VP ellipsis in Libyan Arabic

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Outline:

- VP ellipsis: background
- VP ellipsis in Libyan Arabic
- Modal ellipsis
- Verb-stranding VP ellipsis (VSVP ellipsis)
- Libyan Arabic VSVP ellipsis: VP ellipsis vs. null objects analysis
- Concluding remarks

Aim:

- To discuss a type of verbal ellipsis licensed by the modal verb yagder 'can' and whether this ellipsis can be analyzed as VP ellipsis.
- To discuss apparent cases of verb-stranding VP ellipsis and determine whether such cases can be analyzed as VP ellipsis, null objects/arguments or individual constituent drop yielding a null vP.

1. VP ellipsis: background

• VP ellipsis is a deletion process of an entire verb phrase including the verb, object plus any adjuncts. VP ellipsis is typically licensed by an overt finite auxiliary preceding the elided material (Lobeck 1995; Johnson 2001, 2004; Agbayani & Zoerner 2004; Aelbrecht 2010).

(1) Sara likes to dance, but her husband doesn't [like to dance].

• VP Ellipsis is only grammatical when T is filled with lexical material such as modals, auxiliaries and the infinitival marker 'to' in English; it

is ungrammatical when T is empty or when the VP is the complement of a main verb, as in (2) & (3) respectively.

- (2) a. Because she *(shouldn't) [e], Mary doesn't smoke.b. Dennis rarely plays the piano, but Susan often *(does) [e]
 - c. Pete isn't signing the petition even though most of his friends *(are) [e].
- (3) *Because Mary continued [e], John also started speaking French.

(Lobeck 1995: 47-48)

1.2 VP Ellipsis: a cross-linguistic perspective

Unlike other elliptical phenomena, e.g. sluicing, gapping, stripping, etc, VP ellipsis is less pervasive crosslinguistically. In languages such as Spanish (5), French (6), German (7) and Italian (8), VP ellipsis cannot be licensed by auxiliaries. Such languages are assumed to lack VP ellipsis equivalent to English VP ellipsis (see Lobeck 1995; Busquets 2006).

- (4) Julio hasn't finished his homework, but Juan has.
- (5) *Susana habia leido Guerra y Paz pero Maria no habia [e].
 Susana has read War and Peace but Maria not has (Lopez 1999)
- *Claudine est une bonne etudiante, et Marie est [e] aussi.
 Claudine is a good student, and Mary is [e] too.
 (Lobeck 1995)
- (7) *Hans wird heimfahren und Maria wird [e] auch.Hans will drive home, and Maria will [e] too.
- (8) *Tom ha visto a Lee ma Maria non ha _.. Tom has seen (to) Lee but Mary neg has (Dagnac 2010)

2. VP ellipsis in Libyan Arabic

VP ellipsis occurs in Libyan Arabic (LA) but in limited contexts. LA lacks equivalents to the English pro-forms of 'do' and the perfective 'have'; furthermore, the auxiliary verb 'be' does not license VP ellipsis (9-10).

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(9) *Ali kan yekteb fi l-wažeb w hətta Omar kan. Ali was write.3MS PRT the-homework and too Omar was.3ms intended: 'Ali was doing the homework and Omar was too.'

(10) *Ali ma- kan-š yekteb fi l-wažeb lakin Ali NEG-was.3ms-NEG write-3MS PRT the-homework but Omar kan. Omar was3ms intended: 'Ali wasn't doing the homework but Omar was.'

However, modal verbs such the modal *yogder* 'can' can license VP ellipsis as in (11) and (12).

- (11) Ali ma-yəgder-š yešri siyyara lakin Philipp yəgder.
 Ali neg-can.3ms-neg buy.3ms car but Philipp can.3ms
 'Ali can't buy a car, but Philip can.
- (12) Ali gal inn-ah ma-yəgder-š yiži lakin ane: Ali said.3ms that-he neg-can.3ms-neg come.3ms but I ça?taqid inn-ah yəgder__. think.1ms that-he can.3ms
 'Ali said that he can't come but I think that he can'.

2.1 Modal ellipsis

The modal verb $y \Rightarrow gder$ 'can' seems to license a type of ellipsis resembling VP ellipsis (11)-(14). The cases involve ellipsis in the complement of the modal verb $y \Rightarrow gder$; I will refer to this ellipsis as modal ellipsis. The first question that arises with respect to modal ellipsis is whether it is VP, TP or CP ellipsis.

- (13) humma gədru yəššru šəga w hətta hne: gdərna. they.3mp could.3ms buy.3ms flat and too we could.1mp 'They could buy a flat and we could too.'
- (14) kanu yəgdru yəššru šəga lakin hne: ma-kuna-š nəgdru. were.3MP can.3MP buy.3MP flat but we NEG-were.1MP-NEG could.1MP 'They were able to buy a flat, but we were not able to.'

Modal ellipsis can have different analyses. It can be an instance of VP ellipsis as is the case in English (cf. e.g. Johnson 2001, Merchant 2008b) and in French (Busquets and Denis 2001), an ellipsis site containing a 'null proform', i.e. no internal syntax (cf. Lobeck 1995, Depiante 2001), or a type of modal ellipsis that elides a TP constituent as in Dutch (Aelbrecht 2008) and in French, Italian and Spanish (Dagnac 2010).

In order to find out the category targeted by modal ellipsis in (11)-(14), the syntactic status of the modal *yəgder* and its complement need to be determined.

2.1.1 The modal yəgder 'can'

Modals can be auxiliaries, heads of a modal phrase or V-heads, i.e. lexical verbs. The modal verb *yəgder* 'can' patterns more with lexical verbs. There are arguments in favour of this claim, namely (a) inflection, (b) stackability and (c) argument structure. The data in (15-17) show that the modal is inflected for tense and ϕ -features; the modal can also be preceded by an auxiliary verb (16); finally, it can take a DP argument as a complement (17).

- (15) humma gədru yəššru šaga w hətta hne: gderna. they.3MP could.3MP buy.3MS flat and too we could.1MP 'They could buy a flat and we could too.'
- (16) kanu yəgdru yeššru šəga lakin hne: ma-kuna-š nəgdru. were.3MP can.3MP buy.3MP flat but we NEG-were.1MP-NEG could.1MP 'They were able to buy a flat, but we were not able to.'
- (17) Hisham yəgder il-kors. Hisham can.3ms the-course 'Hisham can (do) the course.'

This indicates that the modal *yəgder* can be used as an auxiliary modal verb as in (15) & (16) and as a transitive lexical verb (17). In the former use, it takes a vP complement, while in the latter it takes a DP complement.

2.1.2 The modal verb yəgder 'can': a raising or control verb

Modal verbs have been analysed as raising verbs in languages such as Dutch and German (Barbiers 1995, Wurmbrand 2003). The modal *yagder* behaves like a raising verb as it

- patterns with raising verbs with respect to allowing inanimate subjects.
- (18) s-siyyara √təgder /*thawal tarfaS tlata nfar. the-car can.3FS / tries.3FS accomodate.3FS three persons 'The car can accommodate three people.'
 - can take inanimate weather-related terms as subjects as in (19); a control verb such as *yihawal* 'try' cannot.
- (19) Sa?taqid inna r-rīh /l-mtar √təgder /*thawal ttayah -ah think.1MS that the-wind/the-rain can.3FS /tries.3FS destroy.3FS.it 'I think that the wind/the rain can destroy it.'

The data in (18-19) indicate that the modal verb 'can' is a raising verb, heading a VP projection. Given that the modal *yagder* patterns more likely with lexical verbs, I argue that it undergoes V-to-T movement just like other lexical verbs in Arabic. Thus, this means that the subject is base-generated in spec vP and it moves to spec TP, while the modal verb, which heads a VP, raises to T.

2.1.3 The complement of modal verb yəgder 'can'

The complement of the modal *yagder* can at least be a VP as it contains a verb and its internal arguments. This complement is not an infinitival complement; as the lexical verb is fully inflected for ϕ -features (20). Tense is carried by the modal verb, which is an indication that the complement of the modal is not a TP.

(20) yəgder / gder yešri siyara. can.3MS / could.3M buy.3MS car 'He can/could buy a car.' The fact that the complement of the verb *yagder* in (21) cannot be introduced by an overt complementiser as in Standard Arabic (22) indicates that it is not a CP. This suggests that the complement of the modal *yagder* 'can' is a vP: TP > VP > vP

(21) yəgder (*inn-ah) yəšri šəga. can.3MS that-he buy.3MS flat 'He can buy a flat.'

Standard Arabic

(22) yastațīSu Zaid-un *(?an) yadhaba ģadan. can.3MS Zaid-NOM COMP go.3MS.SUB tomorrow 'Zaid can go tomorrow.'

2.1.4 Modal ellipsis: diagnosing ellipsis

Modal ellipsis can be analyzed as deletion of a syntactic structure or as a null proform with no structure. There are arguments in favour of the former claim, namely, missing antecedents & extraction.

1. Missing antecedents

Given that the relationship between surface anaphora, e.g. VP ellipsis, and its antecedent is syntactic, VP ellipsis can contain missing antecedents. The pronoun *it* in (23b) must have an antecedent (missing antecedent) in the elided VP; the occurrence of a *camel* cannot serve as an antecedent for *it* as shown in (23c). This indicates that the ellipsis site in (23b) has a syntactic structure.

(23) a. I've never ridden a camel, but Ivan's ridden a camel_i, and he says it_i stank horribly.

b. I've never ridden a camel, but Ivan has, and he says it_i stank horribly. c.*I've never ridden a camel, and it stank horribly.

(Hankamer and Sag 1976)

Modal ellipsis can contain missing antecedents (24), suggesting that there is a syntactic structure in the ellipsis site. Furthermore, the availability of sloppy reading in (24) supports this claim.

(24)Ali ma-gder-š vəttsel b-umm-ah lakin Ali neg-could.3ms-neg call.3ms with-mother-his but gder inn-*ha* Omar e w gal b-sahha žeida. Omar could.3ms e and said.3ms that-she with-health good 'Ali couldn't call his mother, but Omar could and he said that she is in a good condition.'

2. Extraction in modal ellipsis

Extraction is one of the main arguments in favour of assuming a structure in ellipsis, that is, if extraction is allowed from within the ellipsis site, one can argue that there is syntactic structure in ellipsis that hosts the traces left by movement. If extraction is impossible, then this is an indication that ellipsis lacks syntactic structure. Extraction in modal ellipsis is permissible though in limited contexts; (25)-(26) involve movement of the *wh*-phrase out of the ellipsis site in both embedded and matrix *wh*-questions².

- (25) ane: Saraf inna Ali ma-yəgder-š il mablaé. vədfaS Ι know.1ms that Ali neg-can.3ms-neg pay.3ms the sum lakin miš Sarsf man yəgder. but neg know.1mg who can.3ms 'I know that Ali cannot pay the sum, but I don't know who can.'
- (26) a. Sataqad inna Ali ma-yəgder-š yiži l-lhafla. think.1ms that Ali neg-can.3ms-neg come.3ms to-the-party 'I think that Ali can't come to the party'.
 - b. bahi, man yəgder? so who can.3ms 'So, who can?'

2.1.5 Possible analysis for modal ellipsis

The analysis of modal ellipsis in (25) proceeds as follows: the modal *yagder* undergoes V-to-T movement as assumed in Arabic (see, e.g. Fassi Fehri 1993). For ellipsis to take place, I assume that the ellipsis in (25) is licensed by T and triggered by an [E]llipsis feature residing in T (cf. Merchant 2001, 2008). This E feature is coupled with an unvalued $[uV_{[modal]}]$ feature that gets checked by raising the modal verb to T. Once checked, [E] sends the complement of the head in which it resides (the VP) for non-pronunciation at PF



3. Verb-standing VP Ellipsis

In v-raising languages, in which lexical verbs raise to T, main verbs license VP ellipsis. This type of ellipsis is referred to as verb-stranding VP ellipsis (VSVP ellipsis). Below are examples from Portuguese (27), Hebrew (28), and Finnish (29).

(27) A Ana não leva o computador para as aulas, the Ana not brings the computer to the classes [-] porque os amigos também não levam. because the friends too not bring 'Ana does not bring her computer to the classes because her friends do not either'.

(Cyrino & Matos 2002)

² However, object extraction is degraded in the context of modal ellipsis; this issue will not be discussed in this presentation.

(28) dani amar SE - ha- seret tov ,aval moSe lo amar Dani said that the movie good , but Moshe not said 'Dani said that movie is good, but Moshe didn't '.

(Doron 1999: 128)

 (29) Matti ei löytänyt avaintaan, mutta minä löysin. Matti not found key-POSS but I found 'Matti didn't find his key, but I did.'
 (Holmberg 2001: 147)

Libyan Arabic also displays ellipsis cases resembling verb-stranding VP ellipsis (VSVP ellipsis), as in (30). Thus, given that main verbs raise to T in Arabic, it can be assumed that once the verb has moved to T, the vP gets deleted, resulting in vP ellipsis, as illustrated in the tree diagram below.

(30) Nadia šrat siyyara min š-šarika w hətta Ali šre:. Nadia bought.3FS car from the-company and too Ali bought3FS 'Nadia bought a car from the company, but Ali did.'



3.1 Arabic VSVP ellipsis: null-objects vs. VP ellipsis analysis

Verb-stranding VP ellipsis has been analysed as VP ellipsis in Hebrew (Doron 1999; Goldberg 2005), Finnish (Holmberg 2001), Portuguese (Cyrino & Matos 2002), Fasri (Toosarvandani 2009), etc. As far as verb-stranding VP ellipsis in LA is concerned, there are at least two possible analyses:

- 1. The putative verb-stranding VP ellipsis can be analysed as VP ellipsis.
- 2. The putative verb-stranding VP ellipsis can be analysed as null objects/individual constituent drop yielding a null VP.

VSVP ellipsis and null object constructions cannot be easily distinguished in some contexts (31). The fact that all that is deleted in B's answer is the *direct object* makes the distinction between VP ellipsis and null objects rather hard (see Goldberg 2002 and Doron 1990, 1999 for the same issue in Hebrew).

- (31) ane: šre:t siyyara li?əna Dimitri šre:. I bought.1MS car because Dimitri bought.3MS 'I bought a car because Dimitri did.'
- (32) Ali Sadda l-Imadrsa lakin ane: ma-Sadeet-š Ali went.3ms to- the-school but I neg-went.1sm-neg 'Ali went to the school but I didn't'.

The ellipsis in (31) and (32) can be analysed as VP ellipsis, or null objects.

Verb-stranding VP ellipsis





3.2 Null objects in Libyan Arabic

The licensing of null objects depends on the semantic/syntactic features of the DP in the antecedent clause to which the null category refers to. There are two constraints related to animacy and definiteness.

- (33) A: Philipp gal David 1-Imadersa? Plillipp took.3ms David to-the-school 'Did Philipp take David to the school?'
 - B: la, gall *_/√-ah l-ssuug no took.3ms _/-him to-the-market
- (34) Zaid STe: šurTi flus lakin ane: STe:t *_/√-ah ktaab. Zaid gave.3ms policeman money but I gave.1ms_/-him book 'Zaid gave a policeman money but I gave (him) a book'.
- (35) Phillipp šre: malabes l-lkbbaar w ane: Philipp bought.3ms clothes to-the-adults and I šre:t *e* llSSγaar. bought.1ms to-the-young
 'Philipp bought clothes for the adults and I bought (clothes) for the young'

3.3 Arabic VSVP ellipsis: VP-ellipsis vs. null objects analysis

• Argument 1: definiteness & animacy constraints

Given that genuine VP ellipsis does not display animacy and definiteness restrictions, it is expected that the examples in (36) & (37) should be grammatical as VP ellipsis. This prediction is not borne out, thus casting doubts on the analysis of the putative verb-stranding VP ellipsis as VP ellipsis.

(36) A: Philipp gal David 1-Imadersa? Philipp took.3ms David to-the-school 'Did Philipp take David to the school?' B: *e:h, gall ___. yes took.3ms ___ Intended, 'yes, he did'.

(37) *Philipp gre: r-riwaya hedi lakin Sara ma-grat-š. Phillipp read.3ms the-novel this.3fs but Sara neg-read.3fs-neg Intended: 'Phillipp read this novel, but Sara didn't'.

• Argument 2: sloppy vs. strict identity reading

VP ellipsis allows a sloppy identity reading of pronouns in addition to a strict reading. Doron (1999) extended this test to null object and VP ellipsis constructions in Hebrew and concluded that while VP ellipsis allows sloppy identity, null objects display only strict reading. Unlike the case in Hebrew and English, (38) above can only have one reading: '*his brother sold his own car*'; a reading such as '*his brother sold David's car*' is unavailable.

(38) David ma-baa[°]-š sayyart-ah lakin xu-h baa[°]. David NEG-sold.3MS-NEG car-his but brother-his sold.3MS 'David didn't sell his car but his brother did.'

• Argument 3: Adverbial ellipsis

Adverbials in the second conjunct can be deleted along with the verb only if they are identical to the adverbials in the first conjunct (see Xu 2003; Fortin 2007). For instance, the ellipsis in (39) is interpreted as '*John cleaned his teeth carefully* and *Peter cleaned his teeth carefully too*'.

(39) John carefully cleaned his teeth, and Peter did as well.

In Libyan Arabic, the requirement on adverbial deletion does not hold as in genuine VP ellipsis (39). The ellipsis in (40), for instance, is interpreted only as '*Ali speaks Italian*', but not necessarily fluently. This indicates that (40) is not an instance of VP ellipsis.

- (40) David ye-tkallem l-ialiya bi-Talaqqa
 David speaks.3MS the-italian with-fluency
 w hətta Ali ye-tkallem.
 and too Ali speaks.3MS
 'David speaks Italian fluently and Ali does too.'
 - Argument 4: Locative and benefactive PPs

The locative (41) and benefactive (42) PPs cannot only elide as part of VP ellipsis, but also can do so independently. The elided vP in (41) can have two interpretations depending on the context. It can be interpreted as '*Yasin didn't* sleep on the couch' or '*Yasin didn't sleep at all*'.

(41) ane: rgədət Səl ş-şalon, lakən Yasin ma-rgəd-š. I slept.1MS on he-sofa but Yasin NEG-slept.3MS-NEG 'I slept on the sofa, but Yasin didn't.' (intended reading)

Equally, (42) can be interpreted as '*I bought a gift for Yasin' and/or 'I bought a gift'*. I take two cases as an argument that the ellipsis in (41) and (42) does not pattern with VP ellipsis; therefore, it should not be analysed as VP ellipsis.

(42) Sara šrət hadiya l-Yasin w hətta ane: šre:t. Sara bought.3MS gift to-Yasin and too I bought.1MS 'Sara bought a gift for Yasin and I did too'. (intended reading)

4. Concluding remarks

- Modal ellipsis is an instance of VP ellipsis that can be analysed as a PF deletion process.
- The putative verb-standing VP ellipsis cannot be analysed as VP ellipsis; it should be reducible to null object constructions and/or individual constituent drop yielding a null vP.
- Unlike genuine VP ellipsis, the putative *verb-standing* VP ellipsis imposes animacy and definiteness restrictions on the antecedent VP.

• The putative verb-standing VP ellipsis does not displays the salient traits of standard VP ellipsis, e.g. the availability of sloppy identity reading, deletion of *v*P-related material, etc.

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