Verbal Complexes in Lebanese Arabic[*]

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Abstract

This study examines a particular type of optionality in subject placement in Lebanese Arabic that indicates that that language allows restructuring, or derived clause union, mediated by formation of a verbal complex, in which a non-finite subordinate verb raises and adjoins to the finite matrix verb. In addition to the word order VSVX in control constructions, Lebanese Arabic also admits the order VVSX. This study considers rightward subject movement and backward control analyses of the data presented here, but finds that the body of evidence instead supports a derivation in which subordinate T[ense] raises to matrix T, carrying the subordinate verb along with it, analogous to analyses of restructuring in Romance, Slavic and Germanic languages. The study therefore finds restructuring in a language in which it has not previously been observed.

Keywords

restructuring; verbal complexes; tense; backward control; Lebanese Arabic; Arabic

1. Introduction

This paper presents evidence that in non-finite subordination contexts in contemporary Lebanese Arabic (LA), the subordinate infinitival verb optionally forms a verbal complex with the matrix finite verb. In such contexts, the non-finite verb appears adjacent to the finite verb in the matrix clause, preceding material associated with the matrix clause, potentially including the matrix subject in this language, which admits VSO word order. This alternation gives the appearance of rightward movement of the subject in such cases, but evidence presented here militates against a DP movement analysis. Rather, such cases appear to be an overt instance of T-to-T movement argued in similar forms by Kayne (1989) (for Romance), Terzi (1996) (for Romance and Slavic),

Hinterhölzl (1999, 2006) (for Germanic) and others to underlie 'restructur-ing', or derived clause union, in non-finite subordination contexts.

This paper begins by substantiating the claim that LA has non-finite sub-ordination. While LA does not have explicit infinitival marking, the absence of otherwise obligatory tense morphology in certain subordinate contexts sug-gests that these are tenseless. The paper then turns to variation in the position of the subject in such clauses. Several alternative analyses are considered, includ-ing rightward PF movement of the subject, syntactic lowering of the subject, backward control, and verb raising. The evidence presented here is argued to favor the verb raising account.

2. Preliminary remarks on tense

The Standard Arabic sentence with imperfective indicative morphology in (1a) is interpreted as an episodic description of an ongoing event. The morpholog-ical paradigm the verb displays in (1a) is not found in LA, where it has either been lost or never existed. The morphological paradigm glossed 'imperfective' in this paper, following Aoun, Benmamoun and Choueiri's (2010) characteri-zation, is identical to the Standard Arabic jussive mood, a paradigm that occurs in *if*-clauses and certain other modal environments, but is not acceptable in declarative root contexts in Standard Arabic (Wright, 1981). In Lebanese Ara-bic, this paradigm, which (1b) exemplifies, does not receive a uniform interpre-tation among all LA speakers. Some speakers judge (1b) to be ungrammatical, while others judge it grammatical, with a modal interpretation similar to what the English modal *should* expresses. For the former, this paradigm behaves as in Standard Arabic, where it may not appear in a root context. For the latter, the paradigm has been extended in its modal signification to root contexts. There is a correlation between speakers' judgment of (1b) and their judgments of other data described below. Throughout this paper, I refer to the variety of LA in which (1b) is grammatical with a modal reading as 'Variety A', and the variety in which it is ungrammatical as 'Variety B'.[1] An episodic reading analogous to Standard Arabic (1a) is not available in (1b) for any speakers of LA, again indicating that a true imperfective indicative is not found in LA, but rather only the imperfective jussive.[2]

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[1] I am reluctant to extrapolate a sweeping generalization about the regional distribution of the two varieties of LA discussed in this paper on the basis of the relatively small number of speakers I have consulted with for this project, but it may not be a coincidence that the speakers of Variety A I have consulted with are from Tripoli, and the speakers of Variety B are from Beirut.

[2] I follow Koutsoudas (1967) in treating the verbal suffix *-lā* ('her') as a dative clitic, though it is at least historically if not contemporaneously decomposable into the preposition *la* ('to') and

(1)   a.   yaqūl-u   la-hā   ħannā ʕan   l-iʒtimāʕ-i
          tell_IMPF-IND to-her John   about the-meeting-GEN
          'John is telling her about the meeting.'

    b.   yʔil-lā   ħannā ʕan   l-iʒtimēʕ
          tell_IMPF-her John   about the-meeting
          VARIETY A: 'John should tell her about the meeting.'
          VARIETY B: *

In both varieties, an indicative clause is anchored to the present time by the prefix *b-* (2a), and to a future time by the particle *raħ* (2b). Anchoring to a past time is indicated by the perfective morphological form of the verb (2c), typically expressed by a stem vowel alternation in conjunction with a change to a purely suffixal expression of agreement with the subject, in contrast to the circumfixal paradigm of the imperfect that occurs in the present and future tenses. See Aoun, Benmamoun and Choueiri (2010), pp. 74–75 for the complete perfective and imperfective agreement paradigm for LA.

(2)   a.   b-yaʕrif   ħannā l-ʒuwēb
          PRES-know_IMPF John   the-answer
          'John knows the answer.'

    b.   raħ   yaʕrif   ħannā l-ʒuwēb
          FUT   know_IMPF John   the-answer
          'John will know the answer.'

    c.   ʕarif   ħannā l-ʒuwēb
          know_PERF John   the-answer
          'John knew the answer.'

In contrast to stative verbs such as *ʕarif* ('know'), an eventive verb such as *ʔēl* ('say, tell') cannot have an episodic reading in the present tense (marked by *b-*), but rather only a habitual reading, parallel to the interpretation of eventive verbs in the English simple present tense. And as in English, an eventive verb is compatible with the present tense when it occurs in the progressive, marked in LA by the particle *ʕam*. The prefix *b-* may optionally occur in the context of the progressive morpheme, and does so obligatorily for some speakers.

(3)   a.   b-yʔil-lā   ħannā ʕan   l-iʒtimēʕ
          PRES-tell_IMPF-her John   about the-meeting
          'John usually tells her about the meeting.'

the accusative clitic *ā* ('her'). Inflectional morphemes are glossed here in accordance with Noyer's (1992) analysis of phi-feature exponence in Arabic.

    b. ʕam (b)-yʔil-lā   ħannā ʕan   l-iʒtimēʕ
       PROG (PRES)-tell_{IMPF}-her John about the-meeting
       'John is telling her about the meeting.'

Shlonsky and Ouhalla (2002) point out that the prefix *b-* is legitimate in progressive constructions even when these are placed in the future or past tense through the appropriate form of the auxiliary *kēn* ('be').

(4) a. maha kēn-it   ʕam b-ti-lʕab   basketbol
         Maha be_{PERF}-3FS PROG PRES-3FS-play_{IMPF} basketball
         'Maha was playing basketball.'

      b. maha raħ t-kūn   ʕam b-ti-lʕab   basketbol
         Maha FUT 3FS-be_{IMPF} PROG PRES-3FS-play_{IMPF} basketball
         'Maha will be playing basketball.'

This, and the fact that other tense distinctions do not alternate with *b-* in the domain of the progressive, as (5) shows, casts doubt on the claim that *b-* is a present tense marker. Shlonsky and Ouhalla gloss it as a habitual marker, though its occurrence in the progressive constructions in (4), which do not imply that Maha plays basketball habitually, in turn casts doubt on this characterization.

(5) a. *maha ʕam laʕeb-it   basketbol
         Maha PROG play_{PERF}-3FS basketball

      b. *maha ʕam raħ ti-lʕab   basketbol
         Maha PROG FUT 3FS-play_{IMPF} basketball

While these observations do not uniformly support an analysis of *b-* as a tense marker, *b-* behaves analogously to a tense marker both in its obligatory occurrence in present tense contexts, as in (2a) and (3a), and in its obligatory absence in certain subordinate contexts that also fail to allow future and past morphology and that show properties cross linguistically correlated with non-finiteness, as described below. The following discussion capitalizes on the obligatoriness of *b-* in the simple present as a diagnostic for finiteness. Accordingly, *b-* is glossed throughout this paper as a present tense morpheme, leaving open the question of how these occurrences are related to its function in progressive contexts.

   In contrast to finite matrix contexts discussed above, certain subordinate contexts, determined by the choice of matrix verb, require the subordinate verb to occur in its bare imperfective form, without tense morphology. In such cases, the external argument of the subordinate verb is obligatorily identified by the matrix subject. In the absence of a complementizer (more on which below), the complement of e.g. *nisi* ('forget') may not contain an independent subject nor tense morphology (6).

(6) a. nisi   ħannā y?il-lā   ʕan   l-iʒtimēʕ
      forget_PERF John   tell_IMPF-her about the-meeting
      'John forgot to tell her about the meeting.'

    b. *nisi   ħannā y?il-lā   youssef ʕan   l-iʒtimēʕ
       forget_PERF John   tell_IMPF-her Youssef about the-meeting
       ('John forgot that Youssef would tell her about the meeting.')

    c. *nisi   ħannā b-y?il-lā   ʕan   l-iʒtimēʕ
       forget_PERF John   PRES-tell_IMPF-her about the-meeting
       ('John forgot that he usually tells her about the meeting.')

    d. *nisi   ħannā ?al-lā   ʕan   l-iʒtimēʕ
       forget_PERF John   tell_PERF-her about the-meeting
       ('John forgot that he told her about the meeting.')

The embedded verb may bear tense morphology if a complementizer is present. A subordinate clause introduced by a complementizer may contain a subject independent of the matrix subject (and a null subject is free in reference), and the temporal interpretation of the verb follows the pattern found in matrix clauses. An eventive verb, for example, receives a habitual reading in conjunction with the present tense morphology.

(7) a. nisi   ħannā ?inno b-y?il-lā   ʕan   l-iʒtimēʕ
      forget_PERF John   that   PRES-tell_IMPF-her about the-meeting
      'John$_i$ forgot that he$_{i,j}$ usually tells her about the meeting.'
      *'John forgot to tell her about the meeting.'

    b. nisi   ħannā ?inno ?al-lā   ʕan   l-iʒtimēʕ
      forget_PERF John   that   tell_PERF-her about the-meeting
      'John$_i$ forgot that he$_{i,j}$ told her about the meeting.'
      *'John forgot to tell her about the meeting.'

A complementizer may occur with a temporally unmarked (bare imperfective) subordinate verb. However, LA speakers' judgments differ regarding the interpretation of the subordinate clause in such cases. For speakers of Variety A, those that accept a modal interpretation for a bare imperfective verb, the complementizer selects this modal interpretation, and the subordinate subject is referentially independent of the matrix subject. For speakers of Variety B, those for whom no modal reading is available for a bare imperfective verb, the presence of the complementizer does not impact the interpretation of the subordinate clause. The subject is identified by the matrix subject, and such clauses behave identically to their complementizer-less counterparts in ways described in the remainder of this paper.

(8) nisi   ħannā ʔinno yʔil-lā   ʕan   l-iʒtimēʕ
    forget_PERF John   that   tell_IMPF-her about the-meeting
    Variety A: 'John_i forgot that he_{i,j} should tell her about the meeting.'
    Variety B: 'John forgot to tell her about the meeting.'

These observations indicate that certain propositional complement verbs in
LA, such as *nisi* ('forget') and including *ħāwal* ('try'), *ʔeder* ('manage'), *ʔarrar*
('decide'), *ɣafil* ('neglect') and others, may embed a non-finite complement
clause, as schematized in (9). Variety A prohibits the occurrence of a comple-
mentizer in the embedded clause, while Variety B allows it, but does not require
it.

(9) [_{+FIN} nisi   ħannā [_{-FIN} (ʔinno) yʔil-lā   ʕan   l-iʒtimēʕ   ]]
          forget_PERF John   (that)   tell_IMPF-her about the-meeting
    'John forgot to tell her about the meeting.'

3. Right Subject Shift

A syntactic peculiarity of non-finite subordination in both varieties of LA is
that in such cases, the matrix subject may shift to the right to a position fol-
lowing the subordinate verb, a word order I refer to as the 'right shifted' order,
though this term is not intended to prejudice an analysis of the phenomenon.
LA admits (10) as a synonymous word order permutation of (6a).

(10) nisi   yʔil-lā   ħannā ʕan   l-iʒtimēʕ
     forget_PERF tell_IMPF-her John   about the-meeting
     'John forgot to tell her about the meeting.'

The addition of the declarative complementizer to (10), shown in (11), has a
distinct effect in the two varieties of LA reported here. In Variety B, in which
the complementizer may occur in a non-finite clause, (11) is synonymous with
(10). In Variety A, in which a complementizer may only introduce a temporally
independent clause, the addition of the complementizer to (10) blocks the
possibility of construing *ħannā* ('John') as the matrix subject. In variety A,
(11) may only be interpreted as asserting that an implicit forgetter other than
John forgot that John should tell her about the meeting. The fact that John
may not be construed as the forgetter indicates that *ħannā* ('John') functions
as a subordinate subject c-commanded by an implicit pronoun functioning
as matrix subject. A construal in which these are identical in reference results
in a violation of Condition C of the binding theory, which prohibits an R-
expression such as 'John' from being co-indexed with a c-commanding term
(Chomsky, 1981).

(11) nisi   ʔinno yʔil-lā   ħannā ʕan   l-iʒtimēʕ
     forget_PERF that   tell_IMPF-her John about the-meeting
     VARIETY A: 'He_i forgot that John_j should tell her about the meeting.'
     VARIETY B: 'John forgot to tell her about the meeting.'

Confirming the conclusion that the presence of a complementizer makes a subordinate clause finite in Variety A, the occurrence of actual tense morphology in the subordinate clause, which in turn requires the complementizer in both varieties, yields the effect in both varieties seen in Variety A in (11). The introduction of present and past tense in the subordinate clause in (12a) and (12b) respectively causes *ħannā* to be construed as the subordinate subject referentially disjoint from the implicit matrix subject.

(12) a. nisi   ʔinno b-yʔil-lā   ħannā ʕan   l-iʒtimēʕ
        forget_PERF that   PRES-tell_IMPF-her John about the-meeting
        'He_i forgot that John_j usually tells her about the meeting.'

     b. nisi   ʔinno ʔal-lā   ħannā ʕan   l-iʒtimēʕ
        forget_PERF that   tell_PERF-her John about the-meeting
        'He_i forgot that John_j told her about the meeting.'

4. Discussion

The data discussed above illustrate two placement positions for subjects in control constructions. That the alternation relates lexically identical strings and is restricted in systematic ways, as described below, supports a transformational account of the alternation. This section pursues such an account, evaluating several possible formalizations of the relationship. Broadly, it considers two possible hypotheses that differ in the directionality of the transformation, a hypothesis that maintains that the right shifted order is derived from the canonical order and a hypothesis that maintains that the canonical order is derived from the right shifted order. These hypotheses are described in more detail below, and evidence is presented bearing on the correctness of each.

The hypothesis that the right shifted order is derived from the canonical order takes as its starting point the analysis of control presented in Chomsky and Lasnik (1977), in which the subject originates in the matrix clause, where it stands in a thematic relationship with the matrix verb, and binds a null anaphor in the subject position of the subordinate clause, which in turn stands in a thematic relationship with the subordinate verb. The two verbs indirectly share a subject in this manner, schematized in (13) for LA.

(13) [_TP ħāwal-o l-uwlēd_i   [_TP yiftaħ-o   PRO_i l-ʕilbeh]]
        try_PERF-3P the-children_i   open_IMPF-3P PRO_i the-box
     'The children tried to open the box.'

This hypothesis has two possible formulations differing in what moves where in the right shifted order. One is that the subject moves from its position in the canonical order to its position in the shifted order. I refer to this approach as the '(literal) right subject shift' account, illustrated in (14), where the subject *l-uwlēd* ('the children') moves from the canonical subject position marked by the trace *t*. Rightward movement of the subject on this account may exemplify either actual syntactic lowering or post-syntactic reordering of the linear string present in the Phonological Form (PF), essentially a phonological adjustment to the output of the syntactic component, as described by Chomsky (1995) for certain arguably phonologically motivated transformations such as Wackernagel effects in Slavic languages or verb second in German and Dutch. Since the evidence discussed below speaks against both possibilities, I leave the grammatical details of the operation illustrated in (14) unresolved, including the exact landing site of syntactic lowering with respect to PRO.

(14) [ħāwal-o t_i [yiftaħ-o   l-uwlēd$_i$ PRO l-ʕilbeh]]
     try$_{PERF}$-3P   open$_{IMPF}$-3P the-children   the-box
 'The children tried to open the box.'

Another possible formulation of the derivation of the right shifted order from the canonical order is that the subordinate infinitival verb moves from its base position in the subordinate clause, possibly together with some functional material, as described in section 5, to a derived position in the matrix clause, adjacent to the matrix verb, where it precedes the matrix subject, which is in [spec,VP] in the VSO order, giving the impression that the subject has moved to the right. I refer to this approach as the 'verb raising' account. Since Arabic has V raising to T (Mohammad, 1990; Ouhalla, 1991; Fassi Fehri, 1993; Ouhalla, 1994, and others), the verb raising account involves raising of the subordinate non-finite T, encompassing the subordinate verb, to a position adjoined to the matrix verb, prior to raising of the matrix verb to matrix T, deriving a structure such as (15).

(15)
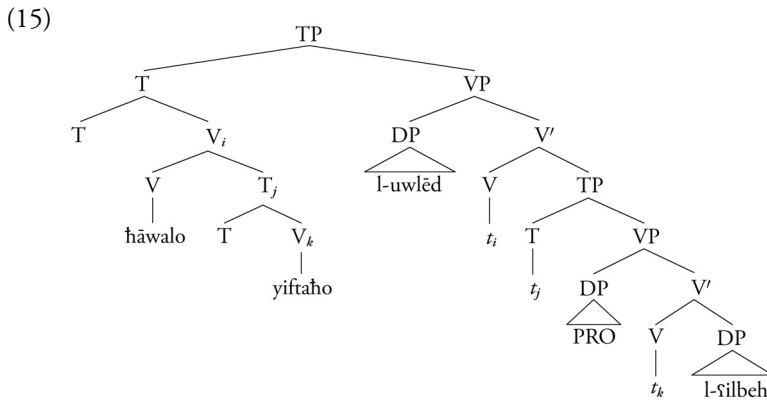
The derivation in (15) is similar to that proposed by Kayne (1989) to underlie restructuring in Romance languages, in which an infinitival subordinate clause is unified with the matrix clause, making the subordinate clause transparent for various syntactic dependencies such as that relating a clitic to a thematic position (clitic climbing). In Kayne's analysis, T-to-T movement (I-to-I movement in his nomenclature) is responsible for the constellation of properties found in restructuring contexts. If the verb movement analysis is the correct analysis of right subject shift in LA, it means that LA systematically supports restructuring in control contexts, as opposed to Romance, in which the possibility of restructuring is contingent on the matrix verb.

The other hypothesis on right subject shift entertained here, that maintains that the canonical order is derived from the right shifted order, takes as its starting point Hornstein's (1999) claim that the dependency between the matrix and subordinate subject in control constructions is a movement dependency, rather than a binding dependency. Hornstein claims that the subject in control constructions originates as a thematic dependent of the subordinate verb in the subordinate clause, then raises into a thematic relationship with the matrix verb in the matrix clause, where it surfaces as the matrix subject. The two verbs then share a subject directly; the two theta positions are related by a movement chain. Accordingly, Hornstein argues against Chomsky's (1981) Theta Criterion, which states that no chain may bear more than one theta role, claiming instead that the difference between control and raising is precisely that in the former case, the movement chain bears two theta roles, while in the latter it bears only one. Building on Hornstein's theory of control, Polinsky and Potsdam (2002) propose that in some languages, raising of the subject from the subordinate to the matrix clause may be covert, in which case the subject appears in the subordinate clause in the surface structure. The LA data described here conform to this picture. A backward control analysis of these data maintains that the subject occurs in the subordinate subject position in the surface structure, while the matrix subject position is unoccupied, illustrated in (16), where the symbol Δ represents the unoccupied matrix subject position. Covert movement of the subject to the matrix clause, leaving a trace in the subordinate clause, links the subordinate subject to a theta role in the matrix clause. The following sections evaluate the hypotheses described above in light of further empirical considerations.

(16)
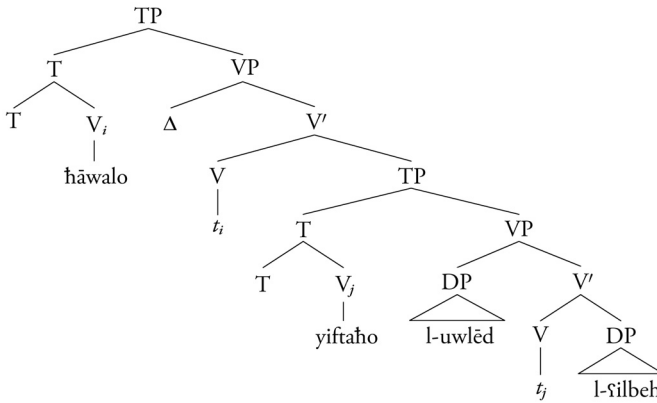
4.1. *Locality*

The data in (17) and (18) illustrate configurational restrictions on right subject shift. Example (17b) demonstrates that, in simplex clauses, the subject may not occur between complements of the verb. Example (18), repeated from (12b) discussed previously, indicates that the matrix subject may not be flanked by material from a finite subordinate clause, in contrast to right subject shift contexts, where it is flanked by material from a non-finite clause. Example (18), in which the subordinate clause contains a complementizer and a past tense verb, is grammatical in both varieties of LA, but *ħannā* ('John') may only be interpreted as the subject of the subordinate clause, not as the matrix subject.

(17) a. tbarraʕ   ħannā bi-mīt   ktēb la-l-maktabeh
        donate_PERF John   with-hundred book to-the-library
        'John donated 100 books to the library.'

     b. *tbarraʕ   bi-mīt   ktēb ħannā la-l-maktabeh
        donate_PERF with-hundred book John   to-the-library

(18) nisi   ʔinno ʔal-lā   ħannā ʕan   l-iʒtimēʕ
     forget_PERF that   tell_PERF-her John   about the-meeting
     'He_i forgot that John_j told her about the meeting.'

These observations militate against the superficial PF analysis of right subject shift, since they indicate that the right shifted word order is sensitive to syntactic attributes of the surface context of the shifted subject. The alternation does not operate purely on phonological forms, since it is sensitive to the nature of the constituent edges that represent possible placement sites for the sub-

ject. These data are compatible with the other hypotheses entertained here, since subject lowering, verb raising, and subject raising (in the backward control analysis), being syntax-level operations, are expected to be sensitive to the syntactic context in which they operate.

4.2. *Contrast with Subject Postposing*

Another fact that militates against both the PF movement and syntactic lowering variations on the right subject shift hypothesis is that putative subject movement in such cases interacts differently with quantifier float than bona fide cases of subject movement in subject post-posing constructions, illustrated in (19c). Quantifier float is illustrated in (19a) and (19b). The quantifier *kill* ('all'), which typically directly precedes the nominal that denotes its restriction, as illustrated in (19a), may instead 'float' to the right, in which case it bears a possessive pronominal suffix that refers back to its restriction, illustrated in (19b), where *-un* ('them') refers back to the restriction *l-uwlēd* ('the children'). The floated quantifier must be c-commanded by its antecedent, though views differ on the nature of the relationship (cf. Shlonsky 1991 and Benmamoun 1999). In subject post-posing, the subject is moved all the way to the right edge of the clause, past all VP-internal material, apparently to a right peripheral position c-commanding the moved subject's base position. This operation may strand a floated quantifier in the matrix clause, as (19c) illustrates, whose structure is illustrated in (19d).

(19) a. ħāwal-o   kill l-uwlēd   yiftaħ-o   l-ʕilbeh
       try$_{PERF}$-3P all   the-children open$_{IMPF}$-3P the-box
       'All the children tried to open the box.'

   b. ħāwal-o   l-uwlēd   kill-un   yiftaħ-o   l-ʕilbeh
      try$_{PERF}$-3P the-children all-them open$_{IMPF}$-3P the-box
      'All the children tried to open the box.'

   c. ħāwal-o   kill-un   yiftaħ-o   l-ʕilbeh, l-uwlēd
      try$_{PERF}$-3P all-them open$_{IMPF}$-3P the-box   the-children
      'All the children tried to open the box.'

   d. [$_{CP}$ [$_{TP}$ ħāwal-o t_i kill-un   yiftaħ-o   l-ʕilbeh] l-uwlēd$_i$]
            try$_{PERF}$-3P   all-them open$_{IMPF}$-3P the-box   the-children

In contrast, the right-shifted word order cannot strand a floated quantifier in the matrix clause (20). This fact indicates that no derivation analogous to (19d) is available for (20), in which the subject moves to the right, leaving a trace in the matrix subject position. The ungrammaticality of (20) therefore

militates against the subject lowering account. It militates against the PF subject movement account as well, since no explanation presents itself for the fact that the floated quantifier disrupts this putatively post-syntactic displacement (the floated quantifier need not be preceded by its antecedent at PF, as (19c) demonstrates). Consequently, neither the lowering nor PF movement account explains the ungrammaticality of (20).

(20) *ħāwal-o   kill-un   yiftaħ-o   l-uwlēd   l-ʕilbeh
       try_PERF-3P   all-them   open_IMPF-3P   the-children   the-box

The ungrammaticality of (20) follows from the backward control analysis due to the fact that the floated quantifier (or to be exact the clitic pronoun it bears) must be c-commanded by its antecedent at or before S-structure (a restriction that holds on binding in general in Arabic, according to Mohammad 1984), which it is not in (20), according to the backward control analysis. And it follows from the verb raising account as well, since verb raising to a position preceding the subject necessarily places the verb in a position preceding a matrix floated quantifier as well, since the subject precedes the floated quantifier, since it must c-command it.

4.3. *Quantifier Float and Scope Relations*

Additional observations on the distribution of floated quantifiers that militate against a subject lowering analysis are presented in (21) and (22). At first glance, (21b) seems to indicate that a quantifier may float into the subordinate clause in a non-finite complementation structure. However, there is a subtle difference in interpretation between the canonical non-floated structure in (21a) and the quantifier float structure in (21b) that suggests that (21a) and (21b) are not transformationally related.

(21) a. ħāwal-o   kill   l-uwlēd   yiftaħ-o   l-ʕilbeh
        try_PERF-3P   all   the-children   open_IMPF-3P   the-box

     (wāħed   wara   l-tēni)
      one   after   the-second
     'All the children tried to open the box (one after the other).'

    b. ħāwal-o   l-uwlēd   yiftaħ-o   kill-un   l-ʕilbeh
        try_PERF-3P   the-children   open_IMPF-3P   all-them   the-box

     (#wāħed   wara   l-tēni)
        one   after   the-second)
     'The children tried to all open the box (#one after the other).'

Example (21b) explicitly asserts that all the children tried to open the box jointly, not individually, and is therefore incompatible with the adverbial *wāḥed wara l-tēni* ('one after the other'), which asserts that the children tried to open it individually, not jointly. On the other hand, (21a) is compatible with this scenario (as well as with the joint opening scenario), and is therefore compatible with the adverbial that asserts that the children tried to open it individually (the judgments for the English translations given above, where *all* occurs either in the matrix or the subordinate clause, are parallel). The difference is illustrated more clearly with a desiderative control verb such as *nēwi* ('intend'), where the matrix and subordinate time frames need not coincide. The sentence in (22a) with a non-floated subject quantifier asserts that all the professors intend to go to America. It asserts only that each professor has an intention about himself, and is therefore compatible with the continuation 'but none intend for the others to go'. The sentence in (22b), on the other hand, with a floated subject quantifier, asserts that the professors intend that they will all go to America. That is, each professor has an intention about all the professors. This assertion is not compatible with the continuation 'but none intend for the others to go', since this continuation contradicts an assertion that the floated quantifier contributes.

(22) a. kill l-ʔasētzi   nēwyīn   ysēfr-o   ʕa ʔamīrkā
        all   the-professors (are) intending travel_IMPF-3P to America

        (bass wala wāḥed   ʔāṣed   ʔinno l-bēʔyīn yrūḥ-o)
         but no   one   (is) intending that the-rest go_IMPF-3P
        'All the professors intend to go to America (but none intend for the others to go).'

   b. l-ʔasētzi   nēwyīn   ysēfr-o   kill-un ʕa ʔamīrkā
        the-professors (are) intending travel_IMPF-P all-them to America

        (#bass wala wāḥed   ʔāṣed   ʔinno l-bēʔyīn yrūḥ-o)
          but no   one   (is) intending that the-rest go_IMPF-3P
        'The professors intend to all go to America (#but none intend for the others to go).'

In each of these cases, the floated quantifier contributes to the semantic composition of the subordinate clause, which in turn denotes the thing attempted in (21b) and the thing intended in (22b). That is, the floated quantifier is interpreted in its surface position in the subordinate clause, not in the position of the matrix subject, suggesting that the floated quantifier in (21b) and (22b) is base generated in the subordinate clause, rather than being displaced from the matrix clause.

The interpretation of *killun* in such cases stands in contrast to the interpretation of right shifted subjects. Though right shifted subjects are flanked by material from the subordinate clause, they do not behave scopally as if they occur in the subordinate clause. Examples (23a) and (23b) show that, in contrast to quantifier float, right subject shift does not suffice to force the joint opening reading in (23a) or the shared intention reading in (23b), as their compatibility with the bracketed continuations there demonstrates.

(23) a. ħāwal-o   yiftaħ-o   kill l-uwlēd   l-ʕilbeh
       try$_{PERF}$-3P open$_{IMPF}$-3P all   the-children the-box

      (wāħed wara l-tēni)
       one   after the-second
      'All the children tried to open the box (one after the other).'

   b.   nēwyīn   ysēfr-o   kill l-ʔasētzi   ʕa ʔamīrkā
          (are) intending travel$_{IMPF}$-3P all   the-professors to America

      (bass wala wāħed   ʔāṣed   ʔinno l-bēʔyīn yrūħ-o)
       but   no   one   (is) intending that   the-rest go$_{IMPF}$-3P
      'All the professors intend to travel to America (but none intend for
      the others to go).'

These data indicate that the conclusion drawn for *killun*, that when it is flanked by material from the subordinate clause it is base generated and interpreted in the subordinate clause, cannot be extended to right shifted subjects. The phrase *ysēfr-o kill l-ʔasētzi ʕa ʔamīrkā* ('all the professors to travel to America') appears to occur as a coherent constituent in (23b), but yet this phrase does not describe the content of the intent of the professors, since (23b) does not assert that the professors have intentions about the other professors' travel plans. Thus, though the right shifted subjects in these cases are flanked by material from the subordinate clause, they are not interpreted in the subordinate clause. Insofar as right shifted subjects are base generated in the subordinate clause, as in the backward control analysis, they move obligatorily into the matrix clause before the interpretation of the sentence is composed. The verb movement approach derives these facts as well, since in this approach right shifted subjects are never in the subordinate clause. These data are also compatible with the PF movement approach, since they indicate that right subject shift is semantically vacuous (but see below), an expected property of post-syntactic movement. They militate against the subject lowering analysis, however, since subject lowering would place the subject quantifier in the subordinate clause, where it is then expected to be interpreted.

The data discussed above shows that quantificational subjects are interpreted in the matrix clause, even in the right shifted order. They scope outside of the intensional context introduced by a control verb. Quantificational subjects' interaction with negation is more nuanced. The [+human] existential quanti-fier *ħadan* ('someone') obligatorily falls under the scope of clausemate negation, which is expressed by the immediately preverbal particle *mā*. Example (24a), therefore, cannot assert that someone did not try to disturb his neighbor, but only that no one tried to disturb his neighbor. Similarly, (24b) asserts that not every tenant tried to disturb his neighbor. Some speakers I have consulted with, but not all, accept a wide scope reading for the universal quantifier in (24b), on which it asserts that every tenant did not try to disturb his neighbor.

(24) a. mā   ħāwal   ħadan   yizʕoʒ   ʒār-uh
       not try_PERF someone disturb_IMPF neighbor-his
       'No one tried to disturb his neighbor.' (NEG > ∃)
       'Someone didn't try to disturb his neighbor.' (∃ > NEG)

   b. mā   ħāwal   kill   mistaʔʒir yizʕoʒ   ʒār-uh
      not try_PERF every tenant   disturb_IMPF neighbor-his
      'Not every tenant tried to disturb his neighbor.' (NEG > ∀)
      %'Every tenant did not try to disturb his neighbor.' (%∀ > NEG)

The interpretations available in the canonical order carry over to the right shifted order, including the availability of a wide scope reading for a universal quantifier for those speakers for whom such a reading is available in the canonical order.

(25) a. mā   ħāwal   yizʕoʒ   ħadan   ʒār-uh
       not try_PERF disturb_IMPF someone neighbor-his
       'No one tried to disturb his neighbor.' (NEG > ∃)
       'Someone didn't try to disturb his neighbor.' (∃ > NEG)

   b. mā   ħāwal   yizʕoʒ   kill   mistaʔʒir ʒār-uh
      not try_PERF disturb_IMPF every tenant   neighbor-his
      'Not every tenant tried to disturb his neighbor.' (NEG > ∀)
      %'Every tenant did not try to disturb his neighbor.' (%∀ > NEG)

If the subordinate verb is negated, the subject in the canonical order obligato-rily outscopes negation.

(26) a. ħāwal   ħadan   mā   yizʕoʒ   ʒār-uh
       try_PERF someone not disturb_IMPF neighbor-his
       'Someone tried to not disturb his neighbor.' (∃ > NEG)
       *'No one tried to disturb his neighbor.' (*NEG > ∃)

   b. ħāwal   kill   mistaʔʒir mā yizʕoʒ   ʒār-uh
      try$_{PERF}$ every tenant   not disturb$_{IMPF}$ neighbor-his
      'Every tenant tried to not disturb his neighbor.' ($\forall$ > NEG)
      *'Not every tenant tried to disturb his neighbor.' (*NEG > $\forall$)

Here too, the interpretation of the canonical order is also available in the right shifted order. In the right shifted order, however, another interpretation arises in addition, one that reflects the surface order of negation and the quantifier. The right subject shift example (27a) may mean either *Someone tried to not disturb his neighbor*, as in the canonical order, or *No one tried to disturb his neighbor*, reflecting the surface order of the two operators. Example (27b) may mean either *Every tenant tried to not disturb his neighbor*, as in the canonical order, or *Not every tenant tried to disturb his neighbor*, reflecting the surface order.

(27) a. ħāwal mā yizʕoʒ   ħadan   ʒār-uh
      try$_{PERF}$ not disturb$_{IMPF}$ someone neighbor-his
      'Someone tried to not disturb his neighbor.' ($\exists$ > NEG)
      'No one tried to disturb his neighbor.' (NEG > $\exists$)

    b. ħāwal mā yizʕoʒ   kill   mistaʔʒir ʒār-uh
      try$_{PERF}$ not disturb$_{IMPF}$ every tenant   neighbor-his
      'Every tenant tried to not disturb his neighbor.' ($\forall$ > NEG)
      'Not every tenant tried to disturb his neighbor.' (NEG > $\forall$)

The presence of an interpretational ambiguity in (27) militates against the PF movement analysis, since this analysis does not predict right subject shift to have any interpretational correlate, being a post syntactic alternation. The data are puzzling in the light of other possible analyses as well. The subject lowering analysis and the backward control analysis seem at first glance to predict the ambiguity, since they both situate the subject within the subordinate clause in at least the surface structure (and in the base structure as well, in the backward control approach). But if this surface order is reflected in the interpretation of the sentence, the order must hold also at the level of representation at which this interpretation is composed, i.e. at LF. In the backward control approach, according to which the subject is base generated in the subordinate clause, it therefore remains there not only in the surface structure but also at LF. Then, at no point in the derivation is this subject in the matrix clause, contrary to Hornstein's (1999) theory of linking that the backward control approach presupposes, according to which the subordinate subject links to a theta role of the matrix verb by LF raising into an argument position in the matrix verb phrase, and contrary to the observation in (23) that a subject cannot be interpreted in the subordinate clause.

The lowering approach maintains that the right shifted subject originates in the matrix clause, but lowers into the scope of negation in the surface structure, and remains there at LF. While this operation suffices to put the subject into the scope of negation, even if the lowered subject binds its base position in the matrix clause by virtue of being related to it by movement, identification of the matrix theta role by the subject quantifier, which does not form a constituent with the negative particle *mā*, does not in and of itself lend clausal scope to the negative particle. A grammatical construct with the desired effect might take the form of a principle that dictates that if an operator scopes over one link in a chain, it scopes over the entire chain. While this principle would also derive the correct result in the backward control analysis, since LF raising of the subordinate subject would 'carry up' the subordinate negation, it further predicts that movement should never invert the scope of two operators, since the crossed over operator would always scope over the base position of the moved operator. Counterexamples to this prediction abound, including again those in (23), where, according to the backward control account, raising of the subordinate subject into the matrix clause removes it from the scope of the intensional matrix predicate.

The net effect of this hypothetical principle is that the subordinate negation can be interpreted in the matrix clause in the right shifted order, but not the canonical order (cf. (26)). The verb raising account, according to which right subject shift is an artifact of restructuring, or clause union, sheds some light on why this might be. Restructuring makes a subordinate clause transparent for certain syntactic dependencies, such as clitic climbing in Romance languages. That this transparency might also promote a reanalysis in which subordinate negation is interpreted in the matrix clause is consistent with the general effect of restructuring as clause union, though it opens new questions about the syntactic details of what in the restructuring analysis is essentially neg-raising contingent on T-to-T movement.

4.4. *Agreement*

Another set of facts militating against the subject movement account and the backward control account in favor of the verb raising account, relates to directionally sensitive agreement patterns in sentences with conjoined subjects. A definite or specific indefinite subject may precede the finite verb in LA, mirroring Mohammad's (1990) description of the closely related dialect Palestinian as well as Standard Arabic. A conjoined preverbal subject (e.g. *maryam wa ḥannā* 'Mary and John' below) triggers plural agreement on the verb (28a). However, as Mohammad (1990) and Aoun et al. (1994) describe, a verb may optionally agree either with only the first conjunct of a conjoined

post-verbal subject, which may be singular, or with the entire conjoined subject, which is inevitably plural (28b).

(28) a. [[maryam]$_i$ wa   ħannā]$_j$ fataħ-{*et$_i$/o$_j$}   l-ʕilbeh
        Mary   and John   open$_{PERF}$-{*3FS/3P} the-box
        'Mary and John opened the box.'

   b. fataħ-{et$_i$/o$_j$}   [[maryam]$_i$ wa   ħannā]$_j$ l-ʕilbeh
      open$_{PERF}$-{3FS/3P} Mary   and John   the-box
      'Mary and John opened the box.'

In control structures showing the canonical order, the agreement facts conform to the pattern described above. The finite matrix verb may show singular agreement with the first conjunct of a conjoined post-verbal subject, illustrated in (29a) (plural agreement is possible here too). The subordinate verb may only show plural agreement (29a), not first conjunct agreement (29b), since its subject is not a coordinate structure, but rather the hidden pronominal PRO (or movement trace in the backward control approach), as illustrated in (29c), where PRO is bound by the coordinate structure *maryam wa ħannā* ('Mary and John').

(29) a. ħāwal-et   maryam wa   ħannā yiftaħ-o   l-ʕilbeh
        try$_{PERF}$-3FS Mary   and John open$_{IMPF}$-3P the-box
        'Mary and John tried to open the box.'

   b. *ħāwal-et   maryam wa   ħannā ti-ftaħ   l-ʕilbeh
      try$_{PERF}$-3FS Mary   and John 3FS-open$_{IMPF}$ the-box

   c. [ħāwal-et$_i$ maryam$_i$ wa   ħannā [yiftaħ-o$_j$ PRO$_j$ l-ʕilbeh]]
      try$_{PERF}$-3FS Mary   and John open$_{IMPF}$-3P   the-box
      'Mary and John tried to open the box.'

Subject post-posing disallows first conjunct agreement on even the matrix verb, as (30a) and (30b) illustrate. This state of affairs is expected on the analysis that what occupies the subject position in the post-posing structure is the trace of right dislocation, as illustrated in (30c). The finite verb agrees with the trace in (30c) and the subordinate verb with PRO; neither verb stands in an agreement relation with a coordinate structure.

(30) a. ħāwal-o yiftaħ-o   l-ʕilbeh, maryam wa   ħannā
        try$_{PERF}$-3P open$_{IMPF}$-3P the-box Mary   and John
        'Mary and John tried to open the box.'

   b. *ħāwal-et yiftaħ-o   l-ʕilbeh, maryam wa   ħannā
      try$_{PERF}$-3FS open$_{IMPF}$-3P the-box Mary   and John

    c. [[ħāwal-o$_i$ t_i [yiftaħ-o$_j$ PRO$_j$ l-ʕilbeh]]
       try$_{PERF}$-P   open$_{IMPF}$-P   the-box

      [maryam wa   ħannā]$_i$]
       Mary   and John

In contrast to subject post-posing, right subject shift does not require plural
agreement. A conjoined subject in the right-shifted order is compatible with
first conjunct agreement on both verbs (31a), as well as with plural agreement
on both verbs (31b), though it disallows mixed agreement (31c), (31d).

(31) a. ħāwal-et   ti-ftaħ   maryam wa   ħannā l-ʕilbeh
      try$_{PERF}$-3FS 3FS-open$_{IMPF}$ Mary   and John   the-box
      'Mary and John tried to open the box.'

    b. ħāwal-o yiftaħ-o   maryam wa   ħannā l-ʕilbeh
      try$_{PERF}$-3P open$_{IMPF}$-3P Mary   and John   the-box
      'Mary and John tried to open the box.'

    c. *ħāwal-et   yiftaħ-o   maryam wa   ħannā l-ʕilbeh
      try$_{PERF}$-3FS open$_{IMPF}$-3P Mary   and John   the-box

    d. *ħāwal-o ti-ftaħ   maryam wa   ħannā l-ʕilbeh
      try$_{PERF}$-3P 3FS-open$_{IMPF}$ Mary   and John   the-box

The subject lowering account does not predict (31a) to be grammatical, since
according to this account, the subordinate verb agrees with PRO and the matrix
verb agrees with the trace of lowering. As in the case of quantifier stranding, the
lowering account predicts things in right subject shift to be as they are in subject
post-posing, contrary to fact. The PF subject movement account incorrectly
predicts (31c) to be grammatical, since it is a purely linear rearrangement of
the grammatical (29a). The backward control analysis claims that the matrix
clause does not have a subject at all in the surface structure. If agreement
applies in the surface structure, then the backward control analysis predicts
the example in (32), in which the matrix verb bears no agreement at all and
the subordinate verb bears first conjunct agreement (with its subject), to be
grammatical, contrary to fact.

(32) a. *ħāwal ti-ftaħ   maryam wa   ħannā l-ʕilbeh
      try$_{PERF}$ 3FS-open$_{IMPF}$ Mary   and John   the-box

If the ungrammaticality of (32) is taken to mean that agreement applies at
LF, at which point the subject has raised into the matrix clause, the possibil-
ity of first conjunct agreement on the subordinate verb is incorrectly ruled
out, since at that level the subordinate clause contains only the trace of the
coordinate subject. For agreement to obtain on the higher verb in right shifted

contexts, the backward control analysis must incorporate a non-local and therefore grammatical function sensitive analysis of agreement, in which the post-verbal pattern reflects the features of the first nominative element in the verb's c-command domain not separated from it by a finite clause boundary. While a precedent for this approach is found in Chomky's (2000) probe-goal analysis of agreement (and other dependencies), the backward control analysis in turn requires an additional restriction enforcing agreement matching between the two verbs. Agreement matching might alternatively be characterized as inheritance of the features of the lower verb by the higher verb; in effect, the lower verb is the goal for agreement by the higher verb. Such an analysis must incorporate a further restriction preventing feature inheritance from verb to verb in the canonical word order, where mixed agreement obtains, as (29a) shows.

The verb raising hypothesis claims that the subordinate verb is incorporated into the matrix verb in the surface structure, and therefore shares the syntactic slot (matrix T) of the matrix verb. It supports this hypothesis that the grammatical agreement configurations in (31a) and (31b) are simply those available to a finite verb in a simplex sentence with a post verbal coordinate subject, as illustrated previously in (28b). Like the simplex verb, the complex verb may agree either with the first conjunct of the conjoined post-verbal subject (31a), or with the coordinate structure as a whole (31b). The ungrammatical data in (31c) and (31d) indicate that each member of the verbal complex inherits the features of the whole. The verb raising analysis is therefore compatible with the agreement facts in (31a)–(31d). The PF movement and syntactic lowering analyses are not compatible with these facts, while the backward control analysis may be, pending an appropriate theory of agreement in such contexts.

4.5. *Nominalization*

Another set of facts bearing on the correct analysis of right subject shift relates to the absence of right subject shift in nominalizations. Nominalizations occur in construct with their external argument, as in (33a), or their internal argument (see below). Adopting Ritter's (1987) analysis of the Semitic construct state, which involves raising of N to the determiner position D in an articulated DP as proposed by Abney (1987), the structure of the nominalization (bracketed constituent) in (33a) is that in (33b) (see also Fassi Fehri 1999). The argument that the head noun occurs in construct with, which I refer to as the 'genitive' argument, after the case it bears in such constructions in Standard Arabic, occupies the [spec,NP] position, directly subjacent to the head noun in the D position. The fact that the genitive argument cannot be linearly

separated from the head nominal is the result of their linear juxtaposition in
the syntax in Ritter's account, not the result of a prosodic restriction enforcing
adjacency. The non-finite subordinate clause functions as an adjunct in (33b),
not a complement, for reasons discussed below.

(33) a. staɣrab-et   min [DP muħāwalit ħannā ?inno yiʕarbiʃ
        be.surprised_PERF-1s at   trying   John that climb_IMPF
        'I was surprised at John's trying to climb the mountain.'

        ʕa   l-ʒabal
        on   the-mountain]

    b.
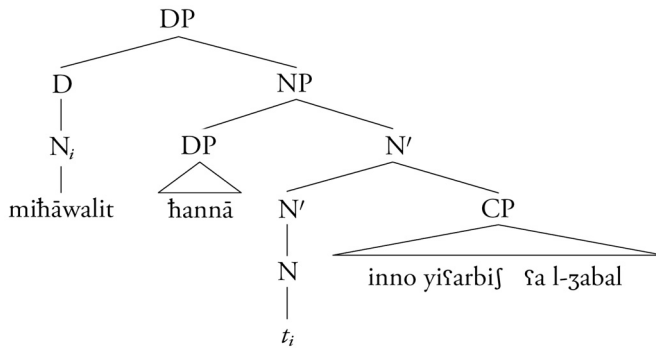
Of interest in (33a) is firstly the fact that dropping the complementizer *?inno*
('that') there is highly marginal, even for speakers of the variety of LA in which
the complementizer is prohibited in verbal control structures (Variety A), and
secondly the fact that the right shifted word order is impossible there (34).

(34) *staɣrab-et   min muħāwalit ?inno yiʕarbiʃ   ħannā
       be.surprised_PERF-1s at trying   that climb_IMPF John

      ʕa   l-ʒabal
      on   the-mountain

Grimshaw (1990, p. 73 ff) argues that clauses (CPs) never function as comple-
ments to nouns, but only as modifiers, even in nominalizations where the CP
is selected by the underlying verb. CPs, for example, are systematically optional
in nominalizations (35a), as is typical of adjuncts, even when they are obliga-
tory in the corresponding verbal structure (35b).

(35) a. The announcement (that an investigation has been initiated) was
        inaccurate.
    b. *They announced.

Further, Grimshaw identifies a class of nominalizations she terms 'complex event nominals', in which internal arguments of the nominal head must be overtly syntactically expressed. Temporal adverbials such as *frequent* and *constant* force the complex event reading of the nominalization. Example (36) (Grimshaw's (8)) demonstrates that in conjunction with *constant*, the term *assignment* may only receive a reading that requires the presence of the internal argument of the corresponding verb *assign*.

(36) a. The assignment is to be avoided.
     b. *The constant assignment is to be avoided.
     c. The constant assignment of unsolvable problems is to be avoided.

Complex event nominals derived from propositional complement verbs are systematically ungrammatical (37) (Grimshaw's (64)). Grimshaw's explanation for this is that since CP cannot be a complement to a noun, the noun cannot discharge a theta role to it under government, as required in complex event nominals. Such structures are therefore subject to contradictory requirements, which explains their non-existence.

(37) a. His (*frequent/*constant) statement that he was about to resign was intended to mislead.

'Simplex event nominals' such as *the announcement that an investigation had been initiated* do not require the subordinate clause to occur in complement position, but allow it to occur as an adjunct to NP instead. Grimshaw develops a theory of why CPs are prohibited from complement position in nominalizations and how they come to be associated with a theta role in adjunct position, the details of which do not bear on the issue at hand here.

Grimshaw's analysis predicts the obligatoriness of the complementizer in (33a), since, as in English, complementizer deletion is only allowed in complement clauses in LA. Accordingly, Stowell (1981) claims that complementizer deletion is licensed by government. Indeed, English shows a behavior similar to Arabic in finite complements to nouns, where a complementizer that is optional in a verb complement (38a) is obligatory in the corresponding nominalization (38b). English and LA differ in that LA has complementizers in non-finite clauses, which may (and must in Variety A) be deleted in the appropriate context.

(38) a. He stated (that) he was about to resign.
     b. His statement *(that) he was about to resign was intended to mislead.

Further, under the hypothesis that right subject shift is derived by raising of the subordinate verb into the matrix clause, Grimshaw's analysis leads to the

expectation that the right shifted word order is impossible in nominalizations, since in these, the subordinate clause is not in a syntactic configuration with the nominalized matrix verb that admits head movement. Movement of a head X to a head Y requires that X be the head of the complement of Y (Koopman, 1984; Travis, 1984; Baker, 1988). It is not the case in nominalizations that the subordinate verb is contained in the complement of the nominalized matrix verb. Rather, it is an adjunct (if it is present at all). These observations present the a priori expectation that verb movement out of a dependent clause is impossible in nominalizations. The hypothesis that the right subject shift alternation is contingent on the possibility of verb movement correctly predicts then that the right shifted word order is impossible in nominalizations. The verb movement analysis reduces the ungrammaticality of (34) to the independently well attested generalization that head movement requires complementhood, as does complementizer deletion.

In the backward control analysis, nominalizations like (33a) involve raising of the subject of the non-finite adjunct clause into the [spec,NP] position. Insofar as subject raising from the adjunct is possible in these contexts, there is no a priori reason to expect backward control to be impossible, since backward control is simply the spell out of the pre-movement structure. The backward control analysis must maintain that the movement structure is legitimate, since control is legitimate here, but that the pre-movement structure cannot surface when the moved element originates in an adjunct, as in nominalizations of control verbs. Consequently, these observations must derive from an accompanying theory relating the possible spell out positions of a chain to the configurational context of the chain, in particular, requiring a chain originating in an adjunct to be spelled out in the derived position. Thus, the backward control analysis is in principle compatible with these observations, given a theory of chain spell out that presents an independent reason for the restriction observed in (34), preferably one that relates these observations to other syntactically relevant properties of adjuncts, such as their island behavior (Ross, 1967).

The fact that right subject shift is impossible in nominalizations is arguably compatible with the subject lowering account of the right shifted order, since lowering in this case would be lowering into an adjunct. The assumption that lowering is subject to the same kinds of constraints as raising independently leads to the expectation that lowering into an adjunct is not possible, blocking (34) in this account. The PF movement account, on the other hand, presents no explanation for the sensitivity of rightward movement to the syntactic category of the head (noun vs. verb), and consequently presents no explanation for the ungrammaticality of (34).

A reviewer of the present work points out that the right shifted order is the only fully acceptable word order when both the matrix and subordinate verb

are nominalized, illustrated in (39) (the literal translations offered below are highly marginal in English).

(39) a. staɣrab-et$_{PERF}$ min muħāwalit ʕarbaʃit   ħannā
        be.surprised$_{PERF}$-1s at   trying   climbing John

        ʕa   l-ʒabal
        on   the-mountain
        [literally:] 'I was surprised at John's attempt of climbing the mountain.'

    b. muħāwalit ʕarbaʃit   ħannā ʕa   l-ʒabal   faʃl-et
        trying   climbing John   on   the-mountain fail$_{PERF}$-3FS
        [literally:] 'John's attempt of climbing the mountain failed'

In (39), the subject appears as the genitive argument of the nominalization, but the object of the subordinate verb may appear in this function as well, as (40) illustrates.

(40) muħāwalit fatħ   l-ʕilbeh faʃl-et
     attempt   opening the-box   fail$_{PERF}$-3FS
     [literally:] The attempt of opening the box failed.'

These structures are of substantial interest due to their striking resemblance to compound nominalized infinitives in German and Dutch as described in Evers (1975), illustrated by Evers' German examples in (41) (p. 16), in which the genitive argument represents the object of the subordinate infinitive.

(41) a. das Ersteigen-sehen ein-er gefährlich-en   Bergwand
        the climbing-seeing a-GEN dangerous-GEN mountainside
        [literally:] 'the seeing of [someone's] climbing of a dangerous mountainside'

    b. das Entwerfen-lernen-wollen   ein-es Segelschiff-es
        the building-learning-wanting a-GEN sailboat-GEN
        [literally:] 'the wanting of learning of building of a sailboat'

The signficance of the data in (41) lies in the fact that the type of compounding seen there is limited to restructuring contexts, as determined by the matrix verb. Evers shows that infinitival complements to verbs such as *sehen* ('see'), *wollen* ('want'), *lernen* ('learn') seen in (41) display transparency typical of restructuring contexts, and proposes a clause-unifying transformation operating on a bi-clausal base. Verbs that do not trigger restructuring, such as *brauchen* ('need'), *versuchen* ('try') and others also do not appear in nominalized infinitive compounds, illustrated in (42).

(42) a. *das Ersteigen-brauchen ein-er gefährlich-en   Bergwand
        the climbing-needing   a-GEN dangerous-GEN mountainside
        [literally:] 'the needing of climbing of a dangerous mountainside'

  b. *das Entwerfen-versuchen ein-es Segelschiff-es
        the building-trying   a-GEN sailboat-GEN
        [literally:] 'the trying of building of a sailboat'

Hence, pending a further investigation of the data in (39) and (40), their resemblance to compounds in Germanic that are contingent on the possibility of restructuring supports the claim that restructuring is generally available in infinitival subordination contexts in LA.

4.6. *Object Control*

A last observation that relates right subject shift in LA to restructuring is the fact that the right shifted word order is not available to the object in object control constructions, just as restructuring is blocked in object control constructions. Kayne (1989) points out that hallmarks of restructuring such as clitic climbing in Romance languages are never found in object control contexts, and seeks to explain this syntactic gap through his T-to-T analysis of restructuring. According to Kayne, T-to-T movement results in co-indexation of the two T heads, which in turn requires co-indexation of their respective specifiers, the matrix and subordinate subjects. T-to-T movement is blocked in object control constructions because the subordinate subject is not co-indexed with the matrix subject in such cases, but with the matrix object, which in turn bears no syntactic relation to matrix T. If right shift is an epiphenomenon of leftward T-to-T movement, and T-to-T movement is blocked in object control constructions, then the expectation arises that right shift should be systematically impossible in object control contexts such as (43a). This prediction is borne out, as (43b) illustrates, in which the object appears flanked by material from the subordinate clause. Only the canonical order in (43a) is grammatical. Right shift of the subject is illicit in object control contexts as well (43c). Other object control verbs, which may replace ʃazzaʕ ('encourage') preserving the grammaticality pattern in (43), include ʔannaʕ ('convince'), naṣaħ ('advise'), zakkar ('remind') and others.

(43) a. maryam ʃazzaʕ-et   ħannā yxalles   drūs-uh
        Mary   encourage$_{PERF}$-3FS John   finish$_{IMPF}$ studies-his
        'Mary encouraged John to finish his studies.'

  b. *maryam ʃazzaʕ-et   yxalles   ħannā drūs-uh
        Mary   encourage$_{PERF}$-3FS finish$_{IMPF}$ John   studies-his
   ('Mary encouraged John to finish his studies.')

c. *ʃaʒʒaʕ-et   ħannā yxalles   maryam drūs-uh
   encourage_PERF-3FS John finish_IMPF Mary   studies-his
   ('Mary encouraged John to finish his studies.')

The backward control analysis is compatible with these data only in connection with an accompanying theory relating the impossibility of spelling out the moved object in the subordinate clause to the configurational environment of the chain, as in the discussion of nominalization above. Similarly, the rightward movement approaches are compatible with these data only in connection with an apparently irreducible restriction to subject control contexts. The verb movement approach, on the other hand, reduces the subject-specificity of the process to the independently observed impossibility of restructuring in object control contexts.

5. Conclusion

The observations made above, individually and aggregately, support the verb raising account more strongly than other possible analyses of the right subject shift phenomenon in LA. These observations therefore indicate that LA has optional raising of a non-finite verb into the matrix clause, where it concatenates with the matrix verb to form a verbal complex occupying the finite verb position. Variety A does not tolerate a complementizer in non-finite complementation, though it does in non-finite adjuncts (seen in nominalizations). In Variety B, however, the complementizer is allowed, and perseveres in the right shifted word order. In the verb raising account, this observation entails that verb raising may pick up the subordinate complementizer on its way into the matrix clause. Assuming that head to head movement involves adjunction of the lower head to the higher, following Kayne (1994), examples such as those in (11) (in Variety B), in which the subject appears to the right of the non-finite verb, which in turn is preceded by a complementizer, involve adjunction of the subordinate T to subordinate C, followed by adjunction of subordinate C to matrix V (then then matrix V-to-T raising), as illustrated in (44).

(44)
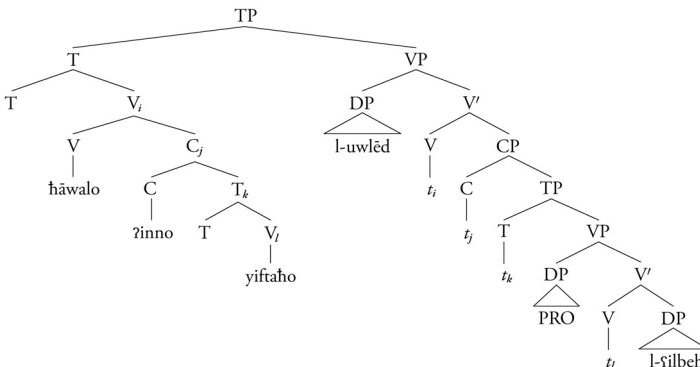
This transformation is essentially identical to that posited by Kayne (1989) and Terzi (1996) for Romance languages, and by Hinterhölzl (1999, 2006) for Germanic languages, deriving a subclass of control construction broadly known as restructuring contexts. These authors describe restructuring as clause union derived by movement of the subordinate verb or functional structure in the subordinate clause into the matrix clause. While in Romance and Germanic, not all control verbs permit restructuring, raising of a non-finite verb into the matrix clause in LA is systematically possible for all control verbs, indicating that in that language, the possibility of restructuring goes hand in hand with non-finite complementation by a finite verb.

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