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Agreement Weakening at PF: A Reply to Benmamoun and Lorimor

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Remarks and Replies

Agreement Weakening at PF: A Reply to Benmamoun and Lorimor

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Benmamoun and Lorimor (2006) dispute the claim made in Ackema and Neeleman 2003 that certain agreement alternations in Standard Arabic, and various related phenomena, can successfully be analyzed in terms of postsyntactic spell-out rules that are sensitive to prosodic structure. In this reply, we argue that the data discussed by Benmamoun and Lorimor do not warrant their conclusion, and in fact provide further evidence in favor of our original analysis.

Keywords: agreement alternations, Standard Arabic, Dutch, prosodic domains, pro drop

1 Introduction

Benmamoun and Lorimor (B&L) (2006) provide a number of facts that they claim are problematic for the account of certain agreement alternations, pro drop, and cliticization phenomena proposed in Ackema and Neeleman (A&N) 2003. In this reply, we show that rather than being problematic, the data put forward by B&L fit perfectly into this account and provide strong additional support for it.

In this section, we will first outline our approach to the phenomena in question. For reasons of space, this outline is brief; for detailed discussion, see A&N 2003 and follow-up work in A&N 2004.

One phenomenon central to our concerns is *agreement alternations* (or *agreement asymmetries* or *agreement weakening*). The morphological expression of particular agreement relations can sometimes depend on the relative positions in which the ''controller'' and the ''target'' of agreement find themselves (for a detailed overview, see Corbett 2006). One instance of this is found in Standard Arabic. This language allows for both VS and SV orders. In the SV order, subject and verb agree in gender, number, and person. In the VS order, however, they agree in gender and person only, not in number. The verb is always singular in this order, even if the subject is plural. This is illustrated by (1) and (2) (B&L's (1) and (2)).

(1) a. ʔakal-at   ṭ-ṭaalibaat-u
         ate-3F.SG the-student.F.PL-NOM
         'The students ate.'

     b. *ʔakal-na   ṭ-ṭaalibaat-u
         ate-3F.PL the-student.F.PL-NOM

(2) a. ṭ-ṭaalibaat-u   ʔakal-na
         the-student.F.PL-NOM ate-3F.PL
         'The students ate.'

     b. *ṭ-ṭaalibaat-u   ʔakal-at
         the-student.F.PL-NOM ate-3F.SG

A first description of the data might state that when the subject appears right-adjacent to the verb, agreement on the verb is weakened, in that there is no longer agreement for number. A main concern of A&N 2003 is that there are various phenomena that seem to depend on this same configuration. Crosslinguistically, there are agreement alternations, instances of pro drop, and instances of cliticization that occur only if two conditions are met: (a) the verbal head precedes the agreeing DP, the dropped pronoun, or the clitic, respectively; (b) there is no XP that intervenes between the verbal head and the other element. In A&N 2003, we argue that the sensitivity of these phenomena to this context does not have a syntactic origin, but is the result of a particular type of rule that operates at PF, the level of representation where syntax is mapped to phonology. As far as agreement alternations are concerned (though not the other phenomena mentioned), this follows an earlier insight by Benmamoun (1996, 2000). It is the particulars of the PF rules proposed in A&N 2003 that B&L take issue with.

Our account is based on an idea that is familiar from models incorporating a so-called realizational morphology (e.g., Distributed Morphology): namely, that before Spell-Out features of terminals can be deleted if identical features appear in their immediate context. A main tenet of A&N 2003 is that this context can be a phonologically defined local domain: specifically, the phonological phrase ϕ. An agreement alternation can arise if the grammar of the language contains a PF rule stating that if the target and the controller of a particular agreement relation are in the same ϕ, the features of one of them are reduced. Since this takes place before Spell-Out, it can have an effect on the morphological shape of the target or the controller.[1]

To see if ϕ is indeed the context of application of these PF rules, we use independently motivated alignment rules, which determine prosodic phrasing by stating that edges of syntactic phrases must be aligned with edges of ϕs (Selkirk 1984, 1986, McCarthy and Prince 1993, Truckenbrodt 1999). This can involve either left-alignment or right-alignment. Languages that are (mainly) head-initial syntactically, such as Standard Arabic, display right-alignment (Selkirk

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[1] For independent reasons, it is the case that if the features of the controller are reduced, this can only mean total reduction of all features (resulting in pro drop), whereas features of the target (the verb) can be reduced partially (e.g., reduction might target only number or only person features; see A&N 2003:730–731).

1986, Tokizaki 1999). This means that the following rule determines the initial prosodic phrasing in a head-initial language (see A&N 2003:684):[2]

    (3) Align the right edge of an XP with the right edge of a ϕ.

Thus, a syntactic structure like English (4a) will be mapped onto the initial prosodic phrasing in (4b) (note that English, as a head-initial language, is also subject to rule (3)). Here and below, ϕ-boundaries are indicated by braces.

    (4) a. [[A friend [of Mary's]] [showed [some pictures] [to John]]].
       b. {A friend of Mary's} {showed some pictures} {to John}

Two things must be noted in connection with (3). First, the rule mentions XPs (i.e., maximal projections) rather than Xs (heads). Hence, heads do not trigger ϕ-closure; only the right boundaries of full phrases do. Second, it is important to realize that this rule determines the initial prosodic structure at PF, that is, *before* Spell-Out. The final part of the mapping from syntax to phonology at PF consists of the insertion of phonological material that corresponds to feature bundles in the structure. The ultimate prosodic structure in phonology proper depends, of course, on the phonological properties of this inserted material. For example, if an initial (i.e., PF) ϕ turns out to be too ''light'' in phonology because it contains too little phonological material to form a ϕ on its own, it will be adjoined to a neighboring ϕ to ensure proper weight distribution. The ultimate prosodic phrasing will also depend on factors such as speech rate and pauses. For motivation of such a two-step model of prosodic phrasing (initial domains determined by mapping from syntax at PF, later adjustments in phonology), see Ghini 1993, Monachesi 2005, and Dehé 2006.

    Consider the different effects that the alignment rule in (3) has on structures in which an XP immediately follows a head H, as in (5a); structures in which a head Z intervenes between H and XP, as in (5b); structures in which a maximal projection ZP intervenes between H and XP, as in (5c); and structures in which XP precedes H, as in (5d). The prosodic phrasing that results from applying (3) to the respective syntactic structures is given on the right-hand side in (5). Syntactic brackets indicate XP boundaries; hence, (3) maps a right] bracket to a right } bracket.

    (5) a. [H [XP] [. . .   →   {H XP} { . . .
       b. [H Z [XP] [→   {H Z XP} { . . .
       c. [H [ZP] [XP] [. . .   →   {H ZP} {XP} { . . .
       d. [[XP] H . . .   →   {XP} {H . . .

It can be seen that in (5a) and (5b), but not in (5c) and (5d), H and XP end up in the same prosodic phrase. Therefore, if agreement weakening in an agreement relation between a head and

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an XP is the result of a context-sensitive spell-out rule of the type proposed in A&N 2003, where *context* means 'within the same phonological phrase', this rule can work in (5a) and (5b), but not in (5c) and (5d). The specific rule for Standard Arabic agreement weakening, which happens to target the number feature, is as given in (6) ((41) in A&N 2003).[3]

(6) $\{[V \text{ Pl} \ldots] [D \text{ Pl} \ldots]\} \rightarrow \{[V \ldots] [D \text{ Pl} \ldots]\}$

One misunderstanding that appears at various points in B&L's article regards our assumption, following Selkirk's (1986) Strict Layer Hypothesis, that prosodic structure is not recursive. B&L claim that this means that rules operating at PF cannot be applied recursively. However, this is incorrect. The import of the hypothesis that prosodic structure is nonrecursive is that in a well-formed prosodic representation, a category of a particular level cannot dominate a category of an identical or higher level. Thus, a prosodic word may not dominate another prosodic word or a prosodic phrase, a prosodic phrase may not dominate another prosodic phrase or an intonational phrase, and so on.[4] The ban on recursive structure does not imply that PF rules cannot apply recursively. This is allowed as long as the output of the rules does not result in a recursive prosodic structure.

For example, in A&N 2003:708n17 we explicitly note that the context-sensitive spell-out rule responsible for Middle Dutch cliticization *does* apply recursively: ''At this point, we should note that the rule can apply recursively.'' Application of the rule results in a pronominal subject's being reduced to a weak element. Such an element cannot support a prosodic phrase boundary, and consequently the prosodic structure is adjusted such that there no longer is a ϕ-boundary between the initial pronoun and a second pronoun in a sequence of pronouns. Therefore, the context-sensitive spell-out rule can apply again, and the second pronoun is reduced to a clitic. In this example, the *application* of the rule is recursive, but this recursive application never results in a *structure* that is recursive in that it violates the Strict Layer Hypothesis.

We now turn to the data that B&L advance as being incompatible with our account of agreement weakening and other phenomena.

2 Postverbal Traces and Agreement Weakening

B&L argue that postverbal *wh*-traces do not trigger agreement weakening in Standard Arabic. They claim that this conflicts with our account because, they say, we assume that ''traces are present during the formation of prosodic domains'' (p. 12). This is correct if *the formation of prosodic domains* refers to the moment when the alignment rule in (3) applies. However, this does not imply that traces are present at the moment when the context-sensitive spell-out rule in (6) applies. In A&N 2004, we explicitly argue that traces are deleted at PF before application of context-sensitive spell-out rules, so that traces should not trigger agreement weakening. We will

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[3] Note that the square brackets in (6) are not syntactic phrase (XP) brackets, which are not present at PF; rather, they simply indicate feature bundle boundaries.

[4] As noted by B&L, Selkirk (1995), adopting an Optimality Theory perspective on grammar, argues that this is in fact a violable constraint. This issue is irrelevant for the point at hand, however.

discuss this point below, but first we consider the data put forward by B&L, because we do not think they in fact show what they are purported to show.

B&L start out by observing that full agreement in Standard Arabic is obligatory in questions and relative clauses. Crucially, they claim that this is also the case when the *wh*-phrase has been extracted from postverbal rather than preverbal position—hence, from the position that normally triggers agreement weakening. In Standard Arabic, it is not possible to determine whether the *wh*-trace is preverbal or postverbal. However, B&L argue that in the Bani-Hassan dialect there is evidence that extraction can take place from postverbal position and yet does not lead to agreement weakening. This evidence is based on Kenstowicz's (1989) observation that in this dialect the word for 'who' occurs in two different forms, *min* and *miin*. The latter occurs when 'who' is governed by a verb (i.e., when it is in postverbal position) or a preposition; when the word is in first position, it shows up as *min*. The following examples (B&L's (28)) illustrate this:

(7) a. maʕa miin/*min raafi fariid al-suug
       with whom   went Fariid the-market
       'With whom did Fariid go to the market?'
    b. min/*miin ðarab miin/*min
       who   hit   whom
       'Who hit whom?'

According to B&L, if in Bani-Hassan Arabic *wh*-movement takes place from postverbal position, the operator should appear as *miin*, ''because it is lexically governed by the verb'' (p. 13). They claim that the following data (their (29)) show that this is correct:

(8) a. miin/*min fariid gaal innu kisar al-beeða
       who   Fariid said that broke the-egg
       'Who did Fariid say that broke the egg?'
    b. min/*miin fariid gaal kisar al-beeða
       who   Fariid said broke the-egg
       'Who did Fariid say broke the egg?'

Note that without the complementizer *innu* the distribution of *min* and *miin* is reversed (see (8b)). According to B&L, there should be a complementizer-trace effect if the operator were extracted from preverbal position in case the complementizer *innu* is present. This means that extraction would have to take place from postverbal position in this case, and indeed what surfaces is *miin*, as in (8a).

However, complementizer-trace effects are notoriously nonuniversal, and we must admit that it is unclear to us whether the data show what B&L claim they show. A plausible alternative interpretation of the data takes *min* and *miin* to be the nominative and accusative forms of the *wh*-expression, respectively. This immediately explains the data in (7). The crucial data in (8) follow as well. Equivalents in other Arabic dialects of the complementizer in (8a) assign accusative to a preverbal subject (see, e.g., Fassi Fehri 1993). If this is true of Bani-Hassan *innu* as well, then what is extracted in (8a) is a preverbal accusative subject *miin*. In (8b), no complementizer is present, so no accusative is assigned; the extracted element is a nominative subject *min*.

The possibility that extraction in (8a) takes place from a preverbal accusative position is mentioned by B&L in their footnote 18, but they discard it for two reasons. First, they state that the complementizer ''can be followed by an expletive in the context of a postverbal subject''; the expletive presumably absorbs accusative case. This, however, does not seem to be relevant, since in (8a) there is no preverbal expletive. Hence, the only potential recipient of the complementizer's accusative is a preverbal *wh*-trace. One could, of course, stipulate that a null expletive is present, but this begs the question why *innu* cannot be followed by VSO order in general (which it cannot).

Second, it could be that *innu* assigns case only optionally. B&L support this option by pointing to the relative clause in their (26a), given here as (9), which they say shows that the complementizer here ''does not require an NP to follow it and doesn't assign Case to the NP'' (p. 13n18).

(9) žaaʔa   l-ʔawlaadu llaðiina nažaħuu
    came.3M.SG the-children that   passed-3M.PL
    'The children who passed came.'

We do not understand the argument. Given that the crucial part of (9) is a relative clause derived by null operator movement, we do not see what excludes the possibility that the trace of the empty operator is assigned accusative by the complementizer.[5] Moreover, if *innu* assigns case only optionally, we again lose the explanation of the ungrammaticality of VSO order in its complement in the absence of an expletive. Indeed, in connection with issues discussed below, B&L suggest that the counterpart of *innu* in Standard Arabic is an obligatory case assigner (see (18a) below).

For these reasons, we do not think that there is a case for linking the *min/miin* alternation to preverbal versus postverbal position, rather than to a nominative/accusative distinction. However, let us assume for the sake of the argument that *wh*-extraction can take place from postverbal position without triggering reduction in agreement. The question is whether this undermines our analysis, as B&L claim. In fact, the opposite is true. In A&N 2003, 2004, we explicitly discuss data from Dutch that imply that postverbal traces do not trigger agreement weakening. The relevant paradigm involves an impoverishment rule that targets the addressee feature of postverbal 2nd person singular subjects.

(10) a. Jij   ren-t   meestal veel   te   hard.
        you run-2SG usually much too hard
        'You usually run much too fast.'
     b. Meestal ren jij   veel te   hard.
        usually run you much too hard
        (same)

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[5] Unless the relative operator must have the same case as its antecedent, which is nominative in (9). As far as we know, however, there are no problems with such case clashes in externally headed relative clauses in other languages.

In the ''straight'' word order in (10a), the verb shows a 2nd person singular ending. When subject-verb inversion takes place, as in (10b), there is no ending, making the form of the verb identical to that of the 1st person. The following context-sensitive spell-out rule is held responsible for this ((23) in A&N 2003) (where Prt = Participant and Add = Addressee):[6]

(11) {[V Prt Add] [D Prt Add]} → {[V Prt] [D Prt Add]}

Subject-verb inversion in Dutch is the result of verb-second. On the assumption, adopted in A&N 2003, that the verb always moves to C in main clauses, subject-initial structures like (10a) must contain a subject trace in postverbal position, bound by the subject in Spec,CP. Such sentences do not show agreement weakening on the verb, however, in contrast to sentences where the overt subject appears after the verb.

These data are easily accommodated by a PF account of agreement weakening. In the course of the derivation from syntax to phonology, traces must be deleted. Therefore, the only assumption required is that trace deletion takes place before application of context-sensitive spell-out rules like (6) and (11). This point is implicit in A&N 2003, but made explicit in A&N 2004, where the following order of operations is argued for (see pp. 258–259):[7]

(12) a. Initial prosodic phrasing, on the basis of syntactic information
      b. Deletion of traces
      c. Application of context-sensitive spell-out rules
      d. Spell-out of terminals

B&L argue that this kind of analysis is not open to us, because we say that traces are present ''during the formation of prosodic domains'' (p. 12). Note, however, that what we mean by this is that the alignment rule in (3) is sensitive to the presence of traces in syntax. This rule takes a syntactic structure as its input and states that the right edge of an XP must correspond to the right edge of a ɸ. Since traces are present in syntax, the right edge of an XP-trace will trigger the rule. In A&N 2003, we provide some evidence that this is correct. Crucially, this does not imply anything concerning the timing of the deletion of traces at PF. The data in (8), even if they show what B&L claim they show, are therefore not problematic, but as predicted by our proposal.

3 Agreement in Aux-V-S Order

B&L's second challenge to our account involves data in which a subject is preceded by both an auxiliary and a main verb. In this case, both verbs undergo agreement weakening, as illustrated in (13) (B&L's (31)).

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[6] Dutch is predominantly head-initial, although VP diverges from this general pattern. We therefore assume that prosodic phrasing results from the same right-alignment rule that is active in Arabic, namely, the one in (3).
[7] B&L do not refer to A&N 2004. We do not know whether they had the opportunity to consult this work before their article was published.

(13) a. kaana   ya-lʕabu l-ʔawlaad-u
          was.3M.SG 3M-play the-children-NOM
          'The children were playing.'
     b. *kaanuu   ya-lʕabu l-ʔawlaad-u
          was.3M.PL 3M-play the-children-NOM
     c. *kaana   ya-lʕabuun   l-ʔawlaad-u
          was.3M.SG 3M-play.M.PL the-children-NOM

B&L claim that the account in A&N 2003 cannot deal with these data—in particular, with the fact that the auxiliary in (13) undergoes agreement weakening—for the following reasons:

> The auxiliary, however, is not adjacent to the subject, so the two cannot form a prosodic unit. Moreover, the operation that forms prosodic units according to A&N [(2003)] is not recursive, which means that we should not expect the auxiliary to form a larger prosodic domain involving the first prosodic domain that includes the [main] verb and the subject. Even if we allow recursion, it is not clear how weakening would proceed, given that the element adjacent to the auxiliary is the main verb whose number feature has been weakened. In that case, how would the auxiliary have access to the number feature spelled out by that prosodic domain? (B&L 2006:14)

There are two points to be made here. The first is that, as pointed out in section 1, the ban on recursive prosodic structures does not imply a ban on recursive rule application at PF. Therefore, if the data were to require recursive application of the PF rules, such application would be consistent with our proposal.

The second point is that it is in fact not necessary for the PF rules to apply recursively to derive the relevant data. Crucially, the rule in (3) implies that the entire Aux-V-S sequence in (13) is parsed into one single ϕ anyway. B&L do cite this rule, but do not trace out this particular consequence. The first right XP bracket after the auxiliary in (13) is that of the subject. Therefore, a right ϕ-bracket will only be inserted after the subject. The V that separates Aux and the subject in (13) is not an XP but a head, and hence does not trigger ϕ-closure (see (5), and in particular (5b)). As a result, both the auxiliary and the main verb end up in the same ϕ as the subject.

(14) Syntax: [$_{AuxP}$ Aux [$_{VP}$ V [$_{DP}$ S]]] ↔
     PF: {Aux V S}

Since Aux and V are both contained in the same ϕ as the subject, the weakening rule in (6) targets both of them, and the data come out as expected.

B&L seem to view adjacency as some sort of condition on the application of the alignment and context-sensitive spell-out rules (compare the quotation above: ''it is not clear how weakening would proceed, given that the element adjacent to the auxiliary is the main verb whose number feature has been weakened''). But that is having it backward. The point of our proposal is that adjacency effects *follow* from an analysis of the phenomena at hand in terms of prosodically conditioned spell-out rules. Such rules, in conjunction with the alignment rule in (3), predict that agreement alternations and related phenomena can take place under nonadjacency as long as the intervening element is a head rather than a full phrase. In A&N 2003, we supply various pieces of evidence showing that this is correct (pp. 694–695: ''Note that there is no strict adjacency

condition on verb and pronoun in weakening contexts''; p. 708n17: ''Note that this example illustrates that a clitic does not have to be string-adjacent to C''). B&L's data constitute another piece of evidence of this kind supporting our approach.

4 Null Subjects

4.1 Pro Drop in Sentences with an Auxiliary

In A&N 2003, we propose to deal with pro drop in Standard Arabic in a way that relates it to agreement weakening. Arguably, in this language the subject can be omitted only if it occurs postverbally. This can be seen in sentences introduced by complementizers. Pro drop is allowed in sentences following the complementizer ʔan, which allows only VSO order in its complement, whereas it is impossible in sentences following the complementizer ʔanna, which allows only SVO order.[8] On the basis of this, in A&N 2003 we analyze pro drop in Standard Arabic as another instance of feature reduction by a context-sensitive spell-out rule. In this case, the rule targets the controller of the agreement relation between subject and verb, rather than the target, and it affects all the features of the controller instead of just some (see footnote 1).[9]

(15) *Standard Arabic pro drop* (cf. A&N 2003:725)
  $\{\ldots [X\ \phi] \ldots [D\ \phi] \ldots\} \rightarrow$
  $\{\ldots [X\ \phi] \ldots [\quad] \ldots\}$ where ϕ = (Pl) (Prt) (Add) (Fem)

B&L argue that the data in (16) (their (34)) are problematic for this account. These data show that in sentences with more than one verb, all verbs must show full agreement if there is pro drop; agreement weakening is impossible.

(16) a. kun-na   ya-ʔkul-na
         was-3F.PL 3-eat-F.PL
         'They were eating.'
    b. *kaan-at   ya-ʔkul-na
         was-3F.SG 3-eat-F.PL
    c. *kun-na   ta-ʔkul
         was-3F.PL 3F-eat

According to B&L (p. 16), ''for their analysis to derive the facts in [(16)], A&N [(2003)] must make one crucial assumption, namely, that the pronominal subject must be located between the

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[8] We assume that (in sentences introduced by a complementizer) the structural difference between SVO and VSO clauses is that the verb has moved to a higher position in the latter than in the former, whereas the position of the subject is invariant. However, nothing in our argument hinges on this, since the PF alignment rule is sensitive to surface order and would therefore yield the same prosodic structure if the position of the verb were constant and the subject moved in CSVO clauses.

[9] We have slightly adapted the format of the rule, in order to remove an unintended ambiguity pointed out to us by an anonymous reviewer.

auxiliary verb and the main verb.'' This is incorrect. The subject can follow both verbs and still be targeted by the pro-drop rule. As discussed in section 3, the whole string Aux-V-S is parsed into one ϕ. Consequently, the pronoun ends up in the same prosodic domain as both the agreeing auxiliary and the main verb. The implication is that the data in (16) are exactly as predicted by our approach, as we will show.

In A&N 2003:728, we point out that in a context that in principle satisfies the structural description of both the pro-drop rule in (15) and the agreement-weakening rule in (6), only one of these rules can be applied. This is because these rules are in a mutually bleeding relationship: applying one rule destroys the context for the other. Agreement weakening requires the presence of an agreeing subject at PF, whereas pro drop requires a verb carrying full agreement. As a result, no structure can combine pro drop and weakened agreement.

It can easily be demonstrated that this account carries over to structures containing both an auxiliary and a main verb. Here, too, pro drop blocks agreement weakening. In pro-drop structures like (16) (in contrast to structures introduced by a complementizer, as mentioned above), the position of the dropped subject is not detectable from the surface representation. Therefore, as B&L note, sentences like (16) could in principle have one of three underlying orders: S-Aux-V, Aux-S-V, or Aux-V-S. Consider what our account predicts for each of these orders.

In a sentence with S-Aux-V order, the subject does not end up in the same ϕ as the verbs (see (5d)), with the consequence that neither pro drop nor agreement weakening is possible. This means that the pro-drop structure in (16) cannot be derived from this underlying word order (see also section 4.2) and that S-Aux-V structures will always show full agreement on both the auxiliary and the verb, which is in fact the case.

In the Aux-S-V order, the subject ends up in the same ϕ as the auxiliary (see (5a)), but not as the main verb (see (5d)). Given the incompatibility of pro drop and agreement weakening, there are two options. The first is to apply agreement weakening, in which case what is generated is a sentence with an overt subject and weakened agreement on the auxiliary but not on the main verb (which is in a different ϕ). This results in examples like (17) (A&N 2003:(42a), from Benmamoun 1996).

(17) kaan-at   ṭ-ṭaalibaat-u   ya-ʔkul-na
     was-3F.SG the-students-F.PL 3-eat-F.PL
     'The students were eating.'

The second option is to apply pro drop, in which case there will be no agreement weakening on either the auxiliary or the main verb. This results in B&L's (34a), cited above as (16a).

Finally, in the Aux-V-S order the subject ends up in one ϕ with both the auxiliary and the verb, as already pointed out (see (5b) and section 3). As before, we can apply either the agreement-weakening rule or the pro-drop rule. The output of the pro-drop rule once again yields example (16a) (B&L's (34a)). If we apply the agreement-weakening rule, we derive a sentence with an overt subject and weakened agreement on both the auxiliary and the main verb. This gives B&L's (31a), cited as (13a) above.

Under no circumstances will the ungrammatical examples in (16b) or (16c) be derived. This could only happen if agreement weakening could apply to only one of the verbs in the Aux-V-S order, with the agreement on the other verb acting as the trigger for pro drop. Such a derivation is impossible under the standard assumption that when a rule applies, it applies to all elements that meet its structural description. In general, if multiple elements are subject to the same rule, it is not possible to satisfy the rule by applying it to just one of them, leaving the others unaffected. Therefore, if agreement weakening takes place, it must affect the number features on both the auxiliary and the verb, as both are in the same ϕ as the subject.

We conclude that the data in (16) are unproblematic and in fact provide yet further support for the proposal in A&N 2003.

4.2 The Issue of Postverbal Pro Drop

As explained in the previous section, our account is based on the assumption that pro drop is possible only in postverbal position. B&L take issue with this assumption, claiming that pro drop is possible in preverbal position as well.

This issue revolves around the status of the complementizer *ʔanna/ʔinna*. In A&N 2003, we argue that since this complementizer is compatible only with the SVO order, and since pro drop is impossible after this complementizer (Mohammad 1990), pro drop in the SVO order is ruled out. (In contrast, the complementizer *ʔan*, which requires the VSO order in its complement, allows pro drop.) B&L counter this argument by making the following claims (see B&L 2006: 17):

(18) *B&L's assumptions in connection with the complementizer* ʔanna
   a. This complementizer must obligatorily discharge accusative case.
   b. There are no phonologically null accusative pronouns in Standard Arabic.
   c. It is not true that this complementizer only allows the SVO order after it; nonsubjects can follow it, as long as these are accusative.

In our view, this account does not go beyond a restatement of the observed facts. Pro drop in Standard Arabic is agreement-related, as in Italian for example. In contrast to Italian, Standard Arabic allows agreeing subjects in both nominative and accusative case, depending on context. Surprisingly, it turns out that only nominative subjects can be dropped. Accusative subjects, even though they agree with the verb, must be spelled out. This is the observation that must be explained.

Our proposal provides an account: pro drop is impossible after the accusative-assigning complementizer *ʔanna*, because the subject is not in the same ϕ as the agreeing verb (so the structural description of the pro-drop rule in (15) is not met). In the word order triggered by this complementizer, the subject precedes the verb, so the structure is prosodically parsed as {C S} {V-agr O}. The fact that agreeing accusative subjects cannot be omitted thus follows.

It seems to us that B&L's alternative, (18b), is no more than a stipulation. Although we agree with the statement in (18a), the fact that the complementizer must discharge its case does not explain why the recipient cannot be a null category. After all, it is a well-established hypothesis,

going back at least to Rizzi 1982, that in a given context empty pronouns receive the same case as overt pronouns.[10] In fact, this conclusion is unavoidable on the assumption that empty pronouns are regular pronouns that fail to be spelled out (as assumed in A&N 2003; see also Holmberg 2005, Neeleman and Szendrői 2007).

In short, B&L's statement in (18b) describes a phenomenon that A&N 2003 actually accounts for, but the statement fails to provide any explanation for it. It is difficult to see how this could constitute a problem for our approach.

We finally turn to (18c), the observation that accusative elements other than subjects can follow the complementizer *ʔanna*. This does not seem to us to be relevant. In order to support their alternative, B&L would have to consider structures in which an agreeing accusative subject follows the verb and show that that subject cannot undergo pro drop (thereby showing that null accusative pronouns must be absent for a reason other than the one we argued for). We think that such an argument cannot be made, because postverbal subjects never bear accusative case. Indeed, the example that B&L cite, given in (19) (their (38)), does not support their hypothesis, as the clause introduced by *ʔinna* does not feature either a postverbal subject or pro drop.

(19) qaala   muħammad-un   ʔinna zayd-an   qad tajarraʔa   ʔan yuqaabila-hu
     said.3M Mohammad-NOM that   Zayd-ACC had dared.3M.SG that meet.3M-him
     l-muʕallim-u
     the-teacher-NOM
     'Mohammad said that Zayd had dared to be met by the teacher.'

Moreover, it is not clear that this example actually establishes that an element other than the subject may follow *ʔinna*. 'Had dared to be met by the teacher' in (19) would appear to be predicated of *Zayd*. Indeed, a reviewer confirms that *Zayd* is a subject, which agrees with the verb *tajarraʔa* 'dared'. Doron and Heycock (1998), from whose paper the example is taken, discuss the status of the subject (namely, 'the teacher') in the embedded clause, 'that meet . . . '. Their argumentation does not concern the clause introduced by *ʔinna*, and they do not argue that *Zayd* is not a proper subject here (as confirmed by Caroline Heycock, pers. comm.).

However, even if B&L are right in assuming that *ʔinna* in (19) is not followed by a subject, we do not see how this would bear on the issue of the position from which pro drop is possible. As mentioned above, it would have to be shown that subjects can actually follow the verb in clauses introduced by this complementizer and that such postverbal subjects unexpectedly cannot be dropped. We are not aware of data showing this.

4.3 Do Floating Quantifiers Provide Evidence for Preverbal Pro Drop?

B&L argue that the distribution of floating quantifiers provides positive evidence for the existence of preverbal pro drop in Standard Arabic. In general, quantified noun phrases in the language assume one of two forms. Either the quantifier precedes the noun, in which case we are dealing

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[10] Only PRO is deemed to be caseless (or to receive a special ''null case''; see Chomsky and Lasnik 1993). The exceptional status of this empty category has given rise to proposals in which this element is abolished (see Ackema 2002, Janke 2007) or assumed to bear regular case (see Sigurðsson 1991). Both proposals imply that there are no null categories that have a special status with respect to case theory.

with a Q head that selects an NP complement, or a combination of a quantifier and a clitic follows
the NP, in which case we are dealing with a QP that stands in apposition to the NP. The analysis
of the second structure is due to Benmamoun (1999), who also argues that quantifier-clitic combi-
nations that surface without there being an overt NP in fact stand in apposition to a null pronoun.
B&L's argument for preverbal pro drop is based on the following example (their (43)):

(20) kull-u-hum   žaaʕ-uu
      all-NOM-them came-3M.PL
      'They all came.'

Whenever the quantifier-clitic combination modifies a regular NP, the latter must precede the
former. Thus, the following examples are ungrammatical (the data in (21) and (23) are due to
Saleh Shaalan, pers. comm.):

(21) a. *kull-a-hum   ra-ʔytu   al-awlad-a
           all-ACC-them saw-1SG the-boys-ACC
           'I saw all of the boys.'
      b. *kull-u-hum   ištaghal-u   al-awlad-u
           all-NOM-them worked-3PL the-boys-NOM
           'All of the boys worked.'

B&L assume that what is true of regular NPs is true of empty pronouns. If so, the grammaticality
of (20) implies that there is preverbal pro drop in Standard Arabic, as the null pronoun would
precede the quantifier-clitic combination, which itself precedes the verb.

     However, as is known from the literature on quantifier float, it does matter whether the
associate of a floating quantifier is a pronoun or a regular NP. Doetjes (1997) shows that in
French, for example, *tous* 'all' can precede an associated weak pronoun, but not a regular NP
(or a strong pronoun, for that matter).

(22) a.   Je veux tous qu'ils   viennent.
           I   want all   that they come
           'I want that they all come.'
      b. *Je veux tous que les enfants   viennent.
           I   want all   that the children come

There is evidence that the same restriction holds in Standard Arabic. Whereas (21a) is ungram-
matical, (23) is well-formed. Notice that in this example the associate of the quantifier-
clitic combination is a pronoun.

(23) kull-a-hum   ra-ʔytu-hum
      all-ACC-them saw-1SG-them
      'I saw all of them.'

In this example, the associate of the quantifier-clitic combination is a direct object. Crucially,
there is no reason why a fronted quantifier-clitic combination could not similarly be associated
with a following subject pronoun. B&L's example in (20) can be analyzed along these lines,
given that weak subject pronouns in Standard Arabic obligatorily undergo pro drop. But on this

analysis, the null pronoun may well occupy a postverbal position (as the associated overt object pronoun does in (23)). This, of course, invalidates B&L's counterargument.

5 The Construct State

Moving beyond the realm of Arabic agreement weakening and pro drop, B&L turn to the construct state (CS), a construction involving two or more nouns in a possessive relationship. The nouns in a CS display a phenomenon that could be called definiteness spreading. If the final noun is marked as definite, all preceding nouns must be interpreted as definite as well, even though they cannot themselves be marked as definite. Borer (1988:48) provides the following examples, demonstrating definiteness spreading in the Hebrew CS:

(24) a. *ha-cəʕif ha-yalda
          the-scarf the-girl
     b. cəʕif ha-yalda
          scarf the-girl
          'the scarf of the girl'
          '*a scarf of the girl'

B&L argue that our proposal in A&N 2003 is insufficiently general, as it does not extend to definiteness spreading in the CS.

One pertinent question is, should it? There is no need to explain the impossibility of attaching the definiteness marker to the left-hand member of a CS in terms of a rule of feature reduction prior to Spell-Out. After all, the phenomenon cannot be analyzed as merely involving such feature reduction, as this would fail to capture the lack of ambiguity in (24b). That is, it would fail to capture why the members of the CS must agree in definiteness. What would additionally be required is something like an obligatory agreement rule for the feature [+definite]. This rule would have the right-hand member of the CS as controller and the left-hand member as target. The suppression of the phonological realization of [+definite] on the left-hand member could then possibly be the result of an agreement-weakening rule.

Such an agreement-weakening rule could well have a prosodic domain as its domain of operation, one that is even smaller than the prosodic phrase, as there seems to be ample evidence that the CS must form a prosodic word. Borer (1988) notes that the CS cannot be interrupted by any modifying XP; such XPs all occur outside the CS, even if they modify the left-hand member. Siloni (2001) notes that the ban on interrupting elements is even stricter: only stressless elements can intervene between the members of the CS, indicating that the CS must form one prosodic word. Moreover, Borer (1988) points out that the head of a CS cannot bear stress itself. Some evidence for this in Hebrew is that reduction of the vowel /a/ to schwa is only possible if it is not adjacent to a stressed syllable. Such reduction can affect the /a/ in the initial syllable in (24b), but not in the regular genitive construction.

In fact, Siloni (2001) provides an analysis of why the definiteness marker does not appear on the head of the CS that is crucially based on the CS's being a prosodic word. If the CS must

form a prosodic word, the nonrecursivity of prosodic structures (the Strict Layer Hypothesis; see section 1) implies that its left-hand member *cannot* in its own right constitute a prosodic word (and indeed, as just noted, the head of the CS cannot bear stress). Siloni's suggestion is that the prefix expressing definiteness in Hebrew (like many other affixes) requires that its host be a prosodic word. It then follows that this prefix cannot attach to the left-hand member of a CS; it can attach only to the CS as a whole. This analysis provides an interesting alternative to an analysis in terms of feature weakening. Other alternatives exist as well. For example, Dobrovie-Sorin (2000) provides a semantic analysis of definiteness spread in the CS, and of the same phenomenon in Saxon genitives in English, that does not rely on agreement between the members of the CS at all.

However, suppose that our analysis of context-sensitive spell-out phenomena were to be extended to the nonexpression of definiteness in the CS. Does the hypothesis that the rules responsible for these phenomena have the prosodic phrase as their domain of application then run into any problems? It would actually be surprising if it did: given that the CS must form a prosodic word, of course its members will be contained in the same larger prosodic unit, the prosodic phrase, as well. Indeed, it turns out that the problems B&L mention for this assumption are rooted in the same misunderstandings of how prosodic phrase formation works as those discussed before. They mention two such problems.

First, the CS is recursive, as illustrated by (25) (B&L's (46)).

(25) kitaab-u   muʕallim-i   ʔibn-i   l-mudiir-i
     book-NOM teacher-GEN son-GEN the-director-GEN
     'the director's son's teacher's book'

In such cases, the impossibility of expressing definiteness affects all members of the CS except the last one. B&L argue that all members of the CS cannot be in the same prosodic phrase because of the assumption that ''prosodic domain formation . . . is not a recursive process'' (p. 20). As already discussed in section 1, this is a misunderstanding. Prosodic domain formation may well be recursive, as long as the resulting structure does not violate the Strict Layer Hypothesis. And as noted in section 3, this is in fact irrelevant, since all elements in (25) are parsed into one ϕ by a single application of the rule in (3). Given this rule, as long as no XP intervenes between the members of the CS, but only heads do, we are dealing with a single ϕ. That the CS can only exist of heads and does not tolerate intervening XPs is well-known (see above).

Second, B&L point out that definiteness weakening in the CS can be combined with agreement weakening on a verb of the type discussed in section 3, as in (26) (B&L's (47)).

(26) daxala   muʕallim-uu   ṭ-ṭaalib-i
     entered.3M.SG teachers-M.PL.NOM the-student-GEN
     'The student's teachers came in.'

The problem perceived by B&L is similar to that for (25). The only way in which the agreement-weakening rule and the hypothetical ''definiteness-weakening'' rule can both apply is if the noun *muʕallim-uu* is in the same ϕ with the verb *daxala* (triggering agreement weakening) *and* in the

same ɸ with the noun *ṭ-ṭaalib-i* (triggering ''definiteness weakening''). B&L claim that this implies that *muʕallim-uu* must be in two different ɸs at the same time, which, given the Strict Layer Hypothesis, is indeed impossible. But it implies no such thing: *muʕallim-uu* is, in fact, in the same ɸ as both the verb and the right-hand member of the CS in (26), because all these elements are parsed into a single ɸ by the rule in (3). The first right-hand XP bracket in this string is that of the whole CS constituent; that is, this bracket follows *ṭ-ṭaalib-i* (*muʕallim-uu* is not an XP but a head, as the CS internally consists of heads only; see above). Thus, (3) maps the syntactic representation in (27a) to the prosodic representation in (27b).

(27) a. V [$_{XP}$ N N]
       b. {V N N}

So, the whole CS and the verb are in one single ɸ, and any rule that is sensitive to whether elements are in the same ɸ can be applied to this configuration.

6 Prosodic Domains

In their section 4, B&L remark that sometimes there can be intervening elements between the constituents that, according to A&N 2003, are supposed to undergo the relevant PF rule sensitive to prosodic phrases. This would mean the rule would have to apply to elements that are actually not in the same ɸ. B&L mention two instances.

First, B&L remark that parentheticals can intervene between the members of the CS.[11] As discussed in the previous section, we are not sure whether our account should be extended to the CS. However, suppose it should be. In that case, it is still an open question whether we predict that no parenthetical can intervene. This would only be so if the parentheticals in question trigger ɸ-closure (note that parentheticals do not always interrupt the prosodic flow of the host; see Dehé 2009), and we do not know whether they do.

In general, though, it seems that parentheticals that form an independent prosodic domain block context-sensitive spell-out rules in the same way that nonparenthetical intervening XPs do (see also Ackema 2010). For example, the Dutch 2nd person agreement-weakening rule mentioned in section 2 is blocked by a parenthetical XP in the following example:

(28) ?*Volgens   mij ga, althans als   het erg heet is, jij   ook naar het park.
        according me go at.least when it   very hot is you also to   the park
        'I think that you also go to the park, at least when it is very hot.'

In fact, this is a potential argument for prosodic conditioning of certain types of context-sensitive spell-out, since at least on some analyses (e.g., Haegeman 1988, Espinal 1991; also A&N 2004), parentheticals are not syntactically integrated into the host structure and therefore cannot influence its syntax.

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[11] A reviewer remarks (referring to Kihm 2000) that traditional grammarians disagree regarding the status and grammaticality of such examples. According to Siloni (2001), similar examples are not possible in Hebrew.

Second, B&L note that there is weak agreement not only in the VSO order in Standard Arabic (see section 2), but also in the VOS order. In the VOS order, subject and verb appear not to be in the same ϕ, as the object XP intervenes between them.

This problem was noted in A&N 2003, 2004. We suggested that certain types of agreement require that the agreeing subject precede the verb or its trace. If number agreement in Standard Arabic is of this type, then in the VOS order no number agreement can be generated on the verb in the first place. Hence, this would not be a case of feature reduction; rather, it would be a case of features not being present at all.

B&L find this suggestion unconvincing: ''it is difficult to evaluate this claim because A&N [(2003)] are not explicit about where the subject is located and why the same account cannot extend to the VSO order'' (p. 21). Note, though, that all that is needed to make our suggestion work is that the subject precede a verb or a verb trace in the SVO or VSO order, respectively, but not in the VOS order. This is because, as we note in A&N 2003, verb movement never influences syntactic checking possibilities; that is, verb traces can check agreement features just as verbs do. We point out that verb-second, for example, never influences a verb's checking possibilities. In general, contrary to what B&L claim, we discuss in some detail why accounts of the agreement alternation between VSO and SVO in terms of conditions on syntactic checking are unsatisfactory (A&N 2003:703–705). As far as the assumption is concerned that VSO and VOS differ in that the subject precedes a verb trace in the former order but not the latter, all that is required is that VSO be derived from SVO by verb movement, which is a standard assumption, whereas the subject is base-generated in a postverbal position in the VOS order, not an outlandish claim to make about post-VP subjects either.

We agree with B&L, however, that it would be more satisfactory if the agreement weakening in the VOS order also followed from Arabic prosody, resulting in a more unified account. This would require that the right edge of the object in the VOS order exceptionally not trigger a ϕ-boundary. Although this would go against the rule in (3), there is some evidence that this rule can sometimes be overridden in Arabic as a consequence of the requirement that prosodic phrases have a minimal size larger than in some other languages subject to (3) (see Hellmuth 2011). We do not know whether this can work, as the evidence just alluded to is based on the prosody of the SVO order in Egyptian Arabic, while the prosody of the VOS order remains to be explored. Crucially, an account along these lines would not undermine our account for the absence of agreement weakening in the SVO order, as Hellmuth (2011) has found that the prosodic boundary after S in the SVO order is particularly robust.

It is interesting to see what B&L's own account (originated in Benmamoun 2000) has to say about why there is full agreement in the SVO order but not in the VSO or VOS order. This account involves a process termed *PF merger*. According to this analysis, the number feature is retained in the VS order, but ''is spelled out by the subject that merges with the verb instead of being spelled out by a number affix on the verb as well'' (B&L 2006:7–8). This ''merger'' of subject and verb takes place at PF. Presumably because of this, it is usually subject to an adjacency requirement. However, to deal with the agreement reduction in the VOS order, B&L simply claim that PF merger is not blocked by ''some intervening elements'': ''In our view, the data in (48)–(49)

[concerning intervening parentheticals and intervening objects in the VOS order] can be accounted for by PF rebracketing to include some intervening elements'' (p. 21). This idea is comparable to our suggestion of how a prosodic account could deal with the agreement weakening observed in the VOS order.

Of course, it is unclear that PF merger can account for the data if there are no clear restrictions on this process determining which elements can partake in it and which cannot. B&L do not provide a specific proposal in this respect, however (nor is there one in Benmamoun 2000). With respect to the object's being included in PF merger in the VOS order, B&L refer to Bobaljik (1994), who ''has argued that in English, adverbs do not block the merger of V and T'' (p. 21). But while Bobaljik does argue that adverbs do not intervene in PF merger, certainly arguments such as the object do intervene in this process; see Bobaljik 2002 for detailed discussion. Hence, the problem of agreement weakening in the VOS order simply remains.[12]

B&L's lack of clarity about the properties of their PF merger creates an additional, more serious problem as well: Benmamoun's (2000) account, as espoused by B&L, does not capture what we think is the crucial observation about the agreement alternation in Standard Arabic, as well as all the other phenomena that we argue are related to it (agreement weakening in Dutch, cliticization in Middle Dutch, cliticization in Irish, pro drop in Old French, pro drop in Standard Arabic). These phenomena occur under *right*-adjacency of the subject to the verb but not under left-adjacency—that is, in the VS order but not in the SV order. Some authors working in the Distributed Morphology framework have postulated the existence of PF merger, but as far as we are aware this process does not refer to linear order and therefore it is unclear why it should be restricted to right-adjacency of the subject to the verb in agreement weakening. In other words, we do not see how Benmamoun's account would block PF merger of an adjacent subject and verb in the SV order. Why can't the subject ''spell out the features of the verb'' if it is left-adjacent rather than right-adjacent to it? Benmamoun (2000:130) stipulates that spell-out of the verb's agreement features by an affix (rather than by the subject) is obligatory in the SVO order but not in the VSO order, but he does not provide a reason for this.

In sum, B&L do not appear to have an explanation for the central property of the agreement alternation. Note that, in contrast, the way prosodic phrases are derived in our approach has independent motivation: we simply adopted the relevant alignment rule from the prosodic literature, where it was put forward for entirely different reasons.

7 Agreement Weakening in Dutch

B&L also argue against our account of the agreement alternation in the Dutch 2nd person singular mentioned in section 2 (see the discussion around (10) and (11)). First, they dismiss the importance of the phenomenon, because it has a limited distribution in the paradigm (p. 5n7: ''our biggest

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[12] Moreover, the fact that adverbs do not intervene is simply a problem for the idea that T and V undergo PF merger, instead of T's being merged directly on the verb; that is precisely why Bobaljik (2002) has to introduce a number of stipulations that are not necessary under the assumption that no PF merger is involved.

concern with this analysis is that it applies only to one cell in the verbal agreement paradigm''). There is indeed no agreement alternation for any other person-number combination in Standard Dutch. However, we do not see why this is relevant. That something happens in only one cell of a paradigm does not mean it is not linguistically significant and can be left unaccounted for. We might also point out that in other variants of Dutch, including an older version of the standard, the phenomenon actually occurs in two cells of the paradigm, not only in the 2nd person singular but also in the 2nd person plural (Buitenrust Hettema 1891, Aalberse 2007). In the variants in question, the 2nd person plural still has an ending distinct from the other plural endings, in contrast to the current standard, which has the same *-en* ending for all plural forms. This distinct 2nd person plural ending, *-t*, becomes identical to the 1st person plural ending *-en* when the subject is right-adjacent to the verb, in accordance with our rule in (11) (or rather in accordance with its counterpart for the plural, which has a [plural] feature added to its description). The phenomenon is illustrated by (29), in which both *jullie heb-t* 'you(PL) have-2PL' and *hebb-en jullie* 'have-PL you(PL)' occur in the same sentence. Of course, we do not know whether B&L would regard a phenomenon that occurs in two cells rather than one in a paradigm as significant, but as noted we do not see why the number of cells in a paradigm affected by a particular phenomenon would be relevant.

(29) Jullie   heb-t   het aangevoeld en   terecht hebb-en jullie . . .
       you(PL) have-2PL it   felt   and rightly have-PL you(PL)
       'You have felt it, and you have rightly . . . '
       (http://www.rkdocumenten.nl/index.php?docid=203)

Second, B&L (2006:6n9) claim that there are some peculiar exceptions to the regular agreement alternation in the 2nd person singular, on the basis of the following data from Shetter 1994:

(30) a. jij   rijdt / rij   jij
             you drive   drive you
     b. jij   snijdt/snij jij
             you cut   cut you

These data seem to show that in the verbs *rijden* 'drive' and *snijden* 'cut', *-t*-deletion in the 2nd person singular under inversion affects even the stems of these verbs (*rijd* and *snijd*), which seems to indicate that it is not a phenomenon that should be accounted for by agreement weakening. Thus, according to B&L, ''the Dutch 2nd person singular weakening does not provide a strong enough basis for introducing a new linguistic process, 'weakening'; what is required is a phenomenon that occurs across a wider range of linguistic forms'' (p. 6n9).

However, the assumption that agreement weakening fails to account for (30) is based on a misinterpretation of these data (apparently on Shetter's (1994) part), in particular of the actual pronunciation of these forms.[13] The normal pronunciation of *rijden* and *snijden* does not have

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[13] The following point is also made by Zonneveld (2007).

[d] in it; rather, the underlying /d/ weakens to [j], so their pronunciation is roughly [reijen] and [sneijen] (see Zonneveld 1978 for a discussion of [d]-weakening in Dutch). Hence, the normal pronunciation of the stems of these verbs is [reij] and [sneij].[14] Therefore, agreement weakening works in exactly the same way here as with other verbs (it follows rule (11)): *jij* [sneij-t] becomes [sneij] *jij*).

    Something similar occurs with the verbs *houden* 'hold' and *vinden* 'find', also mentioned by Shetter and B&L as showing unexpected behavior. In *houden*, the /d/ at the end of the stem gets weakened to [w], so the normal pronunciation of the 1st person singular is [hauw]. In the 2nd person singular, we find the same agreement alternation as with any other verb, between *jij* [hauw-t] 'you hold-2SG' and [hauw] *jij* 'hold-Ø you'. For *vinden*, the final consonant in the stem is actually pronounced as an obstruent in the standard variant (there is no [d]-weakening after [n]), but crucially that is the case again for *both* the 1st person singular *and* the inverted 2nd person singular, which are, respectively, *ik* [vint] 'I find-Ø' and [vint] *jij* 'find-Ø you'. The noninverted 2nd person singular is also [vint] because of the degemination of double [t] in *jij* vin[t]-[t] 'you find-2SG'. Some dialects have a final *t/d*-deletion rule in the stem of a verb like *vinden*, and here we again find the expected agreement alternation: that is, the forms are *ik* [vin] 'I find-Ø', *jij* [vint] 'you find-2SG', and [vin] *jij* 'find-Ø you'. Hence, all these data fit perfectly in an analysis adopting our rule of agreement weakening.[15]

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[14] The final consonant is occasionally pronounced as a dental stop ([t] rather than [d] because of final devoicing in Dutch) in quite exaggerated ''spelling pronunciations,'' but crucially in that case this [t] is also retained in the stem in the inversion structure that triggers agreement weakening.

[15] Zonneveld (2007) mentions data concerning irregularly inflected modal verbs that would appear to pose a more serious problem for our analysis of the Dutch 2nd person singular agreement alternation. These data merit a more detailed analysis, which space considerations prevent us from providing here. In A&N 2011, we show that these verbs, too, are subject to the agreement weakening rule in (11).

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