The Case Assignment And V-movement In Verbal Sentence In Arabic Syntax:
A Minimalist Approach

Dr. Atef Jalabneh
Dept. of Foreign Languages, The Applied Science University

ABSTRACT

This paper discusses the concept of government and case-system proposed by Traditional Arab Grammarians, (see Haque (1984), Wright (1984) and Abdulhamid (1980)). They, basically, regarded the system of overt morphological realizations and the transitivity theory but not government as primary factors for it to assign the case of an NP. As their approach is unable to account for the assignment of the nominative case without a governor, we opt for case - theory of Chomsky (1995) to solve this and other problems. X-bar syntax as a module of case theory guarantees the assignment of case to a DP in the presence of a case - assignor. The DP must be governed by specific case - assignor in its maximal projection. This theory introduces the principle of Exceptional Case Marking as a mechanism that guarantees the assignment of the accusative case by the matrix verb to the subject of IP under government. In this process, we depend on the Spec-head relation to achieve this kind of assignment in X-bar syntax.
تحديد حركات الاسم في الجملة الفعلية العربية: النهج التخنيطي

Government يناقش هذا البحث تطبيق النحوين الحربي للفهم السيطرة وتأثيره المباشر على عملية إعراب الاسم في الجملة، بحيث اعتمدوا شكل حركات الإعراب ونظرية التعدي باعتبارها عوامل أساسية لتطبيق هذا الفهم. وبما أن هذه الفرضية غير قادرة على إعطاء معلومات قواعدية دقيقة بتحديد عوامل وجود بعض حركات الإعراب ومنها الرفع على سبيل المثال، فقد اعتمدنا في بحثنا هذا نظرية لحل مثل هذه الشامخة وغيرها. تؤكد النظرية Chomsky 1995 Case-Theory الجديدة من خلال مبديتها أن إعراب الاسم يعتمد حكناً على مفهوم X-bar-syntax السيطرة ووجود عمليات الإعراب Case -Assignor ومساراته على الاسم في حوزته دون استثناء أي اسم في الجملة. ومن المبادئ الأساسية لهذه النظرية أن حركة إعراب لها حامل سيطرة محدد ولا يجوز له التعدي على غيره حكاً ادعي التحليل بان الفعل اللازم إذا تحدى بسيطرة على الاسم من خلال حرف الحرا. وتؤكد أيضا أن حركة النصب لتفاعل الجملة المحتفزة IP جاء بتطبيق مفهوم السيطرة الجديد Exceptional Case Marking. وتوفر عمليات الإعراب المناسبة في مبدأ...

REVIEW:

The objective of this paper is to study the case-system in verbal sentences in Modern Standard Arabic syntax within a module of grammar, namely, case-theory of Chomsky (1995). This theory specifies that adjectives, adverbs and infinitival clauses are not case bearers but DPs are. The case properties depend on the governors; namely, TNS or AGR, P and V of VP. TNS or AGR assigns the nominative case to [Spec, AGRsP], V assigns the accusative case to [VP, Spec] and P assigns the oblique case to [PP, Spec]. This paper introduces the principle of Exceptional Case-marking (ECM) as a mechanism used to guarantee the grammaticality of Arabic sentence whose subject is the complement of a matrix verb. The Spec-head relation is the core relation to assign the accusative to such DPs in AGR node.

The Arab grammarians claimed that the nominative case is assigned to
subjects and to any element that functions as a subject on the basis of its morphological realization but not on the basis of a case-assignor (cf. Haque (1984), Wright (1984), Abdulhamid (1980), Alfakhuri (1988) and Makram (1992)). This fact can be illustrated as in (kataba al-mu\textsuperscript{c}limu al-darsa 'the teacher wrote the lesson'). They were silent about applying the concept of government to the subject NP al-mu\textsuperscript{c}alimu 'the teacher'. As the verb does not govern the subject either directly or indirectly, they did not talk about its being governed at all. In other words, according to them, the verb governs all the internal NPs in the sentence rather than the external subject. Since they did not claim this case must be assigned under government, it was not necessary for them to point out what governed and assigned the nominative case to the subject NP in the sentence. This, from our point of view, is a shortcoming of government in their analysis.

Their scope of government extends to cover the government of the verb to its object complement and the object of preposition to which the objective cases are assigned, (See Wright (1984): 46-47). The instance, (?a\textsuperscript{c}ta zaidun al-kit\textsuperscript{a}ba li hindin 'Zaid gave the book to Hind') illustrates this point. The verb ?a\textsuperscript{c}ta 'gave' directly governs the accusative case assigned to the NP al-kit\textsuperscript{a}ba 'the book'. However, it indirectly governs the dative case assigned to the object hindin 'Hind' through the preposition li 'to'. The traditional grammarians relied on their analysis on the transitivitiy power of the verb, which can govern beyond its scope(1). The application of government in this style is however a pitfall. This is due to the fact that the subject NP zaidun 'Zaid' constitutes a barrier, which blocks the assignment of case to the NPs. For a case to be assigned, the governor and the governee must be adjacent to one another in X- bar - syntax as a principle of case theory. Moreover, prepositions, themselves, are case-governors whether the assigned case is the dative or anyother oblique case. This problem will be bridged with reference to the adjacency parameter.
The grammarians were incorrect in saying a noun and an adjective are case - assignors for the genitive case as in (al-sācatu min dahabin 'the watch is of gold') and (fahiru al-qalbi 'pure at heart'). In these structures in which [NP1 / or AP, NP2], are manifested, NP2 is assigned the genitive case due to the inherent structural relation found between the two elements. The force of the case- assignors li and min 'of', in Arabic, can specify this kind of relation whether the head is an NP or AP. A noun and adjective cannot be the governors for the inherent genitive case because they cannot assign their objects complement either a case or a theta role. This deficiency can be bridged with the introduction of the principle, namely, 'of' - insertion in a, strategy called the 'last resort', (See Chomsky; (1981): 117-118 and (1995)).

We will agree that these problems of case assignment of the nominative, accusative and genitive can be solved neatly if we introduce case - theory, the concept of government as it is in X-bar syntax, and V-movement in the frame work of the Minimalist Approach as proposed by Chomsky (1995). We will also illustrate that the case - filter accounts for the assignment of case of every phonetically realized NP in the sentence. The concept of VP - internal subject hypothesis in which all the arguments are projected from the VP instead of AGRsP will be our model for the analysis of case - assignment in this paper, (cf. Larson (1988), Pollock (1987) and Chomsky (1995) & (1998))(2).

1. THE ASSIGNMENT OF CASE IN VERBAL SENTENCES IN ARABIC (1)

1.1 AGR, V and P are Case - Assignors in Arabic

For a case to be assigned, a governor and a governee must be adjacent to each other at an abstract level. If we treat Arabic as VSO at all syntactic levels and apply the case - assignment, we will face the same problems that the Arab grammarians faced. In other words, the concept of government of case
- theory of Chomsky (1995) will not be met. Therefore, we treat Arabic as SVO at the spell-out level to meet the requirement of case-assignment (3). A case in its literal sense is assigned only to overt DPs in the sentence. Adjectives, adverbs and infinitives are not case-bearers (4).

Case properties in Arabic; however, depend on the characteristics of the governors AGR or T to assign the nominative case in [Spec - AgrsP], V to assign the accusative case in [V, DP] and P to assign the oblique case in [P, DP]. We may examine the process of case-assignment and government with reference to the approach of V-movement in case theory with reference to Arabic verbal sentences. The sentence (1) illustrates the assignment of cases of the nominative, accusative and oblique.

```
1a. PF  wad'a  zaidun  al -  kitab - a  'ala
   put    Zaid   DET    book    ACC    on
   'Zaid put the book on the table.'

Spell-out

1b. zaid   -un   wad'a - a   al -  kitab
    Zaid  NOM    put    past,3rd,sg,masc DET    book
'on table  Loc
    'Zaid put the book on the table.'

(1c) is the tree-diagram representation for (1b):

- 13 -
In (1c), the preposition ِال-'on' is the governor and it assigns the locative case to the DP ِال-تاويلاتي 'the table' under the maximal projection PP. V2 ِوضع 'put' in this position assigns the theta-role of location to the PP ِال-تاويلاتي. As it cannot assign a case to ِكتاب 'the book' in this position, it raises to the empty position of V1 to govern this object forming the chain ِوضع ...تاويلاتي. In this position, it assigns the accusative case and the theta-role of theme to the object DP ِكتاب 'the book' under VP1 - shell. The DP ِزايد 'Zaid' is in a caseless position due to the absence of the governor AGRs, so it overtly raises to the position of [Spec, AgrsP] to be assigned the nominative case by this governor. We may point out that, in this tree-diagram, the internal domain of the chain ِوضع ...تاويلاتي are the arguments ِال-
kitāba, ʕala al ṭāwilati] and the checking domain of this chain is the DP zajdun. The verb, in a successive movement, raises to the [TNS, T] to check the past tense and becomes wadaʕa 'put'. It raises to the [Agrs, Agrs'] to check agreement features with the subject zajdun and in a final movement it lands in the position of [C, C] to head the sentence at the PF level. These V-movements are overtly visible in (1d):

\[
\text{Id.}
\]
We may note that in (1c) the case relation in Arabic syntax entirely depends on the grammatical as well as the government relations established between the case assignors and the DPs at spell-out level in the sentence. As per this approach, case relation does not follow the question of the overt case markings as the traditional Arab grammarians did. The concept of government, in this approach, helps us to assign cases to DPs in sentences in which a verb has three objects (cf. Alfakhuri 1988: 403-404). The sentence (2) illustrates the point.

\[
\begin{array}{ccc}
\text{PF} & \text{2a.} & ?a^\text{1lam} \ a \ zaidun \ c^\text{amran} \ al- \ khabara \\
& \text{inform} & \text{past,3\textsuperscript{rd}}\text{-sg,masc} & \text{Zaid} & \text{Amr} & \text{DET} & \text{news} \\
\end{array}
\]

Literal Translation

‘Zaid informed Amr the news at correction.’
‘Zaid informed Amr the correct news.’

Spell-out structure\(^{(5)}\)

\[
\begin{array}{cccc}
\text{2b.} & \text{zaid} & ?a^\text{1lam} & c^\text{amr-} \\
& \text{Zaid} & \text{inform} & \text{past,3\textsuperscript{rd}}\text{-sg,masc} & \text{Amr} \\
& \text{al-} & \text{a} & \text{\textasciitilde{s}a\text{\textbar{h}i\textbar{h}-}} & \text{an} \\
& \text{DET} & \text{news} & \text{ACC} & \text{at correction} & \text{ACC} \\
\end{array}
\]

‘Zaid informed Amr the correct news.’

(2c) is the representation for (2b)\(^{(6)}\):

- 16 -
(2c) shows that the verb 'inform' governs the DP 'correct' in the VP3 shell. The verb is posited in this position to assign the theta-role of patient and then the inherent accusative case to it. The verb raises to V2 and assigns the theta-role of theme and the accusative case to the object complement al-khabara 'the news' in VP2 shell. It further raises to V1 to assign the inherent dative case and the theta-role of goal to the indirect object complement 'Amr in VP1 shell. In the second - last movement, it checks TNS and Agr and in the last movement it lands in the position of [C,
C] to initiate the sentence at the PF and LF. The verb in this long travel leaves a chain of traces to indicate the movement.

So far, we notice that the case of a DP as per this approach is assigned on the basis of the position and the structural relation it has with a specific case-assignor. In (2d) the [Spec, AGRsP] position is meant for the subject and it is governed by [AGRs]. The position of [Spec, VP2] is meant for the object and is governed by the verb wada\(^c\)a 'put' in [VP1] shell represented by [t2] after movement. The position of [DP, PP] is meant for the locative oblique case in which P \(^c\)ala is the governor. As compared to (2c), the concept of government expands the range of control of the verb \(^c\)lama 'informed' to cover the direct object, the indirect object and the third object as a unique phenomenon in Arabic. The third object sahihan 'at correction' occupies the position of [DP, V3] and is assigned the structural accusative case in VP3 shell by the verb \(^c\)lama 'to inform'. As this verb is the only governor in the VP shells, it moves to the position of [V2, V2] to assign another structural accusative case to the direct object al -khabara 'the news' that occupies the position of [Spec, VP3]. In a final cyclic movement, in this VP shell, the verb moves to the position of [V1, V1] to assign the dative case to the indirect object \(^c\)amran 'Amr' in VP1 shell. Though the subject zaidun 'Zaid' lies in the position of [Spec, VP1], it cannot get any case because there is no governor. It moves to [Spec, AGRsP] to be assigned the nominative case by the governor AGRs at the spell - out level. Thus, we notice that in (1d) and (2c), the case is assigned in Spec-head relation. If this condition is not fulfilled, a case cannot be assigned to any DP. Through our analysis, we realize that a verb governs all the DPs in its shells. A preposition is a governor for its object complement in its shell and the notational AGR is the governor for the subject position in AGRsP. As far as the article al 'the' is concerned, it is able to restrict the form of the case-marker as discussed earlier.
1.2 A noun and an Adjective are not Case - Assignors in Arabic

We have already considered the case assignment as a structural property of verbs, prepositions and AGR. We have decided that these heads are case assignors and will case-mark any DP governed in their shell. Chomsky (1986a and 1995) proposes two types of case assignment: (a) structural case assignment, which depends solely on government and the configurational property of the case-assignor and (b) inherent case assignment, which is dependent on two conditions: (i) theta-role assignment and (ii) government. In other words, the inherent case assignor must govern and theta-mark the DP which it case-marks. We have assumed that a noun and an adjective are not case-assignor as they cannot assign the inherent case to their complement (7). As a solution, Chomsky (1986a) offers an explanation to this phenomenon. He uses the strategy of the last resort to account for the assignment of the genitive case when no other case-assignor is available in the configuration [NP1/ or AP, NP2]. He proposes that a noun or an adjective assign the genitive case inherently by means of the overt preposition 'of' in English. This is represented in the inherent case condition (3).

3. If A is an inherent case assignor, then A assigns case to an NP if and only if A theta-marks the NP. (Chomsky, 1986a:194).

The inherent case condition (3) entails that a noun or an adjective can assign the genitive case to its complement DP if it can assign it a theta-role.

If we apply this condition to Arabic, we find that the means of the prepositions li and bi 'of' assign the inherent genitive case and the theta-marking. Without these properties, the noun and the adjective are unable to govern either a case or theta-role of its complement. For instance, we may look at (4) to illustrate the point.
4a. *hasadu zaid -in umi hi
    envy Zaid GEN mother his

"Zaid's envy his mother'.

4b. hasadu zaid -in li umi hi
    envy Zaid GEN of mother his

"Zaid's envy of his mother'.

(4c) is the tree-diagram representation for (4b).

4c

```
  DP1
     /\     \
    /  \    \PP
   /    \   /
  DP2   DP3 P
   /\     /\ Spec
  /  \   /  \ P
 /    \ /    \ Spec
/     / /     /
/     / /     /
hasadu zaidun in umih
envy  Zaid  GEN mother hi
```
In terms of government-theory (4a) is ungrammatical because the compound DP2 ḥasadū zaidin 'Zaid's envy' fails to assign case and theta-role to its complement umihi 'his mother' which violates the case-filter and theta-marking. The DP ḥasadū zaidin contains the element (GEN) i.e. POSS(8) in the specifier position and represented by the genitive marker in. This inherent genitive case is assigned to zaidin because of the structural relation between [NP1, NP2]. (4a) can be made grammatical with the means of li 'of' insertion as in (4b). The realization li 'of' in (4) as a governor shows its ability to link the semantically related DP together with DP2 to form one argument to be ready for theta-marking. However, the genitive representation of the governor li is shown in the pronoun hi 'his' in the specifier position, which is without overt marker. In short, the preposition li assigns the genitive case to umihi 'his mother' and joins it to DP2 to get the theta role of theme. In this case, ḥasadū zaidin has nothing to do with the assignment of theta marking.
A similar pattern is found with the adjetival complementation in (5).

5a.  *zaid  -un  fakhūrun  ?ibni  -hi
     Zaid   NOM   proud   son   his

     *Zaid is proud his son'.

5b.  zaid  -un  fakhūrun  bi  ?ibni  -hi
     Zaid   NOM   proud   of   son   his

     'Zaid is proud of his son'.

(5c) is the spell-out tree-diagram representation for (5b):

5c
In (5a), though the DP ?ibnihi 'his son' is assigned the theta - role of theme by the predicate fakhūrūn 'proud' in the small clause AP shell, the structure is ill - formed since this DP is without a case. The structure (5a) can be made well - formed if it has the force of the preposition bi 'of' as in (5b). In the spell - out level, (5c) has the preposition li as the genitive case assignor for the DP ?ibnihi 'his son'. The inherent case is indicated by the genitive pronoun hi in the specifier position. This preposition links this DP to its predicated fakhurūn, which will be assigned the theta role of theme by the verb yakuunu 'be' in the VP shell in the spell-out. As TNS and AGR are the properties of V and not the AP, the DP zaidin gets the nominative case by the AGR of this verb in the position of [Spec, AGRsP] after movement. The adjective fakhūrūn does not have this ability to assign this case because it is tenseless; therefore, the imposition of this verb in this structure is obligatory to do these essential functions to account for the well formedness of the sentence at all levels of syntax in Arabic. The verb yakūnu 'to be' is deleted after checking TNS and AGR in the course of movement as it has no significance in initiating the sentence. In short, we realize that the inherent case in (4c) is assigned to umihi by the preposition li but not the DP zaidin. (5c) has the property of the same preposition but not the predicative adjective fakhūrūn to assign the genitive case to ?ibnihi.

To sum up, we are justified in the hypothesis (3) that N and A can never be case assignors because they cannot ask for complements as V does. The genitive case is assigned to NP2 in [NP1 / AP, NP2] because of its structural relation and not of N or A as it was claimed by the traditional grammarians. NP2 is not projected for NP1, Or AP. If we assume so, we must have grammatical structures at the sentential level as in (4a) and (5a), but it is not the case. The structure [NP1 / AP, NP2] itself is a projection for case - assignment depending on its position. For instance, in (4c), it is the property of AGR to assign the nominative case to hasadu. However, in (5c) fakhūrūn bi
ibnihi is an argument but not a DP and cannot be assigned a case as per this theory.

1.3 Government and Exceptional Case-Marking

The situation in which the matrix verb governs and assigns the accusative case to the subject DP of IP is often referred to as Exceptional Case-Marking (ECM). The AgroP node provides us with a proper solution to assign this case under the condition of Spec head relation of case-theory. It is interpreted as raising of a DP covertly to [Spec, AgroP] and a V to [Agro, Agro]. In this movement, the DP crosses the trace of the V in the VP shell. The sentence (6) illustrates this point.

6a. ?ajbar a past,3\textsuperscript{rd},sg,masc zaidun 'amran ?an ya?ti
    coerce Zaid Amr to come

    'Zaid coerced Amr to come.'

    Spell-out Structure

6b. zaid - un ?ajbar a past,3\textsuperscript{rd},sg,masc 'amr - an ?an ya?ti
    Zaid NOM coerce Amr ACC to come

    'Zaid coerced Amr to come.'

6c. *zaid - un ?ajbar a 'amr - an ya?ti
    Zaid NOM coerce Amr ACC come

    '*Zaid coerced Amr come.'

(6d) is the tree-diagram representation for (6b):
(6c) is incorrect as the DP Camran cannot be assigned the accusative case by the verb ya?ti 'come'. (6d) Shows that the V1 merges with an [Agro, Agro] constituent to which the verb ?ajbara 'coerced' is adjoined. The DP Camran 'Amr' raises to [Spec - AgroP]. The objective case features carried by the DP Camran and by the transitive verb ?ajbara are checked at this point via Spec - head relation between the verb ?ajbara in [Agro, Agro] and its specifier camran in [Spec, AgroP]. However, the DP zaidun 'Zaid' moves to
[Spec, AgrsP1] to get the nominative case assigned to it by AGRs. The verb 'ajbara raises to TNS and Agrs to check tense and agreement features to meet the requirements of the subject zaidun respectively. As (6d) is a verbal sentence, the VP complex i.e., V, TNS and AGRs raise to [C, C] to head the sentence at PF level as in (6e):

\[6e.\]

\[\text{'Zaid coerced Amr to come'}.\]
In (6e), the DP \( c \)amran gets its accusative case because of the spec-head relation found between it and the verb \( ?ajbara \) 'coerced' in the AGRoP shell in the course of derivation. The movement of the two entities covertly took place because the infinitival clause \( ?an \ ya?it \ 'to \ come' \) is not a case - assignor. The verb \( ?ajbara \) is located in \([V1, V1]\) to be adjacent to the argument \( c \)amran \( ?an \ ya?ti \) to assign it the theta-role of theme. The requirements of case assignment and government of the DP \( c \)amran are meet in AGRoP but not AGRs. However, the agreement features for this noun are met in AGRsP2. There are two AGRs in this sentence. The first one is checked between \( ?an \ yati \) and \( c \)amran in AGRsP2 and the second is checked between the subject zaidun and the verb \( ?ajbara \) in AGRsP1. The former agreement took place before the subject camran moves to get the case in AGRo but the latter took place after the subject DP zaidun moves to \([Spec, AGRsP1]\). The verb \( ?ajbara \) checks TNS and AGRs and moves to \([C, C]\) to initiate the sentence.

In short, the concept of government in X-bar theory as per the new approach enables us to assign the accusative case to the subject zaidan in (6d) outside IP. The spec - head relation as a principle of case - assignment enforces the covert movement of the governor the verb \( ?ajbara \) and the governee zaidan to meet case requirements if the subject of IP is overt. Theta marking is insufficient to render the sentence well-formed; the case properties of this DP make it correct. Chomsky (1995) projects this kind of case assignment outside IP because its V is not a case - assignor. In this case, the matrix verb governs this subject in AGRo. The new hypothesis is preferred over the traditional one because the concept of government in the former is systematic and able to give justifications for any case though the case assignor is not always adjacent to the DP.
CONCLUSIONS

This work has tried to test whether case - theory of the Minimalist Program of Chomsky (1995) can be suitably applied to Modern Standard Arabic and we have found that it is the case. We have looked at various data and we found that case theory specifies the governor and the governee for every position in the sentence. Secondly, it relies on Spec-head relation as the core for the process of case - assignment in the maximal projection of the case - assignor. Due to these conditions, we have found the transitivity theory as it was traditionally regarded the primary factor for deciding the scope of government is of no significance. It is obvious in the cases where the verb jumps the subject to assign the accusative to the object, or jumps both the subject and the object to assign the dative case to the object of preposition. The new approach considers AGR as the case - assignor for the subject, which the Arabs were silent about it. The verb is the governor for the accusative case; whereas, the preposition is the governor for the dative or oblique. Case - theory made it clear that it is the structural relation between two DPs to have the genitive case but not because of a noun and an adjective to be case - assignors. It is made obvious that a noun and an adjective are non-case assignors. ECM as a principle of case theory is a mechanism used in this work to specify that infinitive is also not a case assignor because it is of a nominal nature. According to this theory, AGR, V and P are the only case - assignors; however, N, A, Adv and IP are not in Arabic. DPs are the only case - bearers, as they constitute primary arguments for the predicate. We feel that referring to case theory (1995) is fit and successful in handling the problems of case and government through its universal Principles and Parameters.
FOOTNOTES

(1) we agree with the Arab grammarians in the sense that the preposition directly governs its object to which an oblique case is assigned as in the specimen (kasara al-waladu al-zu'aja bi ḥajarin 'the boy broke the glass with a stone').

(2) The analysis of VP - internal subject hypothesis is proposed by Speas and Fuki (1986), propagated by Larson (1988) and then adopted by Chomsky (1995).

(3) The verbal sentence will be treated as SVO at the spell-out level for the case - assignment and VSO at the level of PF and LF. For more discussions on this subject, (See Jalabneh 1996 and 1998).


(6) In (2b) the position of the verb at the spell-out level is decided as SVO. Since we have three objects, the position of the verb lies before the 3rd object to ensure the government of case-assignment. In a successive movement, it moves to other positions meant for it to assign other cases to the respective DPs.

(7) The interested reader is referred to the discussion in Chomsky (1986a : 190) and the references cited there. See also Abney (1987) and Haegeman (1991 : 162-168) for the analysis of the genitive in the specifier position.

(8) For more of the analysis of the POSS in the specifier position in English refer to Chomsky (1986a : 190), (See also Abney (1987)).

- 29 -
<table>
<thead>
<tr>
<th>Arabic letter</th>
<th>Transliteration</th>
<th>Phonetic Value</th>
<th>Arabic letter</th>
<th>Transliteration</th>
<th>Phonetic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ء</td>
<td>?</td>
<td>?</td>
<td>ض</td>
<td>d</td>
<td>d</td>
</tr>
<tr>
<td>ب</td>
<td>b</td>
<td>b</td>
<td>ط</td>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>ت</td>
<td>t</td>
<td>t</td>
<td>ظ</td>
<td>z</td>
<td>z</td>
</tr>
<tr>
<td>ث</td>
<td>th</td>
<td>th</td>
<td>c</td>
<td>c</td>
<td>c</td>
</tr>
<tr>
<td>ج</td>
<td>j</td>
<td>d3</td>
<td>غ</td>
<td>gh</td>
<td>b</td>
</tr>
<tr>
<td>ح</td>
<td>h</td>
<td>h</td>
<td>ف</td>
<td>f</td>
<td>f</td>
</tr>
<tr>
<td>خ</td>
<td>x,kh</td>
<td>x</td>
<td>ق</td>
<td>q</td>
<td>q</td>
</tr>
<tr>
<td>د</td>
<td>d</td>
<td>d</td>
<td>ك</td>
<td>k</td>
<td>k</td>
</tr>
<tr>
<td>ذ</td>
<td>gh,dh</td>
<td>0</td>
<td>ل</td>
<td>l</td>
<td>l</td>
</tr>
<tr>
<td>ر</td>
<td>r</td>
<td>r</td>
<td>م</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>ز</td>
<td>z</td>
<td>z</td>
<td>ن</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>س</td>
<td>s</td>
<td>s</td>
<td>ه</td>
<td>h</td>
<td>h</td>
</tr>
<tr>
<td>ش</td>
<td>š, sh</td>
<td>š</td>
<td>و</td>
<td>w</td>
<td>w</td>
</tr>
<tr>
<td>ص</td>
<td>c</td>
<td>c</td>
<td>ى</td>
<td>i</td>
<td>i</td>
</tr>
</tbody>
</table>

**Vowels**

<table>
<thead>
<tr>
<th>a</th>
<th>a</th>
<th>i</th>
<th>ā</th>
<th>a:</th>
</tr>
</thead>
<tbody>
<tr>
<td>u</td>
<td>u</td>
<td>u</td>
<td>ū</td>
<td>u:</td>
</tr>
<tr>
<td>i</td>
<td>i</td>
<td>ũ</td>
<td>ũ</td>
<td>i:</td>
</tr>
</tbody>
</table>

The Arabic symbols on the left-hand column are used here for the transliteration of the Arabic text and the symbols on the right-hand column are used for transliterating Arabic names and titles, as is the common practice.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABL</td>
<td>Ablative</td>
</tr>
<tr>
<td>ACC</td>
<td>Accusative</td>
</tr>
<tr>
<td>Agr</td>
<td>Agreement</td>
</tr>
<tr>
<td>Agro</td>
<td>Agreement Object</td>
</tr>
<tr>
<td>Agrs</td>
<td>Agreement Subject</td>
</tr>
<tr>
<td>AgroP</td>
<td>Agreement Object Phrase</td>
</tr>
<tr>
<td>AgrsP</td>
<td>Agreement Subject Phrase</td>
</tr>
<tr>
<td>AP</td>
<td>Adjectival Phrase</td>
</tr>
<tr>
<td>C</td>
<td>Complementizer</td>
</tr>
<tr>
<td>COMM</td>
<td>Commulative</td>
</tr>
<tr>
<td>Comp</td>
<td>Complement</td>
</tr>
<tr>
<td>CP</td>
<td>Complementizer Phrase</td>
</tr>
<tr>
<td>D</td>
<td>Determiner</td>
</tr>
<tr>
<td>DAT</td>
<td>Dative</td>
</tr>
<tr>
<td>DET</td>
<td>Determiner</td>
</tr>
<tr>
<td>DP</td>
<td>Determiner Phrase</td>
</tr>
<tr>
<td>ECM</td>
<td>Exceptional Case - Marking</td>
</tr>
<tr>
<td>Fem</td>
<td>Feminine</td>
</tr>
<tr>
<td>GEN</td>
<td>Genitive</td>
</tr>
<tr>
<td>INST</td>
<td>Instrumental</td>
</tr>
<tr>
<td>LOC</td>
<td>Locative</td>
</tr>
<tr>
<td>masc</td>
<td>Masculine</td>
</tr>
<tr>
<td>N</td>
<td>Noun</td>
</tr>
<tr>
<td>NOM</td>
<td>Nominative</td>
</tr>
<tr>
<td>NP</td>
<td>Noun Phrase</td>
</tr>
<tr>
<td>POSS</td>
<td>Possessive</td>
</tr>
<tr>
<td>P</td>
<td>Preposition</td>
</tr>
<tr>
<td>PP</td>
<td>Prepositional Phrase</td>
</tr>
<tr>
<td>Pres</td>
<td>Present</td>
</tr>
<tr>
<td>Spec</td>
<td>Specifier</td>
</tr>
<tr>
<td>T</td>
<td>Tense</td>
</tr>
<tr>
<td>TNS</td>
<td>Tense</td>
</tr>
<tr>
<td>TP</td>
<td>Tense Phrase</td>
</tr>
<tr>
<td>V</td>
<td>Verb</td>
</tr>
<tr>
<td>VP</td>
<td>Verb Phrase</td>
</tr>
</tbody>
</table>

- 31 -
REFERENCES


<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Title</th>
<th>Location</th>
</tr>
</thead>
</table>

- 33 -