Restructuring and control in Arabic

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Abstract

This paper examines verbal complex constructions in two varieties of Arabic, namely: Moroccan Arabic (MA) and Najdi Arabic (NA). We provide a novel analysis that departs from the two previous studies that discussed this phenomenon in Lebanese Arabic (LA): Hallman (2011), and Ouwaydah & Shlonsky (2016). We argue that verbal complex constructions are derived using a monoclausal *restructuring* strategy (Wurmbrand 1998, 2001) in which the matrix control verb of *nisa/forget*-type instantiates a monoclausal structure. This is novel in various aspects. First, it departs from and argues against control-based theories and, consequently, a biclausal structure. Second, it provides an account for various properties, including: agreement facts, Cinque's restrictions on adverb distribution, tense and aspect absence on subordinate verbs, and the unexpected occurrence of the VVSO word order. Third, it analyzes new data related to the requirement of voice matching.

Keywords

restructuring – control – verbal complex – Arabic – agreement

1 Introduction

Verbal complex constructions in Arabic have rarely been discussed in the literature. In this paper, we examine these constructions in two varieties of Arabic, Moroccan Arabic (MA) and Najdi Arabic (NA). We provide a novel analysis

of these constructions that departs from the two previous studies that discussed this phenomenon in Lebanese Arabic (LA) (Hallman 2011 and Ouwaydah & Shlonsky 2016). We particularly argue that these constructions are not biclausal, as Hallman and Ouwaydah & Shlonsky proposed (though their analyses differ in non-trivial ways as will be discussed below). Alternatively, we propose that verbal complex construction of nisa-type is a *restructuring* structure in which the matrix verb instantiates a monoclausal structure.[1] The proposed account conforms to the influential analysis of restructuring put forward by Wurmbrand (1998, 2001, 2004), which has increasingly received crosslinguistic support (see Wurmbrand 2014 for a crosslinguistic survey).

This paper is organized as follows. Section 2 discusses the proprieties of verbal complex, followed by a detailed discussion of the two previous studies that examined verbal complex in Arabic (Hallman 2011 and Ouwaydah & Shlonsky 2016). We show that both analyses fall short on empirical and conceptual grounds. The restructuring analysis is introduced in Section 4 and we provide further arguments that support the restructuring analysis in section 5, introducing previously unnoticed data in Arabic that show that any bi-clausal approach (presumably any control theory adopting PRO/pro) will yield wrong predictions. Section 6 concludes the paper.

2   Verbal complex in Arabic

In this section, we describe some general properties of the verbal complexes under investigation in both MA and NA. We then zero in on a special construction namely: VVSO where the subject linearly appears after both the matrix verb and the embedded verb.

2.1   General properties

The properties of verbal complex constructions vary depending on embedding verbs. Here, we will focus on a sub-type of embedding control verbs, *nisa*-type (forget-type) verbs. Note that we are concerned with verbs that embed verbal complements, thus we refrain from discussing nominal complements.[2]

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1 Verbal complex here is meant to refer to two verbs in sequence and we do not mean to adhere to verbal complex analyses as proposed for Romance languages (see Wurmbrand, 2015 for an overview).

2 For a detailed discussion on restructuring and control in Arabic, see (Albaty, to appear).

The first property of *nisa*-type verbs in Arabic is related to subject positions. The subject has particularly three possible positions: (i) before the matrix verb (SVVO), (ii) sandwiched between the matrix and the embedded verbs (VSVO), and (iii) following the embedded verb (VVSO). Examples in (1) illustrate.

(1)   a. {*ʕali*} *nsa/ ħaawəl*   {*ʕali*} *j-ʤiib*   {*ʕali*} *ktaab-u.*   (MA)
          Ali   forgot/tried.3ms Ali   3ms-bring Ali   book-his
          'Ali forgot/tried to bring his book'

      b. {*ʕali*} *nisa/ ħaawal*   {*ʕali*} *j-ʤiib*   {*ʕali*} *ktaab-uh.*   (NA)
          Ali   forgot/ tried.3ms Ali   3ms-bring Ali   book-his
          'Ali forgot/tried to bring his book'

Tense and Aspect restriction is another property for verbal complex constructions in Arabic. In particular, the matrix verb is required to be finite and the embedded verb (V2) be non-finite imperfective. Violation of this restriction renders the sentence ungrammatical as shown in (2).

(2)   a. **nsa*   (*ʕali*) ***ʤaab***   (*ʕali*) *ktaab-u.*   (MA)
          forgot.3ms (Ali)   brought.3ms (Ali)   book-his

      b. **nisa*   (*ʕali*) ***ʤaab***   (*ʕali*) *ktab-uh.*   (NA)
          forgot.3ms Ali   brought.3ms Ali   book-his

The examples above show that when the embedded verb is tensed/finitie, as in the case of *ʤaab* 'brought', the sentence is ungrammatical. For the sentence to be grammatical the non-finite (i.e., imperfective) form of the verb, *yʤiib* 'bring' has to be used, as shown in (1) above. This turns out to be an important property of control verbs of *nisa*-type and will be critical in evaluating the proposals put forward to account for these constructions.

   Tapping onto the same point, the embedded verb cannot also be aspectually marked, as shown in (3). This might be expected given that V2 is required to be non-finite, and one might assume that aspectual marker is subsumed under this requirement as well.

(3)   a. **nsa*   ***ka-jʤiib***   *ktaab-u.*   (MA)
          forgot.3ms Asp bring.3ms book-his

      b. **nisa*   ***b-jʤiib***   *ktaab-uh.*   (NA)
          forgot.3ms Asp-bring.3ms book-his

The presence of complementizers in complex constructions is also interesting as the two varieties differ in this respect; while MA does not allow the presence of the complementizer *bəlli* or the mood marker *baʃ* with the verb *nsa* "forgot" as in (4a) and (4b) respectively, NA allows for the complementizer as shown in (4c).

(4) a. *nsa*   {ʕali} bəlli **j-dʒiib**   {ʕali} ktaab-u.   (MA)
        forgtot.3ms Ali   that 3ms-bring   book-his

     b. *nsa*   {ʕali} baʃ **j-dʒiib**   {ʕali} ktaab-u.   (MA)
        forgot.3ms Ali   SM 3ms-bring   book-his

     c. *ħaawal* {ʕali} (ʔin/ʔinnu-h) **j-dʒiib**   {ʕali} ktaab-uh.   (NA)
        Tried   Ali   SM/that-him 3ms-bring   book-his
        'Ali tried to bring his book.'

It is also important to notice that even though NA allows for the presence of a complementizer with nisa-type verbs, the requirement of non-finiteness of the embedded verb is still respected. Violation of this requirement renders the sentence ungrammatical as shown in (5).

(5) *ħaawal ʔinnu-h **dʒaab** ʕali ktaab-uh   (NA)
      Tried   that-him brought Ali book-his

Notice, however, that introducing the complementizer makes the sentence ambiguous: obligatory control and no-control interpretations are possible. This is shown in (6) and (7). On the other hand, the sentence without the complementizer has only an obligatory control reading as shown in (8).[3,4]
■1 comma removed, ok?

(6) *ħaawal* (ʔinnu-h/ʔin) **j-dʒiib**   ʕali ktaab-uh.   (NA)
      tried.   that-him/SM 3ms-bring Ali book-his
      'someone tried for Ali to bring his book.' (No-control reading)
      'Ali tried to bring his book.' (Obligatory control reading)

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3 We would like to thank an anonymous reviewer for suggestions and comments about complementizer facts discussed here.

4 In NA, *ʔin* with *nisa* has only the obligatory control reading.

(7) *Nisa   (ʔinnu-h) **j-ʤiib**   ʕali ktab-uh*   (NA)
      Forgot that-him 3ms-bring Ali book-his
      'someone forgot that Ali *should* bring his book.' (No-control reading:
      Modal reading)
      'Ali forgot to bring his book.' (Obligatory control reading)

(8) *nisa/ħaawal **j-ʤiib**   ʕali ktab-uh.*   (NA)
      forgot/tried. 3ms-bring Ali book-his
      'Ali forgot/tried to bring his book.' (obligatory control reading)
      # 'Alii forgot/tried PROi/k to bring his book.' (Non-obligatory control read-
      ing)
      # 'Someone forgot/tried that Ali brings his book.' (No-control reading)

Given the above facts, NA is similar to Lebanese Arabic (LA) discussed in Hall-
man (2011) where he finds that the complemntizer *ʔinno* in LA is ambiguous
between a finite and a non-finite head, and that the matrix verb selects its finite-
ness feature (+/-).[5] We take finite *ʔinnu* in NA as a complementizer while the
non-finite *ʔin/ʔinnu* as a subjunctive mood head (see Aoun 1981 for a similar
assumption in Standard Arabic). The NA finite *ʔinnu* corresponds to MA *bəlli*
and non-finite *ʔinnu* corresponds to the MA *baʃ*. In Standard Arabic (SA) as in
other verities, the subjunctive mood is selected by some verbs such as modal
verbs and control verbs. The subjunctive phrase is generally restricted in terms
of aspect/tense in that the embedded verb has to be in the imperfective form
and aspectual or tense marking is not tolerated. This is shown in (9). Similar
properties are found in both MA and NA as shown in (3) above. The classifica-
tion of the non-finite *ʔinnu* in NA as a subjunctive mood head therefore seems
to follow straightforwardly. One argument for this classification comes from
adjacency requirement found in both SA and NA. In particular, the subjunctive
mood head (*ʔan* in SA and *ʔin/ʔinnu* in NA) has a strict adjacency requirement
with the embedded verb. Breaking the adjacency leads to ungrammaticality as
shown in (10) and (11).[6]

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5 NA is also similar to LA in that using the complementizer with *nisa* 'forgot' triggers a modal-
    ity reading under the non-control reading as shown in (7) (See Hallman (2011) for a detailed
    discussion).
6 See Albaty (In Progress) for further compelling evidence for the classification of mood and
    complemntizer heads in SA.

(9) *nasiya   ʕali-un   ʔan juħdˤir-a/*aħdˤara/*sa-yuħdˤiru*
    forgot.3ms Ali-NOM SM   bring- SUBJ /brought / FUT-bring
    kitaaba-hu.   (SA)
    book-his
    'Ali forgot to bring his book.'

(10) **nasiya   ʔan ʕali-un   juħdˤir-a   kitaaba-hu*   (SA)
     forgot.3ms SM Ali-NOM bring- SUBJ book-his
     'Ali forgot to bring his book.'

(11) *#nisa   ʔinnu-h/ʔin ʕali ʤiib   ktab-uh*   (NA)
     forgot.3ms SM-him/SM Ali bring.3ms book-his
     Intended: ('Ali tried to bring his book.')

In the SA example (10), the subject intervenes between the mood head and the
embedded verb, violating the adjacency requirement. This results in ungram-
maticality. Similarly, (11) shows that the same applies in NA and violating the
adjacency requirement renders the sentence infelicitous under the intended
control reading (though it is felicitous under the No-control reading). Notice
that this sentence differs minimally from the well-formed sentence in (6) where
the adjacency requirement is respected.[7,8]

2.2.   *VVSO construction*
Given the above description of verbal complex constructions in Arabic, we are
particularly interested in the construction where the subject of the matrix verb

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7   An anonymous reviewer suggested that (11) might be unacceptable due to having both a pro-
    noun and an overt subject in sequence. However, this sequence is, in fact, acceptable in this
    variety but under a different interpretation as given below. This shows that the unaccept-
    ability of (11) cannot be reduced to the sequence restriction because it is accepted in this
    language.
    i. *ħaawal   proi   ʔinnu-hi ʕali ʤiib   ktab-uh.*   (NA)
        tried.3ms that-him Ali   bring book-his
        'He tried that Ali brings his book.'
8   The same reviewer asks why the clitic pronoun in *ʔinnu-h* does not break the adjacency
    requirement in (11), for instance. This is an interesting question to which we suggest a plau-
    sible answer here. One might consider the non-finite *ʔinnu-h* as one word (*ʔinnuh*) and that
    this is a case of complementizer agreement. In other words, *-h* is in this case a complemen-
    tizer agreement and not a pronominal clitic marked in (i) above. In fact, this is supported by
    examples such as (11) under the OC reading; if -h in *ʔinnu-h* were a pronoun, one would expect
    to see a Condition C violation, contrary to fact. See Omari (2011) for a similar suggestion for
    Jordanian Arabic.

is following the embedded verb (v2) yielding the word order VVS(O). This puz-zling order was first noticed by Hallman (2011) in Lebanese Arabic and was also analyzed in Ouwaydah and Shlonsky (2016). Hallman (2011) analyzed the verbal complex of *nisa*-type verbs as a bicalsual restructuring construction (Rizzi 1982; Kayne 2005, among others). In particular, he argues that this construction starts as a biclausal structure and undergoes a clause-union effect that makes the structure transparent to operations that are otherwise locally constrained (see Kayne 2005). On the other hand, Ouwaydah and Shlonsky (2016) argued against Hallman's restructuring account, proposing a remnant XP-movement analysis. We assume, with Hallman (2011), that the verbal complex of *nisa*-type verbs is a case of restructuring observed crosslinguistically (Rizzi 1982; Cinque 2006; Wurmbrand 2001, 2007, 2014). In this respect, we argue against the remnant XP-movement analysis on both empirical and conceptual grounds. However, we also depart from Hallman's account by proposing a restructuring account along the lines of Wurmbrand (1998, 2001, 2004, 2014). In particular, we pro-pose a restructuring account that argues for a monoclausal structure and that there is no stage in the derivation where the construction is biclausal. Before delving into much detail of the proposed account, the two previous accounts (Hallman (2011) and Ouwaydah and Shlonsky (2016) will be discussed.

■non-matching parenthesis

3   Previous accounts
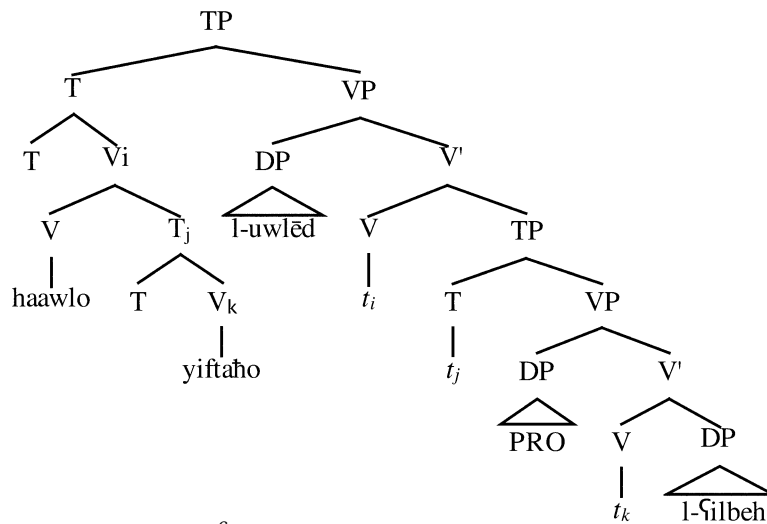
3.1   *The clause unification analysis*

Hallman (2011) treats verbal complex constructions in LA as a case of restruc-turing (or *clause unification*) that have been observed cross-linguistically (Rizzi 1982; Aissen and Perlmutter 1986, and Wurmbrand, (1998, 2001)). Henceforth, we will call this analysis the *clause unification analysis*. Arguing that the embed-ded clause is non-finite and a case of obligatory subject control, Hallman posits that a construction such as (12) is restructuring and argues convincingly against other possible accounts such as backward control (Polinsky & Potsdam 2002) or PF lowering.

(12) a. *nesi*   (*ʔenno*) *jdʒiib*   *saami daftar-o.*   (LA)
         forgot.3ms (FIN)   bring.3ms Sami   notebook-his
         'Sami forgot to bring his notebook' (Ouwaydah and Shlonsky, 2016: 3)

     b. *ħaawal-o l-uwled_i   jiftaħ-o   PRO_i l-ʕilbeh.*
         tried-3pl the-children_i open-3pl   PRO_i the-box
         'The children tried to open the box.' (Hallman 2011: 60)

In this respect, Hallman takes *nisa*-type verbs as restructuring verbs and adopts Kayne's (1989) approach in his analysis. He argues that sentences with restructuring verbs are *biclausal* and that the VVSO order is derived by successive-cyclic head movement of the embedded verb to the matrix clause, adjoining the matrix verb. The derivation provided for sentence (12) above is given in (13). ■ "(13)" added, please check

(13)

HALLMAN 2011: 61

The clause unification analysis clearly assumes a control structure for the verbal complex constructions (i.e., PRO). That is, two TPs are posited and two thematic subject arguments are merged with each verb. The matrix subject is an overt subject that controls the embedded non-overt subject (PRO). The clause unification analysis assumes, as given in (13), that the embedded verb ■ "(13)" added, please check moves first to adjoin the embedded T, followed by moving the complex T to the matrix V. The VVSO word order obtains by a further movement of the matrix complex V to the matrix T.

Even though the clause unification analysis provides a way to account for the VVSO word order, it faces three issues. The first one has been raised by Ouwaydah & Shlonsky (2016) which has to do with the placement of adverbs; they argue that adverb placement under the clause unification account is puzzling. Consider the following examples:

(14) a. *Nsa ma-jʤiib dəɣya ʕali ktaab-u*   (MA)
   forgot.3ms Neg-3ms.bring. quickly Ali book-his
   'Ali forgot not to bring quickly his book'

b. *Nisa*   ***ma**-jʤiib*   ***bsirʕih** ʕali ktaab-uh*   (NA)
 forgot.3ms Neg-3ms.bring quickly Ali book-his
 'Ali forgot not to bring quickly his book'

Furthermore, assuming verb-raising movement to account for the verbal complex, the clause unification analysis is challenged by the above examples. As pointed out in Ouwaydah & Shlonsky (2016) (O & S, henceforth), it only predicts two word orders with respect to embedded clause adverbs. The v-Neg-Adv-v-s-o word order is derived by a head movement of the embedded verb to the matrix clause and the adverb is tagged along, thus, forced to precede the verb (15). The v-Neg-v-s-Adv-o word order occurs when the embedded verb moves to the matrix clause but the adverb is left in situ (16). Given that, a head movement analysis to verbal complex (vvso) would only allow these two word orders. Thus, the clause unification analysis would incorrectly predict the well-formed sentence in (14) to be ungrammatical. Notice that the clause unification analysis assumes control in vvso; that is, the overt subject is in the matrix clause and is the controller of PRO. This makes the adverb *quickly* in (14) unexpected given that it precedes the matrix subject but follows the embedded verb.[9,10]

(15) *nesi*   (*ʔennu*) *ma deghri   jʤiib   saami*
   forgot.3ms (SM)   not immediately bring.3ms. Sami
   daftar-o   (LA)
   notebook-his
   'Sami forgot to not immediately bring his notebook' (O & S 2016: 6; =(13a))

(16) *Nesi*   (*ʔennu*) *ma jʤiib   Saami deghri*
   forgot.3ms (SM)   not bring.3ms Sami   immediately
   daftar-o   (LA)
   notebook-his
   'Sami forgot to not immediately bring his notebook' (O & S 2016: 6; =(15))

Cinque's (1999) hierarchy posits another challenge to the clause unification analysis. Cinque proposes a fixed hierarchical order of adverbs in clause structure. In particular, Cinque argues that due to semantic restrictions and properties, the same adverb cannot be used twice in monoclausals. This is ascribed

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9   For consistency, we slightly modified the glossing from the source. The non-finite *ʔinnu* in
      LA is glossed as FIN while finitie *ʔinnu* is taken as Force in O & S (2016), assuming Rizzi's
      (1997) left periphery.
10   (15) is actually ungrammatical in both MA and NA.

to the proposal that adverbs are specifiers of semantically related projections (Cinque 1999, 2006). Since this assumption of adverb has been attested in various languages and argued to be a monoclausality diagnostic (Cinque 2006), it will be used here as a diagnostic of monoclausality vs. biclausality of vvso constructions in Arabic. With this in mind, notice that the clause unification analysis assumes a biclausal structure. A prediction of this account, therefore, is that two instances of the same adverbs would be grammatical; one adverb modifies the matrix verb and the other modifies the embedded verb. This prediction, however, is not borne out in MA and NA as shown in (17).

(17) a. *nsa   *dəɣya jʤiib   dəɣya ʕali ktaab-u.*   (MA)
          forgot.3ms quickly 3ms.bring quickly Ali book-his

      b. *nisa   *bsirʕih jʤiib   bsirʕih ʕali ktaab-uh.*   (NA)
          forgot.3ms quickly 3ms.bring quickly Ali book-his

The occurrence of the adverb *quickly* twice in the verbal complex is ungrammatical in both varieties. This is neither predicted nor accounted for under the clause unification analysis. In this respect, Cinque argues that this is due to a crosslinguistic hierarchy of functional heads that provides a fixed order of adverbs based on their semantics. Thus, having two instances of the same adverb in a monoclausal structure is not legitimate (for further discussion, see Cinque 1999 and 2006). Further support for the validity of the restriction of using the same adverb twice comes from uncontroversial biclausal constructions. With non-restructuring verbs (i.e., propositional verbs), the prediction is that this restriction would not be observed. The prediction is borne out in both MA and NA as shown in (18) respectively.

(18) a. *xbər-ni   dəɣya ʕali bəlli ʤaab-t   dəɣya   sara ktaab-ha.*
          informed-me quickly Ali that brought-3fs quickly Sara book-her
          'Ali quickly informed me that Sara brought her book quickly'

      b. *ʕalam-ni   bsirʕih ʕali ʔinnuh ʤaabat   bsirʕih sarah*
          informed-me quickly Ali that   brought.3fs quickly Sara
          ktaab-ah.
          book-her
          'Ali quickly informed me that Sara brought her book quickly.'

The verb *inform* in Arabic is a non-restructuring verb that posits no restriction on having the same adverb in the embedded clause. This is because we have

a biclausal structure, evidenced by the presence of the finite complementizer which is also followed by a tensed perfective embedded verb *brought*. These two properties (finite complemntizer and no tense restriction) are properties of biclausal structures as the discussion below will reinforce.

The third problem facing the clause unification account is related to sentential negation in MA. This variety uses bi-partite negation (*ma-ʃ*) for sentential negation and it is grammatical to use it in both clauses in a biclausal structure as shown in (19).

(19) *ma-xbər-ni-ʃ*   *ʕali bəlli ma-ʒabt-ʃ*   *Sara*
 neg-informed.3ms-me-neg Ali that neg-brought-3fs-neg Sara
 ktab-ha.
 book-her
 'Ali did not inform me that Sara did not brought her book.'

In this respect, the structure Hallman proposes for the VVSO sentences allows for negation to occur in both the matrix TP and the embedded TP with nisa-type verbs. This prediction is not borne out, however, as shown in (20).

(20) **ma-nsa-ʃ*   *ma-jʒiib-ʃ*   *ʕali ktaab-o*   (MA)
 neg-forgot.3ms-neg Neg-3ms-bring-Neg Ali book-his

Even though the clause unification analysis provides an interesting account for the puzzling VVSO construction and opens up a new venue of research in Arabic control structures, it still encounters various issues that call for further investigation, as shown above. Though we assume, with Hallman (2011), that the verbal complex constructions in Arabic are restructuring constructions, we depart from his biclausal account, proposing that it is a monoclausal restructuring, along the lines of Wurmbrand (1998, 2001, 2004, 2014) (see also Cinque 2006; Grano 2012, among others). Next, we discuss the other account for the verbal complex proposed in Ouwaydah and Shlonsky (2016) which argues against a restructuring-based analysis.

3.2 *The remnant-XP movement*
Ouwaydah and Shlonsky (2016) argue against Hallman's proposal, challenging the clause unification analysis with empirical data from Lebanese Arabic (LA). In particular, they contend that Hallman's analysis cannot account for the verbal complex constructions thst have adverbs. As discussed above, the clause unification analysis undegenerates data in that it incorrectly predicts well-formed sentences such as (14) above and (21) to be ungrammatical.
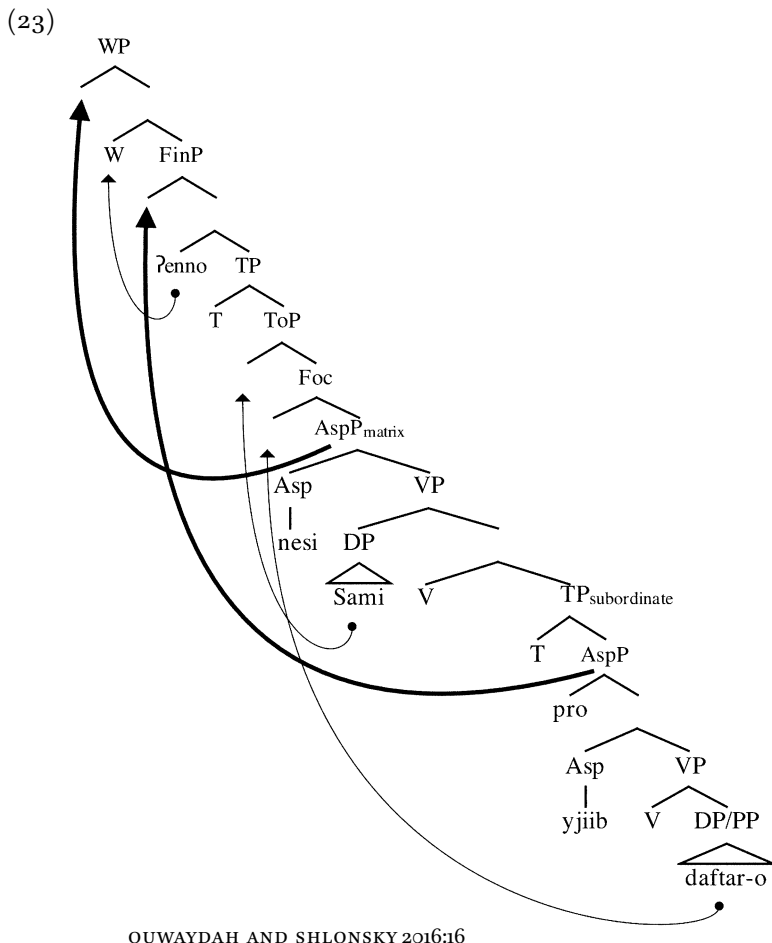
The v-v-s-Adv-o word order is particularly problematic to the clause unification analysis.

(21) *Nesi*   (*ʔenno*) *ma jdʒiib*   **deɣri**   *saami*
     forgot.3ms   (FIN)   not 3ms.bring immediately Sami
     daftar-o   (LA)
     notebook-his
     'Sami forgot to not immediately bring his notebook' (O & S 2016:6)

As alluded to above, the adverb *deɣri* 'immediately' modifies the embedded verb and yet precedes the subject of the matrix verb, *Sami*. Ouwaydah and Shlonsky argue that the placement of the adverb cannot be explained by the clause unification account, which basically posits a head movement of the embedded v to adjoin the matrix one. Head movement is evidently a way to derive the right word order of the verbal complex, but it is puzzling how an adverb of the embedded clause follows the embedded verb, but precedes the matrix subject at the same time. It could be assumed that the embedded verb precedes its adverb by a movement of the embedded verb to a higher functional position, but then it would be unexpected for the matrix subject to follow the adverb. In addition, the head movement approach assumed in the clause unification analysis undegenerates data, as alluded above. For this, Ouwadah and Shlonsky argue that an alternative proposal is called for.

Ouwaydah and Shlonsky, alternatively, adopt Kayne's (2005) approach for infinitives in French and Italian, to analyze the verbal complex in LA. In essence, this account departs from the head-movement approach to posit a remnant-XP approach. They propose an increasingly complex phrasal movement (XP-movement) which starts by topicalizing the embedded object to the matrix clause, followed by topicalizing the matrix subject. This is followed by moving the remnant non-finite subordinate TP to the left periphery, particularly to the specifier of the complemntizer, which in turn moves to even a higher head, called w. The remnant matrix-vp is then attracted to the specifier of w. Thus, the derivation for v-v-s-o sentences such as (22) is (23).

(22) *Nesi*   ('*enno*) *jdʒiib*   *saami daftar-o*   (LA)
     forgot.3ms   (FIN)   3ms.bring Sami   notebook-his
     'Sami forgot to not immediately bring his notebook' (O & S 2016:1)

(23)

WP

W   FinP

ʔenno   TP

T   ToP

Foc

AspP$_{matrix}$

Asp   VP

nesi   DP

Sami   V   TP$_{subordinate}$

T   AspP

pro

Asp   VP

yjiib   V   DP/PP

daftar-o

OUWAYDAH AND SHLONSKY 2016:16

The remnant-XP movement account is rather complex and assumes various unmotivated movements, clearly undesired under economy principles. It nevertheless has various empirical problems. First, being bi-clausal in nature, it inherits the two problems we raised above against Hallman's proposal; namely the restriction of co-occurrence of the same adverb and negation in MA. Both properties are puzzling under this account. In particular, there is no conceivable way to account for the same adverb constraint simply because it proposes a biclausal construction. The same reason also extends to the bi-partite negation in MA. In addition, the remnant-XP movement runs into further empirical issues. First, it is not clear how the remnant-XP analysis would account for double object constructions in embedded clauses, such as (24).

(24) a. *Nisa   j-iʕtˤi   ʕali hind al-ktaab*   (NA)
        forgot.3ms 3ms-give Ali Hind the-book
        'Ali forgot to give Hind the book'

    b. *Nsa   j-əʕtˤi   ʕali l-ktaab   l-hind*   (MA)
        forgot.3ms 3ms-give Ali the-book to-Hind
        'Ali forgot to give Hind the book'

The remnant XP-movement analysis moves the direct object to a peripheral position (*Foc*, as shown in the tree above). This movement should actually be motivated by a Focus interpretation which seems not always to be the case in VVSO. Thus, even though this type of movement is expected within the remnant approach to movement, it is still stipulative. Furtheremore, under such analysis, the indirect object would also vacate the embedded VP, which will also require an additional stipulative movement. This clearly makes the account based on ad hoc assumptions, not empirically supported nor theoretically justified. In this connection, it is thus a sheer stipulation to move all DPS to peripheral positions without any motivation such as focus. It is evident in the above examples, including the LA ones, that the object does not receive a focus reading, making DP movement rather puzzling.

Voice matching provides an interesting empirical argument against the bi-clausal approach to *nisa*-type including both analyses under discussion. In particular, both MA and NA show a uniform behavior in terms of passive in verbal complex constructions. In particular, both verbs (V1 & V2) should have the same voice (active or passive). The voice matching requirement is given in (25). Violating voice matching renders the sentence ungrammatical as given in (26) and (27). As predicted, with typical non-restructuring predicates such as *decide* and *advise*, voice matching is not required as shown in (28).

(25) a. *tənsa   j-tdʒaab   l-ktaab*   (MA)
        forget.**PASS**.3ms 3ms-bring.**PASS**. the-book
        'the book was forgotten to be brought.'

    b. *Insii   j-dʒaab   al-ktaab*   (NA)
        forgot.**PASS**.3ms 3ms-bring.**PASS**. the-book
        'the book was forgotten to be brought'

(26) a. **insii   j-dʒiib   ʕali al-ktaab*   (NA)
        forgot. **PASS** 3ms-bring. **ACT** Ali the-book

b. *nisa   ʕali j-dʒaab   al-ktaab   (NA)
   forgot.3ms. ACT Ali 3ms-bring. PASS the-book

(27) a. *tənsa   j-dʒiib   ʕali l-ktaab   (MA)
     forgot. PASS 3ms-bring. ACT Ali the-book

b. *nsa   ʕali jtdʒaab   al-ktaab   (MA)
   forgot.3ms. ACT Ali 3ms-bring. PASS the-book

(28) a. Qirrir   j-dʒiib   ʕali al-ktaab.   (NA)
     decided.PASS 3ms-bring.ACT Ali the-book
     'It was decided that Ali should bring the book'

b. nsʕiħ   aħmad jsaafir   b-al-sʕaif.   (NA)
   advised. PASS Ahmad travel.3ms.ACT in-the-summer
   'Ahmad was advised to travel in summer.'

The voice matching requirement is unpredicted and unexplained under both
the *Clause unification analysis* and *the remnant XP-movement analysis*. More
specifically, both analyses assume two separate functional layers for each
clause (the matrix and the embedded), which make a uniform voice puzzling
since there will be two VoicePs, two *v*Ps, and two CPs in such constructions. In
this respect, postulating *pro/PRO*, passivization of the matrix clause should not
in principle require passivization of the embedded, contrary to fact. This makes
the voice matching requirement even more puzzling to bi-clausal accounts of
verbal complex.[11]

Theoretically, the remnant XP-movement analysis also makes use of differ-
ent unmotivated movements as discussed above. The analysis relies on topi-
calization of the object to vacate AspP. This leaves open the question of what
happens in contexts where the object is not topicalized. Further, the move-
ments of the two remnant AspPs to target higher functional heads are also
unmotivated and seem to be ad hoc as such movements are not observed in
other constructions. The same applies to the mysterious movement of the com-
plementizer *ʔenno* to w head.

In the next section we propose and develop an alternative restructuring
analysis of the verbal complex facts, which avoids both the theoretical and the
empirical issues faced by the previous accounts.

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11   Below, we discuss in detail how the voice matching facts are puzzling to both the clause
     unification analysis and the remnant-XP analysis.

4   Restructuring analysis

We propose that the puzzling word order of VVSO in Arabic and its associated facts are accounted for by adopting a mono-clausal *restructuring analysis* along the lines of Wurmbrand (1998, 2001, 2004). In particular, we argue that *nisa*-type verbs *are* restructuring verbs. We further argue that the clause structure for such constructions is a *monoclausal* structure (from the beginning), as represented in (30) for sentences in (1) above, repeated here as (29). This contrasts with the biclausal structure proposed by both Hallman (2011) and Ouwaydah & Shlonsky (2016).

(29) a. *nsa   y-ʤiib   ʕali ktaab-u.*   (MA)
          forgot.3ms 3ms-bring Ali   book-his
          'Ali forgot to bring his book'

      b. *nisa   y-ʤiib   ʕali ktaabu-h*   (NA)
          forgot.3ms 3ms-bring Ali   book-his
          'Ali forgot to bring his book'

(30) [TP *nsa* [MoodP *yʤiib* [*v*P *ʕali* ~~*nsa*~~ [VP ~~*nsa*~~ [VP ~~*yʤiib*~~ *ktab-u*]]]]]

Note that the proposed account differs from Hallman's restructuring account in non-trivial ways. Hallman's analysis proposes a biclausal control structure that derives the VVSO word order by head movement. This is problematic as the biclausal restructuring account falls short empirically, as discussed above.

The restructuring account proposed here assumes that there is only one TP in verbal complex constructions. It further assumes that a restructuring control verb like *nisa* selects for a VP, not a CP, TP or *v*P. That is, it is a VP-complementation, along the lines of Wurmbrand (1998, 2001, 2004). This means that there is no syntactic subject in the embedded phrase. In this matter, we follow Chierchia (1984a), Wurmbrand (1998, 2001), among others in that non-finite clauses are semantically properties (i.e., a set with a variable) not propositions (i.e., clauses). Accordingly, we propose that there is only one subject in the clause, located in spec, *v*P (and it is the only *v*P in the clause). The current analysis also dispenses with control *pro/*PRO in Subject Obligatory Control contexts in Arabic, which is the recent standard assumption for restructuring crosslinguistically (Wurmbrand 1998, 2001, 2015; Cinque 2004 2006; Grano 2012; Modesto 2016, among others.)

The restructuring analysis accounts for the VVSO word order in Arabic and other pertaining facts as follows. The structure simply begins as given in (31), a

vP-shell with the subject ʕali in the spec, vP. The matrix verb *nisa* 'forgot' selects another VP headed by the non-finite verb *ydʒiib* 'bring'.

(31) [*vP* ʕali [*VP* nisa] [*VP* ydʒiib ktabu-h]]
    Ali   forgot   bring   book-his
    'Ali forgot to bring his book'

Above vP, we have the usual extended projection of functional heads; Tense, Asp, and Mood, respectively. *nisa* 'forgot' moves to Asp then to T (note that there is no minimality violation crossing Mood head as Mood does not bear matching features with this verb).[12] Next, the non-finite verb *ydʒiib* 'bring' moves to Mood to check the non-finite feature (Subjunctive in SA, and extending such an assumption to Arabic dialects seems natural as well). Hence, we get the VVSO word order. We further assume that T and Mood are specified for phi-features, which explains the agreement of both verbs with subject as will be detailed in the next section. The structure for verbal complex constructions such as (29) is given below in (32).

(32)

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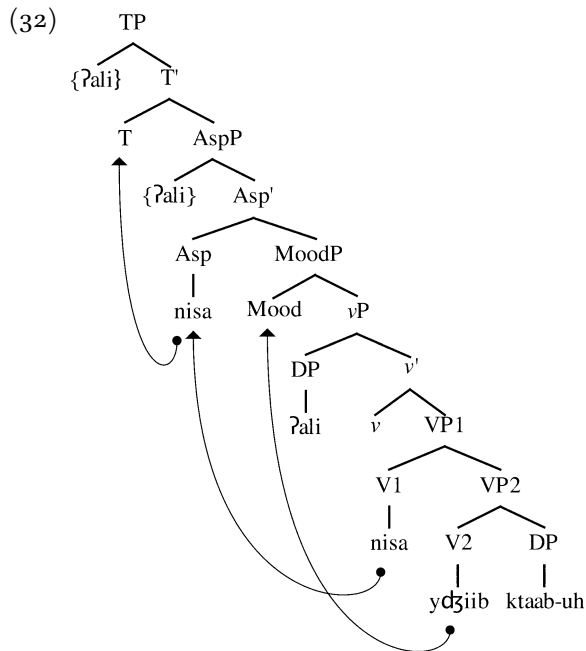
12   We assume that HMC is violated only if an element crosses a head with a matching feature. Here, we assume that Mood has [+subjunctive] which the matrix verb *nisa* does not have, but the embedded verb does. Thus, *nisa* crosses Mood without inducing HMC.

The restructuring account does not only capture the puzzling word order VVSO, but it also accounts for two interesting and novel observations that pertain to restructuring and monoclausality. We discuss them in section 5.

A few words are in order in respect to embedded subject interpretation under the account we propose. In particular, we propose, following Wurmbrand (2001, 2004, 2015) that the embedded phrase is subject-less. A question that immediately arises is how subject interpretation is provided. Another important question is related to theta marking of the embedded verb. In fact, these two questions are fundamental to the VP-complementation approach to restructuring. Wurmbrand (2001) argues that the embedded verb is agentive, - which is a semantic interpretation, but that this does not necessarily need to be syntactically represented. Appealing to Chierchia's (1984a) semantic approach to infinitives and gerunds, Wurmbrand argues that complements of restructuring predicates are semantically properties. That is, they are syntactically subject-less. As for the interpretation, Chierchia proposes a meaning postulate that derives the interpretation of the embedded agent. Put simply, we have a case of *sharing* the subject between the matrix verb and the embedded verb. Notice that this makes sense in obligatory control context where the only possible interpretation of the embedded agent corresponds to the matrix one. That is, the embedded agentive interpretation is derived lexically by the meaning postulate and that the variable is interpreted by the agent that is syntactically presented in the matrix phrase (Wurmbrand 2001, 2015). In particular, we appeal to semantic control instead of syntactic control. The latter is the canonical control relation facilitated by PRO while the former is a semantic relation that interprets an implicit agent (i.e., a variable) by entailment relation. This is shown in (33)a, interpreted in prose in (33)b; j stands for a context dependent modal operator, as Chierchia proposes (adopted from Chierchia, 1984a: 34).

(33) a. $(\text{try})' (P) (x) \to j \, P (x)$ ■non-matching quotation mark
      b. 'whenever x tries to bring about P, then in all the contextually relevant
          ■non-matching quotation mark
          situations (namely those where what x tries actually succeeds) x does P.

With this machinery at hand, one can see how the interpretation of the embedded agent follows from the semantic relation and where theta marking is satisfied. Under this approach, thematic relations can be satisfied implicitly (at LF) at the cost of adhering to more specific lexical specifications of appropriate predicates (for extensive discussion, see Wurmbrand 2001 and Keine and Bhatt 2016).[13]

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13   Wurmbrand (2015) proposes a different approach to the interpretation of the embedded

5   Extending the restructuring account: adverb placement & voice matching

The current proposal receives further support when we extend data beyond the vvso word order. Here, we explore how the restructuring analysis successfully accounts for a universal diagnostic of monoclausality and for previously unnoticed data of the voice matching requirement. We start with the former.

Cinque (2006) argues that restructuring (in the sense adopted here) prohibits some adverbs to co-occur in the same construction, as discussed above. This is evidenced in Italian examples below where the adverb *già* 'already' can only occur twice with biclausal constructions as in (34) but not in monoclausals as in (35). Note that even though the matrix verb is the same in both sentences, the latter shows clitic climbing, which is a well-known feature of restructuring; *lo* the object of the embedded verb moves all way to the left of the matrix verb. Cinque argues that the co-occurrence prohibition of the same adverb is a crosslinguistic diagnostic for monoclausality, and that it follows from the functional hierarchy he proposes (see Cinque 1999).

(34) *Maria vorrebbe   già   aver-lo   già   lasciato.*
      Mary   would.want **already** have-**him already** left
      'Mary would already want to have already left him.' (Cinque 2006:17)

(35) **Maria lo   vorrebbe   già   aver già   lasciato*
      Mary   **him** would.want **already** have **already** left (Cinque 2006:17)

In this connection, if the construction of *nisa*-type is indeed restructuring (thus monoclausal) as we argue here, it should conform to this observation and co-occurrence of an adverb should thus be ungrammatical. The prediction is borne out, as given in (36). Compare this with non-restructuring predicates like *decide*, where the co-occurrence of an adverb is acceptable as shown in (37).

(36) a. **nisa   **bsirʕih** jʤiib   **bsirʕih** ʕali al-ktaab*   (NA)
          forgot.3ms quickly 3ms.bring quickly Ali the-book

      b. **nsa   **dəɣya** jʒiib   **dəɣya** ʕali l-ktaab*   (MA)
          forgot.3ms quickly 3ms.bring quickly Ali the-book

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agent in restructuring by appealing to feature dependency in that the embedded agent *feature* is valued by the matrix subject. For reasons of space, we cannot discuss this approach into detail and we refer the interested reader to the cited work.

(37) a. *qarrar*   **bsirʕih** *aħmad jiruuħ l-al-dictuur*   **bsirʕih**   (NA)
decided.3ms quickly Ahmad go   to-the-doctor quickly
'Ahmad quickly decided to go quickly to the doctor.'

b. *qərrər*   **dəɣɣa** *jʒiib*   **dəɣɣa** *ʕali l-ktaab*   (MA)
decided.3ms quickly 3ms.bring quickly Ali the-book
'Ali quickly decided to quickly bring the book.'

The restructuring analysis proposed here accounts for and in fact predicts the adverb restriction since restructuring verbs of *nesi*-type are assumed to instantiate a monoclausal structure. With Cinque's (1999) hierarchy of functional heads in mind, and with the availability of only one extended projection of both verbs under the proposed analysis, there is no discrete position allowed for two instances of the same adverb since the construction is monoclausal. That is, there is only one discrete position for an adverb in the spine (say *already*, for instance), and thus the unacceptability of another instance of the same adverb follows naturally.

It would be difficult to account for the facts above without entertaining a fixed order hierarchy of functional heads along the lines of Cinque's (1999) hierarchy. If two clauses were assumed for the verbal complex construction (as in *the clausal unification analysis* (Hallman 2011) and *the remnant XP-movement analysis* (Ouwaydah and Shlonsky 2016)) such a restriction should not be observed, contrary to fact (see Cinque 2006 for more discussion).

Further support for the proposed account comes from an interesting and new observation regarding the requirement of voice with *nesi*-type verbs. In such constructions, both verbs (V1 and V2) are required to have the same voice; either both are passive, or both are active (this is also known as Voice matching in Norway and Chamorro (Wurmbrand 2017). As discussed above, voice mismatch with *nisa* leads to ungrammaticality, shown in (38) and (39), repeated from (26) and (27) above respectively. Only voice matching is allowed as given in (40).

(38) a. **insii*   *j-ʤiib*   *ʕali al-ktaab*   (NA)
forgot.**PASS** 3ms-bring.**ACT** Ali the-book

b. **nisa*   *ʕali j-ʤaab*   *al-ktaab*   (NA)
forgot.3ms.**ACT** Ali 3ms-bring.**PASS** the-book

(39) a. *tənsa   j-ʒiib   ʕali l-ktaab.   (MA)
          forgot.**PASS** 3ms-bring.**ACT** Ali   the-book

      b. *nsa   ʕali j-tʒaab   l-ktaab.   (MA)
          forgot.3ms.**ACT** Ali   3ms-bring.**PASS** the-book

(40) a. tənsa   j-tʒaab   l-ktaab.   (MA)
          forget.**PASS**.3ms 3ms-bring.**PASS** the-book
          'the book was forgotten to be brought.'

      b. Insii   j-dʒaab   l-ktaab   (NA)
          forgot.**PASS**.3ms 3ms-bring.**PASS** the-book
          'the book was forgotten to be brought.'

In (40), both verbal elements in the verbal complex have a uniform voice of passive and the sentences are grammatical. In (38) and (39), on the other hand, where the verbs bear different voices, the sentences are ungrammatical. This is due to the violation of the uniform voice requirement on nisa-type verbs. The voice matching requirement follows naturally under the proposed analysis. Since there is only one subject and one functional layer in the construction, there is only once specified Voice head (active of passive). Thus, voice information in the structure is only provided by one source, spread to the two verbs and thus they have to be uniform in voice, either passive or active. Illicit mixed voice would thus follow. In the same vein, since both verbs *share* the subject, if this subject disappears due to passivization of the matrix verb, there is no available embedded subject to the embedded verb. Thus, passivization of both verbs is a natural consequence.

The voice matching requirement goes unexplained and unpredicted in the previous biclausal accounts discussed here. Under these accounts, the two verbs belong to two different clauses, each with its extended projection that supposedly has VoiceP and each has its own subject. Consequently, mixed voices constructions, such as (38) and (39) would be predicted to be grammatical, contrary to fact. Nothing conceptually in the biclausal accounts prevents mixed voices since a biclausal structure is adopted. Note that to assume that VoiceP is lacked in one of the clauses is also problematic. It would be a sheer stipulation. Further, if this assumption were adopted, it again would require another stipulation regarding which clause (the matrix or the embedded) would lack Voice projection. On the contrary, the (monoclausal) restructuring analysis does not face such problems, as there is only one functional layer and one syntactic subject, thus only one voice projection is available to

both verbs. In addition, the biclausal accounts propose that PRO/pro is in a thematic relation with the embedded verb, therefore passivization of the matrix should not affect the null element and the embedded verb could be active or passive independently, contrary to fact.

One might argue that voice matching requirement is not evidence for restructuring and the ungrammaticality of the sentences in (38) and (39) can be accounted for by appealing to interpretation reasons. In particular, since the biclausal approach (the clause unification analysis and the remnant XP-movement analysis) assumes a null subject, passivization of the matrix clause leaves the null subject uninterpretable, which in turn makes the derivation crash.[14] However, this argument cannot be maintained on empirical grounds. In particular, it predicts that passivization of control predicates in general is ungrammatical, contrary to facts attested crosslinguistically (See Landau 2013; Pitteroff & Schäfer 2018 for extensive discussion). If PRO/pro requires a syntactic controller across the board, this means that the whole phenomena of *implicit control* would vanish. However, various languages show voice mismatch in control constructions in a manner that is exactly the opposite of what this argument suggests. This is shown in English (41), French (42), Hebrew (43), and SA (44).

(41) a. It was decided to move forward.
     b. It was hoped to provide an accessible and more effective service.
     c. It was planned to focus on certain sectors such as tourism.
            LANDAU 2013:181

(42) *Il a   été   décidé de quitter le   pays   immédiatement* (French)
     it has been decided to leave   the country immediately
     'People/someone decided to leave the country immediately.' (Pitteroff &
     Schäfer, 2017: 10)

(43) a. *tuxnan   leʃapets   et   ha-mitbax.*   (Hebrew)
        was.planned to.renovate ACC the-kitchen
        'People/someone planned to renovate the kitchen.'

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14   We would like to thank an anonymous reviewer for bringing this counter-argument to our
      attention.

    b. *huxlat   Laazov et   ha-arets.*
       was.decided to.leave ACC the-country
       'People/someone decided to leave the country.' (Pitteroff & Schäfer 2018:11)

(44) *qurrira   al-harab-u   xaariʤ-a   al-balad-i.*   (SA)
       was.decided the-fleeing-NOM outside-ACC the-country-GEN
   'It was decided to leave /flee the country.'

In addition, voice matching has recently been taken as a reliable restructuring diagnostic in different languages including Chamorro and Isbukun Bunun as shown in (45) (see Chung 2004; Wu 2013; Wurmbrand 2013b; Wurmbrand and Shimamura 2017). The idea behind that is that voice matching is a dependency of Voice of the embedded phrase on the voicing of the matrix one (Wurmbrand 2015; Wurmbrand and Shimamura 2017). It is, thus, taken to be evidence for the transparency of the embedded phrase and to militate against a bi-clausal approach to such constructions. The voice matching data we provide here is additional empirical evidence for voice matching in restructuring constructions crosslinguistically.

(45) *Pära tafan-ma-chägi   ma-na'fanätuk   ni   lalahi*
      Fut   1PL.IR.IN-pass-try NPL.RL.in.pass -hide OBL men
      siha.   (Chamorro)
      PL
      (Lit. 'We will be tried to be hidden by the men.')
      'The men will try to hide all of us.' (Chung 2004: 204)

6   Agreement

In the VVSO constructions we have been analyzing, both verbs agree with the subject. Under Hallman's analysis, the subject verb agreement marked on both verbs, is obtained by raising the embedded verb and incorporating it with the matrix verb. Both verbs are adjoined to matrix T. The complex verb ends up bearing the morphological features on the matrix T as shown in (46).

(46)

HALLMAN 2011:61
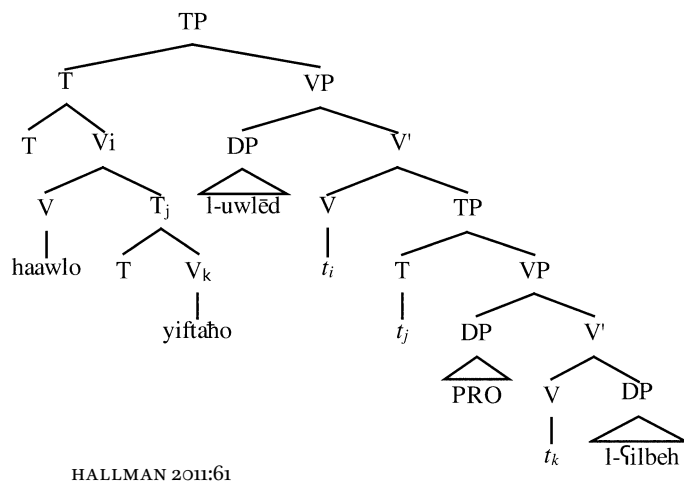
Note however that under this analysis, the embedded T has to agree with PRO, and then moves together with the verb to adjoin to the matrix V. One would expect that the embedded verb would carry the morphology that matches the phi-features of the embedded T. This becomes crucial in the first-conjunct agreement phenomenon in (47)a–b where the verb can agree either with the first conjunct or with the full conjoined DP. Note that in most Arabic dialects, first-conjunct agreement is optional in VSO sentences. Under the biclausal analysis, one would expect a mixed agreement to be a possibility in VVSO sentences where the matrix verb would agree only with the first conjunct of the conjoined DP's whereas the embedded verb would have plural agreement since it would agree with PRO (for Hallman) or *pro* (for Ouwaydah and Shlonsky). This prediction is not borne out as shown in (47)c–d. Notice that mixed agreement (FCA on V1 and plural agreement on V2) is possible with non-restructuring predicates such as *decide*, as given in (48).[15]

(47) a. *nisa-t   t-dʒiib   sarah   ou   al-mudarris   ktaab-hum.*   (NA)
        forgot-3SF 3SF-bring Sarah.F and the-teacher.M book-their
        'Sarah and the teacher forgot to bring their book.'

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15   The data is from NA but the same holds for MA.

b. *nisa-o   j-ʤiib-uun   sarah ou al-mudaris*
   forgot-**3MPL**. 3M-bring-**PL** Sarah and the-teacher.m
   ktaab-hum   (NA)
   book-their
   'Sarah and Ali forgot to bring their book'

c. **nisa-o   t-ʤiib   sarah ou al-mudaris   ktaab-hum*   (NA)
   forgot-**3MPL** **3SF**-bring Sarah and the-teacher.M book-their

d. **nisa-t   jʤiib-un   sarah ou al-mudaris ktaab-hum*   (NA)
   forgot-3SF bring-3MPL Sarah and the-teacher ktab-hum

(48) *? qarrara-t sarah ou zauʤ-aha   j-saafr-uun li-l-madiinah*   (NA)
     decided-3sf Sarah and husbdan-her 3-trvel-PL to-the-city
     'Sarah and her husband decided to travel to the city.'

In this resepct, even though Hallman (2011) argues that his analysis accounts for data such as (47)a–b since both verbs end up adjoined to the matrix T which agrees with the matrix DP subject, it is still an open question why the verb does not spell out the features of the embedded T to which it adjoins first before it moves higher. Note that the embedded T must agree with PRO.

Under Ouwaydah and Shlonsky's analysis, on the other hand, the matrix verb agrees with the overt subject DP and the embedded verb agrees with a null pro. Their analysis accounts for the agreement facts in single-subject sentences such as (49) below, but fails to account for the well-known First-Conjunct agreement facts such as (47) above.

(49) *nisa   j-ʤiib   ʕali ktaab-uh*   (NA)
     forgot.3ms 3ms-bring Ali book-his
     'Ali forgot to bring his book'

To account for the agreement of the subject with both verbs, we argue that both T and Mood carry Phi-features and enter into Agree relations with the DP subject as illustrated in (50).

(50)
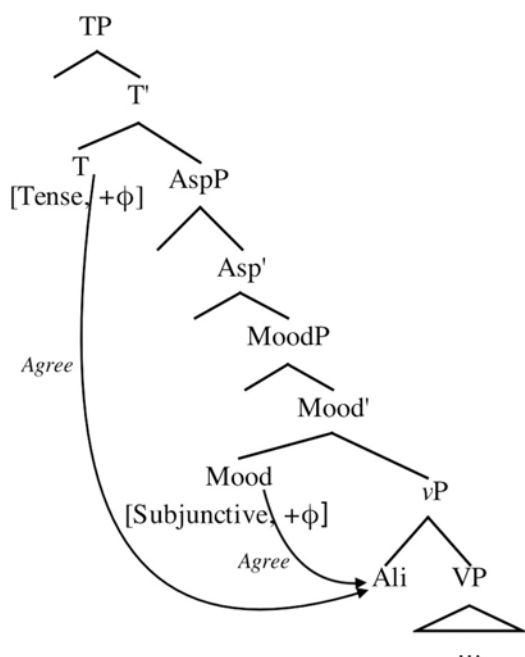
The matching agreement requirement of both verbs in VVSO (observed in (47)a–b is accounted for given that both verbs share one Subject and, therefore, agreement patterns should be uniform in this construction. That is, either both verbs agree with First conjunct or both verbs agree with the whole DP. Under this approach, the matrix verb moves to T and the embedded verb moves to Mood hence the agreement morphology on each verb. Notice that we do not assume a parasitic agreement on T of both verbs (similar to what is suggested in in Bhatt (2005)). We instead propose that there are two probes (T and Mood) that both bear uninterpretable agreement features and both establish Agree with one goal (the lexical DP). This fact will be puzzling under the biclausal approaches to VVSO since there is agreement dependency in each clause, as elaborated above.[16,17]

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16   One anonymous reviewer points out that our analysis might inherit the same problems that the bi-clausal analyses face. The reviewer rightly asks what prevents the T head from agreeing with just the first conjunct and the Mood head from agreeing with the whole conjunct. The prediction the bi-clausal structure makes is that the second verb should bear full agreement since the lower T must agree with PRO. Our analysis does not make such a prediction. However, we are not proposing an analysis for First-Conjunct Agreement here. For an analysis see Crone (2017).

17   A second reviewer points out that if one appeals to Aoun, Benmamoun, and Sportiche's

7 Further consequences and implications

So far, we argue that the VVSO word order is a transparency effect of restructuring in both NA and MA (i.e. monoclausality). In this connection, it is widely assumed that restructuring is blocked in object control contexts (Kayne 2004; Wurmbrand 2001, 2007; Hallman 2011, among many others). Thus, object control provides a test for transparency effects. Particularly, if VVSO is indeed a restructuring/transparency effect and thus a monoclausal, as we argue here, the prediction is that it cannot be observed with object control verbs. The prediction is borne out in NA, MA and LA as (51) illustrate.

(51) a. *ahmad nisaħ tsaafir **sarah** fi asˤ-sˤaif.   (NA)
  Ahmad advised travel Sarah In the-summer
  Intended: 'Ahmad advised Sarah to travel in the summer.'

 b. *ħmǝd nsǝħ tsaafǝr **sara** f sˤ-sˤiif.   (MA)
  Ahmad advised travel Sarah In the-summer
  Intended: 'Ahmad advised Sarah to travel in the summer.'

 c. *maryam ʃaʒʒaʕ-et jxalles ħanna drus-u   (LA)
  Mary encouraged finish John studies-his
  Intended: 'Mary encouraged John to finish his studies.'
  (Hallman 2011:78)

 d. *nisaħ tsaafir Ahmad sarah fi asˤ-sˤaif   (NA)
  advised travel Ahmad Sarah in the-summer
  Intended: 'Ahmad advised Sarah to travel in the summer.'

Note that the ungrammatical sentences above have one common property; the two verbs are adjacent (i.e., verbal complex) and thus an element of the matrix clause follows the embedded verb (i.e., the matrix subject). Whether the sentence begins with a subject (51)a–c or a verb (51)d (as Arabic has both SVO and VSO word orders), the matrix subject, *Ahmad*, cannot follow the embedded verb. That is, in object control contexts, any element of the matrix clause cannot be flanked or preceded by any element of the embedded clause. This

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(1994) analysis of First-Conjunct Agreement, the biclausal analysis would not face any problems. Besides our other arguments against the bi-clausal structure detailed above, we refer the reader to Crone (2017) for a convincing analysis of First-Conjunct Agreement in Arabic.

sets a distinct line between restructuring predicates, which allow vvso, and non-restructuring (bi-clausal) predicates, which do not allow crossing clause boundaries. In other words, when we have object control, we have a bi-clausal structure and any transparency effect such as the vvso word order is illicit. Object control contexts, thus, only allow svov or vsov word orders where no element of the matrix clause is flanked in the embedded one; clause boundary is thus respected. This illustrated in (52) and (53).

(52) a. *aħməd nsəħ   **sara** tsaafər f   sˤ-sˤiif*   (MA)
        Ahmad advised Sarah travel   In the-summer
        'Ahmad advised Sarah to travel in the summer.'

    b. *nsəħ   ħməd   **sarah** tsafər f   sˤ-sˤiif*   (MA)
        advised Ahmad Sarah travel In the-summer
        'Ahmad advised Sarah to travel in the summer.'

(53) a. *aħmad nisaħ   **sarah** tsafir fi as ˤ-sˤaif*   (NA)
        Ahmad advised Sarah travel in the-summer
        'Ahmad advised Sarah to travel in the summer.'

    b. *nisaħ   aħmad **sarah** tsafir fi asˤ-sˤaif*   (NA)
        advised Ahmad Sarah travel in the-summer
        'Ahmad advised Sarah to travel in the summer.'

8   Conclusion

In this paper, we propose that verbal complex constructions in Arabic are a restructuring constructions with a monoclausal structure similar to what is proposed for restructuring in Romance and German (Wurmbrand 2001, 2004, 2014 among many others). We argue that the two previous accounts put forward for verbal complex in Arabic are inadequate empirically and theoretically. The restructuring analysis advocated here is novel in various respects. That Arabic obligatory control (or at least *nesi*-type verbs) is restructuring does away with control-based theories that assume a null element (PRO or pro) and, consequently, a biclausal structure. This, if on the right track, calls for more research on control in Arabic. The proposed analysis, not only accounts for the puzzling vvso word order, but also provides an account for various observations in verbal complex constructions, including agreement facts and Cinque's restriction on the distribution of adverbs. The paper also discusses previously unnoticed

data related to the requirement of voice matching in verbal complex constructions. While these properties would be unexplained under control-based analyses, they follow naturally under the restructuring analysis pursued here.

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