

## Key Concepts in Transformational Generative Grammar

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### ABSTRACT

The paper delves into the concept of transformational generative grammar (TG) with the intention of providing necessary information for students and teachers of English Language on the concept. Ample information is provided on the meaning of grammar, grammatical theory and TG itself. Key concepts in the theory like: phrase structure rules, transformational structure rules. Morphophonemic rules: context-free rules, context sensitive rules, sub categorization rules, complex symbol and category symbols are carefully explained. The paper is concluded with a brief discussion of the theory and an assertion that a sound knowledge of grammatical theories provide scientific bases for the strategies and methodologies usually employed in the modern language classroom. Based on this, it is recommended that seminars and workshops be provided for the teachers on grammatical theories like in other aspects of the language. It is also recommended that simplified textbooks on grammatical theories be made available in schools and that English language teacher should afford themselves the opportunities of self-development training and refresher courses in the area of grammatical theories.

**Key words:** Transformational, Generative, Phrase structure, Morphophonemic context-free, Context sensitive, Sub-categorization, Complex symbol.

### INTRODUCTION

Grammar, broadly speaking, is concerned not just with the principle which determine the formation of words, Phrases and sentences, but also with the principles which govern its interpretation (Radford 2002). Thus, it is obvious that the concept of grammar is central to any form of language study.

In the beginning, English grammar was designed to provide basis for the teaching and learning of Latin which was then the most prestigious language. This idea did not provide the expected positive results as it led to the concept of prescriptive grammar and the problems of inconsistency of form and standard even in the study of English as a language. Arising from these, some scholars met and decided to study English grammar from three area of focus to solve the problem: codifying the principles of the language and reducing them to rules; settling disputed points and deciding cases of divided usage; and pointing out common errors or what were supposed to be errors and thus correct and improve the language (Lamidi 2000).

This decision was the beginning of grammatical theories as it paved way for the concept of traditional grammar which was the basis for other grammatical theories. Notable grammatical theories emanated, thereafter, include: constituent structure grammar, Transformational generative grammar, tagmemics grammar, systemic grammar etc. All these grammatical theories led to the rapid development of English language both at home and in diaspora. And because the formal development of many language, especially, in Africa is tailored along the structure of English language, the knowledge of the grammatical theories is not only essential for language teachers but equally necessary for effective delivery of the lesson contents in the modern language classroom. This is because most of the pedagogical strategies for language teaching and learning are anchored in these grammatical theories. For this reason, presentation of conference and seminar papers on the key concepts of these theories will remain relevant academic exercises for some times to come.

### **Statement of the problem**

Of recent, there has been a drastic decline in the performances of Nigerian students in the use of English language both in written and verbal forms. As noted by Akere (1995) there are enough evidence to show that within the nation's educational system, the standard of expression is not only poor but pupils/students equally lack required language skills through which they could carry out their learning activities successfully as well as communicative competence to execute basic communication tasks at various levels of education.

The students always demonstrate inadequate mastery of the language in almost all the facets of language use like written communication, oral communication, interviews and even in the process of answering examination questions. This fact was confirmed by Ugbor (1984) when he stated that most students in Nigerian institution of higher learning found it too hard to follow lecturers or extract information from textbooks. Little wonder then, when Ofuokwu (1984) claimed that teachers in Nigerian higher institution are disheartened by the poor standard of comprehension and performances usually exhibit by students in the use of English language.

Many factors might have been responsible for this plight. One of them is the inadequate knowledge of the language itself by most teachers teaching English in Nigerian schools. Adekoya (2010) noted that English is poorly learned and used in Nigeria because of poor teaching. Some of the teachers do not possess sound knowledge of the language. This becomes a problem because in modern language teaching, huge responsibilities is imposed on the teachers to give appropriate pragmatic instruction in the classroom (Dosumu 2012). When the teachers themselves are not sound, what type of knowledge would they give?

One problematic aspect of the language for teachers is grammar. They obviously lack adequate knowledge of grammatical theories which are bases for sound mastery of the rules governing the social and linguistic uses of the language. Thus, poor knowledge of grammatical theories in English language is a significant pedagogical problem to effective teaching of language in Nigeria educational system.

In order to solve this problem therefore, a need arises to refresh the memories of the teachers about the grammatical theories they had learned in their various colleges of educations and universities. This is in line with the suggestion of Olatayo Alabi and Falade (2014) citing Adekoya (2010) that there is no solution to the problem of misteaching of English language other them retraining teachers through improving English language

curriculum. If this is done, it will go a long way to alleviate the teaching of English language in Nigerian classrooms and thereby improve the standard of education in the country.

### **Purpose of the study**

Adeyera (2010) opines that languages as a way of communication requires a lot of practices, innovations and reinforcement to make it functional and effective in any given society or organization. Similarly, Ajileye (1998) asserts that overall language use is richer when extra school language activities and opportunities are exploited. Bringing all the conditions in the above assertions into reality will depend mainly on the competence of the language teachers. The teachers must be well sound in all the aspects of the language and not only in some aspects. If teachers are versatile and well equipped in all the aspects of English language teaching, bringing in innovations, adopting appropriate reinforcements, creating room for practices etc will be done easily.

The purpose of this paper therefore is to update the knowledge of English language teachers in Nigerian schools in grammatical theory with a particular reference to transformational generative grammatical theories by exposing them to the key concept therein. This will no doubt equip them appropriately and adequately towards effective teaching of basic grammar of English in their different schools. This will be so, because one of the ways to develop communicative competence in the second language learners is through the functional languages teaching approach (Aremu and Sulymon 2012).

### **Transformational Generative Grammar Explained**

This concept is best explained by considering the two key words in the string. There are: transformational and generative. It is necessary to do this because our knowledge of their meanings will go a long way to provide a quick and through understanding of the concept.

‘Transformational’ is an adjectival derivation from the noun transformation. Transformation in this sense refers to a device or a process of changing the form of one linguistic structure to another. For instance, active sentence can be changed to a passive one while a simple declarative can be changed into a question through the use of transformation (Lamidi 2000).

‘Generative’ on the other hand is an adjective formed from the ‘verb’ generate. And according to Tomori (1997), generate in this sense (as used in generative grammar) does not mean to produce. It means to describe. When it is said that a rule generates a sentence, what this means in transformational grammar is that, a particular rule or set of rules describe how a particular linguistic element or string is formed.

Combining the explanations on the above two key words, therefore, transformational generative grammar implies the type of grammar that seeks to explain the rules governing structural changes and the formation of utterances. An attempt to make explicit that knowledge which is implicit in the native speaker of any language (Tomori 1997).

#### **1. The Description of Transformational Generative Grammar**

As stated in the introduction, this grammar is purely descriptive. It is an explicit knowledge of the native speaker. Its primary purpose is not to serve as a model to guide the performance of any one using the language (Tomori 1997).

## The Key concepts in transformational generative grammar

### 1. Phrase Structure (or F) Rules.

With this rules, utterances are analyzed in terms of their syntactic constituents. For example, the sentences ‘*someone ate the food*’ can be analyzed as subject + verb + objective. The instruction formulas to perform basic operation in TG are referred to as re-writing rules. Based on the rules of phrase structure, therefore, the full derivation of the sentence, *The man lost the money* could be given as follows:

**Sentence**

NP + VP

T + N + VP

T + N + Verb + NP

The + N + Verb + NP

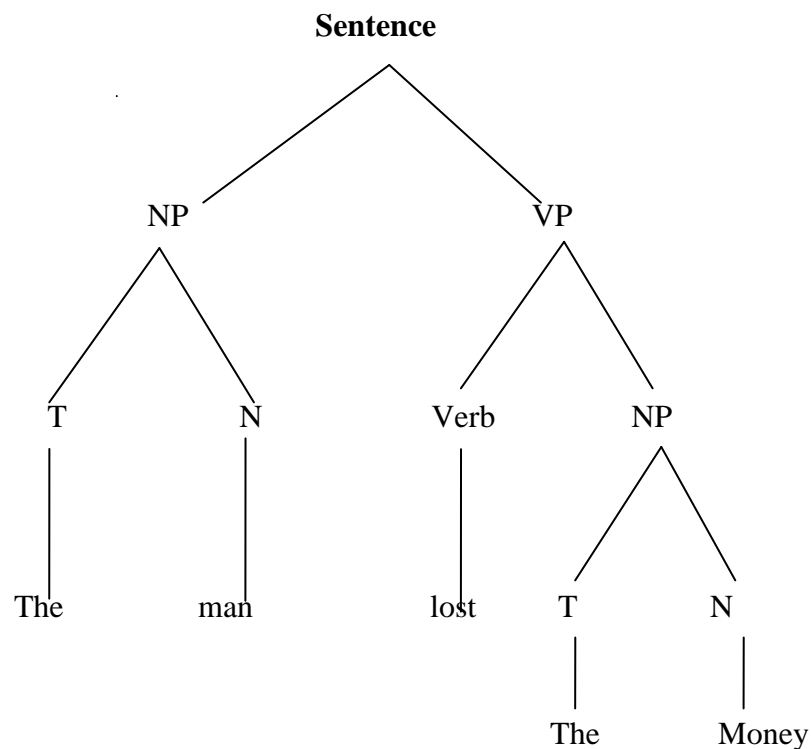
The + man + verb + NP

The + man + lost + T + N

The + man +lost + the + N

The + man + lost + the + money

In the above example, every line is referred to as string while the last line that could not be rewritten again is called the terminal string. The constituent structure of the same sentence can be shown in a diagram or phrase maker like this:



Adopted from Tomori (1997)

The main limitations of phrase structure rules are that while they can describe the overt syntactic structures of most utterances, they cannot make explicit the rules underlying the formation of the sentences and they cannot put the rules in the proper order in which they are applied to produce well formed sentences.

## 2. Transformational Structure Rules

This is the second level of transformational grammar and the level in which transformational rules operate in reality. Chomsky (1957) discussed the following five transformational rules:

- i. *T and*: This is the rule for conjoining two sentences of similar constituents for example.
  - a. The honest boy will be rewarded
  - b. The best girl will be rewarded
  - c. a and b: The honest boy and the best girl will be rewarded
- ii. *I nf*: This is the transformational rule for deriving the correct form of the verb in a sentences. For instance, in the sentence ' *He has a book*. 'has' and not 'have' is the correct verb.
- iii. *T p*: This is the transformational rule for deriving the passive from the active form of a sentence. For example, *Ade killed a goat* will be a transformed to '*A goat was killed by Ade*.
- iv. *T not*: This is the rule for forming the negative version of positive sentences. For example, *He could eat the meat* will have the negative form of '*He could not eat the meat*.
- v. *T q*: This is the rule for forming questions from positive sentences. For example, *We eat our food*. Do we eat food?

## 3. Morphophonemic Rules

This is the last level of transformational grammar and it is the level of TG that converts the string of morphemes comprising a terminal string into the sounds of the language. For example, go + past = went, product +ion = production. The rules that govern the phonetic realization of morphemes are morphophonemic rules.

## 4. Context Free Rules

These are rewriting rules which stipulate that sentences are combinations of noun phrases plus verb phrases. The rules do not specify the kind of noun phrases that can meaningfully and syntactically combine with what types of verb phrases. Consider these examples S= NP + VP

*The girl peeled the yam*

*\*The lizard peeled the yam*

*The boy is laughing*

*\*The tree is laughing*

The fact that not every VP can acceptably combine with every NP in English and also not VP can take NP object renders the rule less effective.

## 5. Context Sensitive Rules

This is otherwise known as ‘**selectional** rules’. These are rewriting rules used to describe the limitation of some items to co-occur with certain linguistic items. That is, there are restrictions on the acceptable co-occurrence of certain linguistic items if meaningful, sensible and flawless language structures are to be granted. Consider these examples S = NP + VP + NP = Sentence is a Noun Phrase + a verb phrase + a noun phrase.

*The boy is eating the fruits*

*\*The stone is eating the fruits*

*The goat is eating the fruits*

*The boy is laughing*

*\*The goat is laughing*

*\*The stone is laughing*

## 6. Sub Categorization Rules

These are rewriting rules that limit certain classes of linguistic items to certain syntactic frames. According Tomori (1997) the strict sub categorization rules are meant to show what verbs (or other lexical or grammatical items) can collocate in what sentence patterns.

\_\_\_ \_\_\_ \_\_\_ Sadly. He/She, they/we, (wept/told) the story

\_\_\_ \_\_\_ \_\_\_ Happily. He/she/they/we (sang/cried) the song

## 7. Complex Symbol

This is defined as a collection of features peculiar to the particular linguistic item in its occurrence in utterances of the language.

## 8. Category Symbols

These are symbols which define the grammatical classes of linguistic items. Symbols like NP and VP are in this category.

## The Theory Discussed

One of the major issues in transformational generative grammar is the concept of context-free rule. This is so because the rule does not specify what type of NP could go with what type of VP. And the fact with English language is that not every VP can go with every NP. Also it is true that not every VP can go into various structures such as

S → NP + VP + NP.

To take care of the inadequacies found in the context free rules, some modifications were introduced into the theory of transformational generative grammar. In 1965, Chomsky replaced the context free rule with the context sensitive rules.

Under the context sensitive rules, two other such classifications were introduced. These were strict *sub categorization* and *sectional rules*. The rules introduced to limit certain classes of linguistic items to certain syntactic frames are known as sub categorization. On the other hand, the rules introduced to describe the restriction on the co-occurrence of certain linguistic items are referred to as sectional rules. The following examples will be appropriate here.

*The class captain opened the door.* Under the context free rule, the sentence could be rewritten as NP + VP + NP. This is possible because ‘opened’ is one of the transitive verbs in English language. But if we take another sentence like ‘*He wept*’ we can see that the rewriting rule of this sentence is NP + VP. The ‘wept’ used in the second sentence is one of the intransitive verbs in English language and it cannot take any object.

Therefore, Chomsky’s stick sub-categorization rules are meant to show what verb can collocate in what sentence pattern while the features of co-occurrence of different NP with VPs are specified in the ‘selectional rules’. To explain this further, Chomsky equally introduced the concept of complex symbol. This is defined as a collection of features (that are) peculiar to the particular linguistic item in its occurrence in utterances of the language (Tomori 1997).

### **Conclusion and Recommendations**

As evident in the previous analysis and discussion on the Transformational Generative Grammar, grammatical theories provide appropriate and adequate materials for formal analysis of language both at syntagmatic and paradigmatic axes. By this, it serves as scientific basis and frame work for language teaching strategies and methodologies. And through this means, it is also contributing, in no small measure, to the development and continuity of language as human phenomenon. Therefore, a sound knowledge of those theories is mediatory not only for the students of language but also for the teachers of language or languages.

Based on the above fact, it is recommended that seminar and workshops be provided for English language teachers on grammatical theories as it is being done on other aspects of the language. Also simplified textbooks on grammatical theories should be made available for teachers in their different schools. In addition language teachers should afford themselves opportunities of self development training and programmes in the area of grammatical theories.

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