Against words with two main stresses: The case of Guugu Yimidhirr revisited

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Abstract

The aim of this article is to re-examine and argue against the existence of words with two main stresses in Guugu Yimidhirr, a Pama-Nyungan language spoken in Queensland, Australia. Based on phonological evidence from patterns of clash avoidance and the distribution of secondary stress, it is claimed that in words alleged to have two main-stressed syllables, each syllable has a different metrical status. Only the initial syllable is main-stressed, while the second is treated as unstressed in Guugu Yimidhirr's metrical phonology.

In contrast to previous analyses found in the literature to solve the puzzle posed by Guugu Yimidhirr's double-headed words, this study finds no empirical support that motivates the weakening of prosodic theory by either allowing recursion at the level of the Prosodic Word or by proposing the existence of disyllabic feet with both of their syllables stressed.

Keywords: clash avoidance, double-headed prosodic words, metrical stress, Pama-Nyungan language

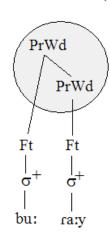
Introduction¹ 1.

This article re-examines and argues against the existence of words reported to have two main stresses in Guugu Yimidhirr (ISO 639-3, code kky; Lewis, Simons and Fennig 2016), a Pama-Nyungan language spoken in Queensland, Australia. These double-headed Prosodic Words (PrWd) have drawn a lot of attention (e.g. Kager 1995; Buckley 1998; Zoll 1998, 2004a, 2004b; Elías-Ulloa 2006). For example, Kager's (1995) analysis proposes that each main-stressed syllable heads its own PrWd and that the leftmost one dominates the other PrWd, creating recursion at this prosodic level. On the other hand, Bye's (1996b) account avoids the PrWdrecursive analysis by recognising the existence of feet with an internal clash, that is, disyllabic feet in which each syllable appears stressed (i.e. they each occupy a head position).

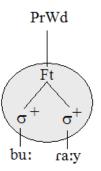
¹ I would like to thank the two anonymous reviewers for their kind and invaluable feedback, questions as well as alternative analyses that have enriched the discussion. All errors remain mine. I would also like to acknowledge the incredible work of documentation of the Guugu Yimidhirr language and culture carried out by John Haviland. In this article, I barely present a metrical interpretation of the stress patterns he describes in painstaking detail.

According to Haviland (1979: 41–43), words with two main stresses in Guugu Yimidhirr only occur when the first and second syllables have long vowels. The diagrams in (1) show the prosodic representations of the word [bú:.rá:y] 'water' according to the accounts put forward by Kager (1995) and Bye (1996b), respectively. The symbol σ^+ represents a stressed syllable. The data provided in this article for Guugu Yimidhirr come entirely from Haviland (1979).²

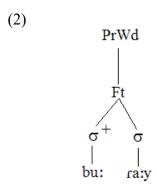
(1) PrWd-Recursive Account (Kager 1995)



Internal Clash Account (Bye 1996b)



This article claims that Guugu Yimidhirr data support neither the Internal Clash Account (ICA) nor the PrWd-Recursive Account (PrWd-RA). Based on phonological evidence coming from clash avoidance and the patterns of secondary stresses, I argue that the two initial long vowels of a PrWd have different metrical statuses. Only the initial vowel corresponds to the head of the PrWd, while the second is not a head syllable, as illustrated in (2).



This article is organised as follows: section 2 offers a brief overview of Guugu Yimidhirr phonology, highlighting those aspects related to the metrical stress of the language, while section 3 presents the stress patterns. This latter section includes information about the assignment of main stress as well as the distribution of secondary stresses and the effects that clash avoidance has on them. Section 4 provides evidence that Guugu Yimidhirr phonology does not treat the second syllable of words reported to have two initial main stresses as actually being stressed. Section 5 presents a discussion of the patterns and entertains alternative analyses, and I end the paper with a few conclusions in section 6.

² Although the data presented for Guugu Yimidhirr in this article come from Haviland (1979), other sources also include de Zwaan (1969a, 1969b), Breen (1970), and Haviland (1974). I have chosen Haviland (1979) because it is the most detailed description available and the only one that actually marks where stress is located at word level.

2. General overview of Guugu Yimidhirr phonology

According to Haviland, Guugu Yimidhirr has the segmental inventory shown in (3) for consonants and in (4) for vowels.

(3)	Labial	Dental	Alveolar	Retroflex	Palatal	Velar
	b	ф	d	d	J	g
	m	n	n	η	n	ŋ
			1			
			ſ	t		
	W				У	
(4)	i/iː			u/uː		
			a/a:			

Most Guugu Yimidhirr words are disyllabic. There are some monosyllabic stems, all of which have a long vowel (e.g. [di:] 'tea', [mi:l] 'eye'). Syllables can be closed by a consonant (Haviland 1979: 38–41). From the data provided from Haviland (1979), it can be observed that only sonorants occupy the coda position of syllables.

Long vowels cannot occur beyond the second syllable of a PrWd (see Zoll 1998, 2004a, and 2004b for an account of this distribution), as illustrated by the examples 3 shown in (5). The examples in (5a–d) show cases in which a long vowel occurs either in the first or second syllable of a word. The examples in (5e) and (5f) show instances of words in which both the first and second syllables have a long vowel. The Guugu Yimidhirr ban on long vowels occurring beyond the second syllable is schematically shown in (5g). In sections 2, 3, and 4, I follow Haviland's (1979) transcription style: main stress is represented by an acute accent ['] and secondary stress by a grave accent [']. In section 5, in order to highlight the contrast with the metrical analysis proposed, I use the symbol ['] to mark main stress, and [,] for secondary stress.

(5)	a.	[bíː.ba]	'father'	H. 49
` ,	b.	[búː.ɾa.y-àygu]	'still in the water'	H. 43
	c.	[ma.gíːl]	'branch'	H. 42
	d.	[ba.dúːr]	'book'	H. 49
	e.	[míː.ríː.l-ìŋga]	'had spoken'	H. 42
	f.	[dáːn.gáːy]	'wind'	H. 50
	g.	* \sigma_1. \sigma_2.CV:		

Vowels that occur in the second syllable of disyllabic stems are subject to processes of vowel lengthening and vowel shortening triggered by certain suffixes. Monosyllabic stems and vowels that occur in the final syllable of trisyllabic stems are not affected by those suffixes (see the data and description in Haviland (1979: 44), and a formal analysis of this phenomenon in Kager (1995) and Zoll (1998, 2004a, and 2004b)). The data in (6) show the effect that the ergative

³ The 'H' in the examples stands for (Haviland 1979) and the following number is the page number in which the example can be found. Furthermore, in the examples provided in this article, I follow Kager's (1995) analysis of syllabification for Guugu Yimidhirr.

suffix -nda has on the vowel of the preceding syllable. As observed in (6b) and (6d), this suffix triggers vowel lengthening in the preceding syllable but only on a vowel that belongs to the second syllable of the word. If the preceding vowel occurs beyond the second syllable, as happens in (6f), then no lengthening may occur.

(6)	a.	/ mangal /	\rightarrow	[máŋ.gal]	'hand'	H. 49
	b.	/ mangal-nda /	\rightarrow	[maŋ.gáːln.da]	'hand' (ergative)	H. 49
	c.	/ gamay /	\rightarrow	[gá.may]	'clay'	H. 49
	d.	/ gamay-nda /	\rightarrow	[ga.máːyn.da]	'clay' (ergative)	H. 49
	e.	/ wa:rigan /	\rightarrow	[wáː.ri.gan]	'moon'	H. 49
	f.	/ wa:rigan-nda /	\rightarrow	[wáː.ri.gan.da],	'moon' (ergative)	H. 49
				*[wáː.ri.gàːn.da]		

3. Guugu Yimidhirr stress patterns

3.1 Main stress

Guugu Yimidhirr is a quantity-sensitive language. Although it has closed syllables and syllables with long vowels, only the latter can attract the main stress away from the initial syllable. The following paragraphs describe the stress patterns found in this language, following Haviland (1979). Unfortunately, I could not find any indication of the phonetic realisation of stress in Guugu Yimidhirr and, in particular, the realisation of stress in the words described as bearing two main stresses.

When the two initial syllables both have short vowels, the main stress falls on the first, as illustrated by the data in (7).

(7)	a.	[yú.gu]	'wood'	H. 42
	b.	[ná.bal]	'stone'	H. 42

Main stress also falls on the initial syllable if that syllable has a long vowel and the following syllables have short vowels. This is exemplified by the data in (8).

(8)	a.	[gúː.gu]	'language'	H. 41
	b.	[búː.ɾa.y-àygu]	'still in the water'	H. 43

When the initial syllable of a word has a short vowel and the second has a long vowel, the main stress is attracted to the second. These are the cases that point out the quantity-sensitive nature of Guugu Yimidhirr stress. See the data in (9).

(9)	a.	[ma.gíːl]	'branch'	H. 42
	b.	[ga.bíːɾ]	ʻgirl'	H. 42
	c.	[na.báːlŋa <u>n</u>]	'stone (ablative)'	H. 42

Haviland (1979) describes words in which the two initial syllables have long vowels as being equally stressed, that is, both syllables bear main stress. Although section 4 shows that actually only the initial syllable bears "main stress" in these cases, the transcriptions given in (10) are faithful to Haviland's (1979) in showing both syllables as main-stressed.

(10)	a.	[búː.ɾáːy]	'water'	H. 42
	b.	[ŋáː.náː]	'what'	H. 42
	c.	[dáːŋ.gáːy] ⁴	'wind'	H. 50

3.2 Distribution of secondary stresses and clash avoidance

Guugu Yimidhirr avoids the occurrence of clashes. Secondary stresses are pushed towards the right in order to avoid them. The following paragraphs describe its patterns of secondary stress and clash avoidance.

By default, Guugu Yimidhirr has a disyllabic trochaic rhythm. When the main stress occurs on the initial syllable and there is no risk of a clash occurrence, secondary stress appears on the subsequent odd syllables counting from left to right (Haviland 1979: 42). See the data in (11) and (12). In the former case, the examples show words of which the initial syllable has a short vowel. In the latter case, the initial syllables have a long vowel.

(11)	b.	[bí.gi.bì.gi] [bá.yanŋàygu] [dúr.gim.bìgu]	'pig' 'just the houses (emphatic)' 'Indian Head (place name)'	H. 41 H. 42 H. 41
(12)		[búː.ɾa.y-àygu] [báː.ɾa.bà.ɾa]	'in the water (emphatic)' 'mangrove'	H. 43 H. 42

When the main stress occurs on the second syllable of a word, secondary stress runs from left to right on even syllables (Haviland 1979: 42), as illustrated by the data in (13).

(13)	a.	[ma.gíːl-ŋaygù]	'just branches'	H. 42
	b.	[da.gáːr-ga.r-ìn]	'(was) growing'	H. 42

It is worth noting that the pattern of secondary stress shown in (13) is a case of clash avoidance. If secondary stresses were not pushed toward the right, clashes would occur, as in (14).

Further evidence for the effects of clash avoidance in Guugu Yimidhirr comes from forms as in (15) and (16). These forms all have a secondary stress on the final odd syllable provided that no clash occurs. This occurs even if that final odd syllable is open, as is the case in (15b) and (16b).

(15)		[már.bu.gàn] [már.bu.gànbigù]	'cave' 'still in the cave'	H. 41 H. 42
(16)	b.	[dáː.ba.ŋàl] [dáː.ba.ŋàlŋa.l-à] [jíː.raːɲŋùn]	'to ask' 'keep asking!' 'old man (ergative)'	H. 42 H. 42 H. 49

⁴ Haviland (1979) does not offer the transcription of stresses for the word in (10c) but the positions of the stresses provided for that example follow from his description.

In contrast to (15) and (16), final odd syllables do not bear secondary stress if this would create the occurrence of two consecutive stressed syllables (i.e. a clash). This situation arises when the second syllable bears the main stress. See the examples in (17).

(17)	a.	[na.báːlŋan] ~ *[na.báːlŋàn]	'stone (ablative)'	H. 42
	b.	[yu.gúːŋu] ~ *[yu.gúːŋù]	'wood (purposive)'	H. 42

4. Clash avoidance and evidence against words with two main stresses

The phonological evidence that comes from clash avoidance also indicates that there are no words in Guugu Yimidhirr that have more than one main stress. This section argues that although words of which the two initial syllables have long vowels have been described as having two main stresses (one on the first syllable and another on the second), the phonological evidence drawn from the behaviour of clash avoidance in Guugu Yimidhirr points out that only the initial syllable is main-stressed; the second syllable has a different metrical status.

As observed in the data in (18), the second syllable, which contains a long vowel, does not behave as a stressed syllable. Put differently, the second syllable does not behave as a metrical head. The secondary stress, following the allegedly stressed second syllable, is not pushed toward the right edge or left unstressed, as was shown in the previous cases.

(18)	a.	[búː.ɾáːybìgu]	'still in the water'	H. 42
	b.	[wáːn.dáːʈŋàygu]	'just white cockatoos'	H. 42
	c.	[míː.ɾíː.l-ìŋga]	'had spoken'	H. 42
	d.	[ֈíː.ráːɲŋùn]	'old man (ergative)'	H. 49

The data in (19) and (20) let us contrast the behaviour of a second syllable with a long vowel that bears main stress, and a second syllable with a long vowel that does not. Whereas in (19), a secondary stress cannot occur after the second syllable because it would create a clash, in (20), a secondary stress does occur in that position because, contrary to appearances, no clash is formed. This proves that Guugu Yimidhirr's phonology treats the second long-voweled syllables in (20) as unstressed.

(19)	[yu.gúːŋu] ~*[yu.gúːŋù] [ma.gíːlŋaygù] ~*[ma.gíːlŋàygu]	'wood (purposive)' 'just branches'	H. 42 H. 42
(20)	[búː.ráːybìgu] ~*[búː.ráːybigù] [wáːn.dáːʈŋàygu] ~*[wáːn.dáːʈŋaygù]	'still in the water' 'just white cockatoos'	H. 43 H. 42

5. Analysis and discussion

Following Liberman and Prince (1977), Prince (1976, 1980, 1983, 1990), and Hayes (1995), among others, it is assumed that stress is better understood as the reflex of metrical structure. The description presented in the previous sections clearly shows that Guugu Yimidhirr is a quantity-sensitive language in which syllables with long vowels are able to attract stress away from its default position (that is, the initial syllable) – see the metrical structure in (21). In this section, foot structure is indicated by parentheses, and the head positions in that structure by ['] in the case of the prosodic word main head, and [|] in the case of the head of secondary metrical feet.

There is no evidence in the language for considering closed syllables as heavy in any context. Thus, for instance, words like those in (21b) provide the perfect context for closed syllables to show they are able to attract stress to the second syllable, but they do not. The main stress of the language is circumscribed to a two-syllable window which signals the presence of a disyllabic metrical foot aligned to the left edge of the prosodic word. Moreover, in Guugu Yimidhirr, long vowels cannot occur beyond the second syllable of a word. This behaviour further supports the presence of a disyllabic metrical foot aligned with the left edge of the prosodic word. In other words, long vowels are only licensed to occur within the main metrical foot.

Guugu Yimidhirr is also a language with a rhythmic distribution of stressed syllables running from left to right. This indicates the presence of disyllabic metrical feet through the prosodic word – see the metrical structure in (22) to (24). By default, the rhythm is trochaic, but it can be reversed to iambic if the second syllable obtains the main stress, thereby avoiding the occurrence of two consecutive stressed syllables – see (22c). Clash avoidance is resolved in Guugu Yimidhirr by pushing the potential offending stress of a syllable onto the following one until each stressed syllable is separated by only one unstressed syllable. No metrical gaps are allowed either (that is, the language does not allow the occurrence of two consecutive unstressed syllables). Gaps are avoided by parsing all syllables into metrical feet. In a word with an odd number of syllables, even the final syllable is assigned to the head of its own metrical foot. This means that the language requires an exhaustive parsing of its syllables even if that creates a degenerate foot at the end of a word – see (23a–e). The only context in which this requirement is overridden is when a metrical clash would otherwise be created, as in the metrical structures in (24).

```
(21) a.
            ('yu.gu)
                                         'wood'
            ('na.bal)
                                         'stone'
      b.
            ('bi:.ba)
                                         'father'
      c.
            (ma. 'gi:l)
                                         'branch'
      d.
(22)
            ('bi.gi)( bi.gi)
                                         'pig'
      a.
            ('dur.gin)(bi.gu)
                                         'Indian Head (place name)'
      b.
            (ma. 'gi:1)(nay. gu)
                                         'just branches'
      c.
            ('bu:.ra)(_yay.gu)
                                         'still in the water'
(23)
      a.
          ('mar.bu)( gan)
                                         'cave'
      b. ('da:.ba)(_nal)
                                         'to ask'
      c. ('mar.bu)(_gan.bi)(_gu)
                                         'still in the cave'
                                         'keep asking!'
      d. ('da:.ba)(_nal.na)(_la)
          ('ji:.ra:n)( nun)
                                         'old man (ergative)'
                                         'wood (purposive)'
(24) a.
           (yu.'qu:).nu
                                         'stone (ablative)'
      b. (na. 'baːl).ηa<u>n</u>
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Guugu Yimidhirr does not possess words with more than one syllable bearing main stress. The cases reported as words with two main stresses should be reanalysed as words in which only the initial syllable bears the main stress, as shown in (25). The language does not provide any phonological evidence that the long vowels in the second syllables of those words occupy any prominent position in the metrical structure. If the second syllable in those examples were

located in a head position, they would push the following secondary stress one syllable to the right, but they do not.

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(25) a. ('da:n.ga:y) 'wind'
b. ('wa:n.da:t)(ˌŋay.gu) 'just white cockatoos'
c. ('mi:.ri:)(ˌliŋ.ga) 'had spoken'
d. ('bu:.ra:y)(ˌbi.gu) 'water (locative, emphatic)'
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While the phonology of Guugu Yimidhirr clearly shows that in words that have long vowels in their two first syllables, only the first syllable belongs to a metrically-stressed position, there is still the question about why those words have been reported in Haviland's work as having two main stresses. Although I claim that those words only have one main stress, there is obviously some type of perceptual prominence to which Haviland's depiction is referring. In order to solve that part of the puzzle, it is necessary to carry out a phonetic study. For the time being, we can say that the perceptual prominence reported in Haviland's studies could be due to a number of factors. For instance, we could entertain the idea that the presence of long vowels could have been perceived as equivalent to be a prominent syllable. It could also be that the language assigns high pitch to syllables with long vowels which, in the case at hand, would create the effect of two consecutive syllables with the same pitch height although, metrically, only the first one occupies a prominent position. This would be similar to the phenomenon known as "level stress" in Scandinavian, where two syllables within a prosodic word are perceived to have equal prominence or perceptual ambiguity; in other words, prominence cannot be uniquely localised on only one syllable (Liberman 1982; Kristoffersen 1990a, 1990b, 2000; Riad 1992; Lorentz 1995; Bye 1996a, 1996b).

Before ending this section, let us explore an alternative analysis and see whether it would be possible to keep claiming that there are two main stresses in Guugu Yimidhirr words with two long vowels. Let us assume for a moment that in Guugu Yimidhirr, words with two main stresses exist and that each syllable with a long vowel forms its own metrical foot: ('bu:)('ra:y) 'water'. In this scenario, words like [na.'ba:l.nan] 'stone (ablative)' would have a metrical analysis such as na.('ba:l).nan. However, words like ['ji:.'ra:n.,nun] 'old man (ergative)', which would have two main stresses, present a problem for this approach since it predicts a metrical analysis that does not match the attested form in the language: *('ji:)('ra:n).nun (cf. 23e). That is, parallel to na.('ba:l).nan 'stone (ablative)', the final syllable is predicted to remain unparsed and therefore unstressed. While that is the correct prediction for 'stone (ablative)', it is not for 'old man (ergative)'.

In order to save this alternative analysis, we could say that there is no clash avoidance in Guugu Yimidhirr. This, in fact, would go well with words like ['bu:.'ra:y] 'water', which is reported to have two main stresses: ('bu:)('ra:y). This also goes well with words like [ma.'gi:l.ŋay.gu] 'just branches'. We could say that the reason why the secondary stress is on the syllable [gu] and not on [ŋay] in this latter example is not because of clash avoidance but the result of avoiding reversing the rhythm and thus preserving the trochaic rhythm: ma.('gi:l.ŋay)('gu). Following this idea, in order to obtain the stress pattern observed, we could reanalyse ['ji:.'ra:n.nun] 'old man (ergative)' as having each of its syllables occupying a head position in the metrical structure creating two metrical clashes: ('ji:)('ra:n)('nun). However, this analysis would fail again in words like [na. 'ba:l.nan] 'stone (ablative)' since it wrongly predicts that the final syllable should also surface as stressed: *na.('ba:l)('nan) (cf. 24b).

As suggested by an anonymous reviewer, we can still save the analysis if we assume that under specific circumstances, Guugu Yimidhirr can allow the occurrence of overlapping trochaic disyllabic feet. They can only be licensed when the head of said feet are occupied by a syllable with a long vowel. Thus, words like ['bu:.'ra:y. bi.gu] 'still in the water' could be analysed as ('bu:.('ra:y)1.('bi)2.gu)3; that is, the syllables [bu:] and [ra:y] form a metrical foot, ('bu:.'ra:y); then [ra:y] and [bi] form another metrical foot, ('ra:y.bi); and finally, [bi] and [gu] form the third metrical foot of the word, (bi.qu). However, the problem here is that nothing seems to motivate the creation of the last metrical foot, (bi.gu). Put differently, one could assume that the presence of a syllable with a long vowel can demand the occurrence of a disyllabic foot, and this demand is so strong in the phonology of the language that two overlapping main-stress disyllabic feet are created in a recursive fashion à la Kager (1995). But what would force the syllables [bi] and [qu] to form a third disyllabic foot keeping in mind that the syllable [bi] is already the non-head syllable of the second foot? A possible answer would be the requirement to parse all syllables in the word, but this requirement would force the last syllable to form a degenerate foot placing a secondary stress in the wrong position: *('bu:.('ra:y)1.bi)2.(_gu) (cf. 25d). As a last attempt to save this alternative analysis, one could argue that, in Guugu Yimidhirr, the requirements to parse syllables exhaustively into metrical feet and to have disyllabic feet are so important that a third overlapping foot is created: ('bu:.('ra:y)1.(_bi)2.gu)3. This would account for the stress pattern for words like ['bu:.'ra:y.,bi.gu] 'still in the water', but it gets the wrong results for words like [ma. 'gi:l.nay. gu] 'just branches'. It mistakenly predicts the secondary stress on the syllable [nay] instead of [qu]: *ma.('qi:l.(_nay)1.qu)2 (cf. 22c). Overlapping and disyllabic metrical feet cannot account for the stress pattern observed in words like ['ji:.'ra:n.,nun] 'old man (ergative)' either. Under this approach, the syllables [ji:] and [ra:n] form a metrical foot, and the syllables [ra:n] and [nun] form the overlapping foot. This analysis fails to assign a secondary stress on the final syllable of the word: *('ti:.('ra:n)1.nun)2.

In contrast, if we assume, as proposed in this study, that Guugu Yimidhirr has no words with two main stresses, i.e. that in those cases of words with two long vowels it is only the one that belongs to the initial syllable that is main-stressed and that the language avoids having two stressed syllables adjacent to each other, then its stress patterns follow from metrical feet running left to right trying to parse as many syllables as possible. Those feet are disyllabic and trochaic by default except when a metrical clash would otherwise be created. Thus, in order to avoid the occurrence of a clash, Guugu Yimidhirr would reverse the trochaic rhythm to iambic within a word – e.g. (ma. 'qi:l)(nay. qu) 'just branches' – or it would leave a syllable unparsed – e.g. (na. 'ba:l).nan 'stone (ablative)'. In its craving to parse as many syllables as possible, it would allow the presence of a monosyllabic foot as long as it does not create a metrical clash, e.g. ('da:.ba)(.nal) 'to ask'. Words with two long vowels are subject to the same forces: by default they will have a trochaic disyllabic foot running left to right. Since the second long vowel does not occupy a head position in the metrical structure, no metrical clash is created in words like ('bu:.ra:y)(bi.qu) 'still in the water'. In words with two long vowels, disyllabic feet also shrink to monosyllabic to be able to parse as many syllables as possible. Since the long vowel in the second syllable is not stressed, then in words like ('ji:.ra:n)(nun) 'old man', the last syllable can be parsed into its own foot without creating a clash (this is in sharp contrast to (na. 'ba:l).nan 'stone (ablative)').

6. Conclusions

This article has shown that Guugu Yimidhirr does not have words bearing two main stresses. The existence of languages that allow words to have more than one primary stress has given

rise to concerns due to the theoretical problems that they present and their scarce occurrence in world languages. Thus far, the accounts proposed to solve this problem, although ingenious, end up weakening the theory. They allow the existence of words with more than one main stress either by allowing prosodic structure be recursive at the PrWd level (Kager 1995) or by permitting feet to have more than one stressed syllable (Bye 1996b).

In the case of Guugu Yimidhirr, based on phonological evidence coming from the patterns of clash avoidance and secondary stresses, this study has demonstrated that in words reported to have two main stresses in Guugu Yimidhirr, the rightmost one is not metrically stressed, i.e. the syllable does not occupy a head position in the metrical structure.

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