



REPRESENTATION OF AUXILIARIES (AND MODALS) IN SUCCESSIVE MODELS OF GENERATIVE GRAMMAR

Andrew Onoja

Department of English

Faculty of Arts

University of Jos, Jos

Email: onojaandrew@gmail.com

Fabian Atese Gbaton

Department of English

Faculty of Arts

Benue State University, Makurdi

Email: gbakinkinism@gmail.com

Abstract

This paper is an assessment of the class of verbs known as auxiliaries within the linguistic framework of Generative Grammar. Largely scientific in approach, a number of linguists within its scholarly precincts have lent their voices to its study since its Chomskyan emergence in the late 1950s, leading to different versions. Some of these include, among others: Transformational Grammar, Standard Theory, Revised Extended Standard Theory, Relational Grammar and the Minimalist Program. The descriptive survey method, which is a research approach that is used to gather data about a particular phenomenon or population, was adopted for this assessment. As such the study's data was sourced from existing discussions and views expounded by the main proponents of Generative Grammar, including particularly model sentences represented in tree diagrams, which were used for analysis. From the assessment, it was observed that auxiliaries are generally categorized as a sub-set of verbs, and not a different lexical category. This is because they are represented as part of the Verb Phrase (VP) in the majority of the different versions of Generative Grammar, except the x-bar model in which modals are categorized as a separate class of items from both the non-modals and the main verbs. It is concluded that auxiliaries should be treated as a component part of the verb phrase, a position that is attested to in various models of Generative Grammar.

Key words: auxiliaries, modals, generative grammar, predicate, verb phrase, node, X-bar

Introduction

Auxiliary verbs have been traditionally explained as verbs which play supporting roles to main verbs in the structure of sentences. These verbs, as Quirk, Greenbaum, Leech and Svartvik (1985:65) explain, are “helping verbs,” which “have no independent existence as verb phrases but only help to make up verb phrases....” This way, auxiliary verbs are set apart from another category of verbs – lexical verbs. However, delineating the properties of auxiliary verbs vis-à-vis lexical verbs has been a point of continuous contention within Generative Grammar. This endless contention, according to Hinc (1993:26), has “provided one of the most popular battlegrounds for disputes of linguistic theory.” In fact, some scholars argue that there are no clear criteria for describing a word as an auxiliary verb (Kuteva, 2001; Anderson 2006). It is in the light of this that this paper seeks to explore the representation of modals and other auxiliaries in the different models of Generative Grammar.

A Brief Survey of Generative Grammar

Generative Grammar is a theory of language structure first proposed by Chomsky in his book –*Syntactic Structures* (1957). This theory, as conceived by Chomsky, is “a system of rules that in some explicit and well-defined way assigns structural descriptions to sentences” (1965:8). It is a theory that explores the innate rules and processes that exist within the language user's faculty which enable such a speaker to produce an unlimited number of possible grammatical sentences.

This model of grammar arose in opposition to structuralism, which regarded language as a self-contained relational structure. Accordingly, Chomsky saw grammar as being beyond what is said and how it is interpreted, since the elements of language structure derive their very existence and value from their distribution and oppositions in texts or discourse. The word 'grammar' itself assumed a new meaning, as it came to be defined as the innate, subconscious ability to generate language – an internal system of rules that constitute our human language capacity. This new approach to linguistic scholarship was aimed at describing this internal universal grammar. Thus, instead of

focusing on the sentences uttered to describe their systemic nature, Chomsky sought to unlock the underlying secrets of language that ensure the production of grammatical sentences. In its evolution, this theory of language study has, in practice, borne various names starting from Transformational Grammar (TG) to Transformational Generative Grammar, Standard Theory, Extended Standard Theory, Government and Binding Theory (GB), Principles and Parameters approach (P&P) and Minimalism or Minimalist Program (MP). Nevertheless, the blanket name 'Generative Grammar' as Carnie (2013: 6) declares, has remained throughout its various models.

The earliest and original model of this linguistic theory, as laid down in Chomsky (1965), is the Standard Theory. At the core of this theory is the two-tiered representation of a sentence: the deep structure and the surface structure. The deep structure is realized through the application of transformational rules. Afterwards, the Extended Standard Theory was formulated with its major component as the X-bar theory. The Revised Extended Standard Theory contains restrictions on X-bar theory (Jackendoff, 1977) and the assumption of the composition. Then came Relational Grammar with an alternative syntactical model within the generative framework, emphasizing the central importance of relational notions like subject, direct object, and indirect object in shaping grammar. The latest model of generative grammar is Chomsky's *Minimalist Program*, with its goal being to simplify and unify the principles of language structure.

Main Verbs Versus Auxiliaries

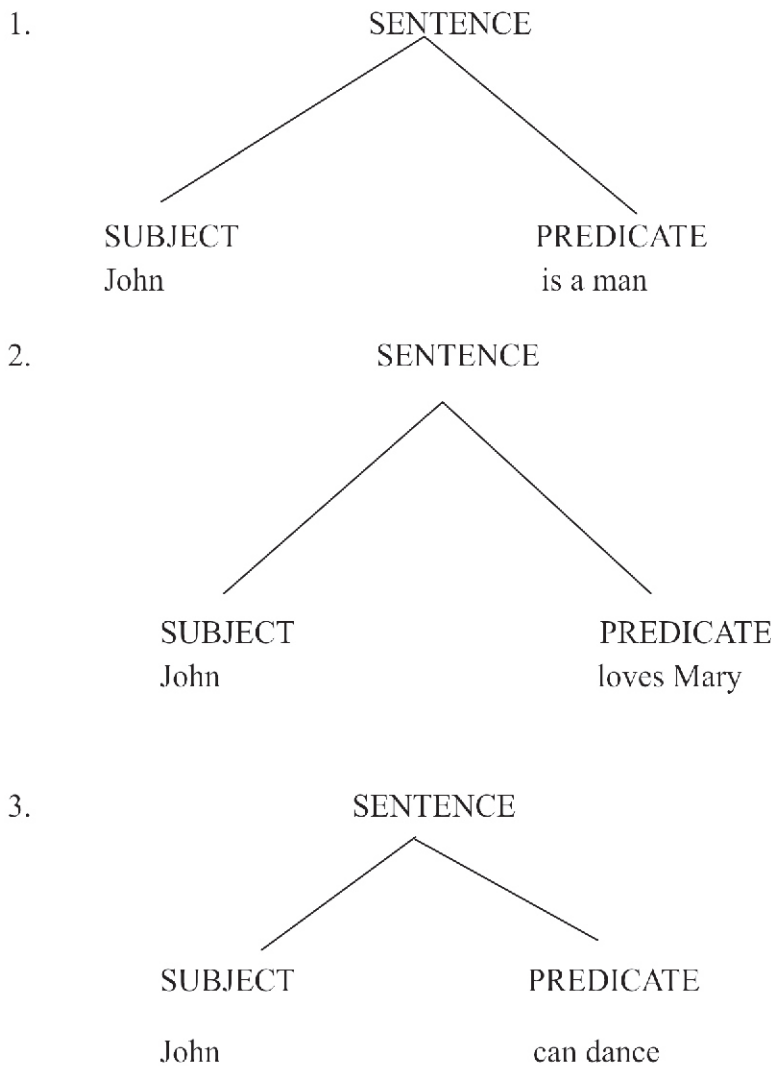
Generally, auxiliaries are characterized as “a special class of items which once functioned simply as verbs, but in the course of the evolution of the English language have become sufficiently distinct from other verbs that they are now regarded as belonging to a different category” (Radford, 1997:50; Al-Horais, 2012). The question is whether they play the same notional and grammatical functions as the “other verbs” or not. If they play the same functions, then it is arguable to state that classifying them into

different categories may amount to a proliferation of lexical categories. Studies (such as Green, 1995; and Jasim, 2002) have, however, shown that auxiliaries and main verbs are actually sub-categories of a single class of words. This derives essentially from their co-occurrence in the traditional predicate position of sentences. For example, a 'primary' auxiliary verb can play a

predicative role like a main verb, while a main verb and an auxiliary can co-occur, as shown in the following sentences in which the verbs are in bold typeface:

1. _s {John} _p {**is**} a man – primary auxiliary
2. _s {John} _p {**loves**} Mary – main verb
3. _s {John} _p {**can dance**} – modal auxiliary + main verb

The sentences above are represented in tree structures below:



Burton-Roberts recognises “two kinds of verb in English: LEXICAL and AUXILIARY”. While the former “belong to the indefinitely large general vocabulary of the language...” the latter, “by contrast, are a special and very restricted set of verbs”. According to him, a “full VP *must* contain a LEXICAL verb and it *may* contain

AUXILIARY verbs” (2011:67). Similarly, Brown and Miller note that “the verb group consists of, minimally, a main verb, and the main verb may, optionally, be preceded by one or more auxiliaries” (1980:107). It is perceptibly clear from these categorizations that lexical verbs are obligatory in every verb phrase, while auxiliary

verbs, which are characteristically a closed sub-class, are optional.

Auxiliary verbs are generally sub-categorized into primary auxiliaries(non-modals) and modal auxiliaries(modals). The non-modals which include *be*, *have*, and *do* also function as main verbs as shown in Sentence (1) above [John is a man]. While *be* and *have* are used to construct different aspects and voices, *do* is used in question forms, in negative constructions, and for emphasis (Ballard, 2001:94). The modals *can*, *could*, *may*, *might*, *must*, *shall*, *should*, *will*, *would*, are said to derive historically from a special class of verbs in Germanic, the linguistic ancestor of English (see Van Kemenade, 1992). They have always differed from ordinary verbs in Germanic, and in the course of the history of English, have differed from verbs even further to the point where they belong to a syntactic category of their own in some versions of generative grammar. Since modals have meanings that are often expressed in other languages by verbal inflections, their syntactic category has been characterized as I(nflection) or INFL (Santorini & Kroch, 2007).

Characteristically, modals have a single invariant form – a property which sharply contrasts them with other verbs in English. They never end in –s even in sentences with third person singular subjects. For example, Sentence (4) below is clearly ungrammatical in comparison to Sentence (5).

- 4. *He {cans, mays} play judo game
- 5. He {can, may} play judo game

In addition, modals lack productive past tense forms. While *could*, *might*, *should*, and

would are the past tense forms of *can*, *may*, *shall*, and *will*, respectively, only *could* can be said to serve as the past tense of *can* and only in certain contexts. For example:

- 6. I said I **would** give him dinner when he **arrived**.

(Adapted from Ballard, 2001:95)

The modal *would* as well as the main verb *arrived* are both in their past tense forms but in the context of this sentence, they refer to a moment in the future.

Auxiliaries (and Modals) in the Structure of Verb Phrase (VP)

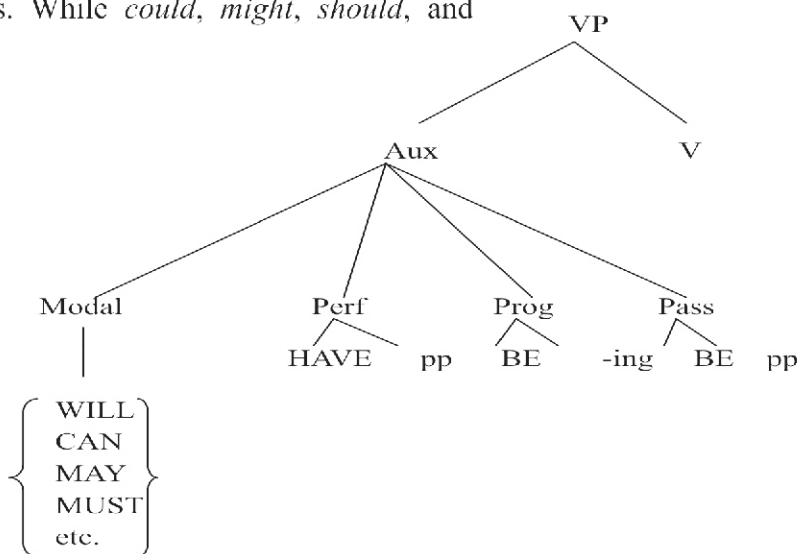
In traditional grammar, main verbs and auxiliaries constitute the predicative part of the sentence structure. However, they are represented in different ways in different versions of generative grammar. There is generally a particular order in which primary and modal auxiliaries occur vis-à-vis the main verbs. Modals usually precede the non-modals in the structure of the verb phrase with the main verb at the end. The sentences below exemplify this grammatical co-occurrence of the sub-classes of verbs:

- 7. I *might be going* to the cinema tonight
- 8. You *could have been fired* by now

Compare,

- 9. *I *be might going* to the cinema tonight
- 10. *You *been have could fired* by now

Brown and Miller (1980:108) present a “mandatory” order in which the main verbs and auxiliaries are to occur in the structure of the verb group in the following schema:

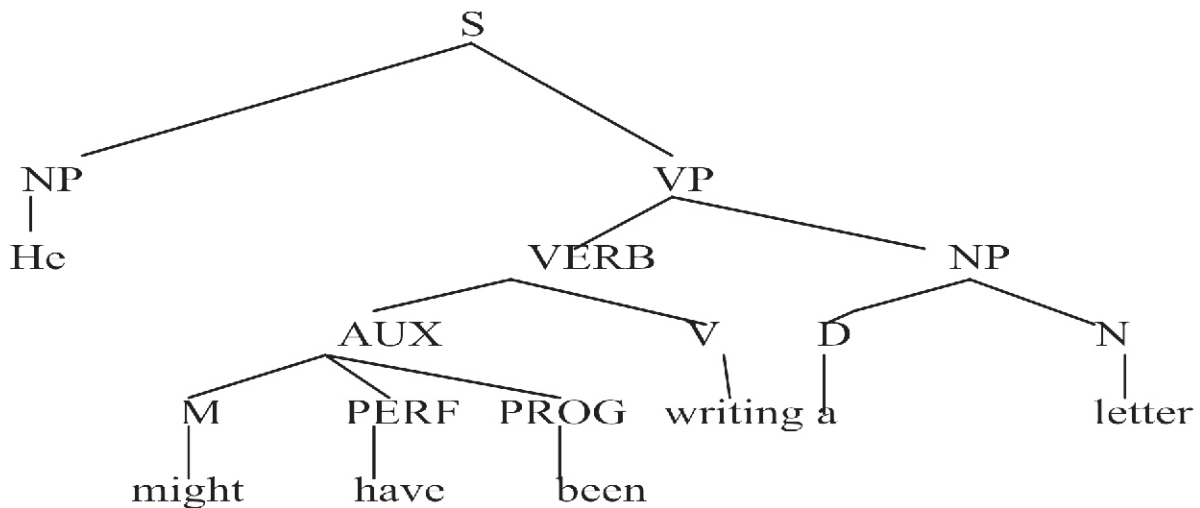


This schema, which is undoubtedly a representation of one of the models of generative grammar, classifies auxiliaries directly under the VP node. That is, an auxiliary, whether modal or non-modal, is an immediate constituent of a verb phrase with a somewhat equal grammatical status as the main verb, which is its right sister. While the Aux node dominates one or more auxiliary verbs, the V node dominates the main verb. Furthermore, it is shown from the schema that a verb phrase can functionally contain only one modal auxiliary but it can contain up to three primary auxiliaries. In other words, the use of the modals is reciprocally exclusive. For example,

the choice of one modal like WILL precludes the choice of another like CAN as exemplified in the ungrammatical sentence below:

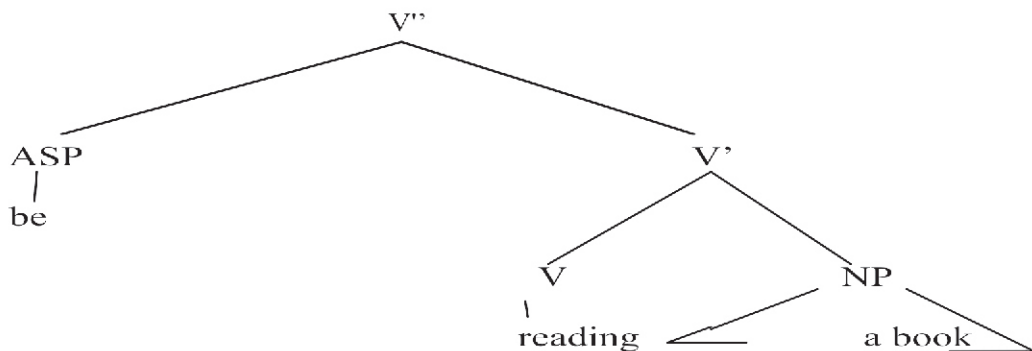
11. * I will can go with you.

While structurally close to that of Chomsky in *Syntactic Structures* (1957), the schema adopted by Brown and Miller (1980) differs from Chomsky's in which the Aux node is directly dominated by the VERB node while the VP dominates both VERB and NP. This indicates that auxiliaries (AUX) are a sub-group of verbs (VERB) alongside the main verbs (V) as right sisters. The schema is presented below as adapted from Radford (1988:162).



Another school of generative grammarians, the Extended Standard theoreticians, recognises an intermediate category between a full VP and V; a theory known as X-Bar syntax. A major proponent of this theory is Ray Jackendoff as propounded in his classic work *X-Syntax* (1977). In this model of generative grammar, “V and its Complements together form a V-bar

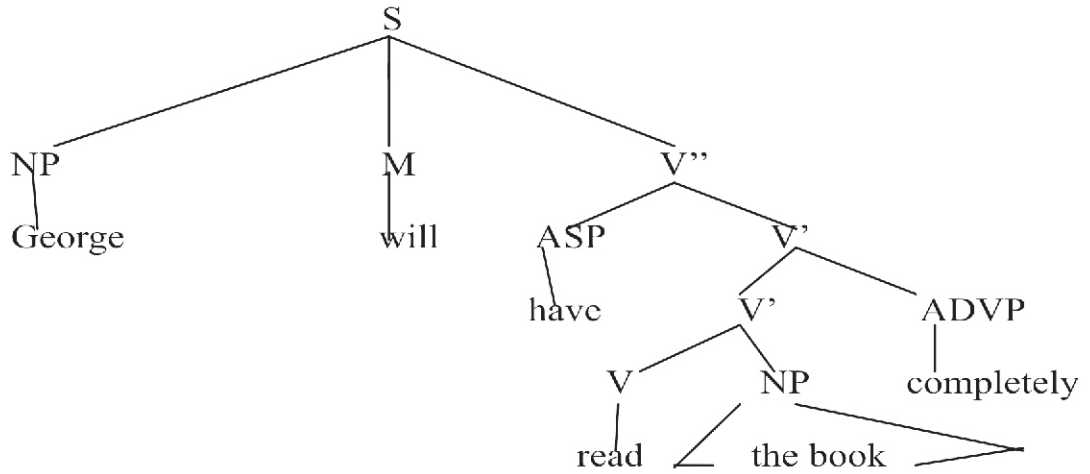
constituent...” which “can be expanded by the addition of appropriate Specifiers (... the Aspectual Auxiliaries *have/be*) into a V-double bar constituent” (Radford, 1988:230-231). The argument lies in the understanding that the non-modals *have* and *be*, which essentially show aspectual function as specifiers expand a V-bar into a full VP as shown below:



(Adapted from Radford, 1988:231)

The same X-bar theory treats modals as immediate constituents of S. This means that modals are classified as a separate category from

main verbs since they constitute the left sisters of the latter and right sisters of NPs as shown in the sentence structure below:

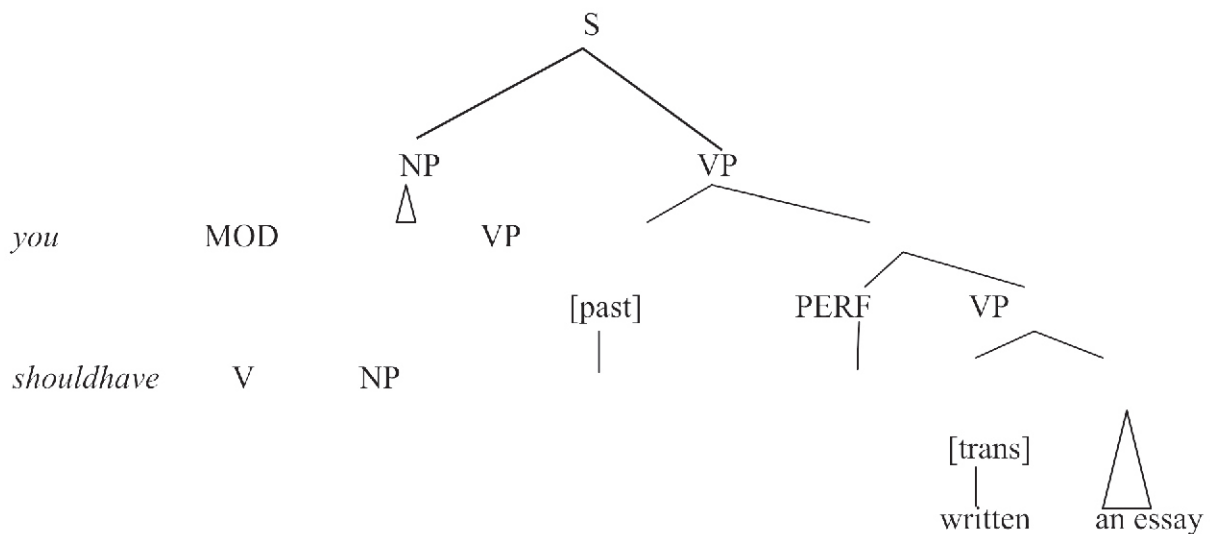


(Adapted from Radford, 1988:241)

Burton-Roberts (2011:121), no doubt, belongs to 'newer' school of generative grammarians. He, like others in this school, holds that “auxiliary verbs... are necessarily followed by VPs” and as such “take VP complements.” When these auxiliaries are not followed by the “necessary” verbs, there is “a definite feeling of ELLIPSIS...the omission of an obligatory element that can be understood in the context of the utterance” (Burton-Roberts, 2011:121). The following sentences (adapted from Burton-Roberts) instantiate this position:

- 12. Monsieur Blanc will _{vp}[study the menu]
- 13. Monsieur Blanc has _{vp}[studied the menu]

14. Monsieur Blanc is _{vp}[studying the menu]
 In certain contexts, the bracketed VPs can be omitted from the structures. However, Burton-Roberts' representation introduces a complexity, as it simultaneously depicts auxiliaries as both constituents of VPs and sisters to VPs, suggesting a recursive VP structure. The last recurring VP in a chain of structures containing a number of auxiliaries usually dominates the main verb, V and the NP. A VP, in this category, constitutes an auxiliary verb and another VP which in turn constitutes a V and NP as diagrammatized below for the sentence *You should have written an essay* in Burton-Roberts (2011: 122):



Conclusion

This paper argues that auxiliary verbs are a sub-category of verbs, based on a survey of Generative Grammar models and sentence analysis. While acknowledging alternative views that treat auxiliaries as a separate lexical class, this paper contends that such categorization would unnecessarily multiply word classes, particularly in English, which already has a complex grammar system. As shown in the sentence analysis, auxiliary verbs co-occur with main verbs in the predicate position of sentences. Furthermore, they are generally sub-categorized into primary auxiliaries (non-modals) and modal auxiliaries (modals). Characteristically, modals have a single invariant form, and lack productive past tense forms. They usually precede the non-modals in the structure of the verb phrase, with the main verb at the end. An intermediate category between a full VP and V; a theory known as X-Bar syntax, is also recognised in discussions on auxiliaries. The analysis equally revealed that auxiliaries invariably require VP complements in sentence structures.

On the strength of the survey and analysis undertaken, it can be concluded that auxiliaries are integral components of the verb phrase, a stance that resonates with various Generative Grammar models, whilst not universally accepted. Notably, the X-bar model presents a striking exception, deviating from this general consensus by categorising modals as a distinct class, separate from both non-modals and main verbs - a divergence that raises important questions pertaining the boundaries and nuances of linguistic classification, and invites further exploration and debate.

References

- Al-Horais, N. (2012). On the Universality of Auxiliary Verbs. *Journal of Universal Language*, 13(1), 7-30.
- Anderson, G. (2006). *Auxiliary Verb Constructions*. Oxford: Oxford University Press.
- Ballard, K. (2001). *The Frameworks of English*. New York: Palgrave.
- Brown, E. K. & Miller, J. E. (1980). *Syntax: A Linguistic Introduction to Sentence Structure*. London: Hutchinson.
- Burton-Roberts, N. (2011). *Analysing Sentences: An Introduction to English Syntax* (3rd ed.). Harlow: Pearson Educational Limited.
- Carnie, A. (2013). *Syntax: A Generative Introduction*. (3rd ed.). West Sussex: Wiley-Blackwell.
- Chomsky, N. (1965). *Aspects of the Theory of Syntax*. M.I.T Press.
- Green, L. (1995). A Study of Verb Classes in African American English. *Linguistics and Education*, 7(1), 65-81.
- Heine, B. (1993). *Auxiliaries, Cognitive Forces, and Grammaticalization*. New York: Oxford University Press.
- Jackendoff, R. (1977). *X syntax: A Study of Phrase Structure (Linguistic Inquiry Monograph Two)*. Cambridge (Mass): The MIT Press, 1977. (xii + 249)
- Jasim, B. M. (2002). Verbs and Auxiliaries in English. DOI: [10.13140/RG.2.2.32065.89445](https://doi.org/10.13140/RG.2.2.32065.89445) https://www.researchgate.net/publication/357835472_Verbs_and_Auxiliaries_in_English/citation/download?tp=cyJjb250ZXh0Ijpw7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIn19iwicGFnZSI6InB1YmxpY2F0aW9uIn19
- Kuteva, T. (2001). *Auxiliation: An Enquiry into the Nature of Grammaticalization*. Oxford: Oxford University Press.
- Quirk, R., Greenbaum, S., Leech, G. & Svartvik, J. (1985). *A Grammar of Contemporary English*. London: Longman Group. West Sussex.
- Merriam-Webster online Dictionary and Thesaurus. www.merriam-webster.com
- Radford, A. (1988). *Transformational Grammar: A First Course*. Cambridge: CUP.

_____ (1997). *Syntactic Theory and the Structure of English: A Minimalist Approach*. Cambridge: CUP.

Santorini, B. & Kroch A. (2007). *The Syntax of natural language: An online introduction using the Trees program*. <http://www.ling.upenn.edu/~beatrice/syntax-textbook>.

IN THIS ISSUE

1. Impact of Educational Blogging Exposure on Kaura-Namoda Polytechnic Students' Written Narrative Essay Academic Performance in Nigeria
Khadijat Yusuf, Ramlatu Jibir-Daura & Sadiq Mohammed 1-9
2. An Assessment of the Implementation of Project Based Learning and its Impact on Students' Academic Performance in Selected Secondary Schools in The BamendaII Municipality of the North West Region of Cameroon
Anyi Mary Uhoman 10-21
3. Effect of School Location on Senior Secondary School Students' Achievement in English Language Essay Writing in Lokoja
Ojomah Kate Ukwumaka & Samuel Femi Bamidele 22-27
4. Impact of School Feeding Programme on Enrolment and Attendance in Rural Primary Schools Of Benue State, Nigeria
Jonathan Tyodaa Anzaa & Titus Terver Udu 28-35
5. The Use of Project-Based Learning (PBL) Method in Improving SS1 Students' Performance in Reading Comprehension in Benue State, Nigeria
Titus Terver Udu, Peter Terhema Lanshima & Mark Nyitse 36-47
6. Effect Of Computer-Based Instruction on Secondary School Students' Achievement in Pronunciation of Vowels of English Language in Abuja
Samuel Femi Bamidele, Duze Daniel Ali & Elizabeth Ebere Agbo 48-57
7. Effects of Technology-Assisted Instruction on Senior Secondary Students' Achievement in Vowel Sounds in Jalingo Local Government Area of Taraba State, Nigeria
Rinret Winniefred Lukden, Mary Ocheenia Anyebe & Sabina H. Gomwalk 58-66
8. Impact of Authentic Materials on the Listening Comprehension Performance of Senior Secondary Students in North- West Zone, Nigeria
Phina Eloho Wilcox, Ramlatu Jibir-Daura & Sadiq Mohammed 67-78
9. Teaching English in The 21st Century
Simon Timothy, Habibu Sule & Fatima S. Umar 79-88
10. Comparative Effect of Explicit Grammar Instruction on Adjective Constructions of Science and Arts Secondary School Students in Makurdi
Grace Ada Awodi, Patience One kutu & Ambrose Ochigbo Adaje 89-96
11. Children's Voices in Chimamanda Ngozi Adichie's *Americanah*
Johnson Nte'ne 97-104
12. Persuasive Strategies in Court Room Discourse
Ndubuisi H. Onyemelukwe & Henry Demenongo Abaya 105-111
13. The Use Of Pre-Writing Activities to Improve Senior Secondary Students' Achievement in Expository Composition in Jos North Local Government Area of Plateau State
Comfort Pam, Loretta Ghibi, Josephine Meseke & Timothy O. Oyetunde 112-119
14. Exploring Alternatives to the English Language as the Medium of Instruction for Higher Education in Nigeria
Deborah Nkechi Ella & Patricia U. Mmegwa 120-131
15. The Use of Digital Media for Communication in Nigerian Educational System
Joshua A. Bisong, Magdaline B. Bisong & Regina A. Agbogo 132-140
16. Impact of Teacher-Students' Interaction and Communicative Approach on Students' Attitude and Performance in Oral English in Benue State- Nigeria
Benard Ojobor, Titus Terver Udu & Emmanuel Edoja Achor 141-161
17. Psycho-Social Predictors as Correlates of Senior Secondary School Two Students' Academic Performance in Literacy Skills in Pankshin, Plateau State, Nigeria
Titus Terver Udu & Tongzum Silas Barde 162-173
18. Challenges of Learning English Grammar in A Rural Nigerian Community
Scholastica Chinyere Amadi & Dumka Harry Togho 174-183
19. Representation of Auxiliaries (and Modals) in Successive Models of Generative Grammar
Andrew Onoja & Fabian Atese Gbaton 184-191