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Case-Assignment under Government in Modern Literary Arabic

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Abstract

This paper aims at finding how "Case-Assignment" is tackled under the notion "Government" in Arabic from the traditional Arab grammarians' grammatical analyses. Its purpose, also, is to argue that case-assignment in Arabic can be assigned under government and thus, this paper adopts the Government and Binding (GB) theory developed in Chomsky (1981, 1982, 1986b) but not Chomsky's "Minimalist theory" (1993 and 1995) because case-assignment is not assigned anymore under the notion "government" but under "Checking theory" in terms of morphological features checking between case assigners and case assignees. Thus, the minimalist theory is excluded here.

The basic part of this article is to argue the views of the traditional Arab grammarians concerning case and government. The paper aims at finding out whether the views of the Arab grammarians are compatible with the recent thinking in linguistics i.e., GB theory or both of these approaches are inadequate for case assignment in Arabic. This paper argues through its data analysis that a number of rules to handle case-assignment are to be proposed.

1. Objectives

The main objective of this paper is to examine case-assignment in Arabic in the light of both: the generative syntactic theory developed by Chomsky –viz., Government and Binding theory and the traditional Arab grammarians. It also throws light on the nature of the word order in Arabic to see whether Arabic is a configurational language i.e. is it restricted to one basic word order i.e., (VSO) or it's a non-configurational language i.e. does it allow elements to move from one place into another? And if yes what is the nature of this movement.

2. Methodology

With a view to pursuing the objectives of this research to a logical end, the researcher has attempted several and complex systems of methodology. The following methods have been applied: historical, descriptive, empirical, comparative, and analytical Historical and descriptive methods have been applied to obtain a historical background and record a descriptive analysis of case- assignment in Arabic.

An empirical method has helped in data analysis and the inclusion of the data (sentences) obtained from personal discussions with a cross-section of native speakers, grammarians, and professors of Arabic language. A comparative method has been applied to analyze case assignment in Arabic and compare it to that found in English to present the similarities and differences between them when necessary. An analytical method has been followed to analyze all relevant data (sentences) from which we have defined the terms exercised the supervision of this research.

3. Hypothesis

The research is designed to analyze the notions: "Government" and "Case Assignment in Arabic" in the light of both: the traditional Arab grammarians and the generative syntactic theory developed by Chomsky, viz, Government and Binding theory. In order to evaluate the explanatory and adequacy of these two approaches, this research is based on whether case-assignment in Arabic is satisfying both views or not. If not, can we explain case-assignment in Arabic with the help of some modifications.

4. Introduction

The language, with which this paper is concerned, is the modern written Arabic which is used in all written purposes throughout the Arab world. It's the language of all types of books, newspapers, magazines, letters, and various formal speaking situations such as lectures, broad casting and etc. Previous works that are related to this paper are dealt with.

Although the traditional Arab grammarians provided us with some literature about case assignment, there is no single work which is devoted specifically for this phenomenon.

Hasan's book (1975) "?an-Nahwu ?al-Wafii" is one of the most important, recent and comprehensive book dealing with all aspects of Arabic grammar.

Sibawayh's book (1966) "al-kitab", an edited version, written in the eighth century A.D. is considered the complete book written on Arabic grammar.

Ibn ya^ciish (1970) in his book"sharhu-al-mufṢṢal", which is an edited version, written in the thirteenth century is a commentary on the work of a well-known grammarian, ZamaXshari.

Among the recent studies applied to Arabic within the transformational-generative model are Snow (1965), Kellean (1966) and Lewkowicz (1967) who assume that SVO is the underlying structure of Arabic. Russell (1977) deals with the word order in Classical and Egyptian Arabic in a functional approach. He also claims that Arabic underlying SVO order.

Bakir (1979) deals with Arabic word order and claims again that Arabic underlying VSO order. Abdu Al-Ghany (1981), Ashawish (1984) and Farghal (1986) consider VSO as the basic order in Arabic. They also try to apply the theory of Government and binding to classical Arabic. Their works investigate case-assignment in Arabic.

Finally, Almomany (1998), in his unpublished thesis claims that literary Arabic strikes word order variation. He argues against the popular perception in the modern linguistic literature that Arabic is a language with basic VSO order, but a derived order by means of the movement of the internal NP of the verb into "S". This derived order can be accounted for by the adoption of the rule of scrambling. Case assignment is briefly tackled in his work.

5. Discussion

5.1. The Traditional Arab Grammarians' View of Case-Assignment

The traditional Arab grammarians take the sentence as the basis of their syntactic analyses. Ibn Ya^ciish (1970: 21) defines the sentence as: "the minimum amount of words conveying a message that merits the silence (on the part of the addressee)". The BaṢri grammarians label the sentence verbal if it starts underlyingly with a verb; whereas, the one that starts underlyingly with a noun is a nominal sentence. Consider the following sentences:

- 1. shahada ar- rajul-u al-masraḥiyat-a saw the man-nom the play-acc The man saw the play.
- 2. ar-rajul-u shahada al-masraḥiyat-a the man-nom saw the play-acc The man saw the play.

3. al-ḥadiqat-u jamilat-un the garden-nom beautiful The garden is beautiful.

Sentence (1) is considered a verbal sentence because it starts with a verb; whereas, (2 and 3) are nominal sentences because they start with NPs. The Kufi grammarians disagree with this classification saying that sentences like (1 and 2) are verbal sentences but they must be looked at as a stylistic variation; whereas, sentence (3) is nominal.

The notion "?^cmal" "government" was examined carefully by the traditional Arab grammarians and their main concern was to establish grammatical relations in terms of government. The notion "al-?^camil" "the governor" plays a central role in Arabic grammar. Words in a sentence influence each other and this influence may appear in the inflectional endings of words. Thus, verbs affect nouns, particles affect verbs, prepositions affect nouns and etc.

According to the traditional Arab grammarians, the word which affects the case of another word is called "al-?^camil" "the governor", and the word which is affected is called or referred to as "al-ma^cmul" "the governee". (cf. al-Jurjani 1972). Governors precede their governees in the underlying structure.

The accusative and nominative case are assigned to the subject and the object of the sentence respectively by the verb, the NPs governed by prepositions in prepositional phrases and NPs occupying the second part of the "?idafa" (construct construction) are assigned Genitive case. Consider the examples below:

- **4.** ?akala al-walad-u at-ta^cam-a. ate the boy-nom the food-acc The boy ate the food.
- 5. dahaba al-walad-u ?ila al-madrasat-i went the boy-nom to the school-gen. The boy went to school.
- 6. al-fakihat-u shahiyyat-un the fruit-nom delicious-nom The fruit is delicious.
- 7. malaabis-u hind-in jadidat-un cloths-nom hind-gen. new-nom Hind's clothes are new.

In (4) above, the subject NP "al-waladu" and the object NP "atta^cama" are assigned Nominative and Accusative case respectively by the verb "?akala" which is acting as a governor.

Thus, according to the traditional Arab grammarians the verb is a multi-case assigner that governs all the NPs that subcategorize for it. They also state that the nominative case as in (4), is associated with subjectiveness, "al-fa^ciliyyah"; whereas, the nominative case, assigned to the subject NP in equational sentences, i.e., verbless sentences where no lexical governors are shown, is associated with "al-?ibtidaa'iyyah" "inception" as can be seen in (6) where the subject NP "al-fakihatu" is assigned Nominative case by inception as an abstract governor; while the predicate "shahiyyatun" is assigned Nominative case by virtue of being the subject's governee.

In (5), the NP "al-madrasati" is assigned Genitive case, marked by "-i", by the preposition "?ila" "to". As for (7), the NP (hindin) is assigned Genitive case by virtue of being the second part of the genitive phrase "malaabisu hindin".

Because Arabic is linguistically considered an inflectional language, the markers (nominative, accusative and genitive) appear on the surface structure of the sentence. Case-assignment is very important in Arabic because it determines the structural case of a word regardless of its position. Consider the following examples:

- **8 a**. ?akala al-walad-u at-tuffahat-a ate the boy nom the apple acc The boy ate the apple.
- **b**. at-tuffaḥat-a ?akala al-walad-u the apple-acc ate the boy-nom The boy ate the apple
- **c.** ?akala at-tuffaḥat-a al-waladu ate the apple-acc the boy-mom The boy ate the apple.
- **d.** al-walad-u ?akala at-tuffaḥat-a the boy-nom ate the apple-acc The boy ate the apple.

In (8), the noun that carries the nominative case marker "-u" is interpreted as "al-fa^cil" "the subject" and the one which carries the accusative case marker is interpreted as "al-maf^cul-bihi" "the object".

Thus, the two NPs i.e., "al-waladu" and "at-tuffahata" in (8) are interpreted as the subject or the object of the sentence depending not on their position, but on the case form they appear in. Accordingly, the importance of the case endings of words made traditional Arab grammarians devote a great part of their work to the discussion of these case endings and how they are brought about.

The theory of case in modern linguistics claims that only overt NPs must be assigned case (cf. Chomsky 1981), the traditional Arab grammarians claimed that each word in a sentence must have a governor. This governor could be explicitly expressed and is

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referred to as "al-?^camilu-l-lazi" "the verbal governor" or implicitly expressed and is referred to as "al-?^camilu l-manawi" "the non-verbal governor.

5.1.1 *Verbal Governors:*

When the governor is explicitly expressed in a sentence is referred to as "verbal". Consider the following example:

9. qatala aş-şayyad-u al-asad-a killed the hunter-nom the lion-acc The hunter killed the lion.

In example (9), the verb "qatala" "killed" assigns case to the subject NP "aṣ-ṣayyadu" which is Nominative and case to the object NP "al-asada" which is Accusative. Thus, this verb is considered to be a verbal governor and it assigns two structural cases at the same time which is not possible according to Chomsky's theory of case.

The other traditional verbal governors are prepositions and particles. A preposition in Arabic is a governor and accordingly a case assigner. Consider the following sentence:

10. dahabtu ?ilaal-madrasat-i went (I) to the school gen I went to school.

In (10), the preposition"?ila" "to" assigns Genitive case to its complement i.e., the NP "al-madrasati" "the school". Thus, the genitive case in Arabic is assigned by a preposition preceding a noun phrase. A particle is a possible governor in Arabic and thus a case assigner. Consider the following sentence:

11. ?axbartu zayd-an ?nna ^comar-an fi al-hadiqat-i told (I) zaid-acc that ^comar- acc in the garden-gen I told Zaid that Omar is in the garden.

In (11), "?anna" "that" is a governor and thus a case assigner which assigns Accusative case to the NP "^comaran". "?anna" is a complementizer here and is referred to by the Arab grammarians as a particle.

It's worth mentioning that there are two kinds of particles: (i) those which assign Accusative case to nouns as seen in example (11) and (ii) those which assign case to verbs. The particle "lan" "not" for instance assigns Accusative case to the imperfective verb as can be seen in the following sentence:

12. lanyuġadir-a(will) not (he) leave-accHe will not leave.

The verb in Arabic is considered to be the strongest kind of governors because more than one case can be assigned to different words in a certain sentence. For more illustration, consider the following sentence:

13. ?^cta zayd-un ^comar-an haddiyyat-an gave zayd-nom ^comar-acc gift-acc Zaid gave Omar a gift.

In (13), the verb "?^cata" "gave" assigns Nominative case to the subject NP "zaydun" and Accusative case to the indirect object NP "^comaran" and the direct object NP "haddiyytan".

The verbal noun which is referred to by the traditional Arab grammarians as "almaşdar" and by William Wright as "nomina verbi" (cf. Wright 1975) can function as a governor in the absence of a verb in a sentence. Consider the following example:

14. al-nawmu ba^cd-a al-la^cib-i mufid-un sleeping after-acc playing-gen healthy nom Sleeping after playing is healthy.

In (14), "ba^cd-a""after" is a time adverbial which is assigned Accusative case from the governor "al-nawmu" which is expressed in the sentence. Thus, "al-maşdar" in Arabic is a case assigner.

Adjectives derived from verbs are governors and accordingly case assigners. Such adjectives are called "sifaatun" by the traditional Arab grammarians. Consider the following example:

15. aT-Tiflu muz^cijun bakiy-an the boy annoying crying-acc The boy is annoying when crying.

(15) is an example of an adjective used as a governor. The adjective "muz^cijun" assigns Accusative case to the adverb "bakiyan".

5.1.2. Non-Verbal Governors:

In order to decide non-verbal governors, consider the following example:

16. ar- rajul-u mut^cab un the man-nom tired-nom The man is tired.

The example in (16) is said to be an equational sentence. "ar-rajulu" "the man" is "mubtada" "the topic" and "mut^cabun" is "xabar" "the comment". As can be seen in this sentence, the verb is absent and thus, there is no explicit governor. Both words are

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assigned Nominative case because they appear in the nominative. How the nominative case is assigned in the absence of the verb since case must be assigned by a governor?

The traditional Arab grammarians claim that a governor in such a sentence is implicitly expressed and it's referred to as "a non-verbal governor".

In (16), the NP "ar-rajulu" is assigned Nominative case by virtue of its position i.e., the case is assigned because the word "ar-rajulu" occurs in initial position in the sentence. The Arab grammarians refer to this governor as "al-?ibtida" "the inception". The second word "mut^cabun" in (16) is also assigned Nominative case by the first word i.e., "ar-rajulu" "the topic". Thus the first word functions as a governor for the second word in an equational sentence.

The concept of "governor" was accepted by the majority of Arab grammarians. However, some Arab grammarians questioned the task and the role given to the "governor" and others completely rejected the concept of "governor".

Ibn Jinnii who lived in the tenth century was the earliest Arab grammarian who questioned the task of the governor, but didn't reject the concept. According to Ibn Jinnii, case is assigned by the speaker not the governor. Thus, the speaker is the one who decides what word can be assigned case in a sentence. (cf. Ibn Jinni: 1954, pp. 109-110)

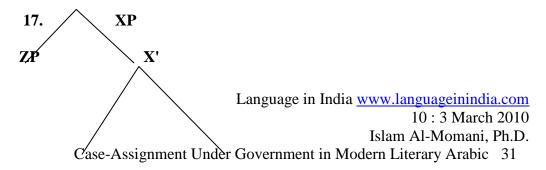
Ibin Madaa, who lived in the twelfth century, rejected completely the concept of the governor and claimed that words don't and can't change the forms of other words. He, like Ibn Jinni, assumes that the speaker is the only one responsible for case-assignment to words occur in a sentence (cf. Ibn madaa: 1979, pp. 69-70).

5.2. Chomsky's Theory of Case

The theory of case established by Chomsky in (1981, 1982and 1986) emphasizes that overt NPs in a sentence must be assigned case under government at the S.Structure of the sentence. Thus, we have to have a governor in order to have case-assignment.

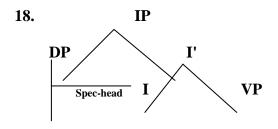
According to Chomsky, abstract case is a universal notion which is of two types: (i) the structural case which is assigned under the notion of government and (ii) the genitive case which is assigned inherently.

Thus, according to Chomsky, formal features are assumed to get licensed in certain phrase structure configuration, defined in terms of the X-bar theory which assumes that all heads, lexical or functional, project their own phrases, described as in the following:



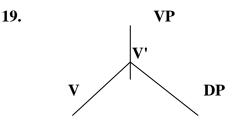
In (17), X is the head of XP i.e., XP is the maximal projection of X. ZP is the position of the specifier (spec) of XP. YP is the position of the complement of X. Lexical categories include N(oun), V(erb), P(reposition), A(djective) and INFL. The two primitive relations in (17), Spec-head and head-complement emerge as the configurations for licensing agreement features on verbs and case features on NPs.

The first relation is typically known as "Spec-head agreement" while the other relation which is between a head and its complement makes use of the notion of "government". Accordingly, Nominative case-assignment results from a Spec-head relation between X, i.e., (I)nflection the head of XP and a (D)eterminer (P)hrase in its Spec.



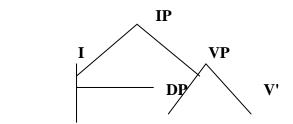
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Object-verb agreement and Accusative case-assignment, on the other hand, are assumed to follow directly from the government relation between the head-complement of (YP), i.e., (VP), the verb and its DP complement, the object NP.



The ECM structure allows case-assignment under an extended definition of government i.e., case is assigned from outside exceptionally (outside government). The paper also adopts the visibility condition (Chomsky 1986) which states that all arguments must be case-marked to be visible for full interpretation. A case can be structural or inherent, the former is being configurational and the latter is related to theta role assignment.

Further cross-linguistic investigation of agreement and case-assignment shows that the extended notion of government is needed to account for subject-verb agreement in VSO languages; as has been argued to be the case in Welsh (Sporat 1985) and Standard Arabic (Mohammad 1990). Consider the following example:



As shown in (20), "I", in VSO languages, is a governor which is assumed to govern the DP subject in Spec VP. Thus, (I)nflection, in this complex definition of government, accounts for agreement on the verb as well as Nominative case-assignment on the DP.

Therefore, there are at least three configurations for case-assignment and agreement to obtain: (i) Spec-head, (ii) head-complement and (iii) head-Spec-of-complement. These three configurations are somehow unified by utilizing the notion of government.

An attempt is made by Chomsky (1993 and 1995) in his "Minimalist Program for Linguistic Theory" and "The Minimalist Program" respectively to get rid of the asymmetry in the configurations need to account for agreement and case-assignment within the same language as well as cross-linguistically. Chomsky (1993), in particular, proposes a Spec-head approach to all agreement and case-assignment phenomena to replace the notion of government.

Adjacency condition, which is claimed to be universal and requirement on caseassignment, assumes that the case assigner and the case assignee must be adjacent in order to get case-assignment i.e., there must be no intervening node between the case assigner and the NP that must be assigned case. Consider the following example:

21 a. John injured Mary badly.**b.** *John injured badly Mary.

(21a) is grammatical because the subject NP "John" is assigned Nominative case by the tensed (I), and the object NP "Mary" is assigned Accusative case by the transitive verb "injured". (21b) is ungrammatical because the object NP "Mary" is not assigned case because the adverb "badly" intervenes between the case assigner which is the transitive verb "injured" and the case assignee i.e., the object NP "Mary".

According to Chomsky, case assigners are as in (22)

22.

a. The tensed Infl(ection) i.e., (I) which assigns Nominative case to the subject NP of a finite clause.

20.

b. The transitive verb assigns Accusative to the object NP of a finite clause or to the subject NP of a non-finite clause as an ECM (exceptional case marking).

c. The preposition assigns accusative case to its complement.

d. The prepositional complementizer (for) assigns accusative case to the subject of a non-finite clause from outside and that is why it is called an outside case assigner.

e. The genitive case is assigned inherently.

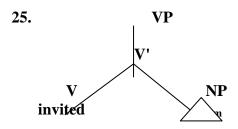
Chomsky claims that case is assigned either under the C-command condition which is a very strict condition, or the M-command condition. Reinhart (1981) defines the C-command condition as the following:

23. Node A c-commands node B iff;a. A doesn't dominate B and B doesn't dominate A.b. The first branching node that dominates A also dominates B.

Government under the c-command condition is defined by Chomsky (1981) as a relation of "mutual of c-command" as the following:

24. A governs B iff
(i) A is a governor; and
(ii) A c-commands B and B c-commands A
(iii) A governs B
(governors are heads)

For illustration, consider the following example:

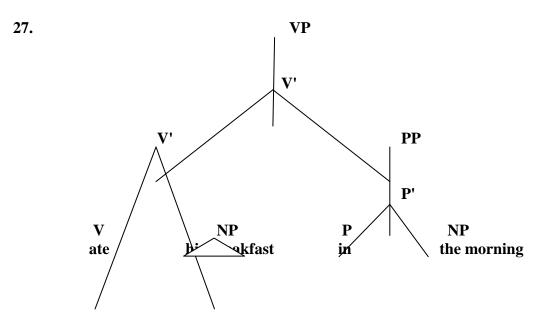


As can be seen from the tree diagram in (25), "invited", the verb, which is the head of the VP, c-commands the NP "him" and, at the same time, the NP "him" c-commands the verb "invited" i.e., they c-command each other (mutual c-commanding) because the first branching node, the "v'" dominates both of them. Thus, the verb "invited" assigns Accusative case to the NP "him".

Chomsky (1986b: 8) proposes the following definition of c-command:

26. A c-commands B iff A doesn't dominate B and every X that dominates A also dominates B.

In (26), if X is equated with the first branching node, we obtain the c-command condition given in (23). If X is interpreted as a maximal projection, then A m-commands B. For illustration, consider the following:



The verb "ate" m-commands the NP "his breakfast" and the PP "in the morning" because the first maximal projection i.e., the VP that dominates the verb also dominates both of them.

Chomsky (1986b: 8) modified the notion "government" under the m-command condition as the following:

28. A governs B iff A m-command B and no barrier intervenes between A and B. Maximal projections are barriers to government. Governors are heads.

A maximal projection according to the X-bar theory is any "XP". XPs constitute barriers for government at the S.Structure of the sentence. Two maximal projections are excluded from being barriers for outside government namely, the IP if its head is (- tensed) and the AGRP because they are weak and thus, case is assigned as an ECM (exceptional case marking)

On the basis of the foregoing discussion of case-assignment under the Arab grammarians' approach, it is worth mentioning the following:

The verb governs the subject in Arabic whenever occurs in a sentence and this subject must be assigned Nominative case. However, when the subject is preceded by a complementizer such as "?inna" in an equational sentence, this complementizer governs the subject and assigns Accusative case to it as in the following example:

29. ?inna ar- rajul-a karim-un

that the man-acc generous-acc That the man is generous.

The topic in an equational sentence which is not preceded by a complementizer is assigned Nominative case like the subject in the absence of a lexical governor.

Consider the following example:

30. ar-rajul-u qadim-un the man-nom coming-acc The man is coming.

As can be seen from (30), the topic "ar-rajulu" is assigned nominative case without the presence of a lexical governor.

The traditional Arab grammarians stipulate that the predicate of an equational sentence is assigned Nominative case as noted earlier in (30). However, adverbs which are governed and assigned Accusative case may occur as predicates of equational sentences and they still appear in that Accusative case. Consider the following example:

31. al-?imttiḥan-u ṣabaḥ-an the examination-nom morning-acc The examination is in the morning.

(31) is considered as a violation to their stipulation that the predicate of an equational sentence must be assigned Nominative case.

By turning back to Chomsky's approach of case-assignment in order to examine its adequacy for case-assignment in Arabic, it is worth to point out the following:

The application of Chomsky's theory of case in Arabic faces a great difficulty, if it's dealt with as a language with a basic VSO word order as classified by many Arab and international modern linguists. On this basis, the subject NP intervenes between the verb "the case assigner" and the object NP "the case assignee". Thus, in terms of government as defined in (26) in terms of the m-command condition the object NP is not governed by the verb and accordingly is not case-assigned. Consider the following example:

32. qatala zayd-un hind-an killed zaid-nom hind-acc Zaid killed Hind.

In (32), the subject NP "zaydun" is assigned Nominative case by the "INFL" without violating the notion of government. The problem which appears here that the object NP "hindan" is not assigned case by the verb "qatala" because the subject NP "zaydun" which is a maximal projection constitutes a barrier for government. According to the traditional Arab grammarians' government schema, this is not a problem because it enables the governor to govern distance governee. Thus, the verb which is a multi-case assigner can govern the object NP despite the presence of a maximal projection.

Furthermore, a prepositional phrase may also intervene between the object and its complement violating the notion of government and accordingly case-assignment in Arabic. Consider the following example:

33. qatala zayd-un fi-l-ḥadiqat-I hind-an Kill zaid-nom in the garden-gen hind-acc Zaid killed Hind in the garden.

In (33), both maximal projections: the subject NP "zaydun " and the prepositional phrase "fi-l-hadiqati" intervene between the governor, the verb "qatala" and the governee the object NP "hindan" causing a problem for the Chomsky's approach.

The problem that faces the notions "government" and case-assignment" of the Chomsky's approach may be solved adopting the following two proposals:

(i) The first proposal is to consider Arabic, as many linguists have stated, a language with a flexible word order i.e., it doesn't have the VSO order as its basic word order.

For illustration consider the following:

- **34. a.** zayd-un qatala hind-an zaid-nom killed hind-acc Zaid killed Hind.
- b. qatala hind-an zayd-un killed hind-acc zaid-nom zaid killed Hind.
 c. hind-an qatala zayd-un hind-acc killed zaid-nom
- hind-acc killed zaid-nor Zaid killed Hind.

As can be seen from the sentences in (34), Arabic, in addition to having a VSO word order displays also SVO, VOS and OVS word orders. According to these three sentences the verb "qatala" governs the object NP "hindan" because there no intervening node between them. Thus, case-assignment is fulfilled.

The prepositional phrase that intervenes between the verb and its complement in (33) doesn't constitute a problem for the application of Chomsky's approach of case-assignment in Arabic if it's looked at the order of the sentence as a derived word order. Different word orders of (33) can be displayed:

- **35 a.** zayd-un qatala hind-an fi-lhadiqat-i zaid-nom killed hin-acc in the garden-gen Zaid killed Hind in the garden.
 - b. qatala hind-an zayd-un fi-lhadiqat-i killed hind-acc zaid-nom in the garden-gen Zaid killed Hind in the garden.
- **c.** hind-an qatala zayd-un fi-lḥadiqat-i hind-acc killed zaid-nom in the garden-gen Zaid killed Hind in the garden.

The sentences in (35) satisfy the notions of government and case-assignment because the verb "qatala" assigns case to the object NP "hindan".

Thus, government is assigned in the base .i.e., at the Deep Structure (henceforth D.Structure) rather than the S. Structure. This is incompatible with the GB theory which asserts that case-assignment is carried out at the level of S-Structure. Thus, transformational rules do not affect case-assignment. Consider the sentences in (36b and c) below where case is moved along with the moved NP.

- **36 a.** daraba as-sajjan-u as-sajiin-a hit the jailor-nom the prisoner-acc The jailor hit the prisoner.
- b. daraba as-sajiin-a as-sajjan-u hit the prisoner-acc the jailor-nom The jailor hit the prisoner.
- **c.** as-sajiin-a daraba as-sajjan-u the prisoner-acc hit the jailor-nom The jailor hit the prisoner.

Obviously, in (36b and c), the accusative case assigned to the object NP "assajiina" which is structurally marked by "a" is moved along the moved NP without getting affected by movement transformations. However, by considering VSO word order as the underlying structure in Arabic, the subject NP of a sentence is assigned a structural case by the INFL, but the object NP cannot be assigned a structural case by the verb because of the intervention of the subject NP and thus, the notion government is violated. Therefore, the object's case-assignment should be handled inherently rather than structurally.

(ii) The second proposal is to adopt the proposals of Snow (1965), Kellean (1966) and Lewkowicz (1967). According to them, SVO word order is the basic word order in Arabic. Thus, the Deep Structure and the S-Structure of (33) which is repeated in (37) are as the following:

37. qatala zayd-un fi-l-ḥadiqat- i hind-an kill zaid-nom in the garden-gen hind-acc Zaid killed Hind in the garden.

The D.Structure of (37) is (38)

38. zayd-un qatala hind-an fi-lhadiqat-i

The S.Structure of (37) is (39)

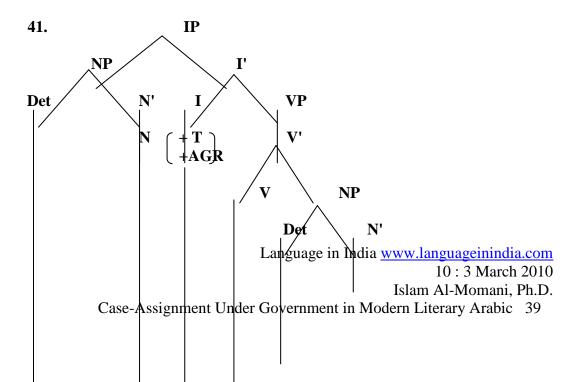
39. t_i qatala zaydun_i fi-l hadiqati_k hindan t_k

As can be seen in (38), case-assignment is perfectly met here because the verb "qatala" assigns Accusative case to the object NP "hindan" satisfying the condition of the theory of case. What is remarkable here that Arabic case-assignment is assigned at the D.Structure of the sentence rather than the S.Structure as claimed by Chomsky's theory of case. By this, it's meant that case is not affected by movement, i.e., case is moved along the NP undergoing a movement of transformation. Thus, the accusative case is moved along with the object NP "hindan" in (39)

The nominative case assigned to the subject NP of the sentence will not be violated if adopting the SVO word order as the basic order in Arabic because as mentioned above that case-assignment is assigned at the level of D.Structure. Consider the following example.

40. al-asad-u hajama aṣ-ṣyyad-a the lion-nom attacked the hunter-acc. The lion attacked the hunter.

In (40), the tensed "INFLECTION" assigns Nominative case to the subject NP satisfying the notion of "government" because there is no maximal projection that intervenes between the case assigner "the (I)" and the case assignee the subject NP "al-asadu", "the lion" as can be seen in the following tree diagram:



al asadu Pst hajam aş şayyadu

The greatest difficulty which faces case-assignment in Chomsky's approach in Arabic is when dealing with topics and subject NPs in topic-comment and equational sentences because there are no lexical governors in such sentences. Consider the following sentences:

42. a. al-walad-u darabahu al-muddarris-u the boy-nom hit (him) the teacher-nom The boy hit him the teacher.
b. ar-rajul-u Tabib-un the man-nom doctor-nom The man is a doctor.

In (42), the topic "al-waldu" and the subject NP "ar-rajulu" are assigned Nominative case. The predicate "Tabibun" in (42b) also appears in the nominative. These NPs can't be case-assigned in terms of government because they have no lexical governors. Thus, such cases are problematic for Chomsky's approach.

However, the other problem concerning topics and subjects of equational sentences when preceded by the complementizer "?inna" "verily", the subject NP of the sentence is governed and assigned Accusative case by it. Whereas, the complementizer "?inna" assigns Nominative case to the predicate as can be seen in the following sentences:

43. a. ?inna ar-rajul-a Tabib-un verily the man-acc doctor-nom that the man is a doctor.
b. ^caraftu ?anna ar-rajul-a Tabib-un knew (I) that the man-acc Tabib-nom I knew that the man is a doctor.

In order to handle the problem facing Chomsky's approach of case-assignment regarding topic-comment and equational sentences in Arabic, the proposals made by Abdul-Ghani (1981), Ashawish (1984), Aboudi (1985) and Farghal (1986) will be

examined in this paper in order to come up with a reasonable solution for caseassignment in Arabic regarding such types of sentences under the GB theory.

Abdul-Ghani (1981: 35) proposes to abandon case-assignment in terms of government and replace it by statements of case-assignment in order to connect various types of case to the grammatical function of NPs as in (44):

44. (i)- Topics are Nominative.

(ii)- Predicates (NPs, adjectives) of equational sentences are Nominative.

Abdul-Ghani's proposal assumes that the topic and the predicate of an equational sentence are assigned Nominative case without deciding what are the governors and accordingly the case-assigners that assign case to them. The subject of the equational sentence if preceded by the complementizer "?inna" is considered to be assigned Accusative case as an exception.

Ashawish's proposal (1984: 201-202) deals with complementizers as caseassigners as the following:

45. (i)- Topic NPs, first NPs and predicates (NPs, adjectives) of equational sentences are Nominative if these topic NPs, and equational sentences are not preceded by case-assigners.

(ii)- ?inna and its sisters (e.g., ?anna) are case assigners.

- (a) They assign the accusative case to topic NPs and first NPs, and first NPs of equational sentences.
- **(b**)

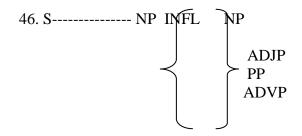
They

assign the nominative case to predicates (NPs, adjectives) when any of them precede in an equational sentence.

Accordingly, the topic NP "al-waladu", the subject NP "ar-rajulu" in (42 a and b) and the predicate NP"tabibun" in (42 b) are assigned Nominative case according to either proposal. In (43), the equational sentences are preceded by the complementizers "?inna" and "?anna" respectively which are considered as case-assigners according to Ashawish's proposal. The subject NPs and the predicate NPs are assigned case by the complementizers "?inna" and "?anna" and "?anna".

According to Ashawish's proposal, a complementizer governs both the subject and the predicate of an equational sentence and accordingly a multi-case assigner which is considered strictly prohibited by the GB theory.

Al- Aboudi (1985: 327) gives a major role to the INFL. and assumes that the INFL governs both the subject and the predicate of an equational sentence if not preceded by a complementizer. He formulates the following PS-rule:



Thus, in sentence (42 b), the INFL assigns Nominative case to both the subject "arajulu" and the predicate "tabibun". Al-Aboudi considers INFL a multi-case assigner which is again prohibited by the GB theory.

If the equational sentence is preceded by a complementizer, the complementizer assigns Accusative case to the NP that follows and the INFL assigns Nominative case to the predicate without violating the GB theory as can be seen in (43).

Farghal (1986: 166) assumes that NPs occur in sentence-initial position are assigned Nominative case inherently. Thus, in (42), the topic "al-waladu" of the topic-comment sentence and the subject NP "ar-rajulu" are assigned Nominative case.

Conclusion

This article tries to examine the views of both the Arab grammarians and the GB theory of case-assignment under the notion "government" in Arabic. Both the Arab grammarians and Chomsky in his GB theory claim that case-assignment must be assigned under government because words in a sentence influence each other. But they are different according to two things: (1) what are the case assigners? and (2) what are the words in a sentence that must be assigned case?

According to the traditional Arab grammarians case-assigners are: transitive verbs which are multi-case assigners because they assign Nominative case to the subject and Accusative case to the object in the same sentence. Particles like "?inna" and "?anna" are case assigners and again they are multi-case assigners because they assign Accusative case to the NPs that follow and Nominative case to their predicates.

Prepositions assign Genitive case to their complements. "al-masdar" "nomina verbi" can function as a governor in the absence of the verb which assigns Accusative case to an adverb that follows it. Adjectives derived from verbs are governors and assign Accusative case to verbs. Finally, in an equational sentence, a non-verbal governor "implicit governor", in the absence of a lexical governor, assigns Nominative case to NPs occur in initial position and the second word is assigned Nominative case by the first word in that sentence.

The words that must be assigned case, according to the Arab grammarians, in a sentence are NPs, adjectives, adverbs and imperfective verbs.

The GB theory assumes case-assigners are only major categories which are classified as the following: transitive verbs in active sentences and prepositions assign Accusative case, the tensed INFL assigns Nominative case, the prepositional complementizer "for" assigns Accusative case as ECM and the genitive case is assigned inherently. According to the GB theory only overt NPs must be assigned case.

Despite the fact that case-assignment in Arabic falls under the nature of the GB theory, its content is different. As argued throughout this article, Arabic possesses two types of case assignment namely: the inherent case which is assigned at the base and the structural case which must be, according to the GB theory, assigned at the level of S.Structure, in Arabic, is carried out at the level of D.Structure regardless of the word order used because the structural case marker moves along with the moved word which constitutes a kind of a departure from the GB theory. Thus, Chomsky's theory of case is partly accounts for case-assignment in Arabic.

Finally, in order to bring our discussion to a logical end, it is necessary to sum the rules of case-assignment in Arabic as proposed by the researcher in the discussion he made throughout this article taking into consideration the four proposals mentioned above regarding topic-comment and equational sentences. Thus, under the researcher's proposal case in Arabic is assigned as the following:

Case is assigned at the level of D.S rather than S.S.

a. SVO is proposed to be an alternative basic word order in addition to VSO word order which is assumed by the majority of Arab grammarians to be the basic word order in Arabic.

b. Predicates (NPs and AdjPs) of equational sentences are assigned Nominative case by INFL whether the equational sentence is preceded by the complementizer "?inna" or not.

c. Particles such "?inna" and its sisters are case assigners. They assign Accusative case to the NPs that follow.

d. The genitive case is assigned to an NP by either the preposition in a prepositional phrase or by the second part of a genitive phrase.

e. NPs in initial positions are assigned Nominative case inherently.

f. The accusative case of a transitive verb is assigned inherently if VSO is considered as the basic word order; whereas, is structural and assigned by the transitive verb if SVO is adopted as an alternative basic word order.

These rules make use of both the traditional Arab grammarians and the GB theory of case-assignment as pointed out earlier.

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