

An RRG Approach to Applicative Constructions in Arabic

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مقاربة وظيفية للتراكيب المتعدية لمفعولين في اللغة العربية

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Abstract:-

Applicative constructions refer to one of the language mechanisms in which the oblique object (usually constructed with preposition) is coded as a direct core argument. Arabic is among the languages that shows interesting patterns of applicative constructions ranging from direct- indirect, primary object and locative alternation.

Applicative constructions received an important attention in the literature, especially from the generative perspective. However, it has not been sufficiently studied from a structural-functional perspective such as RRG. The problem is, therefore, twofold. Firstly, applicatives in Arabic have not received an adequate analysis from a functional perspective. Secondly, applicatives include an increase number of direct core arguments in which it is not clear which one is selected as the subject of passive construction. This paper assumes that RRG can provide a unified account of applicative constructions in Arabic including: case assignment, patterns of applicatives and object passivization selection.

The present study aims at describing applicatives in Arabic within the RRG theoretical framework. Besides, it attempts to investigate patterns of applicatives in Arabic. Finally, it sheds lights on the criteria of undergoer selection.

The study shows that Arabic exhibits two main types of alternations: the first type includes; dative shift, transfer alternation and locative alternation. The second one is marked undergoer construction which occurs when the recipient undergoer is not part of the logical structure. It also shows that Arabic is primary object language while secondary object pattern represents special constructions.

Key words: Arabic, applicative constructions, role and reference grammar.

المخلص:-

تشير التراكيب المتعدية لمفعولين الى احد الوسائل اللغوية والتي يمكن من خلالها تحويل المفعول غير الصريح والذي يصاغ بحرف جر الى مفعول صريح مسند للفعل و اللغة العربية من بين اللغات التي تظهر انماطا مميزة للتراكيب المتعدية والتي تتباين بين المفعول المباشر-غير المباشر، المفعول الاساسي و التناوب الموضوعي.

حظيت التراكيب المتعدية باهتمام واسع في الادبيات اللغوية، و خصوصا من المنظور التوليدي. و على الرغم من ذلك الا انها لم تدرس بشكل كاف من منظور وظيفي مثل RRG (نحو الوظيفة و الاشارة) و المشكلة هنا في شقين: الاول ان التراكيب المتعدية لمفعولين لم تدرس من جانب وظيفي و الثاني ان التراكيب المتعدية تتضمن زيادة في عدد المفاعيل التي يمكن ان تشغل وظيفة نائب الفاعل في تراكيب المبني للمجهول.

تفترض هذه الورقة ان RRG توفر تحليلا موحدا للتراكيب المتعدية في اللغة العربية بما في ذلك اسناد الحالة و انماط التعددي و اختيار نائب الفاعل في تراكيب المبني للمجهول.

تهدف هذه الدراسة الى وصف التراكيب المتعدية في اللغة العربية و تحاول ان تستكشف انماطها و تسلط الضوء على معايير اختيار نائب الفاعل في تراكيب المبني للمجهول.

اظهرت الدراسة ان اللغة العربية تتميز بنمطين من التراكيب المتعدية. الاول يتضمن المفعول غير المباشر و المباشر و الثاني يتضمن تحويل المفعول غير الصريح و الذي هو ليس جزء من التركيب المنطقي للفعل الى مفعول به. بالاضافة الى ذلك اظهرت الدراسة ان اللغة العربية من اللغات التي تقدم المفعول غير المباشر على المفعول المباشر.

الكلمات المفتاحية: اللغة العربية، التراكيب المتعدية، نحو الوظيفة و الاشارة.

1. Introduction

Applicative constructions (applicatives henceforth) are generally defined as peripheral adjuncts that are added to the sentence. Liina Pylkkänen (2008, p. 11) states that “Most languages have a means of adding an indirect object to the argument structure of a verb..., such additional arguments are called applied arguments and the resulting constructions applicative constructions”. Bosse (2015, p. 13) defines applicatives as “nominal elements of a sentence that are not selected by the lexical verb or preposition of that sentence”. While Peterson (2007, p. 1) defines them as “a means some languages have for structuring clauses which allow the coding of a thematically peripheral argument or adjunct as a core-object argument”. Similarly, Van Valin defines applicatives as “involving the promotion of a non-object to direct object status” (2005, p. 121).

The three definitions mentioned above share the basic idea that applicatives are peripheral nominal constituents. They are primarily adjuncts. However, they can also function as direct core arguments. Applicatives are special type of adjuncts in that they can be selected as the privileged argument of passive sentence.

Applicatives in Arabic have received a very little attention in the literature. An-Nashef (2020) studies the relationship between symmetrical and non-symmetrical double object constructions in Arabic. His aim is to propose an analysis of object selection (passivation) in Modern Standard Arabic. By adopting the recent developments in the minimalist programme (Chomsky, 2000, 2001), he argues that his proposal is generalizable cross-linguistically and can account for symmetrical and non-symmetrical distinctions.

The result of An-Nashf’s analysis claims that Arabic double object constructions selects indirect object as a privileged syntactic argument of passive construction. In other words, Arabic is an asymmetrical language which allows one of the objects to be passivized. In this case, the indirect object is always selected as the subject of passive construction.

In a different vein, Rayding (2011) studies the relationship between dative structures and the properties of “verb phrase syntax” through the analysis of predicate argument structure. He adopts a

syntactic analysis that relates semantic structure of dative alternation to its ditransitive realization. His study is motivated by the observation of Arabic grammarians that posits a relationship between syntactic structures and semantic properties, commonly called “taqdīr” (suppletive insertion) and “iḍmār” (suppression).

In particular, Rayding concentrates on the Arabic preposition “li” which realizes two variants of dative alternations: *to*-dative and *for*-dative. This shows types of dative argument structures and the semantic properties of Arabic verbs. Dative alternation, as a result, is predictable from the semantic properties of verbs.

Rayding concludes that the analysis of the interaction between the semantic properties of Arabic verbs with syntax shows “a rich and systematic internal structure for Arabic verbs and prepositions as well as conditions for parametric variation of Arabic prepositional phrases contrasted with English” (2011, p. 284).

This paper argues that RRG can describe applicatives with the minimal theoretical notions. That is, adopting notions such as undergoer assignment and direct core arguments makes passivization and applicative alternations predictable. Consequently, this study differs from (An-Nashef, 2020) in that it is not concerned with the structure of applicative or its types (high and low applicatives). Secondly, it is not concerned with semantic properties of verbs and parametric variation of Arabic prepositional phrases. This study argues that RRG offers the minimum theoretical apparatus for the description and explanation of applicative alternations. Besides, it seeks to contribute to the principles of undergoer selection by examining Arabic data.

Applicative constructions received an important attention in the literature, especially from the generative perspective. However, it has not been sufficiently studied from a structural-functional perspective such as RRG. The problem is, therefore, twofold. Firstly, applicatives in Arabic have not received an adequate analysis from a functional perspective. Secondly, applicatives include an increase number of direct core arguments in which it is not clear which one is selected as the subject of passive construction. To put it in clearly, the problem is centred around whether Arabic is symmetrical language or not (a language is which both objects can be passivized). Besides, it is concerned with factors that determine which object can be passivized.

This present study addresses the following questions:

- 1- What is the relevant theoretical concept that describes and explains applicative constructions?
- 2- Is Arabic a primary or secondary object language?
- 3- Does Arabic show a symmetrical or asymmetrical language?

The present study aims at describing applicatives in Arabic within the RRG theoretical framework. Besides, it attempts to investigate patterns of applicatives in Arabic. Finally, it sheds some light on the criteria of undergoer selection.

2- Applicatives

The term applicatives refer to a special type of constructions which involve “the promotion of a non-object to direct object status”. These constructions are mainly dative shift, transfer alternation and locative alternation.

- (1) a. Sally gave the flowers to Kim.
b. Sally gave Kim the flowers.
c. Sally presented the flowers to Kim.
d. Sally presented Kim with the flowers.
e. Max loaded the olives into his minivan.
f. Max loaded his minivan with the olives.

In the above examples only (b, d, f) are called applicatives. However, in the relevant literature such constructions are commonly called double object constructions. The term double object construction describes:

- 1- Two objects that show syncretism between accusative and dative. Otherwise the construction is not double objects.
- 2- Both objects are direct core arguments. That is, peripheral objects are not considered double object construction.

Some scholars working with the generative tradition subsumes double object construction under the rubric of applicatives, even though the language under consideration lacks applicative morphology. Marantz (1993), for example, assumes that applicative

morpheme is present in but not spelt out. This can be explained on the basis of null hypothesis. He extends the analysis of applicatives in Bantu languages to English double object constructions. For Marantz, the null applicative morpheme is a verbal head and for Baker and Emonds, among others, it is a prepositional element instead.

In a different vein, Liina Pylkkänen (2008) shows a fundamental distinction between high and low applicatives which behave differently within the same language and cross linguistically. The differences appear with constructions involving intransitive verbs, stative verbs, and depictive modifiers. English applicatives are impossible in all three contexts: (2a) shows that an applied argument (the indirect object) cannot be added to an intransitive verb; this example cannot be interpreted as meaning that Mary ran for the benefit of John. (2b) shows that the applied argument cannot be added to a stative verb, and (2c) shows that it cannot be modified by a depictive.

- (2) a. *Mary ran John.
 b. *Mary held John the door.
 c. *Mary showed John a movie interested

Liina Pylkkänen further shows that this difference in structure is also reflected in the semantic interpretation of the two types of applicatives; a low applicative head denotes transfer of possession, whereas a high one is compatible with a wider range of interpretations (Benefactive, Instrumental, Malefactive, etc.). English double object constructions involve a low applicative structure and the ungrammaticality of the examples in (2 a-c) follow from this structure. First, since low applicatives describe transfer of possession between two internal arguments, they are not possible with intransitive verbs (which lack one argument). Second, low applicatives are incompatible with verbs that describe states (rather than events) because such verbs are lexically incompatible with the idea of transfer. And third, low applicatives are incompatible with depictives modifying indirect objects because the two are of incompatible semantic types.

The two terms applicatives and double object constructions are closely related. Formally speaking, the term applicatives is used to

describe Bantu languages in which the addition of a new object correlates with the addition of applicative morpheme on the verb. In this paper, however, the term applicatives is not adopted in this sense. Rather, it refers to “applied object” which appears as one of the verb’s argument regardless of whether applicative morpheme is present or not.

2.1 Transformational Approaches

Transformational approaches to applicatives are mainly concerned with describing the structure and the alternation including to-dative and for-dative (Fillmore, 1965) exemplified below:

- (3) a. The teacher assigned each student a question.
b. The teacher assigned a question to each student.
- (4) a. She left Jim a Card
b. She left a card for Jim

Dative alternation raises an important question about the relationship between double object constructions (as the generativists call it) and PP dative constructions. There are two approaches in this respect: dative shift approaches which assumes that the two structures are transformationally related. Accordingly, double object construction is derived from PP dative construction (Larson, 1988). This approach is based on movement rule and the similarity between the two structures (synonymous structure).

Similarly, Emonds (1993) proposes that “Dative Movement” is a “structure-preserving transformational interchange” which consists of the promotion of indirect object and the demotion of direct object. Emonds considers that both structures contain a preposition. In the absence of dative alternation, this preposition is overtly realized and vice versa.

The second approach is adopted by LFG (lexical functional grammar) developed by (Kaplan & Bresnan 1982). It suggests that the two structures are distinct due to differences in meaning and productivity.

The latter approaches raise an important question about the properties of promoted object (indirect) and its similarity to non-promoted one (direct object). Passivization shows that the promoted

object behaves like the non-promoted one. Another test is relativization which allows only one object to exhibit true object properties (Peterson, 2007).

2.2 Lexicalist Approaches

In contrast to the transformational perspective, the lexicalist approaches are concerned with the productivity of applicatives. That is, some verbs exhibit both patterns: applicative construction and PP dative construction, while others permit either one of the two constructions. In other words, the alternations between applicatives and PP dative is not a regular syntactic operation. The following pairs of examples illustrate the fact.

- (5) a. Dr. Smith {gave/sent/showed} his collection to the library.
b. Dr. Smith {gave/sent/showed} the library his collection.
- (6) a. Dr. Smith {donated/transferred/showed off} his collection to the library.
b. *Dr. Smith {donated/transferred/showed off} the library his collection.

(Citko et al., 2017, p. 21)

Alternatively, while most English double object constructions allow PP dative paraphrases, a disparate collection of verbs taking double objects does not permit them (e.g., allow, ask, bet, charge, cost, deny, etc.).

Jackendoff (1990) is another theorist who believes that a lack of full productivity in the dative alternation supports a purely lexical account of double objects.

For Larson, constraints on productivity also follow from the properties of the prepositional element. In his analysis, *to* is contentful and is associated with the meaning of "Goal of Motion along some path". On this account, the verbs that do not allow dative shift are the ones that do not have transfer to a Goal as part of their lexical make-up. There are other reasons why some verbs do not have double object constructions such as morphological and semantic constraints (Pinker, 2013).

2.3 Discourse Function

A very different view on the productive of the dative alternation is taken by (Bresnan, 2007), Bresnan et al. (2007), Bresnan & Nikitina (2009), who argue against the approaches that derive the constraints on the dative alternation from the meaning differences, and suggest a more probabilistic approach instead.

Bresnan et al. (2007), based on the fact that examples of this general sort are attested in the corpus, argues that these are only preferences that can be overridden by independent factors, such as discourse prominence (given precedes non-given), weight/heavy (light constituents come before heavy constituents), pronominal status (pronouns come before non-pronouns), animacy (animates come before inanimates) and definiteness (definites come before indefinites). They thus conclude that “we cannot predict the dative alternation from meaning alone .

3- The RRG Approach to Applicatives

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, p. 102). In RRG terms, there is clause internal relations such as subject, direct object or indirect object. Although the notion of direct object plays a central role in other theories such as the generative ones, RRG adopt the view that it is “superfluous” (Van Valin, 2005, p. 115). There are two phenomena that motivates the clause internal relations: passive construction and applicatives. RRG argues that these constructions can be described and explained without positing any clause internal relations. With two basic notions, RRG suggests that undergoer and direct core arguments provide that minimum theoretical tools that account for such phenomena.

3.1 Actor–Undergoer Hierarchy

Since applicatives involve the promotion of peripheral constituents to a direct core argument usually beneficiary, RRG suggests that this phenomenon can be described on the basis of

The first two columns in Figure 2 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.

The first and the last column are two prototypes that represent a generalization across thematic relations. 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 also refers to logical object. In general, the undergoer represents “non-instigating, affected participant in a state of affairs”.

3.2 Marked Undergoer Assignment

RRG distinguishes two types of arguments: direct core arguments and core arguments. The former refers to verb’s argument and the latter refers to peripheral arguments expressed with prepositional phrase. Direct core arguments may or may not have a macrorole function, consider the following example:

(7) Allan sent some books to me

“Some books” in the above example is direct core argument but it is not a macrorole. It cannot function as undergoer because it is

“non-referential” (Van Valin, 2005, p. 67). While “to me” is core argument with macrorole functioning as undergoer because “non-instigating, affected participant in a state of affairs”

There are two main types of marked undergoer assignment. The first one occurs with three types of alternations: dative, transfer and locative alternations as illustrated with the following examples.

(8)

- a. Sally gave the flowers to Kim.
- b. Sally gave Kim the flowers.
- c. Sally presented the flowers to Kim.
- d. Sally presented Kim with the flowers.
- e. Max loaded the olives into his minivan.
- f. Max loaded his minivan with the olives.

The second one occurs when a non-argument of the verb appears as undergoer. It usually happens when an oblique argument with beneficiary role turns into one of the verb’s arguments. Consider the following example.

- (9) a. Sandy baked a pie for Robin.
b. Sandy baked Robin a pie.

The core argument “for Robin” is expressed as peripheral constituent and carries an oblique case. Additionally, the logical structure of the verb “bake” does not contain a beneficiary argument. While in the (b) sentence, it appears as a direct core argument functioning as undergoer. The undergoer can function as privileged syntactic argument of passive construction. This support the claim made earlier that the undergoer and direct core arguments are the relevant notions to describe and explain applicatives alternations.

One of the intriguing features of applicative constructions with beneficiaries and other direct core arguments is that they can function as privileged syntactic argument in a passive construction. Van Valin states that “direct core arguments other than the undergoer are possible as privileged syntactic argument in a passive construction (2005, p. 122). This phenomenon raises an important

question about the relevant constraints that determine privileged syntactic argument selection of passive construction.

3.3 Primary and Secondary Objects

The notion of undergoer in applicatives correspond to the notion of primary object suggested by (Dryer 1986). Dryer Proposes that some languages are sensitive to the distinctions between primary objects and secondary ones. The former refers to the indirect object of ditransitive construction, while the latter corresponds to the direct object.

Following the RRG perspective, “primary object languages” permit only the marked selection for undergoer. There are two analyses within RRG to handle such a problem. The first one is suggested by Van Valin and LaPolla (1997) which states that undergoer selection is based on animacy. That is, animate human is selected as undergoer instead of animate non-human. And the undergoer must be animate when the other direct core argument is inanimate.

The second analysis is structurally based. It claims that undergoer selection is based on the principle ‘select the second highest ranking argument in the logical structure as undergoer’. This analysis works perfectly well with two arguments verbs. However, it becomes problematic with three arguments verbs. It will always select the second highest argument as undergoer. Consider the following example.

(10)

- a. Sally gave the flowers to Kim.
- b. Sally gave Kim the flowers.

The second analysis will select in both examples (a,b) the second highest argument which is “the flowers” in (a) and “Kim” in (b). In such situations this analysis is consistent because peripheral adjunct cannot be selected as undergoer even though it refers to animate human. On the other hand, the first analysis will always select “Kim” as undergoer because “Kim” is animate and human which yield an incorrect prediction.

Additionally, the first analysis is not accurate enough when the two direct core arguments of the ditransitive verb are animate especially in causative construction (Van Valin, 2005, p. 124). In this respect, passivization is used as a test to determine which argument is the undergoer, since only one of the direct core arguments can be selected as the privileged syntactic argument of passive construction. The following example illustrates the fact.

- (11) a. They made the students obey their teachers.
 b. The students were made to obey their teachers.
 *c. Their teachers were made to obey the students.

Only the undergoer “the students” can be made the privileged syntactic argument of passive construction as stated in (11). While the other direct core argument cannot because it yields a contradictory meaning.

This section sketches the RRG approach to applicatives which is substantially different from the main stream analyses of generative grammar. RRG views applicatives as marked undergoer assignment in terms of actor-undergoer hierarchy 1. That is, what is stated as alternations such as dative shift, transfer alternation and locative alternation are the result of the application of Principle A or B in figure 1. Accordingly, the notions of undergoer and direct core arguments are the relevant ones to the description and explanation of applicatives.

5- Analysis

This section analyses applicatives in Arabic within the RRG approach. The analysis includes the three main types of alternations: dative, transfer and locative alternation. It focuses particularly on aspects that determines undergoer assignment mentioned in section 3.3. Besides, by investigating whether Arabic is primary or secondary object language, this study seeks to contribute to the typology of primary and secondary object languages (Dryer 1986).

5.1 Dative Alternation

Dative construction in Arabic has two structures: prepositional dative construction and applicatives (double object construction).

Although the latter is marked construction, the two arguments (indirect and direct object) are syncretic.

(12) a. A'tytu al-Kitāb-a li-Muḥammad-in⁽¹⁾

gave-I the book-ACC to-pre Muhammed-GEN⁽²⁾

'I gave the book to Muhammed

b. A'tytu Muḥammad-an al-Kitāb-a

gave-I Muhammed-ACC the book- ACC

'I gave Muhammed the book'

c. A'tytu al-Kitāb-a Muḥammad-an

gave-I the book -ACC Muhammed-ACC

'I gave the book to Muhammed'

d. [do (I, Ø)] CAUSE [BECOME have (Muhammed, Kitāb)]

(12a) represents prepositional dative construction in which the recipient "Mohammad" is neither a direct core argument nor an undergoer. It appears as peripheral adjunct. The second example (12b) is the locus of the study. It represents a marked undergoer assignment because "Muhammed" becomes one of the verb's arguments. (12c) shows the flexibility of Arabic word order and demonstrate that Arabic exhibits two patterns of objects according to (Dryer 1986). Firstly, (12b) is a typical example of primary object languages while (12c) is an example of secondary object languages. The latter refers to the precedence of direct object on the indirect object in dative construction.

It should be noted that although Arabic shows secondary object pattern, the primary object pattern is profound in Arabic. In this respect, secondary object pattern represents a marked construction. That is, discourse function highly constrains secondary object pattern in Arabic as illustrated in the following examples.

(13) a. Mādhā a'tyt-a Muḥammad?

'What did you give Muhammed?'

a'. A'tytu Muḥammad-an al-Kitāb-a

'I gave Muhammed-ACC the book- ACC'

b. li-man a'tyt-a al-Kitāb?

'To whom did you give the book?'

b'. A'tytu al-Kitāb-a Muḥammad-an

'I gave the book - ACC Muhammed-ACC'

The examples illustrated above show that topicality can determine object pattern. While Arabic permits both patterns depending on discourse topic, English permits only primary object pattern, i.e. the precedence of indirect object over the direct object.

The secondary object pattern is obligatory in Arabic when the direct object is possessed by the indirect object. This is the typical rule for secondary object in Arabic as exemplified below.

(14)- A'tytu al-māl ṣāḥbhu

gave-I the money-ACC its owner- ACC

'I gave the money to its owner'

Secondary object pattern in Arabic is not a regular syntactic process. There two conditions that constrain secondary object pattern:

1. The indirect object possesses the direct object.
2. The indirect object is preceded by the exception marker "illā" which means 'but'

The second condition is more productive than the first one.

(15)- Mā ahdytu\ a'tytu\ mnḥtu\ whbtu al-māl illā Muḥammad-an

'I didn't present\give\grant\endow the money-ACC but Muhammed-ACC'

Determining the undergoer in the above examples is straightforward. If an animate (human) is a direct core argument, then it must be the undergoer (Van Valin & LaPolla, 1997). All the above examples consist of a recipient (animate human) and a theme. Passivization is less indicative in these examples because both objects (direct and indirect) are potential privileged syntactic arguments of passive construction. However, given the presence of a recipient animate, it is always the indirect object priority to function as

undergoer and as the privileged syntactic argument of passive construction. It is only for discourse reasons that the direct object (theme) functions as the privileged syntactic argument of passive construction such as being the topic as illustrated in (13).

The process of undergoer selection becomes more complicated when both arguments are animate such as the following:

(16) a. A'tytu Muḥammad-an ḥiṣān-an

gave-I Muhammed-ACC a horse-ACC

'I gave Muhammed a horse'

b. A'tytu Muḥammad-an Fāṭimah-a

gave-I Muhammed-ACC Fatima-ACC

'I gave Muhammed Fatima'

It is impossible to alter the structures in (16 a,b). The rigidity of the structure in (16) comes from two factors: anomaly in (16 a) and confusion (16 b). The only grammatical structure is primary object pattern since secondary object pattern in (16 a) means the animate (non-human) ḥiṣān 'a horse-ACC' owns the animate (human) Muḥammad 'Muhammed-ACC'. In (16 b), it confuses the meaning by shifting roles between Muhammed the possessor (recipient) and Fatima the possessed (theme).

5.2 Object Properties in Dative Alternation

In order to demonstrate that the notion of undergoer is the relevant theoretical concept that describes and explains applicative constructions, there are three main types of tests that show whether the applied object possesses a 'true object' properties or not. These test are passivization, object pronominalization and relativization (Peterson, 2007).

Privilege syntactic argument of passive construction is generally correlates with animacy. The default selection is then for the recipient animate to function as privileged syntactic argument. However, in Arabic, other arguments (non-undergoer) are also potentially available for this function.

(17) a. A'ty alktāb-u Muḥammad-an

gave-pass-past the book-NOM Muhammed-ACC

‘The book was given to Muhammed’

b. A‘ty Muḥammad-u alkitāb-a

gave-pass-past Muhammed -NOM the book -ACC

‘Muhammed was given the book’

On the other hand, privilege syntactic argument of passive construction is restricted to the recipient undergoer when two animate objects co-exist.

(18) a. A‘ty Muḥammad-u ḥiṣān-an

given-pass-past Muhammed-NOM ḥiṣān-ACC

‘Muhammed was given a horse’

b. *A‘ty ḥiṣān-u Muḥammad-an

given-pass-past ḥiṣān -NOM Muhammed –ACC

‘A horse was given Muhammed’

Arabic shows symmetrical treatment when recipient undergoer is animate human and the theme is inanimate (17 a,b). In contrast, the undergoer selection in passive construction is restricted to recipient human only when the two object are animate. The symmetrical treatment extends to pronominalization (18 a) but not relativization (18 c).

(19) a. Ahdāny ayyāhu

presented-he me-ACC it- ACC

‘He presented it to me’

b- Ahdytu ayyāhu

presented- pass-past I- NOM it-ACC

‘I was presented it’

c. Muḥammad-u alladhī a‘tynāh al-Kitāb-a

‘Muhammed who was given the book’

d. * Al-Kitāb-u alladhī a‘tynāh Muḥammad-a

'The book which was given Muhammed'

The above examples show that object pronominalization is symmetrical in Arabic (both objects can be pronominal). The asymmetrical treatment appears with (19 a) because only the undergoer (-i) 'me-ACC' can be passivized (19 b).

Relativization clearly reflects the asymmetrical treatment between the two objects.

Again, only the undergoer can be relativized. (19 c) is interesting because the direct object al-Kitāb-a 'the book' should be relativized and exhibits true object properties. In contrast, the recipient undergoer Muḥammad shows true object properties while the direct object al-Kitāb-a 'the book' is not.

Another test that shows asymmetrical treatment is causitivation. Again, the undergoer is the only argument that can fit causative construction and can be passivized.

(20) a. J'ltu Muḥammad-an y'ty al-rajul-a Kitāb-an

Made-I Muhammed-ACC give-pres al-rajul -ACC a book-ACC

'I made Muhammed give the man a book'

b. Ju'ila Muḥammad-u y'ty al-rajul-a kitāb-an

Made-pass Muḥammad -NOM give-pres al-rajul -ACC a book-ACC

'Muhammed was made to give the man a book'

b'. * Ju'ila al-rajul-u y'ty Muḥammad-an kitāb-an

Made-pass al-rajul -NOM give-pres Muḥammad -ACC a book-ACC

c. [do (I, Ø)] CAUSE [[do (Muhammed, Ø)] CAUSE [BECOME have (al-rajul, Kitāb)]]

The logical structure of (20 a) is given in (20 c). Although at first it appears that (20) shows a symmetrical treatment of both objects, the meaning of (20 c) is exactly the opposite of (20 a). That is, there is a reverse role between Muhammed and al-rajul in both structures. In (20 a), it was Muhammed who made to give the man a book, while in (20 c) it refers to the opposite meaning (the man was made to give

Muhammed a book). Thus, the two passive structures in (20 b, b') are grammatical but with opposite meaning. It demonstrates that causative construction exhibits asymmetrical treatment at the level of semantic roles.

5.2 Transfer Alternation

Transfer alternation refers to the transfer of an inanimate object (theme) to a recipient animate (normally human). Transfer alternation is different from dative alternation in Arabic in that it rarely lexicalises two objects. Instead, Arabic uses prepositional dative construction to express transfer alternation which corresponds to the English counterpart for-dative (Rayding, 2011).

However, while transfer verbs in Arabic such as *ursila* 'to send' and *bā'a* 'to sell' never allow applicatives (21 b), they allow the two objects to be pronominalized (21 c). That is, the recipient argument can be lexicalized as pronoun but not as proper noun. If the two arguments appear as proper nouns, then the first one will be direct object (theme) and the second one will be oblique modified by the preposition *li* 'to' to indicate its recipient role as in (21 a).

(21) a. *arsl-t-u\ qaddam-t-u\ bā'a-t-u al-Kitāb-a li-Muḥammad-in*

send-I \present-I\sell-I the book-ACC li-pre Muhammed

'I send\present\sell the book to Muhammed'

b. **arsl-t-u\ qaddam-t-u\ bā'a-t-u Muḥammad-an-ACC al-Kitāb-a-ACC*

send-I\present-I\sell-I Muhammed-ACC the book-ACC

c. *arsl-t-u-k\ b'-t-u-k ayyāhu\al-Kitāb-a*

d. [do (I, Ø)] CAUSE [BECOME have (Muhammed, Kitāb)]]

Transfer verbs in Arabic such as *ursila* 'to send' and *bā'a* 'to sell' are mono-transitive and the recipient argument usually expressed as peripheral adjunct. This explains the ungrammaticality of (21 b). The recipient undergoer is not part of the logical structure of transfer verbs in Arabic. Unlike Arabic, the English counterpart of the verb *ursila* is 'send' which allows peripheral argument to be direct core argument as in (5 b). Additionally, both objects can be passivized (22

a,b) but only the recipient undergoer can be relativized (22 c) and passivized in causative construction (22 d).

- (22) a. *ursila Muḥammad-u al-risālah-a*
sent-pass-past Muhammed-NOM the letter-ACC
'Muhammed was sent the letter'
- b. *ursila-t al-risālah-t-u*
sent-pass-past al-risālah-t-NOM
'The letter was sent'
- c. *Muḥammad-u alladhī ursila al-risālah*
Muhammed-NOM who-rel sent-past the letter-ACC
'Muhammed who was sent the letter'
- d. *J'itu Muḥammad-a yrsl al-risālah-a*
made-I Muhammed-ACC sent the letter-ACC

Transfer alternation in Arabic has the same treatment of dative alternation analyzed in 5.2. Concerning object pronominalization and passivization both objects show symmetrical properties. On the other hand, asymmetrical treatment is shown in relativization and the passivization of causative construction.

5.3 Locative Alternation

Locative alternation refers marked undergoer selection in which the oblique argument can appear as a direct core augment. As stated in 5.2 that animacy plays a vital role in the distinction between the two objects, then it is predictable that the two objects are symmetrical when they are inanimate.

- (23) a. *Ḥmlw albdā'h-a fī-alshāḥnh-a*
loaded-they the goods-ACC in-pre truck-ACC
'They loaded the goods in the truck'
- b. *Ḥlmw al-Shāḥinah-a bi-ālbda'h-a*
loaded-they truck-ACC with-pre goods
'They loaded the truck with goods'

c. [do (they, Ø)] CAUSE [BECOME be-in (truck, goods)]

Locative alternation in Arabic allows either objects to be a theme undergoer. When one of the objects is a theme undergoer, the other is oblique. In (23 a), the theme is *albdā'h* 'the goods' and *alshāḥnh* 'truck' is oblique argument and (23 b) is vice versa. The symmetrical treatment is also present in passivization.

(24) a. *Ḥmlt albdā'ht-u fī-alshāḥnh*

loaded-pass-past the good-NOM in-pre the truck

'The goods were loaded in the truck'

b. *Ḥmlt alshāḥnht-u bi-ālbđā'h*

loaded-pass-past the truck-NOM with-pre goods

'The truck was loaded with goods'

Furthermore, the symmetrical relationship is again present in object relativization.

(25) a. *al-Shāḥinaht-u allatī ḥmlt bi-ālbđā'h*

the truck-NOM which-rel loaded with-pre goods

'The truck which loaded with goods'

b. *Albdā'ht-u allatī ḥmlt fī al-Shāḥinah*

the goods-NOM which-rel loaded in-pre the truck

'The goods which loaded in the truck'

The symmetrical relationship between the objects in locative alternation is the clearest and among other types of alternations. It is also predictable because both objects are inanimate.

5.4 Results

The following table summarizes the results.

Table (1) Object Properties of Applicatives in Arabic

Symmetrical Treatment				
Marked Undergoer Assignment	Passivization	Pronominalization	Relativization	Passivization of causative
Dative Alternation	+	+	–	–
Transfer Alternation	+	+	–	–
Locative Alternation	+	+	+	*

The results show that Arabic is not an asymmetrical language as argued by An-Nashef (2020). Even though locative alternation is not part of double object constructions, both dative alternation and transfer alternation show symmetrical treatment of both objects when considering passivization and pronominalization. Furthermore, it is true that the recipient undergoer is prioritized to be passivized, it does not eliminate the grammaticality of passivizing the direct object (theme). It is preferences that language offer to choose from based on topicality and relevance as shown in the examples of (13).

Arabic has a combination of symmetrical and asymmetrical properties. It is asymmetrical only with animate recipient when applying the relativization and passivization of causative tests. To put it clearly, Arabic is symmetrical in passivization and pronominalization and asymmetrical in relativization and passivization of causative construction. The latter follows from animacy condition.

Concerning primary and secondary object languages, Arabic is primary object language. Although secondary object pattern exists in Arabic (13b, 14 and 15), it requires specially constructions and certain conditions.

6. Conclusion

This paper argues that the RRG approach provides the minimum theoretical apparatus for the description and explanation of applicatives and its alternations. In contrast to the generative treatment, RRG does not posit the existence of abstract concepts such as derivation, movement and null morpheme. It is a non-derivation and monostratal theory that proposes a feasible concept such as marked undergoer assignment and direct core arguments to explain and describe linguistic phenomena such as applicatives.

The study has also shown that Arabic is a primary object language. This means that, as with many languages, Arabic is sensitive to recipient undergoer (animate) which has the precedence over theme (inanimate). Although Arabic is sensitive to recipient undergoer, it is not a fully asymmetrical language (a language which treats one of the objects differently). Arabic is symmetrical in dative, transfer and locative alternations when applying tests such as passivization and pronominalization. In contrast, it is asymmetrical because only the recipient undergoer can be passivized in causative construction and relativized (act as the head of relative clause).

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- (1) This paper adopts Arabic Romanization ALA-LC tool for transliteration of Arabic examples.
 - (2) The following abbreviations are used: NOM (Nominative), ACC (Accusative), GEN (Genitive), pass (passive), pre (preposition), pres (present).

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