

Evaluating the Immediate Postverbal Position as a Focus Position in Zulu*

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1 IAV as a focus position

1.1 IAV as a linear position

IAV focus across Bantu languages. The immediate postverbal position (or IAV position, “Immediate After Verb”) is claimed to be a focus position in Aghem (Watters 1979). Makhuwa can be used as an example of another Bantu language in which it can be claimed that the IAV position is related to focus:

- (1) a. Q: O- m- vah- alé **esheení** Teresínya?
2S- 1.OM- give- PERF what 1.Terisnha
“What have you given Teresinha?”
A: Ki- m- vah- alé **ekanetá** (Teresínya).
1S- 1.OM- give perf 9.PEN
“I gave (her/Teresinha) a pen.”
b. Q: O- m- vah- alé **páni** ekanéta?
2S- 1.OM- give- PERF who 9.pen
“Who did you give a pen?”
A: Ki- m- vah- alé **Teresínyá** (ekanéta).
1S- 1.OM- give- PERF 1.Teresinha 9.pen
“I gave (it/a pen) to Teresinha.”
(van der Wal 2006)

Although not *immediately* postverbal, a postverbal position in Rundi is also claimed to be a focus position:

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- (2) Ha- á- nyône amatá **abâna**.
 16- PST- drink:PERF milk children
 “CHILDREN (not adults) drank milk.” (Ndayiragije 1999)

Zulu. A Bantu language of the Nguni cluster, S40, spoken primarily in South Africa. Mutually intelligible with Ndebele, Xhosa, and Swati. About 8.5 million home speakers in 1998 (Sanneh 2001). Has tone and clicks.

There is also evidence in Zulu for an immediate postverbal (IAV) focus position:

- (3) a. Ba- zi- fundis- e- **ni** izingane?
 2- 10- teach- PERF- what 10.children
 “What did they teach the children?”
 b. # Ba- fundis- e izingane **ini**?
 2- teach- PERF 10.children what
 (Grammatical on echo question reading.)

Expectation. If there is a low focus position, we expect it to be used whenever an element in the verb phrase is focused. How strong is the correlation between focus and the IAV position?

The goals here are these:

- Discover under what conditions focus requires use of IAV (a linear position) (section 2, p. 4).
- Evaluate analyses of IAV phenomena in light of the variability which will be found (section 3, p. 10).

1.2 Conjunctivity

It is not sufficient to simply consider the first element after a verb. We will now define the IAV position more precisely.

Zulu has a morphological alternation in a few tenses called the “conjoint/disjoint alternation” (van der Spuy 1993):

- (4) a. Disjoint: the next element falls outside the VP/some constituent.
 ngi- cul- **ile**] X
 1S- sing- PERF.DJ
 b. Conjoint: at least the next element falls within the VP/some constituent.
 ngi- cul- **e** X]
 1S- sing- PERF.CJ
 “I sang X”

Here are some classic environments for the conjoint and disjoint verb forms:¹

(5) Classic environments for the *conjoint* verb form

- a. Before a non-agreeing object
 Ngi- cul- **e** ingoma.
 1s- sing- PERF.CJ 9.song
 “I sang a song.”
- b. Before a focused adjunct
 U- cul- **e** izolo. #Uculile izolo.
 2s- sing- PERF.CJ yesterday
 “You sang YESTERDAY.”
- c. Before a *Wh* phrase:
 U- y- **e** ku- liphi idolobho?
 2s- go- PERF.CJ to- 5.which 5.town
 “Which town did you go to?”

(6) Classic environments for the *disjoint* verb form

- a. Clause-finally
 Ngi- cul- **ile**. *Ngicule.
 1s- sing- PERF.DJ
 “I sang.”
- b. Before an agreeing object
 Ngi- yi- cul- **ile** ingoma yakho. *Ngiyicile ingoma.
 1s- 9- sing- PERF.DF 9.song 9.your
 “I sang your song.”
- c. Before an unfocused adjunct
 U- cul- **ile** izolo. #Ucule izolo.
 2s- sing- PERF.DJ yesterday
 “You sang yesterday.”

We will only consider environments where (in a tense having the alternation) the verb requires a conjoint verb form.

Conjoint verb contexts are also the only ones for which a postverbal focus position is claimed in languages like Makhuwa and Rundi, as well.

¹ There is one exception to the generalization that a *Wh* phrase must occur in a conjoint verb context. The word *ngani* “why”, which, when used postverbally, can only question a negative clause, must be preceded by a disjoint verb form:

- (1) a. A- wu- cul- **ile** nga- ni? (disjoint)
 NEG- 2- sing- PERF.DJ for- what
- b. * A- wu- cul- **e** nga- ni? (conjoint)
 NEG- 2- sing- PERF.CJ for- what
 “Why haven’t you sung?”

An analysis of this phenomenon is presented in Buell (2007). *Ngani* would be considered to be attached higher than the putative low focus position under consideration and will hence not be discussed further.

2 The data

Methodology. Explore different focal contexts. See whether or not the focal element must occur in the IAV position.

There are different types of focal contexts that can be tested:

- In situ *Wh* questions and their answers.
- Overt contrast: *I saw Jim, not Mary; I saw Jim instead of Mary; Did you see Jim or Mary?*
- Reason questions with focus: *Why did you see MARY?*
- Presentational focus: *There came a strange man into the room.*

And there are different categories of focused constituents to be considered:

- DPs, PPs, adverbs.

2.1 In situ *Wh* questions

Bad intervenors. An intervenor between the verb and the WH phrase usually results in ungrammaticality:

- (7) a. V Obj1 Obj2
U- phek- el- a ubaba inyama.
2s- cook- APPL- FV 1.father 9.meat
“You’re cooking Father some meat.”
- b. V Obj1 Obj2_{Wh}
?? U- phek- el- a ubaba **kudla kuni**?
2s- cook- APPL- FV 1.father 15.food 15.what.kind
- c. OM-V Obj2_{Wh}] Obj1
U- m- phek- el- a **kudla kuni**] ubaba?
2s- 1- cook- APPL- FV 15.food 15.what.kind 1.father
“What kind of food are you cooking Father?”
- (8) a. V Obj Temp
U- theng- e ingubo entsha izolo.
2s- buy- PERF 9.dress 9.new yesterday
“You bought a new dress yesterday.”
- b. V Obj Temp_{Wh}
* U- theng- e ingubo entsha **nini**?
2s- buy- PERF 9.dress 9.new when
- c. OM-V Temp_{Wh}] Obj
U- yi- theng- e **nini**] ingubo entsha?
2s- 9- buy- PERF when] 9.dress 9.new
“When did you buy a new dress?”

Acceptable intervenors. However, sometimes intervenors are tolerated:

- (9) V Obj1 Obj2_{Wh}
- a. Ba- nik- e uSipho **mali- ni**?
 2- give- PERF 1.Sipho 9.money- what
 “How much money did they give Sipho?”
- b. ? Ba- zo- fund- el- a uthisha **inkondlo ka- bani**?
 2- FUT- read- APPL- FV 1.teacher 9.poem of- 1.who
 “Whose poem will they read to the teacher?”

Speaker variability.

- (10) a. V Wh Loc
 ✓/✓ Ubone indawo lapho kuhlala **bani** khona?
 2.see.PERF 9.place there 17.stay.FV 1.who there
- b. V Loc Wh
 */✓BEST Ubone indawo lapho kuhlala khona **bani**?
 2.see.PERF 9.place there 17.stay.FV there 1.who
 “You saw the place where who lives?”

No crossing. A *Wh* phrase cannot be moved to the left of an intervening argument to immediately follow the verb within the verb phrase. Doing so generally results in strong judgements of ungrammaticality:

- (11) a. V Obj1 Obj2
 U- phek- el- a ubaba inyama.
 2S- cook- APPL- FV 1.father 9.meat
 “You’re cooking Father some meat.”
- b. V Obj2_{Wh} Obj1
 * U- phek- el- a [**kudla kuni**]_i ubaba t_i?
 2S- cook- APPL- FV 15.food 15.what.kind 1.father
- c. OM-V Obj2_{Wh}] Obj1
 U- m- phek- el- a t_i **kudla kuni**] ubaba_i?
 2S- 1- cook- APPL- FV 15.food 15.what.kind 1.father
 “What kind of food are you cooking Father?”
- (12) a. V Obj Adv_{Wh}
 * Ba- bhak- a isinkwa **kanjani**?
 2- bake- FV 7.bread how
- b. V Adv_{Wh} Obj t_i
 * Ba- bhak- a **kanjani** isinkwa?
 2- bake- FV how 7.bread
- c. OM-V Adv_{Wh} t_i] Obj_i
 Ba- si- bhak- a **kanjani**] isinkwa?
 2- 7- bake- FV how 7.bread

“How do they bake bread?”

Lexical *Wh* locatives are more liberal:

- (13) a. i. V Obj Loc
Ngi- leth- e izimpahla zami lapho.
1s- bring- PERF 10.stuff 10.my there
- ii. V Loc Obj
Ngi- leth- e lapho izimpahla zami.
1s- bring- PERF there 10.stuff 10.my
“I put my stuff there.”
- b. i. V Obj Loc_{Wh}
U- leth- e izimpahla zami **ku- liphi ikamelo?**
2s- bring- PERF 10.stuff 10.room to- 5.which 5.room
- ii. V Loc_{Wh} Obj
U- leth- e **ku- liphi ikamelo** izimpahla zami?
2s- bring- PERF to- 5.which 5.room 10.stuff 10.room
“Which room did you take my stuff to?”

But the locative clitic *-phi* “where” is strict:

- (14) a. V-Loc Obj
* U- leth- e- **phi** izimpahla zakho?
2s- bring- PERF.CJ- where 10.stuff 10.your
- b. OM-V-Loc t_i] Obj _{i}
U- zi- leth- e- **phi**] izimpahla zakho?
2s- 10- bring- PERF.CJ- where 10.stuff 10.your
“Where did you put your stuff?”

Other co-occurrence restrictions. There is a tendency to dislike material following the *Wh* phrase within the verb phrase:

- (15) a. V Obj1_{Foc} Obj2
* U- zo- theng- el- a- **ni** amaqanda?
2s- FUT- carry- APPL- FV- what 6.eggs
- b. OM-V Obj1_{Foc}] Obj2
U- zo- wa- theng- el- a- **ni**] amaqanda?
2s- FUT- 6- carry- APPL- FV- what 6.eggs
“Why will you buy eggs?”

Referentiality also plays a role:

- (16) V Obj1_{Foc} Obj2
a. U- zo- thwal- is- a **bani** itafula?
2s- FUT- carry- CAUS- FV 1.who 5.table
“Who will you help carry a table?”

- b. * U- zo- thwal- is- a **bani** leli tafula?
 2s- FUT- carry- CAUS- FV 1.who 5.that 5.table
 “Who will you help carry that table?”

However, judgements in this respect are not uniform:

- (17) Amalunga a- yi- ph- el- e- **ni izingubo ezinthsha**] intandane
 6.members 6- 9- give- APPL- PERF- what 10.clothes 10.new 9.orphan
 esikhundleni se- mali?
 7.instead 7.of- 9.money
 “Why did the members give the orphan new clothes instead of money?”

Wh summary:

- There is a preference for the *Wh* element to immediately follow the verb.
- Intervenors:
 - Intervenors usually yield either ungrammaticality judgement or echo question interpretation.
 - Intervenors sometimes yield a good or only slightly degraded result.
- No crossing:
 - Letting the *Wh* phrase cross another overt element within the verb phrase generally results in strong ungrammaticality judgement.
 - Except when *Wh* phrase is a non-clitic locative.

2.2 Overt contrast

Hhayi “not”. Evidence was found indicating that the focused element has to be in the IAV position:

- (18) a. V Obj1 Obj2_{Foc}
 * Ngi- phuz- is- e izivakashi **ikhofi**, hhayi itiyē.
 1s- drink- CAUS- PERF 8.guests 5.coffee, not 5.tea
- b. OM-V Obj2_{Foc}] Obj1
 Ngi- zi- phuz- is- e **ikhofi** izivakashi, hhayi itiyē.
 1s- 10- drink- CAUS- PERF 8.guests 5.coffee not 5.tea
 “I served the guests coffee, not tea.”

But grammatical judgements were also found:

- (19) Umninisitolo unike isisebenzi imali, hhayi impahla.
 1.shopowner 1.give.PERF 7.worker 9.money not 9.goods
 “The shopkeeper gave the worker money, not goods.”

Noma “or” Similarly, here there is a preference for the focused element to appear in the IAV position:

- (20) a. V Obj1 Obj2_{Foc}
 ?? U- zo- nik- a uSipho **imali noma impahla?**
 2s- FUT- give- FV 1.Sipho 9.money or 9.goods
 “Will you give Sipho money or goods?”
- b. V Obj1_{Foc} Obj2
 U- zo- nik- a **uSipho noma uThandi** imali?
 2s- FUT- give- FV 1.Sipho or 1.Thandi 9.money
 “Will you give money to Sipho or Thandi?”

But the preference for this position can be weak:

- (21) a. V Obj_{Foc} Loc
 BEST Ulethe **izimpahla zami** ku- leli kamelo, noma ezakho?
 2.bring.PERF 10.goods 10.my to- 5.this 5.room or 10.yours
- b. V Loc Obj_{Foc}
 Ulethe ku- leli kamelo **izimpahla zami**, noma ezakho?
 2.bring.PERF to- 5.this 5.room 10.goods 10.my or 10.yours
 “Did you put my things in this room, or yours?”

Overt contrast summary.

- There is a clear preference for the focused element to appear in the immediate postverbal position, but sometimes other positions are also deemed grammatical.

2.3 Focused reason questions

The preference to have the focused element in the IAV position seems robust in the cleft-like reason question strategy:

- (22) a. V Sbj_{Foc} Loc
 Yi- n’ indaba ku- hlal- a **uSipho** khona?
 COP- what 9.story 17- stay- FV 1.Sipho there
- b. V Loc Sbj_{Foc}
 * Yi- n’ indaba ku- hlal- a khona **uSipho?**
 COP- what 9.story 17- stay- FV there 1.Sipho
 “Why does SIPHO live there?”
- (23) a. V Obj1_{Foc} Obj2
 ✓/✓ Yi- n’ indaba amalunga ephe **ingane ecebilile** izingubo
 COP- what 9.story 6.members 6..give.PERF 9.child 9.rich 10.clothes
 ezintsha, esikhundleni se- ntandane.
 10.new 7.instead 7.of- 9.orphan
 “Why did the members give the rich child new clothes instead of the orphan?”

- b. V Obj1 Obj2_{Foc}
 */√ Yi- n' indaba amalunga ephe intandane **izingubo ezintsha**,
 COP- what 9.story 6.members 6..give.PERF 9.orphan 10.clothes 10.new
 esikhundleni se- mali ye- sikole.
 7.instead 7.of- 9.money 9.of- 7.school
 “Why did the members give the orphan new clothes instead of school fees?”

Focused reason question summary.

- Again, there is a clear preference for the focused element to appear immediately after the verb.

2.4 Presentational focus

What could be argued to be “presentational focus” does not behave like the narrow/contrast types of focus we’ve just considered. Light adverbials preferably intervene between the verb and the putatively focused element:

- (24) a. Ngi- bon- e indawo lapho ku- hlal- a khona **uSipho**.
 1s- see- PERF 9.place there 17- stay- FV there 1.Sipho
 b. Ngi- bon- e indawo lapho ku- hlal- a **uSipho** khona.
 1s- see- PERF 9.place there 17- stay- FV 1.Sipho there
 “I saw the place where Sipho lives.” ((24a) deemed better than (24b).)

- (25) ... ku- yaku- vel- a ku- we **umbusi**.
 17- FUT- originate- FV from- you 1.ruler
 “...out of thee shall come a Governor.” (Micah 5:2, as cited in Matthew 2:6, Bible Society of South Africa (1959))

- (26) Ngithanda ukuya esikoleni ngoba...
 “I like to go to school because...”
 a. V Loc Obj_{Foc}
 ngi- fund- a khona **izindaba ezimnandi**.
 1s- study- FV there 10.affair 10.nice
 b. V Obj_{Foc} Loc
 ngi- fund- a **izindaba ezimnandi** khona.
 1s- study- FV 10.affair 10.nice there
 “I study many nice subjects there.” ((26a) deemed better than (26b).)

Presentational focus summary.

- Presentationally focused elements do not mind the IAV position, but they prefer to follow light locatives.

3 Analysis

Evaluating the Focus/IAV correlation.

- Three focal contexts show a clear preference for the focused element to appear in the IAV position. IAV for the focused element is not an absolute requirement, though.
- “Presentational focus” does not pattern with “real” focus. Presentational focus is not relevant for evaluation of the correlation between IAV and focus.

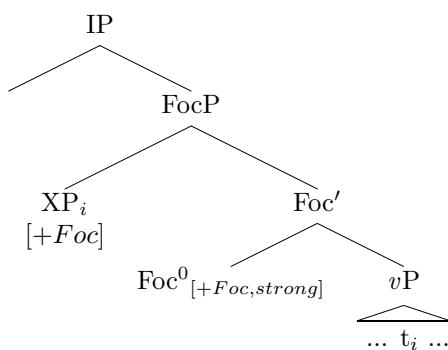
3.1 The low FocP hypothesis

Low focus structural positions for various Bantu languages are argued for in Sabel and Zeller (2006), Aboh (2006), Ndayiragije (1999), and van der Wal (2006).

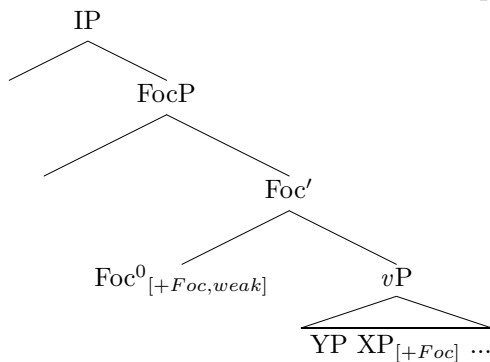
Accounting for the weak correlation. Assuming a low FocP, the variability observed could be handled in this way:

- There are two different [+Foc] focus heads: one strong and one weak.

(27) a. Strong Foc⁰: Focused element moves overtly to spec-FocP.



b. Weak Foc⁰: Focused element remains *in situ* at spell-out.



- Speakers prefer the strong head, yielding ungrammaticality in cases like (7b) and (8b), in which something intervenes between the verb and the focused element.
- Unknown factors sometimes facilitate the acceptability of the weak version.

Challenges for low FocP. Of the arguments used against a low focus position in Aghem in Hyman and Polinsky (2006), the following are relevant for Zulu:

- a. There is no clear evidence for V-to-T movement. (Depends on status of the final suffix. Is this a head which is raised to, such as the perfect suffix *-ile/-e*? (Ferrari-Bridgers 2007))
- b. The element in the immediately postverbal position is not always in focus (Buell 2005; Buell 2006):

(28) Ngi- cul- a ingoma.
 1s- sing- FV 9.song
 ‘I’m singing a song.’ (neutral focus)
 OR ‘I’m singing a SONG.’ (narrow focus)

- c. The focus interpretation “depends on the category” of the constituent in that position (Buell 2005; Buell 2006). Relevant categories in Zulu are a class of abverbs and redundant pronouns:

(29) A- ngi- dans- i kahle, kodwa ngi- cul- a kahle.
 NEG- 1s- dance- FV well but 1s- sing- FV well
 ‘I don’t dance well, but I sing well.’

(30) Y- i- ngoma_i engi- m- cul- el- e yona_i.
 COP- REL:9.song REL- 1s.SBJ- 1.OBJ- sing- APPL- PERF 9.it
 ‘It’s a song that I sang him.’

- d. Multiple *Wh* questions are possible:

(31) U- zo- nik- a bani ini?
 2s- FUT- give- FV 1.who 9.what
 ‘Who will you give what?’

The “no crossing” problem. Recall that you can’t overtly raise a focal element across an overt non-focal element:

- (32) a. V XP YP (*neutral declarative order*)
 b. * V YP_{iFoc} XP t_i

This seems difficult for the low FocP analysis. What linguistic principle could rule out this crossing? (Not adjacency: see (13a.ii) and (13b.ii).)

3.2 Focus *in situ*

- Hyman and Polinsky (2007) argue for focus *in situ* in Aghem.
- Cheng and Downing (2006) argue that focal elements in Zulu stay within the verb phrase (as in Buell (2005,2006)) and that they do not occupy a low FocP.

The “no crossing” non-problem. If no focus position exists, then it’s not surprising that you can’t move to it.

3.2.1 Focus operator

Hyman and Polinsky (2007) propose that a focus operator in CP (or ForceP) unselectively binds the “lowest XP in the clause”.

This alone doesn’t seem to be nearly enough for Zulu:

- Bad intervenors between the verb and the focused element (“prefocal material”):

(33) * U- theng- e ingubo entsha **nini**?
 2S- buy- PERF 9.dress 9.new when
 “When did you buy a new dress?” (Same as (8b).)

- Bad postfocal material within the verb phrase

(34) * U- zo- theng- el- a- **ni** amaqanda?
 2S- FUT- carry- APPL- FV- what 6.eggs
 “Why will you buy eggs?” (Same as (15a).)

The focus operator analysis alone solves only certain cases:

[_{VP} V].
 [_{VP} V XP], with focus on XP.
 [_{VP} V XP], with focus of VP, assuming focus projection (Selkirk 1984).

And it can only explain the contrast in (35) if *imali* in (35b) is in some way dislocated:

(35) a. ?? U- zo- nik- a uSipho **imali noma impahla**?
 2S- FUT- give- FV 1.Sipho 9.money or 9.goods
 “Will you give Sipho money or goods?” (Same as (20a).)
 b. U- zo- nik- a **uSipho noma uThandi** imali?
 2S- FUT- give- FV 1.Sipho or 1.Thandi 9.money
 “Will you give money to Sipho or Thandi?” (Same as (20b).)

3.2.2 Givenness

Cheng and Downing (2006) address the issue directly concerning pre- and postfocal elements within the verb phrase:

- **Extrapose given elements generally.** Given elements must be extraposed in Zulu, independent of focus considerations.

This appears to be on the right track, considering this contrast:

- (36) V Obj_{1_{Foc}} Obj₂
- a. U- zo- thwal- is- a **bani** itafula?
 2S- FUT- carry- CAUS- FV 1.who 5.table
 “Who will you help carry a table?” (Same as (16a).)
- b. * U- zo- thwal- is- a **bani** leli tafula?
 2S- FUT- carry- CAUS- FV 1.who 5.that 5.table
 “Who will you help carry that table?” (Same as (16b).)

Requiring given elements to be extraposed takes care of ungrammatical cases like these:

*[_{VP} V XP_{Foc} YP], *[_{VP} V XP YP_{Foc}], *[_{VP} V_{Foc} XP YP]

Is generalised extraposition of given elements enough? We would expect *khona* to be equally bad in (37a) and (37b):

- (37) a. * Yi- n’ indaba ku- hlal- a khona **uSipho**?
 COP- what 9.story 17- stay- FV there 1.Sipho
 “Why does SIPHO live there?” (Same as (22b).)
- b. Ngi- bon- e indawo lapho ku- hlal- a khona **uSipho**.
 1S- see- PERF 9.place there 17- stay- FV there 1.Sipho
 “I saw the place where Sipho lives.” (Same as (24a).)

Similarly, reconsider (33).

This suggests that we need to make an explicit connection between focus and givenness:

- **Focus-induced maxilised extraposition.** When a focused element appears in the verb phrase, extrapose all elements *that can possibly be interpreted as given*.

Accounting for the variability:

- “Possibly be interpreted as given” can be relativized, allowing for both intervenors and postfocal elements in some cases. A violable constraint.
- The following sort of contrast still searches for an explanation:

- (38) a. V Obj Loc_{Wh}
 U- leth- e izimpahla zami **ku- liphi ikamelo**?
 2S- bring- PERF 10.stuff 10.room to- 5.which 5.room
 “Which room did you take my stuff to?” (Same as (13b.i).)
- b. V Obj Temp_{Wh}
 * U- theng- e ingubo entsha **nini**?
 2S- buy- PERF 9.dress 9.new when
 “When did you buy a new dress?” (Same as (8b).)

References

- Aboh, E. (2006). If we see *Focus*, you got left and I go right! Paper presented at the International Conference on Bantu Grammar, JSOAS, London, April 2006.
- Bible Society of South Africa (1959). *IBhayibheli Elingwele*. Cape Town: Bible Society of South Africa.
- Buell, L. C. (2005). *Issues in Zulu Verbal Morphosyntax*. Ph. D. thesis, University of California, Los Angeles.
- Buell, L. C. (2006). The Zulu conjoint/disjoint verb alternation: focus or constituency? *ZAS Papers in Linguistics* 43, 9–30.
- Buell, L. C. (2007). Restructuring in Zulu reason questions. Submitted to *Linguistics in the Netherlands 2007*.
- Cheng, L. and L. J. Downing (2006). Phonology and syntax at the right edge in Zulu. ILPGA talk handout.
- Ferrari-Bridgers, F. (2007). A morpho-syntactic analysis of the Luganda IP. ACAL talk handout.
- Hyman, L. and M. Polinsky (2006). Is there a focus position in Aghem? Conference talk handout.
- Hyman, L. and M. Polinsky (2007). Focus in Aghem. Unpublished manuscript.
- Ndayiragije, J. (1999). Checking economy. *Linguistic Inquiry* 30(3), 399–444.
- Sabel, J. and J. Zeller (2006). *Wh*-question formation in Nguni. In J. M. et al. (Ed.), *Selected Proceedings of the 35th Annual Conference on African Linguistics*, Somerville, Massachusetts, pp. 271–283. Cascadilla.
- Sanneh, S. (2001). *Facts about the World's Languages: An Encyclopedia of the World's Major Languages, Past and Present*, pp. 852–857. New York: H.W. Wilson Company. Entry for Zulu.
- Selkirk, E. (1984). *Phonology and Syntax: The Relation Between Sound and Structure*. Cambridge, Mass.: MIT Press.
- van der Spuy, A. (1993). Dislocated noun phrases in Nguni. *Lingua* 90, 335–355.
- van der Wal, J. (2006). The disjoint verb form and an empty Immediate After Verb position in Makhuwa. *ZAS Papers in Linguistics* 43, 233–256.
- Watters, J. R. (1979). Focus in Aghem. In L. M. Hyman (Ed.), *Aghem Grammatical Structure*, Southern California Occasional Papers in Linguistics No. 7. Los Angeles: University of California Department of Linguistics.