

The Theory of Government in Arabic Grammatical Traditions: Chomskyan Generative Grammar Perspective

Muhammed Salim

Ph. D Research Scholar, Department of Linguistics

Aligarh Muslim University

Aligarh, Uttar Pradesh, India

alsalim2014@gmail.com

Bedoor Sharaf Al Deen

Ph. D Research Scholar

Department of Linguistics

Aligarh Muslim University

Aligarh, Uttar Pradesh, India

Mohammed Masoud

Ph.D. Research Scholar

Department of English

Aligarh Muslim University

Aligarh, Uttar Pradesh, India

mkhmsoud2016@gmail.com

Abstract

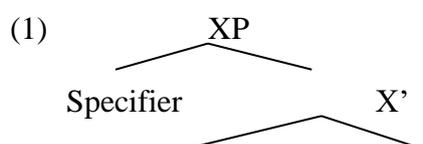
Early Arab grammarians used scientific tools to analyze the sentence structure. Their scholarship is best manifested in the establishment of the *Governor theory*. It assumed that governors change the parsing signs of the word. Two major types of governors were identified: the expressed and the abstract governors. Governor theory dominated the linguistic thinking not only at that time but it is still at the core of Arabic linguistic discussions nowadays. The purpose of this study is twofold: (a) to give a brief introduction about the theory of governor in Arabic, and (b) to compare the governor theory in Arabic

with the theory of government presented in Chomsky's (1988) Government and Binding theory. The study revealed that Sibawayh (793) laid the foundations of the Governor theory and it matured in the works of the Basrans and the Kufans. The study also showed some agreement between Chomsky's theory of government and Arabic Governor Theory. Nevertheless, there is a difference in the nature and the types of governors between the two theories.

Keywords: *GB theory, Sibawayh, governor theory in Arabic, generative grammar*

1. Chomsky's Government theory

Government and binding (GB) is a theory of syntax within the mainstream of Chomskyan generative grammar. GB theory was initiated and developed in Chomsky (1982, 1986, and 1988). It states that the grammar of a language of a native speaker consists of a set of innate universal principles and a set of learned parameters for a given languages (constraints) that work hand in hand to determine the possible well formed sentences of that language. The government theory is an integral part of the modules of grammar constituting GB theory. It plays a central role in other modules of GB such as case theory, theta theory, binding theory, etc. Government is is a configurational property that imposes a structural relationship on the syntactic positions occupied by the governor and the governee. The governor is the element that governs and the governee is the element that is being governed. Government indicates that 'a category governs its complements in a construction of which it is the head' (Chomsky, 1988, p. 50). Therefore, the government relationship can be simply represented in (1). The XP is the maximal projection, X' is the intermediate projection and X⁰ is the head (presumably the governor), and the YP is the complement (presumably the governee). That is, the head governs its complement as illustrated in (1).



X^0 YP (complement)

To make it more concrete, notice the example given in (2a) and schematically represented in (2b).

(2) a. John thought that he left his book on the table.

b. John [INFL [+ Tense]] [VP [v think] [S that [s he [INFL [+ Tense]] [VP[V leave] [NP his book] [pp [p on] [NP the table]]]]]]]

(Chomsky, 1988, p. 50)

The sentence in (2) shows that the verb V ‘think’ governs its complements S’. The INFL governs the subject ‘John’, if the sentence has a tense. The embedded verb ‘leave’ governs its complements NP ‘his book’ and it governs the PP ‘on the table’, but not any element within NP or PP. It is also assumed that the ungoverned categories such as the embedded subject ‘he’ receive no case. The preposition ‘on’ governs and assigns case to the NP ‘the table’. Chomsky (1988) suggests that government should meet three criteria: ‘(i) conditions on choice of governor, (ii) conditions on governed terms, and (iii) structural conditions on the relation of government’ (p. 162). Thus, applying (i) to the example given in (2), the V but not VP or N’, the S but not S’, the P but not the PP, are governors. The condition (ii) indicates that there are three governees: the subject ‘John’, the object ‘his book’, and the NP ‘the table’ in PP. The condition (iii) is configurationally arranging the structural relation between the governor and the governee. Government notion has undergone many changes to empirically maximize its generalization. That is, Government has been defined in terms of sisterhood; mutual c- command, m- command, and later m- command and minimality. Haegeman (1994), for example, formulates Chomsky’s government as in (3).

(3) **Government**

A governs B if and only if

(i) A is a governor;

- (ii) A m-commands B;
- (iii) No barrier intervene between A and B;

Where

- (a) Governors are the lexical heads (V, N, P, AP) and tensed I.
- (b) Maximal projections are barriers.

(Haegeman, 1994, p. 160)

The m- command notion is given in (4).

(4) **M- Command**

A m- commands B iff

- (i) neither node dominates the other;
- (ii) every C, C a maximal projection, that dominates A dominates B.

This notion has been revisited with the addition of another structural relationship, which is the notion of minimality. Following Rizzi (1990), Haegeman formulates government as in (5).

(5) **Government**

A governs B if and only if

- (i) A is a governor;
- (ii) A m-commands B;
- (iv) No barrier intervene between A and B
- (iv) Minimality is respected

Where governors are:

- (a) heads,
- (b) coindexed XPs.

(Haegeman, 1994, p. 442)

Minimality, as a structural relation, ensures that there is proximity between the governor and the governee. The governor has to be close enough to the element being governed. It also indicates that maximal projections are barriers for outside head- government. The Minimality condition is given in (6).

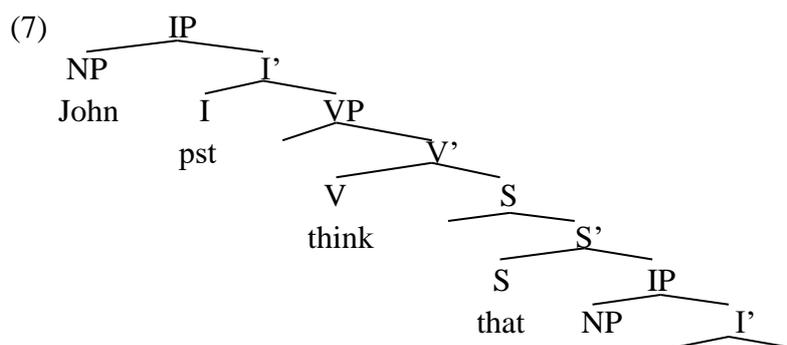
(6) Minimality

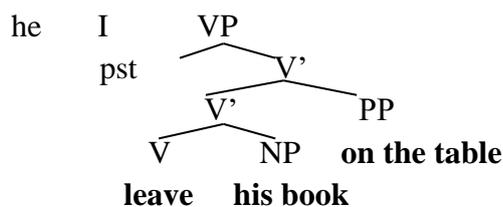
A governs B if and only if there is no node Z such that

- (i) Z is a potential governor for B;
- (ii) Z c-commands B;
- (iii) Z does not c-command A

(Haegeman, 1994, p. 442)

Having shown the major formulations of the notion of government, the remaining of this section presents the syntactic representation of the way the notion of government works in GB theory. We will use the example that was given in (2a). The syntactic representation of (2a) is given in (7).





Government works in this way: the representation given in (7) shows that the lexical heads (governors) are the preposition ‘on’, the verb ‘leave’, and the inflection ‘I’. The preposition ‘on’ governs the NP ‘the table’, the verb ‘leave’ governs the NP ‘his books’ and the PP ‘on the table’, the inflection govern the subject ‘he’. The preposition ‘on’ assigns accusative case to the NP ‘the table’ and the verb ‘leave’ assigns accusative case to the NP ‘his book’. Notice also that the higher verb think governs the whole embedded sentence symbolized by S. To apply the notion of government to the boldfaced categories in (7), the verb ‘leave’ governs the NP ‘his book’ if and only if:

- (i) the verb ‘leave’ is a governor,
- (ii) the verb ‘leave’ m- commands the NP ‘his books’,
- (iii) no barrier intervene between the verb ‘leave’ and the NP ‘his books’,
- (iv) minimality is respected

Now, we will see whether the verb m- commands the NP and whether minimality condition is met. Regarding m- command, the verb ‘leave’ m- commands the noun ‘his books’ if the verb ‘leave’ does not dominate the noun ‘his books’, and the noun ‘his books’ does not dominate the verb ‘leave’; the maximal projection for both the verb and the noun is the same, that is, VP in our case. Minimality, too, seems to be respected because there is no other potential category that could function as potential governor for or c- command the NP ‘his book’. Hence, it can be said that the verb ‘leave’ governs the NP ‘his books’. Governors can be either lexical or functional. Lexical governors are the verbs, the prepositions, and the adjectives while functional governors are the complementizers and the inflection (I). Given

this short introduction about government and its working mechanism, the next section introduces and presents the theory of governor in Arabic with a view to compare it with Government theory of Chomsky.

2. Arabic linguistic theory

2.1 A glimpse

The Arabic linguistic theory that encompasses original grammatical writing dates back to 8th century (Owens, 1990, p. 1). By the late 8th century, three major linguistic schools were developed: the Basran, the Kufan, and the Baghdidian (neo-Basran). The first two schools are the earliest. Each school has its own pioneers and advocates 'the Basran and Kufans schools are represented by a fixed cast of linguists, Sibawayh⁽¹⁾ (177/793), Axfash (215/815 or 221/835), Mazini (249/863), Mubarrid (285/898) and others for the Basrans, Kisa'i (183/799), Farra' (207/822) and Tha'lab (291/904) for the Kufans, though on any given point any linguist can align himself with ideas of the other School' (Owens, 1990, pp. 1-2). The Basrans dominated the grammatical thinking as they developed highly effective analytical system based on the principles of at-ta'fīl 'causation' and al-qyās 'analogy'. They developed taxonomical prescriptive rules that explain different aspects of Arabic grammatical system. The governor or the government theory of Arabic stemmed and matured in the work of Basrans. The basran, which was founded by Abu Amr ibn al-Ala, is represented by al-Farahidi who authored the first Arabic dictionary entitled 'al-ṣyn', named after the voiced pharyngeal fricative Arabic sound /ʕ/. The other phonetic books of al-farahidi include are tarākīb al-aṣwāt 'the structures of sounds', kitāb al-naḡam 'the book of melodies' and kitāb al-eyqāṣ 'the book of rhythm'. The other representative is Sibawayh (177/793) who authored the Kitāb⁽²⁾ 'the book'. This book discusses not only grammatical issues but also presents phonetics and phonology issues such the place and the manner of articulation, allophonic and

phonetic variation, and assimilation, among others (ALDUBAI, 2015, p. 113). The basrans established general rules that should be strictly followed and argued that these rules are the basis of correct usage of language. The kufan school, on the other hand, came into existence 100 years after the basran. The founder of the school is Ar-rawasi⁽³⁾, who was himself a student of the Barsan School. The kufans valued the text and they based their grammatical judgment on the authentic speeches (hearings) collected in natural settings from the original pure Arabs, based their linguistic argumentation on odd poetry and anomalous linguistic expressions. Though they do not establish a clear methodology in their analysis of grammatical issues, they disagreed with the basrans in most of the linguistic issues. This led to the predominance of the basran linguistic thinking. The Baghdidian advocates do not have a particular stance on linguistic issues. The kufans tend to disagree with the Basrans in what constitute the governor in a particular sentence ‘Basra and Kufa represented historically real schools of grammatical theory just as much as generativists (in the Chomsky tradition) or systemicists (Halliday) or lexical functionalists (Bresnan) do today’ (Owens, 1990, p. 2). They tend to synthesize and revisit the ideas of the earlier two schools. Given this, the next subsection presents the theory of governor in Arabic.

2.2 Theory of governor in Arabic

2.2.1 The notion of governor in Arabic

The theory of governor is as ancient as the Arabic grammar. The theory dominated the Arabic grammar many centuries ago and it is still dominating the Arabic linguistic thought until today. Probably, the theory is religiously motivated. Arabs believe that ‘for everything existing in this world there is a creator and a reason for its creation’ (Al-Liheibi, 1999, p. 108). As a result of such thinking, Arab linguists have questioned the reasons behind the appearance of the short vowels at the end of the words known as parsing signs (harakat al-

ifrāb; i.e. mood and case endings). For early Arab linguists, it was inconceivable that any case ending could have existed without an instigator (Al-Liheibi, 1999, pp. 108-109; Al-hammadi, p. 69). The idea of governor dates back to Al-khalīl ibn ahmed al-frahidi⁽⁴⁾. Bakri (1982) indicates that al-khalīl is of the view that there is a governor behind parsing endings representing [nominative, accusative, jussive, genitive, or indicative] in nouns and verbs. That is, there should be a verb or expressed element that explain the noun or verb carrying a specific ending (p. 143). The theory has its practical roots Sibawayh's Al-kitāb 'The Book'. Sibawayh divided the chapters of al-Kitāb 'the Book' based on the notion of governor and its effect on the Arabic grammatical and lexical categories (Dukhair, 2014, p. 71; Bin hamza, 2004, pp. 39-40). He was the first to use the term *ṣāmil* 'governor' to describe a specific grammatical process. Owens (1990) points out that 'when a term is consistently used to represent a constant extensional class or a fixed process it can be taken as a technical term. Very often such terms are represented by a derivational set; the notion of governance in Sibawayh appears in such diverse, morphologically related forms as 'amal "governance", 'amilat "it governed" 'umila "it was governed" 'a'mal-ta "you made govern" 'amil/ 'awaamil "governor/governors" (p. 11). Sibawayh (1975) is of the view that the parsing signs occur due to the influence of *ṣāmil* 'governor' (p. 13). A representation of the basic parsing signs is given in the table in (1).

Table (1): the basic parsing signs in Arabic

		Arabic equivalent	Parsing signs	
			Definite	indefinite
Case in nouns	The nominative	rafʿ	-u	-un
	The accusative	nasb	-a	-an
	The genitive	jarr	-i	-in
Mood in	Indicative	rafʿ	-u	
	Subjunctive	nasb	-a	

verbs	The jussive	žazm	-0
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The table in (1) shows that there are three cases in Arabic: the nominative, the accusative, and the genitive. They are also morphologically realized differently depending on definiteness status of the nouns to which they are affixed. The table also shows there are three moods of verbs in Arabic: the indicative, the subjunctive, and the jussive. The first two moods are morphologically realized as –u, and –a, respectively. The jussive mood is morphologically realized as null. The theory assumes that these parsing signs, that reflect case/mood at the end of words, occur due to some governing elements ‘Iraab “case/mode [mood] suffix” refers to any inflectional ending whose form is determined by a governor’ (Reckendorf, 1977, qtd. in Owens, 1990, p. 12). In other words, the theory assumes that there are some governing elements that govern the parsing signs in governed Arabic words. Governors in Arabic are of two types: the expressed (*lafđi*) and the abstract (*mařnawi*) (al-azhari, n.d., p. 83). The expressed has an overt morphological form while the abstract is an implicit conceptual element that has no form at all. The governor is defined by Al- žeržani as ‘*ma yužib kün axir al-kalimah řala wažh maxřuř sawa kana ism-an aw fiřl-an aw harf-an*’ [whatever affects the ending of word to have a specific form whether it is a noun, a verb, or a letter]’ (Al-xawarizmi, n. d., p. 21). That is, the governor is the one that governs other words and affects their parsing endings. Having explained the notion of governor in Arabic, the next subsection

presents some fundamental principles of government and the types of governors in Arabic with a view to examine them from the point of view of Chomsky's government theory.

2.2.2 Governors in Arabic

This subsection presents the types of governors in Arabic with illustrative examples. It will also attempt to critically appreciate and evaluate the governor theory from a Chomskyan generative perspective. As has been stated in subsection 2.2.1, governors in Arabic are of two types: the expressed and the abstract. Before examining the governors in Arabic, let us present some fundamental principles of government in Arabic. The first fundamental principle is that 'lā bid lil-maʿmūl min ʿāmil' [every governee must have a governor] (Ibn hamza, 2004, p. 260). Arabic grammarians believe that if any parsing signs appear in a word, at word should have a preceding governor. If such a governor is hard to allocate, the grammarians have to assign one by estimation and interpretation. The other fundamental principle is that 'wa anna al-ʿawāmil lā tatazaḥam ʿala maʿmūl wāḥid' [and the governors do not jostle for one governee] (Ibn hamza, 2004, p. 20). Sibawayh, in addition, used the term governor in a set of general rules: some of which are given in (8). These rules seem to regulate the structural relations among words and their positions in the sentences.

(8)

a. A question particle does not stand between the governor and governed ('aamil/ma'muwl).

b. nor do you separate an i-inf[lection] governor and what it governs (maa ya'malu fiyhi).

(Owens, 1999, p. 14)

The principle in (8a) entails the need for proximity between the governor and governee in the examples given in (9, 10). If a question particle intervenes between the governor and the governee as in (9), it renders the sentence ungrammatical. Similarly, the principle in (8b) implicates that the preposition *eyla* 'to', which assigns the genitive case -i, cannot be

separated from its governee. If separated, the sentence is doomed to ungrammatical as in (10).

(9) *katab-a mən ad-dars-a

write- pst who the- lesson-acc

(10) *ḏahaba eyla aṭ-ṭālib-u al-madrasat-i

Go-pst to the –student-3sm-nom the-school-gen

Having mentioned some of the basic fundamental principles of government, the rest of this section discusses the types of governors in Arabic. The expressed governors in Arabic include the verbs, the derivative noun, and a limited set of particles. The prevalent orthodoxy in Arabic linguistic thinking is that every verb has a subject. Arab grammarians considered the verbs as ‘the most powerful governing elements’ (Al-Liheibi, 1999, p. 121) . The verbs grammatically influence and govern the nouns ‘verbs are basically governors, not governed items, governing nouns in u-inf[lectional] and a-inf [lectional]form, and nouns are basically governed items’ (Owens, 1999, p. 16). To substantiate, have a look at the examples given in (11), (12), and (13).

(11) katab-a aḥmad-u ad-dars-a

Write-pst Ahmad-3sm-nom the- lesson-3sm-acc

‘Ahmad wrote the book.’

(12) aḥmad-u aṣṭa fli-an kitab-an

Ahmad-3sm-nom give-pst Ali-acc book-acc

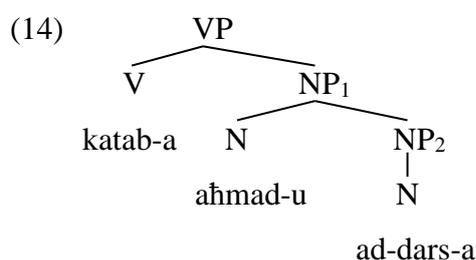
‘Ahmad gave a book to Ali.’

(13) aḥmad-u kataba ad-dars-a

Ahmad-3sm-nom write-pst the- lesson-acc

‘Ahmad wrote the lesson.’

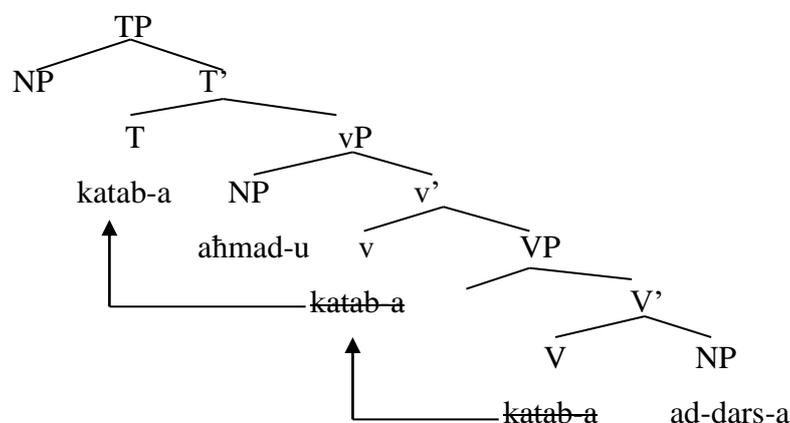
In the basrans' linguistic thinking, it is thought that the verb *kataba* 'wrote' in (11) governs the two arguments; it governs the subject *aḥmad-u* 'Ahmad' resulting in nominative case and it governs the object *ad-dars-a* 'the lesson' resulting in accusative case (Sibawayh, 1975, p. 34). Government occurs forwardly 'the Basrans argue that the verb governs only in the forward direction, i.e. it governs what follows it' (Al-Liheibi, 1999, p. 123). From a generative perspective, it is plausible to assume that the sentence in (11) has the basic syntactic representation in (14).



The syntactic representation in (14) shows that the verb *katab-a* 'wrote' is a governor. Also, the verb *m-* commands NP_1 and NP_2 . There is no barrier that intervenes between the verb and the two NPs and the maximal projection VP dominates the verb and the two NPs. Minimality is also respected as there is not any potential governor in the sentence. However, a closer look at the representation shows that the NP_1 is a subject and it hosts the nominative case. In generative grammar, the nominative case is governed by the inflection (I) of IP. Though the basrans rightly argue that the verb governs the object and assigns accusative case to the object, the analysis represented in (14) for the sentence in (11) is implausible according to generative grammar. Rather, the sentence in (11) can be analyzed by capitalizing on the notion of the light verb of vP Chomsky (1995). Chomsky himself adopted this idea from Larson's (1988) VP- shell analysis. The light verb analysis assumes that there is a light functional v projection that dominates the VP. The subject originates as specifier of vP and the verb originates as the head V of VP. The verb then moves from the head V to the null

light verb in *v* and subsequently moves to *T* of *TP* to check the tense and meet canonical VSO word order in Arabic. The light verb analysis of (11) is given in (15).

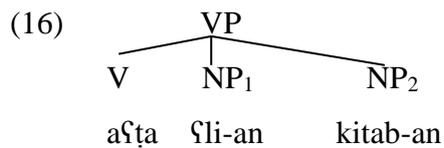
(15)



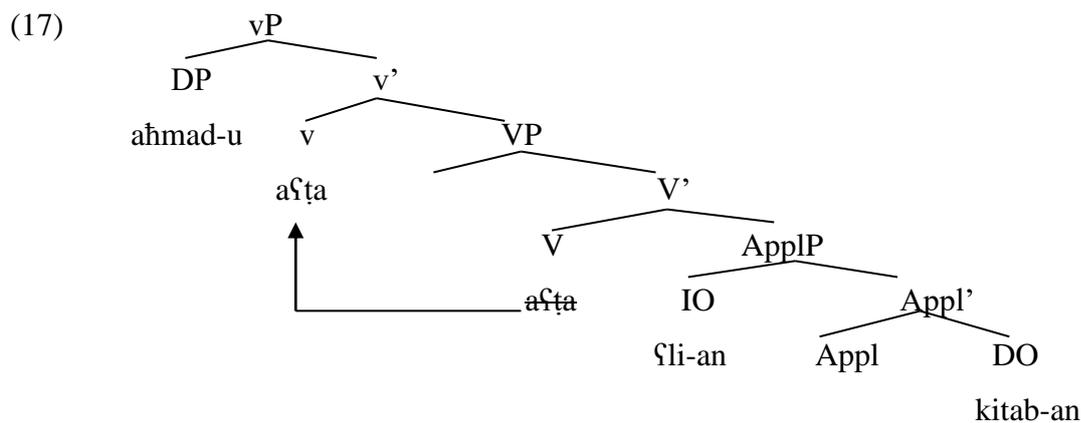
It is interesting to note that the representation in (15) shows that the *V* of *VP* governs only the object. However, after the verb moves and adjoins the *T* of *TP*, it can by no means govern the subject due to the occurrence of maximal projection *vP*. This analysis enables one to make judgment on validity of Arab grammarian's claim that the verb *V* in VSO governs the subject and the object. Therefore, it can be said that the basrans are partly right, that is, the verb governs the object but not the subject.

The Kufans, on the other hand, think that the accusative case in *ad-dars-a* 'the lesson' in (11) is the result of the preceding subject *ahmad-u* 'Ahmad' and verb *katab-a* 'wrote'. Stated differently, both the verb *katab-a* 'wrote' and the subject 'ahmad-u' simultaneously govern the accusative case in *ad-dars-a* 'the lesson'. This implicates that nouns are governors in Kufans' grammatical thinking. This view can be ruled out easily based on the principle that the governors do not jostle for one governee. The simultaneous working of two governors on one governee does not fit the mechanism of government in GB theory.

Regarding the sentence in (12), the basrans and the kufans think that the verb *afta* 'gave' forwardly governs the double objects and assigns accusative case to the double objects. This seems to be true from a generative perspective. The sentence in (12) will be partly represented as in (16). It can be noticed that the verb governs *NP₁* and *NP₂*.



To provide a recent analysis of the sentence in (12), we follow Pylkkänen (2008) and assume that double object construction in Arabic can be analyzed as a low applicative structure (cf. as in (17)).



Pylkkänen (2008) assumes that there are two types of applicative: high and low. Higher applicative occurs between the vP and the VP while the lower applicative occurs lower than the VP and is dominated by VP. Notice that the indirect object-‘ḥli-an’ occupies the specifier of applicative phrase and the direct object ‘kitab-an’ is the complement of applicative phrase. In (17), the verb governs the IO and DO in the applicative phrase. The applicative phrase functions as a complement to the verb.

Besides, the Kufans think that the verb aṣṭa ‘gave’ backwardly governs the subject aḥmad ‘Ahmad’ and subsequently assigns nominative case to the subject. However, backward government is ruled out in Chomsky’s notion of government. No category can govern a higher element in the syntactic representation. On the other hand, the Basrans argue that there is an abstract governor that is responsible for the nominative case on the subject in (12) and (13). Therefore, it can be said that one of the major differences between Arabic

governor theory and Chomsky' government theory is that Arabic governor theory allows for backward and forward government. This entails that the verb in Arabic can govern what comes before it and what comes after it. In generative theoretic concepts, the verb in Arabic governor theory can govern elements occupying a higher position in the syntactic representation. In Chomsky's government theory, no backward government is allowed and the forward government is permitted on strict structural considerations. The other difference is that Arabic governor theory allows for an null abstract governor to govern nouns or verbs. In Chomsky's government theory, there is no abstract governors but the theory is extended to include functional governors. Back to the example in (13), the kufans also assume that the verb has a bi-directional function. It can govern what comes before it and what comes after it. As has been stated, the idea of simultaneous backward and forward government seems to be unreasonable from a generative perspective.

Interestingly enough, adjacency condition is present in early Arabic grammatical thought. The governor and the governed should be adjacent. To make it clearer, see the sentence in (18).

(18) aḥmad-u ṭabaʿ-a wa ḥafid-a al-mustanad-a

Ahmad-3sm-nom print-pst and save-pst the document-acc

'Ahmad printed and saved the document.'

The sentence in (18) shows that there are two verbs connected by a coordinator *wa* 'and'. Arab grammarians believe that the element that governs the accusative case in the object *al-mustanad-a* 'the document' is the adjacent verb *ḥafid-a* 'saved' and not *ṭabaʿ-a* 'printed'. The verb *ṭabaʿ-a* 'printed' operates on a deleted pronoun (small *pro*) functioning as a subject. Therefore, the governor here is the verb *ḥafid-a* 'saved' because of its proximity to the object *al-mustanad-a* 'the document' (cf. Al-Liheibi, 1999, p. 119). This theorizing is similar to the

notion of adjacency in GB theory. In generative grammar theoretical terms, adjacency condition is a structural requirement on case assignment that indicates that ‘the case assigner and the element to which case is assigned should be adjacent’ (Haegeman, 1994, p. 178). Therefore, the case assigner verb *ḥafīḍ-a* ‘saved’ should not be separated from the governed NP *al-mustanad-a* ‘the document’ by an intervening material. The example in (18) also shows that the verb *ṭabaʿ-a* ‘printed’ cannot govern *al-mustanad-a* ‘the document’ due to the occurrence of the interfering material *wa* ‘and’.

Other special verbal governors include the defective *kāna* ‘was’ and its sisters, *ḍanna* ‘to guess’ and its sisters, and the verbs that govern three objects. The defective *kāna* ‘was’ operates on its topic and its comment as shown in (19). It assigns nominative case to its topic *zayd-un* ‘Zayd’ and accusative case to its comment *muḥtāhid-an* ‘hardworking’. On the other hand, *ḍanna* ‘guessed’ governs one subject and two objects at the same time as in (20). *ḍanna* ‘assumed’ assigns nominative case to the subject *aṭ-ṭālib-u* ‘the student’ and accusative case to the two objects *ad-dars-a* ‘the lesson’ and *sahl-an* ‘easy’. Sibawayeh (1975) terms *ḍanna* verb as ‘*al-faṣīli- allathi yataṣadd-hu fiṣla-hu eyla mafṣulayn*’ [the subject whose transitive verb governs two objects’ (p. 39). In (21), the verb *axbara* ‘told’ assigns nominative case to the subject *zayd-un*. It also governs the three subsequent objects and assigns them the accusative case.

(19) *kāna zayd-un muḥtāhid-an*

was Zayd-nom hardworking- acc

(20) *ḍanna aṭ-ṭālib-u ad-dars-a sahl-an*

guess-pst the-student the-lesson easy

‘the student assumed the lesson easy.’

(21) *axbara zayd-un muḥammed-an ad-dars-a sahl-an*

tell-pst zayd-nom Muhammed -acc the lesson-acc easy-acc

‘Intended meaning: Zayd told Muhammed that the lesson is easy.’

In the examples in (19-21), the verb is thought of as a strong governor. It is strong in the sense that it governs everything that comes after it and it can assign different cases to different categories (compare this with the verb in the example in (2) wherein the verb governs both the object NP ‘his book’ and the PP ‘on the table’, though, the notion of government in GB theory has another say in the matter. That is, the accusative case is assigned by the verb and the nominative case is assigned by the inflection. The discussion that has been done so far shows the importance of verbs as governors and assigners of the respective cases to the governed elements in the same syntactic environment.

The other type of expressed governors is the derivative noun. Derivative nouns are the nouns that are mainly derived from verbs. Such types of noun retain the same characteristics of verbs and they can govern other categories in the structures. Derivative nouns include but not limited to al-maṣḍar ‘the infinitive’, ism alfāʿil ‘the active participle’, ism al-mafʿūl ‘the passive participle’, ism al-fiʿl (element with verbal force) (Al-Liheibi, 1999, pp.130- 134). To exemplify, notice the sentences in (22) and (23).

(22) kātib-an ant-a ad-dars-a

Writer you-nom the-lesson-acc

‘Intended meaning: you are a writer of the lesson.’

(23) aḥmad-un kātib-un ad-dars-a

Ahmad-3sm-nom writer the-lesson-acc

‘Intended meaning: Ahmad is the writer of the lesson.’

The infinitive in (22) governs the subject ant-a ‘you’ and the object ad-dars-a ‘the lesson’. The infinitive assigns its subject the nominative case and its object the accusative case (Ibn al-Sarrāj, 1987, p. 54). In (23), the active participle kātib-un is originally a noun and

derived from the verb *katab* ‘to write’. This active participle causes the direct object *ad-dars-a* ‘the lesson’ to bear the accusative case (Ibn al-Sarrāj, 1987, pp. 52-53).

The third type of expressed governors is the particles. Particles act as governors in specific grammatical contexts and they influence and operate on the verbs and cause change in their mood. Occurring in restricted syntactic environment, the subjunctive particles *lan* ‘neg-fut’ and the jussive particle *lam* ‘neg-pst’ in (24) and (25) acts as governors and govern the verbs that follow them. Al-Liheibi (1999) points out that ‘the Arabic theory of government states that the imperfect verb is placed in the subjunctive mood by the presence of subjunctive particles. Furthermore, it is placed in the jussive mood by the presence of jussive particles’ (p. 137).

(24) *lan yaḏhab-a muḥammad-un*
 Neg-fut Go-subj Muhammad-nom
 ‘Muhammad will not go.’

(25) *lam yaḏhab muḥammad -un*
 Neg- pst Go-juss Muhammad-nom
 ‘Muhammad did not go.’

The particles also operate on the nominal subjects and shift their case from nominative to the accusative (Ibn al-Sarrāj, 1987, p. 55). This can be illustrated in (26).

(26) *Inna zayd-an muḏtahid-un*
 That-focus zayd- acc hardworking-nom
 ‘Zayd is indeed a hardworking.’

The table in (2) shows the particles as governors and what they govern.

Table (2): particles as governors

Particle- governor	The governee	The mood/case	The affix
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lan	Imperfect verbs	subjunctive	-a
lam	Imperfect verbs	Jussive	-0
Inna and its sisters	Subject	accusative	-an
	predicate	nominative	-un

2.2.3 The abstract governors

The abstract governor is a hypothetical covert element that is created by grammarians to indicate the parsing signs when there is no apparent expressed governor in the structure. There are two major types of abstract governors. The first type is the found in nominal sentence. The Basrans argue that there is an abstract governor, presumably *al-ibtidā* ‘the inception’, in (27). It governs the topic *mubtada* ‘zayd-un’ resulting in the nominative case and the topic ‘zayd-un’, in turn, governs the *xabar* ‘the comment’ *muḥtahid-un* resulting in the nominative case, too. The sentence in (27) consists of the topic ‘zayd-un’ and the comment ‘*muḥtahid-an*’.

(27) zayd-un muḥtahid-un
 Zayd-nom hard-working-nom
 ‘Zayd is hardworking.’

However, the *kufans* argue that there is a mutual causation (governance) of the nominative case in the topic and the comment. That is, the topic causes the comment to bear the nominative and the comment causes the topic to bear the nominative because each one is grammatically dependant on the other. In other words, the idea of the existence of an abstract governor at the beginning of the sentence is totally rejected by the *Kufans*.

The other type of abstract governor is the one responsible for the indicative mood (*rafiʿ*) on the verb reflecting present tense and occurring at the beginning of the sentence. Here, two viewpoints can be identified. The first is that the *Basrans* argue that the present

tense occurs at the position of noun and replaces the noun (replacement process). The verb *ya-ktub-u* ‘write’ in (28) substitutes for the noun in (29). The other viewpoint is articulated by the Kufasns. They argue that the verb with present tense in (28) is marked in the indicative mood with nominative marker because of the non existence of any subjunctive or jussive particle.

(28) *ya-ktub-u zayd-an*

Write-ind Zayd-nom

‘Zayd writes.’

(29) *axūk-a zayd-an*

Your- brother Zayd-nom

‘Intended meaning: Your brother is Zayd.’

Having identified the governors and compared mechanism of governor in Arabic with that of Chomsky, the next section concludes the discussion.

3. Conclusion

The study concludes that Arabs had the theory of governor in late 8th century. It is rooted in the work of Sibawayh and it was widely discussed in and elaborated on the two Arabic grammatical schools: the basrans and the kufans. The theory of governor in Arabic consists of a set of general principles and a set of prescriptive rules. It identified what constitute a governor and what constitute a governee. The governors can be expressed or abstract. The expressed governors in Arabic are the verbs, the derivative nouns, and the particles. The abstract governors occur due to abstraction or replacement. However, the notion of Chomskyan government is defined configurationally and it includes well-stated notions such as m- command, maximal projections, and minimality. Governors are of two types: lexical such as V, P, AP, and N, and functional governors such as the Inflection (I) and

the Complementizer such as 'for'. In VSO word order, the basrans think that the verb governs both the subject and the object. This view might be true if examined with Chomsky's government theory. The kufans, however, postulates that both the verb and subject govern the object in VSO. This view is ruled out because it violates the basic fundamental principles of government in Arabic. According to the basrans, the subject is governed by an abstract governor and the verb governs the object in SVO word order in Arabic. This is partly similar to Chomsky's government theory which argues that the verb in SVO governs the object. The kufans, on the other hand, argue that the verb rightward governs the object and leftward govern the subject in SVO word order (bi- directional government). In Chomsky's government theory, only forward government is allowed with strict configurational restrictions. The study also reveals that Chomsky's theory of government tends to support the opinions articulated by the basrans.

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