

Vicki Carstens & Loyiso Mletshe
University of Missouri & University of the Western Cape

1. Introduction

1.1 Augmented and augmentless nominals

(1) a. A-ndi-bon-i u-m-ntwana [Xhosa]
NEG-1SSA-see-FV 1-1-child
'I don't see a/the child' *augmented nominal is direct object*

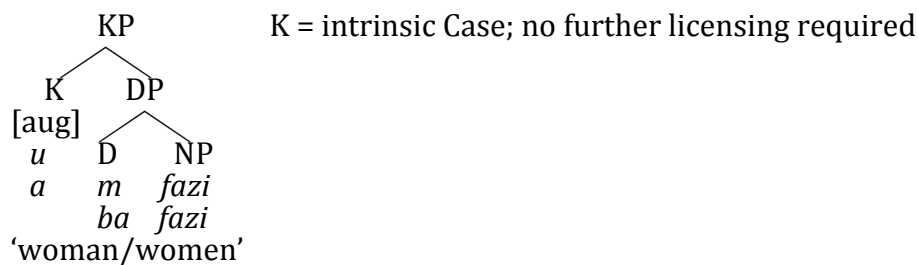
² In glosses, SA=subject agreement; OM=object marker; NEG= negation; SUBJ= (subjunctive); FV= the final vowel of verbs in indicative, affirmative clauses. Arabic numbers = noun classes (number + gender) unless followed by s or pl in which case they are person features. DISJ1-2 are tense morphemes on verbs that are final in their domains; CONJ1-2 are tense morphemes on verbs non-final in their domains. Some but not all nouns have 2 separable class prefixes. We indicate class on prefixes and, if there is only one prefix, on the noun root. NPIs and *wh*-words in questions lack the outer prefix (apart from preverbal subject *wh*-).

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

*augmentless nominal is direct object
 and has NPI interpretation*

In an illuminating 2012 study of Zulu nominals, Halpert (2012) demonstrates convincingly that restrictions on the distribution of the augmentless (henceforth [-A]) NPIs should be attributed to a morphosyntactic feature rather than to semantic factors. The feature that Halpert identifies as the determinant of [-A] NPI distribution is Case: Halpert argues that only nominals of this variety require Case-licensing in Zulu. The outer prefix borne by augmented nominals (henceforth [+A]) is a kind of intrinsic Case-licenser that allows them to appear in positions that Halpert argues to be lacking in structural Case.

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



Among the sources of Halpert's claim that [-A] NPIs in Zulu have special Case-licensing needs is the fact that, unlike [+A] nominals, they cannot appear in pre-verbal subject position, even with c-commanding negation (see (3)).³ Halpert argues that this is because Spec, TP systematically lacks Case-licensing in Zulu. In contrast, [-A] NPIs may appear in the low, post-verbal subject position of an expletive VS construction, or as object in an SVO clause embedded under negation ((3)-(6) from Halpert 2012: 92 & 97). Halpert claims on this basis that structural Case valuation is only available vP-internally in Zulu.

³ There is variation in both Zulu and Xhosa regarding whether [-A] NPIs are acceptable within tensed clause complements like (4) or only subjunctives like (5), embedded under negation. This correlates with (non)permeability of tensed clauses to other cross-clausal processes; we address it in §5.2. Infinitival clauses in Zulu or Xhosa cannot have any kind of overt subject. We leave this interesting issue to future research.

- (3) a. A-*ngi-sho-ngo* ukuthi u-mu-ntu u-fik-ile
 NEG-1SSA-say-NEG.PST that 1-1-person 1SA-arrive-DISJ1
 'I didn't say that someone arrived'
- b. *A-*ndi-sho-ngo* ukuthi mu-ntu u-fik-ile
 NEG-1SSA-say-NEG.PST that 1-person 1SA-arrive-DISJ1
 'I didn't say that anyone arrived'
- (4) A-*ndi-sho-ngo* ukuthi ku-fik-e u-mu-ntu /mu-ntu
 NEG-1SSA-say-NEG.PST that 17SA-arrive-CONJ 1-1-person/1-person
 'I didn't say that someone/anyone arrived'
- (5) A-*ndi-fun-i* ukuthi u-Sipho a-phek-e i-qanda/qanda
 NEG-1SSA-want-NEG.PST that 1-1Sipho 1SA-cook-SUBJ 5-5egg/5egg
 'I don't want Sipho to cook an/any egg'

In this paper we show that the distributional pattern of Xhosa [-A] NPIs is nearly identical to that of their Zulu counterparts as described in Halpert 2012, and on this basis we pursue a unified account. We adopt Halpert's proposal that a morphosyntactic feature restricts the distribution of [-A] NPIs. But we also argue that the pattern of facts shared by Xhosa and Zulu [-A] NPIs has striking parallels in the syntax of negative concord items in languages like French and West Flemish. Among these is the famous contrast in (6) from Kayne 1981.

- (6) a. Je n' ai exigé qu' ils arête personne [French: Kayne 1981]
 I *ne* have required that they arrest(subj) nobody
 'I didn't require that they arrest anybody'
- b. *Je n' ai exigé que personne soit arêté
 I *ne* have required that no one be arrested
 (I didn't require that anybody be arrested')

Based on a detailed comparison, we claim that the distribution of [-A] NPIs in Zulu and Xhosa is best captured by analyzing them as negative concord items, for which we henceforth adopt the term *n*-words from Laka 1990. Following Zeijlstra 2004, 2008, 2013 and Haegeman & Lohndal 2010, we account for the local dependency between negation and *n*-words by means of the assumption that *n*-words bear uninterpretable negation features (uNeg), requiring local licensing in an Agree relation with the interpretable features of a negation operator (iNeg; see (7)). Following Kayne 1981, Haegeman 1995, and

Zanuttini 1997, the contrasts in (6) and hence (3) - (5) arise because the *n*-word in the embedded clause must move into locality with the *i*Neg operator. (6) and (3)b are a kind of that-trace or ECP violations, in Kayne's analysis (see §6 for an amended account).

(7) Negative concord as an Agree relation (Zeijlstra 2004, 2008)

Agree (*i*Neg....*u*Neg...(uNeg))

We argue that like *u*Case, *u*Neg can be abstract, lacking overt morphological expression.

This is the situation in Zulu and Xhosa. Unlike *u*Case, purely abstract *u*Neg has not previously been documented, to our knowledge, and hence is a novel claim of our paper.

Our investigation also brings to light evidence that (Agree, *i*Neg...*u*Neg) is an A'-relation.⁴ As (8) shows, the licit positions for [-A] NPIs are potential A'-positions, while those which disallow them are unambiguously A-positions. (8)c versus (8)f are particularly telling: they make it clear that the locality of a [-A] NPI to clausal negation is just one of the factors determining whether it is licit. How it gets to its location is crucial too.

(8) <i>Licit sites for [-A] NPIs</i>	<i>Illicit sites for [-A] NPIs</i>
a. Phasal Spec, vP of SVO clauses	d. Sister to V
b. Spec of a middle-field FocusP	e. Preverbal subject position
c. Phasal Spec, Appl or Caus of symmetrical double object constructions	f. Externally merged Spec, Appl or Caus

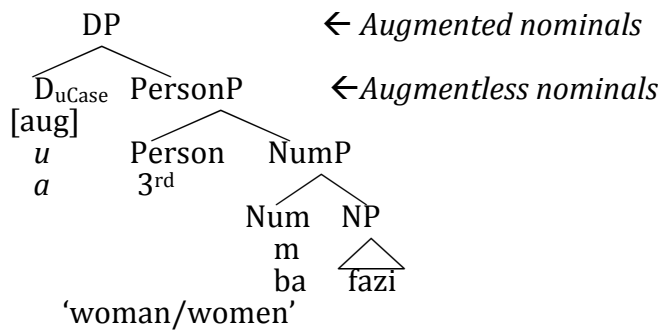
Though our primary focus in this paper is on Xhosa and Zulu, we advance an argument that negative concord relations are generally local A'-relations, including in languages where they are better studied such as French and West Flemish.

Lastly, our paper presents Xhosa evidence that only [+A] nominals require Case-licensing. We propose that *u*Case features are a property of D, which corresponds to the outer prefix layer of [+A] nominals as argued in Carstens & Mletshe to appear. Adapting

⁴ This idea is also suggested in Haegeman 1995.

Carstens 1991 we analyze the inner noun class prefix as a gender-specific realization of number, and head of a Num(ber)P that typically occurs in the DP's middle field (see also Ritter 1992 among others on NumP). Since agreement with [-A] nominals can include successfully valued *uperson* features, we propose that interpretable person is present in both kind of nominals because it resides in a structural layer below the DP layer.

(9) *Our claim: only augmented nominals are DPs with uCase features.*



1.2 Structure of the paper

This paper is structured as follows. §1.3 summarizes our theoretical assumptions. §2 presents the crucial distributional asymmetries distinguishing [+A] and [-A] nominals. §3 describes characteristic facts of negative concord and the analysis of Zeijlstra 2004, 2008 that we adopt. §4 presents the analysis, arguing that key properties of Xhosa and Zulu NPIs align point by point with those of *n*-words. §5 considers some ways in which Xhosa and Zulu NPIs differ superficially from *n*-words: they cannot be used as sentence-fragment answers, and for some speakers they can be embedded in indicative complement clauses below negation. We show that these facts are easily accounted for by assuming (i) that there is no silent negative operator in Xhosa and Zulu, unlike in some better studied negative concord languages; and (ii) that indicative clauses are not all phasal, a conclusion independently motivated by Bantu hyper-raising (see Carstens & Diercks 2013a; Carstens

to appear, Carstens & Mletshe to appear). §6 Argues that negative concord is an A'-relation. §7 presents justification for the claim in (9) that *uCase* of nominals resides in the augment layer, and addresses Halpert's 2012 Case-analysis of [-A] NPIs. §8 concludes.

1.3 Theoretical assumptions

Our paper is written within the Minimalist theoretical framework of Chomsky (2000; 2001). We assume syntactic objects are constructed bottom-to-top and that there is cyclic Transfer to the PF and LF interfaces triggered by the phase heads (robust) *v** and C. Following Chomsky, we assume agreement and nominal Case are uninterpretable, unvalued features (*uFs*), *uPhi* and *uCase* respectively. When *uPhi* is Merged on a category α , it ordinarily *probes* its c-command domain to find a *goal* β that can provide values for α 's *uFs* (though we will assume, following Carstens & Mletshe to appear, that this does not happen in Xhosa VSO clauses where SA has default features). We assume a version of the “activity requirement” of Chomsky (2000; 2001) – that a participant in Agree must bear a *uF*. Following Boskovic (2011) we assume that Case-valuing heads have valued *uCase* features. Hence the robust versions of T and v come from the lexicon with *uNom* and *uAcc* features respectively, and confer these values on the unvalued *uCase* features of local DPs through the Agree relation.

2 Contrasting distributions of [+/-A] nominals

2.1 Preverbal subject position

Both [+A] and [-A] nominals are licit direct or indirect objects in SVO(O) clauses, as shown in the Xhosa (10) and Zulu (11) ((11) adapted from Halpert 2012: 103).

- (10) A-ndi-fund-is-i ✓ba-ntwana / ✓a-ba-ntwana ✓nto / ✓i-nto
 NEG-1SSA-learn-CAUS-MOOD 2-children / 2-2-children 9thing/ 9-9thing
 ‘I don’t teach any/the children/anything/something’

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

As mentioned in §1, only [+A] nominals can occupy preverbal subject position of tensed clauses.⁵ While a lack of c-commanding negation can account for this restriction in simple clauses like (12)a,b, the Xhosa (13) and Zulu (14) show that the prohibition holds even of embedded subjects, where c-commanding negation is available. This is true despite the fact that many speakers accept cross-clausal licensing: a [-A] NPI object of an embedded clause is licit when there is negation in the higher clause (see Xhosa (15) and Zulu (16)).

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

- b. *Mu-ntu a-ka-fik-ile [Zulu]
 1-person NEG-1SA-arrive-DISJ1
 [Intended: Nobody arrived]

- (13) A-ndi-fun-i okokuba *m-ntu / ✓u-m-ntu a-bon-e u-Sabelo
 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'

- (14) *A-ndi-sho-ngo 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'

- (15) A-ndi-fun-i okokuba u-Sabelo a-bon-e ✓m-ntu / ✓u-m-ntu
 NEG-1SSA-want-FV that 1-1Sabelo 1SA-see-FV 1-person/ 1-1-person
 'I don't want Sabelo to see anybody/I don't want Sabelo to see a/the person'

- (16) A-ndi-fun-i ukuthi u-Sipho a-phek-e ✓qanda/i-qanda
 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. (17)a and (17)b show that, like their Xhosa and Zulu counterparts, they require c-commanding negation. But so long as that

⁵ See footnote 2 on subjects of infinitives and some inter-speaker variation regarding licensing into indicative complements, to be addressed in §5.2.

condition is met they can occupy subject or object position (see(18)). Thus Xhosa and Zulu [-A] NPIs are subject to a distributional constraint absent for English NPIs.

- (17) a. I didn't see anybody
b. *Anybody didn't see me.

- (18) a. I don't think [she saw anybody].
b. I don't think [anybody saw her].

2.2 Locality

Another difference between Xhosa and Zulu [-A] NPIs on the one hand and their English counterparts on the other emerges when deeper embedding is involved. Providing English NPIs are in the scope of negation they can be quite distant from it, separated by multiple clause boundaries. This is not the case in Zulu and Xhosa. Embedding of a [-A] NPI two subjunctives below negation yields a fairly acceptable result (see Xhosa (19) and Zulu). But the speakers we consulted who accept [-A] NPIs in indicative complements nonetheless reject sentences in which they are separated from negation by more than one indicative clause boundary. The unacceptability of the Xhosa (21) and Zulu (20) contrasts with their acceptable English translations (see §5.2 for further details).

- (19) A-ndi-fun-i okokuba u-Sabelo a-cel-e u-Mary ukuba a-theng-e
NEG-1SSA-want-NEG that 1-1Sabelo 1SA-ask-SUBJ 1-1Mary that 1SA-buy-PST

nto
9thing
'I don't want Sabelo to ask Mary to buy anything'

- (20) A-ngi-fun-i ukuthi u-Sabelo a-cel-e u-Mary ukuthi a-theng-e
NEG-1SSA-want-NEG that 1-1Sabelo 1SA-ask-SUBJ 1-1Mary that 1SA-buy-PST

lutho
9thing

- (21) *U-John a-ka-tshongo (ukuba) ndi-ya-cabanga (ukuba) u-Mary u-theng-e nto
1-1John NEG-1SA-say that 1SSA-DISJ1-think that 1-1Mary 1SA-buy-PST 9thing
'John didn't say that I thought Mary bought anything.'

- (22) *U-Sabelo a-ka-shongo (ukuthi) a-ka-zisol-i (ukuthi) w-a-bon-a muntu
 1-1Sabelo NEG-1SA-say that NEG-1SA-regret-NEG that 1SA-PST-see-FV 1person
 ‘Sabelo didn’t say he regrets that he saw anybody’ [Zulu]

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

2.3 [-A] NPIs in TECs

2.3.1 Subjects but not objects can be [-A] in simple monotransitive TECs

Xhosa and Zulu allow VS constructions in which SA has default, Class 17 (historically locative) features. The constructions are referred to in the literature as expletive constructions (ECs), a term which we adopt to reflect the non-referentiality of SA features and the fact that the thematic subject is not in the canonical subject position, Spec, TP.

Some speakers accept transitive expletive constructions (henceforth TECs) such as the example in (23). In Xhosa, the [+A] subject of a TEC has an obligatory focus reading that we indicate by upper case in the translation line. We defer discussion of this phenomenon until §7, which presents an analysis from Carstens & Mletshe to appear of forced focus as a strategy for non-canonical Case-licensing in TECs.

- (23) Ku-cul-é u-Sindiswa a-ma-culo [Xhosa]
 17SA-sing-PST 1-1Sindiswa 6-6-songs
 ‘SINDISWA sang songs’

As (23) illustrates, a [+A] nominal is licit as the post-verbal subject or object in a TEC for speakers who accept the construction. (24)a shows that, for these speakers, [-A] nominals are also acceptable in subject position. But if the locations of [+A] and [-A] nominals in (24) are reversed, the result is ill-formed (see (24)a,b). The facts are the same in Xhosa.

- (24) a. ✓VSO augmentless-augmented [Zulu; Halpert 2012:102]

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

b. ***VSO augmented–augmentless**

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

The ban on [-A] objects in TECs is not absolute in either Xhosa or Zulu, but the two languages have slightly different workaround strategies. We turn to these next.

2.3.2 The Xhosa strategy: if a TEC object is a [-A] NPI, the subject must match

Like Zulu, Xhosa permits [-A] NPI subjects in TECs (see (25)a). [-A] NPI objects are also acceptable in TECs just in case the subject is a [-A] NPI too (see (25)b). As noted in §2.3.1, if the subject is [+A] and the object is [-A] the result is ill-formed (see (25)c).

- (25) a. A-ku-phek-anga m-ntu i-qanda [Xhosa]
 NEG-17SA-cook-NEG.PST 1-1-person 5-5egg
 ‘Nobody cooked an egg!’
- b. A-ku-phek-anga m-ntu qanda
 NEG- 17SA- cook NEG.PAST 1-person 5egg
 ‘Nobody cooked any egg!’
- c. *A-ku-phek-anga u-m-ntu qanda
 NEG-17SA-cook-NEG.PST 1-1-person 5egg
 (Intended: a/the person didn’t cook any egg)

It is important to note that the unacceptability of (25)c cannot be attributed to any general “connectedness” or concord requirement on [-A] forms. Negative SVOO clauses show that outside of TECs, [-A] NPIs can follow [+A] nominals, and vice versa: direct and/or indirect object of an SVOO clause can be augmented or augmentless (see (26)a-c). While these examples are from Xhosa, Halpert’s work illustrates the same patterns for Zulu.

- (26) a. U-Sabelo a-ka-nik-é a-ba-ntwana nto [Xhosa]
 1-1Sabelo NEG-1SA-PST 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-PST 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-PST 2-children 9thing
 ‘Sabelo didn’t give any children anything’

We conclude that direct object position in a TEC is an illicit location for a [-A] NPI, and that in Xhosa a [-A] NPI subject neutralizes the problem.

2.3.3 The Zulu strategy: applied/causative morphology allows [-A] NPI DO in TECs

In Zulu, if the direct object in a TEC is a [-A] NPI, then the verb must bear applied or causative morphology (see (27)a and (28)a)⁶ Interestingly, despite this significant correlation between such verbal morphology and [-A] NPI-licensing, in no case can an applied or causee argument be augmentless in a Zulu TEC (see (27)b and (28)b-d).⁷

(27) In a TEC, DO but not Causee object of V+Caus can be augmentless

- a. a- ku- fund-is- anga mu-ntu lutho [Zulu]
 NEG-17SA- learn-CAUS-NEG.PAST 1person 16thing
 ‘NOBODY taught anything.’
- b. *a- ku- fund- is-anga mu-ntu a-ma-ntombazane
 NEG-17SA-learn- CAUS-NEG.PAST 1-person 6-6-girl
 (NOBODY taught (the) girls)

(28) Ditransitive Expletives: DO can be augmentless, but IO object of Appl cannot

- a. ✓ **Augmentless–Augmented–Augmentless** [Zulu]
 A-ku-thum-el-anga mama i-zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-10-child 9money
 ‘MOTHER didn’t send the children any money.’
- b. ***Augmentless–Augmentless–Augmentless** [Zulu]
 *A-ku-thum-el-anga mama zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-child 9money

⁶ Halpert 2012 does not include examples illustrating whether a [+A] subject is acceptable in Zulu when Appl/Caus makes a [-A] object licit. Our ability to research Zulu TECs is limited so we leave this open. It is at least clear from Halpert’s examples that a [-A] subject does not suffice to permit a [-A] direct or indirect object in Zulu as it does in Xhosa.

⁷ This restriction does not seem to hold in Xhosa TECs. A [-A] applied or causee argument is acceptable providing the subject is also [-A].

c. ***Augmented–Augmentless–Augmentless**

*A-ku-thum-el-anga u-mama zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1-1mother 10-child 9money

d. ***Augmentless–Augmentless–Augmented**

*A- ku- thum- el- anga mama zi-ngane i-mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-child 9-9money

2.4 A dislocation asymmetry

Adams 2010 and Halpert 2012 point out that only [+A] nominals can clitic right-dislocate in Zulu (see (29)). Our investigation revealed that the same asymmetry accompanies clitic right- or left-dislocation in Xhosa. [-A] nominals cannot undergo clitic dislocation in either direction (see (30)).

(29) A-ngi-m-bon-i]_{VP} *mu-ntu /u-mu-ntu [Zulu]
 NEG-1SSA-3SOM-see- NEG 1-person/1-1-person
 ‘I don’t see anybody’

(30) a. A-ndi-m-bon-i]_{VP} m-ntu /u-m-ntu [Xhosa]
 NEG-1SSA-3SOM-see- NEG 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- NEG
 *‘Anybody, I didn’t see (him)’

2.5 Summary

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:

- (31) Illicit locations for [-A] NPIs in Zulu and Xhosa
- (i) Preverbal subject position
 - (ii) Positions separated from negation by multiple clause boundaries
 - (iii) Dislocated positions
 - (iv) Object position in TECs, except under special circumstances:
 The subject is also a [-A] TEC (Xhosa) *OR*
 The verb bears applied or causative morphology (Zulu).

We turn in §3 to describing the distribution of negative concord items, presenting data from French, Italian, and West Flemish -- languages where they have been studied in detail. §4 connects the findings of §2 and §3, proposing that the restrictions on Xhosa and Zulu [-A] NPIs closely parallel those to which *n*-words are subject. This, we argue, is due to the fact that these Xhosa and Zulu expressions are in reality *n*-words, bearing abstract negative concord features.

3. Negative concord

3.1 The basics

A signature property of negative concord is the availability of single negation readings in cases where multiple items with negative features co-occur:

- (32) a. Gianni **non** ha telefonato a **nessuno** [Italian; Haegeman 1995]
 Gianni NEG has called to n-body
 'Gianni didn't call anybody' [Lit: Gianni didn't call nobody]
- b. Je **n'ai** **jamais** vu **personne** [French]
 I NE'have never seen nobody
 'I never saw anybody'
- c. da Valère **nooit** Marie **niets** **nie** **en**-zegt [West Flemish; Haegeman 1995]
 that Valere never Marie nothing not EN-says
 'that Valere never tells Marie anything'

Zeijlstra 2004, 2008, 2013 argues that negative concord involves an Agree relation between the interpretable features of sentential negation and expressions like *nessuno*, *personne*, *jamais*, *nooit*, and *niets* which bear uninterpretable negation features, as shown in (33). This is why a single negation interpretation can be obtained even though more than one expression exhibits negative features.

(33) Agree (iNeg...uNeg...(uNeg)) Negative concord as a local licensing relation

Like other Agree relations, negative concord is subject to locality constraints. French permits *n*-words only as far away as an embedded subjunctive as we saw in (repeated

below). West Flemish is stricter, requiring that *n*-words and negation be clause-mates (see (34) from Haegeman 1995:137 (50b)).

- (6) a. Je **n'** ai exigé qu' ils arête **personne** [French: Kayne 1981]
 I *ne* have required that they arrest(subj) nobody
 'I didn't require that they arrest anybody'
- (34) *K'**en**-peinzen-k ik da Valère **niets** keut.
 I *en* think-1s I that Valère nothing knows
 [Intended: I don't think that Valere knows anything]

3.2 Patterns of distribution

3.2.1 No *n*-words in preverbal subject position

In those negative concord languages where *n*-words can be separated from negation by a clause boundary, subject/object asymmetries have been reported. As noted in §1, Kayne 1981 proposes that the *n*-word *personne* – 'nobody' cannot occupy subject position because it must undergo LF quantifier raising into locality with the negative operator of the higher clause.⁸ Kayne thus relates the asymmetry in (6) to well-known restrictions on movement from preverbal subject position (that-trace, anti-agreement, etc.; see Rizzi & Shlonsky 2007 among many others).

- (6) a. Je **n'** ai exigé qu' ils arête **personne** [French: Kayne 1981]
 I *ne* have required that they arrest(subj) nobody
 'I didn't require that they arrest anybody'
- b. *Je **n'** ai exigé que **personne** soit arêté
 I *ne* have required that no one be arrested
 (I didn't require that anybody be arrested')

3.2.2 Overt leftwards movement requirement (Haegeman 1995)

There is also evidence that *n*-words must undergo overt movement in some languages.

Haegeman 1995 argues that this is the case in West Flemish. *N*-words obligatorily shift leftwards as shown in the word order contrast in (35).

⁸ This asymmetry has parallels in other languages. In Italian, an embedded subject *n*-word cannot have matrix scope. Hence a double negation reading is the only option, arguing that movement of the *n*-word subject to the matrix clause is blocked (see Rizzi 1982). On the cross-linguistic (non-)transparency of subjunctives see §5.2.

- (35) a. da Valère **van niemand** ketent en-was
 that Valère of no one contented en-was
 'that Valère was not pleased with anyone'
- b. *da Valère ketent **van niemand** en-was
 that Valère contented of no one en-was

Varying accounts of this requirement have been proposed in the literature on negative concord. Haegeman 1995 attributes it to a Neg Criterion, requiring that *n*-words move into a Spec, head relation with negation. In West Flemish the requirement applies in overt syntax. Zeijlstra 2004, 2008 proposes that if the expression with *u*Neg features undergoes phasal transfer in VP, the clausal *i*Neg operator will fail to be induced; hence a negative concord item must raise to the edge of vP. Haegeman & Lohndal 2010 also relate West Flemish *n*-word movement to phasal Transfer, though with a slightly different implementation. What is important for present purposes is mainly to establish that an overt movement requirement for *n*-words has been documented. We present a novel account of it in §6, proposing that *n*-words must always raise to the closest potential A'-position in order to interact with the operator of sentential negation.

3.2.3 Parasitic licensing (Longobardi 1987, Zanuttini 1997, Haegeman 1995)

Longobardi 1987, Zanuttini 1997, Haegeman 1995 show that negative concord items in Italian are barred from certain adjunct islands including infinitival purpose clauses (see (36)a). Interestingly, a negative concord item in this otherwise illicit location can be rendered acceptable by the presence of an *n*-word in object position of the main clause. Thus while (36)a is unacceptable, an *n*-word in exactly the same syntactic context is permissible in (36)b. Zanuttini 1997 and Haegeman 1995 refer to this as *parasitic negation*, a licensing strategy they compare to parasitic gaps -- rescuing of an illicit *wh*- by another gap in a licit position (see (37)a,b).

- (36) a. ***Non** faccio questo [per aiutare **nessuno**] [Italian: Haegeman 1995]
 non I-do this to help no one
- b. **Non** faccio **niente** [per aiutare **nessuno**]
 non I-do nothing to help no one
- (37) a. *What did you file the papers [without reading _]?
 b. Which papers did you file _ [without reading _]?

3.2.4 N-words can't be clitic-dislocated

Rizzi 1997 shows that negative concord items cannot be clitic-dislocated (see (38), adapted from Rizzi 1997:290:(19)). He attributes this restriction to an incompatibility of bare quantificational elements with topicalization.⁹

- (38) a. ***Nessuno**, lo ho visto
 nobody him have.1S seen
 'Noone, I saw him'
- b. ***Tutto**, lo ho fatto
 everything it have done
 'Everything, I did it'

3.2.5 Summary

In this section we have described some key aspects of the distribution of negative concord items, a.k.a *n*-words, in well-studied languages. We have provided several kinds of evidence that *n*-words must undergo movement. In French, this prohibits them from appearing in preverbal subject position of embedded clauses. In West Flemish, it necessitates that they shift leftwards out of VP. In Italian they cannot appear inside adjunct islands unless licensed through a parasitic strategy of closest c-command by another *n*-word. Lastly we showed that negative concord items cannot clitic-dislocate. While the evidence on the latter

⁹ Rizzi claims that examples like (i) in which a bare quantificational element is fronted without doubling are well-formed in both Italian and English because such expressions allow focalization. The native English-speaking author does not share the English judgment, nor does the Xhosa speaker accept a Xhosa version with a [-A] NPI. The issue does not directly impact our investigation so we leave it to future research.

(i) NO ONE, I saw.

point is taken from Italian, our impression is that it is a general property of *n*-words and NPIs more generally, perhaps of bare quantificational elements as Rizzi 1997 proposes.

We turn next to comparing the distribution of Xhosa and Zulu [-A] forms with that of *n*-words, and argue that they are one and the same.

4. Analysis: Xhosa and Zulu augmentless nominals have *uNeg* features

4.1 The basics

We propose that like *uCase*-features, *uNeg* can be present without overt manifestation.

Zulu and Xhosa [-A] NPIs bear abstract *uNeg* features. Adapting Kayne 1981, Haegeman 1995, we assume that such expressions must raise to participate in a concord relation:

(39) **[-A] NPI licensing hypothesis:** Xhosa and Zulu [-A] NPIs are *n*-words which must:

- (i) be licensed through Agree with a local, c-commanding negation operator, AND
- (ii) move leftwards to enter this relation.

As noted in §3, there have been several proposals in the negative concord literature regarding the precise motivation for the movement requirement in (39)ii. We present our own account in §6, analyzing negative concord as an A'-relation.

We saw that [-A] NPIs cannot appear in the preverbal subject position of Xhosa and Zulu embedded clauses (see (3), repeated below). Assuming that they are *n*-words subject to (39), we unify this fact with its counterpart in the French (6)b:

(3) *A-ndi-sho-ngo ukuthi mu-ntu u-fik-ile
 NEG-1SSA-say-NEG.PST that 1-person 1SA-arrive-DISJ1
 'I didn't say that anyone arrived'

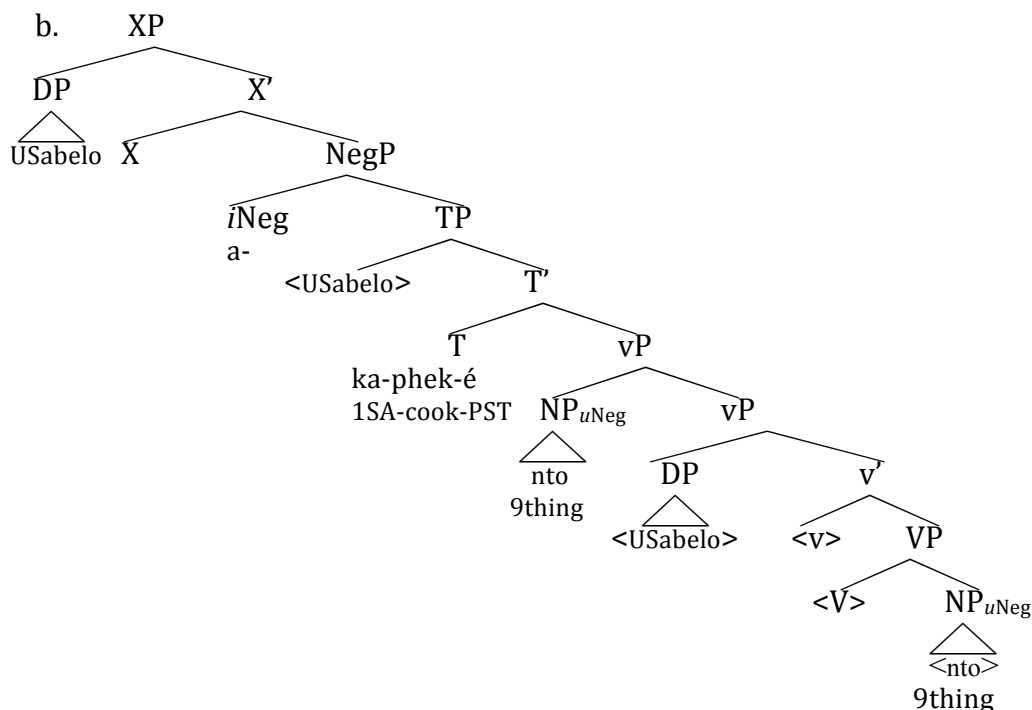
(6) b. *Je n' ai exigé que **personne** soit arrêté
 I *ne* have required that no one be arrested
 (I didn't require that anybody be arrested')

Following Kayne 1981, the *n*-word subject must raise into locality with the matrix clause negation, and cannot do so for the reasons that underlie that-trace effects (see (40) and §6).

(40) [_{CP}...Neg... [_{CP} that SU V O...]]

We assume that direct objects in SVO clauses like (41)a meet (39)ii by raising to phasal Spec, vP.¹⁰ This is string vacuous in Xhosa and Zulu because verbs always adjoin to tense and mood affixes higher in the clause. (41)b sketches a hypothesis for Xhosa and Zulu clausal architecture. NegP is headed by a left edge prefix on the verb, and a preverbal subject occupies Spec of a functional category XP dominating NegP.¹¹ While we represent V-v-to-T in (41)b other possibilities include V-raising as far as X (see Julien 2002, and Carstens & Diercks 2013 on some pros and cons of high landing sites for the Bantu verb).

(41) a. U-Sabelo a-ka-phek-é nto
 1-1Sabelo NEG-1SA-cook-PST thing
 'Sabelo didn't cook anything'



¹⁰ For ease of exposition we defer discussion of applied objects and causees until §4.4.

¹¹ Such an XP has been posited for other languages and identified as AgrP, related to subject agreement (SA); see for example Haegeman 1995. Since SA iterates in Zulu and Xhosa clauses we leave the identity of XP open. We suggest that the *-i* and *-anga* verbal suffixes in negatives like (1) and (25) are past tense allomorphs selected by Neg. (41)b is an initial hypothesis which will need to be fleshed out in future.

As in Xhosa and Zulu, V-v-to-T movement renders object *n*-word raising string-vacuous.

(29) A-ngi-m-bon-i]_{VP} *mu-ntu /u-mu-ntu [Zulu]
 NEG-1SSA-3SOM-see-NEG 1-person/1-1-person
 'I don't see anybody'

4.2 The restricted distribution of [-A] objects in TECs

We have argued that Xhosa and Zulu [-A] NPIs must shift leftwards like the *n*-words of West Flemish (see (35), repeated below).

(35) a. da Valère **van niemand** ketent en-was
 that Valère of no one contented en-was
 ‘that Valère was not pleased with anyone’

b. *da Valère ketent **van niemand** en-was
that Valère contented of no one en-was

Recall that in TECs with simple mono-transitive verbs, the direct object cannot be a [-A] NPI (see (42); we turn to licensing of [-A] subjects in TECs in §4.5).

(42) a. A-ku-bhal-anga m-ntu ncwadi
NEG-17SA-write-NEG.PAST 1-person 9letter
'Nobody wrote any letter!'

- b. *A-ku-bhal-anga u-Sabelo ncwadi
NEG-17SA-write-NEG.PAST1-1Sabelo 9letter
'Sabelo didn't write any letter'

Carstens & Mletshe to appear claim on entirely independent grounds that object shift is unavailable in Xhosa TECs. Assuming this is true, the restriction on Xhosa [-A] NPI objects in TECs follows automatically from this, because they are unable to satisfy (39)ii.

Carstens & Mletshe's argument is based on the fact that objects in TECs cannot be pronominalized. In contrast, objects in SVO clauses can be realized as either an object-marking, clitic type of pronoun or as an independent pronoun (see (43)a,b versus (43)c,d). Subjects of TECs can also pronominalize (see (44)).

- (43) a. U-Sindiswa u-cul-a **ona** OK: Independent
1-1Sindiswa 1SA-sing-FV 6IndPron
‘Sindiswa sings them’
b. U-Sindiswa u-ya-**wa**-cul-a OK: clitic OM in SVO
1-1Sindiswa 1SA-DISJ2-6OM-sing-FV
‘Sindiswa sings them’
c. * Ku-cul-a u-Sindiswa **ona** *Independent pronoun OB in TEC
17SA-sing-FV 1-1Sindiswa 6IndPron
‘It’s Sindiswa who sings them.’
d. *Ku-(ya)-**wa**-cul-a u-Sindiswa *OM pronominal OB in TEC
17SA-(DISJ2)-6OM-sing-FV 1-1Sindiswa
‘It’s Sindiswa who sings them’
- (44) Ku-cul-a **yena** (a-ma-culo) OK: Indep Pro SU in (T)EC
17SA-sing-FV 1IndPron (6-6-songs)
‘(It’s) she (who) sings (songs)’

(45) demonstrates that the same restriction holds in Zulu (thanks to Percy Buthelezi personal communication for these examples).

- (45) a. *Ku-leth-a u-Monwa sona [Zulu]
 17SA-buy-FV1-1Monwa 7IndPron
 ‘(It’s) Monwa (who) brought it’ (i.e. a key)
- b. *Ku-si-leth-a u-Monwa
 17SA-learn-7OA-CAUS-FV 1-1Monwa
 ‘(It is) Monwa (who) brought it’ (i.e. a key)

Diesing (1992, 1997) and Diesing & Jelinek (1995) claim that object pronouns must always vacate VP. They tie this to the unambiguous definiteness of pronouns. They first argue from contrasts like (46)a,b that there are interpretive differences associated with object shift in languages that allow two positions for objects – their base positions and an “object shift” position outside VP. Diesing & Jelinek conclude from such interpretive contrasts that VP is the domain of existential closure, where definites do not belong. Then they present data from German, Icelandic, Arabic, and English demonstrating that even if full DP objects only optionally shift, object pronouns must do so obligatorily (see (47) - (49)).

(46) a. ...weil ich *nicht* **eine** **einzig**e **Katze** gestreichelt habe
 since I not a single cat petted have
 ‘since I have not petted a single cat (no cats petted)’

 b. ... weil ich **eine** **einzig**e **Katze** *nicht* gestreichelt habe
 since I a single cat not petted have
 ‘since there is a single cat that I have not petted’

(47) a. *...weil ich *nicht* **sie** gestreichelt habe
 since I not her petted have

 b. ...weil ich **sie** *nicht* gestreichelt habe
 since I her not petted have
 ‘since I have not petted her’

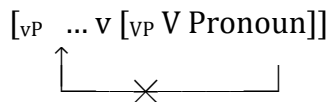
(48) a. Bert looked **the reference** up.
 b. Bert looked up **the reference**.
 c. Bert looked **it** up.
 d. *Bert looked up **it**.

(49) Pronouns must vacate VP (Diesing 1992, Diesing & Jelinek 1995, Diesing 1997)

Carstens & Mletshe to appear conclude that object shift is impossible in Xhosa TECs. Based on this and evidence that accusative Case is absent in TECs, they propose that little *v** is defective in Xhosa ECs.¹² Hence it has no edge feature to shift pronouns.

¹² Based on aspects of the syntax of Zulu TECs, Halpert 2012 also crucially assumes that *v** in Zulu cannot value accusative Case, an assumption consistent with our claim that *v** is defective. We differ however in

(50) *Pronouns cannot escape VP in Xhosa TECs because v* is defective*



Returning to the impossibility of [-A] NPI objects, this follows directly from Carstens & Mletshe's proposals: the [-A] NPI object, unable to shift, cannot satisfy (39)ii. The ban on pronouns and the ban on [-A] NPI objects receive a unified account. Given (45), we propose that the analysis extends to Zulu.

We showed in §2 that Xhosa and Zulu have different ways of circumventing the restriction on [-A] objects in TECs. We turn to these next.

4.3 Parasitic licensing and the Xhosa workaround strategy

Recall that in Xhosa, a direct object in a TEC can be a [-A] NPI just in case the subject is also one (see the contrast between (51)b,c). In contrast, [-A] NPI subjects of TECs are licit whether or not the object is [-A], as shown in (51)a (see §4.5 for an argument that subjects can raise to Spec of a FocusP located between TP and vP).

- (51) a. A-ku-phek-anga m-ntu i-qanda [Xhosa]
 NEG-17SA-cook-NEG.PST 1-person 5-5egg
 'Nobody cooked an egg!'
- b. A-ku-phek-anga m-ntu qanda
 NEG- 17SA- cook NEG.PAST 1-person 5egg
 'Nobody cooked any egg!'
- c. *A-ku-phek-anga u-m-ntu qanda
 NEG-17SA-cook-NEG.PST 1-1-person 5egg
 (Intended: a/the person didn't cook any egg)

We claim that the dependency of [-A] NPI objects on [-A] NPI subjects in Xhosa TECs is a subcase of *parasitic negation* (see Zanuttini 1991, Haegeman 1995). The licit [-A] NPI

assuming with Carstens & Mletshe to appear that this is true only in TECs. Discussion lies outside this papers scope for reasons of length, but see §7 for a brief summary of Halpert's Case-based approach.

subject makes possible the otherwise illicit [-A] NPI object parasitically, as in the Italian (36), repeated below.¹³

- (36) a. ***Non** faccio questo [per aiutare **nessuno**] [Italian]
 non I-do this to help no one
- b. **Non** faccio **niente** [per aiutare **nessuno**]
 non I-do nothing to help no one

For approaches to the mechanics of parasitic negation, see Haegeman 1995 Zanuttini 1997; Haegeman & Lohndal 2010. The choice among them lies outside the scope of this paper. What is important is to recognize the parallelism between (51) and (36): a unified account is possible, under our analysis of [-A] NPIs as *n*-words.

4.4 The loophole of applied and causative morphology

4.4.1 The general proposal

Recall from §2 that the ban on [-A] NPI objects is circumvented in Zulu in a different way: a [-A] NPI can be object in a TEC only if the verb bears applied or causative morphology. (27)a and (28)a demonstrate these strategies (repeated below). (27)b and (28)b-d also illustrate that [-A] NPI indirect object or causee arguments are not licit in TECs. In this respect they pattern with direct objects of simple monotransitives.

(27) In a TEC, DO but not Causee object of V+Caus can be augmentless

- a. a- ku- fund-is- anga mu-ntu lutho [Zulu]
 NEG-17SA- learn-CAUS-NEG.PAST 1person 16thing
 ‘NOBODY taught anything.’
- b. *a- ku- fund- is-anga mu-ntu a-ma-ntombazane
 NEG-17SA-learn- CAUS-NEG.PAST 1-person 6-6-girl
 (Intended: NOBODY taught (the) girls)

¹³ Purpose clauses like these are not islands for licensing of [-A] NPIs in Xhosa and Zulu. This greater permeability suggests to us that they are smaller, lacking perhaps a ForceP boundary present in Italian. See also §5.2 on cross-linguistic variation in the permeability of tensed clauses.

(28) **Ditransitive Expletives: DO can be augmentless, but IO object of Appl cannot**

a. ✓ **Augmentless–Augmented–Augmentless** [Zulu]

A-ku-thum-el-anga mama i-zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-10-child 9money
 'MOTHER didn't send the children any money.'

b. * **Augmentless–Augmentless–Augmentless** [Zulu]

*A-ku-thum-el-anga mama zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-child 9money

c. * **Augmented–Augmentless–Augmentless**

*A-ku-thum-el-anga u-mama zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1-1mother 10-child 9money

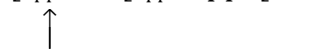
d. * **Augmentless–Augmentless–Augmented**

*A- ku- thum- el- anga mama zi-ngane i-mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-child 9-9money

Based on evidence that Zulu and Xhosa double object constructions are “symmetrical”, we adopt the analysis in McGinnis 2001, under which the addition of applied or causative morphology introduces edge features above VP. These provide a means for a [-A] NPI direct object to meet the raising requirement in (39)ii. But a [-A] NPI indirect object has access only to an edge feature of v^* to raise it. Since v^* is defective in TECs, the result is ill-formed.

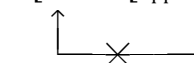
(52) a. *Appl of symmetrical double object constructions has a phasal edge feature. Hence [-A] NPI direct objects can satisfy (39)ii by moving to the edge of ApplP*

[_{ApplP} IO [_{Appl'} Appl [_{VP} V DO]]]]



b. *But since v^* is defective in TECs, IO in a TEC cannot satisfy (39)ii:*

* [_{VP} ... V [_{ApplP} IO [_{Appl'} Appl [_{VP} V ...]]]]]

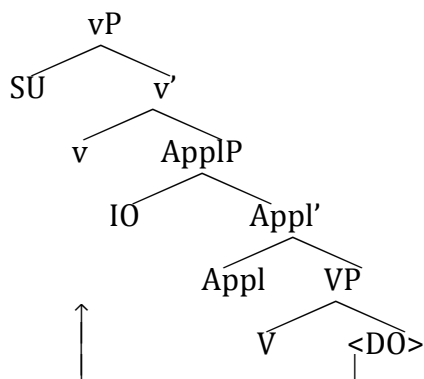


We flesh out these proposals in more detail below.

4.4.2 [-A] NPIs in TECS of applied constructions

We begin with applied constructions. Following Marantz 1993, Pylkannen 2008 among others, we assume that Bantu applicative morphology heads an ApplP situated between vP and VP with the indirect object in its Spec. Zulu and Xhosa double object constructions are *symmetrical*: either direct or indirect objects can passivize or be realized as an object marker on the verb. We adopt the analysis of McGinnis 2001 under which the Appl head has a phasal edge feature that can raise the direct object to the level of the indirect object in symmetrical languages, permitting it to feed passive and pronominalization. (53) illustrates the structure and DO-raising. The evidence for symmetry is presented in the Zulu (54) and (55), taken from Adams 2010; the Xhosa facts are the same. Following Adams 2010, consistent word order of S-V-IO-DO reflects “tucking in” when the direct object moves to a Spec, ApplP (in case of ‘give’ in (55), we assume Appl is non-overt).

(53) *In a “symmetrical” language, Appl is a phase head with an edge feature that raises DO to the level of IO, feeding passive and object marking.*



- (54) a. I-ncwadi y-a-fund-el-w-a a-ba-ntwana [Zulu]
 9-9book 9SA-PRES-read-APPL-PASS 2-2-children
 ‘The book is read to the children’
- b. A-ba-ntwana ba-fund-el-w-a i-ncwadi
 2-2-children 2SA-read-APPL-PASS-FV 9-9book
 ‘The children are read the book’

- (55) a. U-mama u-ba-nik-é i-ncwadi
 1-1mother 1 SA-20M-give-PST 9-9book
 'Mother gave them the book'
- b. U-mama u-zi-nik-é a-ba-ntwana
 1-1mother 1SA-100M-give-PASS 2-2-children
 'Mother gave them to the children' (i.e. the books)

Summing up, our proposal about the contribution of Appl is (56). [-A] direct object NPIs in TECs have the ability to raise leftwards if an edge feature is introduced by Appl assuming with Carstens & Mletshe 2013 that v* otherwise has no phasal edge feature in TECs.

- (56) **NPI licensing by Appl:** Appl introduces edge-features that allow a [-A] direct object NPI to shift leftwards, satisfying (39)ii.

We saw in (27) that the applied object in an EC cannot be a [-A] NPI. (26) showed that in contrast, this position is licit for [-A] NPIs in SVO clauses ((26) and (27) repeated below):

(27) **Ditransitive Expletives: DO can be augmentless, but IO object of Appl cannot**

- a. ✓ **Augmentless–Augmented–Augmentless** [Zulu]

A-ku-thum-el-anga mama i-zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-10-child 9money
 'MOTHER didn't send the children any money.'

- b. * **Augmentless–Augmentless–Augmentless** [Zulu]

*A-ku-thum-el-anga mama zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-child 9money

- c. * **Augmented–Augmentless–Augmentless**

*A-ku-thum-el-anga u-mama zi-ngane mali
 NEG-17SA- send-APPL- NEG.PAST 1-1mother 10-child 9money

- d. * **Augmentless–Augmentless–Augmented**

*A- ku- thum- el- anga mama zi-ngane i-mali
 NEG-17SA- send-APPL- NEG.PAST 1mother 10-child 9-9money

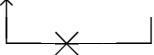
(26) **In an SVOO clause, either or both objects can be [-A]**

- a. U-Sabelo a-ka-nik-é a-ba-ntwana nto [Xhosa]
 1-1Sabelo NEG-1SA-PST 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-PST 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-PST 2-children 9thing
 ‘Sabelo didn’t give any children anything’

This pattern is accounted for as follows. Owing to its Merge location in Spec Appl, an applied object can only be shifted leftwards by a phasal edge feature of v^* (see (57)) Robust v^* of SVO(O) clauses has an edge feature¹⁴ but, as proposed above, v^* of TECs does not. Hence the ban on [-A] NPI applied objects in TECs falls together with the restriction on direct object [-A] NPIs in TECs. Both need to raise to satisfy (39)ii, but cannot do so in a TEC where v^* cannot shift objects.

(57) * [_{VP} ... v [_{ApplP} IO [_{Appl'} Appl [_{VP} V ...]]]]



Significantly, applied morphology does not make it possible for the direct object in a TEC to pronominalize:

- (58) *Ku-leth-el-a u-Monwa a-ba-ntwana sona [Zulu]
 17SA-buy-APPL-FV 1-1Monwa 2-2-children 6IndPron
 ‘(It’s) Monwa (who) brought it to the children’ (i.e. a key)

We interpret (58) as indication that the Spec, Appl landing site is not high enough for a pronoun. This state of affairs motivates sharpening the proposals a bit. We propose that local movement suffices for [-A] NPIs to meet (39)ii, but that pronouns must move higher: they must escape the complement to v^* .

These assumptions capture the facts easily, as (59) shows (for consistency, we depict pronoun and NPI raising as tucking-in; see discussion above (53)). Appl can raise a

¹⁴ To account for two [-A] NPI objects we assume that robust v^* can shift multiple objects. We assume anti-locality will prevent an IO in Spec, Appl from raising to phasal Spec of Appl (Grohmann 2003, Abels 2003).

direct object to the height of the indirect object and this suffices to fulfill the [-A] NPI raising requirement. Appl cannot, however raise a pronoun out of the complement to v*.

(59) a. *Raising of [-A] NPI OB to Spec, Appl suffices because NPIs just need local raising:*

[_{VP} SU v [_{ApplP} IO [_{ApplP} NPI [_{Appl'} Appl [_{VP} V <NPI>]]]]]

b. *Raising a pronoun to Spec, Appl fails because pronouns must escape v*'s complement*

*[_{VP} SU v [_{ApplP} IO [_{ApplP} Pronoun [_{Appl'} Appl [_{VP} V <Pronoun>]]]]]

4.4.3 [-A] NPIs and pronouns in TECs of causatives

Turning now to causatives constructions, (60) and (61) show that they are also symmetrical. These examples are from Zulu;¹⁵ but the Xhosa facts are again the same.

(60) a. I-si-Zulu si-fund-is-w-a a-ba-ntwana
7-7-Zulu 7SA-read-CAUS-PASS-FV 2-2-children
'Zulu is taught to the children'

b. A-ba-ntwana ba-fund-is-w-a i-si-Zulu
2-2-children 2SA-read-CAUS-PASS-FV 7-7-Zulu
'The children are taught Zulu'

(61) a. U-Sabelo u-si-fund-is-a abantwana i-si-Zulu
1-1-Sabelo 2SA-7OM-read-CAUS-PASS-FV 2-2-children 7-7-Zulu
'Sabelo teaches it to the children' (i.e. Zulu)

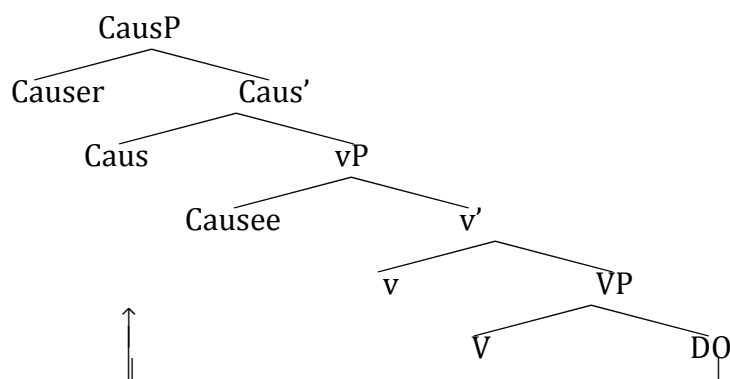
b. U-Sabelo u-ba-fund-is-a i-si-Zulu
1-1-Sabelo 2SA-2OM-read-CAUS-PASS-FV 7-7-Zulu
'Sabelo teaches them Zulu' (i.e. the children)

Halpert 2011, 2012 proposes the structure in (62) for Zulu causatives (see also Baker, Safir, and Sikuku 2012, Pylkkanen 2008, McGinnis 2001). The evidence of symmetry argues that a phasal edge feature is available in causatives just as it is in applicatives. Since it is the causee and DO that are symmetrical in a transitive causative, a first hypothesis is that Caus in a symmetrical language selects a flavor of vP with an edge feature, on this analysis.¹⁶

¹⁵ Thanks to Percy Buthelezi for these examples.

¹⁶ Halpert 2012 raises an interesting question: in a Zulu TEC containing both Appl and Caus, why aren't two

(62) *Hypothesis for symmetry in causative constructions (to be revised): Cause selects vP with an edge feature, permitting the direct object to raise across the cause.*



The proposal in (62) correctly predicts symmetry in Zulu and Xhosa causatives and explains why adding the relevant morphology makes a [-A] NPI direct object licit. But it is not without problems.

First, attributing DO-over-causee movement to the edge feature of v^* has a disadvantage: v^* is hypothesized to have such a feature universally. It is therefore not transparent at all how to distinguish symmetrical from asymmetrical object languages where causatives are concerned, under this analysis.

Second, recall our proposal that pronouns must raise out of the complement of v^* . Since the edge feature of v^* does the raising of DOs, under the approach to causatives in (62), we expect a DO pronoun to be licit. But this is not the case (see (63) and (64)).

(63) *Ku-fund-is-a u-Sipho a-ba-ntwana sona
 17SA-learn-CAUS-FV 1-1Sipho 2-2-children 6IndPron
 '(It is) Sipho (who) teaches it to the children' (i.e. Xhosa)

(64) If v^* raises DO to the height of Causee in Spec, vP, why doesn't this suffice for a DO pronoun? How should the domain that pronouns must escape be defined?

- a. [_{CausP} Causer Caus [_{vP} Causee [_{vP} NPI [_{vP} V <NPI>]]]] OK
- b. * [_{CausP} Causer Caus [_{vP} Causee [_{vP} Pronoun [_{vP} V <Pronoun>]]]]

[-A] objects licit? Similarly, in an SVOO clause, why must the medial object be [+A]? See §7 for discussion of Halpert's answer to this question and some related issues. We hope a fuller exploration of Caus/App'l's roles in (parasitic) licensing and Transfer will yield further insight, but that lies outside this paper's scope.

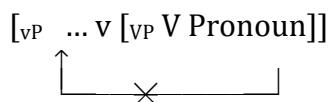
Lastly, recall that a direct object can be a [-A] NPI in a TEC of a causative verb, but the causee cannot (see (27), repeated below).

(27) In a TEC, DO but not Causee object of V+Caus can be augmentless

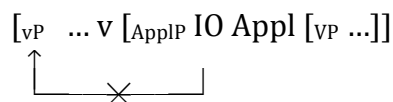
- a. a- ku- fund-is- anga mu-ntu lutho [Zulu]
 NEG-17SA- learn-CAUS-NEG.PAST 1person 16thing
 ‘NOBODY taught anything.’
- b. *a- ku- fund- is-anga mu-ntu a-ma-ntombazane
 NEG-17SA-learn- CAUS-NEG.PAST 1-person 6-6-girl
 (NOBODY taught (the) girls)

As noted in §4.4.1, this closely parallels the fact that in a TEC of an applied verb, the direct object can be a [-A] NPI but the applied object cannot. But the analysis in (62) forces the account to be slightly different. Whereas, by assumption, direct object and applied objects in TECs cannot be [-A] NPIs because defective v^* of TECs cannot raise them, under (62) we must assume that v^* of a TEC is robust just in case it is selected by CAUS which, selected by non-agreeing T of ECs, is defective itself. This is not entirely implausible, but the lack of parallelism, sketched in (65) and (66) versus (67), seems less than ideal.

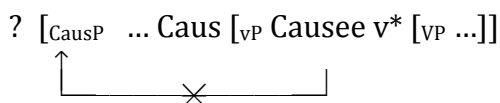
(65) Pronoun and NPI objects cannot escape VP in Xhosa TECs because v^ is defective*



(66) Indirect objects of Appl cannot be pronouns or NPIs because v^ is defective*

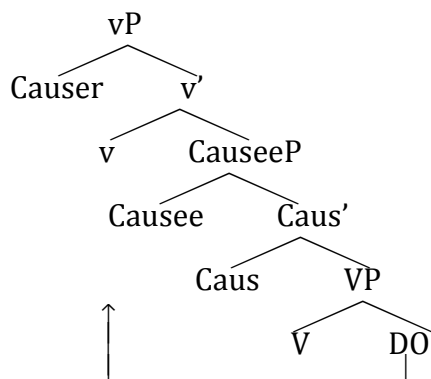


(67) But under (62) the impossibility of a [-A] NPI causee in TECs reduces not to defective v^ but to defective Caus.*



For these reasons we suggest a revision of (62) locating a CauseeP just above VP, parallel to ApplP (see (68) and see also Jerro 2013 for an analysis along these lines). If the causee is an agent, it Merges in Spec of CauseeP; otherwise, perhaps the theme argument of an unaccusative raises. In languages with symmetrical causatives, Caus has a phasal edge feature which suffices to fulfill the raising requirement for [-A] NPIs in a way parallel to the account of direct object raising in applicatives; §6 presents a proposal that the phasal edge of Appl and Caus can be an A or an A' position, and that the latter possibility makes an *n*-word licit. It also permits a completely parallel account of why causees and applied objects cannot be [-A] NPIs in terms of the defective nature of v^* in TECs. Assuming pronouns must raise out of the complement of v^* , the systematic impossibility of object pronouns in TECs is captured in a simple and unitary fashion.

(68) *In a language with symmetrical causatives, the head of CauseeP raises the DO*



This proposal leaves open an important question. In a causative construction, the causee argument performs the action of the main verb while in an applicative, an applied object does not. We hope that the compositional semantics of causative and applied constructions can derive this difference, but details lie outside this paper's scope. For present purposes the approach is attractive in capturing the distribution of [-A] NPIs and the contrast between NPIs and pronouns in a consistent way.

4.4.4 Interim summary

We have argued that Xhosa and Zulu [-A] NPIs are *n*-words and must undergo leftwards movement, like *n*-words in West Flemish. The ban on [-A] NPI direct objects in TECs therefore falls together with the impossibility of pronominal objects in TECs: following Carstens & Mletshe 2013, there is no object shift in TECs because *v** is defective in TECs.

We have also argued that applied or causative morphology adds a phasal edge feature that can raise the direct object internally to *v*P. This suffices for *n*-words but not for pronouns, which must move all the way out of the complement of *v**.

We turn now to the issue of why [-A] NPIs are always licit in the post-verbal subject position of TECs.

4.5 [-A] subjects in TECs

Recall that a [-A] NPI is always acceptable as the post-verbal subject in a TEC (see (24), repeated below). Unlike [-A] NPI objects in TECs, subjects do not need a c-commanding or adjacent expression of the same features:

(24) a. ✓**VSO augmentless-augmented** [Zulu; Halpert 2012:102]

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

b. ***VSO augmented-augmentless**

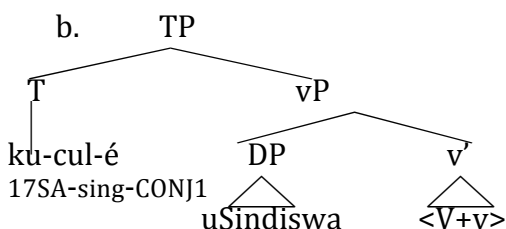
*A-ku-phek-anga u-mu-ntu qanda
NEG-17SA- cook-NEG.PAST 1-1person 5egg
(Nobody cooked any egg)

Halpert uses upper case in the translation line to indicate that the post-verbal subject in (24) receives a focused interpretation. This is a distinctive characteristic of both Xhosa and Zulu ECs as previously noted. Carstens & Mletshe to appear account for it in Xhosa with a proposal that the highest DP in an EC may raise into Spec of a middle field FocusP. For

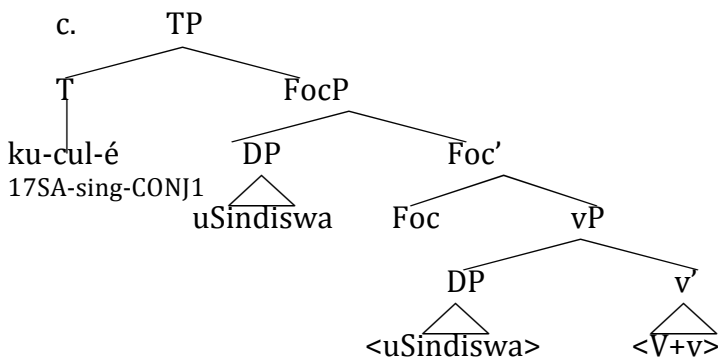
subjects of intransitives, a neutral reading is also possible; thus (69)a can function as a simple narrative statement, responding to a ‘What happened?’ question. For this reason Carstens & Mletshe propose the alternatives in representations in (69)b,c corresponding to the two readings for (69)a. Halpert 2012 shows that focus readings are available for post-verbal subjects in Zulu TECs just as they are in Xhosa. Given the many points of similarity between the two languages, we propose that the same mechanism is responsible.

- (69) a. Ku-cul-é u-Sindiswa
 17SA-sing-CONJ1 1-1Sindiswa
 R#1: ‘Sindiswa sang’
 R#2: ‘It’s Sindiswa who sang’

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



Reading #1

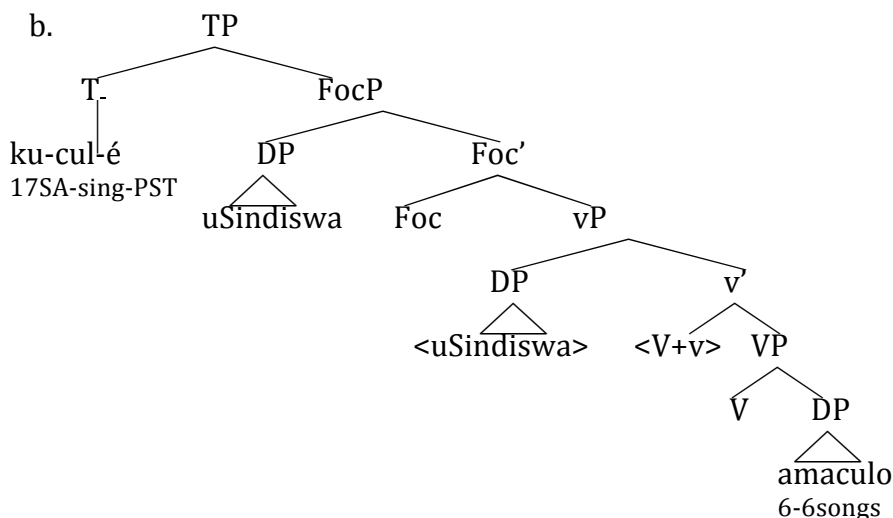


Reading #2

In situ proposals have been advanced for post-verbal focus in Zulu and other languages (see Cheng and Downing 2012, Hyman & Watters 1984 among others). But Carstens & Mletshe show that the focused reading is obligatory for the post-verbal subjects in VSO clauses. They explain this in terms of forced raising of external arguments out of vP, landing in Spec, Foc of TECs. In contrast, in situ analyses have nothing to say about this striking fact.

- (70) a. Ku-cul-é u-Sindiswa a-ma-culo
 17SA-sing-PST 1-1Sindiswa 6-6-songs
 'It's Sindiswa who sang songs'

(Cannot answer, "What happened?")



There are several plausible hypotheses as to the motivation for forced raising of transitive subjects out of vP to Spec, Foc in TECs. They include labeling issues (Chomsky 2013), linearization problems (Richards 2011), and Case-theoretic problems (Alexiadou & Anagnostopoulou 1998, Carstens & Mletshe to appear). We will explore this question in §7. What is significant to the discussion at hand is that raising of subjects to Spec, Foc provides an independently motivated means for [-A] NPI subjects to satisfy the raising requirement in (39)ii. And unlike their [+A] counterparts, [-A] NPI subjects of intransitive ECs have an obligatory focus reading, just like subjects of TECs:

- (71) a. A-ku-cul-anga mntu! *Felicitous answer to, "Who sang?"*
 NEG-17SA-sing-NEG.PST 1person *Anomalous answer to, "What happened?"*
 'NOBODY sang!'
- b. A-ku-theng-anga mntu i-ncwadi/ncwadi *Can answer, "Who bought a book?"*
 NEG-17SA-buy-NEG.PST 1person 9-9book/9book *Anomalous answer to, "What happened?"*
 'NOBODY bought a/any book!'

Summing up, Carstens & Mletshe to appear propose that subjects of TECs all raise to a middle field Spec, Focus, and subjects of intransitive ECs do so when they receive a focused

interpretation. [-A] NPI subjects are uniformly interpreted with focus, so we assume they always raise to Spec, Foc, satisfying the requirement in (39)ii.

4.6 Summary

This section has proposed that all restrictions on the distribution of [-A] NPIs in Xhosa and Zulu are consistent with assuming that they must undergo leftward movement and be local to c-commanding negation in their surface positions. Their unacceptability in preverbal subject position has a parallel in French (and see footnote 7 on interpretive parallels in other languages). Their resistance to clitic-dislocation is also shared by *n*-words in other languages. The distribution of [-A] NPIs in Xhosa TECs is readily explained in terms of (i) *v**'s lack of an edge feature in TECs; (ii) introduction of edge features by Appl and Caus. The fact that [-A] NPIs are licit subjects in Xhosa ECs follows from the availability of raising for EC subjects into Spec of a low FocusP. These solutions are not stipulated to address the distribution of [-A] NPIs. The analysis of symmetrical double object constructions in terms of a phasal Appl/Caus is motivated in McGinnis 2001 (and see Adams 2010 for application of the analysis to Zulu). The remaining factors that we have relied on in our account are proposed by Carstens & Mletshe to appear in order to explain the peculiar syntax of ECs, including a ban on object pronouns and forced focus for subjects of TECs.

As noted in the introduction, Halpert 2012 accounts for the set of Zulu facts in terms of the assumption that Zulu [-A] NPIs have Case-licensing needs that [+A] nominals are not constrained by. In §7 we will review her analysis and argumentation, and summarize the evidence in Carstens & Mletshe to appear that Xhosa [+A] nominals do in fact require structural Case, while [-A] nominals do not. Hence Halpert's analysis cannot be extended to

Xhosa, whereas our analysis of [-A] NPIs provides a unified account of near identical phenomena in these two closely related languages.

But first in §7 we explore two ways in which Xhosa and Zulu [-A] NPIs seem to differ from *n*-words of more familiar languages, concluding that they are only apparent problems for the account. §6 argues that negative concord in Xhosa and Zulu is an A'-relation, and suggests that this is generally the case across languages.

5. Apparent problems that are not real problems

5.1 *N*-words in other languages appear to have independent negative force

A point of superficial contrast between Xhosa and Zulu [-A] forms on the one hand and *n*-words on the other is that [-A] forms cannot be used as negative sentence-fragment answers or as negative subjects. In this they resemble English NPIs:

- | | |
|---|--|
| (72) a. Chi ha telefonato?
who has called
'Who called?' | b. Nesunno (ha telefonato) [Italian]
N-body has called
'Nobody (called)' |
| (73) a. Who called? | b. *Anybody (called) [English] |
| (74) a. Ng'u-bani o-be-fowun-ile?
COP'1-1who whAGR-AUX-call-DISJ1
'Who called?' | b. * <u>Mntu</u> (u-fowun-ile) [Xhosa]
<u>1person</u> 1SA-call-DISJ1
(Intended: 'Nobody (called)') |
| (75) a. Ng'u-bani o-fowun-ile
1-1who wh.AGR-call-DISJ1
'Who called?' | b. * <u>Mu-ntu</u> (u-fon-ile) [Zulu]
<u>1-1-person</u> (1SA-call-DISJ1)
(Intended: 'Nobody (called)') |

But Zeijlstra (2008) argues that *n*-words in cases like (72)b only seem, misleadingly, to contribute negative meanings, because they induce the presence of a silent negative operator with interpretable (*i*Neg) features. This way, there is no expectation of systematic double negation readings when the same *n*-words co-occur with other negative elements.¹⁷

(76) [OP_{*i*Neg}....nessuno_{*u*Neg}] (= (72)b)

¹⁷ Double negation readings also indicate the presence of multiple negative operators; see Zeijlstra 2008 for details.

Zeijlstra's proposal makes available a very simple account of the contrast between *n*-words of familiar languages and the [-A] NPIs of Xhosa and Zulu. We need only conclude that the bearers of interpretable negation in Xhosa and Zulu are always overt (see (77)).

(77) Proposal: there are no silent negation operators in Xhosa and Zulu. The *n*-word licenser must accordingly be overt.

5.2 [-A] NPIs in indicative complements

In well-studied negative concord languages, the one systematic exception to a clause-mate condition is that some languages allow *n*-words to appear in subjunctive complements embedded under negation (see repeated below, and (78)). We follow Zeijlstra 2008 in assuming that subjunctives lack the ForceP layer (on which see Rizzi 1997), making them more permeable than their indicative counterparts.

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

(78) *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'

For some Zulu and Xhosa speakers, [-A] NPIs can appear in indicative complements, providing the higher clause contains negation (the Zulu (79) is from Halpert 2012)

(79) A-ngi-cabang-i ukuthi u-Sipho u-bon-é muntu
 NEG-1SSA-think-NEG that 1-1Sipho 1SA-see-CONJ1 1person
 'I don't think that Sipho saw anyone'

(80) U-Sindiswa a-ka-tshongo ukuba u-Mary u-theng-é nto [Xhosa]
 1-1Sindiswa NEG-1SA-say that 1-1Mary 1SA-buy-CONJ1 9thing
 'Sindiswa didn't say that Mary bought anything'

But like French subjunctives, Xhosa and Zulu indicative complements are permeable in ways that Indo-European indicatives are not. In particular, A-movement is possible out of tensed clauses, preserving idiomatic readings; see the Xhosa (81), and (82) from Halpert 2012. To account for this fairly widespread pattern in Bantu languages, Carstens & Diercks

2013 propose that indicatives are not all phasal in these languages. Permeable tensed clauses are perhaps FinPs (Rizzi 1997, 1999). Carstens to appear proposes that the left-edge phase head is Int(errogative) of Rizzi 1999, which has positive and negative values and is always complement to Force (see (83)).

(81) U-Hili u-bonakala [okokuba u-phum-ile e-ngcongolwe-ni] [Xhosa]
 1-1Hili 1SA-seem that 1SA-exit-PST LOC-10weeds-LOC
 ‘The secret seems to have come out’
 [Lit: the troll seems that exited the weeds]

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

(83) [_{ForceP} Force ... [_{IntP} Int... [_{FinP} Fin [_{TP}...]]]]
 |
 Carstens 2012: Int triggers phasal Transfer in Lubukusu

That said, there are speakers of both Xhosa and Zulu who reject cross-clausal licensing of [-A] NPIs except into subjunctives (see (84), also from Halpert 2012). Halpert reports that the same Zulu speakers (who numbered 12 out of her sample of 30) also reject a kind of left-dislocation out of embedded indicatives (see (85) versus the subjunctive (86)), supporting our claim that clausal porosity is a crucial variable and suggesting that for these speakers, embedded indicatives have enough structure to be barriers to A'-processes. This provides support for the claim we will develop in §6 that *n*-word licensing is an A'-relation. It also confirms that [-A] NPIs of Zulu and Xhosa must be local to negation in a way that English-type NPIs are not.

(84) *A-ngi-cabang-i ukuthi u-Zinhle u-phek-é lutho [Zulu]
 Neg-1sSA-think-NEG that 1-1Zinhle 1SA-cook-CONJ1 16thing
 ‘I don’t think that Zinhle cooked anything’ *Out for 12 of 30 speakers*

(85) * u-Zinhle ngi-cabanga [ukuthi u- zo- xova u-jeqe namhlanje]
 1-1Zinhle 1sgSA-think that 1SA-FUT-make 1-1steamed.bread today
 [intended: ‘(As for) Zinhle, I think that she will make steamed bread today.’] *As above*

- (86) u-Zinhle ngi-cela [ukuthi a- xov- e u-jeqe namhlanje]
 1-1Zinhle 1sg-SA-request that 1SA.SUBJ-make-SUBJ 1-1steamed.bread today
 ‘(As for) Zinhle, I ask that she make steamed bread today.’ *OK for all speakers*

The facts of this section are compatible with the assumption that a [-A] NPI in Xhosa or Zulu may be separated from negation by a FinP boundary, and that subjunctives are FinPs. For speakers who accept cross-clausal licensing into indicatives, it looks as if they are FinPs too, though the next subsection will discuss some contrasts suggesting a key difference.

5.3 Locality and depth of embedding

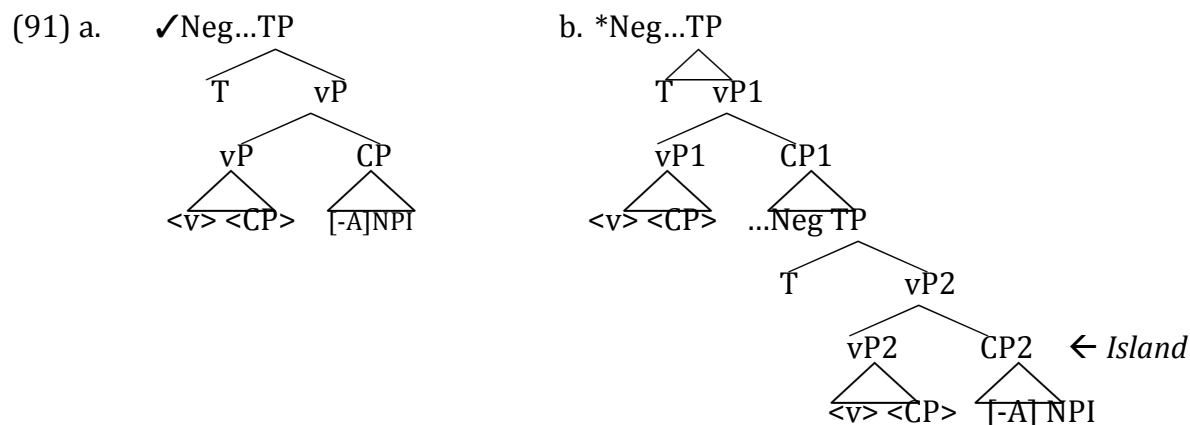
Recall the evidence we presented in §2.2 demonstrating that degree of embedding is important too. Ideally an account of the locality relation between negation and [-A] NPIs should explain the fact that a [-A] NPI located in a multiply embedded subjunctives is possible (see (19), repeated below) whereas even for speakers who accept a [-A] NPI in an embedded indicative, only one level of embedding is tolerated. This is demonstrated in the Xhosa (87) through (89) and in the schematics in (90).

- (19) ✓A-ndi-fun-i okokuba u-Sabelo a-cel-e ukuthi u-Mary
 NEG-1SSA-want-NEG that 1-1Sabelo 1SA.SUBJ-ask-SUBJ that 1-1Mary
 a-theng-e nto
 1SA-buy-PST 9thing
 ‘I don’t want Sabelo to ask Mary to buy anything’
- (87) ✓U-John a-ka-tshongo (ukuba) u-Mary u-theng-é nto
 1-1John NEG-1SA-say (that) 1-1Mary 1SA-buy-CONJ1 9thing
 ‘John didn’t say that Mary bought anything’
- (88) *U-John a-ka-tshongo (ukuba) ndi-ya-cabanga (ukuba) u-Mary u-theng-e nto
 1-1John NEG-1SA-say that 1SSA-DISJ1-think that 1-1Mary 1SA-buy-PST 9thing
 ‘John didn’t say that I thought Mary bought anything.’
- (89) *U-Sabelo a-ka-tshongo (ukuthi) u-ya-cabanga (ukuthi) w-a-bon-a muntu
 1-1Sabelo NEG-1SA-say that 1SSA-DISJ1-think that 1SA-PST-see-FV 1person
 ‘Sabelo didn’t say he thinks I saw anybody’
- (90) a. ✓[...NEG...[SUBJUNCTIVE ...[SUBJUNCTIVE[-A] NPI]]]
 b. *[...NEG...[INDICATIVE ... [INDICATIVE[-A] NPI]]]

Based on (19) and (87) we continue to assume that both subjunctives and indicatives are permeable to negation licensing of the [-A] NPIs, but relate the relevant contrasts to the evidence in §3.2.3 that adjuncts can be islands for this kind of licensing see (36), repeated below.¹⁸

- (36) a. ***Non** faccio questo [per aiutare **nessuno**] [Italian: Haegeman 1995]
 non I-do this to help no one
 [Intended: I don't do this to help anybody]

Indicative CPs have a well-known tendency to extrapose from their thematic positions and adjoin rightwards, perhaps avoiding positions in which structural Case is valued (see Stowell 1981). A potential line of account might suppose that an adjoined indicative is not itself opaque for the [NEG...*n*-word] relation, but one adjoined clause within another constitutes an island. Our illustrations assume indicatives adjoin to vP, and illustrates the indicative under indicative pattern:



This proposal is not without its difficulties. It assumes crucially that all negative indicatives extrapose, but a standard source of extraposition evidence is not available to support it. In affirmative clauses, the *conjoint/disjoint* contrast provides evidence that indicative complements only optionally extrapose. Disjoint forms are tense morphemes on verbs that

¹⁸ This kind of additive effect is reminiscent of the *Barriers* framework of Chomsky 1986, under which one might claim that an indicative clause is a blocking category and another atop it counts as a barrier. The insight does not translate precisely into current theoretical notions. We leave it aside.

are final in their domains (see (92)a) and conjoint forms are non-final (see (92)b). Since either is possible before an affirmative CP complement, Carstens & Mletshe to appear argue that CPs in generally extrapose only optionally (see (93)).

- (92) a. A-ba-ntwana ba-fund-ile/*é. *disjoint form is final*
 2-2-children 2SA-learn-DISJ1/*CONJ1
 'The children studied'
- b. A-ba-ntwana ba-fund-é/*ile *conjoint form is non-final*
 2-2-children 2SA-learn-CONJ1/*DISJ1 i-si-Xhosa. 7-7-Xhosa
 'The children studied Xhosa'
- (93) a. u-gqirha u-bon-é [_{VP} <V+v> [_{CP} ukuba u-m-ntwana u-ya-gul-a]].
 1-doctor 1SA-see-CONJ1 that 1-1-child 1SA-DISJ2-be.sick-FV
 'The doctor saw that the child is sick'
- b. u-gqirha u-bon-ile [_{VP} <V+v> <CP>]_{VP} [_{CP} ukuba u-m-ntwana u-ya-gul-a].
 1-doctor 1SA-see-DISJ1-FV that 1-1-child 1SA-DISJ2-be.sick-FV
 'The doctor saw that the child is sick'

There is no conjoint/disjoint distinction for negative verbs. We leave our speculative solution as one to be confirmed and refined in future research.

Summing up, both subjunctives and indicatives seem to have transparent boundaries for the majority of speakers, based on the pattern of single embeddings in (19) and (87). But not all speakers accept [-A] NPIs in embedded indicatives, and even they reject them if multiply embedded. We have suggested that they extrapose and adjoin, leading to islandhood. But the precise analysis is less important, for this paper's purposes, than the fact that [-A] NPIs in Xhosa and Zulu are more constrained in their locality to negation than their English counterparts, which are indifferent to depth of embedding: *I don't think Mary said John bought anything* is perfect, unlike comparable statements involving [-A] NPIs in Xhosa, and Zulu, and *n*-words in well-studied negative concord languages like French, West Flemish, and Italian. Thus language particular details aside, [-A] NPIs align better with *n*-words than with English-style NPIs.

6. Negative concord is an A'-Agree relation

This section argues that the Agree relation licensing [-A] NPIs in Xhosa and Zulu requires that they occupy A' positions and hence analyzes negative concord as an A' relation.

Recall that a [-A] NPI cannot be an indirect object or causee in a TEC (see (28) repeated below). We have argued that this is because they are embedded under defective v^* , which cannot object-shift them to satisfy the movement requirement in (39)ii, repeated below. But adding an indirect object or causee makes possible a [-A] NPI direct object – a fact we reduced to the phasal edge feature introduced by Appl and Caus in symmetrical double object constructions.

(28) Ditransitive Expletives: DO can be [-A], but IO object of Appl cannot

a. ✓ **Augmentless–Augmented–Augmentless** [Zulu]

A-ku-thum-el-anga mama i-zi-ngane mali
 NEG- 17S- send- APPL- NEG.PAST 1mother 10-10-child 9money
 'MOTHER didn't send the children any money.'

b. ***Augmentless–Augmentless–Augmentless** [Zulu]

*A-ku-thum-el-anga mama zi-ngane mali
 NEG- 17S- send- APPL- NEG.PAST 1mother 10-child 9money

c. ***Augmented–Augmentless–Augmentless**

*A-ku-thum-el-anga u-mama zi-ngane mali
 NEG- 17S- send- APPL- NEG.PAST 1-1mother 10-child 9money

d. ***Augmentless–Augmentless–Augmented**

*A-ku-thum-el-anga mama zi-ngane i-mali
 NEG- 17S- send- APPL- NEG.PAST 1mother 10-child 9-9money

(39) [-A] NPI licensing hypothesis: [-A] NPIs are *n*-words which must:

- (i) be licensed through Agree with the operator of clausal negation, and
- (ii) move leftwards to enter this relation.

These facts argue that the raising of [-A] NPIs cannot be entirely explained on the basis of any particular locality with the negative operator that licenses them. The signature

property of languages with symmetrical double object constructions is that their direct object and applied or causee objects behave as if they were at the *same height* in the clause. Only this assumption explains why passive and pronominalization treat them alike.

The pattern of facts shows clearly that a [-A] NPI externally merged in Spec, Appl or Caus is illicit, while one raised to an equivalent hierarchical location is well formed, as shown in (94) (nb the “tucking in” derivation; see §4.4 and Adams 2010).

- (94) a. * [_{VP} SU v [_{ApplP} NPI [_{Appl'} Appl [_{VP} V ...]]]]
 b. ✓ [_{VP} SU v [_{ApplP} IO [_{ApplP} NPI [_{Appl'} Appl [_{VP} V <NPI>]]]]]

The only principled difference we can see between the two positions is that the position for the raised direct object is created by a phasal edge feature – something that Chomsky 2008 proposes to be the defining property of an A'-position.

The extra Spec of Xhosa and Zulu Appl and Caus cannot be classified as purely an A' position, since raising of the direct object to this position by assumption feeds the A-relations of passive and pronominalization. But if we adopt a weaker conclusion, namely that phasal Specs *CAN* be A'-positions, we have the beginnings of an account. We reproduce from §1.1 table (8), summarizing the distribution of [-A] NPIs. The illicit positions for [-A] NPIs are externally merged positions and preverbal subject positions – the set of pure A-positions.

(8) *Licit sites for [-A] NPIs*

Illicit sites for [-A] NPIs

a. Phasal Spec, vP of SVO clauses	d. Sister to V
b. Spec of middle-field FocusP	e. preverbal subject position
c. Phasal Spec, Appl or Caus of symmetrical double object constructions	f. Externally merged Spec, Appl or Caus

This pattern suggests the conclusion in (95):

- (95) [-A] NPIs must raise to the closest A'-position that c-commands them.

Why should [A] NPIs be illicit in A-positions? Negation is commonly viewed as an operator (see Klima 1964, Lasnik 1974 and many others). Assuming Agree, (iNeg, uNeg) is an A'-relation with an operator, the restrictions follow. Thus we propose a friendly amendment to Zeijlstra's 2004, 2008 definition of negative concord as Agree:

(96) **Proposal:** Negative concord is an A'-Agree relation between an expression with *iNeg* features and an *n*-word with *uNeg* features in a local A'-position.

In a language like French, with V-v-to-T movement, raising of object *n*-words to a phasal Spec, vP can occur string-vacuously. But a subject *n*-word surfacing in Spec, TP fails to fulfill this requirement. (96) thus suggests a reinterpretation of the famous French subject-object asymmetry in (6) (repeated below): as in Xhosa, the *n*-word in the former fulfills the raising requirement, while the latter does not (see (97)).

- (6) a. Je n' ai exigé qu' ils arête personne [French: Kayne 1981]
 I *ne* have required that they arrest(subj) nobody
 'I didn't require that they arrest anybody'
- b. *Je n' ai exigé que personne soit arêté
 I *ne* have required that no one be arrested
 (I didn't require that anybody be arrested')

- (97) a. [_{CP} que [_{TP} ils arête+v+T [_{VP} personne [_{v'} <v> [_{VP} <V> <personne>]]]]]
 b. * [_{CP} que [_{TP} personne soit+T ... [_{VP} <personne> [_{v'} arête+v [_{VP} <V> <personne>]]]]]

That said, it must be acknowledged that there is no successive-cyclic movement for [-A] NPIs, at least not in Xhosa and Zulu. It seems clear that this kind of A'-relation is a more locally constrained variety, without recourse to the full set of positions and recursive movement operations that the *wh*-type of A'-relation utilizes. But this could follow from assuming that *n*-words themselves are not typically operators but dependents of an operator.¹⁹ While a detailed analysis lies outside this paper's scope, we suggest that a more

¹⁹ Though see Haegeman 1995:137 for evidence that West Flemish *n*-words can and must raise overtly into a higher clause if that is the location of negation, and can raise to c-command negation, both possibilities ruled out in Xhosa and Zulu. Exploring such differences is an important project but outside the scope of this paper.

fine-grained typology is needed to distinguish all the edge positions that operators can make use of from the smaller set available as landing sites for *n*-words.

7. Case and the augment

7.1 Introduction

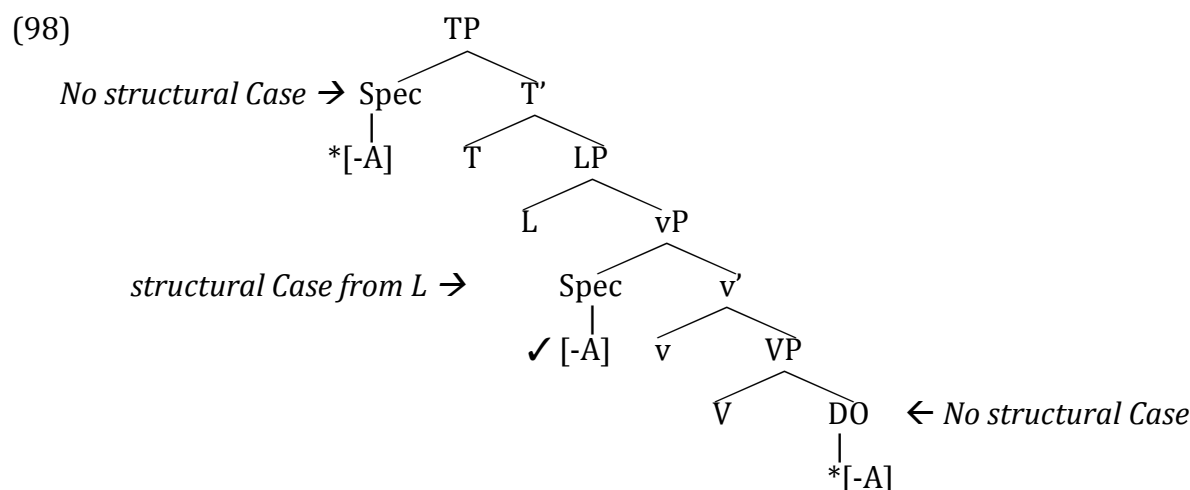
Our research strongly supports Halpert's 2012 proposal that the distribution of [-A] NPIs in Zulu is based on their morpho-syntactic features rather than on semantic factors. But as argued in the preceding sections, our findings argue that the morpho-syntactic feature involved is not Case but uninterpretable negation – the feature involved in negative concord. While we think the arguments we have provided are ample grounds for the claim, we will review and critique Halpert's Case analysis in this section, explaining how it works and why we think the *n*-word account is preferable. We also summarize evidence from Carstens & Mletshe to appear that all and only [+A] nominals in Xhosa require Case-licensing. Though Xhosa [-A] nominals pattern with those of Zulu in all the ways we have discussed, additional phenomena argue that they have no *u*Case features. The *n*-word analysis we advocate in this paper permits a unified account of Xhosa and Zulu [-A] NPIs, but given this evidence, such a unified account is possible only if Halpert's Case-account of Zulu [-A] NPIs is abandoned.

7.2. Halpert's 2012 analysis

7.2.1 Preverbal subject position

As noted in §1, Halpert accounts for the contrast in (3) with a proposal that the preverbal subject position (= Spec, TP for Halpert) is not a position where structural Case is available. Hence only [+A] nominals can appear there, because they have intrinsic Case. In contrast, the post-verbal subject position of TECs is a licit position for [-A] NPIs because a licenser *L* above *v*P can value one structural Case in a downwards Agree relation (see (98)).

- (3) a. A-ndi-sho-ngo ukuthi u-mu-ntu u-fik-ile
 NEG-1SSA-say-NEG.PST that 1-1-person 1SA-arrive-DISJ1
 'I didn't say that someone arrived'
- b. *A-ndi-sho-ngo ukuthi mu-ntu u-fik-ile
 NEG-1SSA-say-NEG.PST that 1-person 1SA-arrive-DISJ1
 'I didn't say that anyone arrived'



7.2.2 [-A] NPI objects

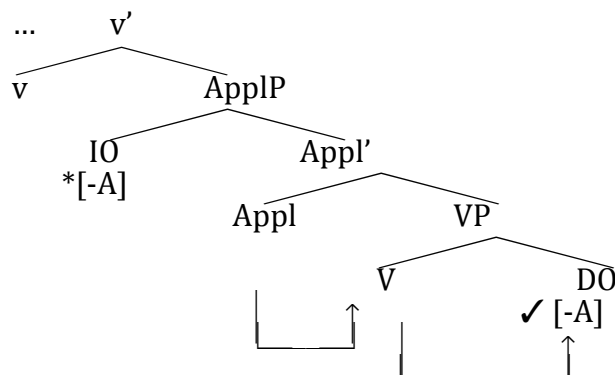
In a transitive SVO clause where a [+A] subject raises to preverbal subject position, Halpert argues that L can Case-license a direct object [-A] NPI under closest c-command across the tail of the subject's movement chain (see (5), repeated below, and (99)).

- (5) A-ndi-fun-i ukuthi u-Sipho a-phek-e i-qanda/qanda
 NEG-1SSA-want-NEG.PST that 1-1Sipho 1SA-cook-SUBJ 5-5egg/5egg
 'I I don't want Sipho to cook an/any egg'

- (99) [TP SU_[+A] T [LP L [vP <SU> v [VP V OB_[-A]]]]]
-
- L Case-licenses [-A] object in SVO clause

Halpert claims that the addition of Appl or Caus also Case-licenses a [-A] direct object because Appl and Caus introduce Case-valuation features. These heads cannot Case-license an indirect object or Causee, however, because the Feature Inheritance mechanism of Chomsky 2007, 2008 gives their Case-features to V. This allows V to Case-license a [-A] NPI direct object (see (100)):

- (100) *Halpert 2012: under Appl/Caus-to-V Feature Inheritance, DO, but not IO is Case-licensed*



7.2.3 Dislocation and the timing of Case

Recall that [-A] NPIs cannot be dislocated in Zulu. The presence of a clitic is the diagnostic (see (29), repeated below). We showed in §2.3 that Xhosa has the same restriction.

- (29) A-ngi-m-bon-i]_{VP} *mu-ntu /u-mu-ntu [Zulu]
 NEG-1sSA-3sOM-see- NEG 1-person/1-1-person
 'I don't see anybody'

Halpert 2012 proposes that the ban on clitic-dislocation of [-A] NPIs is due to late timing of Case-licensing in Zulu. This timing entails that the uCase feature of a Zulu nominal can only obtain a value from a structural licenser that it surfaces locally to. Case cannot be acquired and taken along to another location. Hence a nominal that surfaces in dislocated position must bear the intrinsically Case-licensing augment.

This claim is also crucial in relation to the contrast in (3) with respect to preverbal subject position. Halpert argues that the [-A] nominal only obtains Case from L if it surfaces locally to L. If it raises away to preverbal subject position, the addition of an augment is required to make it licit.

7.2.4 Critique

There are several ways in which we find these proposals less satisfactory than our own. In assessing them, we assume that a unitary account of Xhosa and Zulu is desirable since the phenomena of the two languages are so similar.

First, Halpert's approach does not account for the limited distance permitted between negation and [-A] NPIs, or connect this to their restricted distribution. As we have seen, this class of expressions in Zulu (and Xhosa) require a more local relation with negation than NPIs do in a language like English – for many speakers, only a single subjunctive clause boundary can intervene and for more permissive speakers, limitations are nonetheless present and sharp. The simplest line of approach is to bring this dependency to bear on the other restrictions in [-A] NPI distribution.

Second, the assumption that Spec, TP is not a Case-licensed position is a language-particular stipulation without independent motivation apart from the inability of [-A] NPIs to appear there. In contrast, preverbal subject position is often a problematical location for *n*-words, as we have seen (illicit in French, only permitting double negation in Italian).

Third, it does not seem to us that Halpert's Case approach would have anything to say about the Xhosa strategy of licensing a [-A] NPI object via a [-A] NPI subject. But this falls together with the *parasitic negation* strategy that has been documented in negative concord languages, under the assumption that [-A] NPIs are *n*-words.

Fourth, the assumption that Appl/Caus give their Case to V, leaving IOs and Causees with no Case is at odds with the common cross-linguistic generalization that Appl and Caus license an additional argument, and with the pattern that when IOs are added, they receive dative Case -- presumably from Appl.

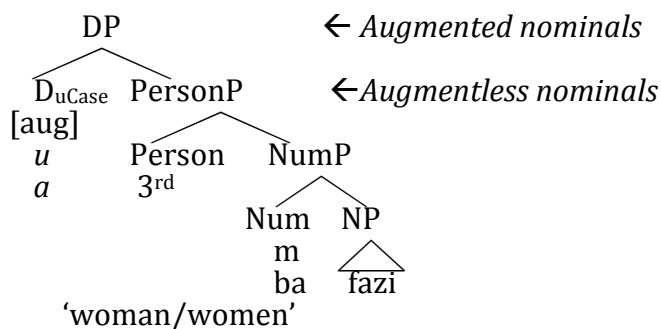
Fifth and relatedly, Carstens 2010, 2011 and Carstens & Diercks 2013a demonstrate that the broad distribution of agreement in Bantu is inconsistent with the assumption of Chomsky 2007, 2008 that all probe features originate with phase heads which must pass them off. If their arguments are correct, then theoretical support is lacking for Halpert's proposal that the contribution of Appl and Caus is to give their Case features to V. On the other hand, there is ample evidence in negative concord languages that *n*-words must move into a local relation with negation, and similarly a body of evidence that in symmetrical languages, Appl/Caus introduce edge features that can raise direct objects to feed passive and pronominalization. Adopting this approach means that we can assume Appl and Caus Case-license their own arguments in Zulu and Xhosa as they seem to in other languages.

We conclude that the analysis of [-A] NPIs as *n*-words has many advantages over Halpert's claim that they have special Case-licensing needs.

7.3 All and only [+A] nominals need Case-licensing

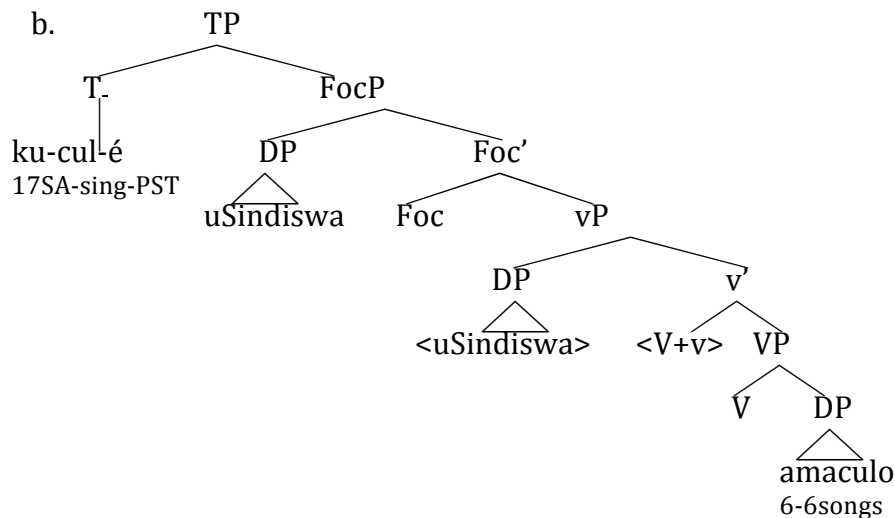
We turn now to a brief overview of evidence from Carstens & Mletshe to appear that all and only [+A] arguments have uCase features needing values, because uCase is a property of D. In Xhosa, D is the augment layer (see (9), repeated below).

(9) Our claim: only augmented nominals are DPs with uCase features.



As we noted in §4.5, subjects of TECs are interpreted with obligatory focus, a fact that Carstens & Mletshe attribute to forced raising of TEC subjects into Spec of a low FocusP (see (70), repeated below).

- (70) a. Ku-cul-é u-Sindiswa a-ma-culo
 17SA-sing-PST 1-1Sindiswa 6-6-songs
 'It's Sindiswa who sang songs' (Cannot answer, "What happened?")



Carstens & Mletshe explore several accounts of this forced raising including labeling problems (Chomsky 2013), linearization problems (Richards 2010) and Case-theoretic problems (Alexiadou & Anagnostopoulou 2001). They conclude that the Focus head plays a role in non-canonical Case valuation. The principle reason for this is that transitive experiencer verbs with two full DP arguments cannot participate in TECs at all (see (101)a; (101) = Carstens & Mletshe's (7)a-c). But such a verb can participate in an expletive construction if its external argument is removed by passivation (see (101)b), or if its internal argument is a CP (see (101)c). Carstens & Mletshe accordingly conclude that neither the identity of the verb nor its argument structure can be responsible for the restriction, and adopt a Case-theoretic solution.

(101) *The experiencer verb restriction: no experiencer verbs with 2 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-PST2-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-PST2-see-PASS-FV 9-9bird
 'A bird was seen'
- c. Ku-bon-é u-gqirha ukuba u-m-ntwana u-ya-gula. *OK: replace DP2 w/CP*
 17SA-see-CONJ1 1-1doctor that 1-1-child 1SA-DISJ2-be.sick
 The doctor saw that the child was sick'

As Carstens & Metshe note, many languages with overt Case systems mark arguments of experiencer predicates with inherent Cases. Bhatt (2003) shows that in Marathi, the Case of experiencer subjects is dative, while in Bhojpuri it is genitive:

- (102) 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'

Carstens & Metshe to appear propose that the arguments of Xhosa experiencer verbs also bear inherent Cases. These are not compatible with interacting with the Focus head, which provides non-canonical Case valuation to the DPs in TECs along with [+/-Focus] values. The strategy does not work for arguments of experiencer verbs due to the constraint in (103).

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

Summing up, forced focus in Xhosa TECs indicates that TEC subjects must raise to Spec of a FocusP for Case reasons. Arguments of experiencer verbs cannot do this because they bear inherent Cases. The remaining question is why, then, subjects of experiencer verbs cannot simply remain in situ? If they have inherent Case, a reasonable expectation is that it would suffice to license them without the involvement of the focus head.

The basis for understanding this last piece of the puzzle lies in the existence of one more circumstance in which experiencer verbs can participate in TECs: namely, if their

arguments are [-A] NPIs (see (104), = Carstens & Mletshe's (7)c). They also note that speakers who do not accept TECs with full DP arguments often find them improved if their arguments are [-A] NPIs.

- (104) A-ku-bon-anga m-ntu nto. *OK: negative experiencer TEC replacing both full DPs*
 NEG-17SA-see-PST3 1-person 9thing *with "augmentless" NPIs*
 'NOBODY saw anything!'
 [Lit: (There) didn't see anybody anything]

- (105) *Conservative dialect: TECs with full DPs are degraded, but TECs with [-A] arguments are improved*

- a. *Ku-theng-e u-Sabelo u-kutya.
 17SA-buy-CONJ1 1-1Sabelo 15-15food
 [Intended: SABELO bought (the) food']
- b. *A-ku-theng-anga u-Sabelo u-kutya.
 NEG-17SA-buy-PST3 1-1Sabelo 15-15food
 [Intended: SABELO didn't buy (the) food']
- c. ?A-ku-theng-anga mntu kutya.
 NEG-17SA-buy-PST3 1person 15food
 'NOBODY bought any food!'

Based on this pattern, Carstens and Mletshe to appear argue for some conclusions that we summarize below:

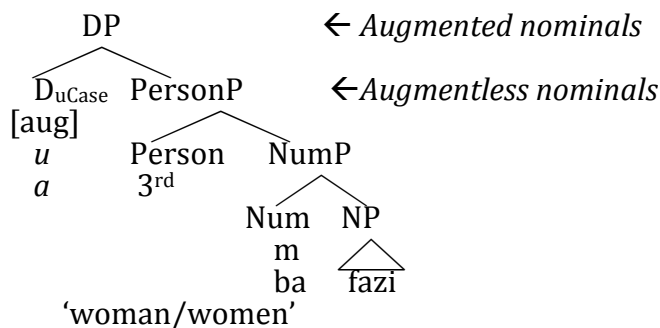
- (i) All [+A] nominals have uCase features regardless of whether they also have inherent Case.
- (ii) [-A] NPIs cannot acquire structural Case values, so are indifferent to this aspect of their syntactic environments.
- (iii) (i) and (ii) are due to the fact that uCase is a property of the augment = D layer.
- (iv) In the dialects of speakers who reject TECs with full DP arguments, the Focus head is not a Case-licenser.

Circumstances do not yet permit us to attempt to replicate these findings in Zulu. But even if the Zulu pattern turns out to be different in significant ways, it will remain true that the negative concord analysis of [-A] NPI restrictions works for near-identical phenomena in both Xhosa and Zulu, two very closely related languages. Should it turn out that the Case systems are subtly different, we are confident that the negative concord analysis will nonetheless stand on its own merits.

7.4 The phi-features of augmentless nominal

A final point to be addressed is the claim we made in n that augmentless nominal are PersonPs with full phi-features.

(9) Our claim: only augmented nominals are DPs with uCase features.



Because [-A] NPIs have noun class prefixes reflecting singular and plural, it is fairly obvious that they are at least NumPs (see Carstens 1991 on noun class prefixes as gender-specific spellings out of singular and plural features which head NumPs). But only the agreement they can control has the potential to tell us whether an NPI has person features as there is no special nominal morphology for this.

Since [-A] NPIs cannot surface in preverbal subject position and cannot be doubled by object clitics, there is little opportunity to observe what agreement features they can value. But Halpert 2012 shows that Zulu [-A] NPIs can undergo raising to object from the subject position of an embedded subjunctive, and in this case there is full subject agreement in the embedded clause (see (106), adapted from Halpert 2012:98: (67b)). The same is true in Xhosa.

- (106) A-ngi-fun-i muntu ukuthi a-phek-e
 NEG-1SSA-want-NEG.PRES 1person that 3SSA-cook-SUBJ
 ‘I don’t want anybody to cook’
 [Lit: I don’t want anybody that (s/he) cook]

Xhosa and Zulu both have a kind of subject agreement which lacks person features. It shows up when humans from noun classes 1 and 2 are questioned or relativized (see (74)a and (75)a, repeated below). This phenomenon is quite common in Bantu languages and because number and gender features (= noun class) are unaffected, it is analyzed in Kinyalolo 1991, Diercks 2009, and Henderson 2013 as the omission of person features.

(74) a. Ng'u-bani o-be-fowun-ile? [Xhosa]
 COP'1-1who whAGR-AUX-call-DISJ1
 'Who called?'

(75) a. Ng'u-bani o-fowun-ile [Zulu]
 COP'1-1who wh.AGR-call-DISJ1
 'Who called?'

The answers to these questions illustrate ordinary *u-* subject agreement which, like the *a-* subjunctive subject agreement exemplified in (107) encodes third person singular.

(107) U-Loyiso u-fowun-ile [Xhosa/Zulu]
 1-1Loyiso 1SA-call-DISJ1
 'Loyiso called'

There is no way of eliciting *u-* agreement with a [-A] NPI, because they cannot surface in preverbal subject position and because raising to object can only proceed from a subjunctive clause. But the evidence of *a-* agreement in the subjunctive seems sufficient basis on which to conclude that [-A] nominals have the full set of phi-features: gender, number, and person.

8. Conclusions

In this paper we have argued that Xhosa and Zulu augmentless NPIs distribute alike. They therefore can and should receive a unitary analysis.

We have demonstrated that their properties are strikingly similar to those of negative concord items (*n*-words) and have accordingly analyzed them as such. The [-A]

NPIs of Xhosa and Zulu do not overtly manifest negative features. We have argued that like *uCase*, negative concord features can be abstract.

Following Zeijlstra 2004, 2008, we have argued that restrictions on the distribution of negative concord items follows from a local Agree relation (Agree (*iNeg...uNeg*)). There is also a leftward movement requirement for [-A] NPIs as there is for *n*-words in well-studied languages (see especially Haegeman 1995). We have accounted for this with a proposal that negative concord is an A' relation, because it involves a negative operator.

While our analysis concurs with Halpert's 2012 conclusion that [-A] NPI distribution reduces to a morpho-syntactic feature, we have rejected her view that this feature is Case. Following Carstens & Mletshe to appear, [-A] NPIs do not have *uCase* features at all, while [+A] nominals require structural Case-licensing.

References

- Abels, Klaus. 2003. Successive cyclicity, anti-locality, and adposition stranding. University of Connecticut PhD dissertation.
- 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.
- Bhatt, Rajesh. 2003. Experiencer subjects. Unpublished course materials.
<http://web.mit.edu/rbhatt/www/24.956/dative.pdf>
- 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. 2013a. Parameterizing Case and Activity: Hyper-raising in Bantu. In *Proceedings of the 40th 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 & Michael Diercks. 2013b. Agreeing How? *Linguistic Inquiry* 44.2:179-23.
- Carstens, Vicki and Loyiso Mletshe. To appear. Implications of Xhosa expletive constructions. Forthcoming in *Linguistic Inquiry* (a longer pre-publication draft can be found at lingbuzz/001750)
- 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.
- 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.
- 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 and Terje Lohndal. 2010. Negative concord and (multiple) Agree: a case study of West Flemish. *Linguistic Inquiry* 41: 181-211.
- Henderson, Brent. 2013. Agreement and [person] in Anti-Agreement. *Natural Language and Linguistic Theory* 31.2:453-481.
- Jerro, Kyle. 2013. The causative-instrumental syncretism in Kinyarwanda. Paper delivered at *Bantu 5*, Paris and ms, UT Austin.
- 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.
- 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.
- 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.
- 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.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Linguistic Inquiry Monograph. Cambridge, MA: MIT Press.
- Richards, Norvin. 2010. *Uttering Trees*. Cambridge: MIT Press
- 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.
- Rizzi, Luigi. 1999. On the Position “Int(errogative)” in the Left Periphery of the Clause. Ms., University of Siena.
- 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.

Zeijlstra, Hedde. 2013. Not in the first place. *Natural Language and Linguistic Theory* 31:
865-900.