False resultatives: The interaction of agreement and creation in Levantine Arabic

Tova Rapoport and Aya Zarka

Abstract

Arabic dialects in general do not allow resultatives. In this article, novel data are presented from Northern Galilee Levantine Arabic that show that Arabic does have a subtype of resultatives: false resultatives (Rapoport 1999, Mateu 2000, Zarka 2019).

The false resultative predicates in this dialect of Arabic exhibit two different agreement patterns. We claim that this distinction derives from the element modified, as dictated by the distinct structures projected by two different verb types that are distinguished here: explicit creation and implicit creation (Geuder 2000; Levinson 2010).

The agreement patterns in Northern Galilee Levantine Arabic thus demonstrate a grammatical parallel to the conceptual distinction between the two creation verb types.

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1. Introduction: Secondary predicates

Secondary predication constructions are those that contain, in addition to the primary verbal predicate, a second, modifying phrase that takes as its argument, or HOST, one of the clausal participants.[1]

In (1), the host of the secondary predicates *whole* and *raw* is *the potatoes*, a DP that is also an argument of the main verb in each sentence.

(1) Depictives

a. Jane fried the potatoes *whole*.

b. Mary ate the potatoes *raw*.

The sentences in (1) include a depictive secondary predicate (henceforth: DPred), a phrase that characterizes its host in a relation concomitant to that of the main event.[2] Depictives are often contrasted with resultatives, exemplified in (2) (see Rapoport 2019 and references therein).

(2) Resultatives

a. Sara scrubbed the shirt *clean*.

b. Sara hammered the metal *flat*.

In (2), the hosts of the secondary predicates *clean* and *flat* are *the shirt* and *the metal*, respectively, phrases that are also the direct object arguments of their verbs.

The resultative secondary (henceforth: RPred) characterizes the state that its host is in as a result of the action described by the verb. In (2)a, for example, the direct argument of the

* Acknowledgements:

[1] We assume a classic Williams 1980, 1987 definition of a predicate as a phrase that assigns a θ-role to a DP external to it. Predication is thus the thematic relation between a predicate and its subject.

[2] See Halliday 1967, Rapoport 1993, Himmelmann and Schultze-Berndt 2005, Motut 2014, for example.

verb *scrubbed*, the DP *the shirt*, is described as *clean* as a result of the scrubbing activity. One important difference argued to hold between these secondary predicate types is that the object-hosted DPred can be found in accomplishments, with a telic VP (Rapoport 1999, Motut 2010, Irimia 2012), whereas the RPred is found in sentences that are otherwise activities, that is, with an (otherwise) atelic VP (e.g. *Sara scrubbed the shirt*). The RPred thus adds a result, or endpoint, to an activity description, deriving an accomplishment.

In this paper, we focus on a particular type of resultative, the false resultative, in an analysis of the facts of a southern dialect of Levantine Arabic (spoken in Syria and Lebanon, generally), that spoken in the Northern Galilee region. Northern Galilee Levantine Arabic (henceforth: NGL Arabic) is spoken by the North Galilee Druze of Israel. It is a dialect closely related to, and understood by, that of the Druze in southern Lebanon and southwestern Syria. We present the facts of two different types of false resultatives in NGL Arabic and propose structural analyses for each type that account for the thematic and agreement distinctions we find.

1.1 True resultatives and false resultatives

The RPreds of (2) add a result to an activity description that otherwise includes none. In this respect, such TRUE RESULTATIVES contrast with FALSE RESULTATIVES (see Levin and Rappaport Hovav 1995; Rapoport 1999, 2019; Mateu 2000; and Zarka 2019), which are illustrated in (3).[3]

(3) False resultatives:

a. Jane sliced the bread thin.

b. Mary braided her hair tight.

c. Sara ground the almonds fine.

[3] Washio 1997 types the false resultatives in (3a-c) 'spurious resultatives'. These three examples are borrowed from Levinson 2010.

d. Jane built the table stable.

e. Mary sewed the shirt too tight.

In (3), the false RPred does not add a new result; rather, it specifies the result already present, that inherent in the meaning of the verb.[4] Consider, for example, (3)a: The predicate contains a 'sliced' result that is part of the meaning of the verb *slice*, whether or not an RPred is present. The addition of the RPred *thin* simply specifies that sliced result; it does not itself provide a result.[5] And (3)d contains a result (the constructed table, as in *Jane built a table*) to which the RPred adds the specification that the table is strong.[6]

Since the false RPred modifies a result that is already present, it is the lexical properties of the verb, and so of the verbal predicate, that distinguish true from false resultatives. Consider a comparison of the aspectual properties of the two types, as in (4)-(5) and (6)-(7).

(4) a. *Jane scrubbed the shirt in an hour. - atelic activity

b. Jane scrubbed the shirt *clean* in an hour. -telic accomplishment

(5) a. *Mary hammered the metal in an hour. -atelic activity

b. Mary hammered the metal *flat* in an hour. -telic accomplishment

The addition of a true RPred affects the aspectual classification of a clause. The RPred-less (a) examples are easily read as (atelic) activities and so are incompatible with the *in*-adverbial; the (b) examples in contrast, which contain an RPred, are (telic) accomplishments and so are compatible with the adverbial.

The addition of a false RPred, on the other hand, does not affect aspectual interpretation:

(6) a. Jane sliced the bread in an hour. -telic accomplishment

b. Jane sliced the bread *thin* in an hour. -telic accomplishment

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[4] False RPreds can also emphasize the result inherent in a verb's meaning, as in: *The river froze solid*.
[5] Recall Tenny's 1987 constraint that two delimiters are possible only if the second further specifies the first.
[6] See also Pustejovsky 1991.

(7) a. Mary braided her hair in ten minutes. -telic accomplishment

b. Mary braided her hair tight in ten minutes. -telic accomplishment

The clauses both with and without the false RPred are easily read as accomplishments. One way to distinguish between the two RPred types, then, is to view the false RPred as explicitly connected to a specific feature of the verb's lexical representation – the verb's result. The true RPred, on the other hand, bears a less specific connection (if any) to the verb's definition (and according to Washio 1997 is completely independent of it); it does however, have a direct connection to the verb's thematic object.

The distinction between true and false RPreds in their connection to the verb's object can be seen in the following contrast (adapted from Washio 1997 and Levinson 2010):

(8) a. Jane scrubbed the shirt clean. → The shirt became clean (by scrubbing).

b. Mary hammered the metal flat.→ The metal became flat (by hammering).

(9) a. Jane sliced the bread thin. ↛ The bread became thin (by slicing).

b. Mary braided her hair tight. ↛ Mary's hair became tight (by braiding).

Whereas the true resultatives of (8) entail a change in the direct object, the false resultatives of (9) do not.

The present paper examines false resultatives in NGL Arabic in a comparison of the facts of two different creation verb types. These facts argue for making a grammatical, as well as a conceptual and aspectual distinction between the two types, as we see in the next section.

2. NGL Arabic and secondary predication

NGL Arabic, like other Semitic dialects or languages such as Bedouin Arabic of the Negev and Hebrew, contains secondary predication constructions of various types. We find object-hosted depictives, for instance:[7]

[7] The examples here are taken from Rapoport 2015 and Zarka 2019.

(10) a. šerb-et Sāra al-Halīb msaqqeʕ

drink-3F.SG.PST Sara the-milk.M.MASS cold.M.SG

'Sara drank the milk cold.'

b. šar-o l-ʕommal al-Hosne morḏ-a

buy-3PL.PST the-workers.M.BP the-horses.M.BP sick-F.SG

'The workers bought the horses sick.'

But, as in Semitic in general, NGL Arabic does not allow resultatives:

(11) a. * ṭaraq AHmad al-maʕdan nāʕem

hammer.3M.SG.PST Ahmad the-metal.M.SG smooth.M.SG

'Ahmad hammered the metal smooth.'

b. *mssaH-at ṭ-ṭawl-e nḏīf-e

sweep-3F.SG.PST the-table-F.SG clean-F.SG

'She wiped the table clean.'

Yet resultatives are not excluded entirely. The following NGL Arabic resultatives are fine:

(12) a. qaṭṭaʕ-at Sāra l-laHme rafīʕ

slice-3F.SG.PST Sara the-meat.F.MASS thin.M.SG

'Sara sliced the meat thin.'

b. jaddal-at Sāra šaʕr-ha fālet

braid-3F.SG.PST Sara hair.M.SG-F.SG.POSS loose.M.SG

'Sara braided her hair loose.'

c. rabaṭ AHmad al-Hbāl šadīd

tie.3M.SG.PST Ahmad the-rope.M.BP tight.M.SG

'Ahmad tied the ropes tight.'

d. xayyat-at Sāra al-bloz-āt deyqa-a

sew-F.SG.PST Sara the-shirt-F.PL tight-F.SG

'Sara sewed the shirts tight.'

e. xbaz AHmad al-xobez ktīr māleH
bake.3M.SG.PST Ahmad the-bread.M.MASS too salty.M.SG
'Ahmad baked the bread too salty.'

f. bana AHmad ṭ-ṭawl-e θābt-e
build.3M.SG.PST Ahmad the-table-F.SG stable-F.SG
'Ahmad built the table stable/strong.'

The well-formed resultatives in NGL Arabic are those in which the resultative predicate modifies an existing result rather than adding one; that is, false resultatives.

This distinction between unacceptable true resultatives and acceptable false resultatives is paralleled in Negev Bedouin Arabic and in Hebrew (see Rapoport 2015)[8], as well as in Romance – for instance, Italian (Napoli 1992), French (Washio 1997), Catalan and Spanish (Mateu 2000) and Romanian (Irimia 2012)—and Japanese (Washio 1997).[9]

This apparent cross-linguistic divide applies to prepositional as well as to adjectival RPreds. As Napoli 1992 notes, if PPs are included in the set of possible resultative phrases, then many languages that have been argued to exclude resultative constructions actually allow them.[10] However, in this case too it appears that the PP results are limited to modification or specification of the verb's endpoint, including the natural endpoint (the goal) of motion verbs (see Rapoport 2015): false resultatives, in other words. While we do not discuss prepositional results here, we note that in NGL Arabic too, true PP resultatives are, as expected,

[8] There are differences in agreement between the Arabic dialects that are beyond the scope of this paper.
[9] And even true resultatives do not appear to be excluded across the board in these languages. For example, Napoli 1992 notes that in Italian, resultatives are more easily found with verbs of instantaneous effect. And Rapoport 2015 observes that Negev Bedouin Arabic and Hebrew allow resultatives with instantaneous achievement verbs. It is the punctual nature of these verbs that allows the secondary predicate. (See discussion in Rapoport 2019.)
[10] In general, it has been claimed, more languages have PP results than have AP results. See, for example, Hoekstra 1988, Pustejovsky 1989, Van Voorst 1988, Mateu 2001, Segal & Landau 2012.

disallowed, while false PP resultatives are possible (as noted in Zarka 2019).[11]

We therefore conclude that while true resultatives do not exist in NGL Arabic, false resultatives (including prepositional results) do. Our discussion here is of adjectival false results but, as we now proceed to demonstrate, this class, too, is not uniform.

2.1 Agreement in NGL Arabic false resultatives

We focus here on one property that divides false resultatives in NGL Arabic into two: agreement between the false RPred and the direct object.

The false RPred of (12)a-c is consistently in the masculine singular form, regardless of the direct object's gender or number features. The false RPreds of (12)d-f , on the other hand, exhibit what we are calling 'complete' agreement with the direct object; that is, the same agreement as that found between the two elements in main (verbless) predication structures. For example, (13)a shows the same agreement on the adjective (feminine singular) as that found on the false RPred of (12)f , repeated here as (13)b. (For more comparisons of agreement between main predication and false resultative structures, see the Appendix).

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[11] This contrast is illustrated in (i) and (ii) (adapted from Zarka 2019). (ii) shows that false RPreds in NGL Arabic can specify the endpoint of a motion verb (iia) or modify the result inherent in a verb's meaning (iib).

(i) True PP resultatives

a. *rafs-at Marie al-bāb la-qeṭaʕ zg̃īr-e
kick-3F.SG.PST Mary the-door into-pieces.BP small-F.SG
'Mary kicked the door into small pieces.'

b. *akl-at Marie aḏ̃āfer-ha la-qeṭaʕ
eat-3F.SG.PST Mary nails.BP-F.SG.POSS to-pieces.BP
'Mary chewed her nails to bits.'

(ii) False PP resultatives

a. raqs-at jōwwa al-g̃orfe
dance-3F.SG.PST into the-room
'She danced into the room.'

b. qaṭṭaʕ-et l-laHme la-qeṭaʕ zg̃īr-e
cut-1SG.PST the-meat.F.MASS into-pieces.BP small-F.SG
'I cut the meat into small pieces.'

However, not all PP results are of the same type. The following are acceptable:

(iii) a. habk-et al-ward b-šakel ʔklīl
weave-1SG.PST the-flowers.F.BP in-form garland
'I wove the flowers in the form of a garland.

b. fark-at al-wsax mn ṭ-ṭannōr-a
scrub-3F.SG.PST the-dirt from the-skirt-F.SG
'She scrubbed the dirt from her skirt.'

(13) a. ṭ-ṭawl-e θābt-e

the-table-F.SG stable-F.SG

'The table is stable/ strong.'

b. bana AHmad ṭ-ṭawl-e θābt-e

build.3M.SG.PST Ahmad the-table-F.SG stable-F.SG

'Ahmad built the table stable/strong.'

This paper is concerned with the gender and number agreement found between false adjectival RPreds and their hosts. [12] We use the agreement facts of false resultatives in Arabic as evidence for our analysis. First, we offer a brief description of the facts of Arabic agreement.

2.1.1 A brief overview of number/gender marking and N-A agreement in NGL Arabic

A few facts of NGL Arabic number and gender marking and agreement:

Arabic nouns are marked for gender, either masculine or feminine and for number, either singular, dual, or plural (Corbett 1991, 2000; Fassi Fehri 1999, Ryding 2005).[13] Following are details of NGL Arabic number and gender marking and adjective-noun agreement; the facts are summarized in (15).

(14) Number, gender, and agreement in NGL Arabic:

- Human singular feminine is marked by *-a* and *-e*.
- Singular masculine is typically unmarked. This is the default form (Ryding 2005).
- Singular nouns, masculine or feminine, human or non-human, are modified by a singular adjective of the same gender and number.
- Plural marking has three different morphophonological realizations:

[12] In general in NGL Arabic, adjectives agree with nouns in gender and number. Attributive adjectives also agree in definiteness with the head noun.

[13] Many of the data in the following points are true of Standard Arabic and other Arabic dialects.

- Regular masculine plural nouns are human only and are marked with *–iin*.
- Regular feminine plural nouns can be either human or non-human and are marked in either case with *-āt*.
- Regular feminine plural nouns, human or nonhuman, are modified by feminine singular adjectives, i.e. those ending in *-a* and *–e*.
- Non-human masculine plural is always marked with the masculine broken plural (BP). (The BP is autosegmental, involving internal modification of the singular stem; McCarthy and Prince 1990.)
- Non-human masculine BP nouns are modified by a form identical to the feminine singular adjectival form (i.e. with *-a* and *–e*) (Fassi Fehri 1984).[14]
- Non-human feminine plural can be marked by regular feminine plural (or by BP).
- Non-human feminine plural nouns can be modified by a feminine singular adjective, as noted above, or by a BP adjective (if a particular form exists).
- Feminine BP nouns, human or nonhuman, can be modified by (a) the feminine singular adjective, (b) regular feminine plural *–āt* if this form exists or by (c) the BP adjective, if this form exists.
- Adjectives that are pluralized with a BP form can modify any plural, whether masculine or feminine, human or non-human.[15]

(15) Noun-Adjective agreement in NGL Arabic

	Singular Noun	**Adjectival Modifier**	**Plural Noun**	**Adjectival Modifier**
Human	Masculine	M, SG	Masculine plural	M, PL BP

[14] See discussion in Corbett 1991 on number and gender agreement and in Kramer 2015 on convergent agreement. See also the discussion in Baker 2008.
[15] In NGL Arabic, broken plural formation is very productive.

	Feminine	F, SG	Feminine plural	F, PL BP
			Feminine broken plural	F, SG F, PL BP
Nonhuman	Masculine	M, SG	Masculine broken plural	F, SG BP
	Feminine	F, SG	Feminine plural	F, SG BP
			Feminine broken plural	F, SG F, PL BP

Given these facts, we can see that the NGL Arabic false RPreds of (12) show two clear patterns with respect to agreement: those RPreds that exhibit complete agreement with the direct object, that is, the same agreement (as described in this section) as that found in main predicative sentences; and those RPreds that exhibit no such agreement, surfacing as masculine singular.

The facts are not random. As we now demonstrate, whether or not the RPred shows agreement depends on the type of construction forming the base of the resultative; specifically, the nature of the verb. We propose that the false resultatives under discussion can be divided into two classes, each based on a different type of creation verb, the topic to which we now turn.

3. Creation verbs

Creation verbs denote the coming into existence of a new entity as a result of the particular activity naming the verb. There are several types of verbs that entail creation. Here we focus on two of these: verbs such as *build* and *sew*, which involve the overt realization in syntax of the created element; and verbs such as *cut* and *braid*, which can be used in sentences in which the created element is not syntactically realized. The next two sections explore our analyses of these EXPLICIT CREATION and IMPLICIT CREATION verbs, respectively.

3.1 Explicit creation verbs

The classic type of verbs of creation is exemplified in (16):

(16) a. Mary built a table.

b. Mary wrote a book.

c. Mary sewed a skirt.

d. Mary drew a circle.

Sentences like those in (16) describe an agent causing a new entity, Geuder's 2000 'effected object' (and see Piñón 2008), to come into existence as a result of the verb's activity (see also Erteschik-Shir and Rapoport 2000, Ježek 2009 and Levin 1993). (For example, in (16)c a new physical object, a skirt, is created by Mary's sewing activity.) This new entity is realized, as shown in (16), as the direct object of the verb in each case; hence, Levinson's 2010 term 'explicit creation' verbs.

Our analysis of explicit creation verb structures follows Zarka's 2019 adaptation of Piñón 2008, in which physically created objects can serve as 'anchors' for abstract templates via a relation of representation or instantiation. For instance, a template for a house (an abstract

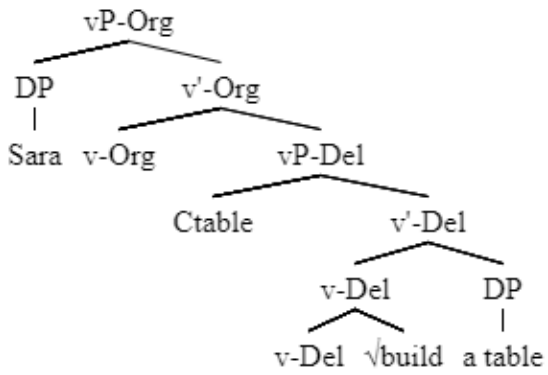
entity, such as a design) can be represented by an architectural blueprint of the house, as well as instantiated by the actual physical house built according to that design.[16]

Zarka 2019 offers a syntactic representation that parallels Piñón's analysis—and simplifies it. In the structure we adapt, a mental concept is instantiated by the actual physical entity created according to that concept. The creation process is thus one in which the mental concept of an entity takes on concrete form.

Consider (17), the structure of the explicit creation verb *build* in the sentence *Sara built a table*.[17]

(17) Explicit creation verb structure:

Sara built a table.



The representation of an explicit creation verb contains both the mental concept, here Ctable, and its instantiation, the effected entity—here, the DP *a table*. The structure in (17) represents the meaning of the explicit creation verb *build* as causing a concept of a table to be transformed into an actual (created) table. The DP *a table* is thus the result of the creation process.

[16] Erteschik-Shir and Rapoport's 2000 syntactic analysis of creation verbs also involves a duality. Their structure is based on the idea that a picture is a painted artifact created by using painting materials. The picture itself constitutes the result of the creative painting process; that is, the final painted state *is* the picture.

[17] We do not include in these representations any details of the higher, functional structure within which these vPs are embedded.

(17) also contains two functional elements, the light verbs v-originator and v-delimiter, v_{org} and v_{del} (adapting Ritter and Rosen 1998). In addition to their categorizing function, the light verbs take event arguments as follows: v_{org} takes the agent or causer of the event and v_{del}P; v_{del} takes as arguments the delimiting theme and vP.

The event arguments are thus typically contributed by these light verbs: The specifier of these categories is interpreted as the event originator and the event measurer/delimiter respectively.[18]

In the explicit creation verb structure of (17), the element in spec,v_{del} that delimits the event is the concept *Ctable*. This reflects our claim that the Concept is the standard against which the actual, physical entity is measured as the creation event progresses.

This claim accords with that in Nehmad and Kempler 2018, for whom certain creation verbs involve both the creation of the mental concept and the representation of that concept in physical form. The completion of the representation phase is measured with respect to the abstract conceptualization. The actual table, as it is being built, comes to match the concept *Ctable* more and more as the building event progresses; so in fact, it is the *Ctable* that measures out the building activity.[19] When the actual table is built, it is the mental Ctable, matched completely, that delimits the building event.

The representation of the second element of the creation process, the physically-created entity (the DP *a table* in (17)), is required by the fact that the Concept acts as the standard against which it is built. As Piñón notes, "the main condition for abstract entities which are created is

[18] These light verb phrases are equivalent to those proposed by others, such as Borer's 2005 EP, whose specifier is interpreted as an originator, and asp_Q phrase; and the VPs interpreted as 'cause' and 'become' in Erteschik-Shir and Rapoport 2004, 2010.

[19] Nehmad and Kempler point out that each type of object can participate in its own creation process, by different individuals or at different points in time:

(i) Mary built a house that John designed. (adapting Piñón's (4a))

(ii) Last year I designed my new kitchen, but only got to build it this summer.

that they be represented in some physical medium, for otherwise it would be unclear what their 'coming into being' amounts to." (p. 2) Since the abstract Concept is the standard for the building of a physical entity, that physical entity is also required to be present in the representation.[20]

As noted above, it is the light verbs that take event arguments. We assume that roots themselves do not have argument structure. (This is part of a more-general view that argument number and type are not specified in the lexicon but rather, are structurally derived.[21]) But the root itself is a semantic element (contra Borer 2005, 2013), whose interpretation can require the presence in syntax of certain other elements, as noted above.[22] We thus have the complete structure (17), whose interpretation is that 'Sara caused the concept of a table to be transformed into an (actual) table as a result of a building activity'. The physical entity that is the result of creation is syntactically and phonetically realized (whereas the concept *Ctable* is not phonetically realized). With explicit creation verb structures, then, the effected entity is overtly expressed as the object of the verb. In these respects, this structure and its interpretation contrasts with that of implicit creation verbs.

3.2 Implicit creation verbs

Explicit creation verbs are distinguished from those of implicit creation. This latter term is employed by Levinson 2010, following Geuder's 2000 analysis of implicit created objects in his discussion of resultant individuals.

Implicit creation verbs are those in which the entity created is not expressed by an argument

[20] Piñón also includes in his discussion of creation verbs the class of verbs denoting the creation of an abstract entity, such as *Rebecca composed a symphony* (his (3a)). For this class, the concept is "minimally physically represented in the brains" of the creator as a result of the creation event "independently of whether or not they acquire written representations as well."

[21] See the discussion in Erteschik-Shir and Rapoport 1997, 2004, 2005 for example, who follow the work of Hale and Keyser 1993.

[22] And see Erteschik-Shir and Rapoport 2005, 2010 for analyses of the requirements of lexical meaning components.

of the verb, but is left implicit. Consider the following:

(18) a. Jane sliced the carrots.

b. Mary braided her hair.

c. Sara ground the almonds.

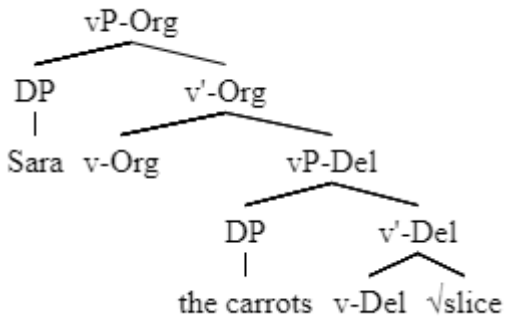
d. Jane tied her shoelaces.

In these examples, the created element is not the direct object, in contrast with explicit creation verbs; the created entity is not overtly expressed at all. In (18)a, for example, a slice (/slices) is created; in (18)b, a braid (or braids). The created result is part of the meaning of the verb (the verbs *slice* and *braid*, for example).

We follow Rapoport 1999, Erteschik-Shir and Rapoport 2005, and Levinson 2010, in which the created result is structurally represented. The structure we propose is in (19).

(19) Implicit creation verb structure:

Sara sliced the carrots.



(19) is interpreted as roughly: 'Sara caused the carrots to be transformed into slices.' The structure also represents the fact that with implicit, as opposed to explicit, creation verbs, it is the surface direct object that measures out and delimits the event—although in this case, it is not the element physically created. Thus in (19), it is the DP object *the carrots* that delimits the event, while it is slices, part of the meaning of the verb, that are created.

These two types of creation verbs, explicit and implicit, form the basis of the false resultatives under discussion.

4. False resultatives in NGL Arabic: Explicit vs. implicit creation verbs

Consider the examples below of the false resultatives of (20) and (21) (some of which are repeated from (12) above), based on explicit creation verbs and implicit creation verbs, respectively.

(20) False resultatives and explicit creation

a. xayyaṭ-at Sāra al-bloza-āt ḏeyq-āt/ ḏeyq-a/ *ḏeyyeq
sew-3F.SG.PST Sara the-shirt-F.PL tight-F.PL/ tight-F.SG/ *tight.M.SG
'Sara sewed the shirts tight.'

b. xbaz AHmad al-xobez ktīr māleH
bake.3M.SG.PST Ahmad the-bread.M.MASS too salty.M.SG
'Ahmad baked the bread too salty.'

c. bana AHmad ṭ-ṭawl-e θābt-e /*θābet
build.3M.SG.PST Ahmad the-table-F.SG stable-F.SG/*stable.M.SG
'Ahmad built the table stable/strong.'

d. rasm-at Sāra al-xaṭ kbīr
draw-3F.SG.PST Sara the-line.M.SG big.M.SG
'Sara drew the line big/long.'

e. ʔllaf-at Sāra ašʕār-ha qasīr-e/ qsār/*qsīr
compose-3F.SG.PST Sara poems.M.BP-F.SG.POSS short-F.SG/short.BP/ *short.M.SG
'Sara composed her poems short.'

(21) False resultatives and implicit creation

a. qaṭṭaʕ-at Sāra l-laHm-e rafīʕ/ *rafīʕ-a

slice-3F.SG.PST Sara the-meat-F.MASS thin.M.SG/ *thin-F.SG

'Sara sliced the meat thin.'

b. jaddal-at Sāra šaʕr-ha šadīd

braid-3F.SG.PST Sara hair.M.SG-F.SG.POSS tight.M.SG

'Sara braided her hair tight.'

c. rabaṭ AHmad al-Hbāl šadīd/* šadīd-e/*šdād

tie.3M.SG.PST Ahmad the-rope.M.BP tight.M.SG /tight-F.SG/ tight.BP

'Ahmad tied the ropes tight.'

d. farm-at Sāra al-xyār-a zḡīr/* zḡīr-e

chop-3F.SG.PST Sara the-cucumber-F.SG small.M.SG/small-F.SG

'Sara chopped the cucumber small.'

e. qaṭṭaʕ-at Sāra al-jazar-āt kbīr/ *kbīr-e/* kbār

slice-3F.SG.PST Sara the-carrot-F.PL big.M.SG/ *big-F.SG/*big.BP

'Sara sliced the carrots big (=into big pieces).'

f. kwamm-at Sāra al-mxadd-āt ʕaly

pile-3F.SG.PST Sara the-pillow-F.PL high.M.SG

'Sara piled the pillows high.'

g. ṭaHn-at Sāra Hbōb al-qahwe nāʕem/*nāʕm-e

grind-3F.SG.PST Sara beans.F.BP the-coffee smooth.M.SG/*smooth-F.SG

'Sara ground the coffee beans fine.'

Recall that we have noted above that some false resultatives display complete agreement between the direct object and the RPred and some do not. Now the division between the two types of examples is immediately apparent: With explicit creation verbs, the false RPred agrees with the direct object. (Again, we note that the fact that there is agreement is not always obvious, but that there is complete agreement is evidenced by identical agreement

found between the subject and predicate in main predication structures, as detailed in the Appendix.) With the implicit creation verbs of (21), in contrast, the false RPred does not exhibit agreement with the direct object; it consistently shows up as masculine singular. (And see the Appendix for the contrast between these examples and the parallel main predication structures in which there is complete agreement.)

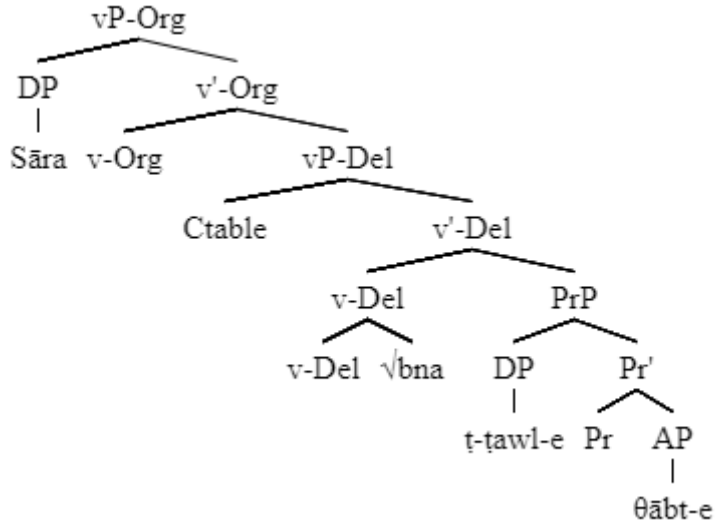
We attribute this difference in agreement to the element modified by the false RPred. With explicit creation verbs, the false RPred modifies the direct object: the created table that results from the building is strong, the skirt that results from the sewing is tight. With implicit creation verbs, on the other hand, the false RPred does not modify the direct object: there is no result of 'tight hair' or 'thin meat', for example. Rather, as argued by Rapoport 1999 and Levinson 2010, the false RPreds modify an entity denoted by the lexical root of the verb: the braid creating by braiding is tight; the slices created by slicing are thin.

4.1 The structures of false resultatives in NGL Arabic

This distinction in modification as well as the distinction in agreement that follows are derived from our proposed structures for the two false resultative types. The structure for explicit creation resultatives is shown in (22) and the structure for implicit creation resultatives is in (23).

(22) A false resultative with an explicit creation verb:

Ban-at Sāra ṭ-ṭawl-e θābt-e - *Sara built the table strong*.

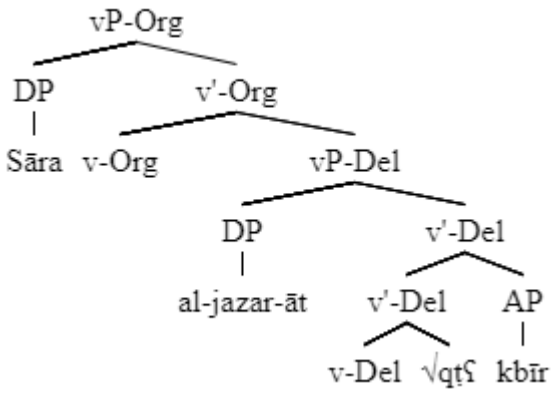


In structure (22) the RPred *θābte* 'stable/strong', modifies the direct object *ṭṭawle* 'the table', the actual table that is the result of the creation process. We have claimed that since the adjectival predicate modifies an overt DP, it exhibits complete agreement with that phrase. The representation of the two in the small clause complement of the verb represents the result of the event—a strong table—and also allows for the complete agreement exhibited.[23]

Consider, in contrast, the result with an implicit creation resultative:

(23) False resultative based on an implicit creation verb:

qaṭṭaʕ-at Sāra al-jazar-āt kbīr - *Sara sliced the carrots big*.



[23] Here, the result of creation is a strong table. In the simple explicit creation sentence, the comparable result is the table that is created. In both cases, the result is the complement of the verb.

Here, the false RPred modifies the verb root to which it is adjoined,[24] specifically, the slices that are denoted by the root; the result in (23) is big slices.

Since the false RPred modifies the root rather than the overt direct object, we do not expect that it agree with the direct object. But the false RPred exhibits no agreement at all.[25] We attribute this lack of agreement to the fact that the element modified by the RPred is a root. Roots have no syntactic properties (following Borer e.g. 2005, 2013[26]) and thus there are no features available with which the RPred can agree. The consequence is that the root-modifying RPred in implicit creation verb structures surfaces with default (masculine singular) agreement.

In this way, it is the distinction between the two creation verb types and the corresponding distinction in the structures they project that accounts for the distinction in agreement exhibited by the two types of false resultatives in Levantine Arabic.

Given the lack of agreement on the false RPred with implicit creation verbs, one could be tempted to analyze the RPred in these cases as an adverb. We consider, and reject, this analysis in the following section.

4.2 Non-agreeing false resultative predicates are not adverbs

We have claimed that the false RPred in implicit creation verb structures exhibits default agreement, which raises the question of whether this false RPred should be analyzed as an adverb rather than as an adjective. Indeed, false resultative predicates have occasionally been described as adverbials (Washio 1997, Mateu 2000, Kratzer 2005).

Levinson 2010, on the other hand, argues at least for English that false RPreds are not

[24] We assume a mutual m-command constraint on the host-predicate relation, as argued in McNulty 1988 and Rapoport 1987.

[25] This lack of agreement in implicit creation verb cases is not found cross-linguistically. Mateu (2000), for example, shows that in Catalan, false RPreds with implicit creation verbs exhibit obligatory adjectival agreement. We have no explanation for this distinction at present.

[26] Although, as noted, we do not follow Borer in her view that roots have no meaning at all.

adverbs.[27] She notes that false RPreds, unlike manner adverbs, do not have manner paraphrases. Zarka 2019 makes the same point, offering the following contrast in NGL Arabic:

(24) a. jāwab-t-ni b-waqaHa
answer-3F.SG.PST-me in-rudeness
'She answered me rudely.'

b. jāwab-t-ni b-tareq-a weqH-a
answer-3F.SG.PST-me in-manner-F.SG rude-F.SG
'She answered me in a rude manner.'

(25) a. farm-at Sāra al-jazar-āt kbīr
chop-3F.SG.PST Sara the-carrot-F.PL big.M.SG
'Sara chopped the carrots big.'

b. *farm-at Sāra al-jazar-āt b-tareq-a kbīr-e
chop-3F.SG.PST Sara the-carrot-F.PL in-manner-F.SG big-F.SG
'Sara chopped the carrots in a big manner.'

(26) a. ṭaHn-at Sāra Hbōb al-qahwe nāʕem
grind-3F.SG.PST Sara beans.F.BP the-coffee smooth.M.SG
'Sara ground the coffee beans fine.'

b. *ṭaHn-at Sāra Hbōb al-qahwe b-tareq-a nāʕm-e
grind-3F.SG.PST Sara beans.F.BP the-coffee in-manner-F.SG smooth-F.SG
'Sara ground the coffee beans in a fine manner.'

While the manner adverb of (24) has a manner paraphrase, the false RPreds of (25) and (26) do not. The false RPred in the implicit creation structure does not, then, behave like a manner

[27] She also distinguishes between false RPreds and Geuder's (2000) resultative adverbs, which are also predicated of implicit created objects, which he terms "resultant individuals".

adverb.

Levinson claims that another argument against the adverb status of false RPreds can be found in the impossibility of coordinating the RPred with a manner adverb:

(27) * Mary braided her hair quickly and tight / tight and quickly. (L's 52)

However, the usefulness of this test is questioned by the fact that manner and result modifiers in general cannot be found in the same clause (see Rapoport 2014, for example). Thus, we would not expect (27) to be good even with a result adverb in the place of the resultative predicate, since we would still have coordination of manner and result modifiers (a coordination not helped by the fact that both are adverbials). Thus, the fact that (27) is infelicitous is not evidence for the non-adverbial status of the RPred.

Zarka (2019) therefore proposes testing the adverb status of the false RPred by coordinating it with an unambiguously result adverb such as 'completely', so as to ensure the best possible outcome. Yet in this case, with two result elements, we still find that the false RPred cannot be coordinated with an adverbial (regardless of the order of the two elements):[28]

(28) * jaddal-at Sāra šaʕr-ha šadīd o ʕl-ʔxer / ʕl-ʔxer o šadīd

braid-3F.SG.PST Sara hair.M.SG-F.SG.POSS tight.M.SG and on-end / on-end and tight.M.SG

'Sara braided her hair tight and completely / completely and tight.'

(29) *farm-at Sāra al-jazar-āt kbīr o ʕl-ʔxer / ʕl-ʔxer o kbīr

chop-3F.SG.PST Sara the-carrots-F.PL big.M.SG and on-end/ on-end and

[28] Similarly, note the contrast in English between the successful coordination of two result adverbs and the unsuccessful coordination of the result adverb with the false RPred:

(i) a. Sara braided her hair tightly and completely.
b. *Sara braided her hair *tight* and completely.

Thus in English as well as Arabic we have an argument that the false RPred is adjectival, not adverbial.

big.M.SG

'Sara chopped the carrots big and completely / completely and big.'

(30) * ṭaHn-at Sāra Hbōb al-qahwe nāʕem o ʕl-ʔxer / ʕl-ʔxer o nāʕem

grind-3F.SG.PST Sara beans.F.BP the-coffee smooth.M.SG and on-end / on-end and smooth.M.SG

'Sara ground the coffee beans fine and completely / completely and fine.'

Further evidence against an adverbial analysis of the RPred can be found by employing Levinson's point that when *good* in English is coordinated with a false RPred, it receives an intensifier reading. We note first that in English, *good* as an intensifier can coordinate with an adjective but not an adverb:[29]

(31) a. After a day's work, my house is good and [good 'n'] clean.

b. *He braided her hair good and tightly/completely.

The coordination of the intensifier with a false RPred, however, is successful:

(32) He braided her hair good and tight. (Levinson's 55) – [intensifier use]

The contrast between (31)b and (32) is thus another argument against an adverbial analysis of the false RPred.

We conclude that since, in its intensifier use, the adjective *good* can be coordinated only with an adjective and since it can be coordinated with the RPred, we have evidence that the English false RPred is an adjective and not an adverb.

Zarka 2019 notes that in Arabic, too, *mnīH* ‘good’ and *Helow* ‘beautiful’ are used as intensifiers. These modifiers can be used adjectivally or adverbially, but their intensifier use

[29] Note that when the order of the two coordinated elements is reversed, *good* does not have an intensifier reading, but rather is read as an adverb (equivalent to *well*). As expected, with this reversed order *good* can be successfully coordinated with another adverb:

(i) He braided her hair tightly/completely and good (=well). [not the intensifier use]

is possible only when used adjectivally, as shown by the following coordination facts.[30]

(33) a. g'assl-et šaʕr-i o essa nd'īf o mnīH
wash-1SG.PST hair-1SG.POSS and now clean.M.SG and good.M.SG
'I washed my hair and now it is clean and good.' [meaning: good 'n' clean]

b. *jaddal-at Sāra šaʕr-ha ʕl-ʔxer o mnīH
braid-3F.SG.PST Sara hair.M.SG-F.SG.POSS on-end and good.M.SG
'Sara braided her hair completely and good.' [meaning: good 'n' completely]

(33)a shows the intensifier use of *mnīH* when used in coordination with an adjective. (Note that in Arabic, the intensifier use of the adjective is possible only when the adjective is the second of the two coordinated elements.) (33)b shows that *mnīH* as an intensifier cannot coordinate with an adverb.[31]

Under our analysis of false RPreds as adjectives, we expect RPreds (as opposed to the adverb in (33)b) to be able to coordinate with intensifier *mnīH* or *Helow*.[32] As (34) shows, this is what we find.[33]

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[30] Arabic does not have many lexical adverbs. Furthermore, as Fassi Fehri 1998 notes: "In terms of morphosyntactic properties, Arabic constituents which function as adverbs do not appear to have any specifics or unifying characteristics which would set them apart as a category" (p.11).

[31] As with English, when the order of coordination is reversed, *mnīH* is read adverbially, rather than as an intensifier. Coordination with an adverb is then much improved:

(i) ? jaddal-at Sāra šaʕr-ha mnīH o ʕl-ʔxer
braid-3F.SG.PST Sara hair.M.SG-F.SG.POSS good.M.SG and completely
'Sara braided her hair completely and well.'

[32] Evidence for this intensifier use is found in the impossibility of coordination of an intensifier with an undesirable result:

(i) a. #jaddal-at Sāra šaʕr-ha fālet o mnīH
braid-3F.SG.PST Sara hair.M.SG-F.SG.POSS loose.M.SG and good.M.SG
#'Sara braided her hair good 'n' loose.'

b. #ṭaHn-at Sāra Hbōb al-qahwe xešen o Helow
grind-3F.SG.PST Sara beans.F.BP the-coffee thick.M.SG and beautiful.M.SG
#'Sara ground the coffee beans nice 'n' coarse.'

[33] As mentioned in note 31, a reversed order of coordinates (*mnīH* + modifier) yields an adverbial, rather than an intensifier reading of *mnīH*. Consider the following:

(i) jaddal-at Sāra šaʕr-ha mnīH o šadīd
braid-3F.SG.PST Sara hair.M.SG-F.SG.POSS well and tightly
'Sara braided her hair tightly and well.'

Coordination in this example is possible because the modifier *šadīd* 'tight' also has an adverbial use. When the second modifier has only an adjectival reading, the result of coordination with *adverbial* mnīH is bad:

(34) a. jaddal-at Sāra šaʕr-ha šadīd o mnīH
braid-3F.SG.PST Sara hair.M.SG-F.SG.POSS tight.M.SG and good.M.SG
'Sara braided her hair tight and good.' [meaning: good 'n' tight]

b. qaṭṭaʕ-at Sāra l-laHme rafīʕ o Helow
slice-3F.SG.PST Sara the-meat.F.MASS thin.M.SG and beautiful.M.SG
'Sara sliced the meat thin and beautiful.' [meaning: nice 'n' thin]

c. ṭaHn-at Sāra Hbōb al-qahwe nāʕem o Helow
grind-3F.SG.PST Sara beans.F.BP the-coffee smooth.M.SG and
beautiful.M.SG
'Sara ground the coffee beans fine and beautiful.' [meaning: nice 'n' fine]

The fact that intensifiers can be successfully coordinated with the false RPred, but not with adverbs, argues for our claim that the non-agreeing false RPred in implicit creation structures in NGL Arabic is indeed adjectival.

5. When secondary predicates agree

We consider the fact that the adjectival false RPred in implicit creation verb structures does not exhibit complete agreement with the overt direct object to be evidence that this RPred does indeed modify the verb root in such structures. With explicit creation verb structures, on the other hand, we take the agreement exhibited by the false RPred as evidence that the RPred modifies the overt direct object. Our claim, then, is that the distinction in agreement in NGL resultatives has to do with the structural nature of the host of the RPred. And we expect complete agreement on the predicate when its host is an overt DP.

(ii) *farm-at Sāra al-jazar-āt mnīH and kbir
chop-3F.SG.PST Sara the-carrot-F.PL well and big
*'Sara chopped the carrots big and well.'

It seems that intensifiers may well offer a way to distinguish the adjectival from the adverbial use of a modifier in Arabic when the same form can be used for both. Since Arabic does not have many lexical adverbs, as noted above (and see Fassi Fehri 1998), a clear distinction between the two readings is not always apparent, so even this diagnostic must be used judiciously.

Evidence comes from the facts of object-hosted depictive predicates.[34] Consider (35).

(35) a. farm-at Sāra al-jazar-āt sōxn-e
chop-3F.SG.PST Sara the-carrot-F.PL hot-F.SG
'Sara sliced the carrots hot.'

b. šar-o l-wlad ṭ-ṭawl-āt maksōr-a
buy-3PL.PST the-boys.M.BP the-table-F.PL broken-F.SG
'The boys bought the tables broken.'

In (35), the hosts of the depictive secondary predicates *sōxne* 'hot' and *maksōra* 'broken' are the overt DPs *al-jazar-āt* ‘the carrots’ and *ṭ-ṭawl-āt* 'the tables', respectively. The predicates thus exhibit the expected complete agreement with these hosts, as evidenced by the identical feature specifications found in main predications:

(36) a. al-jazar-āt sōxn-e
the-carrot-F.PL hot-F.SG
'The carrots are hot.'

b. ṭ-ṭawl-āt maksōr-a
the-table-F.PL broken-F.SG
'The tables are broken.'

Further corroboration of our view distinguishing overt from root hosts is the surprising RPred agreement found with implicit creation verbs in cases like those in (37), shown here in contrast with the examples of default agreement with such verbs discussed above:

(37) a. qaṭṭaʕ-at Sāra hāy al-qeṭʕ-a **kbīr-e**
slice-3F.SG.PST Sara this.F.SG the-piece/slice-F.SG big-F.SG
'Sara sliced this piece/slice big.'

[34] Recall, as (1) illustrates, that depictive predicates modify their host throughout the time of the event, not as a result of it. For further discussion of depictives in Arabic see Rapoport 2015 and Zarka 2019.

(cf. (21)e. qaṭṭaʕ-at Sāra al-jazar-āt **kbīr**/ *kbīr-e/*kbār

'Sara sliced the carrots big (=into big pieces).')

b. rabṭ-at Sāra r-rabṭ-āt **šadīd-e / šdād**

tie-3F.SG.PST Sara the-tie-F.PL tight-F.SG/ tight.BP

'Sara tied the ties/knots tight.'

(cf. (21)c. rabaṭ AHmad al-Hbāl **šadīd**/* šadīd-e/*šdād

'Ahmad tied the ropes tight.')

We have attributed the appearance or non-appearance of an overt result to whether or not the verb is one of explicit or implicit creation, from which follows the presence or absence of complete agreement. In fact, the situation is slightly more complex.

In (37), the same implicit creation verbs as those above are used to describe events involving explicit creation: the element modified here is not the root's result as above, but rather, the actual slice or knots. These results are overtly realized. Since the RPred now modifies an overt host, complete agreement is triggered in such sentences. Thus, it is not only the verb type, but also whether or not its result is overtly realized that determines agreement on the RPred in NGL Arabic.

The interaction in NGL Arabic between types of RPred agreement marking and types of creation verb uses thus argues for the distinct structural analyses that we have proposed here.

6. Conclusion

Our analysis accounts for a range of agreement facts in secondary predication constructions in NGL Arabic. The distinct structures proposed here for explicit and implicit creation verb types answer our main question in this paper: Why does the RPred agree with the direct object in explicit creation verb structures but not with the direct object in implicit creation verb structures?

We have attributed this difference to the element modified, as dictated by the distinct structures merged by the different verb types: The secondary predicate agrees with the element it modifies – when this is possible. When the host is an overt DP, there is complete agreement; when the host is the verb root, the RPred exhibits default agreement.

Thus, the contrast in agreement parallels the syntactic and thematic distinction between the two creation verb types.

Appendix - Predicate Agreement in NGL Arabic

Agreement in resultative structures	Agreement in main predication structures
1. False resultatives and explicit creation verbs	
a. xayyaṭ-at Sāra **al-bloza-āt ḏeyq-āt/ ḏeyq-a** 'Sara sewed the shirts (F.PL) tight (F.PL/F.SG).'	al-bloza-āt ḏeyq-āt/ ḏeyq-a the-shirt-F.PL tight-F.PL/ tight-F.SG 'The shirts are tight.'
b. xbaz AHmad **al-xobez** ktīr **māleH** 'Ahmad baked the bread (M.MASS) too salty (M.SG).'	al-xobez māleH the-bread.M.MASS salty.M.SG 'The bread is salty.'
c. bana AHmad **ṭ-ṭawl-e θābt-e** 'Ahmad built the table (F.SG) stable/strong (F.SG).'	ṭ-ṭawl-e θābt-e the-table-F.SG stable-F.SG 'The table is stable/strong.'
d. rasm-at Sāra **al-xaṭ kbīr** 'Sara drew the line (M.SG) big/long (M.SG).'	al-xaṭ kbīr the-line.M.SG big.M.SG 'The line is big/long.'
e. ʔllaf-at Sāra **ašʕār-ha qasīr-e/ qsār** 'Sara composed (her) poems (M.BP) short (F.SG/BP).'	ašʕār-ha qasīr-e/ qsār poems.M.BP-F.SG.POSS short-F.SG/short.BP 'Her poems are short.'
2. False resultatives and implicit creation verbs	
a . jaddal-at Sāra **šaʕr-ha šadīd** 'Sara braided (her) hair (M.SG) tight (M.SG).'	šaʕr-ha šadīd hair.M.SG-F.SG.POSS tight.M.SG 'Her hair (hairstyle) is tight.'
b. rabaṭ AHmad **al-Hbāl šadīd/** *šadīd-e/ *šdād 'Ahmad tied the ropes (M.BP) tight (M.SG/*F.SG/*BP).'	al-Hbāl šadīd-e/ šdād the-rope.M.BP tight-F.SG/ tight.BP 'The ropes are tight.'
c. farm-at Sāra **al-xyār-a zḡīr**/ *zḡīr-e 'Sara chopped the cucumber (F.SG) small (M.SG/*F.SG).'	al-xyār-a zḡīr-e the-cucumber-F.SG small-F.SG 'The cucumber is small.'

d. qaṭṭaʕ-at Sāra **al-jazar-āt kbīr**/ *kbīr-e/ *kbār 'Sara sliced the carrots (F.PL) big (M.SG/*F.SG/*BP) (=into big pieces).'	al-jazar-āt kbīr-e/ kbār the-carrot-F.PL big-F.SG/ big.BP 'The carrots are big.'
3. False resultatives and implicit creation verbs with explicit objects	
a. qaṭṭaʕ-at Sāra hāy **al-qeṭʕ-a kbīr-e** 'Sara sliced this piece/slice (F.SG) big (F.SG).'	al-qeṭʕ-a kbīr-e the-piece-F.SG big-F.SG 'The piece/slice is big.'
b. rabṭ-at Sāra **r-rabṭ-āt šadīd-e/ šdād** 'Sara tied the ties (F.PL) tight (F.SG)/ tight (BP).'	r-rabṭ-āt šadīd-e/ šdād the-tie-F.PL tight-F.SG/ tight.BP 'The ties/ knots are tight.'

References

Baker, Mark C. 2008. *The Syntax of Agreement and Concord*. Cambridge: Cambridge University Press.

Borer, Hagit. 2005. *Structuring Sense. Volume I: In name only*. Oxford: Oxford University Press.

Borer, Hagit. 2005. *Structuring Sense Volume II: The Normal Course of Events*. Oxford: Oxford University Press.

Borer, Hagit. 2013. *Structuring Sense: Volume III: Taking Form*. Oxford: Oxford University Press.

Corbett, Greville, G. 2006. *Agreement*. Cambridge: Cambridge University Press.

Corbett, Greville G. 1991. *Gender*. Cambridge: Cambridge University Press.

Erteschik-Shir, Nomi and Tova Rapoport. 1997. A Theory of Verbal Projection. In G. Matos et al. (eds.), *On Interfaces in Linguistic Theory -- Selected Papers from the International Conference on Interfaces in Linguistics*. 129 -148. Lisboa: APL/Edicoes Colibri.

Erteschik-Shir, Nomi and Tova Rapoport. 2004. Bare Aspect: A Theory of Syntactic Projection. In J. Gueron and J. Lecarme (eds.), *The Syntax of Time*. Cambridge, Mass: MIT Press. 217-234.

Erteschik-Shir, Nomi and Tova Rapoport. 2005. Path Predicates. In Erteschik-Shir, Nomi and Tova Rapoport (eds.), *The Syntax of Aspect: Deriving Thematic and Aspectual Interpretation.* Oxford: Oxford University Press. 65-86.

Erteschik-Shir, Nomi and Tova Rapoport. 2010. Contacts and other results. In M. Rappaport-Hovav, E. Doron and I. Sichel (eds.), *Lexical Semantics, Syntax, and Event Structure*. Oxford: Oxford University Press. 59-75.

Fassi Fehri, Abdelkader. 1984. Agreement, Binding and Coherence. In Michael Barlow and Charles Ferguson (eds.), *Agreement in Natural Language, Approaches, Theories, Descriptions*. Stanford: CSLI. 107-158.

Fassi Fehri, Abdelkader. 1998. Layers in the Distribution of Arabic Adverbs and Adjectives and their Licensing. In Elabbas Benmamoun, Mushira Eid and Niloofar Haeri (eds.), *Perspectives on Arabic Linguistics: Papers from the Annual Symposium on Arabic Linguistics. Volume XI: Atlanta, Georgia, 1997*. Amsterdam: John Benjamins. 9-46.

Fassi Fehri, Abdelkader. 1999. Arabic modifying adjectives and DP structures. *Studia Linguistica, 53*(2), 105-154.

Geuder, Wilhelm. 2000. *Oriented Adverbs: Issues in the Lexical Semantics of Event Adverbs*. PhD dissertation. Universität Konstanz.

Ježek, Elisabetta, and Chiara Melloni. 2009. Complex types in the (morphologically) complex Lexicon. In *Proceedings of the 5th International Conference on Generative Approaches to the Lexicon* (pp. 17-19).

Kramer, Ruth. 2015. *The Morphosyntax of Gender*. Oxford: Oxford University Press.

Kratzer, Angelika. 2005. Building resultatives. In Claudia Maienborn and Angelika Wöllstein-Leisten (eds.), *Event arguments in syntax, semantics, and discourse.* 177–212. Tübingen: Niemeyer.

Hale, Kenneth, and Samuel Jay Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In Kenneth Hale and Samuel Jay Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger.* Cambridge, Mass.: MIT Press. 53-109.

Halliday, Michael A.K. 1967. Notes on transitivity and theme in English, Part 1. *Journal of Linguistics* 3: 37–81.

Himmelmann, Nikolaus P. and Eva F. Schultze-Berndt. 2005. Issues in the syntax and semantics of participant-oriented adjuncts: an introduction. In Himmelmann, Nikolaus P. and Eva F. Schultze-Berndt (eds.), *Secondary Predication and Adverbial Modification: The Typology of Depictives*. 1-67. Oxford: Oxford University Press.

Hoekstra, Teun. 1988. Small Clause Results. *Lingua* 74:101–139.

Irimia, Monica-Alexandrina. 2012. *Secondary Predicates*. PhD dissertation. University of Toronto.

Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity*: *At the syntax-lexical semantics interface*. Cambridge, Mass.: MIT Press.

Levinson, Lisa. 2010. Arguments for pseudo-resultative predicates. *Natural Language & Linguistic Theory*. 28: 135-182.

Mateu Fontanals, Jaume. 2000. Why can't we wipe the slate clean? A lexical-syntactic approach to resultative constructions. *Catalan Working Papers in Linguistics* 8. 71-95.

Mateu, Jaume. 2001. Small clause results revisited. *ZAS Papers in Linguistics. Proceedings of the Workshop on the Syntax of Predication.* 127-152.

McCarthy, John J., and Alan S. Prince. 1990. Foot and word in prosodic morphology: The Arabic broken plural. *Natural Language & Linguistic Theory*, 8(2), 209-283.

McNulty, Elaine. 1988. *The Syntax of Adjunct Predicates*. PhD dissertation. University of Connecticut.

Motut, Alexandra. 2010. A puzzle for the syntax-semantics of depictives. In Heijl, Melinda (ed.), *Proceedings of the Canadian Linguistics Association.*

Motut, Alexandra. 2014. A Semantics for Object-Oriented Depictives. In *University of Pennsylvania Working Papers in Linguistics 20*.

Napoli, Donna Jo. 1992. Secondary resultative predicates in Italian. *Journal of Linguistics* 28:53–90.

Nehmad, Olga, and Amit Kempler. 2018. The Semantics and pragmatics of telicity. Ms. Ben-Gurion University of the Negev.

Piñón, Christopher. 2008. Verbs of creation. In Johannes Dölling, Tatjana Heyde-Zybatow, Martin Schäfer (eds.), *Event Structures in Linguistic Form and Interpretation*. Berlin: De Gruyter. 493-521.

Pustojovsky, James. 1991. The syntax of event structure. *Cognition* 41. 47-81.

Pustejovsky, James 1989. The geometry of events. In Tenny, Carol (ed.), *Generative Approaches to Aspect*. Cambridge, Mass: MIT Lexicon Project.

Ritter, Elizabeth, and Sara Thomas Rosen. 1998. Delimiting events in syntax. In Butt, Miriam and Wilhelm Geuder (eds.), *The Projection of Arguments: Lexical and compositional factors.* Stanford: CSLI Publications. 135-164.

Rapoport, Tova. 1993. Stage and adjunct predicates: Licensing and structure in secondary predication constructions. In Eric Reuland and Werner Abraham (eds.), *Knowledge and Language, Volume II: Lexical and conceptual structure*. Dordrecht: Kluwer Academic Publishers. 157-182.

Rapoport, Tova. 1999. Structure, Aspect and the Predicate. *Language* 75: 653–676.

Rapoport, Tova. 2014. Verb meaning and context: a criticism of Manner-Result Complementarity. In G. Girard-Gillet (ed.), *Autour du Verbe Anglais: Construction, Lexique, Evidentialité*. 121-137. Paris: Presses Sorbonne Nouvelle.

Rapoport, Tova. 2015. Secondary Predication: Aspects of resultatives and depictives. Talk given at the Catalonia-Israel Symposium. The Hebrew University.

Rapoport, Tova. 2019. Secondary Predication. In Robert Truswell (ed.), *The Oxford Handbook of Event Structure*. Oxford: Oxford University Press. 426-455.

Ryding, Karin. C. 2005. *A Reference Grammar of Modern Standard Arabic*. Cambridge University Press.

Segal, Zehavit and Idan Landau. 2012. *Clear from and clear of*: The asymmetric syntax of detaching. *The Linguistic Review*. 223-278.

van Voorst, Jan. 1988. *Event Structure*. Amsterdam: John Benjamins Publishing.

Washio, Ryuichi. 1997. Resultatives, Compositionality and Language Variation. *Journal of East Asian Linguistics* 6: 1–49.

Williams, Edwin. 1980. Predication. *Linguistic Inquiry* 11:203–238.

Williams, Edwin. 1987. NP trace and theta theory. *Linguistics and Philosophy* 10: 203-238.

Zarka, Aya. 2019. *False Resultatives in Levantine Arabic: The Case of Creation Verbs*. MA Thesis. Ben-Gurion University of the Negev.