

Object Drop in Omani Arabic

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1. Introduction

In this paper, we present an analysis of object drop in Omani Arabic (OA), as illustrated in (1), where the symbol [e] (empty category) marks the position of the dropped object.

- (1) ʔana ʃtarē-t siyyāra ləʔənn-oh ʔaħmad ʃtara [e].
I Pst.buy-1s car because-3sm Ahmad Pst.buy.3sm
‘I bought a car because Ahmad bought one.’

The dropped object is interpreted as a copy of the indefinite object *siyyāra* ‘car’ in the main clause. We consider two possible analyses of the phenomenon in (1). One is that it represents a case of V-stranding VP ellipsis, as advocated for the related language Hebrew by Doron (1999) and Goldberg (2002, 2005). According to this view, the adjunct clause in (1) contains the verb phrase *ʃtara siyyāra* ‘bought a car’, which is elided after evacuation of the verb *ʃtara* from the verb phrase, so that ellipsis ‘strands’ the verb in a higher position. The other possible analysis we consider, and which we find to be a better fit for the facts in Omani Arabic, is that the term labeled

[e] in (1) is an indefinite anaphor, similar in function to English *one*. This phenomenon bears a strong resemblance to null objects in Greek as documented by Giannakidou and Merchant (1997).

2. Against a verb stranding VP ellipsis account

We model our discussion of V-stranding VP ellipsis after Algryani's (2012) discussion of similar facts in Libyan Arabic. Like Algryani, we find that the predictions of the V-stranding VP ellipsis account are not borne out. We go beyond Algryani in concluding we are dealing with a null anaphor, and documenting constraints on its distribution, seeking in particular to explain why it must be indefinite.

Like Algryani, we begin with the observation that OA seems to admit ellipsis of VP after modal verbs. The gap after *yiqdar* 'he can' and *niqdar* 'we can' in (2a) and (2b) respectively refers back to the VP in the first clause *yitkallam Engəlēzi* 'speak English' in (2a) and *yištəru šaqqah* 'buy an apartment' in (2b), just as in the English translations.

- (2) a. ʔahmad yi-qdar yi-tkallam Engəlēzi, bass/lākin ʕali mā yi-qdar
 Ahmad Impf-can.3sm Impf-speak.3sm English, but Ali Neg Impf-
 can.3sm
 'Ahmad can speak English, but Ali can't.'
- b. kān-u y-qədr-u yi-štər-u šaqqah, lākin hana mā kon-na ni-qdar
 Pst.be-3pm Impf-can-3pm Impf-buy-3pm apartment, but we Neg
 Pst.be-1p 1p-can

‘They could buy an apartment, but we couldn’t.’

These cases are naturally analyzed as VP ellipsis, where the second clause contains a copy of the VP from the main clause, which is elided under identity with the antecedent VP in the main clause, schematized for (2a) in (3) (Ross 1967, Bouton 1970, Sag 1976, Hankamer and Sag 1976, and many others; see Craenenbroeck and Temmerman (2019) for a recent overview).

(3) ʔahmad yi-qdar yi-tkallam Engələzi, bass/lākin ʕali mā yi-qdar ~~yi-tkallam~~
Engələzi

Ahmad Impf-can.3sm Impf-speak.3sm English, but Ali Neg Impf-can.3sm
~~Impf-speak.3sm English~~

‘Ahmad can speak English, but Ali can’t.’

Turning then to cases of object drop like that illustrated in (1), one potentially fruitful approach resembles Doron’s (1999) and Goldberg’s (2005) analysis of similar looking structures in Hebrew. In Arabic, the verb appears in a relatively left peripheral position. Classical Arabic is typically classed as a verb-initial language, though the status of the dialects is controversial (Comrie 1981). However controversial that typological claim may be, it is widely agreed upon that the Arabic verb raises from a position internal to the VP to a position external to it, either T (the locus of tense) or an intermediate position between T and VP (Fassi Fehri 1993, Ouhalla 1994, Mohammad 2000, Al-Balushi 2011 and others). This situation is schematized in (4). Suppose now that Arabic has an ellipsis operation that targets VP—the one we seem to see in (2) and that English also displays. If the verb raises

out of VP before VP-ellipsis, we expect that verb to ‘escape’ ellipsis. Only the other material in the VP will be elided, including the object in (4), leaving us with a clause that looks just like the adjunct clause in (1).

(4) ʔaḥmad štara_i [_{VP} t_i siyyāra].

Ahmad Pst.buy.3sm car

‘Ahmad bought a car.’

This analysis makes a number of predictions that Algryani tests in detail in relation to Libyan. Here, we test these predictions for OA and, like Algryani, we find this analysis inadequate. One thing that at first glance seems to support the V-stranding VP ellipsis analysis is that in constructions with multiple complements, both arguments of the verb can be elided simultaneously, as (5) shows, where the second clause is understood to assert that Ali also sent his report to the director. Note that the understood pronoun *-oh* ‘his’ in the second clause receives a ‘sloppy’ interpretation; it does not share the same antecedent as its counterpart in the first clause, an interpretational option that is typical of ellipsis (Ross 1969, Dahl 1973 and others).

(5) nādya rasl-it taqrīr-ha li-l-mudīr, w ʕali baʕad rasal.

Nadia Pst.send-3sf report-her to-the-director, and Ali also Pst.send.3sm

‘Nadia sent her report to the direct, and Ali did, too.’

This makes sense if the ellipsis of objects is really VP ellipsis, since ellipsis then causes everything in the complement of the verb to disappear. On the other hand, it also predicts that it should not be possible for the individual complements of the

verb to appear without the others. VP ellipsis is an all-or-nothing process. If the VP is elided, it should not be possible for one or another complement to escape ellipsis unilaterally. In fact, though, it *is* possible for the two missing arguments in the second clause in (5) to appear individually without the other. Example (6a) displays a missing DP in the second clause and (6b) a missing PP.

(6) a. nādya rasl-it taqrīr-ha li-l-mudīr, lākin ʕali rasal l-maʕārf-oh fi-l-ħākūmah.

Nadia Pst.send-3sf report-her to-the-director, but Ali Pst.send.3sm to-contacts-his in-the-government

‘Nadia sent her report to the director, but Ali sent [his report] to his contact in the government.’

b. nādya rasl-it taqrīr-ha li-l-mudīr, w ʕali rasal mustanad-āt θānyah.

Nadia Pst.send-3sf report-her to-the-director, and Ali Pst.send.3sm document-pf other.f

‘Nadia sent her report to the director, and Ali send other documents [to the director].’

The fact that the objects can be dropped individually in (6) suggests that VP-ellipsis does not cover these cases, and that instead we need an analysis of object drop. The analysis must allow us to drop a nominal direct argument (‘DP’ for ‘Determiner Phrase’), as in (6a), as well as a prepositional phrase (PP), as in (6b), independently. We show in sections 3 and 4 that DP ellipsis is subject to more restrictions than PP ellipsis, suggesting that these are separate processes. We refer to them as DP-drop and PP-drop respectively.

Another argument against a V-stranding VP ellipsis account of data like (1) involves the identity requirement between the elided VP and its antecedent. The content of the elided VP must match the content of the antecedent VP. This means that the stranded verb, too, must match the verb in the antecedent, since it forms part of the constituent that is elided, though again, it itself escapes ellipsis through movement. Though it occurs external to the elided VP in the surface structure (on the account we are testing), it leaves a copy within the VP that should fall under the identity requirement.

However, in OA, the verb in the second clause need not be identical to the verb in the first clause when one or more complements are dropped in the second clause. The two clauses in (7a), for example, share the object *bēt* ‘house’ but not the verb, which is *bāf* ‘sell’ in the main clause but *štara* ‘buy’ in the relative clause. Likewise, the object of *raggaʕ* ‘return’ in (7b) is interpreted as identical to the antecedent *kitāb* ‘books’ in the main clause though the main clause verb is different (*xað* ‘take’ vs. *raggaʕ* ‘return’). Lastly, the object of *haşşal* ‘find’ in (7c) is interpreted as identical to the object of the preposition *marāgiʕ ʕan l-mawðūʕ* ‘references on the topic’ in the main clause, though the verbs again are different (*dawwar ʕala* ‘look for’ vs. *haşşal* ‘find’). This means that object drop is not contingent on identity of the governing verb with the verb governing its antecedent, militating against a VP-ellipsis approach. Note that the phrase *fī-h* ‘at it’ refers to the temporal head of the relative clause *nafs l-waqt* ‘the same time’, and the pronoun *-ha* lit. ‘her’ in the PP *l-ha* in) refers to the library.

- (7) a. mħammad bāf bēt f-musqat f-nafs əl-waqt əlli ʕali štara fī-h.

Muhammad Pst.sell.3sm house in-Musqat in-same the-time that Ali
Pst.buy.3sm at-it

‘Muhammad sold a house in Musqat at the same time Ali bought one.’

b. mħammad xaḍ kitāb mə-l-maktabah, w ħali raggaħ l-ha

Muhammad Pst.take.3sm books from-the-library and Ali
Pst.return.3sm to-it

‘Muhammad took books from the library, and Ali returned some.’

c. mħammad dawwar ħala marāgiħ ħan l-mawḍūħ l-muddit šahar w mā
ħaṣṣal, lākin ħali dawwar yōm wāħad w ħaṣṣal

Muhammad Pst.search.3sm for sources on the-topic for-period month
and Neg Pst.find.3sm, but Ali Pst.search.3sm day one and Pst.find.3sm

‘Muhammad looked for sources on the topic for a month and didn’t find [any],
but Ali looked [for sources on the topic] for a day and found [some].’

Another difference between clear cases of VP-ellipsis in English and putative V-stranding VP ellipsis in Arabic is that ellipsis may target VPs containing definite objects, while object drop in Arabic may not target a morphologically definite object, as Algryani observes. Example (8) is modeled after Algryani’s example (305), p. 121. The indefinite object in (8a) can antecede the object gap in the second clause in that example while the definite object in (8b) cannot. A pronoun that picks up a definite antecedent must be overt, as (8c) illustrates.

(8) a. nādya qar-it ktāb, w ħatta mħammad qara.

Nadia Pst.read-3sf book, and also Muhammad Pst.read.3sm

‘Nadia read a book, and Muhammad did, too.’

- b. * nādya qar-it l-ktāb, w ḥatta mḥammad qara.

Nadia Pst.read-3sf the-book, and also Muhammad Pst.read.3sm

(‘Nadia read the book, and Muhammad did, too.’)

- c. nādya qar-it l-ktāb, w ḥatta mḥammad qarā-h.

Nadia Pst.read-3sf the-book, and also Muhammad Pst.read.3sm-it

(‘Nadia read the book, and Muhammad read it, too.’)

Names pattern like definites, as in the following example, patterned after Algryani’s (307), p. 122.

- (9) a. mḥammad šall l-ʔəstāḏ / ʔaḥmad l-gāmʕah?

Mohammad Pst.take.3sm the-professor / Ahmad the-university

(‘Did Mohammad take the professor / Ahmad to the university?’)

- b. la, šall-*(oh) s-sūq

Neg, Pst.take.3sm-(him) the-market

(‘No, he took him to the market.’)

We note here in passing that possessive objects as seen in (6a), repeated in (10) below, pattern like indefinite objects. We present an explanation for this in section 4, where we will refine the observation about definiteness. Note though that no indefiniteness requirement applies to PP-drop. The dropped PP in the second clause of (10) is interpreted as *li-l-mudīr* ‘to the director’ or the name *Ahmad*. The occurrence of definite descriptions or names in that PP does not interrupt the mechanism that licenses PP-drop. The fact that the DP in a dropped PP can be definite

is another reason to think that the mechanism of PP-drop is not the same as the mechanism of DP-drop.

(10) nādya rasl-it taqrīr-ha li-l-mudīr / l-ʔaḥmad, w ʕali rasal mustanad-āt θānyah.

Nadia Pst.send-3sf report-her to-the-director / to-Ahmad, and Ali Pst.send.3sm document-pf other.f

‘Nadia sent her report to the director / to Ahmad, and Ali sent other documents to the director / to Ahmad.’

Another observation that militates against a V-stranding VP ellipsis analysis of examples like (1), and that arguably falls under the constraint against dropping definite objects, is that Arabic does not have any counterpart to Antecedent Contained Deletion (ACD) contexts (Bouton 1970, Sag 1976, Larson and May 1990, Fiengo and May 1994, Kennedy 1997). In ACD, exemplified in (11a), a VP is elided that contains a semantic variable bound by a quantifier *within* the antecedent for the ellipsis site (the VP *read every book* in (11a)). According to May and others, an appropriate antecedent is constructed by covert quantifier raising out of the VP in the main clause, carrying the relative clause with the VP gap out of the antecedent for ellipsis, deriving an LF like (11b).

- (11) a. Nadia read every book Ali did.
b. [Every book_i Ali [~~read t_i~~] Nadia [read t_i]

If OA has V-stranding VP ellipsis, then the counterpart to (11a) would look like (12a) in OA. But (12a) is strongly ungrammatical. In OA, the position over which

a relative clause is abstracted must be overtly spelled out as a resumptive pronoun, which in Arabic cliticizes to its governor, as shown in (12b). If OA lacks VP-ellipsis, then the ungrammaticality of (12a) falls under the generalization that a dropped object in Arabic must not be definite, assuming traces are semantically names (with variable reference), and so pattern like other names in (12a).

- (12) a. *nādyā qar-it kəll kitāb qara ʕali
 Nadia Pst.read-3sf every book Pst.read.3sm Ali
 ('Nadia read every book Ali did.')
- b. nādyā qar-it kəll kitāb qarā-h ʕali
 Nadia Pst.read-3sf every book Pst.read.3sm-it Ali
 'Nadia read every book that Ali read.'

We conclude at this point that a V-stranding VP ellipsis analysis of the basic fact in (1) and similar data faces significant challenges. We pursue instead the hypothesis that the complements of the verb may be dropped independently, and seek to identify the parameters of this process. We begin by investigating under what conditions a PP can be dropped in section 3, and proceed in section 4 to investigate the conditions under which a DP can be dropped.

3. PP-Drop

Algryani mentions examples like (13) as indicative of some kind of PP-drop (here as usual in OA, modeled on his Libyan example (316), p. 125). The verb from the first clause is repeated in the second without any additional VP-internal material;

the null object is interpreted as the same as its antecedent in the first clause. But the sentence is ambiguous as to whether the adverb in the first clause is understood as also pertaining to the situation the second clause describes. Example (13) may assert that Ahmad didn't sleep in the living room or that he didn't sleep at all.

(13) *ʔana raqad-t fə-ṣ-ṣālah, lākin ʔahmad mā raqad*

I Pst.sleep-1s in-the-livingroom, but Ahmad Neg Pst.sleep.3sm

(i) 'I slept in the living room, but Ahmad didn't sleep in the living room.'

(ii) 'I slept in the living room, but Ahmad didn't sleep at all.'

If (13) is not derived through VP-ellipsis, then reading (i) where we understand that Ahmad didn't sleep in the living room, but rather he slept elsewhere, requires us to postulate a null PP *fi-ṣ-ṣālah* 'in the living room' in the second clause, whose content is carried forward from its antecedent in the first clause. Note that this material could also be represented in the second clause by the locative pro-PP *hnāk* 'there'. Assuming that this dialect of Arabic has a null pronoun meaning what *hnāk* means (or to put it another way, it has *hnāk*-drop), the optional occurrence of this null pro-PP in (13) derives the ambiguity seen there. Example (13) can either be interpreted as *mā raqad* 'he didn't sleep', or *mā raqad hnāk* 'he didn't sleep there', with covert *hnāk*.

A similar strategy is available for the analysis of examples like (14) below, modeled after Algryani's example (321), p.126. This example can be interpreted as asserting simply that Mohammad paid his rent, like Ahmad did, or more specifically that he pays it every month, like Ahmad does. This makes sense if, just as Arabic has a pro-PP meaning 'there', it also has a pro-PP meaning 'then'. This would correspond

to something like the overt PP *ðīk əs-sāʕah*, literally ‘that the-hour’, meaning ‘at that time’.

(14) ʔaḥmad yi-dfaʕ ʔigār kəll šahar, w mḥammad baʕad yi-dfaʕ.

Ahmad Impf-pay.3sm rent every month, and Mohammad also Impf-pay.3sm

(i) ‘Ahmad pays rent every month, and Mohammad pays rent every month, too.’

(ii) ‘Ahmad pays rent every month, and Mohammad pays rent, too, though not necessarily every month.’

The idea that the sentences in (13) and (14) contain covert locative and temporal pronouns respectively predicts that PPs that are neither temporal nor locative, for example those expressing manner, cannot be dropped. Example (15) bears this prediction out. The PP *b-sarʕah* ‘with speed’, meaning ‘fast’ in the first clause, cannot be construed as part of the meaning of the second. The second clause asserts that Mohammad didn’t drive at all, not just that he didn’t drive fast.

(15) ʔaḥmad sāq b-sarʕah lākin mḥammad mā sāq

Ahmad Pst.drive.3sm with-speed but Mohammad Neg Pst.drive.3sm

‘Ahmad drove fast, but Mohammad didn’t drive at all.’

Consequently, altering the example in (13) to contain a manner adverb like *zēn* ‘well’ eliminates the possibility of carrying the meaning of the adverb over to the second clause.

(16) ?ana raqad-t zēn, lākin ?ahmad mā raqad.

I Pst.sleep-1s well, but Ahmad Neg Pst.sleep.3sm

‘I slept well, but Ahmad didn’t sleep at all.’

This is again in contrast to the predictions of the V-stranding VP-ellipsis analysis of (15) and (16), which would claim that the antecedent for ellipsis is the entire phrase *sāq b-sarʕah* ‘drove fast’ in (15) and *raqadt zēn* ‘slept well’ in (16). Indeed, the English counterparts with VP-ellipsis have the reading that (15) and (16) cannot have, where we assert that Mohammad didn’t drive fast, not that he didn’t drive at all, and that Mohammad didn’t sleep well, not that he didn’t sleep at all. These readings are impossible in OA because neither of these adverbial PPs can be resumed by covert *hnāk* ‘there’ or *ðīk əs-sāʕah* ‘then’.

(17) a. Ahmad drove fast, but Mohammad didn’t [drive fast].

b. I slept well, but Mohammad didn’t [sleep well].

This analysis accommodates dropped PPs that are temporal or locative, and correctly excludes dropping manner adverbs (PPs or otherwise). But we have also seen examples of argument PP-drop. The PP *li-l-mudīr* ‘to the director’ or *l-Ahmad* ‘to Ahmad’ can be dropped as in (10), but these cannot plausibly be analyzed as corresponding to a null temporal pronoun, nor can they be resumed by overt *hnāk* ‘there’, militating against an analysis that puts a covert locative pronoun in the place of the gap in the second clause. These PPs introduce the recipient argument of the main verb *rasal* ‘send’, that is, they function as arguments of the main verb. Argument PPs can, in fact, quite generally be elided under identity with an

antecedent, regardless of the definiteness of the PP-internal DP. Many verbs in Arabic introduce an object through a mediating preposition. The three examples below include the verbs *ʔayār ʕala* literally ‘invade on’ meaning to invade, *ʔinqaḏḏ ʕala* literally ‘attack on’, meaning to attack, and *ʔistahān bi* literally ‘underestimate in’ meaning ‘underestimate’. In each example below, the PP argument is dropped under identity with an antecedent.

- (18) a. ʔəl-ʔimārāt ʔayār-it ʕala l-yaman bas ʕumān mā ʔayār-it.
the-Emirates Pst.invade-3sf on the-yemen but Oman Neg Pst.invade-3sf
‘UAE invaded Yemen but Oman didn’t.’
- b. ʔəl-ʔasad ʔinqaḏḏ ʕala l-ʔazālah lākin l-nəmər mā nqaḏḏ.
the-lion Pst.attack.3sm on the-ghazelle but the-tiger Neg Pst.attack.3sm
‘The lion attacked the ghazelle but the tiger didn’t.’
- c. ʔəl-ʔittiḥād əs-sōvyēti ʔistahān b-ʔafyānistān w ʔamrīka baʕad ʔistahān-it.
the-union the-soviet Pst.underestimate.3sm in-afghanistan and America too Pst.underestimate-3sf.
‘The Soviet Union underestimated Afghanistan and America did, too.’

These examples suggest that it is generally possible to drop a PP argument under identity with an antecedent, a generalization that extends to (10). This mechanism does not extend to non-argument PPs in general, but some of those,

namely locative and temporal PPs, may be resumed by a null pronominal adverbial meaning ‘there’ or ‘then’, giving the appearance of PP-drop in those cases.

We have thus identified two mechanisms responsible for suppressing PPs. One is the existence of covert counterparts of the locative and temporal pronouns *hnāk* ‘there’ and *ḏīk as-sāfah* ‘then’. In addition, it is generally possible to elide an argument PP in OA under identity with an antecedent. Neither of these processes allows a non-temporal or non-locative adjunct PP to be elided, ruling out an interpretation for examples like (15) and (16) in which the meaning of the PP in the main clause is carried forward to the subordinate clause. This concludes the discussion of PP-drop in OA. We turn now to the typologically somewhat more puzzling case of DP-drop of objects, and treat the indefiniteness condition in more detail.

4. DP-Drop

The striking thing about object DP-drop in Arabic is that, as mentioned above, the dropped DP may not be definite. The examples in (20) show that the indefinite objects that function as the antecedent for a missing object in the second clause in the examples in (19) may not be definite.

- (19) a. *nādyā šāf-it dolfīn w mḥammad baʿad šāf.*
Nadia Pst.see-3sf dolphin, and Muhammad also Pst.see.3sm
‘Nadia saw a dolphin, and Muhammad did, too.’
- b. *?ali laqaf kūra w mḥammad baʿad laqaf*
Ali Pst.catch.3sm ball and Muhammad also Pst.catch.3sm

‘Ali caught a ball and Muhammad caught one, too.’

- (20) a. *nādya šāf-it d-dolfin w mhammad baṣad šāf.
Nadia Pst.see-3sf the-dolphin, and Muhammad also Pst.see.3sm
(‘Nadia saw the dolphin, and Muhammad did, too.’)
- b. *ʔali laqaf l-kūra w mhammad baṣad laqaf
Ali Pst.catch.3sm the-ball and Muhammad also Pst.catch.3sm
(‘Ali caught the-ball and Muhammad did, too’)

Further, the dropped DP may not be construed as referring to a referent introduced by a previously mentioned antecedent, even if that antecedent is indefinite. The goats that Ali slaughters according to (21a) may not be the same goats that Muhammad raises, and the flowers that (21b) asserts Mohammad put in a vase may not be the previously mentioned flowers that Nadia bought. That is, the dropped DP may not be construed as a referential pronoun. It may only be construed as an existential quantifier over individuals falling under the description the antecedent denotes.

- (21) a. mhammad y-rabbi yanam w ʕali yi-ḏbaḥ.
Muhammad Impf-raise.3sm goats and Ali Impf-slaughter.3sm
(‘Muhammad raises goats and Ali slaughters goats (but not the goats that Muhammad raises).’)
- b. nādya štar-it zhūr w mhammad haṭṭ f-mazhariyya.
Nadia Pst.buy-3sf flowers and Muhammad Pst.put.3sm in-vase

‘Nadia bought flowers and Muhammad put flowers in a vase (but not the flowers that Nadia bought).’

This is in contrast to subject drop in Arabic, which, as a well-known ‘pro-drop’ language, has a full repertoire of covert subject pronouns. These covert subjects though, must be definite. Like all referential pronouns, a null subject in Arabic must refer to an entity already mentioned in the discourse. That is, unlike the case of object drop, the null subject in (22) is ungrammatical if the women it refers to have not been previously introduced in the discourse context.

(22) rāh-in ?orobba

Pst.go-3pf Europe

‘They [feminine] went to Europe.’

Not: ‘Some women went to Europe.’

Although null objects do not co-refer with an antecedent, they nonetheless obligatorily bear a semantic dependency to an antecedent. That antecedent provides the description attributed to the discourse referent the null object introduces. Accordingly, the examples in (19) cannot be interpreted as asserting that Mohammad saw or caught *something*. They can only mean that Mohammad saw a dolphin, not a boat or plane, or that he caught a ball, not a rock or a leaf. This is especially clear when the gap is embedded under negation. Example (23) is not interpreted to mean that I didn’t buy anything, but only that I didn’t buy coffee. It is compatible with the continuation that asserts that I bought other things.

(23) muna štar-it qahwah mi-s-sūq, w ana mā štar-ēt, ləʔənn-oh ʕand-na qahwah.
bass štar-ēt sakkar w ḥalīb.

Mona Pst.buy-3sf coffee from-the-market, and I Neg Pst.buy-1s, because-it at-
us coffee, but Pst.buy-1s sugar and milk

‘Mona bought coffee at the market, but I didn’t buy [any], because we have
coffee, but I bought sugar and milk.’

If the context fails to make any antecedent available at all, then object drop is ill-formed, as (24) shows. As the introductory utterance in a new discourse, there is no description for the null object of *štara* ‘buy’ to take as an antecedent. In this case, it may not simply be interpreted as an unrestricted existential quantifier, in which case (24) would assert that Mona didn’t buy anything at the market. The fact that this interpretation is not available means that the dropped DP object must associate with an antecedent. No default interpretation is available to it.

(24) *muna rāḥ-it əs-sūq bass mā štar-it.

Mona Pst.go-3sf the-market but Neg Pst.buy-3sf

(‘Mona went to the market but didn’t buy anything’)

This means that object drop in Arabic has an anaphoric component: the object may drop only under identity with an antecedent. Again, ‘identity’ does not extend to identity in reference. On the contrary, the fact that the dropped object must be indefinite precludes sameness of reference, a point we expand on below. But the dropped object must be identical in form to its antecedent. It is, however, sensitive to the internal structure of the antecedent. Modification material associated with the

antecedent may or may not be associated with the dropped object. The dropped object in (25a) is interpreted most naturally as referring to Indian tea, that is, the whole antecedent NP including the modifier. The second clause in (25a) denies that I bought Indian tea, not that I bought any tea at all, since it is compatible with the continuation that asserts that I bought Sri Lankan tea. But the first clause in (25a/b) is also compatible with the continuation shown in (25b), which asserts that I bought tea, just not Indian tea.

(25) a. muna štar-it šāy hindi mə-s-sūq, w ana mā štar-ēt. bass štar-ēt šāy səri lanki.

Mona Pst.buy-3sf tea Indian from-the-market, and I Neg Pst.buy-1s.

but Pst.buy-1s tea Sri Sankan

‘Mona bought Indian tea at the market, but I didn’t buy [Indian tea].

But I bought Sri Lankan tea.’

b. muna štar-it šāy hindi mə-s-sūq, w ana baḡad štar-ēt. bass əš-šāy māli səri lanki.

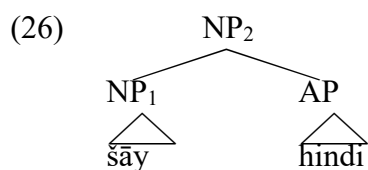
Mona Pst.buy-3sf tea Indian from-the-market, and I also Pst.buy-1s.

But the-tea mine Sri Lankan

#‘Mona bought Indian tea at the market, and I did, too. But my tea is

Sri Lankan.’

This means that the antecedent for the null object in the second clause in each of (25a) and (25b) may be construed as either of the lower or higher NPs in (26), representing the structure of the NP *šāy hindi* ‘Indian tea’ in the first clause. The null object refers back to NP₂ in (25a) but only to NP₁ in (25b).



In both cases, the null object is interpreted as identical in form to the antecedent, though the antecedent may be construed as a subtree of a previously occurring nominal. We conclude that object drop in OA is restricted by the principle in (27), which enforces identity in form between the dropped object and its antecedent. This principle is just like the identity requirement in VP ellipsis in English and other languages with VP ellipsis, but in Arabic pertains only to DP-drop. This points to an ellipsis analysis of object-drop in Arabic, according to which the object is present in the gap but is elided under identity with its antecedent.

(27) **Same Form Requirement (SFR):** A dropped DP object must be interpreted as identical in form to its antecedent.

The syntactic context of the antecedent does not seem to restrict the dependency. The antecedent may occur in an adjunct clause, as in (28a), where the antecedent for the null object is water, or be a subject, as in (28b), where the antecedent is candles.

(28) a. Muna tlawwm-it [ləʔən-ha nas-it ti-štiri māy], lākin ʔana štarē-t.
 Muna Pst.be.frustrated-3sf [because-she Pst.forget-3sf 3sf-buy water]
 but I Pst.buy-1s

‘Muna was frustrated because she forgot to buy water, but I bought [water].

b. mā kān šay šamʕ fə-l-kartūn, lākin haṣṣal-t fə-d-dorg.

Neg Pst.be.3sm any candles in-the-box, but Pst.find-1s in-the-drawer

‘There weren’t any candles in the box, but I found [candles] in the drawer.

We now address the indefiniteness requirement on object drop mentioned above, and refine it somewhat. As remarked above, a referential object cannot be dropped. An object that is interpreted as co-referential with, or bound by, an antecedent must surface obligatorily as a clitic pronoun, as in (8c) and (12b) respectively.

But Algryani mentions a striking exception to the indefiniteness requirement on object drop, namely that a possessive DP may be dropped, though possessed DPs are referential and semantically definite (Keenan and Stavi 1986, van Benthem 1983). The OA example below is modeled after Algryani’s example (310), p. 122.

(29) ʔaḥmad šabay siyyārt-oh, lākin mḥammad mā šabay

Ahmad Pst.paint.3sm car-his, but Muhammad Neg Pst.paint.3sm

‘Ahmad painted his car, but Muhammad didn’t.’

In (29), the dropped object is interpreted as identical in form to its antecedent *siyyārt-oh* ‘his car’, in accordance with the SFR. But Algryani does not remark on a significant interpretational facet of (29). The occurrence of the possessive pronoun -*oh* ‘his’ in the covert copy is obligatorily bound locally by the subject of the second

clause *mhammad*. The sentence means that Ahmad painted his car but Muhammad didn't paint his own (Muhammad's) car. This is what Ross (1969) calls the 'sloppy' reading of the unpronounced pronoun, since its referent differs from that of the corresponding pronoun in the antecedent for ellipsis. The 'strict' reading, in which the pronoun has the same referent as its counterpart in the antecedent for ellipsis, is possible in VP-ellipsis contexts in English, as (30) shows. This example asserts most naturally that it wasn't Ahmad who painted Ahmad's car, rather Mohammad painted Ahmad's car.

(30) Ahmad didn't paint his car, rather Mohammad did.

A strict reading of (29) along the lines of (30) is not available in OA, presenting yet another contrast between VP ellipsis and the phenomenon of object drop in OA. The impossibility of a strict reading is easier to see in examples like (31) below. A natural interpretation of (31a) would be that since Ahmad didn't clean his room, his mother cleaned it, that is, Ahmad's room. But (31a) only has the pragmatically odd interpretation that Ahmad's mother cleaned her *own* room. The possessive pronoun in the antecedent *higirt-oh* 'his room' is obligatorily reconstrued in the dropped counterpart as referring to the local antecedent *ʔumm-oh* 'his mother', so that (31a) asserts that Ahmad didn't clean his room but his mother cleaned hers. Likewise, (31b) can only mean that Ahmad didn't finish his homework but Balqees finished her own homework, not that she finished Ahmad's homework for him.

(31) a. ʔahmad mā naððaf higirt-oh, lākin ʔumm-oh naððf-it

Ahmad Neg Pst.clean.3sm room-his, but mother-his Pst.clean-3sf

‘Ahmad didn’t clean his room, but his mother cleaned hers.’

b. ʔahmad mā xallaṣ wāgbāt-oh lākin balqīs xaṣ-it.

Ahmad Neg Pst.finish.3sm homework-his but balqees Pst.finish-3sf

‘Ahmad didn’t finish his homework, but balqees finished hers.’

These observations lead us to postulate a second requirement on object DP-drop in addition to the SFR, namely the requirement that a dropped object must be referentially disjoint from its antecedent. See Giannakidou and Merchant (1997) for similar remarks on object drop in Greek.

(32) **Different Referent Requirement (DRR):** a dropped object must have a different referent than its antecedent.

We claim that the DRR subsumes the indefiniteness requirement. That is, there is no indefiniteness requirement per se on object drop in Arabic. The indefiniteness requirement is an epiphenomenal interaction of the SFR and DRR. A dropped object DP must have an antecedent and must be construed as identical in form to that antecedent, yet be disjoint in reference to that antecedent. Typically, if the antecedent is definite, it refers to a referent that is unique in the discourse context. A null object then would have to be identical in form to that definite antecedent but yet not refer to the same element. But if the referent of the definite antecedent is unique in the discourse, as its definiteness requires it to be, then the null copy of the definite antecedent has no choice but to refer to that same referent, the unique potential referent in the discourse. But this is banned by the DRR. If the antecedent is indefinite, the null object DP may be construed as identical in form to the antecedent

while introducing a new discourse referent, distinct from the discourse referent the antecedent introduces, which satisfies both the SFR and the DRR.

Two exceptions to the indefiniteness requirement on dropped objects support its formulation in terms of the SFR and the DRR. First, a possessive DP like *siyyārt-oh* ‘his car’, though semantically definite, can be construed as distinct in reference to a superficially identical antecedent by giving the possessive pronoun in the copy a distinct referent from that in the antecedent. This is a typical option for pronouns found in ellipsis contexts known as a ‘sloppy’ reading of the pronoun, as mentioned previously. The fact that sloppy readings are generally available in ellipsis contexts suggests that object DP-drop in Arabic is ellipsis, but only of the DP itself, not of more than that. That is, Arabic has DP ellipsis but not VP ellipsis.

Second, the formulation of the indefiniteness requirement as an interaction of the SFR and the DRR does not strictly require the antecedent itself to be indefinite. We have seen in examples like (25b) that a null object may refer back to a subtree of a previously occurring DP. If a previously occurring DP is definite, nothing in principle prevents a null object from referring back to the NP inside that DP, and introducing a new discourse referent with that description. This, we claim, is what is going on in examples like those in (33). In (33a), the speaker mentions a house that was previously under discussion, saying that the real estate agent said that it was still available. In the second clause, the speaker asserts that he or she has already bought a house, with a null object referring back to the description *bēt* ‘house’, which the definite antecedent provides. But the null object is not construed as definite. It borrows its descriptive content from the NP occurring in the (definite) antecedent, but introduces a new discourse referent with that description. Example (33b) presents the same kind of situation, where the speaker refers to previously mentioned paint but

then uses a null object which inherits the descriptive content *ṣaby* ‘paint’ from the definite antecedent but introduces a new discourse referent with that description.

- (33) a. ʔis-simsār qāl ʔinn l-bēt mā btāʕ baʕd-oh, lākin ḥana xalāṣ ʕtarē-na.
 the-agent Pst.say.3sm that the-house Neg Pst.be.sold.3sm yet-3sm, but
 we already Pst.buy-1p

 ‘The real estate agent said that the house had not been sold, but we had already bought [a house].’

- b. ʔiṣ-ṣabbāy qāl ʔinn ṣ-ṣaby baʕd-oh mā xallaṣ, lākin ḥana xalāṣ ʕtarē-
 na.
 the-painter Pst.say.3sm that the-paint yet-3sm Neg Pst.finish.3sm, but
 we already Pst.buy-1p

 ‘The painter said the paint wasn’t used up yet, but we had already bought [paint].’

This analysis nonetheless predicts that verbs that require a definite object will not be compatible with a null object, since here sameness of reference is unavoidable. For example, subject experiencer verbs select a generic reading of a mass or bare plural object (Erteschik-Shir 1997, Hallman 2004), and generic DPs in Arabic are obligatorily morphologically definite (as in French and a variety of other languages, see Longobardi 1994, Chierchia 1998). Accordingly, the object of a subject experiencer verb like *ḥabb* ‘love’ or *karah* ‘hate’ may not be null, as (34) shows. Assuming, following Carlson (1977), Chierchia (1998) and others, that the antecedent *l-qahwah* ‘the coffee’ (meaning coffee in general) refers to a kind, the null object in (34) that refers back to that antecedent cannot fail to refer to the same thing, the

unique kind that *l-qahwah* denotes. But this violates the DRR, which makes (34) ungrammatical.

- (34) *mḥammad yi-krah l-qahwah bass ʕali y-ḥibb
Muhammad Impf-hate.3sm the-coffee but Ali Impf-love.3sm
(‘Muhammad hates coffee but Ali loves [coffee].’)

We take these observations to support the two principles we propose here governing the use of null objects in Arabic. A null object must acquire its descriptive content from a nominal antecedent but may not refer to the same discourse referent as that antecedent, mimicking the canonical property of indefinites that they introduce new discourse referents. This analysis captures the surprising fact that null objects may refer back to possessive DPs, which are semantically definite, but which may avoid sameness of reference through a sloppy construal of the possessive pronoun.

5. Omani Arabic in typological perspective

Before concluding, we briefly touch on the relevance of these results to certain typological generalizations. It is well known that cross-linguistically, subjects tend to be definite and objects tend to be indefinite. Put another way, subjects tend to refer to given, previously mentioned, information, while objects tend to introduce new material (Givón 1976). This tendency manifests itself in a variety of forms. In some languages, subjects must be definite, though objects may be either definite or indefinite. In other languages, objects must be indefinite, though subjects may be definite or indefinite (Keenan 1976, Givón 1978). Languages in which subjects must

be definite and objects must be indefinite are rare, but Keenan (1976) observes that Tagalog is such a language. There are, at any rate, no languages in which this tendency is reversed, i.e., no language in which subjects must be indefinite or objects definite.

In Classical (and Modern Standard) Arabic, overt DP arguments manifest this tendency in a subtle way. While objects may be definite or indefinite, the definiteness of subjects is connected to both word order and agreement. Arabic admits an alternation between SVO and VSO word order. In the SVO order, the subject must be definite or specific (modified indefinite). In the VSO order, it may be definite or indefinite. However, in the VSO order, agreement between the subject and verb is defective; agreement persists for gender but not number. Since verb agreement is a canonical subject property (Keenan 1976), the failure of number agreement in the VSO order makes subjects in that order less subject-like than in the SVO order, supporting the generalization that ‘strong’ subjects, those that trigger verb agreement for number, must be definite, while objects may be definite or indefinite. In fact, Soltan (2007) argues that preverbal subjects in Arabic are topics, while Givón (1976) claims that topics are generally the true controllers of agreement, and subjects as such are merely grammaticalized topics. Objects do not trigger verb agreement in Arabic under any circumstances, in accordance with this typological generalization.

What we see for null DPs in OA, though, is a much stricter association of subjecthood with definiteness and objecthood with indefiniteness than is seen for overt arguments in either Classical Arabic or modern Arabic. Null DPs in OA manifest the rare (Tagalog-like) strict correlation between grammatical function and definiteness. In light of our claim that the DRR subsumes the indefiniteness requirement, it is more accurate to say that null subjects are referential (they refer to

previously mentioned individuals) while null objects are (existentially) quantificational (they introduce new referents to the discourse). We continue to refer to (individually) referential terms as ‘definite’ and (existentially) quantificational terms as ‘indefinite’ for the sake of harmony with the terminology of the typological literature. Null DPs in OA, unlike overt DPs, do not overlap in their potential definiteness. Subjects are only definite and objects are only indefinite.

If the conclusions above are correct, OA is both a null subject and a null object language. But null subjects and objects differ in definiteness strictly, along the lines of the typological generalization described above. Further, since subjects trigger verb agreement and objects do not, definiteness correlates with agreement for null DPs as well, so that OA displays the three-way correlation in (35), where markedness refers to agreement on the verb.

- (35) a. subject = given = marked
b. object = new = unmarked

6. Conclusion

In this paper, we have considered two analyses of object drop in OA, a verb-stranding VP ellipsis analysis and an object-ellipsis analysis. Finding that the first is inadequate, we have developed an object ellipsis analysis. A close look at ‘missing’ objects in OA reveals that several different processes are involved. One ellipsis process targets argument PPs. Argument PPs may elide under identity with an antecedent but no semantic restrictions obtain. Another grammatical effect responsible for what looks like PP ellipsis is the existence of covert locative and

temporal pro-PPs, covert counterparts to *there* and *then*. Lastly, object DP ellipsis itself is subject both to the sameness of form requirement (SFR) typical of ellipsis in general, but also a differentness of reference requirement (DRR). We claim that object DP ellipsis is not subject to an indefiniteness requirement as such, but that the SFR and the DRR interact to mimic an indefiniteness requirement. Supporting this view, a null object DP may have a possessive DP as antecedent as long as the possessive pronoun receives a sloppy reading in the ellipsis site, so that the elided DP itself has a different referent from its antecedent. Further, the null object DP may even have a definite antecedent if for pragmatic reasons the discourse referent it introduces can be construed as disjoint from the referent of the definite antecedent. We conclude that OA does not display VP ellipsis, but does display PP and DP ellipsis subject to certain restrictions.

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