The prosody-syntax interface and the status of pronouns in Papiamentu

SILVIA KOUWENBERG

Abstract

This paper shows that a distinction should be made between weak and strong pronouns in Papiamentu. The members of the weak series are prosodically and distributionally deficient, in contrast with those of the strong series. Their prosodic deficiency means that weak pronouns need to be prosodically licensed. I argue that this is achieved by integration into a tone domain, and, in the case of weak object pronouns, by incorporation into the prosodic word of the preceding verb. Tone polarisation, whereby weak pronouns acquire a contextually determined tone, is evidence of integration into a tone domain. A mismatch in the directionality of tone integration (to the right) and incorporation (to the left) shows that the tone domain of Papiamentu is not co-terminate with the prosodic word. An important distributional fact is found in the distribution of subject pronouns relative to mood marker “lo”, suggesting that weak and strong subject pronouns occupy different positions in the clausal architecture. I argue that weak subject pronouns are functional heads, and appear lower than strong pronouns, which have the same status as lexical subjects.

1. Introduction

In this paper¹, I argue that two pronoun series need to be distinguished in Papiamentu (Pp), a weak series² and a strong series. I will show that weak

¹ This paper has profited considerably from insightful comments received at its first presentation at the Centre for General Linguistics, Typology and Universals Research (ZAS), Berlin, 2 June 2006. I would like also to express appreciation for references, material and feedback received at different stages of development of the ideas expressed here from Marlyse Baptista, Claire Lefebvre, Cristina Martínez Sanz, Jacqueline Toribio and Tonjes Veenstra, and for helpful comments from two anonymous reviewers and the editors of this journal issue. I wish to acknowledge the generosity of the Max Planck Institute for Evolutionary Anthropology (Leipzig, Germany), where I did much of the work towards compiling this paper, and of the Mona Campus Fellowship Committee at the University of the West Indies, whose generosity in awarding me a Mona Campus Fellowship allowed me the time to work on this paper.
pronomens appear only as arguments (i.e., subjects and objects of V), and that they display both phonological and syntactic dependence. The strong pronouns are not so restricted, hence can appear also in oblique Case positions. I will further argue that weak subject pronouns are agreement markers, whereas strong subject pronouns have the status of phrasal, i.e., lexical subjects.

I will begin by enumerating the forms in the pronoun system of Pp in section 2. A brief excursion on Pp tone will be necessary there to account for the prosodic status of weak plural pronouns; this section will also form the basis for the discussion in section 3 on the prosodic licensing of weak pronouns.

The phonological evidence for a weak/strong distinction is addressed in section 3. There we will see that the weak singular pronouns display prosodic dependence: they receive a contextually determined tone (tone polarisation), a process first recognized by Römer (1977). Moreover, where a weak singular pronoun appears as the object of V, the pronoun forms a prosodic word with the preceding verb. I propose a difference in proclisis and enclisis of pronouns, based on the observation that enclisis seemingly results in resyllabification, but that proclisis does not have this effect.

In section 4, we turn to evidence that the weak pronouns are syntactic clitics. We will see that string adjacency, although a necessary condition, is not a sufficient condition for either tone polarisation or for the encliticisation of an object pronoun on the preceding verb, both of which appear to be subject to syntactic constraints.

The transposition of subject pronouns with the mood marker lo, discussed in section 5, provides an indication of the position which weak and strong subject pronouns take in the clausal architecture. I account for these facts by arguing that the former are functional heads, whereas the latter have the status of lexical subjects.

The weak/strong pronoun distinction proposed here has not previously been recognized. Nonetheless, the phonological and distributional properties which form the basis for this distinction have been described elsewhere. This paper thus draws on earlier work, while also showing that many aspects of the grammar of Pp are still insufficiently described or understood. I would like to present the account proposed here as a tentative one, therefore, and hope that it will provide an opportunity for new research to be carried out on the prosody-syntax interface in Pp.

One obvious weakness of the description is the fact that only singular pronouns display phonological dependence; plural pronouns, on the other

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2 I recognize the need, noted by Cardinaletti & Starke (1999), to distinguish between deficient pronouns which have the status of functional heads and those which have the status of maximal projections. I do not, however, adopt their terminology, which reserves "clitic" for the former, "weak" for the latter. In this paper, "weak" in fact denotes clitic pronouns.
hand, do not show a prosodic distinction between weak and strong forms. Although there is a straightforward explanation for this fact (as seen in section 2.2, where the prosodic status of the plural pronouns is considered), it presents a problem in that it restricts the evidence for a weak/strong distinction to the singular pronouns.

Another weakness is the fact that the process of tone polarisation – an important piece of evidence for the existence of a series of weak singular pronouns – is only very partially described. Although tone polarisation appears to be syntactically constrained, it is entirely unclear what constitutes an appropriate syntactic environment for it.

2. Background

2.1 The pronominal forms

Pp is the national (but not the official) language of the Dutch ABC islands Aruba, Bonaire and Curaçao. Although it probably originates as a Portuguese-lexified Creole, there has been considerable Spanish lexical overlay, and today it is best classified as a Spanish-lexified Creole (see Kouwenberg & Murray, 1994).

Existing descriptions of Pp pronouns list the forms in table 1:

<table>
<thead>
<tr>
<th>Singular:</th>
<th>plural:</th>
</tr>
</thead>
<tbody>
<tr>
<td>mi</td>
<td>emphatic ami</td>
</tr>
<tr>
<td>bo</td>
<td>emphatic abo</td>
</tr>
<tr>
<td>e (and allomorphs el, dje)</td>
<td>possessive su</td>
</tr>
</tbody>
</table>

Table 1. Papiamentu pronouns, according to existing descriptions (e.g., Birmingham, 1970: 60ff; Goilo, 1953: 61; Maurer, 1988: 37)

Table 1 shows a singular and plural series, with some suppletive allomorphy in the third person singular, including a possessive form. Empathic forms are provided for the first and second person singular only. We shall see below that *a*-prefixed plural forms (*anos, aboso, anan*) are available in the Aruban variety of Pp, whereas the *a*-prefixed emphatic singular forms *ami, abo* are shared by all speakers; since existing descriptions take the Curaçao variety as normative, the plural *a*-prefixed forms are not listed in table 1.

Except for the 3s possessive form, Pp pronouns show no evidence of morphological case; nor is gender distinguished.

Table 2 lists the Pp pronouns according to my analysis; tone-marks for high and low tones and stress marks are supplied where relevant:
The main differences between tables 1 and 2 are in the distinction between weak and strong pronouns, and in the fact that table 2 provides the full paradigm of emphatic forms. Since the weak and strong forms are more or less homophonous, something which is not uncommon, cross-linguistically, it is hardly surprising that a distinction between them has not previously been recognised.\(^4\)

I will not consider emphatic pronouns as distinct from strong pronouns in this paper; except for isolated usage (acceptable for emphatic pronouns, not for strong pronouns) they appear to display the same distribution, but further research is needed to ascertain this.

One should note that the singular forms ami and abo display a pattern of non-coincidence of high tone and stress: high tone appears on the final syllable, but foot structure being trochaic, it is the initial syllable which receives stress in these cases. As a result, that initial syllable, here the a-prefix, is lengthened (ami, abo), a pattern which these forms share with bisyllabic verbs with LH melody, as explained in 2.2 (see Kouwenberg, 2004 for a fuller description of Pp prosody). No such lengthening of the a-prefix is seen in anos, aboso, anan, as the pronominal base forms a foot here; a- is stray-adjoined and receives no stress, as expected from the quantity-sensitivity of Pp (see 2.2).

\(^4\) It is not an aim of this paper to provide a comparison between Pp and other creoles with Portuguese or Spanish as main lexifier, but it is noteworthy that Cape Verdean Creole, like Aruban Pp, has a full a-prefix series. Unlike Aruban Pp, that series does not have an emphatic interpretation (Baptista, 2002:48). It is also noteworthy that, based largely on distributional asymmetries, a distinction similar to that made here for Pp between clitic and nonclitic pronouns has been recognized in the case of Cape Verdean Creole (Baptista, 2002), Saramaccan (Veenstra, 1994) and Palenquero (see Schwegler, 2002).

<table>
<thead>
<tr>
<th></th>
<th>weak</th>
<th>strong</th>
<th>emphatic(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>m(i)</td>
<td>mí</td>
<td>À mí</td>
</tr>
<tr>
<td>2s</td>
<td>b(o), obj. bu*</td>
<td>bó</td>
<td>À bó</td>
</tr>
<tr>
<td>3s</td>
<td>e, allomorph el</td>
<td>é, allomorphs né, djé, poss. sú</td>
<td>`élé</td>
</tr>
<tr>
<td>1p</td>
<td>nós</td>
<td>nós</td>
<td>nós*, à nós**</td>
</tr>
<tr>
<td>2p</td>
<td>`bósó</td>
<td>`bósó (nán)</td>
<td><code>bósó*, à </code>bósó**</td>
</tr>
<tr>
<td>3p</td>
<td>nán</td>
<td>nán</td>
<td>nán*, à nán**</td>
</tr>
</tbody>
</table>

* in Curaçao/Bonaire  ** in Aruba

\(^{3}\) I will not consider emphatic pronouns as distinct from strong pronouns in this paper; except for isolated usage (acceptable for emphatic pronouns, not for strong pronouns) they appear to display the same distribution, but further research is needed to ascertain this.

Table 2. Papiamentu pronouns, according to the present analysis

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<table>
<thead>
<tr>
<th></th>
<th>subject, object of V</th>
<th>subject, object of V or P, possessive</th>
<th>subject, object</th>
<th>functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1p</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2p</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3p</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to the listing of table 2, the singular weak pronouns are prosodically deficient in that they are toneless, in contrast with all other forms. In other words, for singular pronouns, the weak/strong distinction translates to a distinction between unaccented/toneless and accented/tone-marked pronouns. No such contrast exists for weak and strong plural pronouns. This can be understood from the general properties of tone in Pp as described in Kouwenberg & Murray (1994) and Kouwenberg (2004). A brief excursion follows.

2.2 Papiamentu tone

The well-formedness conditions which apply to lexical words in Pp do not govern function words. Lexical words are almost exceptionless in conforming to a prosodic minimality condition, which requires that a prosodic word in Pp is at minimum bimoraic and carries at least one high tone (Kouwenberg & Murray, 1994:12). Quite a few function words, on the other hand, fail to conform to prosodic minimality. Thus, lexical words, without exception, carry H, and almost all of them are at least bimoraic. Those function words which are at least bimoraic similarly carry H, whereas those which are monomoraic are mostly (but not all) toneless.

Where tone is concerned, Pp can be characterized as a pitch-accent language; this means that the most prominent syllable in nearly all words is associated with a high tone. As noted, only monomoraic function words escape this requirement. The placement of H is predictable from categorial information. Words of [+V] category (verbs) receive final H; in all cases, the final H-toned syllable is light. The position of H in words of [-V] category (nouns, adjectives, adverbs) is assigned in a very different manner, through a quantity sensitive algorithm: trochaic feet are constructed from the right edge; a final heavy syllable is assigned H, otherwise the prefinal syllable receives H. In Kouwenberg (2004) I argue, based on these facts, that tone can be considered to have a grammatical function in Pp, namely that of marking word category.

Tone is not marked in the orthography of Pp. Where diacritics appear in the orthography, they mark stress (acute) or vowel-quality (grave and macron) [see fn. 9]. The most notable example of the former is seen in verbs of three or

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5 But note that there are a few exceptions. Those which I have found so far are: ba ‘kiss’ (a word used specifically in affective speech, mainly addressed to children; it can be considered onomatopaeic), fe ‘religion, belief’ (a form which is constantly reinforced by the churches) and te ‘tea’ (a genuine exception). Like other monosyllabic lexical items, these forms carry H.

6 Bisyllabic imperatives deviate from the pattern, displaying a HL melody instead.

7 Kouwenberg (2004:59, fn.5) notes that the small number of bisyllabic verbs which seem to end in a heavy syllable, in fact contain only a consonant in the rhyme of that final syllable underlyingly. Hence, consonant-final verbs end in a light syllable underlyingly, as do the vowel-final verbs.
more syllables, which are always H-toned and stressed on the final syllable; that final syllable is marked with an acute as a mark of stress, as in kaminá ‘to walk,’ meresé ‘to earn, merit,’ sakudi ‘to shake.’

Returning to the problem of the plural pronouns, we note that these forms consist of two morae (a single heavy syllable in the case of nos, nan, two light syllables in the case of boso). The plural pronouns thus meet the minimal word requirement of Pp. As a result, the plural pronouns cannot be toneless: they have prosodic word status, and are marked as such by the presence of a high tone. The singular pronouns, in contrast, are monomoraic, hence prosodically deficient; they do not meet the prosodic minimality requirement. We will see below that the singular pronouns join a small class of monomoraic functional forms which are toneless.

As a consequence of the different prosodic status of plural and singular pronouns, only the latter provide us with phonological evidence of clitic status: only they appear in different toneless and H-toned forms. We will see that the toneless forms are subject to phonological cliticisation, which allows for them to be prosodically licensed.

3. The phonological evidence

3.1 Tone polarisation

The following discussion is based on Römer’s (1977, 1983) work. His description shows that most monomoraic functional morphemes are unaccented and lack tone. Thus, the quantity deficiency of these forms (monomoraic) is coupled with prosodic deficiency (unaccented/toneless). These forms receive a tone which contrasts with an immediately following one. In other words, their tone is contextually determined. Römer (1977) applied the term tone polarisation to this phenomenon. The forms in (1) are subject to polarisation:

(1) the singular pronouns mi, bo, e [1s, 2s, 3s]
    irrealis mood marker lo [MOOD]
    copula ta [BE]
    the functional prepositions di ‘of’, ku ‘with’, na ‘at’, pa ‘for’, i ‘and’, ò~òf ‘or’
    finite complementizer ku [COMP] (also acting as relative clause introducer)

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That verbs of three or more syllables are marked for stress in the orthography is due to a false assumption, namely that Pp’s stress rules are similar to those of Spanish. The expectation is, then, that final light syllables should not be stressed. The result is that verbs with a fully predictable stress location are treated in the orthography as an open-ended class of exceptions. (Kouwenberg, 2004:56)
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Excluded from this list are the preverbal markers *ta* [TNS] and *a* [PERF] and the preverbal negator *no* [NEG], which are H-toned, and focus marker *ta* [FOCUS] which is L-toned. Other prepositions and functional items are bimoraic (e.g., *den* 'in(side)', *tabata* [PAST.IMPF], etc.), hence carry at least one high tone.

It is the unaccented singular pronouns *mi, bo, e* that are relevant for this paper; the reader is referred to Römer (1977, 1983) for discussion of the polarising behaviour of the other forms. The following examples\(^9\) illustrate the occurrence of the 1s subject *mi* with low tone (2.a), and with high tone (2.b). In each case, the tone of *mi* contrasts, or “polarises,” with the immediately following tone.\(^{10}\)

(2)  
  a. *mì tâ nà pórtà* [1s BE at door] ‘I am at the door’  
  b. *mí tâ bón* [1s BE good] ‘I am well’ (Römer, 1991:10 [1977:75])

The variation in the melody of *mi* shows that it receives a tone post-lexically. The question is why this tone should vary. An answer may be found in the general properties of tone in Pp. As pointed out in the preceding section, H is assigned to the accented syllable of a prosodic word. It may further be noted that – subject to conditions which are as yet insufficiently explored (see

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\(^9\) In the following, sources of data are acknowledged where relevant; where no source is indicated, data are drawn from my own collection of texts by native speakers from both Aruba and Curaçao. The translations are generally my own. The orthography used in different sources varies from Dutch-based, to etymological, to phonemic; I have adjusted all examples to the official orthography of Curaçao as described in Joubert (1991). In addition, I use tone marks – which are not part of Pp orthography – where useful for the subject matter. Unfortunately, some aspects of the orthography interfere with the need for tone marking in this article. This includes the use of the grave accent which distinguishes open vowels (ò, è, ù) from their close counterparts (o, e, u). Also, the orthography prescribes an acute on some irregularly stressed forms, on occurrences of the 3s pronoun contracted with a preceding functional morpheme, on verb participles and on the final syllable of verbs of three or more syllables length. To ensure that these marks are not mistaken for tone marks, I distinguish between orthographic representations and tone-marked representations, where relevant.

I have provided glosses where these were missing and/or adjusted them to a standard set of glosses. Abbreviations used in the glosses include: BE copula, COMP complementiser, DEF definite article, EMPH emphatic (of pronouns), IMPF imperfective marker, IND indefinite article, MOOD mood marker, NEG negation marker, PAST past tense, PERF perfective aspect, PROG progressive suffix, TNS tense marker.

\(^{10}\) Note that tone polarisation has also affected *na* ‘at’, which receives a tone contrasting with the initial tone of *porta* ‘door’. According to Römer (1991:6 [1977]), where copula *ta* directly precedes a polarising preposition, it fails to polarise, and simply surfaces with a high tone irrespective of the tone of the following preposition; hence it appears as *tâ* in (2a). In contrast, *ta* preceding an adjectival predicate, as in (2b), polarises with the immediately adjacent tone of that predicate; in that case, tone polarisation has iterated leftward from *bon*, affecting first copula *ta* before reaching *mi*. 
Remijsen & Van Heuven, 2005) – alternating H and L tones appear in the surface realisation of polysyllabic forms, showing that melody in Pp is essentially a rhythmic property. The assignment of tone to mi in (2) clearly follows this rhythmic pattern – although seemingly extending outside the domain of the word. Tone polarisation can be seen as evidence of the incorporation of the toneless form into a tonal complex. As argued by Akinlabi & Liberman (2000), sequences of unlike tones, such as [high low] or [low high], form tonal complexes. The incorporation into a tonal complex provides prosodic licensing for the toneless pronoun. That licensing is necessary follows from the fact that at PF, all phonetic content has to be incorporated into prosodic structure (e.g., Anderson, 2005:39). We will return to the question what constitutes a domain for tone polarisation in 3.3, although that issue cannot be resolved here.

3.2 Enclitic object pronouns

The encliticisation of an unaccented object pronoun to the preceding verb is illustrated in (3). The verb and the pronoun constitute a single prosodic word. As seen there, the verb-pronoun string carries H and stress on the final syllable of the verb stem; the pronoun is underlyingly toneless, and is subject to tone polarisation, as will be shown shortly. Recall that bisyllabic verbs such as duna ‘to give’ normally display a pattern of non-coincidence of H and stress, with stress being assigned to the first syllable, whereas H is assigned to the final syllable. Encliticisation, then, is seemingly accompanied by stress shift, resulting in the preferred coincidence of H and stress on the final syllable of the verb. Below, I will suggest that stress shift is a surface manifestation, and should not be thought of as representing an actual process. Note that the verb-pronoun string also displays lengthening of the final vowel of the verb stem, giving it its distinctive prosodic shape. Finally, the 2s object pronoun appears not as bo, but in its special enclitic form bu – a form available to speakers of the Curaçao/Bonaire variety only.12

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11 Recall that H is assigned according to the predictions set out in section 2.2. This does not mean, however, that all other syllables surface with a low tone (L). In words of sufficient length, alternating H and L may appear, such that a form such as kùmindamento ‘greetings’ surfaces as kùmindàmèntò rather than *kùmindâmèntò. This is not true, however, of verbs, which display a series of L preceding the single H, as in kùmîndà ‘to greet,’ rather than *kùmindá.

12 What conditions vowel length in these cases is a question which remains to be addressed. It is common for low-toned stressed syllables to be long, presumably to mark prominence in the absence of H (see fn. 1), but the length which is observed in encliticisation is not thus motivated. Note also that the stress shift which results from encliticisation on a bisyllabic verb does not apply in longer verbs, as stress and H cooccur on the final syllable of verbs of three or more syllables.
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(3) orthographic:  
mi ta  
duna bu X

tone-marked:  
dû’ná:bu

1s TNS give 2s X

‘I give/am giving you X’

The data in (4) show that object pronouns, like subject pronouns, are subject to tone polarisation. In each case in (4), the 2s object pronoun carries a tone which contrasts with the immediately following one. Thus, bu surfaces with L preceding H-toned pan ‘bread,’ and with H preceding the initial L of piská ‘fish’ (orthographically piská).

(4)  
(a)  
mi tâ dû’ná-bû pán  
1s TNS give-2s bread

‘I give you bread’

(b)  
mi tû dû’ná-bû piská  
1s TNS give-2s fish

‘I give you fish’ (Römer, 1983:89 [1991:33])

As was true of the subject pronouns, the behaviour of the enclitic object pronouns can be explained from their prosodic deficiency. Its prosodic integration into the preceding verb allows the weak pronoun in (4) to be structurally licensed. The apparent stress shift seen in cases involving bisyllabic verbs such as duna ‘to give’ supports the view that encliticisation involves structural integration into the prosodic word of the host, since the domain for stress assignment is the prosodic word. Tonally, the deficient pronoun is integrated into a tone domain to the right. In other words, the structural and tonal effects are in opposite directions, a fact to which we return below.

Monosyllabic verbs and verbs with an irregular HL melody appear not to provide an appropriate prosodic environment for encliticisation. In these cases, the H-toned strong pronoun appears. This is illustrated in (5)-(6), which show the presence of noncliticised é and bó following such verbs. The unacceptability of the enclitic 2s object form bu of the Curaçao / Bonaire variety in (6) shows that these are not weak forms which receive a H tone by some other means, for instance by default.

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13 Where the verb takes the 3s object pronoun é, elision of the final vowel of the verb – a regular occurrence where a vowel-vowel sequences is created; see section 4.3 for discussion – results instead in transfer of the verb’s final H to the object pronoun, as in dùné < dùná e [give 3s]. In these cases, tone polarisation does not apply.

14 Note that bo > bu can be related to a rule with wider historical application, whereby final mid vowels were raised (e > i and o > u) in many words (see Birmingham, 1970, 13ff).
This difference suggests that verbs with an irregular prosody enter the syntax with a fully specified prosodic structure, in contrast with verbs which conform to a regular template, which can be assumed to be prosodically unspecified. It is this lack of prosodic structure which allows for the apparent stress shift to take place. In other words, so-called stress shift does not involve resyllabification, but rather results from syllabification from scratch.

There is one exception in the class of monosyllabic verbs, namely dal ‘to hit’, which takes enclitic bu as its complement, as in (7).

\[(7) \quad \text{mì tǎ ðáł-bù} \]
\[1s\ TNS\ hit\-2s\ ‘I hit you’ / ‘I am hitting you’ (Römer, 1991:79)\]

### 3.3 Discussion and proposal

The preceding shows that weak singular pronouns have the phonological properties of clitics, both as subjects and as objects. The evidence that we have seen for this can be summarized as follows:

(i) Weak pronouns are toneless and acquire a contextually assigned tone (tone polarisation). They share this behavior with a small class of monomoraic functional morphemes, and can be contrasted in this respect with forms which have prosodic word status.

(ii) A weak object pronoun forms a prosodic word with the preceding verb, provided the prosodic status of that verb supports encliticisation. I have argued that this is true only of verbs which conform to the regular prosodic template, and which can therefore be assumed to enter the syntactic derivation without prosodic structure. Where the prosody of the verb is irregular, hence prespecified, it does not support encliticisation of the object pronoun. In that context, the

Where the verb appears in the progressive -andal-iendo form, encliticisation of an object pronoun also fails, as illustrated in (i). Taking further the argument proposed here for the contrast between verbs of a regular / predictable prosodic shape and those which are irregularly shaped, this behavior suggests that the progressive suffix is specified for prosodic structure. (Note the orthographic diacritics on drùk, kansi, and loké, not to be mistaken for tone marks.)

(i) \[\text{Ami tabata hopi drùk i kansi di e loké ta pàsándò mì} \]
\[1s\ \text{PAST.IMPF}\ very\ busy\ and\ tired\ of\ the\ what\ TNS\ pass\-PROG\ 1s\ ‘I was very busy and tired because of what was happening to me’\]
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strong form appears instead, as seen by the fact that the enclitic 2s form *bu* is unacceptable in such an environment.

In the preceding sections, I have argued that the prosodic deficiency of weak pronouns (monomoraic, toneless) accounts for their phonological behavior. Prosodic licensing is achieved by the integration of these pronouns with adjacent phonological material.

 Booij (1996) argues, based on the behavior of Dutch proclitics and enclitics, that clitics may achieve integration at different levels in a prosodic structure (but see Gerlach & Grijzenhout, 2000 for a different analysis). I adopt Booij’s proposal and suggest that this is true also of Pp: whereas enclitic object pronouns incorporate into the prosodic word, proclitic subject pronouns adjoin to it. Thus, of the structures suggested by Booij (1996:229), the following would apply to Pp proclitic subject pronouns and enclitic object pronouns (PW = Prosodic Word):

\( \text{(8) a. proclisis:} \quad \text{enclisis:} \)

\[
\begin{array}{c|c}
\text{PW} & \text{PW} \\
/ & | \\
\sigma & \text{PW} \\
\text{PW} / & | \\
\sigma & \sigma \\
\end{array}
\]

That subject and object pronouns achieve different degrees of integration with the host is supported by the facts pertaining to (re)syllabification and stress shift. As Booij (1996:230) points out for his analysis of the Dutch data, incorporation into the prosodic word accounts for the fact that enclitisation is capable of inducing resyllabification, because the prosodic word is the domain of syllabification. Adjunction, on the other hand, fails to do so.

We noted earlier that the combination of a verbal host with an enclitic object pronoun seemingly triggers stress shift. Preverbal proclitic material might be expected to have a similar effect – an expectation which is based on the fact that where a bisyllabic verb takes a derivational prefix, stress shift results (see Kouwenberg, 2004). Recall that bisyllabic monomorphemic verbs display non-coincidence of stress (on the first syllable) and H (on the last syllable). The derivational prefixes *re*- and *des*- seemingly trigger stress shift to the final syllable, as seen here:

\( \text{(9) a. orthographic:} \quad \text{bende} \quad / \quad \text{rebendé} \)

\[
\begin{array}{c|c}
\text{tone-marked:} & \text{rebèn'dé} \\
\text{‘to sell’} & \text{‘to resell, retail’} \\
\end{array}
\]

\( \text{b. orthographic:} \quad \text{arma} \quad / \quad \text{desarmá} \)

\[
\begin{array}{c|c}
\text{tone-marked:} & \text{dèsrâ’má} \\
\text{‘to arm, mount’} & \text{‘to disarm, dismount’} \\
\end{array}
\]
The monomorphemic form displays the noncoincidence of stress and H expected of bisyllabic verbs, whereas the derived form displays the coincidence of stress and H on the final syllable which is expected of trisyllabic verbs. This suggests, once again, that verbs which conform to regular prosodic patterns enter the derivation without prosodic structure. This means that prosodic structure is built over complex forms such as re-bendé and des-armá without regard for their morphological complexity.

Preverbal material, despite its integration into a tonal domain with the verb, does not trigger such stress shift. This is illustrated here for preverbal lo [MOOD]. As a result of tone polarisation, its H tone contrasts with the immediately following initial L tone of the verb bende ‘sell’, showing that lo is integrated into the tone domain of bende. But the presence of lo fails to have a structural effect, in contrast with the prefixes in (9); hence *lo-bendé with final stress and H:

(10) orthographic: ma ku lo bende e kas mi sa
    tone-marked: mà kà ló ‘bèndé é kás mì sá
    but COMP MOOD sell DEF house 1s know
    ‘but that the house will be sold I know’ (Römer, 1991:61)

Note further that incorporation into the prosodic word of bende would not only manifest itself in the structure, but would result in L tone on lo, as the tone of all but the final syllable in trisyllabic and longer verbs is L.

In the following example, a subject pronoun directly precedes the verb, without intervening tense/aspect material. Again, we see no structural effect, hence no stress shift:

(11) orthographic: Paden ta mucho kalor pa mi dru[mí].
    inside BE too hot COMP 1s sleep
    ‘It is too hot inside for me to sleep (there).’

In sum, subject pronouns and other preverbal material display tone polarisation, showing that they belong to the same tonal domain as the host; on the other hand, they fail to trigger a structural effect (manifested as resyllabification and stress shift), showing that they do not incorporate into a prosodic word with the host.

Stress shift, which is observed for the [verb-object pronoun] string, is indicative of incorporation. Lack of stress shift in combinations of a verb with preverbal material shows that no incorporation takes place there.

We should note at this point that tone polarisation of enclitic pronouns does not follow the direction of incorporation: an object pronoun incorporates into the prosodic word to its left, but integrates into a tone domain to its right, as was shown in the examples in (4). Nor is this phenomenon restricted to object pronouns. Römer (1983:88ff [1991:32ff]) points out that
monomorphemic forms with penultimate H typically display polarisation of the final tone with the initial tone of a following word. Since the [verb-object pronoun] string which results from encliticisation similarly produces a string with penultimate H, it is not surprising that it behaves in the same way as the monomorphemic forms, further supporting the claim that the pronoun incorporates into the PW of the host. But this also points to the fact that the prosodic word is not co-terminate with the tonal domain. More data are needed to determine these tone domains of Pp, and I will refrain from speculating at this point. Clearly, there is still much to be investigated with regards to Pp tone.

4. Distribution of Pp pronouns

We turn to evidence pertaining to the syntactic status of (prosodically distinguished) weak and strong pronouns. We will see that tone polarisation and incorporation are sensitive to syntactic information. We will also see that weak pronouns are excluded from certain syntactic positions.

4.1 Restrictions on tone polarisation

Some syntactic environments do not allow for tone polarisation. Thus, polarisation fails to apply to the enclitic object pronoun before an indefinite or definite article, as in (12), where it surfaces with a default high tone. It is clear from the segmental shape of the 2s pronoun (bu rather than bo) that the high-toned form is the weak enclitic form. Also, lengthening of the final vowel of the verb stem accompanies encliticisation:

(12) orthographic: mi ta duna bu un buki / e buki
tone-marked: [mì tá dùná-bú ūn būkì / ē būkì]

1s TNS give-2s IND book / DEF book


Recall that tone polarisation applied to bu before a bare noun (examples in (4)). This suggests that tone polarisation is sensitive to syntactic boundaries.

Römer (1977:75 [1991:10]) claims that tone polarisation fails to apply where the subject pronoun is adjacent to a verb, without intervening tense/aspect material. This similarly suggests sensitivity to the syntactic status of the potential host. On the other hand, Römer (1991a:50ff) contains data which contradict this claim, showing polarisation of a subject pronoun directly preceding a verb. In sum, the description of tone polarisation is incomplete, and determining the constraints on tone polarisation remains for further research.
4.2 Encliticisation across clause boundaries

Encliticisation of a weak embedded subject pronoun takes place across a clause boundary in the case of an ECM context as in (13). The speaker here is Aruban, hence bo appears, but we see the lengthening of the final vowel of the verb stem which typically accompanies encliticisation; in this case, bu would be used in the variety spoken in Curacao and Bonaire.

(13) orthographic: Mi a laga bo warda mas ku un luna
    tone-marked: làgá:-bó wàrðá
    1s PERF let-2s wait more than one month
    ‘I have kept you waiting for over a month’

As is shown in (14), encliticisation fails where the pronoun is the subject of a finite clause. Thus, this sequence of verb and pronoun does not result in lengthening of the final vowel of the verb stem:

(14) orthographic: Korda mi ta spera-bo asina ku bo tin
    fakansi grandí
    tone-marked: Kòrdá mi tá spèrá-bó
    *Kòrdá: -mi
    remember 1s TNS await-2s manner COMP 2 have
    holiday large
    ‘Remember (that) I am expecting you as soon as you have your summer holidays’

This contrast shows that encliticisation of an object pronoun cannot be explained as a purely phonological phenomenon: phonological string adjacency would not predict different results for the subject pronouns in (13) and (14). The encliticisation in the ECM environment of (14) shows that the prosodic structure is constrained by the syntactic structure.\(^\text{17}\)

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\(^{16}\) Incidentally, this also shows that enclitic object pronouns are not suffixes, despite their tight integration into a single prosodic word with the verb and their selection for hosts with particular prosodic characteristics. Vigario (2003) suggests that these are properties typically expected of affixes rather than clitics. However, if the object pronouns were suffixes, we would not expect the integration of an embedded subject pronoun with the preceding matrix verb.

\(^{17}\) Note also that possessive pronouns which directly follow the verb do not encliticize. Thus:

(i) Mi ta duna bo ruman pan / *Mi ta duna-bu ruman pan
    1s TNS give 2s sibling bread ‘I give bread to your sibling’

Whether this constitutes further evidence against a purely phonological account of encliticisation or not will depend on the status of possessive pronouns on the weak/strong distinction, which remains to be ascertained.
4.3 Oblique contexts

In this section, I will show that weak pronouns are excluded from oblique Case positions, i.e., that only strong pronouns can appear as Indirect Object and as object of a Preposition.

Where prepositions are concerned, a distinction needs to be made between toneless (functional) prepositions and lexical prepositions. Lexical prepositions have prosodic word status and carry H. Where a pronoun is the object of such a preposition, the preposition and the pronoun form two separate phonological words, and the pronoun appears in its H-toned independent form (15) or in an emphatic form (16):

(15) Nunka mas  di bo bida bo kere  ku Kristu por  bin  keiru  serka bo [= bó]
never more of 2s life 2s believe COMP Christ can come walk near 2s
‘Never again in your life should you believe that Christ can come visit you’ (Saka kara II:64)

(16) Nunka di mi bida mi no  a  mira hende bira rasu  di legria manera abo [= àbó]
never of 1s life 1s NEG PERF see person turn enraged of happiness like 2s.EMPH
‘Never in my life have I seen someone turn as mad with happiness as YOU’ (Maurer, 1988:376,378)

Where a pronoun appears as object of a toneless preposition, singular pronouns show the following pattern:

(17) orthographic:  di mi;  ku mi;  pa mi
tone-marked: [dìːmí] [kùːmí] [pàːmí]
of-1s;  with-1s;  for-1s
‘of me’; ‘with me’; ‘for me’

The pattern shown in (17) looks a lot like what we get when a weak pronoun encliticises on a preceding verb, forming a prosodic word with it, and triggering length of the final vowel of the verb stem. However, the unacceptability of the 2s clitic object form bu following these prepositions shows that this pattern cannot be accounted for by postulating the occurrence of clitic object pronouns:

(18) pa bo / *pa bu;  ku bo / *ku bu;  di bo / *di bu
for 2s;  with 2s;  of 2s
‘for you’ ‘with you’ ‘of you’
Römer (1991:19) suggests that sequences such as *dì:mí, kù:mí and pà:mí derive from a combination of the preposition with the emphatic pronoun, as in (19):

(19) orthographic: *dì ami; kù ami; pà ami
   tone-marked: [dì à:mí] [kù à:mí] [pa à:mí]
of 1s.EMPH; with 1s.EMPH; for 1s.EMPH
   ‘of ME’; ‘with ME’; ‘for ME’

In other words, he suggests that the preposition acquires both its tone and its length from the suppressed initial syllable of the emphatic pronoun. There are several problems for Römer’s proposal. First, where emphatic pronouns are used, an emphatic interpretation is expected to result. This is the case in (19), as shown in the translation. But no emphatic interpretations are obtained in (17), showing that the emphatic forms are not simply allomorphs of the strong pronouns. Second, it would be unexpected for emphatic pronouns to be selected by certain prepositions. Finally, although vowel sequences in Pp frequently result in elision, this is always at the expense of the first vowel, not the second, as illustrated in (20). It is unexpected, therefore, that *dì à:mí and similar sequences should show the suppression of the second rather than the first vowel in the sequence.18

(20) a. pa é kás > pé kás / *pá kás
   for DEF house
   ‘for the house’
   b. pa é > pé / *pá
   for 3s
   ‘for her/him/it’

I propose instead that the pattern in (17) results from the unfooted status of the prepositions. Recall that the prepositions *dì, kù, pa belong to the class of toneless functional morphemes. These can be assumed to enter the syntax without prosodic structure. This means that they are subject to post-lexical syllabification. Where the preposition precedes an item which is bimoraic, i.e., constitutes a foot, stray-adjunction applies, and the preposition, which receives a default high tone, appears as an unstressed syllable:

(22) Di e manera aki ami a bai ku nan [= kú nán]
of the manner here 1s.EMPH PERF go with 3p
   ‘Thus, I went with them’

---

18 It is worth noting that elision applies to a vowel sequence independent of clitic status. Thus, *dunele < duna ele (where ele is the strong pronoun) ‘give him/her’.
(23) **Mi ta masha kontento pa boso [=pá bòsó]**

1s BE very happy for 2p

‘I am really happy for you (all)’

In the case where the preposition precedes a singular pronoun—an item which is itself monomoraic, hence constitutes a defective foot—the string consisting of preposition and pronoun combines into a bisyllabic foot, forming a prosodic word. The pronouns in this case are the strong pronouns, as seen from the unacceptability of enclitic 2s bu in (18). This means that these pronouns carry H. Hence, the P + pronoun combination carries final H. However, foot structure being left-headed, the initial syllable carries stress, resulting in stress on the P. Note that where stress and high tone do not coincide, we encounter lengthening of the low-toned syllable as a signal of stress on that syllable; this is also observed in bisyllabic verbs which typically display a pattern of noncoincidence of H and stress (see fn. 3).19

4.3 Summary

In the preceding, we have seen that an embedded subject pronoun encliticises on a preceding verb in an ECM context, showing that encliticisation of object pronouns is syntactically conditioned. We have also seen that weak pronouns are excluded from the position of object of a preposition, in contrast with strong pronouns. This contrast suggests that weak pronouns do not have phrasal status. Recall also that tone polarisation of weak subject pronouns appears to be affected by syntactic information. All this supports the view that weak pronouns are syntactic clitics.

5. Weak pronouns as Agreement markers

5.1 Subject pronouns and the mood marker lo

In this section, we turn to data which show that subject pronouns seem to be able to “invert” around the irrealis mood marker lo, in contrast with lexical subjects, which can only appear in the position preceding lo. We will see that

19 For completeness sake, note further that the 3s pronoun é will trigger either elision of the final vowel of the preposition (pé < pa é ‘for 3s’) or the use of a consonant-initial allomorph which allows the formation of a bisyllabic foot (di-djé < di é ‘of 3s’, na-djé < na é ‘at 3s’, kuné < ku é ‘with 3s’). This allomorphy of the 3s pronoun appears to be selected by P, hence *pané, *ké, etc. Vigario (2003), considering idiosyncratic selection of clitic object allomorphs in European Portuguese (EP), concludes that lexical listing has to be invoked, both of the allomorphs and of information regarding their contexts of use. As in EP, the Pp allomorphy is not predictable from the application of phonological rules, and lexical listing needs to be invoked. Note by the way that the relevant Pp forms are completely unrelated to those displaying allomorphy in EP.
the impression of inversion is in fact deceptive, as lo does not move from its position in the clausal architecture. Instead, the different ordering options are explained by the fact that two different positions are available for pronominal subjects.

Pp lo is considered related to Portuguese logo ‘soon’; it precedes all preverbal material. Thus, in (24), it precedes the preverbal negator no; in contrast, Pp tense/aspect markers follow no:

(24) ... pakiko e persona ei lo no por a hasi e lote di paña aki komo donashon pa ...

why DEF person there MOOD NEG be.able PERF do DEF loot of clothes here as donation for
‘...why that person could not have used all these clothes as a donation for...’
(Extra 2004-10-25:2)

(24) contains a lexical subject (e persona ei) which precedes lo. Pronouns, unlike lexical subjects, can follow lo. Goilo notes the pattern in (25-26).

(25) Lo mi kanta; Lo bo kanta; Lo e kanta.

Mood 1s sing; Mood 2s sing; Mood 3s sing
‘I will sing; You will sing; S/he will sing’

(26) Lo nos / Nos lo kanta; Lo boso / Boso lo kanta; Lo nan / Nan lo / Nan kanta

Mood 1p / 1p Mood sing; Mood 2p / 2p Mood sing; Mood 3p / 3p Mood sing
‘We will sing; You (pl) will sing; They will sing’

(Goilo, 1953:97)

I propose to account for the different orders in (25-26) by calling on the weak/strong distinction: weak pronouns appear in the position following the irrealis mood marker lo, whereas strong pronouns, like lexical subjects, precede lo. The ambiguous behavior noted by Goilo for plural pronouns, which he indicates can occur both before lo (like lexical subjects) and after lo (like the singular subject pronouns), can be explained by the fact that the

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20 Recall that weak pronouns preceding a bare verb do not display tone polarisation, and surface with high tone.

21 The analysis which I propose here predicts the following tonal facts: weak pronouns, in the post-lo position, are predicted to engage in tone polarisation, subject only to the constraints which are relevant to this phenomenon generally. In contrast, strong pronouns, in the pre-lo position, are predicted to surface with H irrespective of the tone of lo (which may be variable, due to the fact that lo itself engages in tone polarisation). The data now available do not allow for this prediction to be tested. This remains for further research, therefore.
weak/strong forms are not prosodically distinct for the pronouns, in contrast with the singular forms. One should note that singular forms preceding lo are also attested (in other words: Mi lo..., Bo lo..., E lo...); my claim is that these are the strong pronoun forms. That Goilo did not note this possibility is due to the pronounced preference for the post-lo position of singular pronouns for the majority of speakers. This choice of positions and the preference of speakers is reminiscent of the situation in pro-drop languages such as Spanish and Portuguese: There, preference is for a null subject pronoun rather than an overt pronominal subject; the former option corresponds to the preferred post-lo position of pronominal subjects in Pp, whereas the latter option corresponds to the dispreferred pre-lo position. I propose to account for the availability of a pre-lo and a post-lo position from the distinction between clitic pronouns (post-lo) and strong pronouns (pre-lo), combined with an analysis which places lo in the left periphery of the clause.

5.2 The role of AGRSP
Kouwenberg & Lefebvre (forthc.), adopting Rizzi’s (1997) split CP, argue that lo heads Fin(iteness)P. This places lo outside of the split INFL domain. Evidence for this can be adduced from the fact noted above that lo appears in a non-canonical TMA position (Muysken, 1981), preceding both other TMA material and preverbal negation. Additionally, example (27), which contains lo followed by a 1s pronominal subject, shows that lo has illocutionary force, a function typically associated with the left periphery rather than with the domain of INFL; it marks optative mood here.

(27) **Lo** mi n’lag’e kolebra ei den
MOOD 1s NEG-leave-DEF snake there in
‘Would that I had left the snake inside there’, ‘If only I had left the snake inside there’ (Maurer, 1988:352)

Adopting the position that lo heads FinP means that lexical subjects are assumed to move up from a VP-internal position through the specifier positions of the functional projections dominating VP to a final landing site in [SPEC,FinP], linearly to the left of lo. This would be in agreement with Cinque’s (2005) position that “total” movement is unmarked. The clitic

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22 Papiamentu is a limited pro-drop language, where expletive subjects and subjects with arbitrary reference are unexpressed. See Kouwenberg (1990) for a description.

23 The appearance of lo is normally associated with interpretations which can be subsumed under irrealis (such as future, inductive generalisation, etc.; see Maurer 1988 for in-depth discussion). Thus, out of context, the utterance in (22) would be interpreted as ‘I won’t leave the snake in there’; in other words, to obtain the optative interpretation requires a specific context.
subject pronouns, on the other hand, head AgrSP, which is linearly ordered to the right of \( \text{lo} \).\(^{24}\)

\[
(... \text{FinDP} \text{lo} \text{AgrSP} \text{GRS} \text{...})
\]

The preference, noted above, for clitic subject pronouns over their strong counterparts can be seen as an instantiation of Cardinaletti & Starke’s (1999:198) economy principle:

\[(29)\] **Economy of Representations**

Minimise Structure

The application of this principle yields the following chain of preference:

\[(30)\] null pronoun > pronoun without structure > pronoun with structure

In Pp, this corresponds to the following options:

\[(31)\]

\(a.\) null pronouns where subjects are non-referential\(^{25}\) (Kouwenberg, 1990)

\(b.\) clitic pronouns where prosodic licensing is possible

\(c.\) nonclitic pronouns elsewhere

There are several expectations which follow from the account presented here and which are in need of verification. These include the expectation that only strong pronouns, which have phrasal status, can be separated from the verbal complex either by a syntactic processes (focus) or by the presence of adverbial material, and that only strong pronouns can be coordinated or modified.\(^{26}\) Weak pronouns are functional heads which need to be strictly

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\(^{24}\) As pointed out by a reviewer, alternative analyses may be sought to one that relies on a projection of Agr, as argued in Chomsky (1995), among others.

\(^{25}\) It is not the aim of this paper to compare the Pp case with its lexifiers Portuguese and Spanish, but it is of interest to note that Pp is a partial pro-drop language, in contrast with the full pro-drop of the European varieties. On the other hand, Brazilian Portuguese and Caribbean varieties of Spanish have been noted for their frequent use of and perhaps even preference for pronominal subjects, without the emphatic interpretation associated with their use in the European varieties; this preference has been linked to the weak status of these pronouns, in contrast with their (emphatic) strong counterparts (e.g. Cyrino, Duarte & Kato, 2000; Ordóñez & Olarrea, forthc.; Toribio, 2000). Interestingly, while the pro-drop status of non-referential subjects in Pp is well-established, the situation in Brazilian Portuguese and Caribbean Spanish varieties seems to be in flux, with an overall increase of pronominal subjects, even of non-referential ones (ibid.).

\(^{26}\) Note that independent use of pronouns is restricted to emphatic forms, e.g. *Ami ‘Me’*. 
adjacent to their hosts. As a result, they are unable to mirror the distribution of strong pronouns.\footnote{27}

6. Conclusion

In this paper, I have presented evidence that singular toneless pronouns are phonologically dependent, both as subjects and as objects of verbs. Such evidence is not available for plural pronouns: as bimoraic morphemes, the plural pronouns constitute prosodic words; as a consequence, they cannot be toneless.

I have argued that enclitic object pronouns incorporate into the prosodic word formed by the preceding verb, with appropriate structural effects. Proclitic subject pronouns, on the other hand, only adjoin to the following prosodic word. Incorporation and adjunction license the prosodically deficient pronouns.

I have also presented evidence that the appearance of dependent pronouns is syntactically conditioned, in other words, that encliticisation does not simply result from string adjacency. This can be seen most clearly when comparing a sequence of verb and object pronoun with a sequence of verb and embedded subject pronoun; the embedded subject pronoun encliticizes on the preceding verb where there is an ECM relationship only.

Further evidence that syntactic environments condition the appearance of clitic pronouns comes from their appearance in PPs. It turns out that the special enclitic form of the 2s pronoun is excluded from the position following a Preposition. Although there are no segmentally distinct enclitic forms for any other pronouns, I take this as an indication that weak pronouns are excluded from oblique positions.

Finally, we noted that subject pronouns can be transposed with the mood marker \textit{lo}, and that there is a preference especially for the singular pronouns to occur after \textit{lo}. This is the basis for the argument that there are two positions available in the clausal structure where pronominal subject material may appear. These two positions are not available for lexical subjects, which must precede \textit{lo}.

As argued by Kouwenberg & Lefebvre (forthcoming), I take \textit{lo} to head FinP—a position in the split CP domain (Rizzi, 1997). This analysis makes it possible to account for the fact that two positions seem to be available for pronominal subjects. I propose that the position following \textit{lo} is that of an agreement marker heading the AgrSP of the split-INFL projection, whereas the pre-\textit{lo} position is simply that of a DP subject. Thus, pronouns following \textit{lo} are clitics in AgrS, those preceding \textit{lo} are independent pronouns, with phrasal status.

\footnote{27 It follows that the order */lo pronoun adverb … should be unacceptable; whether this is so remains to be verified.}
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