On the (Non-)congruence of Focus and Prominence in Tumbuka

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1. Introduction

It is widely assumed in the linguistic literature on focus that, cross-linguistically: "Focus needs to be maximally [prosodically] prominent" (Büring 2010: 178; see, too, Frota (2000), Gundel (1988), Jackendoff (1972), Roberts (1998), Rooth (1992, 1996), Reinhart (1995), Samek-Lodovici (2005), Selkirk (1995, 2004), Szendröi (2003), and Truckenbrodt (1995, 2005)). However, there is also a growing list of counterexamples to the Focus-Prominence correlation. I show in this paper that Tumbuka, a Bantu language (N20) spoken in Malawi, should be added to the list of problematic cases. After presenting a brief sketch of Tumbuka prosody in section 2, section 3 demonstrates non-congruence between focus and maximal prominence by discussing the prosody of the following focus-related constructions: *wh*-questions and answers; alternative (choice) questions and answers; and the focus particle *-so* 'also'. I conclude in section 4 with questions for future research and implications of Tumbuka for the typology of focus prosody.

2. Sketch of Tumbuka prosody (Downing 2006, 2008)

Although most Bantu languages are tonal (Kisseberth & Odden 2003), it is controversial whether Tumbuka is to be considered a tone language because, except for with some ideophones (Vail 1972), there are no lexical or grammatical tonal contrasts. Rather, the penult of every word in isolation is lengthened and bears a falling tone, as shown in the following representative data:

(1) No tonal contrasts in nouns

Singular	*Gloss*	*Plural*
múu-nthu	'person'	ŵáa-nthu
m-líimi	'farmer'	ŵa-líimi
m-zíinga	'bee hive'	mi-zíinga
m-síika	'market'	mi-síika
khúuni	'tree'	ma-kúuni
báanja	'family'	ma-báanja
ci-páaso	'fruit'	vi-páaso
ci-ndíindi	'secret'	vi-ndíindi
nyáama	'meat, animal'	nyáama
mbúuzi	'goat'	mbúuzi

(2) No tonal contrasts in verbs or verb paradigms
(a)   ku-líima   'to farm'   líima!   'farm!'

(a)	ku-líima	'to farm'	líima!	'farm!'
	ti-ku-líima	'we farm'	ti-ku-líma yáaye	'we do not farm'
	ti-ka-líima	'we farmed'	ti-ka-líma yáaye	'we did not farm'
	t-angu-líima	'we recently farmed'		
	n-a-ŵa-limíira	'I have farmed for them'		
	ŵ-a-líima	'they have farmed'		
	wa-zamu-líima	's/he will farm'	wa-zamu-limilíira	's/he will weed'

(b)	ku-zéenga	'to build' zéenga! 'build!'
	ti-ku-zéenga	'we build'
	nyúumba yi-ku-zengéeka	'the house is being built'
	ŵa-ka-zéenga	'they built'
	ŵa-ka-ku-zengéera	'they built for you sg.'
	ŵa-ka-mu-zengeráa-ni	'they built for you pl.'
	n-a-zéenga	'I have built'
	wa-zamu-zéenga	's/he will build'
	ŵa-zamu-zengeráana	'they will build for each other'

     To put these Tumbuka prosodic patterns into perspective, penult lengthening (especially of phrase-penult vowels), interpreted as stress, is very common cross-Bantu (see, e.g., Doke 1954; Downing 2010; Hyman & Monaka 2011; Philippson 1998). It is also very common cross-Bantu for the High tone of a word to be attracted to the penult (see, e.g., Kisseberth & Odden 2003; Philippson 1998). And it is attested (though it is not clear how widespread this is) for other languages of the region (roughly, northern Lake Malawi) to have what have been called restricted or predictable tone systems: all words must have a High tone (see Odden 1988, 1999; Schadeberg 1973 for discussion). It is plausible that the present Tumbuka system arose diachronically through the interaction of penult lengthening and the attraction of High tones to the penult, and subsequent loss of tonal contrasts.

     Tumbuka words have the isolation pronunciation in (1) and (2), though, only when they are final in the Phonological Phrase (indicated with parentheses). As shown in (3), penult lengthening and falling tone – the correlates of prosodic phrasing in Tumbuka – are conditioned by the right edge of XP. As a result, the verb plus its first complement generally form a single phrase (unless the VP is very short, as in (3c)), and following complements are phrased separately. Subject NPs and Topics are phrased separately from the rest of the sentence. These patterns are reminiscent of the phrasing demonstrated for Chimwiini (Kisseberth & Abasheikh 1974), a Bantu language spoken in Somalia, and the Edge-based analyses developed in Kisseberth (2010) and Selkirk (1986) can be extended rather straightforwardly to Tumbuka:

(3) Tumbuka prosodic phrasing (Downing 2008)[1]
(a)   (ti-ku-phika síima)   'We are cooking porridge.'
       we-TAM-cook porridge
(b)   (ŵ-áana)   (ŵa-ku-ŵa-vwira   ŵa-bwéezi)
       2-child   2SBJ-TAM-2OBJ-help   2-friend
       'The children are helping the friends.'
(c)   (ti-ka-wona   mu-nkhungu   ku-msíika)
       we-TAM-see   1-thief   LOC-market
       'We saw a thief at the market.'

(d) (ŵ-anakáazi)   (ŵa-ka-sona   vy-akuvwara   vya mu-kwáati)
    2-woman   2SBJ-TAM-sew   8-clothes   8.of   1-bride
    'The women sewed clothes of the bride.'
(e) (m-nyamáata) (wa-ka-timba   nyúumba)   (na líibwe)
    1-boy   1SBJ-TAM-hit   9.house   5.rock
    'The boy hit the house with a rock.'

Because the (phrase) penult predictably has a High tone and lengthened vowel, Tumbuka is often classified as a stress language (Kisseberth & Odden 2003). One might reasonably expect focused words and/or phrases to attract sentential stress, as they do in many other stress languages (like English, for example). However, this is not the case. As we shall see in the next section, focus does not directly condition sentential stress (or phrasal prominence) in Tumbuka.

3. Focus constructions and prosody in Tumbuka

One finds a number of definitions of focus in the literature. I adopt the following working definition, adapted from e.g., Güldemann (2003), Krifka (2007) and Nurse (2008): Focus is the part of an utterance which introduces changes in the Common Ground shared by Speaker and Addressee. Wh-phrases are assumed to have inherent focus (Rochemont 1986), and many researchers (e.g., Krifka 2007, Rooth 1992) argue that the focused part of an utterance provides a congruent answer to an implicit or explicit question. For these reasons, wh-question/answer pairs are a common technique for eliciting focus. We begin this section with an examination of the prosody and syntax of wh-questions and answers in Tumbuka.

3.1. Non-subject questions and answers

The canonical word order in Tumbuka is: S V IO DO Adjunct. (This is common cross-Bantu: see e.g. Bearth 2003, Heine 1976). The data in (4) illustrate the canonical word order:

(4) (ŵa-máama) (ŵa-ku-capa   vya-kuvwara   vya ŵ-áana) (ku-máaji)
    2-woman   2SBJ-TAM-wash   8-clothes   8.of 2-child LOC-6.water
    'The woman washes the clothes of the children in the river.'

In non-subject questions, wh-words and answers do not occur in the canonical position. Instead, IAV (immediately after the verb) position is required (except for those wh-expressions which must be clefted; see next sections). The data below provides examples illustrating this pattern for questions on both objects and adjuncts (the wh-question word is underlined):

(5) Questioning a direct object (in a sentence with an indirect object or adjunct)
(a) (Ku-sukúulu)   (u-tolel-enge   <u>víici</u>) (ŵa-lendo   ŵ-íithu)
    LOC-5.school   you-take.for-TAM what   2-visitor   2-our
    'What are you taking to the school for our visitors?'

(b) (ŵa-máama) (ŵa-ku-capa   <u>víici</u>)   (ku-máaji)
    2-woman   2SBJ -TAM-wash what   LOC-6.water
OR
(c) (ŵa-máama) (ku-máaji) (ŵa-ku-capa <u>víici</u>)
    'What is the woman washing in the river?'

(d) (Pafupi na sukúulu)   (wa-ku-zenga   <u>víici</u>)
    LOC   with 5.school   1SBJ-TAM-build   what
    'What is s/he building near the school?'

(6) Questioning adjuncts like 'when', 'how', 'where'
(a) (Káasi) (wu-ka-mu-wona   <u>pa wúuli</u>) (Méeri)
     Q   you-TAM-1OBJ-see   when   Mary
     *Kasi, wukamuwona Mary pa wuli?
     'When did you see Mary?'

(b) (Káasi) (Jíini)   (wa-ku-phika   <u>úuli</u>)   (kéeke)
     Q   Jean   1SBJ-TAM-cook how   cake
     'How does Jean make her cake?'

(c) (ŵa-máama) (ŵa-ku-capira   <u>nkhúu</u>) (vya-kuvwara vya ŵ-áana)
     2-woman   2SBJ-TAM-wash   where   8-clothes   8.of 2-child
     'Where is the woman washing the clothes of the children?'

(7) Questioning 'what for = why'
(a) (Káasi) (wa-ngu-mu-piráa-<u>ci</u>)   (ndaláama)
      Q   you-TAM-1OBJ-give.for-what   9.money
     'What did you give her the money for?'

(b) (Dokotóola) (wa-kiziráa-<u>ci</u>)   (mwakucéedwa)
     1.doctor   1SBJ.TAM-arrive.for-what   late
     'What did the doctor arrive late for?'

The examples in (8) show that answers to non-subject wh-questions also strongly tend to occur in IAV position. This is strikingly illustrated by the effect on word order of asking a wh-question on different postverbal complements of the same basic sentence in (b) vs. (c). Note in the examples that information repeated from the question tends to be left-dislocated:

(8)
(a) Context is wh-question in (5d), asking 'what'
     (Wa-ku-ŵa-zengera   <u>ŵa-nthu ŵa-káavu</u>) (ci-patala   cíi-pya) (pafupi na sukúulu)
     1SBJ-TAM-2OBJ-build.for 2-person 2-poor   7-hospital   7-new   LOC   with 5.school
     'S/he is building a new hospital for poor people near the school.'

(b) Context is wh-question in (5b, c), asking 'what'
     (ŵa-máama) (ku-máaji)   (ŵa-ku-capa   <u>vya-kuvwara   vya ŵ-áana</u>)
     2-woman   LOC-6.water 2SBJ-TAM-wash 8-clothes   8.of 2-child
     'The woman washes the clothes of the children in the river.'

(c) Context is wh-question in (6c), asking 'where'
A   (vya-kuvwara   vya ŵ-áana) (ŵa-máama) (ŵa-ku-capa   <u>ku-máaji</u>)
     8-clothes   8.of 2-child 2-woman   2SBJ-TAM-wash   LOC-6.water
     'The woman washes the clothes of the children in the river.'

(d) Context is wh-question in (6a), asking 'when'
     (Méeri) (ni-ka-mu-wona   <u>mayíiro</u>)
     Mary   I-TAM-1OBJ-see   yesterday
     'I saw Mary yesterday.'

To put Tumbuka in perspective, note that the IAV requirement on non-subject focused elements is found in other Bantu languages – e.g., Aghem (Hyman 1979, 1999; Hyman & Polinsky 2010; Watters 1979), Tswana (Creissels 1996, 2004); Makhuwa (van der Wal 2006, 2009); Kimatuumbi (Odden 1984); Bàsàa (Hamlaoui & Makasso 2010), Zulu (Cheng & Downing 2009) – and in other African languages and language families, like Mambila (Güldemann 2007); Chadic (Tuller 1992). As we shall

see in sections 3.4 and 3.5 below, the IAV requirement on focused non-subjects only holds for wh-words and answers in Tumbuka, though, not for all types of focus.

What are the consequences for prosody of these wh-questions and answers? Following a well-established Bantuist tradition (see, e.g., Doke 1954, Downing 2010, Hyman & Monaka 2011 and Zerbian 2006), penult lengthening is considered the principal correlate of phrasal and sentential stress prominence in Tumbuka. As we can see in this data, wh-words and answers do receive phrasal stress, and a Phonological Phrase break consistently follows these words. However, we can also see that this cannot be directly attributed to focus, as the final word in an XP is at the right edge of a Phonological Phrase, where it receives phrasal stress, whether it is focused or not. Moreover, sentence stress (i.e., culminative penult lengthening, not marked in the data) is always found on the final word of a sentence, regardless of the location of focus.

3.2. Clefted wh-phrases
3.2.1. Subject questions and answers

Subject questions and answers also do not occur in their canonical position in Tumbuka. Instead, a cleft is obligatory for subject questions, and is often used in answers to subject questions. Indeed, clefting of focused subjects is widely found in Bantu languages – Dzamba (Bokamba 1976), Makhuwa (van der Wal 2009), Kivunjo Chaga (Moshi 1988), N. Sotho (Zerbian 2006), Kitharaka (Muriungi 2003), Kinyarwanda (Maxwell 1981), Zulu (Cheng & Downing 2007) – and in other African languages – e.g., Bijogo (Segerer 2000), Byali (Reineke 2007), Hausa (Jaggar 2001: 496), Somali (Orwin 2008). As Zerbian (2006) argues, this can be accounted for by proposing that the cleft resolves a conflict between the inherent topicality of subjects and the inherent focus of wh-questions and answers. Examples of clefted subject questions and answers in Tumbuka are given below:[2]

(9)
Q
(a) (Ni njáani) (uyo   wa-ku-capa   vya-kuvwara   vya   ŵ -áana) (ku-máaji)
    COP 1.who 1.REL 1SBJ-TAM-wash 8-clothes   8.of   2-child LOC-water
    'It is who who is washing the clothes of the children in the river?'

A
(b) (aŵo   ŵa-ku-capa   vya-kuvwara   vya ŵ-áana) (ku-máaji)   (m-ba-máama)
    2.REL 2SBJ-TAM-wash 8-clothes   8.of 2-child LOC-6.water COP-2-woman
    '(The one) who is washing the clothes of the children in the river is the woman.'
OR
(c) (m-ba-máama) (aŵo ŵa-ku-capa vya-kuvwara vya ŵ-áana) (ku-máaji)
    'It's the woman who is washing the clothes of the children in the river.'

(10)
(Ni mw-ana njúu)   (uyo   wa-ka-luwa   ku-jala   ma- ŵíindo)
 COP 1-child 1.which 1.REL   1SBJ-TAM-forget INF-close   6-window
'It is which child who forgot to close the windows?'

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[2]   Even though Tumbuka has two positions where wh-words can occur – clefted and IAV – multiple wh-questions like 'Who brought what?' are considered ungrammatical. If speakers are forced, they accept, with doubts, multiple wh-questions, if one questioned argument is a human subject. But these do not have a list-pair reading like they do in English (e.g., 'Terry brought charcoal; Chris brought steak; Tracy brought corn, etc.'); rather only one pair is expected in the answer (e.g., 'Terry brought charcoal.').

3.2.2. Other uses of clefts

A cleft is also used in Tumbuka for non-subject *which* questions and for the question phrase, 'because of what' (why). More research is necessary to understand why these particular question types are clefted:

(11) Tumbuka non-subject *which* question
(Ni m-ziwu   wa-nkhuni   ngúu) (uwo   m-sungwana mu-cóoko) (wa-nga-ghegha yáayi)
 COP 3-bundle   3.of-10.wood 3.which 3.REL 1-girl   1-small   1SBJ-TAM-carry NEG
'Which bundle of firewood can't the small girl carry?'

(12) 'because of what' question
(Nchifukwa ca víici)   (mu-lutenge yáayi)   (ku nyumba pa Kirisimáasi)
COP.7.cause 7.of what   you-go   not   LOC 9.home LOC Christmas
'Why aren't you going home for Christmas?'

What are the consequences for prosody of these clefted wh-questions and answers? While the focused word is again followed by a phrase break (and so attracts phrasal stress) in the clefted position, this follows from the syntactic structure: the clefted word is at the right edge of an XP, where we expect to find a Phonological Phrase break. That is, syntax, not focus, conditions prominence on the clefted word. Moreover, sentence stress (i.e., culminative penult lengthening, not marked in the transcriptions) is always found on the final word of a sentence, not on the clefted wh-question or answer. (See Koch (2008) for a similar pattern in Thompson River Salish.)

3.3. Alternative questions and answers

In contrast to wh-questions and answers, no consistent position (or prosody) is required with alternative questions and answers. As shown in (13), the IAV position is possible but not required for the focused words in both the question and the answer. (Focused words/phrases are underlined in this section.):[3]

(13)
Q (ŵa-máama) (ŵa-ku-capa   vya-kuvwara   vya ŵ-áana) (<u>ku-máajíi</u>)
    2-woman   2SUBJ-TAM-wash   8-clothes   8.of 2-child LOC-6.water
OR IAV:
    (vya-kuvwara   vya ŵ-áana) (ŵa-máama) (ŵa-ku-capa   <u>ku-máajíi</u>)
     8-clothes   8.of 2-child 2-woman   2SUBJ-TAM-wash LOC-6.water
    'Is your mother washing the children's clothes <u>in the river</u>?'

A (ŵa-ku-capa   vya-kuvwara   vya ŵ-áana) (<u>ku-máaji</u>)   (yáayi)
    2SUBJ-TAM-wash   8-clothes   8.of 2-child LOC-6.water NEG
    (ŵa-ku-capira   <u>ku-nyúumba</u>)
     2SUBJ-TAM-wash.at   LOC-9.house
    'She's not washing the children's clothes <u>in the river</u>. She's washing them *at home*.'

As shown in (14), verbs, prepositions and modified nouns do not receive phrasal stress when they are focused in a choice question or answer, unless they are final in their syntactic phrase:

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[3]   As shown by the data in this section, the final word in the Intonation Phrase of alternative question has a distinctive prosody: each of its last two syllables is lengthened and bears a falling tone.

(14)

(a)

Q	(Káasi)	(c-úuvu)	(<u>ci-ka-khosomoleska</u>	n-chéeŵée)
	Q	7-dust	7SBJ-TAM-make.cough	9-dog

'Did the dust make the dog <u>cough</u>?'

A	(Yáayi)	(c-úuvu)	(<u>ci-ka-yethyemuliska</u>	n-chéeŵe)
	no	7-dust	7SBJ-TAM-make.sneeze	9-dog

'No, the dust made the dog <u>sneeze</u>.'

(b)

Q	(mw-ááná)	(wa-ka-gheghera	ci-téete)	(dada	mu-cekúurúu)
	1-child	1SBJ-TAM-carry.for	7-basket	1.man	1-old

(panyákhe	<u>mw-anakazi</u>	mu-cekúuru)
or	1-woman	1-old

'Did the child carry the basket for an old <u>man</u> or an old <u>woman</u>?'

A	(mw-áana)	(wa-ka-mu-gheghera	ci-téete)	(dada	mu-cekúuru)
	1-child	1SBJ-TAM-1OBJ-carry.for	7-basket	1.man	1-old

'The child carried the basket for an old <u>man</u>.'

(c)

(M-nyamáta	wa-ka-sanga	<u>n-cheŵe</u>	ya-ku-zyéeŵáa)	(panyákhe
1-boy	1SBJ-TAM-find	9-dog	9.of-INF-be lost	or

<u>m-buzi</u>	ya-ku-zyéeŵa)	(mu-ma-thíipha)
9-goat	9.of-INF-be lost	LOC-6-swamp

'Did the boy find a lost <u>dog</u> or a lost <u>goat</u> in the swamp?'

As we can see, focus on XP-internal words does not trigger either prosodic rephrasing or syntactic positioning to place them in Phonological Phrase-final position where they will receive phrasal stress. Tumbuka is not unique in this respect. Restrictions on prosodically marking focus on XP-internal words are found in languages like Chewa and Zulu (Downing 2008), Egyptian Arabic (Hellmuth 2006: 123-129), Italian (Ladd 2008, Swerts et al. 2002), Northern Biscayan (NB) Basque (Hualde et al. 2002: 551), and Swahili (Geitlinger & Waldburger 1999), as well as other languages surveyed in Cruttenden (2006) and Ladd (2008).

3.4. Association with focus morpheme, -so

Recent work on the prosody of focus (e.g. Rooth (1992, 1996), Selkirk (2004), Truckenbrodt (1995)) leads us to expect that the focused argument of a focus-related morpheme should be made prominent either phonologically (as usual), or morphologically (by adjacency of the focusing morpheme and its argument). For example, in English, sentential accent marks all types of focus, including focus on the italicized argument of 'also' in (15c):

(15)
(a) Where are you going to eat dinner on Friday?
   We are going to *an Italian restaurant* for dinner on Friday.
(b) We are going to an *Italian* restaurant, not a *Thai* restaurant.
(c) We are <u>also</u> going to an Italian restaurant on *Saturday* night.

Analogous focus morphemes in Tumbuka do not conform to this proposal, however. Neither the position of the particle nor its prosody highlights the focused argument. The association-with-focus verbal enclitic, -*so* 'also; again' illustrates the problem especially clearly. It attaches only to verbs and is followed by a Phonological Phrase boundary, as shown in the data in (16) – (19):[4]

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[4] See Downing (2006) for discussion of other Tumbuka association-with-focus morphemes, like *only* and *not*, which have similar prosodic phrasing properties.

(16)
(Mu-nyaŵo uyo   wa-ka-yi-koma   n-jóoka) (ndiyo   wa-k-izáa-*so*)
1-friend   1.REL   1SBJ-TAM-9OBJ-kill 9-snake COP.1.who   1SBJ-TAM-bring-also
(na   ŵa-dada ŵ-áaŵo) (ku-ci-patáala)
with   2-father 2-their LOC-7-hospital
'The friend who killed the snake is who also brought father to the hospital.'

(17)
Q   (Káasi), (mu-ku-luta   ku-Lilóongwe)   (mw-ahúunóo)
     Q   you-TAM-go   LOC-Lilongwe   today
    'Are you going to Lilongwe today?'
A   (Éenya), (n-khu-lutáa-*so*) (ku-Salíima)
     yes   I-TAM-go-also LOC-Salima
    'Yes, and I am also going to Salima.'

(18)
(a) (n-khu-limilíra   ma-púuno)
      I-TAM-weed   6- tomatoes
     'I am weeding tomatoes.'
(b) (Ku-limiliráa-*so*)   (ngóomáa)
     You/TAM-weed-also 10.maize
     'Are you also weeding the maize?'

(19) (Ŵa-ku-guliskáa-*so*) (nyúuzi)   (pa sitolo   apo   mu-nga-guláa-po)   (ma-búuku)
      2SBJ-TAM-sell-also   10.newspapers   LOC 9.store LOC.REL you-TAM-buy-LOC   6-book
      [The shop where you can buy books is next to the bus stop.] 'They also sell newspapers at the shop
      where you can buy books.'

Because the verb is not always the argument of this clitic, even though it is always the host, ambiguity
can arise about what is in focus. For example, in (20b), the subject, the verb, the verb phrase or the
object could all be interpreted as the argument of -*so* without the context in (20a) to disambiguate:

(20)
Q   (Ni ŵa-dokotala péera) (aŵo   ŵa-ku-vwíra   ŵa-sambíizíi)
    COP 2-doctor   only   2.REL   2SBJ-TAM-help   2-teacher
    'Is it only the doctor who helps the teacher?'
A   (Yáayí), (ŵa-fúumu) (ŵa-ku-vwiráa-*so*)   (ŵa-sambíizi)
     no   2-chief   2SBJ-TAM-help-also   2-teacher
    'No, the chief also helps the teacher.'

4. Conclusions

We are now in a position to summarize the strategies we have shown are used to mark focused
elements in Tumbuka, to allow us to evaluate how well this language supports the Focus-Prominence
correlation typology mentioned in the introduction.

4.1. Focus strategies

Prosody: Focus has no consistent, direct effect on prosody in Tumbuka. Indeed, Hyman's (1999)
and Nurse's (2008) surveys have found that focus rarely directly affects tone (and other prosody) in
Bantu languages. Rather, focus mainly has an effect on the morphology and/or syntax (and this
sometimes has prosodic consequences).

Morphology: Tumbuka has focus-related particles like -*so* 'also'. This particle triggers prosodic
phrasing (perhaps because it is XP-final) and consequently phrasal stress on its verbal host, even
though other focus contexts do not. As we saw, however, neither the position of the clitic nor the

prosodic phrasing unambiguously marks the position of focus. We leave it as an issue for future research to account for why focus-related elements like *-so* trigger special prosody. Perhaps, as a reviewer suggests, they are simply XP-final.

Syntax: Clefts are required to question or focus the subject, while IAV position is required to question or focus non-subject wh-questions and their answers in Tumbuka.[5] An issue for further research is what the best syntactic analysis of the IAV requirement is. Is it a low Focus position (Aboh 2007, Zubizarreta 2010) or an in situ 'position' which licenses focus and/or bans non-focused material (Cheng & Downing 2009; Hyman & Polinsky 2010)? More work on more languages will be required to evaluate these two approaches. Any analysis must also explain why IAV is required for some kinds of focus on non-subjects in Tumbuka (wh-questions and answers) but not others (choice questions and answers; the arguments of association with focus particles).

No focus marking: A focused head (verb, preposition or noun) which is non-final in its syntactic phrase (XP) has no effect on either syntax or prosody in Tumbuka. As in languages like Italian (Ladd 2008, Swerts et al. 2002), Egyptian Arabic (Hellmuth 2006), NB Basque (Elordieta 2008) and others mentioned at the end of section 3.4, one cannot disambiguate through prosody alone whether the head or a complement is focused.

4.2. Implications for the typology of focus prosody

What, then, does Tumbuka tell us about the typology of focus prosody? Is it typologically unusual in having no focus prosody? Yes, according to the Focus-Prominence correlation typology mentioned in the introduction (Büring 2010, etc.). No, according to a growing body of recent research which provides numerous counterexamples to the proposal that the Focus-Prominence correlation is a universal. Many languages do not have any phonological marking of focus. Examples include N. Sotho (Zerbian 2006); Hausa (Hartmann & Zimmermann (2007); Wolof (Rialland & Robert (2001); Buli and related Gur languages (Schwarz 2009); Yucatec Mayan (Gussenhoven & Teeuw 2008, Kügler et al. 2007) and Thompson River Salish (Koch 2008); see Zerbian et al. (2010) for an overview. Others do not mark focus with sentence stress – e.g., Bengali (Hayes & Lahiri 1991) and Egyptian Arabic (Hellmuth 2006) – or mark focus prosodically in some contexts but not others – e.g., Italian (Ladd 2008, Swerts et al. 2002) and NB Basque (Elordieta 2008). In a new typological proposal, Chen et al. (2009) and Xu (2010), argue that focus prosody is best considered an areal feature confined to some northern Asian and European languages. Work on focus prosody in African languages like Tumbuka has an important role to play in testing this new view of the geographical distribution of focus prosody among the world's languages.

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5   Interestingly, Immediately *Before* the Verb is a common focus position in non-African languages, like Basque (Ortiz de Urbina 1999, Elordieta 2008), German verb-final clauses (Kratzer & Selkirk 2007), Hindi (Patil et al. 2008), Hungarian (É. Kiss 1998, Szendroi 2003), Mayan (Aissen 1992; Kügler et al. 2007) and Turkish (Kornfilt 1997). As Güldemann (2007) argues, it is expected that Immediately Before the Verb would be the position of focus for SOV languages like these.

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