

# Augmentless nominals: n-words and NPIs in Xhosa and Zulu\*

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Xhosa and Zulu nouns function similarly to English negative polarity items (NPIs) when lacking the outer class prefix known as the *augment*. But their distribution differs in important respects from that of English NPIs. We show that when augmentless nominals ([-A]) are licensed by negation, they generally cannot be separated from it by an indicative clause boundary. Some Xhosa speakers accept [-A] nominals in questions and conditionals, but here no clause-mate requirement exists. We argue that only and always in negative contexts, [-A] nominals bear uNeg features which must Agree with a negative licenser iNeg (Zeijlstra 2004). We then demonstrate that further distributional constraints attributed by Halpert 2012 to special Case-licensing needs of Zulu [-A] nominals are shared by [+A] DPs modified by 'only.' We build on Sabel & Zeller 2006, Zeller 2008 in attributing the pattern to incompatibility between [-focus] features of the illicit positions and [+focus] features borne by NPIs and 'only'-modified DPs, and propose an extension of the account to some interpretive asymmetries for wh-questions. Our unified analysis of Xhosa and Zulu is consistent with Carstens & Mletshe's 2015 evidence that Xhosa [+A] DPs have uCase features.

## 1. Introduction

### 1.1 Augmented and augmentless nominals

Xhosa nouns typically have two class prefixes (see (1)a).<sup>1</sup> Without the outer prefix a.k.a.

*augment*, their distribution and interpretation are restricted in systematic ways. All

speakers accept augmentless nominals (henceforth [-A]) in negative contexts like (1)b. Two

out of six Xhosa speakers that we consulted also accept [-A] forms in conditionals and

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<sup>1</sup> In glosses, SA=subject agreement; OM=object marker; Arabic numbers = noun classes (number + gender) unless followed by s or pl in which case they are person features. DISJ1-2 are tense morphemes on verbs that are final in their domains; CONJ1-2 are tense morphemes on verbs non-final in their domains. NEG = negative; PST = past; SUBJ = subjunctive; CAUS = causative; APPL = applicative; REL = agreement with the head of a relative clause (usually coalesced with SA), FV = final vowel, -i in present negative and -a as default. Some but not all nouns have 2 separable class prefixes. We gloss prefixes for class and, if there is only one prefix, the noun root. NPIs and often wh-words lack the outer prefix. SA with class 1 (3s) is usually *u-*, but *a-* in subjunctives and *ka-* in negatives. The conjoint past tense ending CONJ1 differs from the subjunctive ending only in bearing a high tone. While we lack sufficient insight to mark tone consistently, we tone-mark this ending -é to help the reader distinguish them.

(1) a. A-ndi-bon-i                      u-m-ntwana  
NEG-1SSA-see-FV    1-1-child  
'I don't see a/the child'

b. A-ndi-bon-i                      m-ntwana  
NEG-1SSA-see-FV    1-child  
'I don't see any child'

(2) Ukuba u-bon-a            m-ntu,    u-ndi-xelel-e  
COMP    2SSA-see-FV 1-person    2SSA-10M-tell-SUBJ  
'If you see anybody, tell me'

(3) Ingaba u-John            u-fund-é                      ncwadi kule mpela veki?  
Q            1-1John    1SA-read-CONJ1 9book    this end    week  
'Did John read any book this weekend?'

(4) Ng-u-bani            o-fund- é                      ncwadi kule mpela veki?  
COP-1-1who REL-read-CONJ1 9book    this end    week  
'Who read any book this weekend?'

(5) \* Ndi-bon-é                      m-ntwana/ba-ntwana  
1SSA-see-CONJ1    1-child/2-children  
[Intended: I saw a/the/some child/I saw children]

<sup>2</sup> The expression of ‘without’ involves a negated clause. Like Halpert 2012: 92 we found that ‘few’ does not license [-A] NPIs. Halpert reports that Zulu speakers accept licensing by ‘before’ (Halpert 2012: 91) though this was not true of the speakers in our study. Our results thus argue that the characterizations anti-veridical or anti-additive would be too broad to fit the licensers of [-A] nominals in the grammars of speakers in our study who do not permit [-A] nominals in conditionals and questions; anti-morphic is the accurate term.

This paper describes and analyzes aspects of [-A] nominal distribution in Xhosa and closely related Zulu that are unexpected under such an approach. The first of these is that, just in case the licenser of a [-A] nominal is negation, there is a clause-mate requirement (see the Xhosa (6)a). In both languages, subjunctives are a systematic exception to this clausal opacity effect (see (6)b).<sup>3</sup>

- (6) a. \*u-Simiso a-k-az-i okokuba u-Bonke u-ty-é ku-tya  
 1-1Simiso NEG-1SA-know-FV that 1-1Bonke 1SA-eat-CONJ1 15-food  
 ‘Simiso doesn’t know that Bonke ate any food’
- b. ✓A-ndi-fun-i okokuba u-Sabelo a-ty-e ku-tya  
 NEG-1SSA-want-FV that 1-1Sabelo 1SA-eat-SUBJ 15-food  
 ‘I don’t want Sabelo to eat any food’

Recall that some Xhosa speakers accept [-A] forms in conditionals and questions. (7)-(9) show that the clause-mate requirement is absent in these contexts. ‘If’ or the interrogation can be matrix-clause level while the [-A] nominal is embedded:

- (7) (Ingaba) u-Sindiswa u-tshilo (ukuba) ndi-fund-é ncwadi kule mpela veki?  
 (Q) 1-1Sindiswa 1SA-say (that) 1SSA-read-CONJ1 9book this end week  
 ‘Did Sindiswa say I read any book this weekend?’
- (8) Ng-u-bani o-th-é ndi-fund-é ncwadi kule mpela veki?  
 COP-1-1who REL-say-CONJ1 1SSA-read-PST 9book this end week  
 ‘Who said I read any book this weekend?’
- (9) Ukuba u-vil-e u-Mary u-thi (ukuba) u-John w-a-bon-a m-ntu,  
 COMP 1SA-hear-SUBJ 1-1Mary 1SA-say (that) 1-1John 1SA-see-FV 1-person  
 u-ndi-xelel-e  
 2SSA-1SOM-tell-SUBJ  
 ‘If you hear Mary say that John sees anybody, tell me’

<sup>3</sup> Halpert 2012 reports an indicative clause-mate requirement for only 12 of 30 Zulu speakers she interviewed. In our study we encountered a few inconsistencies in judgments mainly for the so-called neg-raising verbs ‘think’ and ‘believe,’ but across a range of clausal embedding verbs and different [-A] nominals all of our 10 Zulu and 7 Xhosa speakers strongly rejected cross-clausal licensing by negation in an overwhelming majority of cases. We present a proposal regarding the grammars of speakers who accept cross-clausal licensing in §2.6.

Our paper proposes that [-A] nominals of Xhosa and Zulu always and only bear negative concord features in negative contexts.<sup>4</sup> Following Zeijlstra 2004, 2008, these are uninterpretable negative features *uNeg* which require a local Agree relation with interpretable negation *iNeg*; hence clause-boundedness is typical of negative concord cross-linguistically. For most Zulu and Xhosa speakers, this is the sole grammar of [-A] nominals functioning as NPIs. Those who accept [-A] forms in conditionals and questions have access to both the agreeing types and ‘broad’ NPIs, which lack such features.<sup>5</sup>

Support for the negative concord approach comes from the ability of some Zulu [-A] nominals to appear in fragment answers and from the fact that they can be modified by *cishe* – ‘almost’ (see (10)).<sup>6</sup> These are among the defining properties of negative concord items, and points of contrast with other kinds of NPIs including the broad NPIs of English (see among others Giannakidou 2006).

(10) Q: U-bon-é                      bani?  
 2SSA-see-CONJ1 1who  
 'Who did you see?'  
 A: (Cishe)    mu-ntu!                      [Zulu]  
                  almost    1-person  
                  '(Almost) nobody!'

Besides the clause-mate requirement in negative contexts, there are 4 further restrictions on [A-] nominals that we will explore. They cannot occupy preverbal subject position, even in a subjunctive clause with c-commanding negation (see (11)). In transitive expletive constructions (TECs, see (12)a) they can appear in post-verbal subject position, but not as applied objects or as direct objects of mono-transitive verbs (see (12)b,c,d; upper case indicates that TEC subjects are [+focus]). Lastly, they cannot be clitic-dislocated.

<sup>4</sup> Xhosa thus resembles Slavic languages, which have both existential NPIs and n-words with complementary distribution (the “bagel problem;” see Progovac 1994, Blaszczyk 1999 among others).

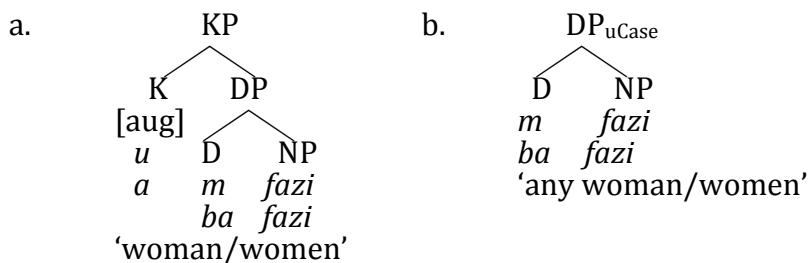
<sup>5</sup> Some non-negative uses of [-A] forms reported in the Nguni syntax literature are rejected by our speakers (see §2.7). We briefly address vocative and post-demonstrative uses in §1.2. On [-A] wh-words see §6.5.2.

<sup>6</sup> Details and an account of why not all [-A] NPIs can be fragments appear in §2.3.2 and §2.4 respectively.

- (11) A-ndi-fun-i okokuba \*m-ntu /✓u-m-ntu a-bon-e u-Sabelo [Xhosa]  
 NEG-1SSA-want-FV that 1-person/ 1-1-person 1SA-see-SUBJ 1-1Sabelo  
 'I don't want anybody to see Sabelo'/I don't want a/the person to see Sabelo'
- (12) a. Ku-phek-é u-Sabelo a-ma-qanda  
 17SA-cook-CONJ1 1-1Sabelo 6-6-eggs  
 'SABELO cooked eggs'
- b. A-ku-phek-anga m-ntu a-ma-qanda  
 NEG-17SA-cook-NEG.PST 1-person 6-6-eggs  
 'NOBODY cooked eggs!'
- c. \*A-ku-phek-el-anga u-Sabelo ba-ntwana a-ma-qanda  
 NEG-17SA-cook-APPL-NEG.PST 1-1Sabelo 2-children 6-6-eggs  
 [Intended: SABELO didn't cook any children eggs!]
- d. \*A-ku-phek-anga u-Sabelo nto  
 NEG-17SA-cook-NEG.PST 1-1Sabelo 9thing  
 [Intended: SABELO didn't cook anything!]
- (13) A-ngi-**m**-bon-i]<sub>VP</sub> \*mu-ntu /u-mu-ntu [Zulu]  
 NEG-1SSA-3SOM-see-FV 1-person/1-1-person  
 'I don't see anybody'

The pattern of facts in (11) - (13) was first described in Halpert 2012 for Zulu. Halpert argues that its origins are Case-theoretic: Zulu augments provide intrinsic Case for their bearers (see (14)a) in the absence of which Case-licensing is needed (see (14)b). For Halpert, the more restricted distribution of [-A] nominals is a diagnostic for positions in which structural Case is unavailable in Zulu (see (15)), and these include preverbal subject position (Spec, TP) and all but a single vP-internal position, unless applied or causative morphology provides a second Case for a vP-internal nominal.

- (14) *Halpert 2012: a Zulu nominal without the augment is a DP and needs structural Case-licensing. Augmented nominals are intrinsically Cased KPs.*



(15) *Halpert 2012: only [-A] nominals require Case-licensing, which is absent or limited for:*

- a. Occupants of Spec, TP
- b. Dislocated positions
- c. Direct object of a mono-transitive verb
- d. Indirect/applied object or causee

We will show that [+A] DPs modified by *kuphela* – ‘only’ are barred from exactly the same positions as [-A] nominals in both Xhosa and Zulu. Furthermore in Zulu, where both [+A] and [-A] wh-phrases are permitted in situ, both varieties exhibit very similar restrictions. Building on Zeller & Sabel 2006, Zeller 2008, and Carstens & Mletshe 2015, we argue that the illicit positions are anti-focus positions, incompatible with [+focus] features of [-A] nominals, *kuphela* – ‘only’, and wh-phrases. This analysis is compatible with evidence in Carstens & Mletshe 2015 that [+A] nominals in fact require Case-licensing.

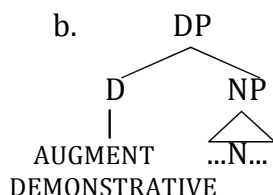
It has been noted before in the literature on negative concord items that they bear focus morphology, in languages that have it (Watanabe 2004 on Japanese and Hungarian, Sells 2006, Giannakidou & Yoon to appear on Korean). Given the evidence we will present that [-A] nominals participate in negative concord, our approach has the advantage of reducing their distributional properties to the [+focus] and *uNeg* features that are independently motivated for the class of expressions to which they belong.

## **1.2 Background and scope, and what this paper will not do**

There are other differences in the distribution of the two types of nominals that have been documented in previous linguistic literature including Doke 1927/1997, Du Plessis & Visser 1992, Visser 2006, 2008, Buell 2011, Mzolo 1968, von Staden 1973 among others. Our paper will not be able to do justice to the contributions of these prior treatments or to explore all patterns of distribution distinguishing the two types. Here we mention a couple of representative issues and analytical directions that seem promising to us.

First, as a number of these authors have noted, the augment is systematically omitted in Zulu and Xhosa when a demonstrative precedes a noun. Halpert does not offer an account, though she mentions the facts (see (16)a from Halpert 2012: 130). Neither Case nor NPI licensing seems relevant here. But the pattern makes sense if Zulu augments are not Ks as in Halpert’s 2012 analysis but rather determiners as proposed in de Dreu 2008 (see also Visser 2008, Taraldsen 2010, Gambarage 2012, 2013 among many others). Following de Dreu we interpret (16)a to mean that the prenominal demonstrative and the augment potentially occupy the same D position as shown in (16)b.<sup>7</sup>

(16) a. Lo (\*u-) m-ntwana u-ya-gang-a  
 DEM 1 1-child 1SA-DISJ2-misbehave-FV  
 ‘This child is misbehaving’



De Dreu proposes that [-A] nominals are bare NPs, which must have a c-commanding licenser. When a D is present, it licenses the NP. When D is absent, some other licenser is required, and a common one is negation. Augments are default Ds, included any time there is no other licenser available for an otherwise bare NP.<sup>8</sup> This approach seems very promising to us, though we will argue that negation licensing involves special features on

<sup>7</sup> Augments are required however if the noun precedes the demonstrative, perhaps because pre- and post-nominal demonstratives involve different structures as argued in de Dreu 2008. See Visser 2008 for discussion of some meaning differences identified in Malinga 1980. While we depict the complement of D as NP it is likely bigger than that, including functional heads that are the locus of person and number features. De Dreu points out that the analysis can account for the absence of augments following pronouns on the fairly common assumption that pronouns are or occupy D. We leave further consideration aside.

<sup>8</sup> Halpert 2012 observes that oblique morphemes *kwa* and *ku* are augment-replacing. We leave it to future research to determine how this works.

the [-A] nominals. In connection with the bare NP idea, see also Depréz 2000 on similarities between n-words and bare nominals in other languages.

Analysis of augments as a variety of D makes sense of the fact that they are impossible in vocatives:

- (17) a. Ngi-bon-a    \*(u)- Sabelo                      b. Ngi-ya-ku-bona,    (\*u-) Sabelo  
           1sgSA-see-FV   1 1Sabelo                      1sgSA- DISJ2-2sOM-see   1-   1-Sabelo  
           'I see Sabelo'                                      'I see you, Sabelo'

It is common cross-linguistically to omit the overt article from vocatives in languages where articles are otherwise obligatory, such as Italian (Longobardi 1994:612). Some varieties of Spanish show a similar pattern to Xhosa and Zulu in that articles precede even proper names, but not in vocatives. A user of *SpanishDict Answers*<sup>9</sup> explains, "This [use of an article] is not uncommon in Mexico, but by talking **about** someone – not addressing them directly," and provides the example below (glosses added).

- (18) Di-le        a        la    Bethany que ya        nos    vamos  
       Tell-3Scl PREP DET                      that already we    go.1PL  
       'Tell Bethany that we are going now'

De Dreu proposes that vocatives involve a null D (and see Longobardi 1991 on raising of proper names to null D in Italian).

In Zulu, both [+A] and [-A] wh-phrases are acceptable in situ. The [+A] varieties have a more specific, d-linked interpretation:

- (19) a. U-bon-é        bani?  
           2sSA-see-PST 1who  
           'Who did you see?'  
       b. U-bon-é        u-bani?  
           2sSA-see-PST 1-1who  
           'Who exactly did you see?'

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<sup>9</sup> <http://www.spanishdict.com/answers/199039/using-la-or-el-for-proper-nouns>



This is puzzling under the view of arguments as instantiations of Case. It seems to point towards a determiner-like role for the argument as a component of wh-words along the lines of English *which*, though there is much to be worked out.

Some uses of [-A] nominals described in prior linguistic literature on Zulu and Xhosa were not accepted by the speakers in our study, such as in future and potential clauses (du Plessis & Visser 1992, Visser 2006, 2008); we provide a brief discussion of this in §2.7.

Our paper henceforth focuses exclusively on licensing in the NPI-like usage of Zulu and Xhosa [-A] nominals, with brief coverage of their distribution as wh-words in §6.5.2.

### **1.3 Structure of the paper**

This paper is structured as follows. §1.4 summarizes our theoretical assumptions. §2 presents and analyzes the locality conditions relevant to [-A] nominals in different contexts. §3 describes in more detail the ban on [-A] nominals in preverbal subject position, dislocated positions and, in TECs, as applied objects and objects of mono-transitive verbs and reviews Halpert's 2012 analysis in terms of Case needs of [-A] nominals. §4 demonstrates that [+A] DPs containing *kuphela* – 'only' are subject to identical constraints. §5 presents the facts of Case and focus in Xhosa ECs from Carstens & Mletshe 2015 that are important for the analysis. §6 proposes an analysis of the distribution of [-A] nominals and DPs containing *khupela* in terms of [+/-focus] features and independently motivated cartographies of focus developed in Zeller 2008, Sabel & Zeller 2006, and Carstens & Mletshe 2015 for Zulu and Xhosa. §6 also extends the analysis to wh-phrases. §7 concludes.

Before proceeding we offer a word of explanation about our decision to include both Xhosa and Zulu data. Much about [-A] nominal distribution is consistent across the two

languages. We therefore wish to provide an account that is not trivially falsifiable by either one. Consideration of the similarities and differences contributes towards this goal.

## 1.4 Theoretical assumptions

Our paper is written within the Minimalist theoretical framework of Chomsky (2000; 2001). We assume that syntactic structures are constructed bottom-to-top and that there is cyclic Transfer to the PF and LF interfaces triggered by phase heads (robust)  $v^*$  and C. Following Chomsky, we assume agreement and nominal Case are uninterpretable, unvalued features (uFs),  $u\Phi$  and  $uCase$  respectively which must find local valuers in the syntax (though we will assume, following C&M, that in Xhosa VSO clauses, subject agreement has purely default features). We depart from Minimalism in assuming that  $uCase$  can be valued without phi-agreement, and that Case-assigners have valued  $uCase$  (see Boskovic 2011).

## 2. Locality and licensing of augmentless nominals

### 2.1 The clause-mate restriction on [-A] in negative contexts

The Xhosa and Zulu speakers that we consulted in this study overwhelmingly judged augmentless nominals to be unacceptable in negative contexts when separated from negation by an indicative clause boundary (see (20)a,b and (21)). As noted in the introduction, subjunctive complements are not opaque in the same way (see 20c and (22)).

- (20) a. \*A-ndi-qond-i okokuba u-Sabelo u-bon-é m-ntu [Xhosa]  
 NEG-1SSA-think-FV that 1-1Sabelo 1SA-see-CONJ1 1-person  
 ‘I don’t think Sabelo saw anybody’
- b. \*A-ka-tshongo okokuba u-Mandisa u-fund-is-é ba-ntwana [Xhosa]  
 NEG-1SA-say that 1-1Mandisa 1SA-read-CAUS-CONJ1 2-children  
 ‘He didn’t say that Mandisa taught any children’
- c. ✓A-ndi-fun-i (okokuba) u-Sabelo a-ty-e ku-tya [Xhosa]  
 NEG-1SSA-want-FV that 1-1Sabelo 1SA-eat-SUBJ 15-food  
 ‘I don’t want Sabelo to eat any food’

- (21) \*uSimiso a-ka-tshongo ukuthi u-Nothando u-theng-é mi-funo [Zulu]  
 1-1Simiso NEG-1SA-say that 1-1Nothando 1SA-buy-CONJ1 4-vegetables  
 ‘Simiso didn’t say that Nothando bought any vegetables’
- (22) ✓A-ngi-fun-i (ukuthi) u-bon-e muntu [Zulu]  
 NEG-1SSA-want-NEG that 2SSA-see-SUBJ that  
 ‘I don’t want you to see anybody’

These examples show that there is a more local dependency between negation and the [-A] NPIs of Zulu and Xhosa than holds between English NPIs and negation.

## 2.2 A clause-mate requirement for *n*-words and *in years* NPIs

There are two classes of expressions for which a clause-mate requirement with negation is well established in the syntactic literature. The first is negative concord items, also known as *n*-words. Giannakidou & Zeilstra 2014: 27 write, “Cross-linguistically, *n*-words, as opposed to existential NPIs such as *any* [...] are generally not licensed long-distance” (see (23)a vs. (23)b).

- (23) a. da Valère **an niemand niets** ge-zeid (en-) eet [West Flemish]  
 that Valère to no one nothing EN-said has  
 ‘that Valère has said nothing to anyone’
- b. \*K'**en**-peinzen-k ik da Valère **niets** keut.  
 I *en*-think-1s I that Valère nothing knows  
 [Intended: I don’t think that Valère knows anything]

Works documenting the locality of negative concord include Zanuttini 1991, Longobardi 1991, Progovac 1994, Giannakdou 1997, 1998, 2000, Brown 1999, Herberger 2001, Haegeman and Zanuttini 1996, Zeijlstra 2004, Watanabe 2005, on such diverse languages as Italian, West Flemish, French, Japanese, Korean, Greek, Serbian/Croatian, and Polish.

A second class of expressions with this restriction includes the English phrase *in years* and idiomatic expressions like *breathe a word*, *a living soul*, and *a damn/fucking thing* (see Collins & Postal 2012 for recent discussion). We will refer to these as *in years* NPIs.

- (24) a. She hasn’t worked in years  
 b. \*They didn’t say [she had worked in years]

- c. I won't breathe a word.
- d. \*Don't tell Mary [I will breathe a word].

Though both negative concord items and *in years* NPIs are 'strict' in requiring a local negative licenser, there are a few diagnostic properties that set them apart from each other. In the next section we present these diagnostics and try them on [-A] nominals in Zulu and Xhosa. They provide evidence that [-A] nominals are not a uniform class.

## 2.3 N-words and Zulu *lutho*, *ndawo*, and *muntu*

### 2.3.1 Special properties of n-words

N-words have some distinctive properties that hold commonly across languages, listed in (25) (adapted from Vallduví 1994 and Giannakidou 2006). Of these, Giannakidou 2006 proposes that (25)a and (25)b are definitional for *n*-words.

(25) *Common properties of n-words*

- a. Can occur in isolation, as sentence-fragment answers
- b. Co-occur with other negative elements, yielding single negation interpretation
- c. Can be modified by 'almost' and 'exactly'
- d. Licensing by negation is clause-bound
- e. Can appear in preverbal subject position with apparent negative force

As will be demonstrated in §3, (25)e is not a fruitful diagnostic because, for independent reasons, no Zulu or Xhosa [-A] nominal can appear in preverbal subject position, even in embedded subjunctive clauses with c-commanding negation, or in a conditional or question. (25)d has already been established. We therefore restrict discussion to properties (25)a-c. These diagnostics argue that while a few [-A] nominals are *n*-words, others pattern with *in years* NPIs, which do not exhibit either property (25)a or (25)c.

### 2.3.2 Sentence-fragment answers

The ability to serve as sentence-fragment answers with negative force is a point of marked contrast between *n*-words and broad NPIs like English *any* forms (see (26), (27) and (28)).

(26) Q: Chi ha telefonato?  
who has called  
'Who called?' A: **Nesunno** [Italian]  
N-body  
'Nobody'

(27) Q: Qui a téléphoné?  
Who has called  
'What do you have?' A: **Personne** [French]  
n-body  
'Nobody'

(28) Q: Who called? A: \*Anybody [English]

In Zulu, the speakers we consulted accept fragment answers involving 3 [-A] nominals with the meanings 'nothing', 'nobody,' and 'nowhere' ((29) from Zeller 2009: 2-3).

(29) Q: Y'ini o-nga-ngi-tshela yona ng'oJohn?  
COP'9what REL+2sSA-CAN-1sSA-tell 9IndPron COP'1John  
'What can you tell me about John?'

A: Lutho. Kodwa u-Bill i-ntombazana i-m-qabul-ile  
11thing. But 1-1Bill 9-9girl 9SA-3SOM-kiss- DISJ1  
'Nothing. But Bill, the girl kissed (him)'

(30) Q: U-bon-é bani?  
2sSA-see-CONJ1 1who  
'Who did you see?' A: Mu-ntu!  
1-person  
'Nobody!'

(31) Q: U-y-é ku-phi?  
2sSA-go-CONJ1 17-which  
'Where did you go?' A: Ndawo!  
9place  
'Nowhere!'

For other [-A] nominals in Zulu, however, fragment answers are judged impossible.

(32) Q: U-dl-é a-ma-qanda ma-ngaki?  
2sSA-eat- CONJ1 6-6-eggs 6-how.many  
'How many eggs did you eat?' A: \*Ma-qanda!  
6-eggs  
[Intended: No eggs!]

(33) Q: U-thand-a u-m-fazi u-phi?  
1SA-like-FV 1-1-woman 1-which  
'Which woman does he like?' A: \*M-fazi!  
1-woman  
[Intended: No woman!]

And in Xhosa, no [-A] nominals can be used as sentence-fragment answers (see (34) and (35)). In this they pattern with English NPIs, not with n-words or with Zulu *lutho*, *ndawo*, and *muntu*.

(34) Q: Ng'u-bani o-be-fowun-ile?  
COP'1-1who whAGR-AUX-call-DISJ1  
'Who called?' A: \*M-ntu! [Xhosa]  
1-person  
[Intended: Nobody!]

Q: U-funa-ni?  
2<sub>SSA</sub>-want-what  
'What do you want?'

A: \*Nto!  
9thing  
[Intended: Nothing!]

(35) Q: U-y-é ku-phi?  
2<sub>SSA</sub>-go-CONJ1 17-which  
'Where did you go?'

A: \*Ndawo!  
9place  
'No place!'

### 2.3.3 Multiple negative elements, single negation readings

The central puzzle of negative concord is that *n*-words like Italian *nessuno* and French *personne* appear to have independent negative force in such circumstances as fragment answers like (26) and (27), but combine with each other and with sentential negation to yield a reading equivalent to one logical negation (see (36) and (37) from Haegeman 1995: 78 and 89 respectively). The statement of this puzzle in (38) is taken from Giannakidou & Zeijlstra 2014.

(36) **Personne** ne disait **rien**  
N-body NE said n-thing  
'No one said anything'

(37) **Non** ho **mai** detto **niente** a **nessuno**  
NEG have never said n-thing to n-body  
'I never said anything to anyone'

(38) The *compositionality* question of negative concord  
If two elements are independently able to induce a semantic negation, how is it possible that jointly they yield only one semantic negation?

Since most [-A] nominals of Zulu and Xhosa cannot serve as fragment answers, the compositionality question does not arise for them. But Zulu *lutho*, *muntu*, and *ndawo* pattern with *n*-words in this respect: despite appearing to be intrinsically negative in fragment answers like (29) - (31), they combine with sentence negation and with each other to yield a single logical negation ((40) and (42) from Halpert 2012:103). In fact, they require the presence of an overt negator when they are used in sentences, as is also true in 'strict' negative concord languages such as Czech (Zeilstra 2008).

(39) A-ngi-yi ndawo  
 NEG-1SSA-go 9place  
 'I'm not going anywhere.'

(40) U-Sipho a-ka-fund-is-anga mu-ntu lu-tho  
 1-1Sipho NEG-1SA-learn-CAUS-NEG.PST 1-person 11-thing  
 'Sipho didn't teach anyone anything'

(41) \*U-Sipho u-fund-is-a mu-ntu/lu-tho  
 1-1Sipho 1SA-learn-CAUS-FV 1-person/11-thing  
 [Intended: Sipho teaches nobody/nothing]

(42) Ngeke ngi-sho lutho  
 never 1SSA-say 11-thing  
 'I'll never say anything'

### 2.3.4 Modification with 'almost'

It has often been noted that *n*-words can be modified by 'almost' and 'exactly' or 'absolutely' (see (43) from Deprez 2000, and (44) from Valduví 1994:9):

(43) Jean n'a invité presque personne [French]  
 John NE have invited almost n-body  
 'John has invited almost no one'

(44) On en venen, de faves? Absolutament enlloc. [Catalan]  
 Where prtve 3SSA.sell broad-beans absolutely nowhere  
 'Where are broad beans sold? Absolutely nowhere.'

Zulu has an adnominal *cishe* - 'almost' (see (45)) which can modify *lutho* and *muntu*, though it does not felicitously combine with *ndawo* (see (47) - (48)).

(45) Yena u-thand-a cishe wonke u-mu-ntu  
 3IndPron 1SA-like-FV almost all 1-1-person  
 'S/he likes almost everybody'

(46) Q: U-thand-a bani? A: Cishe mu-ntu  
 1SA-like-FV 1who almost 1-person  
 'Who does s/he like?' 'Almost nobody'

(47) Q: U-dl-eni? A: Cishe lu-tho  
 1SA-eat almost 11-thing  
 'What did he eat?' 'Almost nothing'

(48) Q: U-ye-phi nge-sikathi ngi-nge-kho? A: \*Cishe ndawo  
 2sSA-go-where at-time 1SSA-NEG-be almost 9place  
 'Where did you go while I was away?' 'Almost nowhere'

It is probably not surprising that, since the remaining [-A] nominals cannot convey negative meanings in isolation, neither can they cannot be modified by *cishe*.

- (49) Q: Ba-fund-é      i-zi-ncwadi e-zi-ningi?      A: \*(Ba-fund-é) cishe    zi-ncwadi  
           2SA-read-CONJ 10-books    10-10-many            2SA-read    almost 10-books  
           'Did they read a lot of books?'                            [(they read) almost no books]

Not even *munthu* and *lutho* can be modified by Zulu *ncamashi* – ‘exactly.’ We assume that an exploration of its lexical semantics would shed light on this, but it lies outside our paper’s scope.

## 2.4 Analysis

We have shown that two particular Zulu [-A] nominals, *lutho* – ‘nothing’ and *muntu* ‘nobody,’ exhibit several of the hallmark properties of negative concord items listed in (25): in addition to requiring a clause-mate negative licenser, they can appear as sentence-fragment answers, they combine with sentence negation and other negative expressions to yield a single logical negation, and they can be modified by ‘almost.’ Though *ndawo* - ‘nowhere’ cannot be modified by ‘almost’, it patterns with *n*-words on criteria (25)a and (25)b. As previously noted, these two criteria are argued by Giannakidou 2006 to be definitional for *n*-words.

All other Zulu [-A] nominals differ markedly, as do Xhosa [-A] nominals: while they exhibit the clause-mate requirement and combine with sentential negation to yield a single logical negation, they cannot be sentence-fragment answers or be modified by *cishe* – ‘almost.’

As noted in §2.2, there is a second relevant class of NPIs: *in years* NPIs have a constellation of properties very similar to those of [-A] nominals in Xhosa and to the majority in Zulu. We have already shown that they have the clause-mate requirement (see



(24), repeated below). But *in years* NPIs differ from *n*-words in being unacceptable as sentence-fragment answers (see (50)). They are also infelicitous in combination with *almost*.

- (24) a. She hasn't worked in years  
       b. \*They didn't say [she had worked in years]  
       c. I won't breathe a word  
       d. \*Don't tell Mary [I will breathe a word].
- (50) a. Q: Does she still work?     A: \*(Not) in years.  
       b. Q: What did you get done? A: \*(Not) a damn thing.  
       c. She hasn't worked (\*almost) in years.

With the exception of Zulu *lutho*, *muntu*, and *ndawo*, we assimilate Xhosa and Zulu [-A] nominals in negative contexts to the class of *in years* NPIs.

By way of analysis, we adopt and build on Zeijlstra's 2004, 2008 proposal that the clause-mate relation between negation and *n*-words exists because negative concord is an agreement relation. Just as agreeing categories bear uninterpretable phi-features (*uPhi*) valued by their interpretable counterparts, so *n*-words bear uninterpretable negation features (*uNeg*), which must be locally licensed by interpretable negation (*iNeg*).

- (51) Negative concord is an Agree relation between a single feature [*iNeg*] and one or more features [*uNeg*] (Zeijlstra 2008: 20)

Our proposal is that expressions like *in years* and [-A] nominals have *uNeg* features also, so the clause-mate requirements have a unitary syntactic source.

A potential obstacle for this unified account lies in the divergent behavior of *n*-words and *in years* NPIs with respect to sentence-fragment answers. But Zeijlstra's approach paves the way for a simple explanation of this difference. Zeijlstra (2004, 2008) argues that *n*-words in fragment answers only seem, misleadingly, to contribute negative meanings, because they induce the presence of a silent negative operator with interpretable (*iNeg*) features (see (52) and also Giannakidou 1997, 1998, 2000, 2006,

Blaszczak 2005 among others for a slightly different proposal, in which negation is elided). In Zeijlstra's account, *iNeg* is *always* silent in so-called 'strict' negative concord languages, where he analyzes the overt marker of negation as a bearer of *uNeg* as well. When the sole *n*-word in a sentence is *vP*-internal, overt negation is needed higher in the clause purely to mark scope (see Zeijlstra 2008:22-28 for details).

(52) [  $OP_{iNeg} \dots \text{nessuno}_{uNeg}$  ] (Zeijlstra 2004) *Licensing an n-word in all fragment answers and systematically in 'strict' negative concord languages*

If *n*-words in fragment answers Agree with a null or elided negation, the inability of [-A] nominals and *in years* NPIs to function as fragments simply indicates that their *uNeg* features are not compatible with this possibility. Analogously, *uPhi* features vary across languages and even within a given language as to whether they are compatible with pro-drop; thus there are pro-drop, non-pro-drop and partial pro-drop languages. It seems entirely reasonable, if negative concord is a kind of agreement, for variation to exist in whether the agreed-with *iNeg*-bearer can be non-overt.

Thus *n*-words, including Zulu *lutho*, *muntu*, and *ndawo*, are like T(ense) in a pro-drop language. *In years* NPIs and the remaining [-A] nominals of Zulu and Xhosa are instead like T in English: they agree, but do not license the negative counterpart to pro-drop.

Summing up, [-A] nominals and *in years*-type NPIs are like *n*-words in that they bear *uNeg* features which must be licensed through Agree with *iNeg*. This accounts for their clause-bound relation with negation. Apart from *lutho*, *muntu*, and *ndawo*, they differ from *n*-words in that the negation they agree with must be pronounced.

## 2.5 Non-negative uses and absence of locality

(7)- (9) (repeated below) make it clear that, for speakers who accept [-A] nominals in conditionals and questions, they do not have to be clause-mates with the interrogative

element or the conditional complementizer. Thus in the grammars of these speakers, the clause-mate requirement is specific to the relationship between [-A] nominals and negation.

(7) (Ingaba) u-Sindiswa u-tshilo (ukuba) ndi-fund-é ncwadi kule mpela veki?  
 (Q) 1-1Sindiswa 1SA-say (that) 1SSA-read-CONJ1 9book this end week  
 ‘Did Sindiswa say I read any book this weekend?’

(8) Ng-u-bani o-th-é ndi-fund-é ncwadi kule mpela veki?  
 COP-1-1who REL-say-CONJ1 1SSA-read-PST 9book this end week  
 ‘Who said I read any book this weekend?’

(9) Ukuba u-vil-e u-Mary u-thi (ukuba) u-John w-a-bon-a m-ntu,  
 COMP 1SA-hear-SUBJ 1-1Mary 1SA-say (that) 1-1John 1SA-see-FV 1-person  
 u-ndi-xelel-e  
 2SSA-1SOM-tell-SUBJ

‘If you hear Mary say that John sees anybody, tell me’

The combination of (i) non-negative uses with (ii) the lifting of locality suggests that speakers who permit [-A] nominals in conditionals and questions have access to versions that lack *uNeg* features. The resulting forms are comparable to indefinite NPIs, like *any* forms.<sup>10</sup>

N-words and plain NPIs coexist in other languages including Greek and some Slavic languages, so our proposal is not without precedents. In Greek, the forms of the two differ only in that the *n*-words are emphatically stressed (Veloudis 198, Tsimpli & Roussou 1996, Giannakidou 1997, 1998, 2000). These emphatic versions are ruled out in non-negative

<sup>10</sup> We assume that augmentless wh-words also lack *uNeg* features. Like [-A] NPIs in conditionals and questions, they can appear in embedded clauses. Following Cole & Hermon 1998, Abels 2012 among others, there is a syntactic dependency between in situ wh- and an operator in the left periphery. The facts thus provide another indication that the relationship between negation and a [-A] NPI is subject to special locality.

(i) U-Sabelo u-th-é okokuba ndi-theng-é ntoni? [Xhosa]  
 1-1Sabelo 1SA-say-CONJ1 that 1sSA-buy-CONJ1 9what  
 ‘What did Sabelo say that I bought?’

contexts where the plain (non-emphatics) can appear (see (53) from Giannakidou 2000, (54) and (55) from Giannakidou & Zeijlstra 2014).<sup>11</sup>

(53) I Theodora \*(dhen) enekrine {kanena/KANENA} sxedhio  
the Theodora not approved.3sg n- plan  
‘Theodora didn’t approve any plan’

(54) Píjes {poté/\*POTE} sto Parísí?  
went.2sg n-ever in-the Paris  
‘Did you ever go to Paris?’

(55) An dhis tin Eléna {poté/\*PUTHENA}, na tis milísis.  
If you see Eléna anywhere talk to her  
‘If you see Elena anywhere, talk to her.’

In a striking parallel with Greek, our investigation revealed a significant stress difference between Xhosa [-A] forms in negative versus non-negative contexts. A [-A] form like *nto* ‘9thing’ or *mntu* – ‘1person’ in a negative sentence has emphatic stress, including a stress on its syllabic initial nasal. In interrogatives and conditionals, the same forms are almost monosyllabic, destressed and reduced to an extent that recalls the pronunciation of an English function word such as a determiner or auxiliary.

Summing up, Xhosa has stressed [-A] nominals with *uNeg* features and destressed versions without them. We will see evidence in §6.5.3 that the stress difference has a syntactic consequence in barring the *uNeg*-less [-A] nominals from positions associated with focus or any emphasis at all. Before we turn to this, the next few sections concentrate on the stressed versions and their negative concord properties.

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<sup>11</sup> A question arises as to why Xhosa speakers with access to *uNeg*-less versions of [-A] nominals cannot use them in negative contexts, thus evading the clause-mate requirement. This has cross-linguistic precedents: as mentioned in note 4, in Slavic languages which have both *n*-words and regular NPIs, they are in complementary distribution; the latter are disallowed in negative contexts. See Blaszczak to appear, Progovac 1994 among others for approaches to this so-called “bagel problem.”

## 2.6 Cross-clausal licensing: subjunctives, neg-raising, and hyper-raising

In well-studied negative concord languages, the most common exception to a clause-mate condition is that some languages allow *n*-words to appear in subjunctive complements embedded under negation (see (56) and in contrast the ill-formed case of embedding in an indicative in the Italian (57)). As noted in the introduction, all speakers of Zulu and Xhosa that we interviewed exhibited this pattern, accepting cross-clausal licensing into a subjunctive complement (see (58)). This provides additional evidence that our analysis in terms of  $\bar{u}$ Neg features is on the right track. We follow Zeijlstra 2008 in assuming that subjunctives in the relevant languages lack the ForceP layer (on which see Rizzi 1997), making their contents more local to negation than the contents of indicative clauses.

(56) Je n' ai exigé qu' ils arrête **personne** [French: Kayne 1981]  
 I *ne* have required that they arrest(subj) nobody  
 'I didn't require that they arrest anybody'

(57) \*Gianni non ha detto che a achato **niente** [Italian; Zeijlstra 2008]  
 Gianni NEG has said that has bought n-thing  
 'John didn't say that he bought anything'

(58) ✓A-ndi-fun-i okokuba u-Sabelo a-bon-e mu-ntu [Zulu]  
 NEG-1SSA-want-FV that 1-1Sabelo 1SA-eat-SUBJ 1-person  
 'I don't want Sabelo to see anybody'

But Halpert 2012 reports that many Zulu speakers in her study accepted sentences in which negation seems to license a [-A] nominal in an indicative complement ((59) is from Halpert 2012: 92).

(59) ✓A-ngi-cabang-i [<sub>CP</sub> ukuthi u-Sipho u-bon-é muntu] [Zulu]  
 NEG-1sSA-think-FV that 1-1Sipho 1SA-see-CONJ1 1person  
 'I don't think that Sipho saw anyone'

This too is not without precedent for *n*-words and *in years* NPIs. Giannakidou (2000 and 2002) observes that the clause-mate requirement for licensing of emphatic *n*-words in Greek is occasionally violated when *n*-words appear in the indicative complements of

classical neg-raising verbs like ‘think’ and ‘believe.’ This class of verbs has the interesting property that negation of the matrix clause has a reading semantically equivalent to negation of the lower clause (compare (60)a and b). A tradition of syntactic analyses attribute this equivalence to raising of negation out of the embedded clause. As Giannakidou reports for Greek n-words, so also the locality requirement for *in years* NPIs is loosened in neg-raising contexts (see (61)a and b taken from Collins & Postal 2012’s extensive discussion of this phenomenon).

- (60) a. I don’t think Mary left.  
       b. I think Mary didn’t leave.

- (61) a. I don’t think/ \*agree that Teresa has been seen *in years*.  
       b. Shelley didn’t think/\*admit that Sandra had told *a living soul* about her sister.

In our own investigation, the few instances where cross-clausal licensing was (inconsistently) accepted involved neg-raising verbs. We therefore continue to assume that uNeg features of [-A] nominals in negative contexts require licensing in a local Agree relation – a requirement that neg-raising verbs occasionally obscure.

It is possible that there is more to this story than we were able to detect, since Halpert 2012 does not show whether she found cross-clausal licensing possible for verbs other than ‘think,’ for her speakers, and also since, unlike in our study, Halpert reports cross-clausal licensing was found acceptable by almost 2/3 of her subjects. Suppose there turn out to be speakers who systematically allow licensing across *any* indicative clause boundary. It is then important to take into account that in significant ways, indicative clauses are more permeable in Xhosa and Zulu than in English. “Hyper-raising” A-movement can cross indicative clause boundaries, preserving idiomatic readings (see (62) from Halpert 2012). Carstens & Diercks 2013 propose that indicatives are not all phasal in

Bantu languages with this pattern of facts. Permeable tensed clauses are perhaps FinPs, like subjunctives (Rizzi 1997, 1999, and see Carstens 2012 for specific proposals).

- (62) I-qhina        li- bonakala ukuthi li-phuma e-mbizeni        [Zulu]  
 5-5steinbok 5SA-seem    that    5SA- exit LOC-9cooking.pot  
 'The secret seems to be coming out'  
 [Lit: the steinbok seems that is leaving the cooking pot]

Halpert reported that speakers who do not permit cross-clausal licensing of [-A] nominals also reject a kind of long topicalization out of embedded clauses, which suggests that for these speakers, embedded indicatives are islands for some but not all syntactic relations: perhaps just some that involve A'-elements, under the common assumptions that negation is an operator, and that topicalization is a kind of A'-movement.

## 2.7 Summary

We have shown in this section that for the speakers in our study, [-A] nominals in negative contexts exhibit a clause-mate locality requirement. They share this aspect of their syntax with negative concord items a.k.a. n-words and with strict *in years* type NPIs. Only three [-A] nominals, the Zulu *lutho* – 'nothing', *ndawo* – 'no place', and *muntu* – 'nobody', can function as sentence-fragment answers the way n-words typically can in other languages. For this reason we have suggested that while these three are n-words, other [-A] nominals and *in years* NPIs are a class distinguished by having uNeg features that must Agree with an overt negation. In this their uNeg features are like non-pro-drop phi-agreement.

For the minority of Xhosa speakers who accept [-A] nominals in conditionals and questions, there is no clause-mate restriction. We have proposed that such speakers have access to unstressed, 'broad' versions of these NPIs which lack uNeg features.

These non-negative uses of Zulu and Xhosa [-A] nominals are regularly reported in the literature on the topic such as von Staden 1973 for Zulu, Du Plessis & Visser 1992,

Visser 2006, 2008 for Xhosa. As noted in the introduction, several additional uses they describe, such as in future or potential clauses, were not accepted by any of the speakers we consulted. This divergence from our findings might be attributable purely to regional or social variation, but an attractive alternative hypothesis is that change is taking place in the grammar of these expressions. Variation is often a precursor to change, so both might be true. We can speculate that perhaps at one time [-A] nominals were simply plain, 'broad' NPIs, and are becoming progressively more strict. In Xhosa, plain varieties and the stricter *in years* type of [-A] NPIs coexist for some speakers whereas in Zulu, plain [-A] NPIs seem to be gone entirely, at least for our speakers. The three most generic (therefore perhaps the most commonly used) [-A] nominals have completed the process of change by becoming n-words. If a linguist checks in 50 years from now, will all [-A] nominals be n-words in Xhosa and Zulu? We leave this question to future research.

We turn next to a different set of distributional constraints – ones that we will ultimately argue are not connected with negation but rather with focus features of NPIs.

### 3. Four positional constraints and their implications

#### 3.1 Introduction

Both [+A] and [-A] nominals are licit direct or indirect objects in SVO(O) clauses, as shown in the Xhosa (63) and Zulu (64) ((64) adapted from Halpert 2012: 103). Any combination of [-A] and [+A] nominals is possible post-verbally in SVOO clauses.

(63) A-ndi-fund-is-i                      ✓ba-ntwana / ✓a-ba-ntwana    ✓nto    / ✓i-nto  
 NEG-1SSA-learn-CAUS-FV    2-children / 2-2-children    9thing/ 9-9thing  
 'I don't teach [any/the children] [anything/something]'

(64) U-Themba a-ka-phek-el-i                      ✓mu-ntu / ✓u-Sipho    ✓nyama / ✓i-nyama  
 1-1Themba NEG-1SSA-cook-APPL-FV    1-person/ 1-1Sipho    9meat/ 9-9meat  
 'Themba didn't cook [anybody/Sipho] [any meat/the meat]'



But in other positions and contexts the distribution of [+A] and [-A] forms differs strikingly. This section explores four syntactic positions from which [-A] nominals are barred in negative clauses: (i) preverbal subject position, (ii) applied object position of a transitive expletive construction (TEC), (iii) direct object position in a mono-transitive TEC, and (iv) right-dislocated position. Because the facts are quite different for distressed [-A] nominals in conditionals and questions, we defer discussion of these until §6.5.3.

### 3.2 Preverbal subject position

Halpert 2012 demonstrates that only [+A] nominals can occupy preverbal subject position of Zulu tensed clauses, and this is also true in Xhosa (see (65), (66), and the well-formed paraphrases in (67) and (68)).<sup>12</sup> A lack of c-commanding negation can account for this restriction in simplex clauses like (65) and (66) -- a problem avoided by the low, post-verbal subjects in the expletive constructions (ECs) of (67)a,b and the negative existential strategy in (68). But Zulu (69) and Xhosa (70) show that the prohibition holds even of embedded subjects of subjunctives. Compare these examples with well-formed (71) and (72), which show that direct objects within subjunctive complements are successfully licensed by higher clause negation. The [-A] embedded subjects in (69) and (70) must therefore be ill-formed for some reason not connected with c-command by negation or with locality of [-A] licensing by negation.

(65) \* Mu-ntu a-ka-fik-ile [Zulu]  
 1-person NEG-1SA-arrive-DISJ1  
 [Intended: Nobody arrived]

(66) \* Ba-ntwana a-ba-fund-i i-si-Xhosa [Xhosa]  
 2-children NEG-2SA-study-FV 7-7-Xhosa  
 [Intended: No children study Xhosa]

- (67) a. A-ku-fik-anga                      m-ntu                      [Xhosa]  
              NEG-17SA-arrive-NEG.PST   1-person  
              'Nobody arrived'
- b. A-ku-fund-anga                      ba-ntwana                      [Zulu]  
              NEG-17SA-study-NEG.PST   2-children  
              'No children studied'
- (68) A-ku-kho                      m-ntu                      o-fik-ile-yo  
              NEG-17SA-be-NEG   1-person   REL-arrive-DISJ1-REL  
              'Nobody arrived' [Lit: there isn't anybody who arrived]
- (69) \*A-ngi-shongo                      ukuthi   mu-ntu   u-fik-ile                      [Zulu; Halpert 2013:97]  
              NEG-1SSA-say-NEG.PST   that   1-person   1SA-arrive-DISJ1  
              'I didn't say that anyone arrived'
- (70) A-ndi-fun-i                      okokuba   \*m-ntu   /✓u-m-ntu   a-bon-e   u-Sabelo   [Xhosa]  
              NEG-1SSA-want-FV   that   1-person/   1-1-person   1SA-see-SUBJ 1-1Sabelo  
              'I don't want anybody to see Sabelo'/I don't want a/the person to see Sabelo'
- (71) A-ndi-fun-i                      okokuba   u-Sabelo   a-bon-e   ✓m-ntu   /✓u-m-ntu   [Xhosa]  
              NEG-1SSA-want-FV   that   1-1Sabelo   1SA-see-SUBJ 1-person/   1-1-person  
              'I don't want Sabelo to see anybody/I don't want Sabelo to see a/the person'
- (72) A-ngi-fun-i                      ukuthi   u-Sipho   a-phek-e                      ✓qanda/✓i-qanda                      [Zulu]  
              NEG-1SSA-want-FV   that   1-Sipho   1SSA-cook-SUBJ   5egg/5-5egg  
              'I don't want Sipho to cook any egg/I don't want Sabelo to cook a/the egg'

English NPIs provide a helpful point of comparison. (73)a versus (73)b show that, like their Xhosa and Zulu counterparts, they require c-commanding negation. But so long as that condition is met they can occupy either subject or object position (see (74)). Thus Xhosa and Zulu [-A] NPIs are subject to a distributional constraint absent for English NPIs.

- (73) a. I didn't see anybody  
       b. \*Anybody didn't see me.
- (74) a. I don't think [she saw anybody].  
       b. I don't think [anybody saw her].

### 3.3 Direct object in a mono-clausal TEC

As previously demonstrated, Xhosa and Zulu allow VS constructions in which SA has default, Class 17 (historically locative) features (see Halpert 2012, Carstens & Mletshe to appear, henceforth C&M). The constructions are referred to in the literature as expletive

Some speakers accept not just intransitive but also transitive expletive constructions (henceforth TECs) such as the example in (75) (upper case in the translation line indicates subject focus, to be discussed in detail in §5). Word order is rigidly VSO.

As (75) illustrates, [+A] nominals are licit as the post-verbal subject or object in a monotransitive TEC, for speakers who accept the construction. (76)a shows that, for these speakers, [-A] nominals are also acceptable as post-verbal subjects. But if the locations of [+A] and [-A] nominals in (76)a are reversed, the result is ill-formed (see (76)b). The facts are the same in Xhosa.

A-ku-phek-anga      mu-ntu i-qanda  
NEG-17SA- cook-NEG.PAST   1-person 5-5egg  
'NOBODY cooked the/an/any egg.'

\*A-ku-phek-anga                      u-mu-ntu ganda  
NEG-17SA-cook-NEG.PAST 1-1person 5egg  
(Nobody cooked any egg)

27

from Xhosa, Halpert’s work illustrates the same patterns for Zulu. Many studies have shown that O1 of a Bantu double object construction c-commands O2 (and see Adams 2010 for evidence that this holds in Zulu). Under the hypothesis that the [+A] subject in a case like (76)b somehow rules out a [-A] direct object by intervention, the same would be expected in double object constructions like (77)a where O1 is [+A] and O2 is [-A].

- (77) a. U-Sabelo a-ka-nik-é a-ba-ntwana nto [Xhosa]  
 1-1Sabelo NEG-1SA-give-CONJ1 2-2-children 9thing  
 ‘Sabelo didn’t give the children anything’
- b. U-Sabelo a-ka-nik-é ba-ntwana a-ma-qanda  
 1-1Sabelo NEG-1SA-give-CONJ1 2-children 6-6-eggs  
 ‘Sabelo didn’t give any children (the) eggs’
- c. U-Sabelo a-ka-nik-é ba-ntwana nto  
 1-1Sabelo NEG-1SA-give-CONJ1 2-children 9thing  
 ‘Sabelo didn’t give any children anything’

There is further evidence: in a TEC, Halpert 2012 shows that the addition of an applied object or causee has the surprising effect of making a [-A] direct object possible. This is true whether the intervening IO or causee is [+A] or [-A].

- (78) a. \*A-ku-thum-anga u-mama lu-tho  
 NEG-17SA- send-NEG.PAST 1-1mother 11-thing  
 [Intended: MOTHER didn’t send anything!]
- b. A-ku-thum-el-anga u-mama i-zi-ngane lu-tho  
 NEG-17SA- send-APPL-NEG.PAST 1-1mother 10-10-child 11-thing  
 ‘MOTHER didn’t send the children anything!’

We provide an account for this pattern in §5.4. For now, we conclude that the ill-formedness of a [-A] direct object in a mono-transitive TEC does not reduce to any general “connectedness” or concord requirement holding between the post-verbal [-A] arguments.

### 3.4 [-A] applied or causee object in a TEC

§3.3 showed that applied objects and causees are possible in TECs (though having more than 2 post-verbal arguments degrades the outcome, in some speakers’ judgments). There

is a sharp contrast however depending on the [+/-A] status of the nominals. In particular, a [-A] nominal can never be the applied object or causee in a TEC in either Zulu or Xhosa. The contrasts in (79) and (80) illustrate this. ((79) and (80) from Halpert 2012:106).

- (79) a. A- ku- fund- is-anga                      u-Sabelo    a-ma-ntombazane  
              NEG-17SA-learn- CAUS-NEG.PAST   1-1Sabelo   6-6-girl  
              ‘SABELO didn’t teach (the) girls!’
- b. \*A- ku- fund- is-anga                      u-Sabelo    ma-ntombazane  
              NEG-17SA-learn- CAUS-NEG.PAST   1-1Sabelo   6-girl  
              [Intended: SABELO didn’t teach any girls!]
- (80) a. A-ku-thum-el-anga                      u-mama    i-zi-ngane    i-mali  
              NEG-17SA- send-APPL- NEG.PAST   1-1mother 10-10-child   9-9money  
              ‘MOTHER didn’t send (the) children (the) money!’
- b. \*A-ku-thum-el-anga                      (u-)mama    zi-ngane    (i-)mali  
              NEG-17SA- send-APPL- NEG.PAST   (1-)1mother 10-child   9-9money  
              [Intended: MOTHER didn’t send any children (any) money!]

### 3.5 A dislocation asymmetry

Adams 2010 and Halpert 2012 point out that only [+A] nominals can clitic right-dislocate in Zulu (see (81) from Halpert 2012:99: (124)). This is true also in Xhosa. [-A] nominals cannot undergo clitic dislocation in either direction (see (82)).

- (81) A-ngi-m-bon-i]<sub>VP</sub>                      \*mu-ntu    /u-mu-ntu                      [Zulu]  
              NEG-1SSA-3SOM-see-FV            1-person/1-1-person  
              ‘I don’t see anybody’
- (82) a. A-ndi-m-bon-i]<sub>VP</sub>                      \*m-ntu    /u-m-ntu                      [Xhosa]  
              NEG-1SSA-3SOM-see-FV            1-person/1-1-person  
              ‘I don’t see anybody’
- b. \*M-ntu,    a-ndi-(m)-bon-i                      [Xhosa]  
              1-person NEG-1SSA-(3SOM)-see-FV  
              [Intended: Anybody/nobody, I didn’t see (him)]

### 3.6 Interim summary and sketch of Halpert 2012

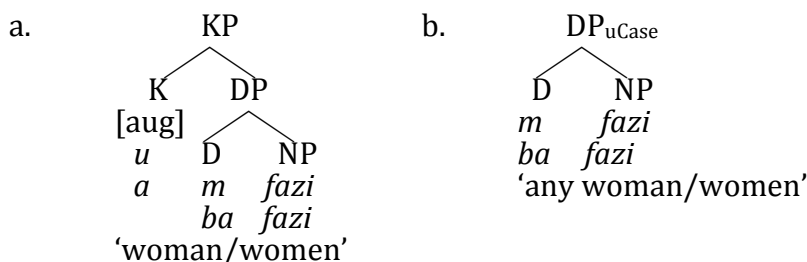
This section has demonstrated that some restrictions on the distribution of [-A] NPIs in Xhosa and Zulu distinguish them from their [+A] counterparts, as well as from English NPIs.

In particular, they are barred from the following positions:

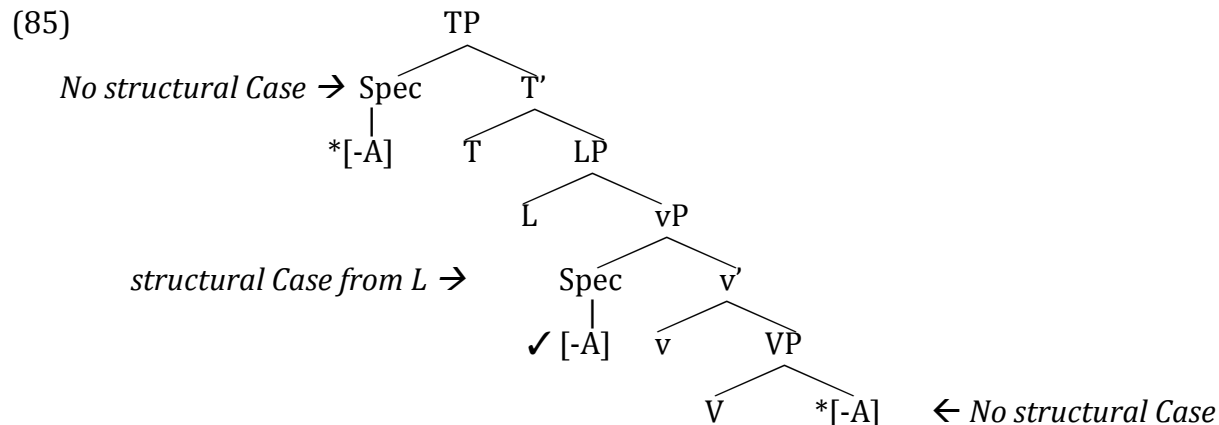
- (83) *Illicit locations for [-A] nominals in Zulu and Xhosa*
- (i) Preverbal subject position: S of SVO
  - (ii) Direct object in a mono-transitive TEC: O of VSO
  - (iii) Applied object or causee in a di-transitive TEC: O<sub>1</sub> of VSOO
  - (iv) Clitic dislocated positions

We noted in the introduction that to account for this pattern, Halpert 2012 proposes that [-A] nominals differ from their [+A] counterparts in that they require Case licensing. In Halpert's view, the augment is an intrinsic Case-licenser. The nominals that lack it are restricted to positions in which they can obtain structural Case values. (14) is repeated below as (84).

- (84) *Halpert 2012: a Zulu nominal without the augment is a DP and needs structural Case-licensing. Augmented nominals are intrinsically Cased KPs.*



The distribution of available structural Cases in Zulu under Halpert's analysis is unusual from a cross-linguistic standpoint: there is never Case-valuation associated with Spec, TP, that is, no Case from T, and  $v^*$  does not value Case either. On the other hand, a mid-level licenser L can value the Case of the highest DP that surfaces internal to  $vP$ :



Because Case is unavailable for occupants of Spec, TP, only [+A] nominals can ever appear there. Similarly for direct object position, unless the external argument raises out of the way in an SVO clause, permitting the object to be licensed by L. And because Case is licensed late, after movement, dislocated elements cannot “take it with them” and hence have to bear augments, since dislocated positions do not have Case licensors.

There are two major reasons why we will seek an alternative to Halpert’s account. First, [+A] DPs containing the modifier *kuphela* – ‘only’ exhibit a pattern of distribution exactly like that of [-A] nominals. Since Halpert’s approach is designed to apply to all and only [-A] nominals it cannot account for this.

Second, C&M argue from facts of experiencer verbs in ECs that [+/-A] nominals in Xhosa have Case needs that are the inverse of those proposed in Halpert’s analysis: [+A] nominals are full DPs with uCase features requiring values, in Carstens & Mletshe’s view, while [-A] nominals can appear in certain Caseless positions. Our investigation indicates that this is true in Zulu as well. We present this evidence in §5.

While these findings are inconsistent with a Case-theoretic account of the common properties of [-A] nominals in the two languages, there is a morpho-syntactic feature that emerges to fit the bill: focus. Zeller 2008 argues that DPs containing *kuphela* – ‘only’ cannot

occupy preverbal subject position and clitic-dislocated positions because these positions are anti-focus. The locations within TECs that [-A] nominals and *kuphela*-DPs cannot occupy are ones analyzed by C&M as marked with a morpho-syntactic [-focus] feature. In §5 we accordingly develop a unified account in terms of the topography of focus developed in Zeller 2008 and C&M for Zulu and Xhosa.

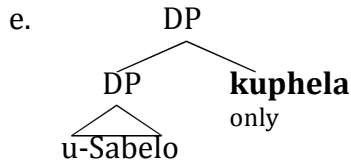
#### 4 [+A] expressions sharing distributional constraints with [-A] nominals

##### 4.1 Overview of *kuphela* – ‘only’

Zulu and Xhosa have an adnominal modifier *kuphela* – ‘only’ whose distribution has been explored in previous Zulu syntax literature including Buell 2008 and Zeller 2008. In both languages adnominal *kuphela* can modify direct objects ((86)a), applied objects ((86)b), causees ((86)c), and clefted expressions ((86)d) in SVO(O) clauses. These examples show that *kuphela* follows the noun and any other modifiers within a DP. Following Tancredi 1990, Erlewine 2014 and many others, we assume that ‘only’ (and its counterparts in other languages) must c-command in surface syntax the expression that it is semantically associated with. As illustrated in (86)e, we analyze *kuphela* as DP-adjoined, thus scoping over all contents of the DP and nothing else.

- (86) a. U-Sindiswa u-phek-é [i-mi-funo **kuphela**]. [Xhosa & Zulu]  
 1-1Sindiswa 1SA-cooked-CONJ1 4-4-vegetables **only**  
 ‘Sindiswa cooked only vegetables’
- b. U-Sindiswa u-phek-el-é [u-Sabelo **kuphela**] i-mi-funo  
 1-1Sindiswa 1SA-cooked-CONJ1 1-1Sabelo **only** 4-4-vegetables  
 ‘Sindiswa cooked vegetables only for Sabelo’
- c. U-Sindiswa u-fund-is-é [a-ba-ntwana **kuphela**] i-si-Xhosa  
 1-1Sindiswa 1SA-study-CAUS-CONJ1 2-2-children **only** 7-7-Xhosa  
 ‘Sindiswa taught only the children Xhosa’
- d. Y- [i-ndoda e-nde **kuphela**] e-phek-é i-mi-funo  
 COP-9-9man 9-tall **only** REL-cook- CONJ1 4-4-vegetables  
 ‘Only the tall man cooked vegetables’





adnominal *kuphela*

## 4.2 Restrictions on the location of *kuphela*

It is well-established that a DP containing *kuphela* – ‘only’ cannot occupy preverbal subject position in Zulu (see (87) from Zeller 2008; see also Buell 2008). If such a DP is the logical subject of a clause it must be clefted or appear post-verbally in an EC. (88) shows the identical pattern for Xhosa.

- (87) a. ✗[U-John **kuphela**] u-fik-ile  
           1-1John only           1SA-arrive-DISJ1  
           [Intended: Only John arrived]
- b. ✓Ku-fik-é                   [u-John **kuphela**]  
           17SA-arrive-CONJ1       1-1John only  
           ‘Only John arrived’
- c. ✓Ng-[u-John **kuphela**] o-fik-ile  
           COP-1-1John only       REL-arrive-DISJ1  
           ‘It’s only John who arrived’

- (88) a. ✗[U-Sindiswa **kuphela**] u-cul-a           a-ma-culo                                   [Xhosa]  
           1-1Sindiswa only           1SA-sing-FV   6-6-songs  
           ‘Only Sindiswa sings songs’
- b. ✓Ku-cul-a           [u-Sindiswa **kuphela**] a-ma-culo  
           17SA-sing-FV   1-1Sindiswa only       6-6-songs  
           ‘Only Sindiswa sings songs’
- c. ✓Ng- [u-Sindiswa **kuphela**] o-cul-a           a-ma-culo  
           COP-1-1Sindiswa only       REL-sing-FV   6-6-songs  
           ‘It is only Sindiswa who sings songs’

In this the distribution of *kuphela*-DPs perfectly matches that of [-A] nominals. And as is true of [-A] nominals, the ban on *kuphela*-modified DP subjects holds in embedded clauses:

- (89) ✗u-Loyiso u-th-é                   (okokuba) [u-Sabelo **kuphela**] u-fik-ile  
           1-1Loyiso1SA-say-CONJ1 (that)       1-1Sabelo only       1SA-arrive-DISJ1  
           [Intended: Loyiso said that only Sabelo arrived]

We found that DPs containing *kuphela* share all the other distributional constraints that characterize [-A] nominals as well. (90) (from Buell 2008:41) shows that they cannot be right-dislocated.

- (90) \*Ngi-m-bon-ile]<sub>VP</sub> [u-Sipho **kuphela**  
 1SSA-3SOM-see-DISJ 1-1Sipho only  
 [Intended: I saw only Sipho]

And DPs containing *kuphela* cannot appear as applied objects or causees within TECs.

- (91) \*Ku-fund-is-a u-Sipho [a-ma-ntombazane **ku-phela**] i-si-Xhosa  
 17SA-learn-CAUS-FV 1-1Sipho 6-6-girl only 7-7-Xhosa  
 [Intended: Sipho teaches Xhosa only to girls]

- (92) \*Ku-thum-el-é u-mama [i-zi-ngane **kuphela**] i-mali  
 17SA- send-APPL-CONJ1 1-1mother 10-10-child only 9-9money  
 [Intended: Mother sent only the children money]

And (93) shows that a *kuphela*-DP cannot be direct object in a monotransitive TEC in Zulu:

- (93) \*Ku-theng-é u-Sindiswa [a-ma-qanda **kuphela**] [Zulu]  
 17SA-buy- CONJ1 1-1Sindiswa 6-6-eggs only  
 [Intended: Sindiswa bought only eggs]

Some Xhosa speakers accept right-edge *kuphela* with semantic association to the preceding direct object, but there is reason to believe that this is a construal available for an adverbial

*kuphela* in Xhosa: it is one among a family of available readings.<sup>13</sup>

- (94) Ku-theng-é uSindiswa a-ma-qanda **kuphela**  
 17SA-buy- CONJ1 1-1Sindiswa 6-6-eggs only
- a. 'All that happened was Sindiswa bought eggs'
  - b. 'Only Sindiswa bought eggs'
  - c. 'Sindiswa bought only eggs'
  - d. 'Sindiswa only bought eggs' (she didn't cook them)
  - e. 'Sindiswa only bought eggs' (she didn't get anything else done)

- (95) [TP [T' buy+PST ... [VP Sindiswa <v> [VP <V> eggs ]] **kuphela** ]]

<sup>13</sup> Xhosa speakers also accept left-edge *kuphela* with comparable scope ambiguities, and clause-medial *kuphela* with scope over VP and its contents. Anticipating §5, the object construal for *kuphela* in (94) suggests that the expression with which adverbial *kuphela* is semantically associated need not have a [+focus] feature of its own, unlike in many languages (see among other Erlewine 2014 on focus and 'only'). We leave exploration of this interesting phenomenon and adverbial *kuphela* more generally to future research.

Summing up, [+A] nominals containing the adnominal modifier *kuphela* – ‘only’ are unacceptable in all the same positions where [-A] nominals are unacceptable. An apparent exception for direct objects in Xhosa TECs is due to the ability of an adverbial *kuphela* to be construed with a direct object in its c-command domain.

## 5. Case, focus, and augments in ECs

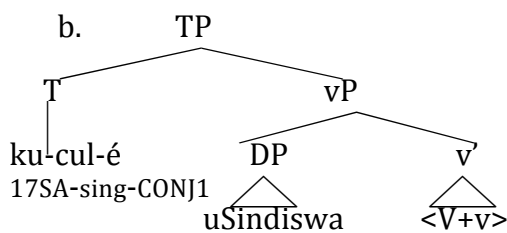
### 5.1 Subject focus and forced raising in TECs

This section presents evidence that [+A] nominals have uCase features needing values, contra Halpert 2012. Based on this, and on the shared distribution of [-A] nominals and DPs including ‘only,’ we will develop in §6 an alternative account of the facts that we presented in §3. The topography of focus sketched out here will serve as this account’s foundation.

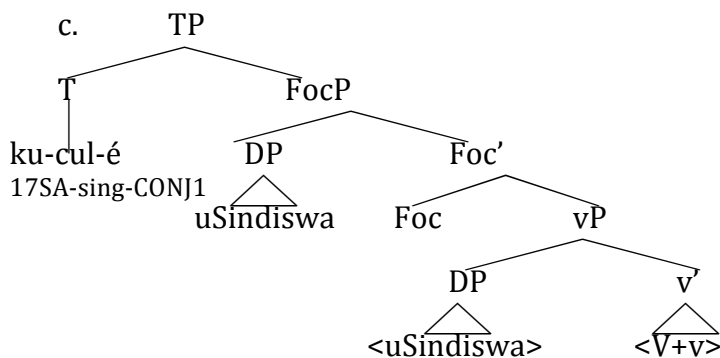
We have noted that post-verbal subjects of ECs have focus readings in both Xhosa and Zulu. C&M account for this in Xhosa with a proposal that the highest DP in any EC may raise into Spec of a middle field FocusP.

- (96) a. Ku-cul-é            u-Sindiswa  
           17SA-sing-CONJ1 1-1Sindiswa  
           R#1: ‘Sindiswa sang’  
           R#2: ‘SINDISWA sang’

(answers ‘What happened?’)  
 (answers ‘Who sang?’)



Reading #1



Reading #2

[illegible]

b.

```
graph TD
    TP --> T_minus[T-]
    TP --> FocP
    T_minus --> T_minus_lex[ku-cul-é  
17SA-sing-CONJ1]
    FocP --> DP1[DP]
    FocP --> Foc_prime[Foc']
    DP1 --> DP1_lex[uSindiswa]
    Foc_prime --> Foc[Foc]
    Foc_prime --> vP
    Foc --> Foc_lex[<uSindiswa>]
    vP --> DP2[DP]
    vP --> v_prime[v']
    DP2 --> DP2_lex[<V+v>]
    v_prime --> V[V]
    v_prime --> DP3[DP]
    V --> V_lex[amaculo  
6-6songs]
    DP3 --> DP3_lex[ ]
```

(i) \*Ku-**wa**-cul-a (a-ma-culo) u-Sindiswa (a-ma-culo)  
17SA-60M-sing-FV 6-6-songs 1-1Sindiswa 6-6-songs  
[Intended: Sindiswa sings them/Sindiswa sings songs]

36

C&M consider a number of approaches to this forced subject raising including linearization problems (Richards 2010), labeling (Chomsky 2013), and Case-theoretic problems (Alexiadou & Anagnostopoulou 2001). Based in large part on restrictions on experiencer verbs in TECs to be detailed in §5.2, they advocate a Case-theoretic account. They propose that T and v\* of TECs are defective with the result that subjects surface low, agreement is default, object pronouns are impossible because they need to vacate VP but v cannot raise them. The inertness of the usual clausal probe features gives rise to a situation where there is only a single purely structural Case available for the highest argument in a Xhosa EC (which C&M hypothesize is valued by C). For two DPs to be Case-licensed relies on an exceptional Focus-linked strategy: the Focus head Agrees with both subject and object, raising the higher argument to its Spec and conferring on it a [+focus]-linked Case value while giving the lower argument a Case associated with the opposing value, [-focus] ((98)= C&M's (10)). We interpret this not as an absence of focus but as a feature incompatible with focus, in keeping with Zeller's 2008 approach to preverbal subject position.

(98) *The Focus head probes subject and object. Linked Case and Focus values result:*

- a.  $[_{\text{FocP}} \text{SU}_{\text{uCase} [+ \text{Foc}]} [_{\text{Foc}'} \text{Foc} [_{\text{VP}} < \text{SU} > [_{\text{v}'} \text{v} [_{\text{VP}} \text{V} \text{OB}_{\text{uCase}} ]]]]]]$
- b.  $[_{\text{FocP}} \text{SU}_{\text{uCase} [+ \text{Foc}]} [_{\text{Foc}'} \text{Foc} [_{\text{VP}} < \text{SU} > [_{\text{v}'} \text{v} [_{\text{VP}} \text{V} \text{OB}_{\text{uCase} [- \text{FOC}]} ]]]]]]$
- 

## 5.2 Why this is Case: experiencer verbs

As noted above, a key piece of the motivation for C&M's Case account of subject focus in TECs lies in asymmetries connected with experiencer verbs. C&M show that an experiencer verb can participate in a Xhosa TEC only if (i) it is intransitive; (ii) one of its arguments is a CP; (iii) one of its arguments is removed by passivization, or (iv) both its arguments are [-A] nominals. ((99) = C&M: (7)).

(99) *The experiencer verb restriction: no experiencer verbs with 2 full DP arguments in a TEC.*

- a. \*Kw-a-bon-a            u-m-fazi            i-ntaka.            *\*TEC of an experiencer verb with 2 full DP arguments*  
 17SA-CONJ2-see-FV    1-1-woman    9-9bird  
 '(It was) a/the woman (who) saw the bird'
- b. Kw-a-bon-w-a            i-ntaka.            *OK: same V in impersonal passive*  
 17SA-CONJ2-see-PASS-FV 9-9bird  
 'A bird was seen'
- c. Ku-bon-é            u-gqirha    [<sub>CP</sub> ukuba u-m-ntwana u-ya-gul-a]. *OK: replace DP2 w/CP*  
 17SA-see-CONJ1 1-1doctor    that    1-1-child    1SA-DISJ2-be.sick-FV  
 The doctor saw that the child was sick'
- d. A-ku-bon-anga            m-ntu    nto!    *OK: negative experiencer TEC replacing both full DPs with "augmentless" NPIs*  
 NEG-17SA-see-NEG.PST 1-person    9thing  
 'NOBODY saw anything!'  
 [Lit: (There) didn't see anybody anything]

C&M argue that approaches to forced subject raising in terms of linearization or labeling problems for 2 vP-internal DPs can have nothing to say about such an asymmetry among verb classes. C&M's account is based on the fact that arguments of experiencer verbs bear inherent Cases in many languages (see (100)) and are barred from a kind of transitive expletive construction in Ukrainian for reasons convincingly argued by Lavin (2010) to be Case-theoretic in origin (see (101)).

- (100) a. Ti-la    rag    ala.    [Marathi]            b. Hamraa    ii    naa miilal. [Bhojpuri]  
 she-Dat anger came            I-Gen.Obl this not find  
 'She got angry'            'I didn't find it'
- (101) a. \*Ivana bulo    zdyvovano blyskavkoju.    b. Kulju    rozirvano evjaxom.  
 Ivan.acc was surprised lightening.instr    balloon.acc pierced nail.instr  
 'Ivan was surprised by lightening'            'The balloon was pierced by a nail'

C&M propose that arguments of experiencer verbs bear inherent Cases in Xhosa. Adding the augment layer to a nominal argument gives them an additional unvalued uCase feature as well. A purely structural Case-value can combine with an inherent Case value; this is what happens when an experiencer verb is used in an SVO clause like (102). And when there is only one [+A] argument in a Xhosa TEC, it can be licensed by the single purely

structural Case available in ECs. But a focus-linked and hence semantic Case value violates the constraint in (103), yielding ungrammaticality when an experiencer verb has two [+A] DP arguments in a TEC.

- (102) a. U-Sindiswa u-bon-é u-gqirha  
 1-1Sindiswa 1SA-see-CONJ1 1-1doctor  
 ‘Sindiswa saw the doctor’

- b. [TP SU<sub>uCase</sub> T [VP <SU<sub>uCase</sub>> v\* [VP OB<sub>uCase</sub> V <OB<sub>uCase</sub>>]] SVO: A-movement, Case, and agreement function normally

- (103) **The semantic Case constraint:** \*DP bearing more than one semantically linked Case.

Hence an experiencer verb with more than one [+A] argument is never well-formed in a Xhosa TEC: either one argument lacks a Case value, or it violates (103).

### 5.3 Interim conclusions

The previous subsection summarized arguments from C&M that [+A] nominals in Xhosa have uCase features that require values. In TECs, where T and v\* are impoverished, there is a novel focus-linked Case strategy which is illicit for inherently Cased arguments of experiencer verbs.

Our investigation revealed that in Zulu, experiencer verbs with 2 [+A] arguments are illicit in TECs just as in Xhosa (see (104)a,b). Replacing the internal argument with a CP ((104)c) or removing one argument by passivization ((104)d) markedly improves the results:<sup>15</sup>

- (104) a. \*Ku-bon-é u-Sindiswa u-m-ntwana  
 17SA-see-CONJ1 1-1Sindiswa 1-1-child  
 [Intended: SINDISWA saw a/the child]  
 b. \*Ku-zw-é u-Nothando u-m-sindo  
 17SA-hear-CONJ1 1-1Sindiswa 3-3-noise  
 [Intended: NOTHANDO heard a/the noise]

<sup>15</sup> It is not clear that substituting [-A] nominals has the same ameliorating effects in Zulu as in Xhosa, however. Due to time constraints on our field research we leave further investigation to future research.

- c. Ku-bon-é            u-gqirha ukuti u-m-ntwana u-ya-gul-a  
 17SA-see-CONJ1 1-1doctor that 1-1-child 1SA-DISJ-be.sick-FV  
 'The doctor saw that the child was sick'
- d. Kw-a-bon-w-a            i-n-yoni  
 1717SA-see-PASS-FV 9-9-bird  
 'A bird was seen'

This pattern argues that arguments of experiencer verbs have inherent Case in Zulu as C&M propose that they do in Xhosa, and that [+A] arguments of experiencer verbs cannot interact with the focus head – the pattern that C&M attribute to uCase features of augmented nominals. The conclusion is incompatible with Halpert's 2012 approach to the restrictions on the distribution of [-A] nominals in terms of a proposal that only [-A] nominals require Case-licensing in Zulu.

## 6. Analysis: focus and anti-focus

### 6.1 Introduction

In this section we argue that both stressed [-A] nominals and *kuphela* have [+focus] features. No expression can be marked with conflicting focus values:

(105) \*XP[+focus][ -focus]

Following Sabel & Zeller 2006 and Zeller 2008, Nguni preverbal subject position is obligatorily [-focus], so DPs containing adnominal *kuphela* cannot appear there. We follow Zeller and Sabel & Zeller in adopting Kallulli's 2000 proposal that clitic doubled expressions must be [-focus]. Following C&M, the position of the highest internal argument in a Xhosa TEC is marked [-focus] as well. We extend this analysis to Zulu to provide a unified account of the phenomena in both languages in terms of their shared properties.



## 6.2 Preverbal subject position

It is well-established that preverbal subject position is not a licit site for a *wh*-phrase in many Bantu languages (see Sabel & Zeller 2006, Zeller 2008, Zerbian 2006 among many others). In Zulu and Xhosa, subject *wh* can be clefted or appear vP-internally in an EC.

- (106) a. \*U-bani/bani u-fik-ile? [Zulu]  
 1-1who/1who 1SA-arrive-DIJS1  
 [Intended: 'Who arrived?']  
 b. Ku-fik-é (u-)bani?  
 17SA-arrive-CONJ1 1-1who  
 'Who arrived?'  
 c. Ng'u-bani o-fik-ile  
 COP-1-1who REL-arrive-DISJ1  
 'Who arrived?'

Sabel & Zeller argue that Zulu wh-phrases are disallowed in Spec, TP due to a general constraint “that bans focused constituents (i.e. those with a [+focus] feature) from appearing in [preverbal] subject position.”

Zeller 2008 proposes that this is also the reason why DPs containing adnominal *kuphela* – ‘only’ cannot appear in preverbal subject position in Zulu either: *kuphela* makes them [+focus] and hence such DPs are barred from a [-focus] position.

It has been noted in the literature on *n*-words that they often bear focus particles, such as *mo* in Japanese and *to* on Korean *n*-words (see (107) from Watanabe 2005 and Shimoyama 2011 on Japanese, Sells 2006, Giannakidou & Yoon to appear on Korean, and Giannakidou & Zeijlstra to appear for discussion).

- (107) John-wa nani-**mo** tabe-nak-atta. [Japanese; Watanabe 2004]  
 John-TOP what-**MO** eat-NEG-PAST  
 'John didn't eat anything'  
*N-word is wh+focus particle*

Given this, the assumption that Spec, TP cannot host focal material in Xhosa and Zulu can account for why these three classes of expressions – [-A] nominals, wh-phrases, and *kuphela*-DPs – share an important constraint on their distribution.

By way of explanation for the restrictions on Spec, TP, Sabel & Zeller (2006) propose that Zulu preverbal wh-phrases actually surface in Spec of a FocusP between vP and TP (the copula of (106)c is in T, and the apparent relative morphology better viewed as extraction morphology). In a reanalysis, Zeller 2008 proposes that subject agreement morphology is clitic doubling which cross-linguistically is restricted to topic material.

It is outside the scope of this paper to determine the best analysis of why Spec, TP in Xhosa and Zulu should be anti-focus. Any workable approach to the phenomenon can be extended to stressed [-A] NPIs.

### 6.3 Clitic-doubling and anti-focus

Zeller 2008 draws a parallel between the semantic restriction on preverbal subject position in Bantu languages and clitic-doubling in Albanian and Greek as analyzed in Kallulli 2000. Kallulli shows that an object can only be clitic doubled if it is [-focus]. This rules out clitic doubling of contrasted material and wh-objects:

(108) Pap-a (\*e) vizitoi madje Tiranë-n (jo vetëm Shkodrën)  
 pope-the CL visited even Tirana-the not only Shkodra  
 'The pope visited even Tirana (not only Shkodra.)'

(109) Kë/çfarë (\*e) pe?  
 who/what.ACC CL saw.you  
 'Who/what did you see?'

Assuming *kuphela*-DPs and [-A] nominals are [+focus] in Zulu and Xhosa, it follows automatically that they cannot be clitic-right-dislocated as we saw in §3.5.

## 6.4 Focus in TECs

The focus-based account of these properties converges strikingly with C&M's analysis of focus in Xhosa ECs presented in §5. Adopting their proposals will permit us to explain the remainder of the asymmetries in the distribution of [-A] NPIs and *kuphela*-DPs. This accomplished we will explore its bearing on some asymmetries associated with wh-questions.

Recall C&M's proposal that in TECs, the Focus head Agrees with both subject and object. It raises the higher argument to its Spec, conferring a [+focus]-linked Case value on it, while giving the lower argument a Case associated with the opposite value, [-focus].

(110) *The Focus head probes subject and object. Linked Case and Focus values result:*

- a.  $[_{\text{FocP}} \text{SU}_{\text{uCase}[+Foc]} [_{\text{Foc}'} \text{Foc} [_{\text{VP}} <\text{SU}> [_{\text{v}'} \text{v} [_{\text{VP}} \text{V} \text{OB}_{\text{uCase}} ]]]]]]$
- b.  $[_{\text{FocP}} \text{SU}_{\text{uCase}[+Foc]} [_{\text{Foc}'} \text{Foc} [_{\text{VP}} <\text{SU}> [_{\text{v}'} \text{v} [_{\text{VP}} \text{V} \text{OB}_{\text{uCase}[-Foc]} ]]]]]]$
- 

We have proposed that both [-A] NPIs and [+A] DPs containing *kuphela* have [+focus] features. If they appear in the direct object position of a mono-transitive TEC, a feature-clash arises.

In a TEC containing an applied object or causee, we propose that this argument, being directly below the external argument, is the one that receives the [-focus] feature from the Focus head. It follows that neither NPIs nor *kuphela*-DPs can occupy this position in a TEC (see (111)a,b). Adapting Halpert 2012, Appl or Caus in Zulu and Xhosa Case-licenses the direct object that it c-commands (see (111)c). As this argument is therefore not affected by [-focus] marking from the Focus head, it can be a [-A] NPI ((111)e) or a *kuphela*-DP ((111)d):

- (111) a.\* Ku-thum-el-é u-mama [i-zi-ngane **kuphela**] i-mali  
 17SA- send-APPL-CONJ1 1-1mother 10-10-child only 9-9money  
 [Intended: MOTHER sent only the children money]
- b.  $[_{FocP} SU_{uCase[+Foc]} [_{Foc'} Foc [_{VP} <SU> [_{v'} v [_{VP} V OB_{uCase} ]]]]]]$
- c.  $[_{FocP} SU_{uCase[+Foc]} [_{Foc'} Foc [_{VP} <SU> [_{v'} v [_{ApplP} IO_{uCase[antifoc]} Appl V OB_{uCase} ]]]]]]$
- d. A-ku-thum-el-anga u-mama i-zi-ngane [ i-mali **kuphela**]  
 NEG-17SA- send-APPL-NEG.PST 1-1mother 10-10-child 9-9money only  
 'MOTHER didn't send the children only money!'
- e. A-ku-thum-el-anga u-mama i-zi-ngane lu-tho  
 NEG-17SA- send-APPL- NEG.PST 1-1mother 10-10-child 11-thing  
 'MOTHER didn't send the children anything!'

## 6.5 Two loose ends

### 6.5.1 Introduction

In the interests of full disclosure this section will complete our exploration of focus and [-A] NPIs by reporting on two further topics: (i) wh-words within TECs, and (ii) the behavior of destressed [-A] nominals in TECs within conditionals and questions. Both raise some questions for future research.

### 6.5.2 Wh-asymmetries and the topography of focus

As already noted, Sabel & Zeller 2006, Zeller 2008 take as their starting point the fact that *wh*-phrases cannot appear in Zulu preverbal subject position (see (106)a, repeated below). They explain this by means of the assumption that all *wh*-phrases have [+focus] features.

- (106) a. \*U-bani/bani u-fik-ile?  
1-1who/1who 1SA-arrive-DIJS1  
[Intended: 'Who arrived?']

Our analysis makes a clear prediction that *wh*-phrases should also be impossible as the indirect object or causee of a ditransitive TEC, or as direct object in a mono-transitive TEC.

As expected, a *wh*-word as applied or causee argument in a TEC is judged to be quite unacceptable (see the Xhosa (112)a,b).

- (112) a. \*Ku-thum-el-é                  u-Sindiswa **bani** i-i-ncwadi [Xhosa]  
               17SA-send-APPL-CONJ1 1-1Sindiswa 1who 10-10-books  
               [Intended: Who did Sindiswa send books to?]
- b. \*Ku-fund-is-é                  u-Loyiso **bani** i-si-Xhosa  
               17SA-study-CAUS-CONJ1 1-1Loyiso 1who 7-7-Xhosa  
               [Intended: Who did Loyiso teach Xhosa to?]

Xhosa does not allow [+A] wh-phrases outside of clefts so we cannot compare the two varieties with respect to this constraint. But in Zulu, [+A] wh-phrases can appear wherever [-A] wh-phrases are also possible though they are reported to have a specific, d-linked kind of reading as we mentioned in §1.2. Just like their [-A] counterparts in both Zulu and Xhosa, these wh-phrases are unacceptable as applied objects or causees in TECs. This follows from our proposal that the positional constraint is due to a clash of [+/-focus] features, rather than the absence of an augment as in Halpert's 2012 account.

- (113) a. \*Ku-thum-el-é                      u-Sindiswa    **(u-)bani**    i-zi-ncwadi                      [Zulu]  
 17SA-send-APPL-CONJ1    1-1Sindiswa (1-)1who    10-10-books  
 [Intended: Who did SINDISWA send books to?]
- b. \*Ku-fund-is-é                      u-Loyiso    **(u-)bani**    i-si-Xhosa  
 17SA-study-CAUS-CONJ1    1-1Loyiso (1-)1who    7-7-Xhosa  
 [Intended: Who did LOYISO teach Xhosa to?]

Unexpectedly for our analysis, however, speakers of both languages are divided on the status of *wh*-words as direct objects in monotransitive TECs. Some reject them completely, while others find them acceptable though report them to be rather emphatic and echo-like.

- [illegible]

Why this state of affairs should exist for a wh- direct object but not a preverbal subject or applied object/causee in TECs is something of a mystery.<sup>16</sup> Lacking any insights to offer, we must leave it to future research.

### 6.5.3 Destressed NPIs revisited

Recall that some Xhosa speakers permit destressed [-A] nominals in non-negative conditionals and questions. The restriction on preverbal subject position holds in these environments, that is, no speakers accept destressed [-A] nominals in the preverbal subject position of a conditional or question. The contrasts between (115)a,b and (116) a,b illustrates this.

- (115) a. Ukuba u-John u-fik-a, u-ndi-xelexe [Xhosa]  
 COMP 1-1John 1SA-arrive-FV 2sSA-1SOM-tell-SUBJ  
 'If John arrives, tell me.'
- b. \*Ukuba m-ntu u-fik-a, u-ndi-xelexe  
 COMP 1-person 1SA-arrive-FV 2sSA-1SOM-tell-SUBJ  
 [Intended: If anybody arrives, tell me]
- (116) a. Ng-u-bani o-th-é u-John u-fik-ile  
 COP-1-who REL-say-CONJ1 1-1John 1SA-arrive-DISJ1  
 'Who said John arrived?'
- b. \*Ng-u-bani o-th-é m-ntu u-fik-ile  
 COP-1-who REL-say-CONJ1 1-person 1SA-arrive-DISJ1  
 [Intended: Who said anyone arrived?]

Turning to ECs, (117)a and (117)b show that, like [+A] nominals and stressed [-A] nominals in negative clauses, a destressed [-A] nominal can appear as the sole argument of an intransitive verb in an EC (see (117) and (118)).

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<sup>16</sup> The Zulu [-A] form of 'what' is a verbal clitic so an exact counterpart is not possible. It is perhaps worth noting that Halpert's 2012 Case-theoretic approach could not derive (114)a. Recall that Halpert claims [-A] nominals require Case-licensing that is unavailable for direct objects in mono-clausal TECs. While her proposal is intended for Zulu, we have shown that Xhosa [-A] nominals in negative clauses exhibit the same distribution as their Zulu counterparts, motivating a unified approach to both languages. That some speakers accept (114)a,b remains mysterious.

(117) a. Ukuba ku-cula u-Nomsa, u-ndi-xelel-e  
 COMP 17SA-sing 1-1Nomsa, 2SSA-1SOM-tell-SUBJ  
 'If Nomsa sings, tell me.'

b. Ukuba ku-cula mntu, u-ndi-xelel-e  
 COMP 17SA-sing 1person 2SSA-1SOM-tell-SUBJ  
 'If anybody sings, tell me.'

(118) a. Ingaba kucul-é u-Nomsa?  
 Q 17SA-sing-CONJ1 1-1Nomsa  
 'Did Nomsa sing?'

b. Ingaba kucul-é mntu?  
 Q 17SA-sing-CONJ1 1person  
 'Did anybody sing?'

While TECs are also possible within conditionals and questions with [+A] subjects (see (119) and (120)), [-A] nominals are completely ruled out in all positions of affirmative TECs within conditionals and questions (see (121) and (122)).

(119) Ukuba ku-cul-a u-Sindiswa i-culo e-li-mnandi, u-ndi-xelel-e  
 COMP 17SA -sing-FV 1-1Sindiswa 5-song 5-5-nice 2SSA-1SOM-tell-SUBJ  
 'If SINDISWA sings a pretty song, tell me'

(120) Ingaba ku-cul-é u-Sindiswa a-ma-culo a-ma-hle?  
 Q 17SA-sing-CONJ1 1-1Sindiswa 6-6-songs 6-6-nice  
 'Did SINDISWA sing nice songs?'

(121) a. \*Ukuba ku-cul-a mntu i-culo e-li-mnandi, u-ndi-xelel-e  
 COMP 17SA-sing-FV 1person 5-song 5-5-nice 2SSA-1SOM-tell-SUBJ  
 [Intended: If anybody sings a pretty song, tell me]

b. \*Ukuba ku-cul-a u-Sindiswa ma-culo, u-ndi-xelel-e  
 COMP 17-sing-FV 1-1Sindiswa 6-songs 2SSA-1SOM-tell-SUBJ  
 [Intended: If Sindiswa sings any songs, tell me.]

c. \*Ukuba ku-cul-a m-ntu ma-culo, u-ndi-xelel-e  
 COMP 17-sing-FV 1-1person 6-songs 2SSA-1SOM-tell-SUBJ  
 [Intended: If anybody sings any songs, tell me.]

(122) a. \*Ingaba ku-cul-é m-ntu a-ma-culo a-ma-hle?  
 Q 17SA-sing-CONJ1 1person 6-6-songs 6-6-nice  
 [Intended: Did anybody sing nice songs?]

b. \*Ingaba ku-cul-é u-Sindiswa ma-culo?  
 Q 17SA-sing-CONJ1 1-1Sindiswa 6songs  
 [Intended: Did Sindiswa sing any songs?]

- c. \*Ingaba ku-cul-é                      m-ntu                      ma-culo?  
       Q            17SA-sing-CONJ1    1-person            6songs  
       [Intended: Did anybody sing any songs?]

(123)a,b show that if negation is added to a conditional or question, [-A] nominals become possible. Thus it is only the destressed, uNeg-less varieties that are ruled out.

- (123) a. Ukuba a-ku-cul-anga                      m-ntu                      ma-culo, u-ndi-xelel-e  
           COMP    NEG-17SA-sing-NEG.PST    1-1Sindiswa    6-songs    2SSA-1SOM-tell- SUBJ  
           ‘If nobody sings any songs, tell me’

- b. Ingaba a-ku-cul-anga                      m-ntu                      ma-culo?  
       Q            NEG-17SA-sing-NEG.PST    1-person            6songs  
       ‘Didn’t anybody sing any songs?’

The illicit positions for the destressed versions thus include both [-focus] positions (preverbal subject and direct object in a mono-clausal TEC) and the [+focus] post-verbal position for TEC subjects. Clearly then reference to focus features will not provide a satisfactory account.

By way of explanation for these facts we suggest that, as the topic or theme of the clause, a lexical subject in preverbal position always bears some stress, incompatible with these particular [-A] nominals,<sup>17</sup> and that the overall emphatic interpretation of TECs makes them an inhospitable environment for the destressed varieties as well. We leave more detailed consideration to future research.

## 7. Conclusions

In this paper we have demonstrated that three Zulu [-A] nominals, *lutho* – ‘nothing’, *muntu* – ‘nobody,’ and *ndawo* – ‘nowhere,’ are negative concord items (*n*-words). All other Zulu and Xhosa [-A] nominals in negative uses pattern like ‘strict’ NPIs in that they require a clause-mate negation. We have argued that both of these groups of [-A] nominals have

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<sup>17</sup> Another line of approach to the ban on [-A] nominals in preverbal subject position would be to assume, following Deprez’s (2000) approach to bare nominals, that they do not have the features to satisfy the EPP. This seems plausible but makes the resemblance to DPs containing *kuphela* coincidental in this regard, so we leave it aside.



uninterpretable negative features (*uNeg*). Following Zeijlstra 2004, 2008, the clause-mate restrictions follow from a local licensing Agree relation (Agree (*iNeg*...*uNeg*)).

While Halpert 2012 attributed some positional restrictions on Zulu [-A] nominals to Case needs particular to [-A] forms, we have shown that the restrictions, which exist in Xhosa as well, are shared by [+A] nominals modified by adnominal *kuphela* – ‘only’ and, with one mysterious exception, by *wh*-phrases – even those which bear augments in Zulu. (124) summarizes the close parallels found in the distribution of these three classes of expressions.

(124) *[+focus] expressions and the four taboo locations, summarized*

<i>Expression type</i>	<i>Spec, TP</i>	<i>Clitic-dislocated</i>	<i>IO in ditrans TEC</i>	<i>DO in TEC</i>
[-A] NPI	✗	✗	✗	✗
[+A] ‘only’ DP	✗	✗	✗	✗
[+/-A] <i>wh</i> -word	✗	✗	✗	??

We have accordingly rejected the Case-theoretic approach and related the distributional restrictions to the topography of focus in Xhosa and Zulu clauses, interacting with [+focus] features borne by [-A] nominals in negative clauses, *kuphela*, and *wh*-words.

We have also shown that [-A] nominals are accepted in Xhosa conditionals and questions, but their grammar differs markedly. In this context [-A] nominals need not be clause-mates with the licensing ‘if’ or the interrogative. We have proposed that they lack *uNeg* features and thus are rather like the plain or ‘broad’ NPIs of English. Their distribution is restricted also by their resistance to stress.

While much work remains to be done on augments and the distribution of [+/-A] nominals, we hope to have contributed a significant piece towards the mapping out of this intriguing phenomenon.

## References

- Adams, Nikki. 2010. The Zulu ditransitive verb phrase. University of Chicago PhD thesis.
- Alexiadou, Artemis, and Elena Anagnostopoulou. 2001. The subject-in-situ generalization and the role of case in driving computations. *Linguistic Inquiry* 32:193–231.
- Blaszczak, Joanna. 1999. "The Riddle of N-Words in Polish." Manuscript, Humboldt Universität Berlin.
- Blaszczak, Joanna. 2005. On the nature of n-words in Polish. *Journal of Slavic Linguistics* 13.2: 173–235.
- Blaszczak, Joanna. To appear. Explaining the bagel problem: the case of Polish *kolwiek*-NPIs. Forthcoming in *Formal Approaches to Slavic Linguistics* 11.
- Bošković, Ž. 2011. Last Resort with Move and Agree in derivations and representations. In *The Oxford Handbook of Linguistic Minimalism*, ed. C. Boeckx, 327-353. New York
- Bhatt, Rajesh. 2003. Experiencer subjects. Unpublished course materials.  
<http://web.mit.edu/rbhatt/www/24.956/dative.pdf>.
- Brown, Sue. 1997. *The Syntax of Negation in Russian: A Minimalist Approach*. Stanford, CA: CSLI Publications.
- Buell, Leston. 2008. VP-internal DPs and right-dislocation in Zulu. In *Linguistics in the Netherlands 2008*, pp. 37-49.
- Carstens, Vicki. 1991. The morphology and syntax of DPs in Kiswahili. UCLA PhD thesis.
- Carstens, Vicki. 2010. Implications of grammatical gender for the theory of uninterpretable features. In *Exploring Crash Proof Grammars* M. Putnam (ed), 31-57. Amsterdam: John Benjamins.
- Carstens, Vicki. 2011. Hyperactivity and hyperagreement in Bantu. *Lingua* 121.5: 721-741.

- Carstens, Vicki. 2012. Delayed valuation. Lingbuzz/001432. To appear in *Syntax*.
- Carstens, Vicki & Michael Diercks. 2013. Parameterizing Case and Activity: Hyper-raising in Bantu. In *Proceedings of the 40<sup>th</sup> Annual Meeting of the North East Linguistic Society*, Seda Kan, Claire Moore-Cantwell, Robert Staubs (eds), 99-118. Amherst: University of Massachusetts Graduate Linguistic Student Association.
- Carstens, Vicki and Loyiso Mletshe. 2015. Implications of Xhosa expletive constructions. Forthcoming in *Linguistic Inquiry* (a longer pre-publication draft can be found at lingbuzz/001750. The version to be published excludes a discussion of [-A] NPIs that appears in section 5 of the lingbuzz version.)
- Cheng, Lisa & Downing, Laura. 2012. Against FocusP: arguments from Zulu. In *Information Structure*, ed. by Ivona Kucerova and Ad Neeleman.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays in honor of Howard Lasnik*, edited by R. Martin et al, 89-155. Cambridge, MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Kan Hale: A life in language*, edited by M. Kenstowicz, 1-52. Cambridge: MIT Press.
- Chomsky, Noam. 2007. Approaching UG from below. In *Interfaces + Recursion = Language?*, ed. by U. Sauerland and H.-M. Gartner, 1-29. Berlin: Mouton de Gruyter
- Chomsky Noam. 2008. On Phases. In *Foundational Issues in Linguistic Theory*, ed. by Robert Freidin, Carlos P. Otero and Maria Luisa Zubizarreta, 133-166. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2013. Problems of projection. *Lingua* 130: 33-49.
- Collins, Chris & Paul Postal. 2012. Classical NEG raising. Ms, NYU. lingbuzz/001498.
- De Dreu, Merijn. The internal structure of the Zulu DP. University of Leiden MA thesis.

- Déprez, Viviane. 2000. Parallel (a)symmetries and the internal structure of negative expressions. *Natural Language and Linguistic Theory* 18: 253-342.
- Diercks, Michael. 2009. Subject extraction and (so-called) anti-agreement effects in Bukusu: *A Criterial Freezing approach. Presentation made at the 45th Annual Meeting of the Chicago Linguistics Society. April 16-18, University of Chicago.*
- Diesing, Molly. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- Diesing Molly. 1997. Yiddish VP order and the typology of movement in Germanic. *Natural Language and Linguistic Theory* 15: 369-427.
- Diesing, Molly and Eloise Jelinek. 1995. Distributing Arguments. *Natural Language Semantics* 3.2: 123-176.
- Doke, Clements. 1997. Textbook of Zulu grammar. Cape Town: Longman, sixth edition. (First published in 1927).
- Du Plessis, J.A. and M. Visser. 1992. Xhosa Syntax. Cape Town: Via Afrika.
- Erlewine, Michael. 2014. Movement out of focus. MIT PhD dissertation.
- Gambarage, Joash Johannes. 2012. Context of use of augmented and unaugmented nouns in Nata. UBC working papers.
- Gambarage, J.J. (2013). The Pre-prefix in Nata: An Interface Account. In *Selected Proceedings of the 43rd Annual Conference on African Linguistics*. Orie, Ó. & K. W. Sanders. Cascadilla Proceedings Project Somerville, MA.
- Giannakidou, Anastasia. 1997. The Landscape of Polarity Items. PhD diss., University of Groningen. Giannakidou, Anastasia. 1998. *Polarity Sensitivity as (Non)veridical Dependency*. Amsterdam and Philadelphia: John Benjamins.

- Giannakidou, Anastasia. 1999. Affective dependencies. *Linguistics and Philosophy*, 22: 367–421.
- Giannakidou, Anastasia. 2000. Negative ... concord? *Natural Language and Linguistic Theory*, 18: 457–523.
- Giannakidou, Anastasia. 2001. The meaning of free choice. *Linguistics and Philosophy*, 24: 659–735.
- Giannakidou, Anastasia. 2006. N-words and negative concord. In *The Blackwell Companion to Syntax*, edited by Martin Everaert and Henk van Riemsdijk. Volume III, Chapter 45, 327–391. Malden, MA: Blackwell Publishing.
- Giannakidou, Anastasia. 2011. Negative and positive polarity items. In *Semantics: an International Handbook of Natural Language Meaning*. (Second edition; ed. by C. Maienborn, K. von Stechow, and P. Portner). Berlin: Mouton de Gruyter. Pp. 1660–1712. de Gruyter.
- Giannakidou, A. & S. Yoon. To appear. Scalar marking without scalar meaning: non-scalar, non-exhaustive EVEN-marked NPIs in Greek and Korean. Forthcoming in *Language*.
- Giannakidou, A. & H. Zeijlstra. 2014. The landscape of negative dependencies: negative concord, *n*-words, split scope. Ms, University of Chicago & Georg-August-Universität Göttingen (for *Linguistics Companion*, 2<sup>nd</sup> edition, Malden: Blackwell).
- Grohman, Kleanthes. 2003. *Prolific Domains: on the anti-locality of movement dependencies*. Amsterdam and New York: John Benjamins Linguistik Aktuell.
- Halpert, Claire. 2012. Argument licensing and agreement in Zulu. MIT PhD dissertation.
- Haegeman Liliiane. 1995. *The Syntax of Negation*. Cambridge and New York: Cambridge UP.
- Haegeman, Liliane & Rafaella Zanuttini. 1996. Negative concord in West Flemish. In *Parameters and Functional Heads*, eds. A. Belletti & L. Rizzi. Oxford UP: NY, 117–179.

- Haegeman, Liliane & Rafaella Zanuttini. 1991. Negative heads and the Neg criterion. *The Linguistic Review* 8: 233-251.
- Haegeman, Liliane and Terje Lohndal. 2010. Negative concord and (multiple) Agree: a case study of West Flemish. *Linguistic Inquiry* 41: 181-211.
- Herburger, Elena. 2001. 'The negative concord puzzle revisited'. *Natural Language Semantics* 9: 289-333.
- Hyman, Larry Michael; Katamba, Francis X. 1993. The augment in Luganda: syntax or pragmatics? In: *Theoretical aspects of Bantu grammar*, v. 1, p. 209-256. Ed. by Sam A. Mchombo. Lecture notes, #38. Stanford: Center for the Study of Language and Information (CSLI).
- Julien, Marit. 2002. *Syntactic Heads and Word Formation*, New York: Oxford UP
- Kayne, Richard. 1981. Two notes on the NIC. In A. Belletti, L. Brandi, and L. Rizzi (eds.), *The Theory of Markedness in Generative Grammar*. Pisa: Scuola Normale.
- Kallulli, D. 2000. Direct Object Clitic Doubling in Albanian and Greek. In F. Beukema & M. den Dikken (eds.), *Clitic Phenomena in European Languages*. Amsterdam: John Benjamins, 209-248.
- Kinyalolo, Kasangati K.W. 1991. Syntactic Dependencies and the Spec-head agreement hypothesis in Kilega. Doctoral dissertation, University of California Los Angeles.
- Klima, J. 1964. Negation in English. In J. Fodor and J. Katz (eds.), *The Structure of Language*. New Jersey: Prentice-Hall. 246-332.
- Laka, Itziar. 1990. Negation in syntax: On the nature of functional categories and projections. MIT Phd dissertation.

- Lasnik, Howard. 1974. Analyses of negation in English. MIT PhD thesis. Indiana University Linguistics Club.
- Longobardi, G 1987. Parameters of negation in Romance dialects. Paper presented at the GLOW dialect workshop, Venice.
- Longobardi, G. 1994. Reference and proper names: a theory of N-movement in syntax and Logical Form. *Linguistic Inquiry* 25.4: 609-665.
- Longobardi, Pino. 1991. "Island effects and parasitic constructions." In Jim Huang and Robert May (eds), *Logical Structure & Linguistic Structure*, 149-196. Dordrecht: Kluwer.
- Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In Sam Mchombo (ed.), *Theoretical aspects of Bantu grammar*. Stanford: CSLI, 113–150.
- McGinnis, Martha. 2001. Variation in the phase structure of applicatives. In *Linguistic Variation Yearbook 1*: 105-146.
- Mzolo, D. 1968. The Zulu noun without the initial vowel. *African Studies* 27.4:195-210.
- Progovac, L. 1993. Non-augmented NPs in Kinande as negative polarity items. In S. A. Mchombo (ed.), *Theoretical aspects of Bantu grammar* 1, 257–269. CSLI.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Linguistic Inquiry Monograph. Cambridge, MA: MIT Press.
- Richards, Norvin. 2010. *Uttering Trees*. Cambridge: MIT Press.
- Ritter, Elizabeth. 1992. Cross-linguistic evidence for Number Phrase. *The Canadian Journal of Linguistics* 37.2: 197-218.
- Rizzi, Luigi. 1982. *Issues in Italian Syntax*. Dordrecht: Foris Publications.

- Rizzi, Luigi. 1997. The fine structure of the left periphery. L. Haegeman, ed. *Elements of Grammar*, Kluwer, Dordrecht.
- Sabel, J. and J. Zeller. 2006. Wh-question formation in Nguni. In: J. Mugane, J. Hutchison and D. Worman (eds), *African Languages and Linguistics in Broad Perspective* (Selected *Proceedings of the 35th Annual Conference of African Linguistics*, Harvard, Cambridge). Somerville, Massachusetts: Cascadia Proceedings Press, 271-283.
- Shimoyama, Junko. 2011. Japanese Indeterminate Negative Polarity Items and their Scope. *Journal of Semantics* 28: 413-450.
- Sells, Peter. 2006. Interactions of Negative Polarity Items in Korean. In *Proceedings of the 11th Harvard International Symposium on Korean Linguistics*, 724-737. Cambridge: Harvard University.
- Staden, Paul von. 1973. The initial vowel of the noun in Zulu. *African Studies* 32.2: 163-182.
- Taraldsen, Knut Tarald. The nanosyntax of Nguni noun class prefixes and concords. *Lingua* 120: 1522-1548.
- Tsimpli, Ianthi-Maria, and Anna Roussou. 1996. Negation and polarity items in Greek. *The Linguistic Review*, 13: 49-81.
- Vallduví, E. 1994. Polarity items, n-words and minimizers in Catalan and Spanish. *Probus* 6, 263-294.
- Veloudis, Ioannis. 1982. Negation in Modern Greek. PhD diss., University of Reading.
- Visser, M. 2006. DP structure in IsiXhosa: definiteness properties and the occurrence of the noun class preprefix. Handout at 'The Bantu-Romance connection', Leeds.
- Visser, M. 2008. Definiteness and specificity in the isiXhosa determiner phrase. *South African Journal of African Languages* 28.1: 11-29. (also as Visser 2010 in Legère and Thornell, eds.).



- Watanabe, Akira. 2004. The genesis of negative concord. *Linguistic Inquiry* 35: 559-612.
- Zanuttini, Rafaella. 1997. *Negation and clausal structure: a comparative study of Romance languages*. New York/Oxford: Oxford University Press.
- Zeijlstra, Hedde. 2004. *Sentential Negation and Negative Concord*. Utrecht: LOT.
- Zeijlstra, Hedde. 2008. Negative concord is syntactic agreement. Ms., University of Amsterdam.
- Zeller, Jochen. 2008. The subject marker in Bantu as an antifocus marker. *Stellenbosch Papers in Linguistics* 38: 221-254.
- Zeller 2009. On clitic left-dislocation in Zulu. *Frankfurt African Studies Bulletin* 18 (2006): Focus and Topic in African Languages (edited by Sonja Ermisch, Ruediger Koeppel Verlag: Koeln, 131-156.
- Zerbian, S. 2006. Expressions of information structure in the Bantu language Northern Sotho. *ZAS Papers in Linguistics* 45. ZAS: Berlin.