

اسناد حالة الرفع و النصب في اللغة العربية: مقارنة وظيفية

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An RRG Approach to Nominative and Accusative Case Assignment in Arabic

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المستخلص

الحالة الاعرابية هي مفهوم مهم في علم اللغة فهو مفهوم معقد يخلق شبكة من العلاقات بين الصرف والنحو والمعنى. جذبت فكرة الحالة انتباه اللغويين لدرجة أن بعض الأطر النحوية تعتبرها فكرة مركزية. حظيت دراسة إسناد الحالة باهتمام كبير في القواعد التوليدية و اللغة العربية هي إحدى اللغات التي درست بشكل مكثف من منظور التوليد. ومع ذلك ، تفتقر هذه الدراسات إلى التوحيد ، وبالتالي ، الدفاع عن معالجة خاصة للحالة باللغة العربية و الجدير بالذكر ان نتائج هذه العلاجات متضاربة إلى حد ما.

تهدف الدراسة الحالية إلى عرض إسناد الحالة من منظور مختلف ، حيث أن الهيكلية الوظيفية لنحو الوظيفة و الاحالة يمكن أن توفر وصفاً وتفسيراً موحداً مقارنة بالنحو التوليدي.

قواعد الوظيفة و الاحالة تتضمن مستوى وصفي أحادي وغير مشتق حيث تفترض ارتباطاً مباشراً بين التمثيل النحوي والدلالي للجملة. لذلك في لديها منظور فريد لإسناد الحالة. أولاً ، لا تستند الحالة إلى العلاقات النحوية. ثانياً ، لا تعيين الحالة وفقاً لقواعد بنية العبارة. ثالثاً ، قد تعكس الحالة بشكل مباشر الوضع الدلالي أو التداولي.

توضح هذه الدراسة أن إسناد الحالة لا يمكن التعامل معه بسهولة من خلال آليات القواعد التوليدية. طرح المدافعون عن هذا المقاربة علاقات معقدة وأنظمة مجردة لشرح آلية إسناد الحالة. من ناحية أخرى ، تفسر قواعد الوظيفة و الاحالة إسناد الحالة من خلال تبني علاقة مستقلة بين العبارة الاسمية والحالة التي يتوسط فيها التسلسل الهرمي للفاعل والخاضع.

الكلمات المفتاحية: اللغة العربية ، إسناد الحالة ، قواعد الوظيفة و الاحالة

Abstract

Case is an important concept in linguistics. It is an elusive concept that creates a network of relations among morphology, grammar and meaning. The notion of case has attracted the attention of linguists to the extent that some grammatical frameworks consider it a central one .

Case assignment has received considerable attention in generative grammar. Arabic is one of the languages that studied extensively from the generative perspective. However, these studies lack unification and, consequently, arguing for specific treatment to case assignment in Arabic. These treatments have, to certain extent, conflicting results. Thus, the present study aims at viewing case assignment from a different perspective, arguing that the structural-functional of RRG can provide a unified description and explanation than the generative one.

Role and Reference Grammar (RRG) (Van Valin, 1993, 2005, 2008; Van Valin & LaPolla, 1997) is a monostratal and non-derivational theory which posits a direct linking between syntactic and semantic representation of a sentence. RRG has a unique conception of case. Firstly, case assignment is not based on grammatical relations. Secondly, it is not assigned according to phrase structure rules. Thirdly, it may directly reflect the semantic or pragmatic status of an argument.

This study shows that case assignment cannot be handled easily by the mechanisms of generative grammar. Advocates of this approach posed complex relations and abstract systems to explain how case is assigned. On the other hand, the RRG approach accounts for case assignment by adopting an independent relation between NP and case mediated by the actor-undergoer hierarchy .

Keywords: Arabic, case assignment, role and reference grammar

1. Introduction

Case is an important concept in linguistics. It is an elusive concept that creates a network of relations among morphology, grammar and meaning (Malchukov and Spencer 2009:1). The notion of case has attracted the attention of linguists to the extent that some grammatical frameworks consider it a central one (Case grammar (1968), Government and binding theories (1981), Minimalist programme (1995) First phase syntax (2008), while others try to assimilate and explicate it (Role and reference grammar (1993)). On the other hand, typological studies explored “a variety of phenomenon under the rubric of case”.

Arabic case assignment has received considerable attention among researchers working within the generative perspective (Fassi, 1993; Mohammed, 2000; Ouhalla, 2005; Soltan, 2007; Aoun. Benmamoun & Choueiri 2010; Al-Blushi, 2011; Ahmed, 2016). Advocates of the generative approach adopt an agree-based analysis which typically refers to ϕ -features (Schutze, 1997; Chomsky, 2001) to account for case assignment in Arabic. Others assume that tense is responsible for case assignment (Pesetsky & Torrego, 2001; 2004).

Arabic flexible syntax (free word order) causes several problems to the generative perspective. It has been demonstrated that neither agreement (Fassi, 1993) nor tense (Al-Blushi, 2011) are responsible for case assignment in Arabic. As a result, researchers have proposed different accounts and developed unique models to explain the principles of case assignment in Arabic (Fassi, 1993; Ouhalla, 2005; Soltan, 2007; Al-Blushi, 2011). However, the results are rather conflicting. The emerging picture of case assignment is too abstract, lacking unification, prediction and sophistication.

This paper assumes that the generative approach cannot satisfactorily describe, explain or predicate case assignment in Arabic. It argues for the structural functionalist approach proposed by Van Valin (1993; 2005; 2009) and aims at exploring case assignment from the RRG perspective. Moreover, it aims at demonstrating that the RRG approach can handle case assignment with less problems in comparison to the generative approach.

This paper addresses the following questions:

- 1- Can RRG predict case assignment in Arabic without posing abstract relations?

2- What are the problems that faces the RRG approach to case assignment in Arabic?

2. Case in government and binding theory

The term *case* is traditionally used to describe languages such as Latin, Sanskrit, Russian, and German. It marks the syntactic functions of noun phrases in the sentence; i.e. the subject is marked morphologically differently from the object and/or oblique cases (dative, instrumental, genitive, etc.). Case as a linguistic phenomenon varies greatly among languages. For example, Chinese has no case morphology that indicates the syntactic functions of noun phrases, while English, although, has no case morphology, it shows different pronouns for each case; *he* (Nom), *him* (Acc) and *his* (Gen). Other languages have rich case systems such German which has four cases, Russian has six cases and Finish has fifteen (Stranzy, 2005: 179).

Case assignment demands certain conditions in order to be considered a functional concept. Firstly, the case assigner should be present. Secondly, the case assigner and case assignee should be adjacent. The noun phrase should stand in particular syntactic relation to the case assigner. For example, *I send a letter John*. This sentence is ungrammatical because there is no case assigner to the word *John*. On the contrary, *I send a letter to John*, is grammatical because *John* receives case from the preposition *to*. Thirdly, the case assigner and case assignee should not be separated or detached from each other. For example, *I met occasionally him*. This sentence is ungrammatical because the adverb *occasionally* intervenes between the verb (case assigner) and the object (case assignee). By moving the adverb to sentence final position, the verb can assign accusative (Acc henceforth) case to the object *him*. Furthermore, the case assignee should not be structurally far from the case assigner. For example, *I considered that him to be clever* is ungrammatical because *him* is far from the case assigner verb to receive Acc case.

Case is an abstract linguistic phenomenon because case morphology is not a universal aspect, it is a language specific one (Blake, 2004: 58). GB distinguishes between structural and inherent case. Structural case is assigned to NPs according to their position while inherent case is assigned by prepositions or idiosyncratically by “peculiar verb or verbs”.

The notion of inherent case suggests that nouns and adjectives are considered case assigners. Thus, in *a present to my friend* and *a present*

of my friend, the case relationship is one between the two noun phrases *present* and *my friend*. Thus, the noun *a present* is the case assigner, whereas *my friend* receives case. The prepositions *to* and *of* are

interpreted as realizations of the dative and genitive cases, respectively. GB elaborated the basic structure of the sentence (S) which consists of (NP) and (VP) by introducing IP (inflectional phrase). The head I^0 consists of tense and modality. Besides, the VP is the complement of I^0 and the NP is its complement. Consider the following:

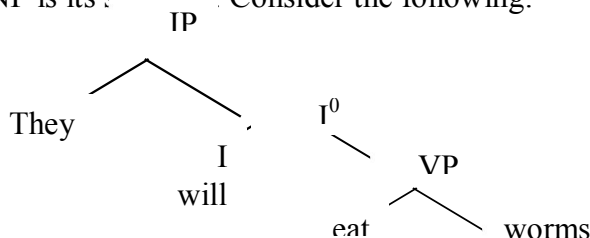


Figure 1 GB clause structure adopted from (Black 2004: 58)

GB states that (worms) is assigned Acc case because it is governed by the verb. On the other hand, (they) is assigned nominative (Nom henceforth) case by finite inflectional phrase. Van Riemsdijk (1983:249) proposes a hierarchy of case assigners which begins with verbs, prepositions, adjectives and nouns. Verbs usually assign structural case to their objects. On the other hand, prepositions, adjectives and nouns assign inherent case which normally near oblique, usually genitive or dative (Blake, 2004: 60). For example, *Anne is proud John** is ungrammatical because *John* has not assigned case by the preposition *of*.

The existence of VP constituent is an essential case assignment principle of GB. Problems related to the fact that in some languages the verb is not adjacent to the object is handled and explained by movement.

Building on the above facts, infinitive (non-finite verb phrase) cannot assign case to its subject as in the following example.

1a- * *Her to cut the log* is too difficult.

1b- *For her to cut the log* is too difficult.

(1a) is ungrammatical because the infinitive (to cut) cannot assign Acc case to the subject (her). Thus the subject of the infinitive clause is always introduced by the preposition (for) which is considered an Acc case assigner. On the other hand, when the infinitive clause functions as object or complement, it is assigned Acc case from the governing verb.

2- I considered *him to be clever*

The above examples (1a, 1b) are handled under the heading of ECM (exceptional case marking) in which case is assigned outside the scope of governor.

2. Case assignment in Arabic

Case assignment is one of the central topics in Arabic grammar. Arabic traditional grammarians want to know the mechanisms behind case assignment. Thus, case assignment has received a lot of attention in the Arabic literature (Baalbaki, 2008).

Arabic nouns inflect for three cases: nominative, accusative and genitive. These are usually suffixes attached to the word stem. Arabic case markers are short vowel suffixes: -u for Nom, -a for Acc and -i for Gen but there are alternative markers for each word class. The following declension paradigm exhibits Arabic case system.

Table (1) nouns classes in Arabic and case markers

Type	Morpheme	Case
Singular nouns	-u 'ضمّة'	Nom
	-a 'فتحة'	Acc
	-i 'كسرة'	Genitive
Masculine plural nouns	-uuna 'ون'	-u Nom
	-iina 'ين'	-i Acc + Gen
Daul nouns	-aani 'ان'	-a Nom
	-iina 'ين'	-i Acc + Gen
Feminine plural nouns	-at-u 'ات'	-u Nom
	-at-i	-i Acc + Gen
Defective nouns	Ø	Ø

Through the study of case assignment, Arabic traditional grammarians proposed that cases on words is the result of the existence of a factor that demands certain case marking on a word or a group of words. This phenomenon is labelled as case assignment and studied under the rubric of "the governor theory". The governor is defined as the unit that has an effect on other word(s) (Baalbaki, 2008: 85-6). It is first introduced by Sibawayhi as a theoretical concept that explains case inflections and syntactic relations (For more details on Amal theory see Baalbaki 2008: 83-98).

According to Arabic grammarians, there are two types of governors: formal and abstract. Formal governors refer to words that are actually uttered like nouns, verbs, prepositions and particles. These include active participle, assimilate adjective, passive participle, verbal noun, etc. On

the other hand, abstract governors refer to deduced effect without being actually uttered like inception (*ibtida*). There is an agreement among scholars that abstract governors are of two types: ʾāmil which causes *mubtada* and ʾāmil which causes the imperfect to be indicative.

The government theory is an essential building block of Arabic grammar. It sets different analytical techniques into motion combining both formal and abstract mechanisms. Later Arabic grammarians criticised this theory which results in further refinement and development of government theory. Others reject it and propose other explanations (Baalbaki, 2008: 83-98).

2.1. The generative perspective

Generative grammar has an influential effect on Arabic literature. Perhaps, Homeidi (1993) is one of the representatives of this tradition. He studies case assignment in nominal and verbal sentences. Following GB's approach, he demonstrates that Acc is assigned by verb.

3- [IP [VP-I [V ^cta] [NP muhammad-u] [NP ahmad-a] [NP kitāb-an]]]
gave Muhammed- Nom Ahmed- Acc Book- Acc

“Muhammed gave Ahmed a book”

The two NPs (Ahmed and book) received Acc case because they are governed by V. On the other hand, Homeidi treats nominal sentences with past tense in the same way.

4- [IP [VP-I [V kant [NP alshms-u] [AP mshrqt-an]]]
was- 3fg The sun Nom Shining Acc

“The sun was shining”

In the above example, V assigns Acc to its AP while VP-I assigns Nom to *alshms*. Concerning present tense nominal sentences, the claim that both NPs bear the same case because they are in an agreement relationship is rejected. It is demonstrated by considering sentences which consist of emphatic markers (*nawaasix*) as in (4) below.

5- alshams-u mushriqa-un

The sun Nom shining Acc

6- 'ina alshams-a mushriqat-un

The sun Acc shining Nom

Homeidi suggests that Nom is the default case for nominal sentences without emphatic markers (*nawaasix*). The concept of default status is common in the literature of case assignment. (Al-Byaty, 1990: 44; Plunkett, 1993: 245; Ouhalla, 1997: 207 cited after Abdul-Raof, 2011).

Case assignment with emphatic markers (nawaasix) is problematic.

Consider the following example:

7- 'iina albint-a Safarat

The girl Acc travelled 3fsg

Aoun (1985) suggests that the first NP (the girl) is assigned Acc because it is in the position of complement under the head iina (government under complementizer).

Another explanation is given by Fassi (1993) in which he states that Acc is assigned to the subject in complement position by the verb in the absence of complementizer. This is sometimes called embedded subject. Consider the following example.

8- hasibt-u alrajul-a maradana-an

Though 1st the man NP-Acc sick Adj-Acc

The subject (arajula) is assigned Acc because it occupies the direct object position. While the Acc of (maradana) is not clear and difficult to state how it is assigned. This is because according to the generative perspective, a case assigner can assign one case only. In this way, (arajula) received it case from the verb (hasib) while (maradana) remain without case assigner.

Null copula analysis is also disputed. It assumes that nominal sentences lack full clause structure, as such both NPs share the same case. Aoun et al. (2010: 42) argues strongly against it. They state that Nom on the first NP is structural and not default. Additionally, they assert that present tense nominal sentences have full functional categories. That is, present tense sentences possess a tense feature without a verb. Nom is assigned to the first NP and checked by T, while the second NP is assigned Nom because of the absence of V.

Fassi (1993) considers cases of subject in Arabic. Following GB, he distinguishes two types of subjects: accessible and non-accessible. He claims that VSO and VOS structures are marked with Nom under government by inflection. Thus, it is protected and not accessible. On the other hand, in SVO structures, the subject is accessible to external governors which assign it a non-Nom case. According to him, case correlates with agreement, asserting that agreement in Arabic is weak and does not protect the subject, unlike English and French.

9- a. ?inna baqarat-an takallam-at

that cow-Acc spoke-3.s.f

A cow has spoken.

b. hasib-tu baqarat-an takallam-at
 thought-/ cow-acc spoke-3.s.f
 I thought that a cow has spoken

The above examples (Fassi, 1993: 45) show that external governor (inna) can assign structural case to the first NP (baqarat-an). Thus, it is assigned Nom only in the absence of an external governor. The second example (7.b), the embedded subject (baqarat-an) is assigned Acc by matrix verb. The subject in both cases is not protected (accessible) which explains shifting case from Nom to Acc.

Turning to the minimalist perspective, Soltan (2007) adopts an agree-based approach to case-assignment in Arabic. He states that post verbal NPs are always Nom. Pre verbal NPs are Nom only if they are not governed by other case assigner. Post verbal NPs receive their case by agreement with tense, while pre verbal NPs receive a default case because they never enter into agreement relation with tense. Thus in the presence of nawaasix preverbal NPs receive an Acc case contrary to the expected Nom case (Soltan, 2007: 73-4).

Al-Balushi (2011) argues against this view. He proposes a developed a unique model to case assignment in Arabic in which the notion of verbal case (VC) is utilized. It is an old observation which states that verbs in Arabic receive an abstract case. He argues against agree bases analysis (Soltan 2007) and tense approach (Pesetsky & Torrego, 2004).

Al- Balushi shows that agree-based approach is not adequate to Arabic because agreement in Arabic is always defective (Chomsky, 2001: 7). Arabic verbs agree with their subjects in terms of gender and person but not number. In other words, agreement should be complete in terms of gender, number and person on both NP and the verb to value case.

- 10- a. qaraʔa-Ø l-mudarris-uun l-kitaab-a
 Pst.read.3sm-Ind the-teacher.m-p.Nom the-book-Acc
 'the teachers read the book'
 b. qaraʔa-t-Ø l-mudarris-aa-t-u l-kitaab-a
 Pst.read.3s-f-Ind the-teacher.p-f.Nom the-book-Acc
 'the female teachers read the book'

Based on the above presented facts, Al-Balushi (2011: 38) concludes that agreement in Arabic is defective and cannot licensed case. NPs in Arabic do not fully agree with their verbs, agreement is limited to person and gender.

He also demonstrated that tense is not responsible for case assignment in Arabic and that case is licensed in the absence of tense. Firstly, imperative clauses are tenseless in Arabic (there is no morphological realization of tense). Secondly, when negating imperative clauses, the negative particle “laa” encodes imperative feature with no tense morphology. Thirdly, Arabic is an aspect language (it does not differentiate between past and non-past) (Al-Balushi, 2011: 45-6).

After reviewing the relevant literature of case assignment in Arabic, it is clear that case assignment is a problematic topic. The diversity of perspectives and the contradictory assumptions reflect theoretical inconsistency. This is demonstrated by the notion of governor, accessibility, agree, and tense. All these notions are related to case assignment from the generative perspective. However, none of these notions can provide an adequate explanation to case assignment in Arabic. Furthermore, NPs are not the only category that receives case in Arabic. Adjectives and adverbs also receive case. Thus, the generative perspective has focused only on structural case and overlooked another equally important issues. The next section provides a theoretical sketch to the treatment of case assignment in RRG. It concentrates on the basic notions that play an important role in case assignment.

3. The RRG theory of case assignment

Role and Reference Grammar (Van Valin, 1993, 2005, 2008; Van Valin & LaPolla, 1997) is a monostratal and non-derivational theory which posits a direct linking between syntactic and semantic representation of a sentence (Van Valin 2009: 102). There are several theories to case assignment (Malchukove & Spencer, 2009), however, RRG treats case rather differently. Firstly, case assignment is not based on grammatical relations. Secondly, it is not assigned according to phrase structure rules. Thirdly, it may directly reflect the semantic or pragmatic status of an argument. This section will concentrate on the central characteristics of the RRG model to case assignment which includes: the semantic representation of sentence, the decompositional system, semantic roles and the relationship between argument position in the logical structure and the Actor-Undergoer hierarchy.

3.1 The semantic representation

The lexicon is an essential part of the RRG theory. It is the starting point from which “grammatical generalization” is derived. Van Valin puts it as follows:

Grammatical generalizations may be stated both in the syntax and in the lexicon, and therefore the system of lexical representation that a theory uses has a profound effect on the type and nature of the generalizations that may be stated in terms of it.

(Van Valin, 2005: 31)

The semantic representation of a sentence is based on the Aktionsart distinctions which are proposed by Vendler (1967). He classifies verbs into four classes.

1. State: be sick, be tall, be dead....
2. Activity: run, walk, march....
3. Accomplishment: melt, freeze, learn....
4. Achievement: pop, explode, shatter...

“States depict static situations which are inherently temporally unbounded (atelic), and both achievements and accomplishments express changes of state, which are inherently temporally bounded (telic): achievements are instantaneous, while accomplishments are not” (Van Valin 2005: 32).

The lexical representation (logical structure) of the Aktionsart classes are summarized in the table below.

Table (2) Verb classes adapted from (Van Valin, 2005: 45)

Verb class	Logical Structure (LS)
State	Predicate' (x) or (x,y)
Activity	do' (x, [predicate' (x) or (x,y)])
Accomplishment	BECOME (predicate' (x) or (x,y) or BECOME do' (x, [predicate' (x) or (x,y)])
Achievement	INGR predicate' (x) or (x,y) or INGR do' (x, [predicate' (x) or (x,y)])

The decompistional system is developed from Dowty (1979). For the sake of convenience, some of the English examples are given with their logical structure below.

Table (3) Verb classes and logical structures adapted from (Van Valin & LaPolla, 1997: 105)

Aktionsart type	Example	Logical structure
State	The window is shattered	Shattered' (window)
Activity	Carl ate sandwich	do' (Carl [eat' (Carl, sandwich)])
Achievement	The balloon popped	INGR popped' (balloon)
Accomplishment	The snow melted	BECOME melted' (snow)

3.2. Semantic roles

A distinguishing feature of the RRG model to case assignment is the semantic roles. The RRG model suggests two types of semantic roles: thematic relations and semantic macroroles. The former includes agent, patient, effector, etc. which are defined in terms of argument position in the decompositional system. While the latter represents a generalization across thematic relations. It includes two macroroles: Actor and Undergoer. These two macroroles are considered as the primary arguments of "transitive predication". The single argument of an intransitive predicate can be either Actor or Undergoer.

11- The window (U) is shattered

12- Carl (A) ate sandwich (U)

13- The balloon (U) popped

3.2.1 Thematic relation

RRG develops a unique system for thematic relations or (θ -role) which assumes that thematic relations are assigned by independent criteria. In RRG theory, thematic relations are assigned on the basis of argument position in the logical structure. This idea is quite different from the generative perspective which assumes that thematic relations are listed in the lexical entry of the verb (see Van Valin, 2005: 55 table 2.4 for the definitions of thematic relations in terms of logical structure). State verbs are divided into two types: single arguments and two arguments.

14a- The window broke

b- Anne saw the picture

In (14-a), the first argument *the window* is patient because it is the single argument of state verb while (14-b) is different. The first argument is perceiver while the second one is stimulus. Although the verb class is the same, the logical structure is different in both examples. Thus,

thematic relations are assigned on the basis of logical structure and not on the basis of verb class.

It is important to note that equational predicate is exceptional in that both arguments are assigned the same semantic role because there is no semantic contrast between the two arguments.

15a- John is my brother

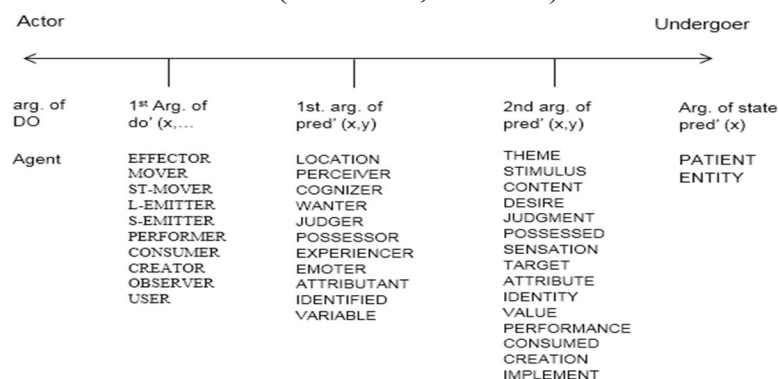
b- My brother is John

In the above example, both *John* and *my brother* refer to the same thing. Thus, the difference is pragmatic and not semantic one.

Activity verbs are also divided into two classes: single argument and two arguments. These are classified into ten subclasses (Van Valin, 2005: 56). Activity verbs with single argument are typically effector (a thematic relation for participant which does some action without being wilful or controller). While activity verbs with two arguments are typically with mark agent and patient. The thematic relations of achievement, accomplishment and semelfactive verbs are treated similarly to states and activities.

The RRG theory posits thirty-eight thematic relations (Van Valin, 2005: 54). These are large in number and theoretically not economic. Van Valin states that only five relevant distinctions are necessary for argument positions in the logical structure. The five distinctions are represented by a continuum in which the agent and patients are its extreme ends. The next diagram illustrates the thematic relations continuum according to the argument position on the logical structure.

Figure 2 Thematic relations assignment principle in RRG theory adapted from (Van Valin, 2005: 58)



The first two columns are closely related to each other in that both express a participant that does something. The difference between them is that agent is always wilful, intentional and instigating participant while effector and its subtypes are not. The last two columns include patient and theme. In terms of affectedness, patient is more affected than theme and its subtypes. The representation of thematic relations in this figure reflects the semantic contrast among the thematic relations.

3.2.2 Macroroles

The previous section explicates the RRG approach to thematic relations. These are assigned according to their position in the logical structure. However, a universal theory such as RRG

needs to be economic. Thus, a generalization is needed to subsume thematic relations under prototypical headings. The first prototype is actor which includes arguments that are “agent like”. The second prototype is undergoer which includes “patient like” arguments. Both the actor and undergoer are basic arguments of transitive verbs and either of which can be the argument of intransitive verbs. According to figure 2 above, the leftmost argument is actor and the rightmost one is undergoer. It should be noted here that the notion of actor and undergoer do not necessarily refer to the semantic content of argument. It is clear that the subject of the verb *see* is different from the subject of the verb *run*. Both of these verbs have actor as their first argument, however, the former does not do an action while the latter does. Actor in this sense refers to the logical subject. Similarly, the object of the verb *love* is different from the object of the verb *break*. The former undergoes an experience while the latter undergoes a physical state of affairs. Thus, the notion of undergoer refers also to logical object.

Case assignment follows argument position in the logical structure and not the semantic content. The logical structure specifies the number of macroroles. There are three options: two macroroles, one macrorole or zero. When the verb has two or more arguments, the number of macroroles is two. When a verb has one argument, there is only one macrorole. If the verb has no arguments, the verb has no macrorole.

3.3 Case assignment rules

There are two case assignment rules in the RRG model: case assignment rules for Acc constructions and ergative constructions.

1- case assignment rules for accusative constructions:

- a. Assign nominative case to the highest ranking macrorole argument in terms of (Figure 1)
- b. Assign accusative case to the other macrorole argument in terms of (Figure 1)

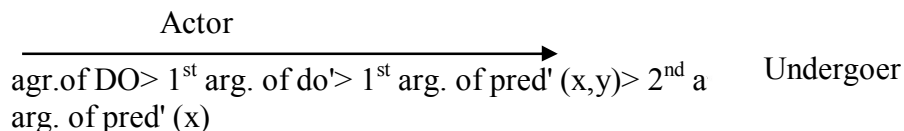


Figure (3) Privileged syntactic argument selection hierarchy (Van Valin, 2005: 61)

According to Figure (1) direct core arguments receive case by virtue of their position in the logical structure. It states that the leftmost argument will receive Nom case while the rightmost one will receive an Acc case. There are some exceptions in which a higher argument can be selected as an undergoer see (Van Valin 2009: 106). Thus, to specify case type (Nom or Acc) assigned to a direct core argument, we need to derive the logical structure.

Transitivity is the last component of case assignment rules in the RRG model which states that there are three types of transitivity; M-transitive verbs, M-intransitive verbs and atransitive verbs. M-transitive verbs take two macroroles: Nom and Acc. M-intransitive verbs take (regardless of the type of the single macrorole) Nom. While, atransitive verbs are zero transitive. Although there is a clear relationship between actor- undergoer hierarchy (figure 3) and macroroles, case is assigned according to the former and not the latter.

Default macrorole assignment principles (Van Valin, 2005: 63)

- 1- Number: The number of macroroles a verb takes is less than or equal to the number of arguments in its logical structure:
 - a. If a verb has two or more arguments in its LS, it will take two macroroles.
 - b. If a verb has one argument in its LS, it will take one macrorole.
- 2- Nature: for verbs which take one macrorole:
 - a. If a verb has an activity predicate in its LS: the macrorole is actor.
 - b. If a verb has no activity predicate in its LS: the macrorole is undergoer.

4. Analysis

This section considers the application of the RRG theory of case assignment to Arabic data. The data are selected from (Ryding, 2005). The examples will include nominal sentences and verbal sentences. In addition, the analysis is not limited to cases of subject and object, it will scrutinize occurrences of Nom and accusatives cases on other elements such as verbs, adjectives and adverbs. In Arabic, these elements receive case.

4.1 Nom case

There are various classes of words that are marked with Nom case in Arabic. It marks nouns, verbs, adjectives and certain adverbs. Nouns functioning as the subject of active sentence, the subject of passive sentence, the subject and predicate of equational sentence, the predicate of 'inna and her sisters and the vocative. Verbs with present tense are also marked with Nom in Arabic (Al-Balushi, 2011). While adjectives receive Nom by agreement with Nom nouns or by functioning as the predicate of nominal sentence.

4.1.1 The subject of active sentence

The subject is typically marked with Nom in Arabic. This includes both proper nouns (whether preverbal or post verbal) and pronouns. When the subject is pronoun, it is either enclitic attached to the verb or it is omitted and understood from the context.

كتب علي الدرس -1

Katab-a past Ali-u Nom l-dars-a Acc

'Ali wrote the lesson'

do' (Ali, [write (l-dars)])

Following Figure (3), (Ali) is the highest ranking argument, as a result it receives an Nom case. Whether being post verbal as in the above example or preverbal, the subject will always receive Nom case regardless of the position. (1) represents M-transitive verb which takes two direct core arguments (Ali and l-dars).

عاشوا في بلاد عربية -2

^c iaash-uu -3rd pl- Nom fii l-bilaad-i l-'iarabiyyat-i.

'They lived in Arab countries'

lived' (3rd pl, Ø)

(2) represents an instance of M-intransitive verb. The subject is incorporated with the verb and is assigned Nom case because it is the highest ranking argument in terms of figure (3). Semantically it is an

undergoer because it is the single argument of a non-activity predicate. Moreover, the single argument of M-intransitive verb is always Nom in Acc languages.

3- اجرو محادثات

ajraw –3rd pl- Nom muhaadathaat-*in* Acc

‘They conducted talks.’

do' (3rd pl, [conducted' (muhaadathaat)])

The above example is an instance of M-transitive verb. The actor (they) is incorporated with the verb and is assigned Nom because it is the highest ranking argument in terms of figure (3). The other argument (muhaadathaat) is assigned Acc, however, it is not an undergoer; “the undergoer NP refers to the non -instigating, affected participant in the state of affairs denoted by the clause” (Van Valin, 2005, p. 63), and because (muhaadathaat) in this example is non-referential, it cannot refer to a specific affected entity; hence it cannot be an undergoer”. As a result, the verb (اجرو) is M-transitive with one marcorole.

4- سرتُ و خالد

walk- past- 1st and khalid

‘I walked with Khalid’

do' (1st, [walk (1st, khalid)])

The above example is ambiguous. It has two interpretations. The first one “I walked with Khalid”, in this case (Khalid) is assigned Acc case which is predictable. The second one is not predictable because it consists of ellipsis. It is interpreted as “I walked and Khalid walked”. Accordingly, (Khalid) is assigned Nom case contrary to the RRG prediction. This shows that case is also, in some instances, context bound. It cannot be described accurately in isolation from meaning and context.

5- hasib-tu rajul-a takallam-a

thought- 1st man-acc spoke-3sg

6- قالت ان احدا لا يستطيع ان يوقفهم

qaal-at 'inna 'ahad-an-Nom laa ya-staTii^c-u 'an yu-qqif-a-hum.

She said **that no one** could stop them

Perhaps (5) and (6) are the most problematic cases for two reasons. The first one is that the decompositional system needs modification to account for subordination. The second one, there is no reference within the RRG theory of case assignment to case marking in subordinate clauses. Presumably, the subject is incorporated with the verb (*qaal-a*) and assigned Nom case because it is the highest ranking argument. The

subject of the subordinate clause ('ahad) is assigned Acc case. If we consider the privileged syntactic argument selection hierarchy to be one continuum for simple and complex sentences, the theory predication is correct. However, it is not an argument of the predicate. In this way, the theory predication is partially acceptable and requires some modification to account for simple and complex sentences.

On the other hand, the above examples show that the subject of subordinate clause in Arabic is marked. It is not assigned the default Nom case. On the contrary, it is treated as a special type of subject with Acc rather than Nom case.

The subject in Arabic is not only marked with Acc case as the above examples showed. It can also be marked with Gen case in certain constructions (Hasan, 1987, p.68). Consider the following example:

7- سرني نجاح الطالب في الامتحان

Sara-ni njahu l-talib-i fi l-imtihan

Pleased- past – success –infinitive student – Gen in the exam

'It pleased me that the student passed the exam'

(7) is another problematic instance to RRG. It is difficult to explain how the subject of embedded clause received Gen case. Such examples are not predictable by the adopted framework.

4.1.2 The subject of passive sentence

Passive voice in Arabic is achieved by changing the internal vowels in the verb or by adding derivational suffix. It is commonly achieved by the former method. The object of the active sentence is marked with Acc case. When transforming the sentence into passive, it will be marked with Nom.

8- عقد الاجتماع

aqad-a – past l-ijitmaafi-u - Nom

'the meeting' was held'

held (l-ijitmaafi)

This is a predictable situation because it is stated that the single argument will be marked with Nom by default. If the opposite happened, for example, the single argument was marked with a non-Nom case, a modification will be required.

4.1.3 The subject and predicate of equational sentence

Nominal sentences are more problematic than verbal sentences when considering case assignment in Arabic. These are mainly represented by verbless sentences with or without emphatic elements (nawaasix). As

discussed in section two, such sentences pose great difficulty to the generative perspective. However, nominal sentences are not unique to Arabic. They are found in Russian, Lakhota, Hebrew and other languages. Thus, according to RRG, the predicating element is not necessarily a verb (Van Valin & LaPolla, 1997: 25). It can be an adjective, pronoun or a noun. Consider the following examples:

العالم قرية صغيرة -9

al-^c aalam-u Nom **qaryat-un** Nom **Saghiirat-un** Nom

The world [is] a small village

be (al-^c aalam, [qaryat, Saghiirat])

الطريق طويلة -10

al-Tariiq-u Nom **Tawiil-un** Nom

The road [is] long.

be (al-Tariiq, [Tawiil])

انت صديقتي -11

'anta Sadiiq-ii'

You are my friend

equate (2nd, my friend)

The above nominal sentences are equational in that there is no semantic contrast between the two arguments. As a result, the two arguments share the same case (Van Valin, 2005: 54). However, it should be noted that more than one element can receive the same case on the contrary of figure 3 which states that only the first argument can receive Nom case. The first example clearly violates this rule in that not only core arguments receive the same case but also the non-core argument (Saghiirat-un) received Nom case.

4.1.4 The predicate of 'inna and her sisters

There is another variant of nominal sentences in Arabic which should be treated separately. Nominal sentences preceded by the nawaasix ('inna-a and her sisters) are exceptional. Although there is no semantic contrast between the two arguments, the first one is marked with Acc and the second one is marked with Nom. This is because nawaasix are case assigners which is a language specific phenomenon.

ان العالم قرية صغيرة -12

'inna **al-^c aalam-a** Acc **qaryat-un** Nom **Saghiirat-un** Nom

Indeed, the world [is] a small village

be (al-^c aalam, [qaryat Saghiirat])

ان الطريق طويلة -13

'inna **al-Tariiq-a Acc Tawiil-un Nom**

Indeed, the road [is] long.

be (al-Tariiq, [Tawiil])

Case assignment rules for Acc constructions need some modifications. In addition to (a) and (b) rules stated earlier in section 3.3, there should be a slot for language specific case assigners.

5- Case assignment rules for Acc constructions:

a. Assign nominative case to the highest ranking marcorole argument in terms of (figure 1).

b. Assign accusative case to the other marcorole argument in terms of (figure 1).

c. Language specific case assigners violate privileged syntactic argument selection hierarchy.

agr. of DO > 1st arg. of do' > 1st arg. of pred' (x,y) > 2nd arg. of pred' (x,y) > arg. of pred' (x)

Figure (3) privileged syntactic argument selection hierarchy

4.1.5 Vocative

The gist of this section and the next one is to demonstrate that non-core arguments can receive case. This is not predictable in RRG because only direct core arguments receive case according to their position in the logical structure while non-direct core arguments are not mentioned.

أيها السيدات و السادة -14

'ayyuhaa l-sayyidaat-u wa-l-saadat-u!

'Ladies and gentlemen!'

4.2 Acc case

Verbal sentences are normally divided into intransitive and transitive. These two types follow the RRG principle of case assignment to a large extent. Following the terminology of the adopted framework, the former will be called M-intransitive and the latter M-transitive. Consider the following examples:

اظن زيدا ذاهبا -15

'a-Zunn-u- 1st Nom Zayd-an dhaahib-an.

I believe Zayd [is] going.

9' believe' (1st, [*dhaahib'* (Zayd)])

The above example is different. The actor (pro I) is incorporated with the verb ('a-Zunn) and assigned Nom case. The other highest argument (Zayd) is the undergoer and marked with Acc case. It follows the principle of privileged syntactic argument.

ترك الباب مفتوحا -16

tarak-a – 3rd Nom l-baab-a maftuuH-an.

He left the door open.

do' (2nd, [left' (l-baab)])

The above example is an M-transitive verb with one macrorole. The actor (pro he) is assigned Nom because it is the highest ranking macrorole. (*l-baab*) is assigned Acc because it is the second highest argument. It is not an undergoer because it is a non-referential and non-specific entity. The adjective *maftuuH-an* is assigned Acc by agreement with *l-baab*.

There are many other instances of Acc case that is assigned to non-direct core arguments (Ryding, 2005: 172-182). For the sake of convenience and to avoid redundancy, the following examples are selected as representatives.

اللجنة ستعقد اجتماعا سنويا -17

al-lajnat-u sa-ta-fiqud-u jtimaafi-ayni sanawiyy-an

'The committee will hold a meeting annually'

لاشكر على واجب -18

laa shukr-a fialaa waajib-in.

'Don't mention it'

يا طلاب الجامعة و اساتذتها -19

yaa Tullaab-a l-jaamiiat-i wa-'asaatidhat-a-haa!

'O students and professors of the university!'

حضر الجميع الا زيدا -20

HaDar-a l-jamii'-u' illaa zeid-an.

'Everyone came except Zeid'.

(17) above shows that adverbs and adverbial expressions are marked with Acc in Arabic. While (18) is an instance of another case assigner particle which "laa". It assigns an Acc case to the immediately following noun. (19) is another variant of vocative which is assigned Acc. Thus, vocative in Arabic has two constructions: the first one is marked with Nom when it is following by ('ayyuhaa). The second one is assigned Acc when it is not followed by ('ayyuhaa). Finally, marker of exception is also a case assigner which assigns Acc to its adjacent NP.

4.3 Results

The analysis presented so far is not a comprehensive one. It shows where the adopted framework (RRG) is applicable and where it is not. The results can be summarized by the following points:

- 1- The adopted framework partially describe the case assignment rules in Arabic. It suits basic sentence patterns.
- 2- The adopted framework has not given attention language specific case assigners.
- 3- The theory has not allowed non-direct core arguments to be marked case. The analysis shows that non-direct core arguments can be marked with Nom and Acc.

5. Conclusion

The RRG model of case assignment is not based on notions like subject and object. It denies the existence of such notions and grammatical relations. On the contrary, it assumes that case assignment rules are based on actor- undergoer hierarchy (figure 1).

The analysis shows that case assignment in Arabic is partially follows the principles specified in the RRG theory. However, the theory requires more refinement to be able to account for case assignment in subordinate clauses. Moreover, there should also be a place for language specific case assigner's verbs or particles. Furthermore, non-direct core arguments receive case.

It is shown that handling case assignment by a functional framework is also problematic. Case is a functional concept that refers to the lexical properties of NPs. Additionally, language specific peculiarities play an important role. Thus, it is difficult to posit a formal explanation without complicating the mechanisms of case assignment. On the other hand, a structural functional approach such as RRG provides a unified framework for the analysis of case with explicit concepts and tools. However, adhering to economy and simplicity costs the theory to be descriptively inadequate. The two perspectives presented so far are initially appealing. However, after application many problems arise. This is because the compelling desire to impose structural uniformity to case assignment. Haspelmath argues for a framework-free grammatical description which, as he assumes, is superior to framework-bound grammatical description. He states that "Frameworks represent aprioristic assumptions that are likely to lead to a distorted description of a language." (Haspelmath, 2010: 341).

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