غبنية الجملة في اللغة الإنكليزية

دراسة توليدية

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قسم اللغة الإنكليزية وآدابه

الملخص

هذا البحث عبارة عن دراسة للبنية العامة للجملة الإنكليزية من وجهة نظر تحويلية. على وجه الخصوص ، يوضح هذا البحث كيف أن اللغات البشرية لها بنية عميقة مشتركة يمكن من خلالها اشتقاق بنى ظاهرة مختلفة. ومن ثم، فمن الطبيعي أن مختلف اللغات لها بنى ظاهرة مختلفة نتيجة لتطبيق القواعد التحويلية المتنوعة.

يهدف هذا البحث إلى استكشاف بنية الجملة الإنكليزية في إطار نظرية الربط العاملي لعام 1981 للعالم الأمريكي نعوم تشومسكي. يمكن أن يكون لهذا البحث أهمية كبيرة لمتعلمي اللغة الإنكليزية كلغة أجنبية ومدرسيها لأنه يمكّنهم من فهم كيفية تشكيل الدماغ البشري لمعنى الجملة في البنية العميقة قبل أن يتم تمثيلها صوتيًا في البنية الظاهرة عند نطقها. وقد يساعد ذلك في تقليل الأخطاء في أدائهم اللغوي.

الكلمات الرئيسية: اللغات البشرية ، نظرية الربط العاملي ، بنية الجملة العميقة ، بنية الجملة الظاهرة ، القواعد التحويلية

Sentence structure in English:
A generative account

Abstract

This research is a study of the general structure of the English sentence from a transformational point of view. In particular, it shows how human languages have a common deep structure from which different surface structures can be derived. Hence, it is natural that different languages have different surface manifestations as a result of the application of transformational rules.

This study aims to explore the structure of the English sentence within the Government and Binding theory of Chomsky (1981). This may be of great importance to learners of English as a foreign language since it enables them to understand how the human brain forms the meaning of the sentence in the deep structure before it is represented phonologically in the surface structure when uttering it. That may help in reducing errors in their performance.

key words: human languages, Government and Binding, deep structure, surface structure, transformational rules.

1. Introduction

Sentence structure is concerned with the structure and word order in sentences. It is about how words group together to make phrases and sentences, according to Tallerman (2013). Rules of syntax enable speakers of different languages to express themselves by forming grammatical sentences of various kinds. Syntax also enables them to group words together to create a certain meaning depending on the syntactic rules used. Thus, the concept of structure is fundamental. It is essential for distinguishing between the strings of words that are well-formed expressions and those that are not.

2. The significance of the study

It is argued that all languages share some common deep structure, but they differ in the surface structure manifestations due to different transformational rules that are used by different grammars cross-linguistically. Some languages, like English, have SVO structure, while others have VSO or SOV. This study helps the learners of English as a foreign language (henceforth, EFL) to compare the deep structure and the surface structure of English

and Arabic to find out how to form sentences correctly and avoid interlingual and intralingual errors.

3. Objectives of the study

This work is a study of the structure of the English sentence in general. In particular, it focuses on explaining the word order of the basic constituents of the clause. One objective of the study is to reach a better understanding of the internal structure of the English sentence and to explore how this may have an impact on teaching English to non-native speakers. Another objective is to account for the variation of the word order in different constructions in English, on the one hand, and that in other languages such as Arabic, on the other hand. Moreover, this research aims to focus on how the English sentence differs from its Arabic counterpart and to highlight the similarities between the two languages in so far as word order variation is concerned.

4. Theoretical preliminaries in the Government and Binding framework

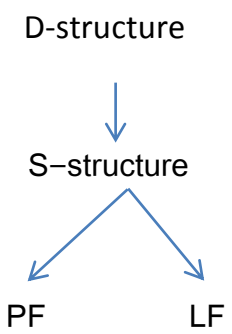
Generative grammar is a syntactic approach that regards syntax as the study of a hypothesised innate grammatical structure. Like some structuralist theories, the Government and Binding theory (henceforth, GB) theory considers grammar a system of rules that

generates exactly those combinations of words that form grammatical sentences in a given language.. This theory was developed by Chomsky in the second half of the 20^{th} century. This section summarises the major issues and concepts of GB that relate to the sentence structure as outlined by Chomsky (1981).

4.1 Levels of representation

Chomsky (1981) argues that there are four levels of representation in grammar: D-structure, S-structure, Logical Form (henceforth, LF) and Phonetic Form (henceforth, PF). The following diagram illustrates this relation:

(1)



D-structure is related to the semantic interpretation of sentences. Arguments such as subjects and objects are subcategorised for by lexical heads such as verbs and prepositions at D-structure. The S-structure representation results from the D-structure after applying transformational rules, and it shows traces as it will be

explained later in this section. One can define surface grammatical relations at this level configurationally. The LF level deals with the representation of scope of quantifiers and anaphor interpretation. This level is abstract. The PF level deals with the representation of sound and pronunciation.

4.2 Modules of grammar

GB is a theory of principles and parametres, and this makes it more universal (Chomsky, 1981). According to this theory, the order of elements in a phrase or clause is determined by a set of principles and parametres instead of phrase structure rules. As the name suggests, the theory consists of the government theory and the binding theory along with other sub-theories, as stated by Chomsky (1981). These theories are: Government theory, Inflection, Case theory, and Movement theory.

5. General structure of the English sentence

GB assumes that a large portion of the grammar of a language is common to all languages, and is therefore part of Universal Grammar (henceforth, UG). Linguists analyse the structure of any sentence to understand the type it belongs to and the function it serves. In this section, I analyse types of the English sentences according to the Generative Theory by Chomsky (1981).

Sentences in English fall into different categories according to the function they have in use. The main types that will be discussed in this paper include affirmative, negative, interrogative and passive sentences.

5.1 Affirmative sentences

Affirmative sentences are those sentences that express the validity or truth of a basic assertion and include many types depending on the number of arguments and complements the verb assigns to them. Verbs can be divided into intransitive, transitive and ditransitive verbs.

Traditionally, the structure of simple sentences comprises an NP and a VP. Radford (2009) argues that all phrases consist of two constituents, namely the head of a projection which determines the grammatical properties of the head word and the complement that this head takes.

5.1.1 Sentences with intransitive verbs

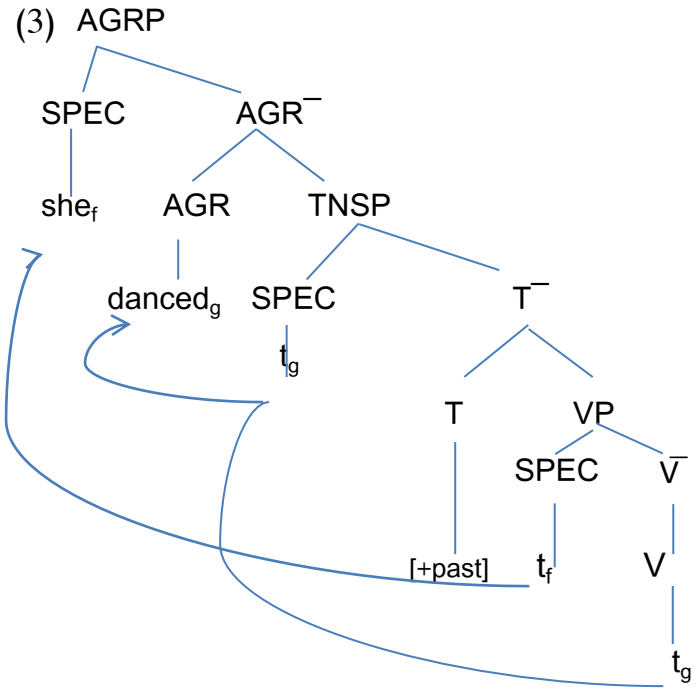
Ouhalla (1988) argues that the base-structure of SVO languages specifies its surface word order and that the overall S is a TP, or a projection of tense because TNS is the most important element in the sentence. Therefore, there is a cyclic movement of the verb to

AGR and then to TNS. There is also another movement involved which is the movement of the subject which is base generated in the SPEC of the VP to the SPEC of TNSP to the SPEC of AGRP to get Nominative Case from AGR by coindexation as the following example illustrates (2):

(2) She danced.

The following tree diagram illustrates the S-structure of (2) together with the required movement rules involved according to GB:

(3)



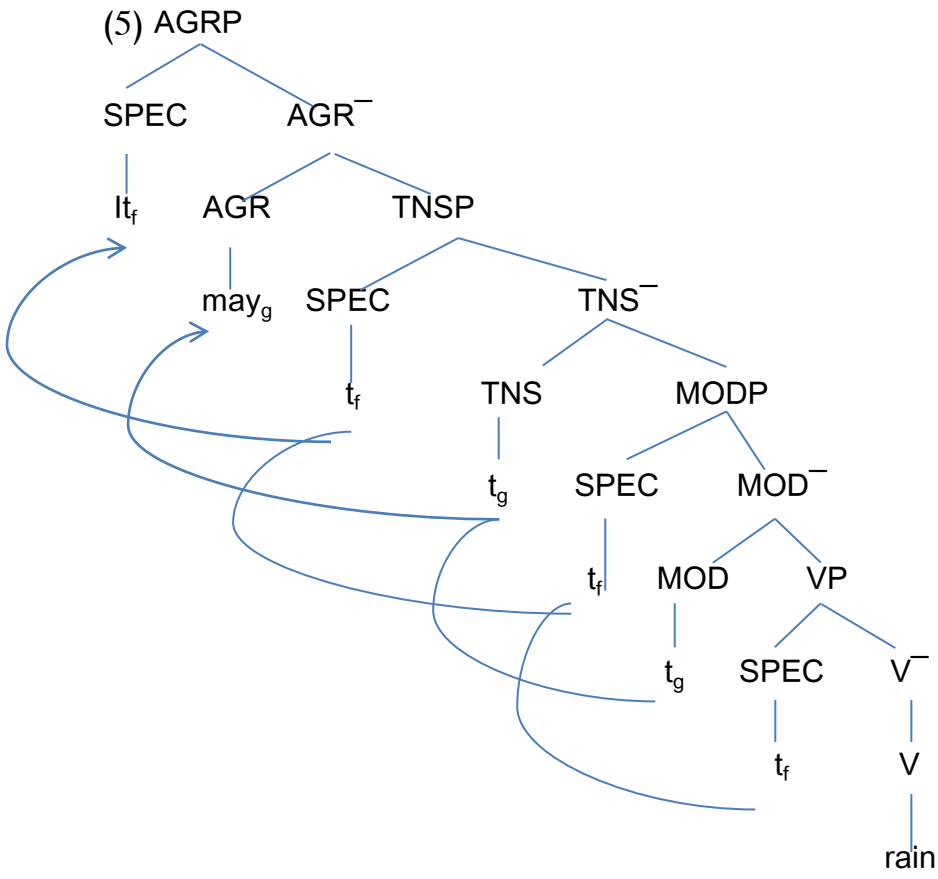
In (3), the verb *dance* is raised to TNS to be inflected for the past tense and then to AGR position to get its agreement. Also, the NP *she* moves from the SPEC of VP to the SPEC of AGRP to get Nominative Case. Both the NP *she* and the V *danced* leave traces in their previous positions as can be seen from coindexation.

5.1.2 Sentences containing modals

Tallerman (2019) defines Modal Auxiliaries as a group of independent words in English which express concepts relating to permission, probability, necessity or ability. Since they are finite verbs, they appear under the T label, as shown in the following example:

(4) It may rain.

The hierarchical S-structure of this sentence is as follows:



In (5), the modal auxiliary *may* moves from MODP to TNS and then to AGR to get agreement. In turn, the subject *it* moves from the SPEC of the VP, where it originates, to the SPEC of the AGRP leaving trace in the previous position.

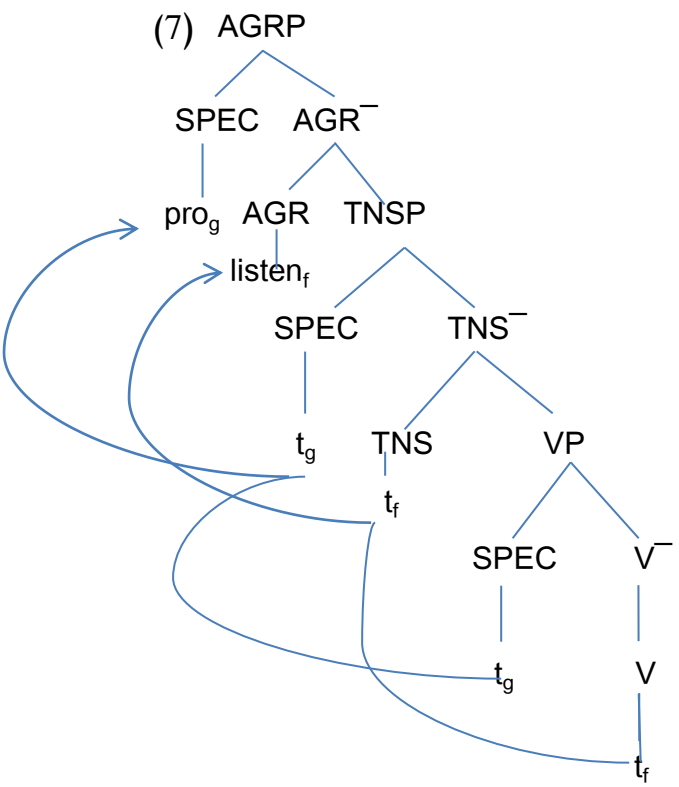
5.1.3 Null subject sentences

English allows the occurrence of a null subject in imperative sentences (Radford, 2009). In such sentences, there is an intrinsically/ implied second person pronoun as follows:

(6) Listen!

The sentence in (6) is an imperative clause with a missing subject that is understood to be "you". The S-structure of (6) is shown as follows:

(7)



In (7), the verb *listen* moves to TNS and then to AGR position to get agreement. There is an empty pronominal referred to as pro in imperative sentences. This pro is generated in the SPEC of the VP and it moves to the SPEC of AGRP. However, one has to notice that the rule of deleting the subject in imperative sentences is optional. This is confirmed by the fact that one can also say: *You listen*. The subject here is not deleted. This means that the rule is optional.

5.2 Negative sentences

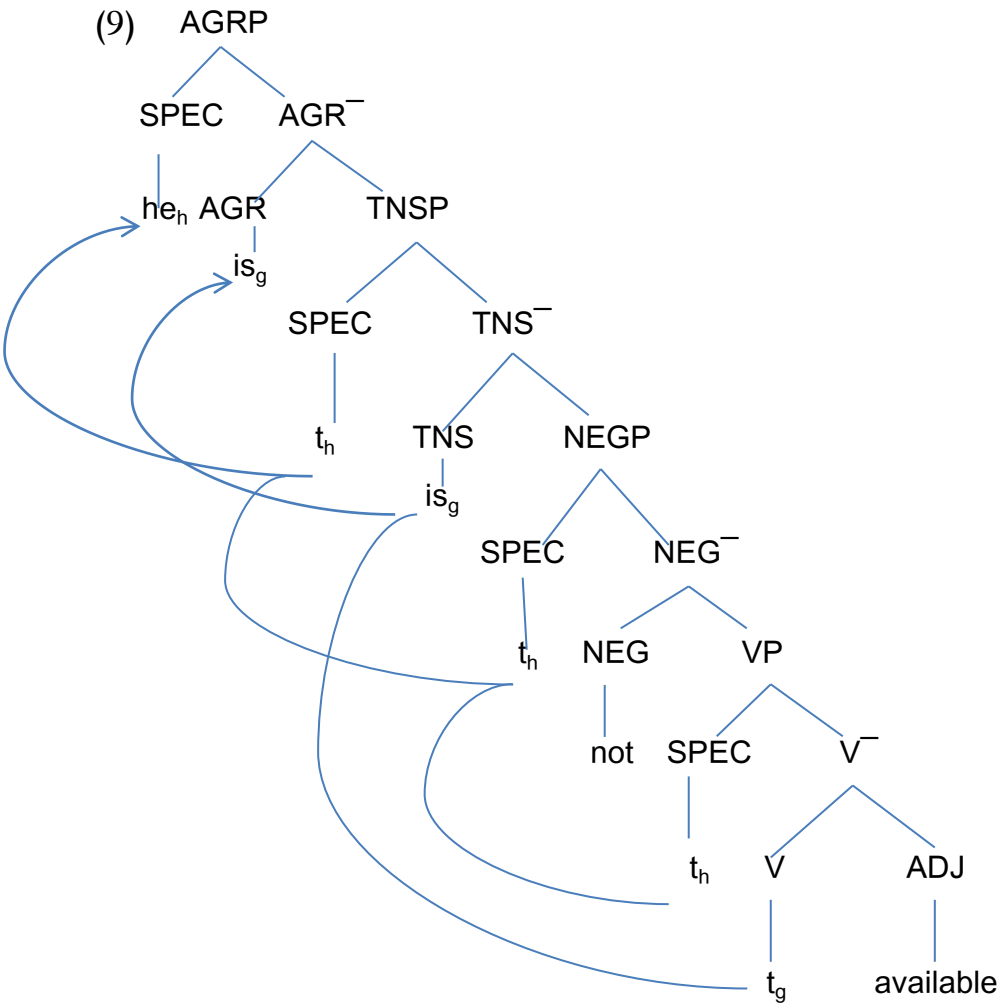
According to Jordan (1998), negation is an important syntactic process and it affects the structure of the clause. Negative phrase(henceforth, NEGP) English, is before TNSP.

Lasnik (1972) states that one can generate *not*, the negative determiner (henceforth, NEG), in NPs and Adverbials and sometimes *not* is related into AUX transformationally. In other cases, we can generate *not* in a Pre-S node as was analysed by Klima (1964). Radford (2009) states that there is no movement of the verb from V to T in English negative clauses. Here is an example of a negative sentence:

(8) He isn't available.

The S-structure of (8) is diagramed as follows:

(9)



One can conclude from this tree that *be* may occupy a position below *not* and subsequently it is raised into the head T position TP and then to AGR to get agreement. Also, the NP *he* moves from the SPEC of VP, to the SPEC of NEGP, to the SPEC of TNSP and then to the SPEC of AGRP to get Nominative Case.

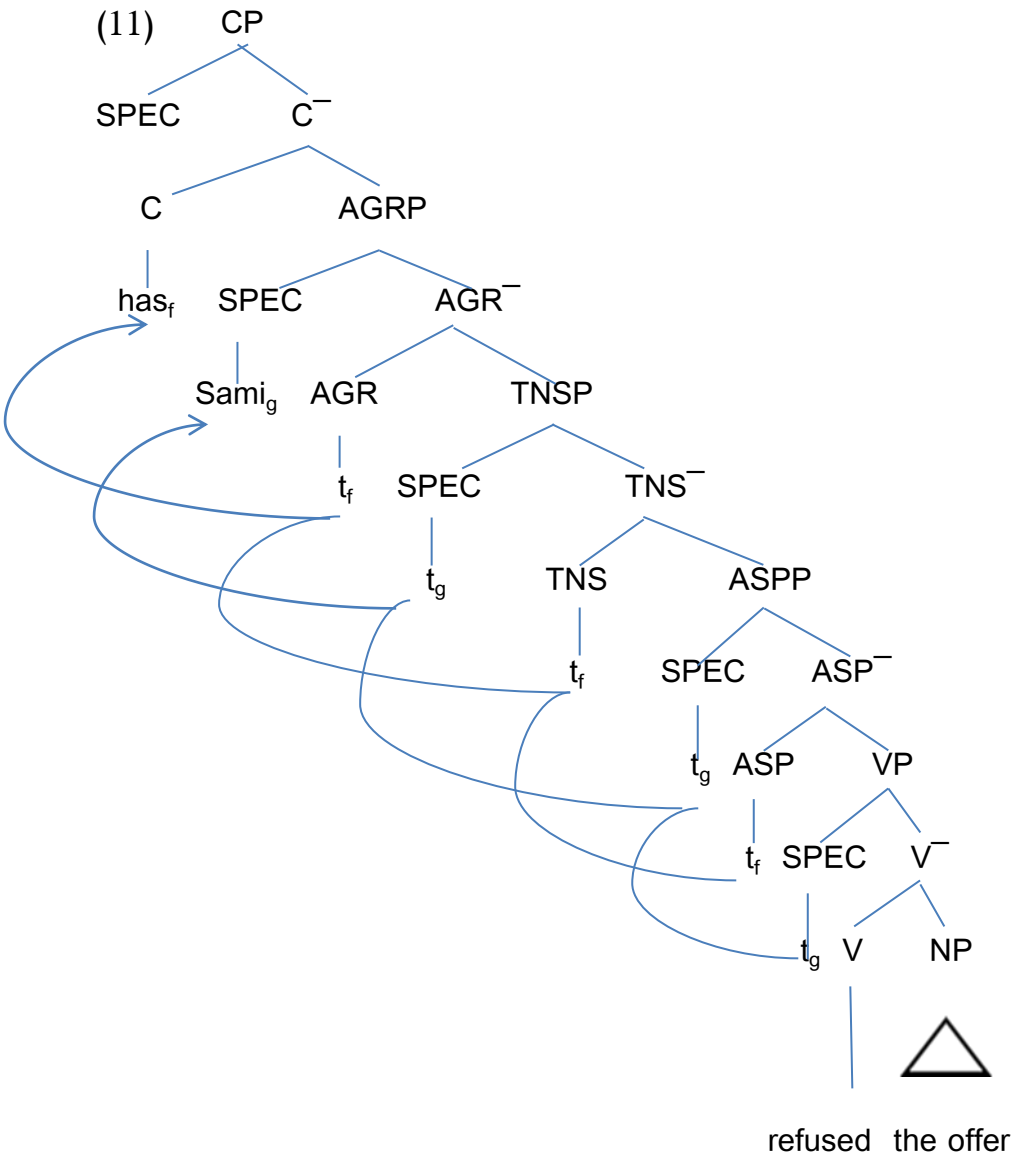
5.3 Interrogative

5.3.1 Yes/No questions

Yes/No questions in English start with an auxiliary. Therefore, forming Yes/No questions in this language requires moving an auxiliary from a post-subject position into a pre-subject position as follows:

(10) (a) Sami has refused the offer.
(b) Has Sami refused the offer?

The restrictions and word order in Yes/No questions still hold. The auxiliary can move into a pre-subject position to obtain the surface word order from the D-structure. When there is movement, only one auxiliary, usually the first one, moves to a sentence initial position to invert with the subject. The S-structure tree for (10b) is shown in (11):



In (11), the AUX *has* moves from ASP position to TNS position to be inflected for tense, then to AGR position to get agreement, and finally to the C to occupy a pre-subject position to get the word

order of Yes/No question. This is called a head to head movement (Chomsky, 1986). There is another movement which is the cyclic movement of the NP subject from the SPEC of the VP to the SPEC of ASPP, then to the SPEC of TNSP and finally to the SPEC of AGRP.

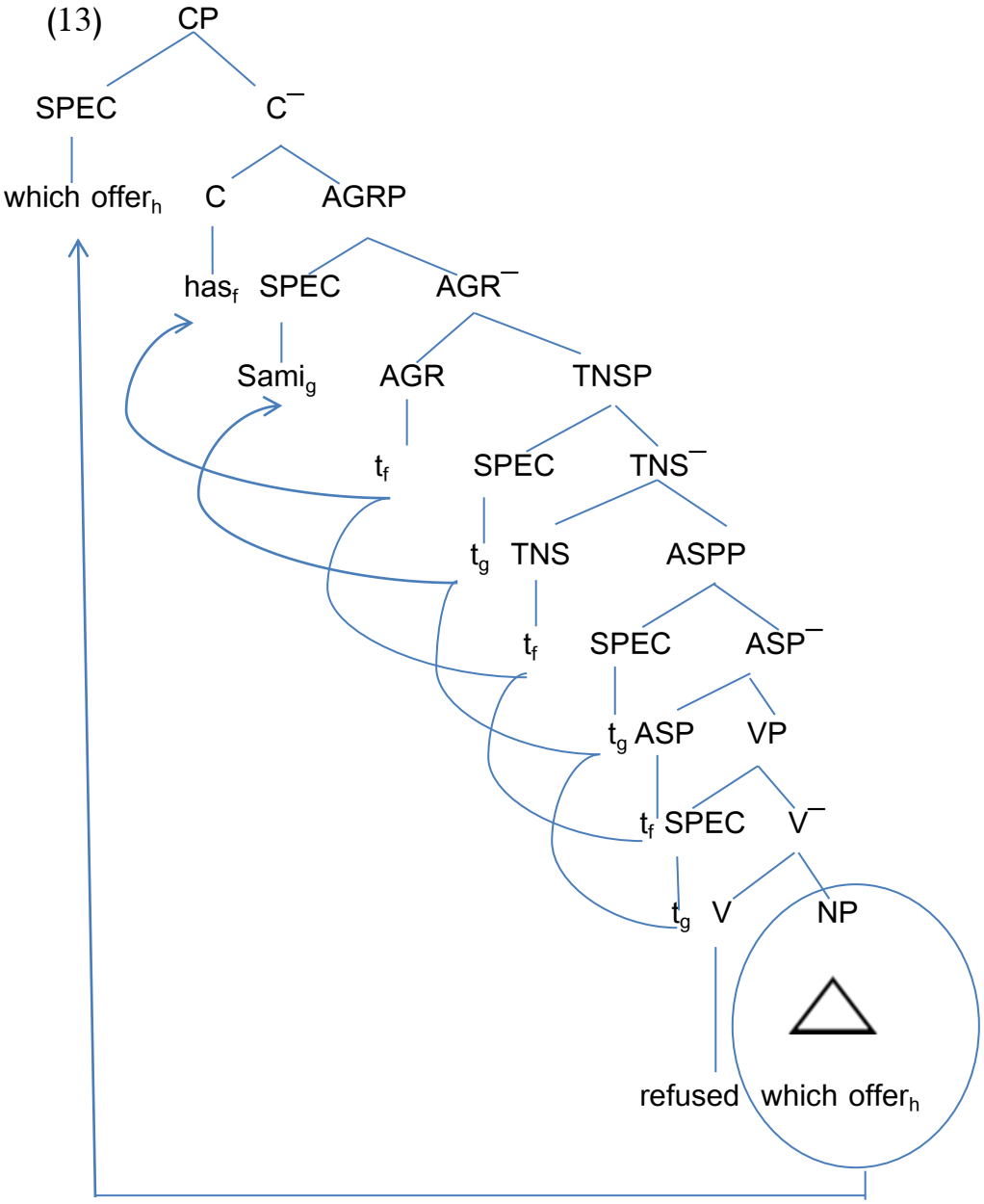
5.3.2 Wh-questions

Wh-questions are information questions and they require the same Subject/Aux inversion used in Subject/Aux question, as in the previous sentences, with one difference from Yes/No questions which is that information questions require a further transformational rule which involves the wh-phrase via moving it to occupy a pre-AUX position in the SPEC of the CP. The following example shows how movements take place:

(12) Which offer has Sami refused?

The S-structure of the example in (12) is as follows:

(13)


CP
SPEC
C¯
which offer$_h$
C
AGRP
has$_f$
SPEC
AGR¯
Sami$_g$
AGR
TNSP
t_f
SPEC
TNS¯
t_g
TNS
ASPP
t_f
SPEC
ASP¯
t_g ASP
VP
t_f SPEC
V¯
t_g V
NP
refused
which offer$_h$

(13) has the following movement rules:

(a) The NP subject *Sami* moves from the SPEC of the VP to the SPEC of ASPP, then to the SPEC of TNSP, and finally to the SPEC of AGRP in a cyclic movement, leaving traces behind. It follows the head-to head constraint.

(b) The AUX *has* is the head of ASPP and it moves from ASP to AGR to get agreement, then to TNS to to be inflected for tense and finally to C position, also in a cyclic movement.

(c) The NP *which offer* moves to the SPEC position of CP to occupy the highest position in CP and this precedes the AUX *has*. This is the case in wh-questions in English.

Thus, one can summarise the movement needed for information questions as follows:

(14) (a) The NP subject moves to the SPEC of AGRP to get Nominative Case.

(b) The AUX moves to C to be inflected for TNS and AGR.

(c) The wh- phrase moves to the SPEC of CP to obtain wh- word order.

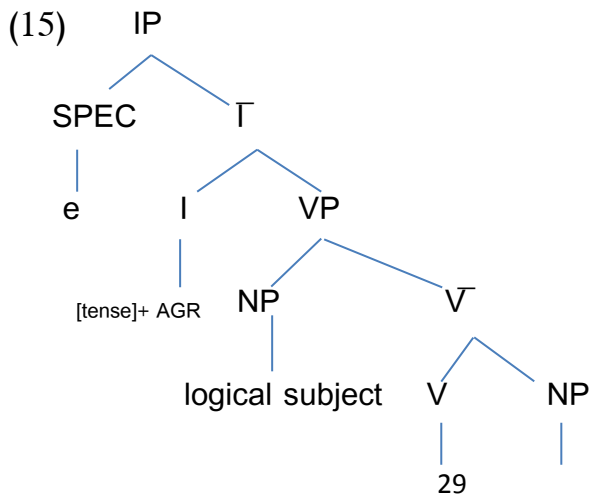
It is clear that all these requirements are achieved in (13).

However, I have to refer to a case where the wh-movement is not used. This is referred to as echo questions where the wh-phrase remains in-situ *You saw who?* Instead of *who did you see?* Such questions are similar in structure to a normal sentence with one difference which is that echo questions have a wh word in the object position.

5.4 Passive constructions

According to Chomsky (1981), Radford, (1981, 1988) and Larson (1988), a clause has a typical D-structure as the following diagram in (15) if the verb is transitive:

(15)



main verb logical object

(15) shows that the logical subject NP originates to the left of the verb in the SPEC position of VP and the logical object is to the right of the verb as required by the subcategorisation of properties of the verb (Woolford, 1991). The S-structure of (15) is derived by applying some transformational rules. In SVO languages, such as English, the logical subject is base-generated in the SPEC position of the VP and then it is raised to the SPEC position of IP in order to get Case and AGR at the S-structure representation.

Chomsky (1981, p. 124) analyses the passive voice constructions process through the following principles:

(16) I. [NP, S] does not receive a θ-role.

II. [NP, VP] does not receive Case within VP, for some choice of NP in VP.

When the main verb has the passive morpheme -en, the subject NP loses its agent θ-role, and the object NP, in turn, is deprived of its Accusative Case, and that is why they move from their original position to receive Case and θ-role. These changes are called morpho-syntactic changes on the main V and they lead to the subject and object NPs changing positions.

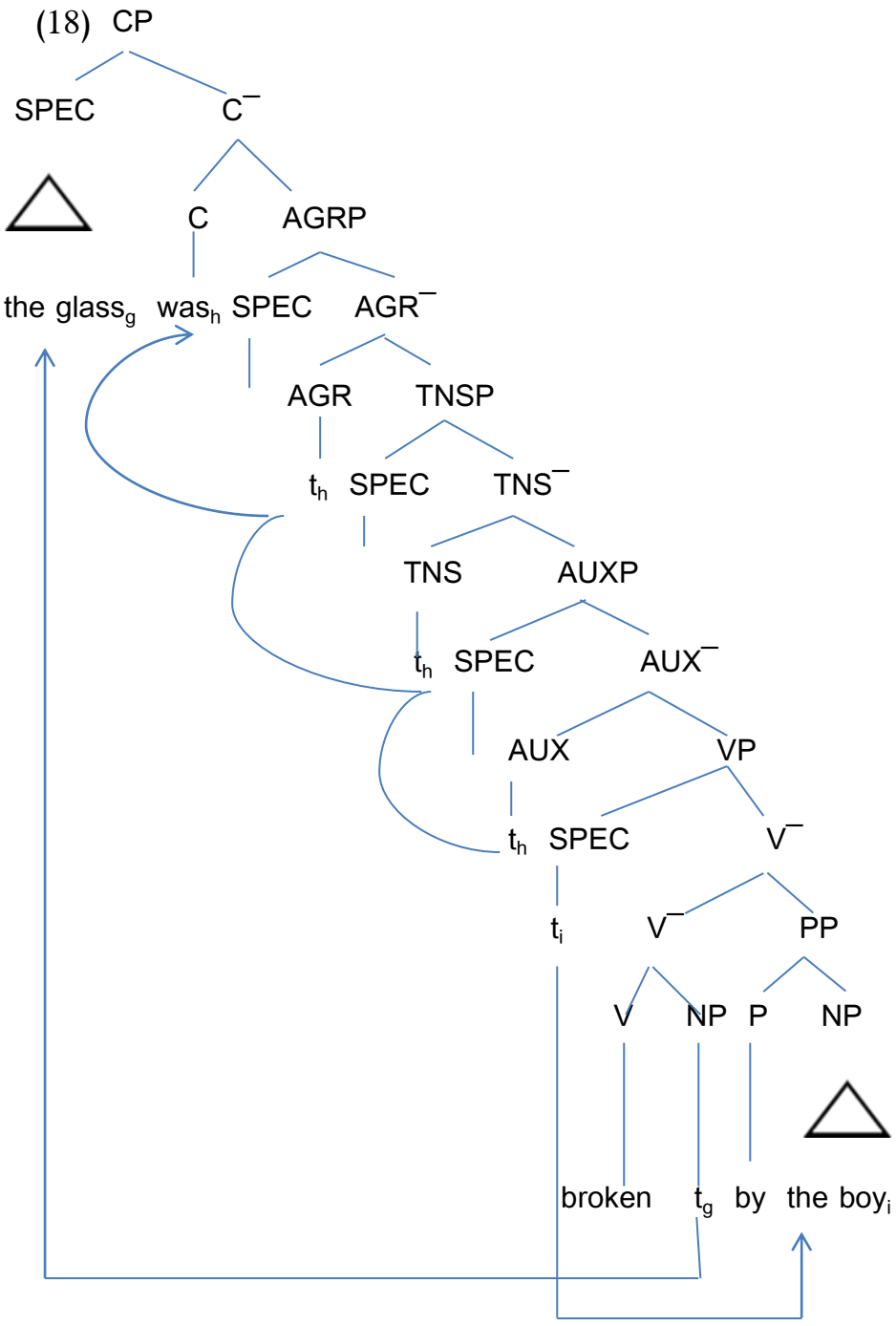
Thus, in accordance with the principles in (16), one can summarise the basic changes in a passive construction as follows: morpho-syntactic changes on the main verb, subject NP demotion, and object NP promotion.

The following example of an active sentence shows how the transformational rules apply:

(17) (a) The boy broke the glass. (Active voice)

(b)The glass was broken by the boy. (Passive voice)

These changes are explained by Chomsky (1981), Radford (1981, 1988) and Larson (1988) in accordance with the following S-structure tree diagram:


(18) CP
SPEC
C¯
C
AGRP
the glass$_g$ was$_h$ SPEC
AGR¯
AGR
TNSP
t$_h$ SPEC
TNS¯
TNS
AUXP
t$_h$ SPEC
AUX¯
AUX
VP
t$_h$ SPEC
V¯
t$_i$
V¯
PP
V
NP
P
NP
broken
t$_g$
by
the boy$_i$

In (18), according to Radford (2009), the NP object *the glass* is demoted to occupy the NP subject of the passive sentence. In turn, the AUX *was* moves up from AUX to TNS, to AGR and then to C after we add it before the main verb *broken*, which is the requirement of passive constructions in English. In addition, the logical subject NP, *the boy*, originates in the SPEC position of the VP. While deriving the passive S-structure, the PP is adjoined to the main $\overline{V}$, and the logical subject NP is demoted by the principle Move- alpha to occupy the position of the empty category after the P *by* to result in the agentive phrase *by the boy*. One can delete the by-phrase since it is optional. He also adds that the by-phrase has an oblique Case because it occupies a complement position of the P *by*.

6. Pedagogical implications of the study

According to the Contrastive Analysis Hypothesis (Brown, 2000), the scientific analysis of English and Arabic would enable linguists to predict the difficulties a learner would encounter while learning English. Thus, showing the similarities and differences between the structure of English and Arabic sentences would help in reducing both interlingual and intralingual errors.

One implication of this study is to show that it is possible to have VSO structures in English as it is the case in Arabic. Examples of such sentences include *There is a book on the table* and *Here comes the queen.* Such sentences are easier for the Arab learners to learn because they can be examples of positive transfer from Arabic to English, though English is mainly an SVO language. Thus, one expects that Arab learners of English may not make mistakes when producing such constructions.

Another implication is that EFL learners and teachers should be aware that nominal sentences in Arabic require a verb to be grammatical in English as stated by Moneim (1989) and Hasan (1990). Benmamoun (2000) states that verbless clauses are a significant characteristic of Arabic. Such clauses are difficult for Arab learners to form. Homeidi (2003) suggests that there is an implied verb to be in such nominal sentences at D-structure. Most learners drop the verb to be in such sentences because it does not exist in the structure of nominal sentences in Arabic.

A further point concerns passive constructions in English and Arabic. By analysing the process of forming passive in English, learners would learn to use passive voice in its proper context. Passive voice in Arabic is formed by using diacritics, unlike

English, which requires applying transformational rules. The generation of passive clauses in Arabic does and include the use of transformational rules, as in English. This knowledge will improve learners' competence and performance in English.

Lastly, the most common error committed as a result of first language interference is that some EFL learners write English sentences in VSO order. Depending on this research, it is possible to identify the difference between the structure of Arabic and that of English sentences, which may minimise errors in the their performance.

Thus, teachers and learners at different stages, from elementary to the academic stage, should understand the various structures of the English sentence since it is the basic element of any process of communication.

7. Recommendations for further research

This research will contribute to research about the universality of working on the structure of the English sentence and account for the differences among languages in a systematic way. Further research can be conducted on the errors Arab learners of English

make as a result of first language interference within slaecond nguage production. Finally, one may study how a change in sentence structure may have a significant impact on its interpretation.

Bibliography

Abd El-Moneim, A. A. (1989). *The role of INFL*. Doctoral Dissertation, University of Connecticut, USA.

Benmamoun, E. (2000). *The feature structure of functional categories: A comparative study of Arabic dialects*. Oxford University Press.

Brown, H. D. (2000). *Principles of language learning and teaching*. New York: Longman.

Chomsky, N (1981). *Lectures on government and binding*. Dordrecht- Holland: Foris Publications.

Hasan, A (1990). *Configurationality and the syntax of empty categories*. Doctoral dissertation, University of Stcathclyde, Glasgow, UK.

Homeidi, M. (2003). The notion of governor in modern standard Arabic (MSA) and English: A contrastive perspective. *J. King Saud Univ*, *15*, 49-62.

Iatridou, S. (1990). About agr (p). *Linguistic Inquiry*, *21* (4), pp. 551-577.

Jordan, M. P. (1998). The power of negation in English: Text, context and relevance. *Journal of Pragmatics*, *29* (6), pp. 705-752.

Kibort, A. (2004). *Passive and passive-like constructions in English and Polish* (Doctoral dissertation, University of Cambridge Research Centre for English and Applied Linguistics).

Klima, E. S. (1964). 'Negation in English' In J. A. Fodor & J. J. Katz (eds) *The Structure of language*, pp. 246–323. Prentice-Hall, Englewood Cliffs, N.J.

Laka Mugarza, M. I. (1990). *Negation in syntax--on the nature of functional categories and projections* , Doctoral dissertation, Massachusetts Institute of Technology.

Larson, R. K. (1988). On double object constructions. *Linguistic Inquiry*, 19 (3), pp. 335-391.

Lasnik, H. (1972). *Analyses of negation in English*, Doctoral dissertation, Massachusetts Institute of Technology.

Ouhalla, J. (1990). Sentential negation, relativised minimality and the aspectual status of auxiliaries, in *The linguistic review*, 7, 183- 231.

Pollock, J. Y. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic inquiry*, *20* (3), 365-424.

Radford, A. (1981). *Transformational syntax: A student`s guide to Chomsky`s extended standard theory*. Cambridge: Cambridge University Press.

———— (1988). *Transformational grammar*. Cambridge: Cambridge University Press.

_____(2009). *An introduction to English sentence structure*. Cambridge: Cambridge University Press.

Tallerman, M. (2013). Join the dots: A musical interlude in the evolution of language. *Journal of Linguistics*, 49 (2), 455-487.

_____(2019). *Understanding syntax*. Routledge: Oxford University Press.

Woolford, E. (1991, July). Two subject positions in Lango. In *Annual Meeting of the Berkeley Linguistics Society* 17 (2), 231-243.

Zanuttini, R. (1991). *Syntactic properties of sentential negation. A comparative study of Romance languages*, Doctoral dissertation, University of Pennsylvania.