



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

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ABSTRACT

Arabic dialects in general do not allow resultatives. We present here novel data from a dialect of Levantine Arabic, Northern Galilee Arabic, which 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 the difference in agreement 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 Arabic thus demonstrate a grammatical parallel to the conceptual distinction between two creation verb types.

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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 verb's arguments.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, a phrase that characterizes its host in a relation concomitant to that of the main event. Depictives are often contrasted with resultatives, exemplified in (2).²

- (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 predicate (henceforth: RPred) characterizes the state that its host is in as a result of the action described by the verb. In (2a), for example, the direct argument of the 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 two secondary predicate types is that the object-hosted depictive predicate 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 construction, the false resultative, in an analysis of the facts of Northern Galilee (NG) Arabic. NG Arabic is a southern dialect of Levantine Arabic, a term generally used to refer to Jordanian, Lebanese, Palestinian and Syrian dialects of Arabic. Our informants are Druze of the northern Galilee region in Israel.

We present the facts of two different types of false resultative secondary predication constructions that are found in the NG Arabic dialect and propose structural analyses that account for the distinctions in interpretation and in agreement that are found.

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 & Rappaport Hovav 1995; Rapoport 1999; Mateu 2000; Rapoport 2019; 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.
 - d. Jane built the table stable.
 - e. Mary sewed the shirt too tight.

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 For discussion of their relation to the main event and other properties of secondary predicates, see Halliday (1967); Rapoport (1993); Himmelmann & Schultze-Berndt (2005); Simpson (1983; 2005); and Motut (2014), for example.

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

As shown in (3), the false RPred does not add a new result; rather, it specifies the result already present, the result inherent in the meaning of the verb.⁴ Consider, for example, (3a): The predicate contains a ‘sliced’ result that is part of the meaning of the verb *slice*, regardless of the presence of the RPred. The addition of the RPred *thin* simply specifies that sliced result; it does not itself provide a result.⁵ Likewise, (3d) contains a result, the constructed table, to which the RPred adds the specification that the table is strong.

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
- (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 in entailments (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).

The true resultatives of (8) and the false resultatives of (9) entail different changes in the direct object as a result of the event. In (9), the sentence-final adjective does not modify the direct object at any point in the event. The entailments of the false resultatives are, rather (based on Levinson 2010: 154):

- (9’) a. Jane sliced the bread thin. → A thin slice(s) was created (by slicing).
 b. Mary braided her hair tight. → A tight braid(s) was created (by braiding).

The present paper examines false resultatives in NG 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.

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.

NG Arabic, like other Semitic dialects and languages, contains secondary predication constructions of various types. We find object-hosted depictives, for instance:⁶

- (10) a. qatṭaʕ-at sāra al-jazar-a soxn-e.
slice.PST-3F.SG Sara the-carrot-F.SG hot-F.SG
'Sara sliced the carrot hot.'
- b. bāʕ aḥmad al-korsi maksūr.
sell.PST.3M.SG Ahmad the-chair.M.SG broken.M.SG
'Ahmad sold the chair broken.'

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

- (11) a. *ṭaraq aḥmad al-maʕdan nāʕem.
hammer.PST.3M.SG Ahmad the-metal.M.SG smooth.M.SG
'Ahmad hammered the metal smooth.'
- b. *mssaḥ-at ṭ-ṭāwl-e ndif-e.
sweep.PST-3F.SG the-table-F.SG clean-F.SG
'She wiped the table clean.'

Yet resultatives are not excluded entirely. The following NG Arabic resultatives are fine:^{7,8}

- (12) a. qatṭaʕ-at sāra al-jazar-a rafīf.
slice.PST-3F.SG Sara the-carrot-F.SG thin.M.SG
'Sara sliced the carrot thin.'
- b. farm-at sāra al-xyār-a zǧīr.
chop.PST-3F.SG Sara the-cucumber-F.SG small.M.SG
'Sara chopped the cucumber small.'
- c. rabaṭ aḥmad r-rabbaṭ-āt šadīd.
tie.PST.3M.SG Ahmad the-shoelace-F.PL tight.M.SG
'Ahmad tied the shoelaces tight.'
- d. xayyaṭ-at sāra haḍol al-blūz-āt deyq-āt.
sew.PST-3F.SG Sara these the-shirt-F.PL tight-F.PL
'Sara sewed these shirts tight.'
- e. xbaz aḥmad al-xobez ktīr māleh.
bake.PST.3M.SG Ahmad the-bread.M.MASS too salty.M.SG
'Ahmad baked the bread too salty.'
- f. bana aḥmad ṭ-ṭāwl-e ṭābt-e.
build.PST.3M.SG Ahmad the-table-F.SG stable-F.SG
'Ahmad built the table stable/strong.'

⁶ All the examples of secondary predication that were provided by our informants had verb-initial word order.

⁷ The facts of adjectival agreement in Arabic are often not transparent. See Tables 1 and 2 for details of the range of possible number and gender marking on nouns and on agreeing adjectives.

⁸ In addition to the secondary predication judgments of our NG Arabic informants, we offer the following examples from YouTube, recorded by a speaker from Haifa and a speaker from Baqa al-Gharbiyye (both located in northern Israel), respectively:

(i) balš-i fi l-malfūf-e, ?frm-i-ha nāʕem nāʕem nāʕem.
start-2F.SG.IMP in the-cabbage-F.SG chop-2F.SG.IMP-it.F.SG fine.M.SG fine.M.SG fine.M.SG
'Start with the cabbage and chop it very, very fine.'
<https://www.youtube.com/watch?v=cbvQrNUfowc>

(ii) badna n-qatṭeʕ ktīr ktīr nāʕem al-bandor-a.
we want 1PL-slice much much fine.M.SG the-tomato-F.SG
'We want to slice the tomato very, very fine.'
<https://www.youtube.com/watch?v=0c1zzzbXrcw>

The well-formed resultatives in NG Arabic are those in which the resultative predicate modifies an existing result rather than adding one; that is, false resultatives.⁹

This distinction between unacceptable true resultatives and acceptable false resultatives is paralleled in other Semitic dialects (see Rapoport 2015), as well as in Romance – for instance, Italian (Napoli 1992), French (Washio 1997), Catalan and Spanish (Mateu 2000) and Romanian (Irimia 2012) – as well as Japanese (Washio 1997).¹⁰

This apparent cross-linguistic division 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.¹¹ 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 2019): false resultatives, in other words. While we do not discuss prepositional results here, we note that in NG Arabic too, true PP resultatives are, as expected, disallowed, while false PP resultatives are possible (as noted in Zarka 2019).¹²

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

2.1 AGREEMENT IN FALSE RESULTATIVES IN NORTHERN GALILEE ARABIC

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

The false RPreds of (12d-f) show agreement with the direct object, exhibiting exactly the same agreement in gender and number as that found between the two elements in main (verbless) predication structures.¹³ For example, (13a) shows the same agreement on the main adjectival predicate (feminine singular) as that found on the false RPred of (12f), repeated here as (13b).

⁹ In other dialects of Levantine Arabic, as noted by two anonymous reviewers, such false resultatives are rarely possible. Instead, we find a cognate object construction (an instance of Arabic’s *mafful mutlaq*). Thus, contrasting with (12b), for example, we find the following, which is not possible in NG Arabic (and see section 5.2).

(i) qaṭṭaʃ-at sāra al-jazar-a taqṭīʃ rafiʃ.
 slice.PST-3F.SG Sara the-carrot-F.SG slicing.M.SG thin.M.SG
 ‘Sara slice the carrot a thin slicing.’

¹⁰ We do not account here for the lack of true resultatives in Arabic (and in Semitic and Romance languages in general). See Merlo (1988); Washio (1997); Mateu (2012); and Milway (2019) for some of the different approaches to this issue.

¹¹ In general, it has been claimed, more languages have PP results than have AP results (see, for example, Hoekstra 1988; Van Voorst 1988; Pustejovsky 1989; Mateu 2001; Segal & Landau 2012).

¹² This contrast is illustrated in (i) and (ii) (adapted from Zarka 2019). (ii) shows that false RPreds in NG 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 mari al-bāb la-qeṭaʃ zǧīr-e.
 kick.PST-3F.SG Mary the-door into-pieces.BP small-F.SG
 ‘Mary kicked the door into small pieces.’
 b. *akl-at mari aḍāfer-ha la-qeṭaʃ.
 eat.PST-3F.SG Mary nails.BP-F.SG.POSS to-pieces.BP [BP = broken plural; see Table 1]
 ‘Mary chewed her nails to bits.’

(ii) False PP resultatives
 a. raqs-at jūwwa al-ǧorfe.
 dance.PST-3F.SG into the-room
 ‘She danced into the room.’
 b. qaṭṭaʃ-et al-jazar-āt la-qeṭaʃ zǧīr-e.
 slice.PST-1SG the-carrot-F.PL into-pieces.BP small-F.SG
 ‘I sliced the carrots into small pieces.’

¹³ Predicative adjectives in Arabic agree with their hosts only in number and gender, unlike attributive adjectives, which also agree in definiteness; for example:

(i) ʦ-ṭawl-e θ-θābt-e
 the-table-F.SG the-strong-F.SG
 ‘the strong table’

- (13) a. *ṭ-ṭawl-e ṯābt-e.*
 the-table-F.SG stable-F.SG
 ‘The table is stable/strong.’
- b. *bana aḥmad ṭ-ṭawl-e ṯābt-e.*
 build.PST.3M.SG Ahmad the-table-F.SG stable-F.SG
 ‘Ahmad built the table stable/strong.’

Given this identity with main predication agreement, we will use the term MAIN AGREEMENT to describe that exhibited by the RPred in a subset of false resultatives. The false RPreds of (12a-c), in contrast, do not exhibit main agreement; they are consistently masculine singular, regardless of the direct object’s gender or number features. This lack of agreement on the RPred is illustrated by the contrast between (12b), repeated below in (14a), and the main predication of (14b):

- (14) a. *farm-at sāra al-xyār-a zġīr.*
 chop.PST-3F.SG Sara the-cucumber-F.SG small.M.SG
 ‘Sara chopped the cucumber small.’
- b. *al-xyār-a zġīr-e/*zġīr.*
 the-cucumber-F.SG small-F.SG/small.M.SG
 ‘The cucumber is small.’

This paper is concerned with the presence or absence of main agreement on the false RPred in Arabic and the reasons for this distinction. We begin with a brief description of the facts of Arabic agreement.

2.2 A BRIEF OVERVIEW OF NUMBER/GENDER MARKING AND NOUN-ADJECTIVE AGREEMENT IN NORTHERN GALILEE ARABIC

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

Arabic nouns are marked for gender, either masculine or feminine (masculine singular is the default form), and they are marked for number, either singular, dual, or plural (Corbett 1991; 2000; Fassi Fehri 1999; Ryding 2005).¹⁴ The details of NG Arabic number and gender marking and of adjective-noun agreement are given in *Tables 1* and *2*, respectively (and see Fassi Fehri 1984 for discussion of number agreement).

	M.SG	F.SG	M.PL	F.PL
Human	unmarked	-a, -e	-īn	-āt
Non-human	unmarked	-a, -e	BP	-āt, BP

Table 1 Number and gender marking in NG Arabic.¹⁵

	SINGULAR NOUN	ADJECTIVAL MODIFIER	PLURAL NOUN	ADJECTIVAL MODIFIER
Human	Masculine	M.SG	Masculine plural	M.PL; BP
	Feminine	F.SG	Feminine plural	F.SG; F.PL; ¹⁷ BP
			Feminine broken plural	F.SG; F.PL; BP
Non-human	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

Table 2 Noun-Adjective agreement in NG Arabic.¹⁶

Given these facts, we can see that the NG Arabic false RPreds of (12) show two distinct patterns with respect to agreement, exhibiting either main agreement with the direct object, as described here, or surfacing as masculine singular.

¹⁴ Many of the points in this section are true of Standard Arabic and other Arabic dialects.

¹⁵ BP = broken plural. The BP is autosegmental, involving internal modification of the singular stem; see McCarthy & Prince (1990).

¹⁶ The broken plural form exists only for some adjectives. A BP adjective has only one form and can modify any plural, whether masculine or feminine, human or non-human.

¹⁷ The choice of F.SG or F.PL marking on the adjective depends on the interpretation of the noun as generic or not. See Zarka (in preparation) for discussion.

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 (15):

- (15) a. Mary built a table.
 b. Mary wrote a book.
 c. Mary sewed a skirt.
 d. Mary drew a circle.

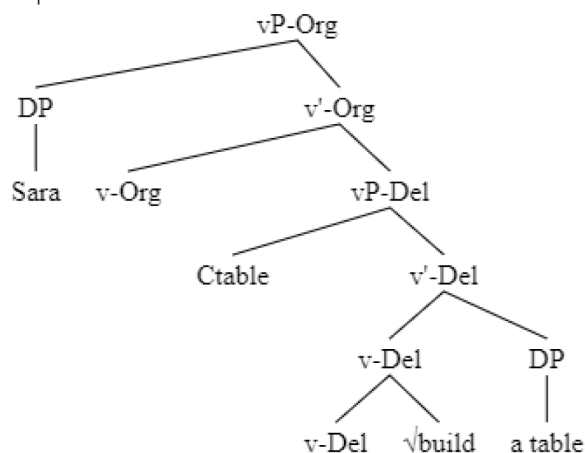
Sentences like those in (15) describe an agent causing a new entity, Geuder's (2000) *effected object*, to come into existence as a result of the verb's activity (see also Levin 1993; Erteschik-Shir & Rapoport 2000; Piñón 2008; Ježek 2009). For example, in (15c) a new physical object, a skirt, is created by Mary's sewing activity. This new entity is realized, as seen in (15), 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.¹⁸

Zarka (2019) offers a syntactic representation that simplifies Piñón's analysis. 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 (16), the structure of the explicit creation verb *build* in the sentence *Sara built a table*.¹⁹

- (16) Explicit creation verb structure:



¹⁸ Erteschik-Shir & 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.

¹⁹ We do not include in these representations any details of the higher, functional structure within which these vPs are embedded.

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 (16) 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.

Structure (16) also contains the root of the verb and two functional elements, the light verbs *v-originator* and *v-delimiter*, *vOrg* and *vDel* (adapting Ritter & Rosen 1998). We assume that roots have semantics, but no categorial specification, and must merge with a category-assigning functional head in syntax (following Marantz 2001, for example); here, *vDel* merges with the root to create a verb.

In addition to their categorizing function, the light verbs *vOrg* and *vDel* take event arguments as follows: *vOrg* takes the agent or causer of the event; *vDel* takes as argument the delimiting theme.

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.²⁰

In the explicit creation verb structure of (16), the element in *spec,vDel* 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 & 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.²¹ 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 (16)), is required for logical reasons, due to the fact that the Concept acts as the standard against which the actual table is built. As Piñón (2008: 2) notes, “the main condition for abstract entities which are created is that they be represented in some physical medium, for otherwise it would be unclear what their ‘coming into being’ amounts to.” 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.²²

The result *a table* is also required by the *v-Delimitation* head which, due to its nature, requires a syntactically-represented result. That result can either be denoted by the root with which it merges (as in (18) below) or can be added as the complement of *vDel-√root*, as in (16).²³

²⁰ These light verb phrases are equivalent to those proposed by others, such as Borer’s (2005b) EP, whose specifier is interpreted as an originator, and *asp_o* phrase; and the VPs interpreted as “cause” and “become” in Erteschik-Shir & Rapoport (1997; 2004; 2010).

²¹ Nehmad & Kempler (2018) 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.

²² 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.”

²³ Thus we mostly follow the view of Adger (2012) and Lohndal (2012), for example, in which a root may not take a complement. Whereas in our analysis, too, arguments are generated as specifiers of functional categories (here, *vDel* and *vOrg*), the verb formed by the merging of such a light verb and a root (although not the lexical root itself) can merge with a phrase that is interpreted as a result.

Event arguments are selected by the light verbs. We assume that roots themselves do not have argument structure.²⁴ But the root itself is a semantic element (see Borer 2005a; 2013), whose interpretation can require the presence in syntax of certain other elements, as noted. (See also Erteschik-Shir & Rapoport 2005; 2010 for analyses of the requirements of lexical meaning components.)

We thus have the complete structure (16), 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 in spec,vDel 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 contrast with those of implicit creation verbs.

3.2 IMPLICIT CREATION VERBS

Implicit creation verbs differ from those of explicit creation. This latter term is employed by Levinson (2010), following Geuder’s (2000) analysis of implicit created objects in his discussion of resultant individuals.

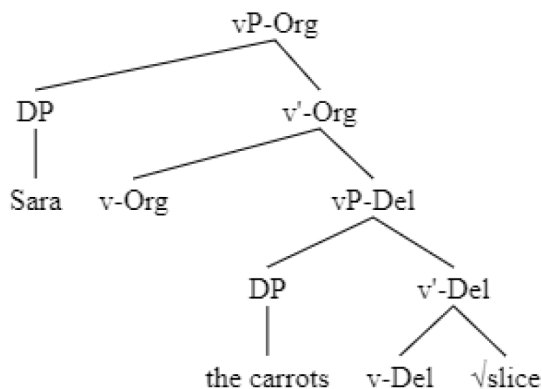
Implicit creation verbs are those in which the entity created is not expressed by an argument of the verb, but is left implicit. Consider the following:

- (17) 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 (17a), for example, a slice (or slices) is created; in (17b), a braid (or braids). The created individual is denoted by the root of this type of implicit creation verb, following Levinson 2010.

We follow Rapoport (1999), Erteschik-Shir & Rapoport (2005), and Levinson (2010), in which this created result is structurally represented. The structure we propose is in (18).

- (18) Implicit creation verb structure:
Sara sliced the carrots.



Structure (18) 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 (18), 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.

²⁴ This is part of a more-general view that argument number and type are not specified in the lexicon but rather, are structurally derived. See the discussion in Erteschik-Shir & Rapoport (1997; 2004; 2005) which follows the work of Hale & Keyser (1993).

4 FALSE RESULTATIVES IN NORTHERN GALILEE ARABIC: EXPLICIT VS. IMPLICIT CREATION VERBS

The examples in (19) and (20) below are false resultatives based on explicit creation verbs and implicit creation verbs, respectively. To clearly illustrate the agreement patterns, the parallel main predication, identical in (19) and contrasting in (20), is included after each example (where possible).

(19) False resultatives and explicit creation

- a. xayyaṭ-at sāra al-blūza-āt ḍeyq-āt/ḍeyq-a/*ḍeyyeq.
sew.PST-3F.SG Sara the-shirt-F.PL tight- F.PL/tight-F.SG/tight.M.SG
'Sara sewed the shirts tight.'

(Compare: al-blūza-āt ḍeyq-āt/ḍeyq-a.
the-shirt-F.PL tight-F.PL/tight-F.SG
'The shirts are tight.')

- b. xbaz aḥmad al-xobez ktir māleḥ.
bake.PST.3M.SG Ahmad the-bread.M.MASS too salty.M.SG
'Ahmad baked the bread too salty.'

(Compare: al-xobez ktir māleḥ.
the-bread.M.MASS too salty.M.SG
'The bread is too salty.')

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

(Compare: ṭ-ṭawl-e θābt-e.
the-table-F.SG stable-F.SG
'The table is stable/strong.')

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

(Compare: al-xaṭ kbīr.
the-line.M.SG big.M.SG
'The line is big/long.')

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

(Compare: ašṣār-ha qasīr-e/qsār.
poems.M.BP-F.SG.POSS short-F.SG/short.BP
'Her poems are short.')

- f. ḥyyak-at sāra al-jrāzi wasīf-a/wsāf.
knit.PST-3F.SG Sara the-sweaters.F.BP wide-F.SG/wide.BP
'Sara knit the sweaters wide/loose.'

(Compare: al-jrāzi wasīf-a/wsāf.
the-sweaters.F.BP wide-F.SG/wide.BP
'The sweaters are wide/loose.')

(20) False resultatives and implicit creation

- a. qaṭṭaṭ-at sāra al-jazar-a rafīf/*rafīf-a.
slice.PST-3F.SG Sara the-carrot-F.SG thin.M.SG/thin-F.SG
'Sara sliced the carrot thin.'

(Compare: al-jazar-a rafīf-a.
the-carrot-F.SG thin-F.SG
'The carrot is thin.')

- b. jaddal-at sāra šaʕr-ha rāxi.
 braid.PST-3F.SG Sara hair.M.SG-F.SG.POSS loose.M.SG
 ‘Sara braided her hair loose.’
- c. rabaṭ aḥmad r-rabaṭ-āt šadīd/*šadīd-e/*šdād.
 tie.PST.3M.SG Ahmad the-shoelace-F.PL tight.M.SG/tight-F.SG/tight.BP
 ‘Ahmad tied the shoelaces tight.’
 (Compare: r-rabaṭ-āt šadīd-e/šdād.
 the-shoelace-F.PL tight-F.SG/tight.BP
 ‘The shoelaces are tight.’)
- d. farm-at sāra al-xyār-a zġīr/*zġīr-e.
 chop.PST-3F.SG Sara the-cucumber-F.SG small.M.SG/small-F.SG
 ‘Sara chopped the cucumber small.’
 (Compare: al-xyār-a zġīr-e.
 the-cucumber-F.SG small-F.SG
 ‘The cucumber is small.’)
- e. barš-at sāra t-toffāh-āt kbīr/*kbīr-e/*kbār.
 grate.PST-3F.SG Sara the-apple-F.PL big.M.SG/big-F.SG/big-BP
 ‘Sara grated the apples big (= into big pieces).’
 (Compare: t-toffāh-āt kbīr-e/kbār.
 the-apple-F.PL big-F.SG/big-BP
 ‘The apples are big.’)
- f. ṭahn-at sāra ḥbūb al-qahwe nāʕem/*nāʕm-e.
 grind.PST-3F.SG Sara beans.F.BP the-coffee smooth.M.SG/smooth-F.SG
 ‘Sara ground the coffee beans fine.’

As noted above and as seen in the comparisons here, some false RPreds display main agreement with the direct object and some do not. The division between the two types of examples is now immediately apparent: With explicit creation verbs, the false RPred agrees with the direct object, as shown by the comparison with the parallel main predication structures. With the implicit creation verbs of (20), in contrast, the false RPred does not exhibit agreement with the direct object (as shown in the contrast with the parallel main predication); it is marked masculine singular throughout.

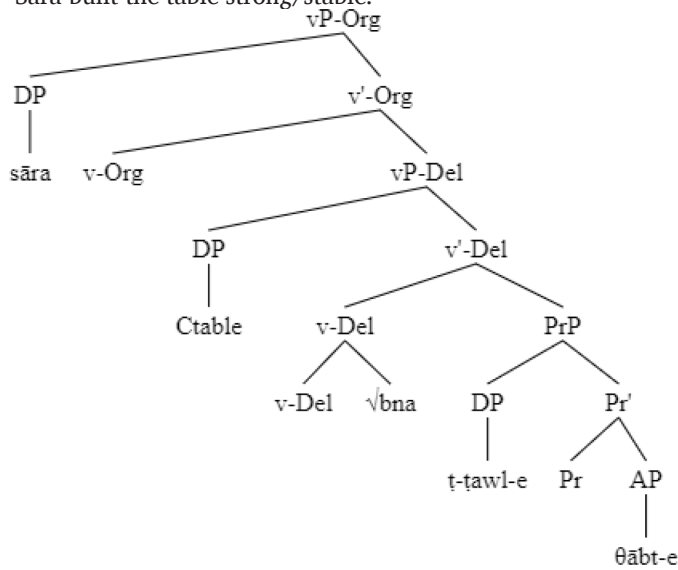
4.1 FALSE RESULTATIVES: INTERPRETATIONS AND STRUCTURES

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 ‘thin carrots’ or ‘fine beans’, for example. Rather (as argued by Pustejovsky 1991; Rapoport 1999; and Levinson 2010), the false RPreds modify an entity denoted by the lexical root of the verb: for instance, the braid creating by braiding is tight; the slices created by slicing are thin.

In both cases of creation, the false RPred does not add a result, but modifies a result that is already present in the structure, whether the effected DP object of explicit creation verbs or the result in the implicit creation verb root.

The distinction in modification between explicit and implicit creation as well as the distinction in agreement that follows are derived from the structures we propose for the false resultatives with the two creation verb types. The structure for explicit creation resultatives is shown in (21) and the structure for implicit creation resultatives is in (22).

- (21) False resultative with an explicit creation verb:
 ban-at sāra t-ṭawl-e θābt-e.
 build-PST.3F.SG Sara the-table-F.SG stable-F.SG
 ‘Sara built the table strong/stable.’



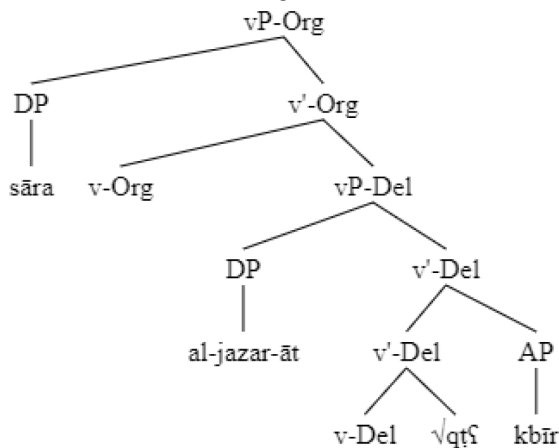
In structure (21) the RPred *θabte* ‘stable/strong’, modifies the direct object *tṭawle* ‘the table’, the actual table that is the result of the creation process.²⁵ The small clause complement of the verb represents these two elements as the result of the creation event: a strong table.

Here, the result of the creation event, the strong table, compares to the result in the simple explicit creation structure (16), a table that is created. In both cases, the DP or PrP complement of the verb expresses a result. This is as required under our assumption that the complement position of the verb (that is, of vDel-root) is limited to phrases interpretable as results.

The small clause in (24) allows for the agreement between the RPred and its host. This is as expected, given our claim that since the adjectival predicate modifies an overt DP, it exhibits main agreement with that phrase.

Consider, in contrast, the implicit creation resultative structure:

- (22) False resultative with an implicit creation verb:
 qaṭṭaṭ-at sāra al-jazar-āt kbīr.
 slice.PST-3F.SG Sara the-carrot-F.PL big.M.SG
 ‘Sara sliced the carrots big.’



²⁵ We assume a mutual m-command constraint on the predicate-host relation, as argued in McNulty (1988) and Rapoport (1987).

Here, following Levinson, the false RPred modifies the syntactically-accessible created individual denoted by the root of the implicit creation verb.²⁶ In (22), the created individual denoted by the root is the slice/s; modification thus yields the interpretation ‘big slices’.

Since the false RPred modifies the root rather than the overt direct object, we do not expect it to agree with the direct object. The false RPred exhibits no agreement at all.²⁷ 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. 2005a; 2013)²⁸ and thus there are no features available with which the RPred can agree. The consequence, we claim, is that the root-modifying RPred in implicit creation verb structures surfaces with default agreement, and so is masculine singular.

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 NG Arabic.

We thus account for the appearance of the RPred in implicit creation contexts as consistently marked with masculine, singular, regardless of the features of the direct object. But this lack of agreement raises the possibility of two alternative analyses, which we consider, and reject, in the next section.

5 CONSIDERING ALTERNATIVE ANALYSES OF THE NON-AGREEING FALSE RESULTATIVE PREDICATE

Two possible alternative analyses of the RPred in implicit creation suggest themselves: the first, that the RPred is actually an adverbial and not an adjective; the second, that the RPred is actually a modifier of a null cognate object, since cognate objects are widespread in Arabic.

We begin with the first.

5.1 NON-AGREEING RESULTATIVE PREDICATES ARE NOT ADVERBS

The idea that false RPreds are adverbs is not new – RPreds have indeed occasionally been described as adverbials (see Washio 1997; Mateu 2000; Kratzer 2005).

Against this view, Levinson (2010) presents arguments that, at least in English, false RPreds are not adverbs.²⁹ She notes that false RPreds, unlike manner adverbs, do not have manner paraphrases. Zarka (2019) makes the same point with respect to NG Arabic, as we see in the following contrast:

- (23) a. *jāwab-t-ni b-waqāha.*
 answer.PST-3F.SG-me in-rudeness
 ‘She answered me rudely.’
- b. *jāwab-t-ni b-ṭariq-a weqḥ-a.*
 answer.PST-3F.SG-me in-way-F.SG rude-F.SG
 ‘She answered me in a rude way.’
- (24) a. *farm-at sāra al-jazar-āt kbīr.*
 chop.PST-3F.SG Sara the-carrot-F.PL big.M.SG
 ‘Sara chopped the carrots big.’
- b. *#farm-at sāra al-jazar-āt b-ṭariq-a kbīr-e.*
 chop.PST-3F.SG Sara the-carrot-F.PL in-way-F.SG big-F.SG
 #‘Sara chopped the carrots in a big way.’

²⁶ Our analysis of the false RPred’s host as an element of the verbal root necessitates a refinement of the definition in section 1 of a secondary predicate’s host as a verbal argument. One possibility is to broaden the definition of host to “an element of core aspectual structure” (see Rapoport 2019 for structures and discussion).

²⁷ 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 agreement with the direct object. In Romanian, on the other hand, RPreds in false resultatives with implicit creation verbs do not agree (Monica Irimia, personal communication). We have no explanation for such cross-linguistic differences at present.

²⁸ As noted, not having argument structure does not mean that roots have no meaning at all.

²⁹ Levinson also distinguishes between false RPreds and Geuder’s (2000) resultative adverbs, which are also predicated of implicit created objects, which he terms “resultant individuals”.

- (25) a. *ṭāhn-at sāra ḥbūb al-qahwe nāfem.*
 grind.PST-3F.SG Sara beans.F.BP the-coffee smooth.M.SG
 ‘Sara ground the coffee beans fine.’
- b. *#ṭāhn-at sāra ḥbūb al-qahwe b-ṭariq-a nāfm-e.*
 grind.PST-3F.SG Sara beans.F.BP the-coffee in-way-F.SG smooth-F.SG
 #‘Sara ground the coffee beans in a fine way.’

While the manner adverb of (23) has a manner paraphrase, the false RPreds of (24) and (25) do not. The false RPred in the implicit creation structure does not, then, behave like a manner adverb.

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

- (26) *Mary braided her hair quickly and tight/tight and quickly. (Levinson 2010: 150)

However, the usefulness of the first test is questioned by the fact that we would not expect a result modifier to have a manner paraphrase. The second test must also be revised under the assumption that we would not expect manner and result modifiers to coordinate, regardless of category³⁰.

For these reasons, Zarka (2019) proposes testing the adverb/adjective status of the false RPred in Arabic by coordinating it with a result adverb so as to ensure the best possible outcome. Yet, while each result modification is fine separately, as shown in (27a,b), the false RPred and the result adverbial cannot be coordinated, as shown in (27c) and again in the contrasts in (28) and (29).^{31,32}

- (27) a. *jaddal-at sāra šafr-ha šadid.*
 braid.PST-3F.SG Sara hair.M.SG-F.SG.POSS tight.M.SG
 ‘Sara braided her hair tight.’
- b. *jaddal-at sāra šafr-ha b-ṭariq-a mrṭtab-e.*
 braid.PST-3F.SG Sara hair.M.SG-F.SG.POSS in-way-F.SG tidy-F.SG
 ‘Sara braided her hair in a tidy way.’
- c. **jaddal-at sāra šafr-ha šadid w b-ṭariq-a mrṭtab-e.*
 braid.PST-3F.SG Sara hair.M.SG-F.SG.POSS tight.M.SG and in-way-F.SG tidy-F.SG
 ‘Sara braided her hair tight and in a tidy way.’
- (28) a. *qaṭṭaʿ-at sāra al-jazar-āt zġir / b-ṭariq-a helw-e.*
 slice.PST-3F.SG Sara the-carrot-F.PL small.M.SG / in-way-F.SG pretty-F.SG
 ‘Sara sliced the carrots small / in a pretty way.’
- b. **qaṭṭaʿ-at sāra al-jazar-āt zġir w b-ṭariq-a helw-e.*
 slice.PST-3F.SG Sara the-carrot-F.PL small.M.SG and in-way-F.SG pretty-F.SG
 ‘Sara sliced the carrots small and in a pretty way.’
- (29) a. *ṭāhn-at sāra ḥbūb al-qahwe nāfem / ʔal-ʔaxer.*
 grind.PST-3F.SG Sara beans.F.BP the-coffee smooth.M.SG / on-end
 ‘Sara ground the coffee beans fine /completely.’

³⁰ See, for example, Rapoport (2014), who offers the following as an example of the impossibility of coordinating a manner and a result modifier, even when the two are like categories:

(i) #Jane cut the ropes carelessly and entirely.

³¹ Similarly, note the unsuccessful coordination in English of the result adverb with the false RPred, as contrasted with the successful coordination of two result adverbs:

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

Thus, in English as well as in Arabic, we can conclude that the false RPred is adjectival, not adverbial.

³² We transcribe ‘and’ as the glide *w* throughout to represent the range of pronunciation from *w* to *o*, which depends on the phonological environment.

- b. *ṭahn-at sāra ḥbūb al-qahwe nāṣem w ʕal-ʔaxer.
 grind.PST-3F.SG Sara beans.F.BP the-coffee smooth.M.SG and on-end
 ‘Sara ground the coffee beans fine and completely.’

We take the impossibility of coordinating the two types of result modifiers, the RPred and the adverbial, as evidence that the RPred is not an adverb.³³

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:

- (30) 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:

- (31) He braided her hair good and tight. (Levinson 2010: 150)

The contrast between (30b) and (31) is another argument against an adverbial analysis of the false RPred in English: 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.

The facts are paralleled in Arabic. Zarka (2019) notes that Arabic *mnīḥ* ‘good’ can be used as an intensifier.³⁴ *Mnīḥ* ‘good’ can be used adjectivally or adverbially, but its intensifier use is possible only when used in coordination with another adjective.³⁵ (See Fassi Fehri 1998 for discussion of adverbs and adjectives in Arabic.)

- (32) ḡassal-et šaʕr-i w essa ndīf w mnīḥ.
 wash.PST-1SG 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]

When used in coordination with an adverb, the intensifier use of *mnīḥ* is impossible; rather, *mnīḥ* is interpreted adverbially:

- (33) ʕmel-et wadift-i b-deqq-a w mnīḥ.
 do.PST-1SG homework-1SG.POSS in-precision-F.SG and good.M.SG
 ‘I did my homework precisely and well.’³⁶

In Arabic, *mnīḥ* must be the second of the two coordinated adjectives in order to receive the intensifier interpretation. (This is the opposite of the English order seen above.)³⁷

Thus we conclude that the intensifier use of *mnīḥ* is possible only when *mnīḥ* is coordinated with an adjective and not when it is coordinated with an adverb. We therefore use the possibility of the intensifier interpretation as a diagnostic of the categorial status of the RPred.

33 Coordination of the RPred and adverb in the reverse order also results in ungrammaticality; for example:

- (i) *jaddal-at sāra šaʕr-ha b-ṭariq-a mrttab-e w šadid.
 braid.PST-3F.SG Sara hair.M.SG-F.SG.POSS in-way-F.SG tidy-F.SG and tight.M.SG
 ‘Sara braided her hair in a tidy way and tight.’

34 Evidence for this intensifier use is found in the impossibility of coordination of an intensifier with an undesirable result; for example:

- (i) #jaddal-at sāra šaʕr-ha rāxi w mnīḥ.
 braid.PST-3F.SG Sara hair.M.SG-F.SG.POSS loose.M.SG and good.M.SG
 #‘Sara braided her hair good ‘n’ loose.’

35 Note that the clause containing intensifier *mnīḥ* ‘good’ expresses a result.

36 Either order of adverbial *mnīḥ* in coordination with certain adverbs is possible, but in neither order does *mnīḥ* have an intensifier use.

37 When *mnīḥ* is the first of the coordinated adjectives, it receives a typical adjectival interpretation, not an intensifier interpretation, as can be seen in a comparison of (i) with (32).

- (i) ḡassal-et šaʕr-i w essa mnīḥ w ndīf.
 wash.PST-1SG hair-1SG.POSS and now good.M.SG and clean.M.SG
 ‘I washed my hair and now it is clean and (looks) good.’

Under our analysis of false RPreds as adjectives, we expect RPreds to coordinate with intensifier *mnih*. And such coordination is indeed possible, as (34) shows.

- (34) a. *jaddal-at sāra šaʿr-ha šadid w mnih.*
 braid.PST-3F.SG 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. *qaṭṭaʿ-at sāra al-jazar-āt rafīf w mnih.*
 slice.PST-3F.SG Sara the-carrot-F.PL thin.M.SG and good.M.SG
 ‘Sara sliced the carrots thin and good.’ [meaning: good ‘n’ thin]
- c. *ṭahn-at sāra ḥbūb al-qahwe nāfem w mnih.*
 grind.PST-3F.SG Sara beans.F.BP the-coffee smooth.M.SG and good.M.SG
 ‘Sara ground the coffee beans fine and good.’ [meaning: good ‘n’ fine]

Given the fact that intensifiers can be successfully coordinated with the false RPred, and in general with adjectives but not with adverbs, we can conclude that the false RPred marked with default agreement in implicit creation structures in NG Arabic is adjectival.

We turn next to consideration of a second alternative analysis.

5.2 RESULTATIVE PREDICATES ARE NOT MODIFIERS OF COVERT COGNATE OBJECTS

We have argued that the sentence-final adjectival element is a resultative predicate, directly modifying either the direct object, in explicit creation contexts, or the verbal root, in implicit creation contexts. We have claimed that modification of the root is responsible for the lack of agreement, or rather, the default agreement exhibited by the RPred. However, an anonymous reviewer, a speaker of a different Levantine dialect, has suggested that in fact the RPred does exhibit agreement and in fact agrees with a covert cognate object whose overt parallel is masculine singular. We note that cognate objects are prevalent in Arabic, appearing in a wide variety of verb types: transitive, unaccusative, as well as unergative. (See, for example, Al-Sammak 2012; Akkuş & Öztürk 2017; and Alqurashi 2020.)

Such a direction could be suited to other Levantine dialects, which allow sentences with overt cognate objects, like the following (which have been provided by the reviewer):

- (35) a. *qaṭṭ-e al-bSal-e taqṭīf nāfem.*
 slice-2F.SG.IMP the-onion-F.SG slicing.M.SG fine.M.SG
 ‘Slice the onion a fine slicing [= Slice the onion fine]!’
- b. *farm-e l-laḥm-e farem xešen.*
 chop-2F.SG.IMP the-meat-F.MASS chopping.M.SG thick.M.SG
 ‘Chop the meat a thick chopping [= Chop the meat thick]!’

However, the sentences of (35) are not possible in the dialect under examination here, NG Arabic. In NG Arabic, the only way to modify the result in an implicit creation sentence is with an RPred, as we have described. No examples of overt cognate objects with implicit creation verbs are possible in NG Arabic,³⁸ and therefore it does not seem to us likely that a null cognate object would be present in order to provide an element to be modified.

Complications for such an analysis are also found in dialects other than NG Arabic. Our consultants in a Lebanese dialect of Levantine Arabic, which does allow the cognate object sentences above, are able to accept cognate objects only with a subset of the implicit creation verbs that appear in the resultative constructions discussed in this article. Thus in contrast with (35), the following is impossible not only in NG Arabic but also in Lebanese Arabic:³⁹

³⁸ Cognate objects are allowed in other construction types in NG Arabic, however. As Rapoport & Zarka (in preparation) note, we do find cognate objects with explicit creation verbs. But these are irrelevant to the issue at hand, since they do not show the same variety of gender and number features found on RPreds with explicit creation resultatives, appearing always as feminine singular.

³⁹ See Rapoport & Zarka (in preparation) for an analysis of cognate objects with different types of creation verbs in a comparison of two Levantine dialects. Our discussion includes the above distinction made in Lebanese Arabic between creation verbs of assembly and creation verbs of separation.

- (36) a. *jaddal-at sāra šaʕr-ha tejdił ħolow.
 braid.PST-3F.SG Sara hair.M.SG-F.SG.POSS braiding.M.SG beautiful.M.SG
 ‘Sara braided her hair a nice braiding [= braided her hair nicely].’
- b. *kwwam-at sāra l-mxedd-āt tekwił ʕali.
 pile.PST-3F.SG Sara the-cushion-F.PL piling.M.SG high.M.SG
 ‘Sara piled the cushions a high piling [= piled the cushions high].’

Thus not all of our RPred examples can be replicated with cognate object constructions even in a dialect that allows overt cognate objects. The contrast between (36) and (35) challenges any analysis of the RPred as a modifier of a covert cognate object and itself requires a distinct explanation.

These facts, taken together with the impossibility of overt cognate objects in NG Arabic implicit creation anyhow, exclude an analysis in which the NG Arabic RPred is actually a modifier of their covert equivalents.

To conclude, our proposed analysis of the false RPred with implicit creation as a modifier of the root’s resultant individual accounts for the default agreement found in one type of resultative of NG Arabic. And our analysis of the false RPred with explicit creation as a modifier of the overt object accounts for the main agreement found in this second type of resultative.

Analyzing the sentence-final adjectival element in both types of false resultatives in NG Arabic as a resultative secondary predicate allows comparison with other secondary predicate constructions. In the next section, we present two such cases.

6 WHEN SECONDARY PREDICATES AGREE

We have argued that whether or not the RPred exhibits agreement depends on whether the RPred modifies an overt object or a root, and that when the host is an overt object the RPred exhibits main agreement. The key is the element modified by the RPred. Below we consider two more cases of secondary predication, which offer corroboration for this view.

6.1 IMPLICIT VERBS WITH EXPLICIT CREATION

Consider below the unexpected occurrence of main agreement exhibited by the RPred with implicit creation verbs. These are the same verbs and the same RPreds as those in (20) above, but in (20), the same RPred shows default agreement. The examples of (37) and (38) illustrate this contrast in agreement.

- (37) a. qaṭṭaʕ-at sāra hāy al-qeṭʕ-a rafiʕ-a.
 slice.PST-3F.SG Sara this.F.SG the-slice/piece-F.SG thin-F.SG
 ‘Sara sliced this slice thin.’
- (Compare: hāy al-qeṭʕ-a rafiʕ-a.
 this.F.SG the-slice/piece-F.SG thin-F.SG
 ‘This piece/slice is thin.’)
- b. (= 20a) qaṭṭaʕ-at sāra al-jazar-a rafiʕ/*rafiʕ-a.
 slice.PST-3F.SG Sara the-carrot-F.SG thin.M.SG / thin-F.SG
 ‘Sara sliced the carrot thin.’
- (38) a. rabṭ-at sāra r-rabṭ-āt šadiđ-e/šdād.
 tie.PST-3F.SG Sara the-tie-F.PL tight-F.SG/tight.BP
 ‘Sara tied the ties/knots tight.’
- (Compare: r-rabṭ-āt šadiđ-e/šdād.
 the-tie-F.PL tight-F.SG/tight.BP
 ‘The ties/knots are tight.’)
- b. (= 20c) rabaṭ aħmad r-rabaṭ-āt šadiđ/*šadiđ-e/*šdād.
 tie.PST.3M.SG Ahmad the-shoelace-F.PL tight.M.SG/tight-F.SG/tight.BP
 ‘Ahmad tied the shoelaces tight.’

We have attributed the appearance or non-appearance of an overt result, and so the presence or absence of main agreement, to whether or not the verb is one of explicit or implicit creation. In fact, as the examples in (37)–(38) show, the situation is more complex.

In (37a)–(38a), the same implicit creation verbs that above are used in sentences that describe only an implicitly-realized result are used to describe events with an explicitly-realized result, a created individual. And the element modified here is not the root’s resultant individual as in (20), but rather, the overt realization of the root’s implicit result, that is, the slices or knots themselves. This kind of sentence thus contains both of these result elements.⁴⁰

Given this duplication of the result element, we have analyzed these sentences (see Rapoport & Zarka 2020) as a type of cognate object construction. This type is similar to those in Massam (1990) which have an explicitly-realized “result-of-action object” or Sailer’s (2010) “resultant object”, both of which are the results of creation, as is the case here.⁴¹

In sentences (37a)–(38a), the overtly-realized duplicated result is what is modified by the RPred, which therefore shows main agreement with it. We conclude that it is not only the creation verb type but also the position in which the created result is realized that determines the type of agreement on the RPred.

Thus, we have shown that when the modified element is overt, the modifying RPred agrees with it. We observe the same behavior with another type of secondary predicate.

6.2 DEPICTIVES

One more type of secondary predicate that agrees with its overt object host is the depictive predicate.⁴² Consider again the object-hosted depictives of (39), repeated from (10) above.

- (39) a. *qaṭṭaʕ-at* *sāra al-jazar-a* *soxn-e/*soxen.*
 slice.PST-3F.SG Sara the-carrot-F.SG hot-F.SG/hot.M.SG
 ‘Sara sliced the carrot hot.’
- b. *bāʕ* *aḥmad al-korsi* *maksūr.*
 sell.PST.3M.SG Ahmad the-chair.M.SG broken.M.SG
 ‘Ahmad sold the chair broken.’

In (39), the hosts of the depictive secondary predicates *soxne* ‘hot’ and *maksūr* ‘broken’ are the overt DPs *aljazara* ‘the carrot’ and *alkorsi* ‘the chair’, respectively. The predicates exhibit obligatory main agreement with their hosts, as expected. Evidence for this agreement is found in the identical feature specifications on the adjective in the parallel main predications:

- (40) a. *al-jazar-a* *soxn-e.*
 the-carrot-F.SG hot-F.SG
 ‘The carrot is hot.’
- b. *al-korsi* *maksūr.*
 the-chair.M.SG broken.M.SG
 ‘The chair is broken.’

Depictive secondary predicates, like certain false resultative predicates, thus exhibit obligatory main agreement with their overt object hosts.

For a broader perspective, see Rapoport & Zarka (in preparation) for an analysis in which depictive predicates and false resultative predicates are analyzed as adjuncts. They thus contrast with true resultative predicates, which are arguments (assuming the discussion in Rapoport 2019). Since NG Arabic allows depictives and false resultatives but disallows true resultatives, we can thus form a thematic generalization describing possible secondary predication constructions in

⁴⁰ See Rapoport & Zarka (2020) for the analysis of the examples in (37a)–(38a), which has the same basic root and verbal structure as in (18), but in addition, an overt result is merged in direct object position and the RPred modifying it is an adjunct to vP.

⁴¹ Note that such argument cognate objects contrast with the modifying cognate objects of section 5.2 above. (See Pereltsvaig 2002 for discussion of argument and adverbial cognate objects.)

⁴² Recall, as (1) illustrates, that depictive predicates modify their host throughout the time of the event, not as a result of it.

7 CONCLUSION

Our analysis accounts for the pattern of agreement shown by secondary predicates in NG Arabic. We have attributed an RPred's agreement marking to the element the RPred modifies, as dictated by the distinct structures merged by the different creation verb types, together with the manner in which the created element is realized. We thus answer the question: Why does the RPred agree with the direct object only in some false resultatives?

We have shown that the contrast in agreement parallels the thematic distinction between two types of creation. In this way, the agreement patterns in Northern Galilee Arabic are evidence not only for the structures we propose but also for a conceptual distinction between these two types of creation.

ABBREVIATIONS

1 = first person, 2 = second person, 3 = third person, _{BP} = broken plural, _F = feminine, _{IMP} = imperative, _M = masculine, _{MASS} = mass, _{PL} = (sound) plural, _{POSS} = possessive, _{PST} = past, _{SG} = singular.

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COMPETING INTERESTS

The authors have no competing interests to declare.

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