

## Implications of Xhosa expletive constructions\*

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In addition to SVO clauses with full-featured subject agreement (SA), Xhosa has VSO clauses in which SA has default features, subjects surface low, objects cannot be pronominalized, a subject focus reading is obligatory, and transitive experiencer verbs with 2 DP arguments are precluded (though with bare NP or CP arguments, transitive experiencer verbs can participate). We argue that the probe features involved in SA, EPP, object shift, and nominative/accusative valuation within SVO clauses are all absent in VSO constructions; hence T and  $v^*$  of VSO clauses are impoverished or defective. An unusual focus-linked strategy is the only option for Case-licensing full DPs, but it is incompatible with inherent Cases borne by arguments of experiencer verbs. We claim that CPs and NPs can appear in positions where DPs cannot surface because  $uCase$  is a feature of D. Our study provides striking evidence for abstract Case in Xhosa despite the presence of anomalies which led Harford Perez 1985, Diercks 2012 to argue that Case is absent in Bantu and Halpert 2012 to propose that full DPs in Zulu have intrinsic Case. We conclude that the standard diagnostics yield misleading results for Bantu. Our re-analyses of the problem facts are consistent with the presence of abstract Case in Xhosa and by extension, other Bantu languages that exhibit the same anomalies. We also argue that NPIs in both Xhosa and Zulu are *n*-words and must move leftwards, as Haegeman 1995 proposed for *n*-words in West Flemish. This explains aspects of their distribution that Halpert 2011, 2012 attributes to Zulu NPIs having Case needs that full DPs do not: they are barred from preverbal subject position even in the scope of negation, and  $vP$ -internally, since  $v^*$  cannot shift objects in TECs, edge features of Appl/Caus are needed to satisfy the *n*-word raising requirement. The proposals yield a unified account of DP and NPI positions in Xhosa and Zulu.

### 1. Introduction

#### 1.1 Overview

In the Xhosa language (narrow Bantu, S.40), canonical word order is Subject Verb

(Object...). The verb agrees with the preverbal subject in person, number, and noun class.<sup>1</sup>

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<sup>1</sup> In glosses, SA=subject agreement; OM=object marker; Arabic numbers = noun classes (number + gender) unless followed by s or pl in which case they are person features. DISJ1 and 2 are tense morphemes on verbs that are final in their domains; PST1 -3 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*-).

- (1) a. i-ncwadi i-fik-il-e                      b. A-ba-ntwana ba-fund-a      i-si-Xhosa  
 9-9letter 9SA-DISJ1-FV                      2-2-children 2SA-learn-FV 7-7-Xhosa  
 'A letter arrived'                              'The children study Xhosa'
- c. u-Themba u-fund-is-é                      a-ba-ntwana i-si-Xhosa  
 1-1Themba 1SA-learn-CAUS-PST1 2-2-child      7-7-Xhosa  
 'Themba taught the children Xhosa'

Expletive constructions (henceforth ECs) are also possible in which the verb bears invariant class 17 subject agreement (henceforth SA) and word order is V S (O...). We demonstrate with an unaccusative verb in (2)a. As the glosses indicate, two readings are possible for this sentence. It can function as a simple report or narration of a past event, and is thus a felicitous answer to a "What happened?" question like (2)b. It can also convey subject focus, and answer one of the subject questions in (2)c-d.

- (2) a. Ku-fik-é                      i-ncwadi                                      *Felicitous answer to (2b-d)*  
 17SA-arrive-PST1 9-9letter  
 R#1: 'A letter arrived'  
 R#2: 'It was a letter that arrived' [Lit: (There) arrived a letter.]
- b. Kw-enzek-é                      ntoni namhlanje?  
 17-happen-PST1 9what today  
 'What happened today?'  
 [Lit: (There) happened what today?]      *OR*
- c. Ku-fik-é                      ntoni?                                      d. Yi      ntoni i-fik-ile-yo?  
 17SA-arrive-PST1 9what?                                      9COP 9what 9SA-arrive-DISJ1-RM  
 'What arrived?' [Lit: (There) arrived what?]      'What is it that arrived?'

All intransitive verbs seem able to participate in Xhosa ECs, and some speakers find transitive expletive constructions (TECs) acceptable as well (a fact noted in Mletshe 1995; Mali 1995). But there are interesting asymmetries between TECs and intransitive ECs: TECs exhibit special properties and are subject to a number of constraints that we summarize in (3). Accounting for the full set of EC properties is the goal of our paper.

### (3) Properties of expletive constructions in Xhosa

- i. The inverted subject of a TEC is obligatorily [+Focus]. In contrast, the subject focus interpretation is optional in intransitive ECs.
- ii. There is no “definiteness effect” for the post-verbal subject (= the highest argument) of an EC.
- iii. An internal argument in a TEC cannot be realized as a pronoun –never as the object-marking variety and for most speakers, not as an independent pronoun.<sup>2</sup>
- iv. In contrast, the external argument of a TEC or the sole argument of any intransitive EC may be an independent pronoun.
- v. A verb with an experiencer argument cannot participate in a TEC unless:
  - (a) its internal argument is clausal; *OR*
  - (b) its external argument is removed by passivization *OR*
  - (c) its arguments are both “augmentless” nouns used as question words or negative polarity items (an outer noun class prefix is omitted; see (4a,b)).

The “augmented”/ “augmentless” distinction referred to in (3)vc is illustrated in (4).

(4) a. “Augmented” or pre-prefixed nominals = full DPs and citation forms of *wh*-words:

- |   |                                  |                                     |
|---|----------------------------------|-------------------------------------|
| i. u-m-ntu /a-ba-ntu<br>1-1-person /2-2-person<br>'a/the person/people' | ii. i-ntoni<br>9-9what<br>'what' | iii. u-bani etc.<br>1-1who<br>'who' |
|---|----------------------------------|-------------------------------------|

b. “Augmentless” nominals (henceforth abbreviated [-A] and underlined) function as negative polarity items (NPIs) and *wh*-words in questions:

- |   |                                      |   |
|---|--------------------------------------|---|
| i. <u>m-ntu</u> / <u>ba-ntu</u><br>1-person /2-person<br>'anybody/any people' | ii. <u>ntoni</u><br>9what<br>'what?' | iii. <u>bani</u> etc.<br>1who<br>'who?' |
|---|--------------------------------------|---|

The asymmetries summarized in (3) are exemplified in (5)-(7).

(5) *The focus asymmetry: in TECs but not intransitive ECs, the subject MUST be focused.*

- |   |   |
|---|---|
| a. Ku-lil-é u-Sindiswa<br>17SA-cry-PST1 1-1Sindiswa<br>R#1: 'Sindiswa cried'<br>R#2: 'It's Sindiswa who cried'<br>[Lit: (There) cried Sindiswa] | <i>Optional subject focus in an intransitive EC</i><br><br>(answers 'What happened?')<br>(answers 'Who cried?') |
| b. Ku-theth-a i-ndoda ende i-si-Xhosa.<br>17SA-speak 9-9man 9tall 7-7-Xhosa<br>'It's the tall man who speaks Xhosa.'                            | <i>Obligatory subject focus in a TEC</i><br><br>(answers only, 'Who speaks Xhosa?')                             |

<sup>2</sup> Mali 1995 also noted this restriction.

(6) *The pronominalization asymmetry: in TECs, only the subject can be pronominalized.*

- a. Ku-cul-a      **yena**      (a-ma-culo)      *OK: pronoun SU in (T)EC*  
 17SA-sing-FV 1IndPron (6-6-songs)  
 '(It's) she (who) sings (songs)'
- b. \*Ku-cul-a      u-Sindiswa      **ona**      *\*independent pronoun OB in TEC*  
 17SA-sing-FV 1-1Sindiswa 6IndPron  
 'It's Sindiswa who sings them.'
- c. \*Ku-**wa**-cula      u-Sindiswa      *\*clitic pronoun OB in TEC*  
 17SA-6OM-sing 1-1Sindiswa  
 'It's Sindiswa who sings them'

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

- a. \*Kw-a-bon-a      u-m-fazi      i-ntaka      *\*TEC of an experiencer verb with 2  
 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-PST1 1-1doctor that 1-1-child 1SA-DISJ2-be.sick  
 'The doctor saw that the child was sick'
- d. A-ku-bon-anga      m-ntu      nto      *OK: negative experiencer TEC replacing both full DPs  
 NEG-17SA-see-PST2 1-person 9thing  
 'Nobody saw anything!' [Lit: (There) didn't see anybody anything]*

## 1.2 Sketch of the analysis

We argue that both T and v\* are defective in Xhosa ECs – unable to agree, raise DPs, or value Case. The properties in (3), (5), and (7) are indicative of non-canonical Case licensing. These findings are significant because the status of Case in Bantu languages is controversial (see Harford Perez 1985, Diercks 2012, Halpert 2011, 2012, Van der Wal 2012).

The correlation of obligatory focus with transitivity in Xhosa ECs is the first indicator that Case is an issue, and the experiencer verb contrasts in (7) provide the second. Both patterns illustrate that problems arise if a TEC contains two full DP arguments. We attribute the forced subject focus reading in TECs to a focus/Case connection. Because

subject focus is optional in intransitive ECs, we propose that one structural Case is always available for the highest EC argument. But accusative is absent in TECs (see (8)). A middle field Focus head surmounts this difficulty: it probes twice in TECs, raising the subject to its Spec where it obtains the [+Focus] feature, and then valuing the object's uCase (see (9)).<sup>3,4</sup>

(8) \* $[_{VP} V [_{VP} V OB_{uCase}]]$  *Accusative unavailable in TECs*

(9) *Foc probes and raises the subject to Spec, Foc, then probes and Case licenses the object:*

- a.  $[_{FocP} SU_{+Foc} [_{Foc'} Foc_{CASE} [_{VP} <SU> [_{v'} v [_{VP} V OB_{uCase\dots}]]]]]]$
- 
- b.  $[_{TP} SU_{+Foc} T [_{FocP} Foc_{CASE} [_{VP} <SU> [_{v'} v [_{VP} V OB_{uCase\dots}]]]]]]$
- 

The restrictions on TECs with experiencer verbs flesh the picture out, providing evidence that Focus confers Case values linked to [+/-Focus] features on both the DPs that it probes in TECs (see (10)a). Arguments of experiencer verbs have inherent Cases and cannot bear a second semantically linked Case. Hence full DP subjects and objects of experiencer verbs cannot licitly interact with the Focus head (see (10)b and, on the contrasting distribution and Case properties of full DPs and augmentless NPIs, see §1.3 and §4.3). An implication of our analysis is that the Cases coming from Focus straddle the line between structural and inherent: they have semantic associations, but are connected with particular structural positions and compatible with a variety of thematic roles.

- (10) a.  $[_{FocP} SU_{uCase+Foc} [_{Foc'} Foc_{Case} [_{VP} <SU> v [_{VP} V OB_{uCase-Foc} []]]]]$
- b. \* $[_{FocP} SU_{Inherent; uCase+Foc} [_{Foc'} Foc_{Case} [_{VP} <SU> v [_{VP} V OB_{Inherent; uCase-Foc} []]]]]$

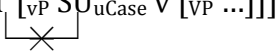

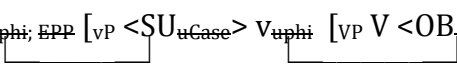
<sup>3</sup> This proposal is based on Hiraiwa's 2001 Multiple Agree but takes a serial approach to it, on which see Haegeman & Lohndal 2010. See also §4.2.2 and references therein on Icelandic T first raising a dative and then agreeing with a nominative object, the relevance of which is pointed out in Halpert 2011, 2012.

<sup>4</sup> If v\* of a TEC induces phasal Transfer, this analysis is incompatible with the PIC as formulated in Chomsky 2000 though perhaps not with his 2001 version. Since nothing including an agent subject can be extracted from a TEC it is not obvious how to settle this question. See §5.7 for some related discussion.

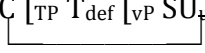
Turning to the restriction on pronoun use, we attribute this to a failure of object-shift in TECs, stranding pronouns illicitly in VP-internal positions:

- (11)  $*[{}_{VP} \langle SU \rangle v [{}_{VP} V \text{Pronoun}]]$  *Pronouns cannot escape VP in TECs*
- 

We relate the absence of accusative and the unavailability of object shift to defectivity of  $v^*$  in TECs (see Bobaljik & Brannigan 2006 for a similar approach to ergative constructions in Chuckchi). It is an unlikely coincidence that defective  $v^*$  occurs in clauses with low subjects and default SA, so absent evidence that T participates in EC syntax, we analyze it as lacking EPP, Case, and  $u\phi$ . Hence T of an EC cannot agree, Case-license, or raise the subject just as  $v^*$  of an EC cannot shift objects or value accusative<sup>5</sup> (following Preminger 2011, agreement failures do not cause a derivation to crash). In contrast SVO clauses have robust T and  $v$ .

- (12) a.  $[{}_{TP} T [{}_{VP} SU_{uCase} v [{}_{VP} \dots]]]$  *T of ECs cannot agree with or raise the subject*
- 
- b.  $[{}_{VP} v [{}_{VP} V DP_{uCase}]]$  *v of ECs cannot value uCase or raise the internal argument*
- 
- c.  $[{}_{TP} SU T_{u\phi, EPP} [{}_{VP} \langle SU_{uCase} \rangle v_{u\phi} [{}_{VP} V \langle OB_{uCase} \rangle]]]$  *T & v of SVO clauses are robust*
- 

As noted above, since subject focus is optional in intransitive ECs, we assume there is optionally one purely structural Case assignable “downwards” to the highest DP in an EC as Halpert 2011, 2012 proposed for Zulu. Given the evidence that T and  $v^*$  are inert in agreement and Case relations in ECs, we speculate in §4.2.3 that this Case is valued by C.

- (13)  $[{}_{CP} C [{}_{TP} T_{def} [{}_{VP} SU_{uCase} v_{def} [{}_{VP} \dots]]]]$  *C can provide one Case for the highest DP in an EC probing across inert, defective T.*
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<sup>5</sup> See §4.6 for discussion of some alternatives connected with Alexiadou & Anagnostoulou 2001’s *subject in situ generalization* and the *distinctness* requirement on linearization of Richards 2010.

While there is no evidence that Spec, TP is occupied in Xhosa ECs, we suggest that cross-linguistically, the use of expletive subjects might be triggered when T has an EPP feature but is unable to raise a thematic subject. Our idea is to extend to other ECs the last resort type approach common for “weather” verb constructions and English *do*-support.

### 1.3 On augmented and augmented nominals

As noted above, transitive experiencer verbs can participate in TECs if their arguments are [-A] NPIs. [-A] wh-expressions also improve TECs that speakers reject with full DP arguments. These systematic liberalizations of TECs with [-A] arguments we explain with a proposal that Xhosa [-A] nominals do not have uCase features needing valuation. In this, our analysis of Xhosa is virtually the mirror image of Halpert’s 2011, 2012 analysis of Zulu, and aligns with a proposal in Baker 2003 that [-A] NPIs in Kinande do not need Case.

Halpert argues that only NPIs require Case in Zulu partly because they cannot occupy preverbal subject position, even with c-commanding negation. While Xhosa NPIs share this distribution (see (14)a,b), we relate it in §5 to (15) -- a contrast that Kayne 1981, 1984, Rizzi 1982, and Haegeman 1995 explain by means of a requirement that certain negative expressions (so-called *n*-words) undergo LF quantifier raising into locality with a negative operator, here located in the higher clause. Movement from preverbal subject position is highly restricted cross-linguistically (see Rizzi & Shlonsky 2007 among many others).

(14) a. *All DPs including [-A] nominals can occupy object positions in SVO clauses.*

A-ndi-fun-i            okokuba u-Sabelo    a-bon-e            ✓m-ntu    / ✓u-m-ntu  
 NEG-1sSA-want-FV    that        1-1Sabelo    1SA-see-SUBJ    1-person[-A]/ 1-1-person  
 ‘I don’t want Sabelo to see anybody/some person’

b. *[-A] nominals cannot occupy preverbal subject position even with c-commanding negation.*

A-ndi-fun-i            okokuba \*m-ntu    /✓u-m-ntu        a-bon-e            u-Sabelo  
 NEG-1sSA-want-FV    that            1-person[-A]/ 1-1-person    1SA-see-SUBJ    1-1Sabelo  
 ‘I don’t want anybody to see Sabelo’

- (15) a. Je n' ai exigé qu' ils arête **personne** [French: Kayne 1981]  
 I *ne* have required that rhey 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')

Halpert's analysis also aims to explain why, VP-internally in Zulu TECs, only direct objects can be licit [-A] NPIs, and they require not just c-commanding negation but also applied or causative morphology on the verb. Taking McGinnis's 2001 analysis of applicatives as a point of departure, we propose in §5 that the heads of ApplP and CausP introduce edge features that make *n*-word raising possible. Adapting Zeijlstra (2008), we argue that *n*-words move for a local A' relation with sentential negation, Agree [*i*Neg...*u*Neg].

#### 1.4 Implications for Case in Bantu

This paper makes a novel contribution to an important controversy over the status of structural Case in Bantu languages and hence its plausibility as a linguistic universal. Harford Perez 1985 and Diercks 2012 claim that Case is entirely absent in Bantu, and Halpert 2011, 2012 proposes that apparent Case-theory violations in Zulu arise because full DPs have intrinsic Case-licensing, unlike augmentless NPIs. Based on the asymmetries summarized in (3), our paper argues that full DPs in Xhosa require Case-licensing. But we show that they exhibit the same Case-anomalies as Zulu, which include participating in hyper-raising and occupying what appear to be Caseless positions. We approach these phenomena in ways compatible with the presence of abstract Case in Xhosa and conclude that the classic diagnostics yield misleading results. The pattern of facts strongly suggests that abstract Case is present in Bantu languages, but manifested in unexpected ways.



## 1.5 Structure of the paper

This paper is structured as follows. In §1.6 we summarize our theoretical assumptions. In §2 we describe in more detail the striking asymmetries that characterize Xhosa ECs. In §3 we review analyses by Buell 2006 and Halpert 2011, 2012 of ECs in closely-related Zulu, presenting insights they provide into the Xhosa facts and also several key questions that they cannot answer. In §4 we flesh out our proposals in terms of defective T, defective  $v^*$ , and a FocP between the two, whose head (for speakers who find TECs acceptable) values uCase. §5 analyzes [-A] NPIs, which Halpert 2011, 2012 argues are the only Zulu nominals that require Case-licensing. We propose instead that these are *n*-words, which must A'-move leftwards into locality with negation. §6 addresses apparent Case anomalies in Xhosa (and other Bantu languages that exhibit them). §7 concludes.

## 1.6 Theoretical background

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  $\alpha$ , it immediately *probes* its c-command domain to find a *goal*  $\beta$  that can provide values for  $\alpha$ 's uFs. 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 Asymmetries in Xhosa expletive constructions

### 2.1 The empirical puzzles

In this section we lay out in detail the asymmetries that characterize Xhosa expletive constructions. The analysis will be presented in §3 and §4.

### 2.2 Asymmetry #1: focus and transitivity in ECs

Subjects of all Xhosa ECs can be interpreted as focused. This is illustrated in (2)a (repeated below) for the unaccusative verb ‘arrive’ and in (16) for the unergative verb ‘sing.’

(2) a. Ku-fik-é                      i-ncwadi                      *Optional subject focus for unaccusative EC*  
      17SA-arrive-PST1 9-9letter  
R#1: ‘It was a letter that arrived’                      (answers, ‘What arrived?’)  
R#2: ‘A letter arrived’                                      (answers, ‘What happened?’)  
      [Lit: (There) arrived letter.]

(16) Ku-cul-é                      u-Sindiswa                      *Optional subject focus in unergative EC*  
      17SA-sing-PST1 1-1Sindiswa  
R#1: ‘It’s Sindiswa who sang’                              (answers, ‘Who sang?’)  
R#2: ‘Sindiswa sang’                                      (answers, ‘What happened?’)  
      [Lit: (There) sings Sindiswa]

In contrast, the subject of a TEC has an invariant focus reading.

(17) a. Ku-theng-a a-ba-fazi i-i-ntyatyambo.                      *TEC has subject focus*  
      17SA-buy 2-2-women 10-10-flowers  
      ‘It’s the women who buy flowers.’  
      b. Ku-bhaq-é                      u-Sindiswa i-mali  
      17SA-discover-PST 1-1Sindiswa 9-9money  
      ‘It was Sindiswa who discovered the money.’

That subject focus is obligatory in TECs is confirmed by two diagnostics. First, only an intransitive EC is a felicitous answer to a “What happened?” question (see (18)a-c). Second, a true indefinite can be subject of an SVO sentence (see (19)a), or subject of an intransitive EC, as shown in (19)b, d; but not subject of a TEC, as shown in (19)c. <sup>6</sup>

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<sup>6</sup> Buell 2005 reports that in Zulu a TEC can answer a “What happened?” question and gives one example. The contrast is potentially interesting though two Zulu speakers I consulted did not share the judgment.

- (18) a. Kw-enzek-é      ntoni?  
 17-happen-PST1 9what  
 ‘What happened?’ [Lit: (There) happened what?]
- b. Ku-cul-é      u-Sindiswa  
 17SA-sing-PST1 1-1Sindiswa  
 ‘Sindiswa sang.’ [Lit: (There) sang Sindiswa]
- c. #Ku-cul-é      u-Sindiswa a-ma-culo      *Infelicitous in context*  
 17SA-sing-PST1 1-1Sindiswa 6-6-songs  
 #‘It was Sindiswa who sang songs’ [Lit: (There) sang Sindiswa songs]
- (19) a. U-m-ntu    u-b-é      i-ncwadi y-am      *Indefinite SU OK if order is SVO*  
 1-1-person 1SA-steal-PST1 9-9book 9my  
 ‘Somebody stole my book!’ OR
- b. Ku-kho    u-m-ntu    o-b-é      i-ncwadi y-am      *Indefinite SU OK in intrans EC*  
 17SA-be 1-1-person wh.AGR-steal-PST 9-9book 9-my  
 ‘Somebody stole my book!’  
 [Lit: (There) is a person who stole my book!]
- c. \*Ku-b-é      u-m-ntu    i-ncwadi y-am!      *\*Indefinite SU in TEC*  
 17SA-steal-PST1 1-1-person 9-book 9-my      *(Reversal of “definiteness effect”)*  
 ‘Somebody stole my book!’  
 [Lit: \*(There) stole a person my book]
- d. Ku-cul-é      u-m-ntu      *Compare with (8c)*  
 17SA-sing-PST1 1-1-person  
 ‘Somebody sang’  
 [Lit: (There) sang a person]

Xhosa clearly lacks the “definiteness effect” (DE) that characterizes ECs in Indo-European languages as discussed in Milsark 1977, Safir 1987, 2009, Belletti 1988 Vangsnes 2002 among many others; see (20)a-c, adapted from Belletti 1988 and (21) from Vangsnes 2002.

- (20) a. There is a/\*the man in the room      [English]
- b. Il    est    arrivé trois filles/\*la fille      [French]  
 there be.3S arrived three girls/\*the girl  
 ‘There arrived a girl/\*the girl’
- c. Es    liegt ein/\*?der Brief auf dem Tisch.      [German]  
 there lies a /\*the letter on the table  
 ‘There lies a letter/\*the letter on the table’
- (21) Það hafa verið nokkrir kettir/\*allir kettirnir í eldhúsinu      [Icelandic]  
 there have been some cats /\*all cats.the in kitchen.the  
 ‘There have been some cats/all the cats in the kitchen’

The focus contrast between Xhosa intransitive and transitive ECs requires explanation, as does the difference between Xhosa and Germanic ECs with respect to definiteness.

### 2.3 Asymmetry #2: pronominalization in ECs

In Xhosa SVO clauses, an internal argument can be realized as a pronoun – either an independent pronoun (22)a or a clitic-like object marker (22)b. In contrast, the internal argument in a TEC cannot be a pronoun of either variety (see (22)c-d). The subject of a TEC or the sole argument of any intransitive EC can however be pronominalized (see (23)).

(22) a. u-Sindiswa u-cul-a **ona** *OK: Independent pronominal OB in SVO*  
 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 *\* Clitic OM pronoun in TEC*  
 17SA-(DISJ2)-6OM-sing-FV 1-1Sindiswa  
 'It's Sindiswa who sings them'

(23) a. 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)'

b. Ku-fik-é **yena** *OK: Indep Pro theme in unaccusative EC*  
 17SA-arrive-PST1 1IndPron  
 'She arrived'

c. Ku-cul-w-a **ona** *OK: Indep Pro theme in impersonal passive*  
 17SA-sing-PASS-FV 6IndPron  
 'They are sung.' (i.e., the songs)

### 2.4 Asymmetry #3: experiencer verb restrictions

A verb with an experiencer argument cannot participate in a TEC unless (i) its external argument is removed by passivization; (ii) its internal argument is a CP; or (iii) both arguments of the verb lack the initial augment vowel (see (7), repeated below).

- (7) a. \*Kw-a-bon-a u-m-fazi i-ntaka \*TEC of an experiencer verb with 2  
 17SA-PST2-see-FV 1-1-woman 9-9bird full DP arguments  
 '(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-PST1 1-1doctor that 1-1-child 1SA-DISJ2-be.sick  
 The doctor saw that the child was sick'
- d. A-ku-bon-anga m-ntu nto OK: negative experiencer TEC replacing both full DPs  
 NEG-17SA-see-PST3 1person 9thing with "augementless" NPIs  
 'Nobody saw anything!' [Lit: (There) didn't see anybody anything]

Tables 1 and 2 list the verbs tested in Xhosa ECs, and their status. With very few exceptions, transitive experiencer verbs resist involvement in TECs.

*Table 1: Verbs with DP arguments that are acceptable in active expletive constructions*  
 ukufika – 'arrive', ukutsha – 'burn', ukucula – 'sing', ukulila – 'cry', ukuonwaba – 'be happy', ukuqumba – 'be.sad', ukurhala – 'yearn', ukulumka 'be.wise', ukuzila – 'mourn' (intrans), ukuxhuma 'jump', ukuthetha – 'speak', ukutshaya 'smoke' (intrans & trans), ukunuka – 'smell' (intrans), ukuthenga – 'buy', ukuthengisa – 'sell' (buy+CAUS), ukufunda – 'learn', ukufundisa – 'teach' (learn+CAUS) ukupheka – 'cook', ukulumkisa – 'warn', ukubhala – 'write', ukuoyika – 'fear', ukubukela – 'watch', ukubhaqa – 'discover', ukutsiba – 'jump over', ukunceda – 'help', ukutyhola 'accuse/blame', 'ukukhumbula – 'remember (inanimate DO)', ukurhalela – 'desire', (inanimate DO), explain, ukubuhlungu – 'to pain'

*Table 2: Verbs with DP arguments that cannot participate in active TEC constructions*  
 \*ukuthusa – 'surprise', \*ukwazi – 'know', \*ukucinga – 'think', \*ukucapukela – 'hate', \*ukuthanda – 'like', \*ukufuna 'want', \*ukukhumbula – 'miss', \*ukurhalela – 'desire sexually' (yearn+APPL with human DO), \*ukuthakazelela – 'appreciate', \*ukuthaza – 'make angry', \*ukuzilela – 'mourn' (trans), \*ukunukisa – 'smell', \*ukubona – 'see', \*ukuva – 'hear'

## 2.5 Summary

This section has demonstrated that TECs in Xhosa have properties that distinguish them from intransitive ECs, from SVO clauses, and from TECs in more familiar languages including absence of the "definiteness effect," obligatory subject focus, a ban on object pronouns, and incompatibility with experiencer verbs having two full DP arguments.

The next section reviews existing analyses of Nguni ECs and shows that they provide insights into the structure, but on their own they cannot account for the pattern of facts we have described. Section §4 builds on these analyses to provide principled explanations.

### **3. Building a structural analysis**

#### **3.1 Introduction**

Xhosa is a member of the Nguni subgroup, which includes the closely-related Zulu language. Nguni ECs are addressed in several other works including Buell 2006, Halpert 2011 and 2012, Mletshe 1995, and Mali 1995. In §3.2-4 we discuss some analytical contributions from these works that we will draw on in constructing our account. §3.5-§3.7 present three additional diagnostics for the analysis of Xhosa expletives: §3.5 shows that VSO is only possible in a Xhosa expletive construction, arguing that agreement with the thematic subject correlates with its raising to Spec, TP and conversely that in its absence the subject has not done so. §3.6 shows that auxiliary verbs must all precede the thematic subject in an expletive construction, supporting a low subject position in TECs. §3.7 shows that ECs can occur in embedded clauses following an overt complementizer. This provides a final argument against a potential alternative structural analysis positioning the verb in C and the post-verbal subject in Spec, TP. §3.8 summarizes the conclusions the section has reached regarding the structure of ECs, and the issues they leave to be explained.

#### **3.2 Unaccusatives and the conjoint/disjoint diagnostic (Buell 2006)**

Xhosa expletive constructions resemble those of Zulu in featuring invariant class 17 agreement and VS(O) order. Buell (2006) provides a diagnostic for the low position of the post-verbal arguments in Zulu ECs which we will adopt in our analysis of Xhosa ECs. As in Zulu, Xhosa verbs have some tense/aspect alternations that correlate primarily with whether the verb is final in some minimal domain to be made specific below. These

alternations are demonstrated in (24) for the optionally transitive verb *funda* – ‘study.’ In the linguistic literature the inflected form of verbs in final position is generally referred to as the long or *disjoint* form, while the non-final form is referred to as short or *conjoint*.

- (24) a. A-ba-ntwana ba-fund-ile/\*é *disjoint form is final*  
 2-2-children 2SA-learn-DISJ1/\*PST1  
 ‘The children studied’
- b. A-ba-ntwana ba-fund-é/\*ile *conjoint form is non-final*  
 2-2-children 2SA-learn-PST1/\*DISJ1 i-si-Xhosa 7-7-Xhosa  
 ‘The children studied Xhosa’

While this kind of alternation has sometimes been attributed to the presence or absence of verb focus (Hyman & Waters 1984, Ndayiragije 1999), Buell (2006) argues against such an interpretation partly because either conjoint or disjoint morphology can appear in the answer to a “What happened?” question depending on whether the verb has a complement; in this circumstance the domain of focus is the whole sentence. We therefore adopt Buell’s proposal that the crucial factor is whether a constituent follows the verb within a local domain (see also Van der Spuy 1999 and Mali 1995); hence (25)a,b. We analyze the domain as TP, but were the verb to raise to C and precede a subject in Spec, TP, we suspect that the conjoint form would still be required. Hence the broad formulation in (26) (anticipating somewhat the pattern of tense morphology in ECs to be described below).<sup>7</sup>

- (25) *Conjoint/disjoint distribution (Buell 2006)*  
 a. A disjoint verb form is final in its domain.  
 b. A conjoint verb form is non-final in its domain.

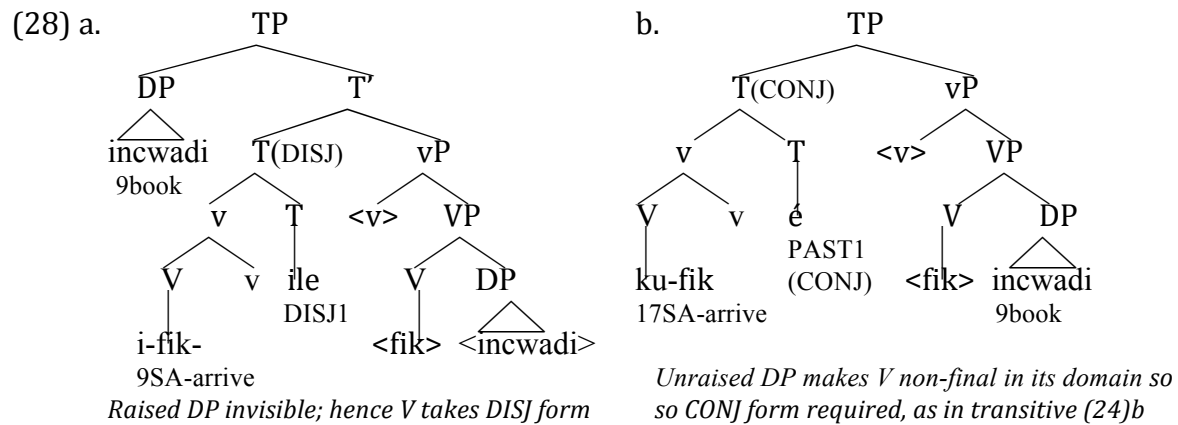
- (26) *Condition on conjoint/disjoint forms:* T in the conjoint form must c-command an expression with phi-features (hence ≠ vP or VP); a disjoint form cannot.

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<sup>7</sup> A similar approach was independently proposed in Halpert 2012. Buell points out that the Zulu adverb *kahle* – ‘well’ triggers the conjoint form, as does a focused adverb like *phandle* – ‘outside’ (assume it occupies Spec, Foc). *Kahle* doubles as an adjective and bears agreement; *phandle* descends from locative class 16. Thus they are plausibly viewed as having phi-features. For reasons of length we ignore CP complements here.

Buell 2006 demonstrates that the conjoint/disjoint alternation sheds light on inversion constructions in Zulu, and his observations extend to Xhosa. Consider (27)a: the unaccusative subject is preverbal, leaving the verb final in its domain save for the subject's unpronounced copy. Verbal morphology is accordingly disjoint. In contrast, the conjoint form is required in an EC like (27)b. The appearance of the conjoint form in an unaccusative EC makes perfect sense if the theme subject remains in its base position so that the verb is non-final in its domain, c-commanding an overt DP. Thus adapting slightly Buell's proposals for these constructions we arrive at (28)a,b respectively.

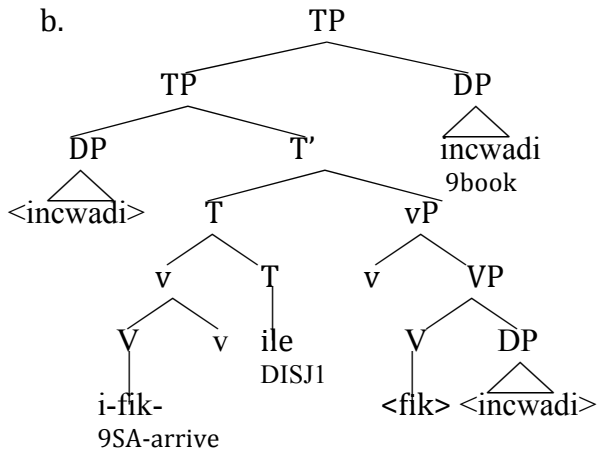
- (27) a. I-ncwadi i-fik-ile/\*é  
 9-9letter 9SA-arrive-DISJ1/\*PST1  
 'A letter arrived'
- b. Ku-fik-é/\*ile i-ncwadi  
 17SA-arrive-PST1/\*DISJ1 9-9letter  
 'A letter arrived'



On the other hand, when a post-verbal subject controls SA, the verb takes the disjoint form (see (29)a). This follows from the reasonable assumption that the subject in such cases has raised to Spec, TP and right-dislocated (29)b as Buell 2006 proposes for Zulu.

- (29) a. I-fik-ile/\*é i-ncwadi  
 9SA-arriveDISJ1/PST1 9-9letter  
 'A letter arrived'



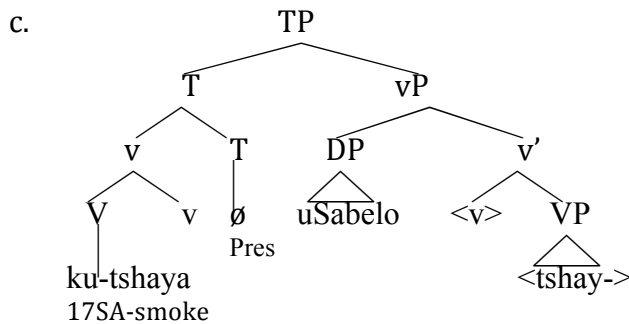


Buell 2006: After right-dislocation, raised OB remains invisible to DISJ

### 3.3 Unergatives

Unergative verbs with preverbal subjects bear disjoint morphology, as expected. In an unergative EC, (26) correctly predicts the conjoint form since T c-commands the subject:

- (30) a. u-Sabelo u-ya-tshay-a  
 1-1Sabelo 1SA-DISJ2-smoke-FV  
 'Sabelo smokes'
- b. Ku-tshay-a u-Sabelo  
 17SA-smoke 1-1Sabelo  
 '(It's) Sabelo (who) smokes'



again adapting Buell 2006;  
 unraised SU in V's domain blocks DISJ

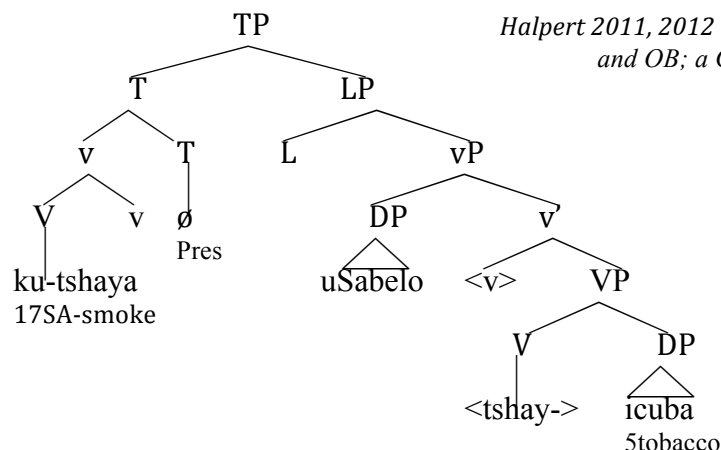
### 3.4 Transitive expletive constructions in Halpert 2011, 2012

We have noted that many Xhosa speakers accept TECS (see (31)b).

- (31) a. u-Sabelo u-tshay-a i-cuba  
 1-1Sabelo 1SA-smoke-FV 5-5tobacco  
 'Sabelo smokes tobacco'
- b. Ku-tshay-a u-Sabelo i-cuba  
 17SA-smoke-FV 1-1Sabelo 5-5tobacco  
 'It's Sabelo who smokes tobacco'

Halpert 2011, 2012 shows that TECs exist in Zulu, and proposes their arguments remain in situ. She posits a Case-licenser between T and vP that she labels L (on which see §5.4).

(32)



Halpert 2011, 2012 on Zulu: *V raises to precede in situ SU and OB; a Case-licenser L can value uCase of SU*

### 3.5 VSO order -> expletive agreement

Halpert's analysis is consistent with Buell's in assuming that the VSO subject is unraised. In addition to the conjoint/disjoint facts, there is support for extending this conclusion to Xhosa in that VSO order is impossible if the verb agrees with the subject (see (33)). In this case the licit orders are only SVO and VOS:

- (33) a. U-tshaya-a      i-cuba      u-Sabelo      *VOS OK in a clause with SA*  
 1SA-smoke-FV    5-5tobacco    1-1Sabelo  
 'Sabelo smokes tobacco'
- b. \*U-tshaya-a      u-Sabelo i-cuba      *\*VSO in a clause with SA*  
 1SA-smoke-FV    1-1Sabelo 5-5tobacco

This contrast supports our claim that a robust T has both EPP and uPhi probe features, while a defective T lacks both of these properties. A sentence like (33)b cannot be generated because T agrees with the subject but leaves it in situ. In (33)a, T agrees with and raises the subject which then right-adjoins, as in the intransitive VS sentence (29)a,b.

### 3.6 Evidence from auxiliaries

Although the facts above have argued against a right-adjoined position for the post-verbal subject in an EC, they have not ruled out the possibility that the subject undergoes raising

to the middle field of the clause as in the analysis of Icelandic in Bobaljik & Jonas (1996).

(34) from Vangsnes (2002) illustrates two positions for subjects within Icelandic ECs:

- (34) a. *það hafi fallið [Einhver nemandi] á prófinu.*  
 EXPL had flunked some student on exam.the
- b. *það hafi [Einhver nemandi] fallið á prófinu.*  
 EXPL had some student flunked on exam.the  
 ‘Some student had flunked the exam’

In contrast, the subject in a Xhosa EC must follow all auxiliaries. We demonstrate in (35) with the auxiliary *phantse* – ‘almost’ and in (36) with the combination of *soloko* – ‘often’ and a remote future auxiliary (=RFUT) (for arguments that such multiply agreeing constructions are truly mono-clausal in Bantu languages see among others Carstens 2001, Carstens & Kinyalolo 1989, Kinyalolo 1991, Halpert 2012).

- (35) a. *u-Thandeka u-phantse w-aty-a i-papa*  
 1-1Thandeka 1SA-almost 1SA-eat-FV 9-9polenta  
 ‘Thandeka almost ate the polenta’
- b. *Ku-phantse kw-aty-a u-Thandeka i-papa*  
 17SA-almost 17-eat-FV 1-1Thandeka 9-9polenta  
 It was Thandeka who almost ate the polenta’
- c. \**Ku-phantse u-Thandeka kw-aty-a/w-aty-a i-papa*
- (36) a. *Wena u-be u-soloko u-fund-a lapha*  
 2SIndPron 2sSA-RFUT 2sSA-often 2sSA-study-FV here  
 ‘You will often study here’
- b. *Ku-be ku-soloko ku-fund-a wena lapha*  
 17SA-RFUT 17SA-often 17SA-study-FV 2SIndPron here  
 ‘(It’s) you (who) will often study here’
- c. \**Ku-be wena ku-soloko ku-funda lapha*
- d. \**Ku-be ku-soloko wena ku-funda lapha*

(35)-(36) help to flesh the structure of Xhosa clauses. Anticipating discussion in §4.2 we propose that a FocP lies just above vP (see (37)a). Since the main verb precedes the subject even in a clause like (36)b containing two auxiliaries, it seems  $V_{\text{main}}$  always raises beyond

vP and FocP. To account for this we assume that the final vowel of the inflected verb is itself a functional head to which the verb always adjoins (see (37)b,c, = (36)b).

- (37) a. TP > AspPs > FocP > vP > VP  
 b. [<sub>TP</sub> T [<sub>AspP</sub> Aux [<sub>AspP</sub> -a [<sub>FocP</sub> SU<sub>Foc</sub> [<sub>vP</sub> <SU> v [<sub>VP</sub> V OB]]]]]]  
 c. [<sub>TP</sub> T [<sub>AspP</sub> Aux [<sub>AspP</sub> V+v+Foc+a [<sub>FocP</sub> SU <Foc> [<sub>vP</sub> <SU> <v> [<sub>VP</sub> <V> OB]]]]]]

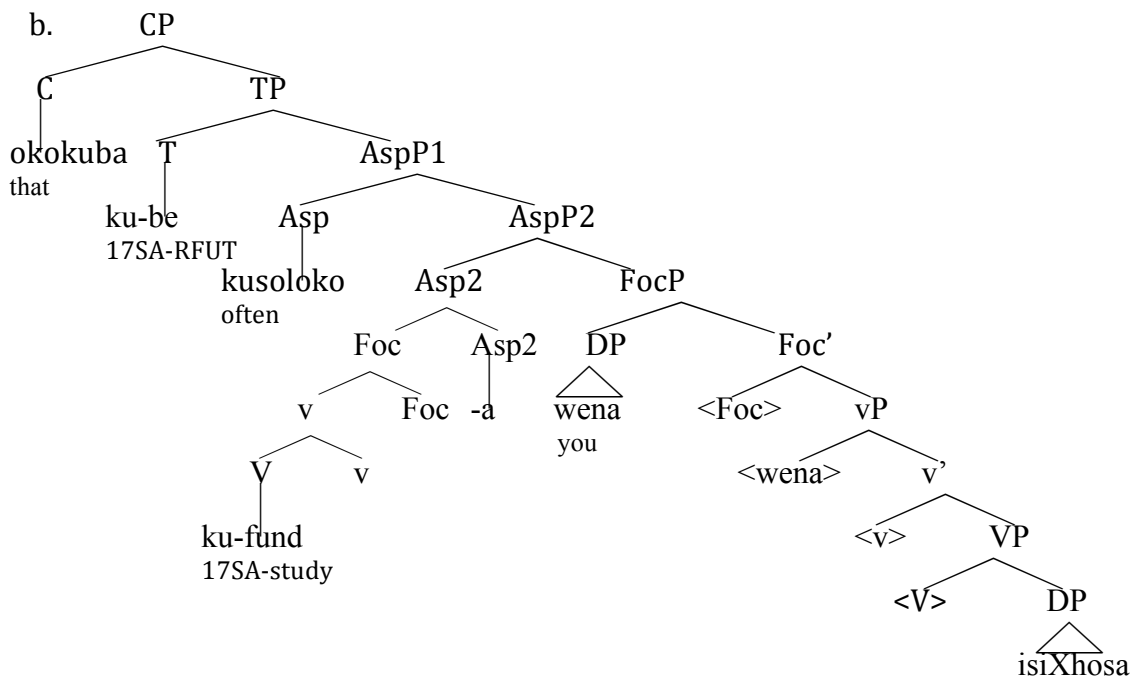
### 3.7 ECs in embedded clauses

A question remains regarding the location of the highest inflected verb in a Xhosa EC. We now present (38) – (39) showing that ECs are possible in embedded clauses following overt complementizers. The pattern of facts supports the representation in (40)b for (40)a.

- (38) u-Sabelo u-cing-a okokuba ku-fundisa u-Loyiso i-si-Xhosa  
 1-1Sabelo 1SA-think-FV that 17SA-learn-CAUS-FV 1-1Loyiso 7-7-Xhosa  
 ‘Sabelo thinks that it’s Loyiso who teaches Xhosa’

- (39) u-Thandeka u-buz-é okokuba ngabe ku-bhal-é u-m-ntwana i-ncwadi na  
 1-1Thandeka 1SA-ask-PST that whether 17SA-write-PST 1-1-child 9-9letter Q  
 ‘Thandeka asked if it was the child who had written the letter’

- (40) a. ...okokuba ku-be ku-sololo ku-fund-a wena i-si-Xhosa  
 that 17SA-RFUT 17SA-often 17SA-study-FV you 7-7-Xhosa  
 ‘...that it’s you who will often study Xhosa’



### 3.8 Summary

Buell 2006 provides a useful diagnostic basis for determining that the arguments in Nguni ECs are not in a right-adjoined position but rather clause-internal, c-commanded by the tense/aspect heads that precede them. In the analysis of Halpert 2011, 2012 this approach is extended to Zulu TECs. We have shown in this section that both Buell's and Halpert's diagnostics are relevant to Xhosa, making correct predictions regarding the word order and morphology in ECs. The additional diagnostics of auxiliary placement, embedded ECs and the correlation of VSO order with expletive SA also argue that the subject surfaces low in ECs, and that the highest inflected verb of an EC is located lower than C.

## 4 Analysis in detail

### 4.1 Introduction

In this section we develop in detail our analytical approach to the properties of Xhosa ECs, addressing the questions we have already raised, summarized below:

#### (41) *Issues in the analysis of Xhosa expletive constructions*

- Focused reading is optional for subjects of  $V_{\text{intrans}}$  but obligatory for subjects of  $V_{\text{trans}}$ .
- There is no definiteness effect constraining low, post-verbal DPs in Xhosa ECs.
- The subject of an EC can pronominalize but an object cannot.
- An experiencer verb is illicit in a TEC unless (i) it is passivized; (ii) its internal argument is a CP; or (iii) its arguments are [-A] (augmentless) nominals.

We first argue in §4.2 that the focused reading for subjects in ECs indicates that they can raise into Spec, Foc. Given that subject focus is obligatory in TECs, we propose that this raising permits non-canonical Case-licensing, in the grammars of speakers who accept TECs. §4.3 presents a Case-theoretic account of the ban on experiencer verbs in TECs. §4.4 applies proposals of Cheng & Downing 2012 to derive an optional focus reading for experiencer subjects of intransitives and verbs with CP objects. §4.5 attributes the impossibility of object pronouns to a failure of object shift in TECs. §4.6 discusses the so-called *subject in situ generalization* (Alexiadou & Anagnostopoulou 2001, 2007) and

Richards's 2010 *distinctness* requirement, arguing that approaches to Xhosa along these lines are less successful at deriving all the facts. §4.7 argues against the presence of an expletive *pro* in Spec, TP based on the combination of default SA with the peculiar syntax of objects in TECs. Under our analysis the properties of T and v mirror each other in TECs. §4.8 shows how our approach meshes with the so-called Definiteness Effect characteristic of ECs in more familiar languages, but absent in Xhosa. §4.9 concludes the section.

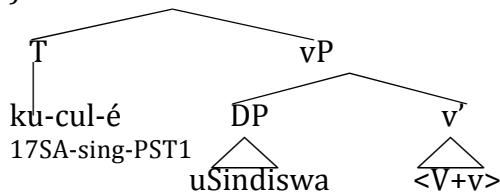
## 4.2 Deriving the focus interpretation

### 4.2.1 Intransitives

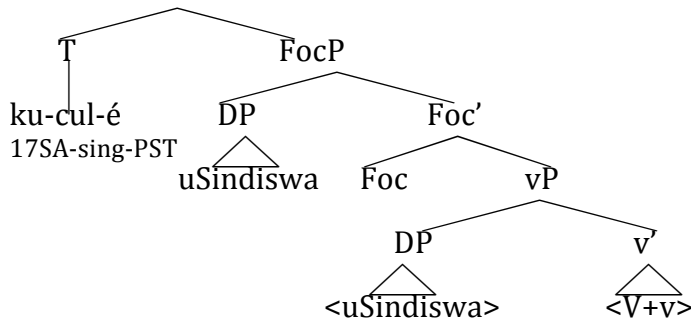
Consider the intransitive EC in (42). As indicated, it can be a simple narration of a past event and a potential answer to, "What happened?" It can also have a subject-focus reading. We propose that this difference reduces to whether or not a middle field Focus head is present to raise the subject to its Spec (though see §4.5 for a slightly more complex picture). Hence the representations in (43) correspond to the two readings.

- (42)      Ku-cul-é                  u-Sindiswa  
                  17SA-sing-PST1   1-1Sindiswa  
 R#1: 'Sindiswa sang'  
 R#2: 'It's Sindiswa who sang'
- (answers 'What happened?')  
 (answers 'Who sang?')

- (43) a.      TP Reading #1



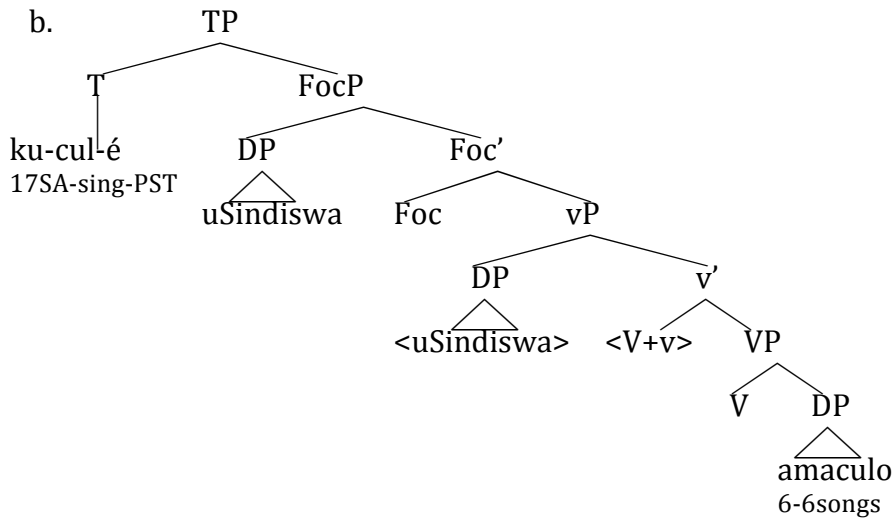
- b.      TP Reading #2



## 4.2.2 Obligatory focus in TECs

The fact that subjects of TECs MUST have the focus reading strongly suggests that they cannot remain in their base positions; they are forced to raise to Spec, FocP. Thus the only representation for (44)a is (44)b.

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

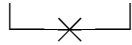


Why should raising be obligatory in TECs but optional in intransitives ECs? The need for Case is a common factor underlying forced movement of arguments. But the optionality of focus in intransitives argues that raising is not required to Case-license the subject. We accordingly propose that  $v^*$  of TECs cannot value accusative (see (12)b repeated below). There is just one structural Case in a Xhosa EC independent of focus, and it goes to the highest argument. In the grammars of many speakers, this limitation cannot be surmounted and TECs are disallowed. But in the grammars of those who do accept TECs, we propose that raising the subject to Spec, FocP permits Case-licensing of a second DP.<sup>8</sup>

(12) b. [<sub>VP</sub> V [<sub>VP</sub> V DP<sub>uCase</sub>]]

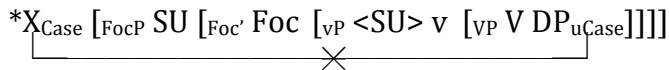
*v of ECs cannot value uCase or raise the internal argument*

<sup>8</sup> For reasons of length we ignore the issue of Case in TECs that include applied and causative morphemes.

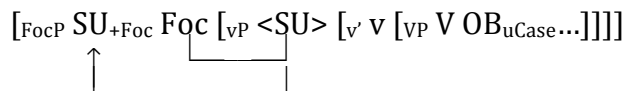


A locality question arises since, for any potential licenser above FocP, the subject would intervene to block access to the direct object (see (45)). We accordingly propose that Foc can Agree with two expressions, Case-licensing the object across defective v\* (see (46)a,b). Details on the subject's Case follow in §4.2.3 and §4.4.

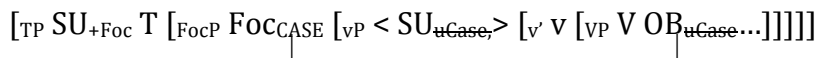
(45) *A probe above FocP would not be expected to reach across SU in Spec Foc*



(46) a. *Foc probes and raises SU to its Spec, conferring the Foc value on it:*



b. *Foc probes again and Case-licenses the object in situ:*



This analysis builds on a proposal in Haegeman & Lohndal 2010 for accomplishing multiple Agree relations serially, and on Halpert's (2011, 2012) idea that Case-licensing in closely related Zulu can happen late, across a position vacated by A-movement. Halpert draws a parallel that we adopt between this and a well-known Icelandic pattern of number agreement: an in situ dative blocks T from agreeing in number with a nominative in Icelandic, but agreement succeeds across the same base position vacated by A-movement of the dative. Below we reproduce examples (taken from Holmberg & Hroarsdottir 2004) and illustrations adapted from Halpert 2012:(46)). Inspired by Halpert's account, we propose that like Icelandic T can probe and raise the dative and then agree with the lower nominative, so Xhosa Foc can raise and Case-value the subject; then probe the object.



(47) *Icelandic dative experiencers in situ block object agreement*

- a. það finnst einhverjum stúdent tölvurnar ljótar  
EXPL findSG some studentDAT the computersNOM uglyNOM  
'Some student finds the computers ugly.'
- b. \*það finnast einhverjum stúdent tölvurnar ljótar  
EXPL findPL some studentDAT the computersNOM uglyNOM

(48) *Icelandic raised dative experiencers do not block object agreement*

- a. einhverjum stúdent finnst tölvurnar ljótar  
some studentDAT findSG the computersNOM uglyNOM  
'Some student finds the computers ugly.'
- b. einhverjum stúdent finnast tölvurnar ljótar  
some studentDAT findPL the computersNOM uglyNOM  
'Some student finds the computers ugly.'

(49) *Icelandic dative raising feeds number agreement:*

- a.  $[_{TP} T+Num [_{VP} DAT [_{V'} V [_{VP} V [_{TP} NOM...]]]]]$  *Agreement blocked across in situ dative*  
✗
- b.  $[_{TP} DAT T+Num [_{VP} ~~DAT~~ [_{V'} V [_{VP} V [_{TP} NOM...]]]]]$  *Agreement OK after dative raises*

Our account of Xhosa differs from Halpert's approach to Zulu in proposing that full DPs require Case, and in linking non-canonical Case-licensing to focus, verb class asymmetries, and pronominalization restrictions, all properties that our investigation is the first that we know of to explore. Whether these phenomena also exist in Zulu is a question for future research (though see §5 and §6 for some discussion of Case and DP positions in Zulu).

#### 4.2.3 Case for a single argument without focus

As noted above, assuming that Case is a major determinant of DP positions in Xhosa, it would seem that that there is always "downward" Case licensing available for a single post-verbal argument in any EC (see (2), (5a), (7b,c) and (43)a). Given that this Case is not linked to any particular thematic role or semantic interpretation, we analyze it as a purely structural Case. It is possible that this Case is nominative, licensed downward by T, as attested in German and Icelandic (see Bobaljik & Wurmbrand 2005 on German, and

discussion of Icelandic in §4.2.2). But this is not a necessary conclusion given that certain complementizers in some languages have the ability to independently license a Case. We reproduce Standard Arabic data from Melebari & Seely 2012 in (50) showing that while T values nominative, the C *ʔanna* values accusative. Given the apparent inertness of T and v's probe features in ECs we conjecture that there is a particular null Xhosa C that, like *ʔanna*, can value Case on the argument it closest c-commands (see (51)). The hypothesis reflects and completes the symmetries between Xhosa T and v in TECs: neither one raises the argument that it typically raises in SVO clauses; neither agrees or values uCase features.

- (50) a. ʔal-ʔawlad-u qaraʔ-u d-dars-a *Main clause SU is NOM*  
 the-boys-NOM read-3PL.MASC the-lesson-ACC  
 'The boys read the lesson.'
- b. ʔanna al-ʔawlad-a ʔakal-u T-Taʕaam-a yusʕidu-ni *ʔanna values SU as ACC*  
 that the-boys-ACC ate-3PL.MASC the-food-ACC pleases 3PL.MASC-me  
 'That the boys ate the food pleases me.'

(51) *A single purely structural Case in ECs comes perhaps from C, since T seems inert:*

[CP C<sub>Case</sub> [TP T... DP<sub>uCase...</sub>]]]

A natural assumption would be that the subject in an EC always bears this single structural Case. §4.3 however presents evidence that expressions in Spec, Foc receive a special Case from the Focus head along with the [+Focus] feature.

### 4.3 Case and experiencer predicates

#### 4.3.1 The basics

Recall that an experiencer verb with two full DP arguments cannot participate in a TEC. As noted in the introduction, neither the identity of the verbs nor their argument structures suffices to explain this restriction because it is voided under certain conditions: (i) if one of the arguments is removed by passivization, (ii) if one of the arguments is a CP, or (iii) if both of the arguments are augmentless NPIs (see (7) repeated below).

- (7) a. \*Kw-a-bon-a u-m-fazi i-ntaka \*TEC of an experiencer verb with 2  
 17SA-PST2-see-FV 1-1-woman 9bird full DP arguments  
 '(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-PST1 1-1doctor that 1-1-child 1SA-DISJ2-be.sick  
 'The doctor saw that the child was sick'
- d. 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]

Only Case theory seems to have the potential to address this curious pattern. Many languages with overt Case mark the 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:

- (52) 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'

It has also been demonstrated that in Ukrainian, experiencer predicates are barred from participation in a kind of transitive expletive construction (see (53)a versus (53)b). Lavin (2010) argues convincingly that the restriction underlying (53)a is Case-theoretic in origin.

- (53) a. \*Ivana bulo zdyvovano blyskavkoju b. Kulju rozirvano evjaxom  
 Ivan.acc was surprised lightening.instr balloon.acc pierced nail.instr  
 'Ivan was surprised by lightening' 'The balloon was pierced by a nail'

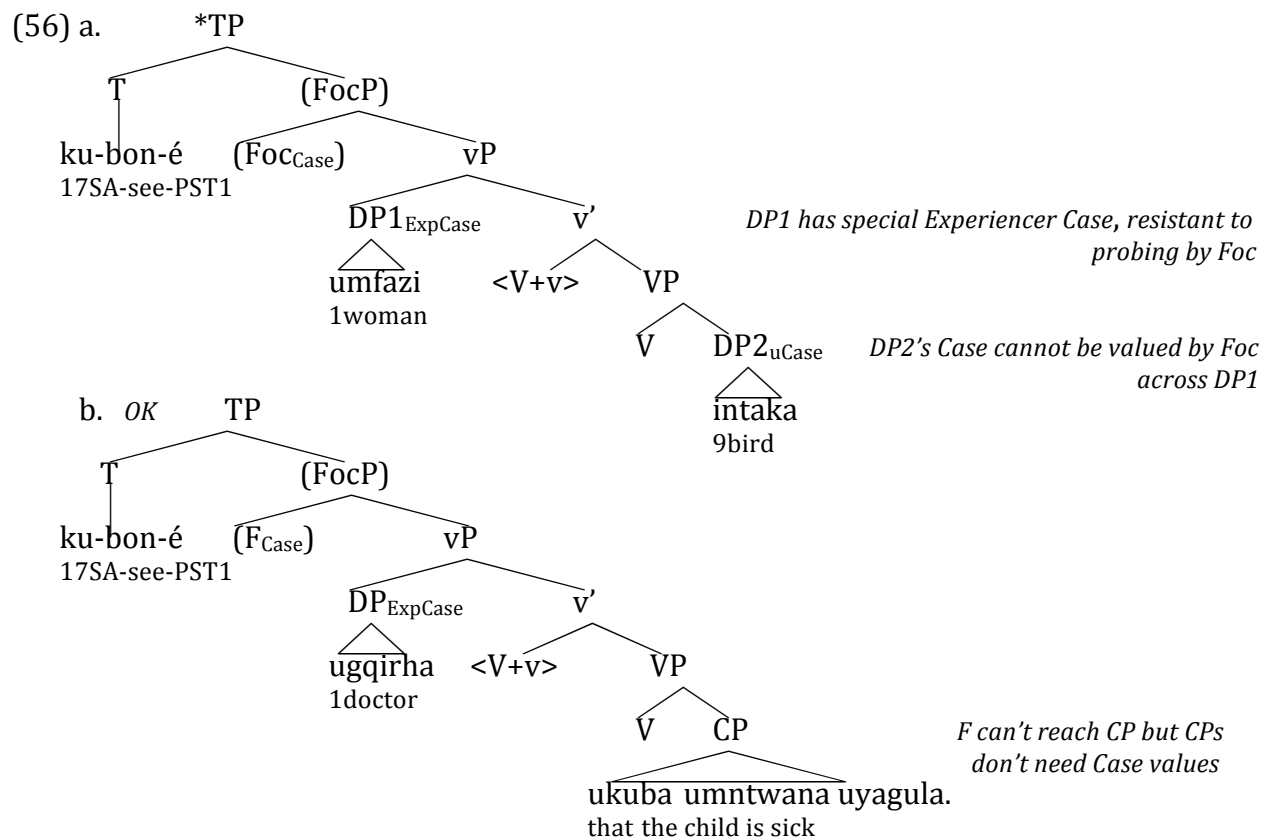
Based on these precedents we propose that full DP arguments of experiencer predicates in Xhosa bear special inherent, hence semantic Cases. Since subjects can raise to Spec, TP and value subject agreement (see (54)) we assume Xhosa inherent Cases are compatible with purely structural Cases as proposed in Jelinek 1984 for Walpiri clitic-DP chains.

- (54) U-m-fazi u-bon-é i-ntaka  
 1-1-woman 1SA-see-PST1 9-9bird  
 'The/a woman saw the/a bird'

Suppose however that Focus confers a complex Focus/Case feature on the DP that it raises, and that the experiencer subject, already marked with its special semantic Case, cannot bear a second such feature (see (55)):

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

Assuming (55), the experiencer subject will be unable to raise to Spec, Foc, yielding a failure of Case-licensing for the object (see (56)a). The problem does not arise for a CP object because Xhosa CPs do not necessarily have uCase (see Stowell 1981 on English CPs).



As for (7)d, in line with a proposal of Baker 2003 for [-A] nominals in Kinande we assume that Xhosa [-A] NPIs do not have uCase features, which are likely part of the DP layer that augments supply. This leads us to expect subject raising to be systematically optional where both arguments are NPIs, and in fact the subject focus reading is optional in cases

like (7)d: It can answer either a question like “Didn’t anybody see the bird?” or “Didn’t Mary see anything?” The former promotes object focus; the latter subject focus.<sup>9</sup> This is true of all negative TECs with two [-A] arguments, as is expected if they lack uCase.

#### 4.3.2 Fine-tuning: binary focus features

The analysis so far predicts that the subject of an experiencer verb cannot be a full DP if the object is also, because a full DP experiencer subject cannot raise to Spec, Foc. It is unexpected, however, that BOTH nominals must be [-A]. If the object has inherent Case, the analysis sketched in (56)b would lead us to expect that to suffice. If the object (also) has a structural uCase feature, raising the [-A] subject to Spec, Foc (and giving it the focus reading) should make available Case-licensing for the object from Foc. But (57)a,b show that something goes wrong in any experiencer TEC containing an augmented object, even if the subject is augmentless (and focused).<sup>10</sup> In contrast, an augmented object of an agentive verb in a TEC can combine with either an augmented or augmentless subject (see (57)c).

- (57) a. \*A-ku-bon-anga      m-ntu      i-ntaka  
 NEG-17SA-see-PST3    1-person    9-9bird  
 ‘Nobody saw a/the bird!’      *ill-formed with or without subject focus*
- b. \*A-ku-cing-anga      m-ntu      u-kutya  
 NEG-17SA-think-PST3    1-person    15-15food  
 ‘Nobody thought of (the) food!’      *ill-formed with or without subject focus*
- c. A-ku-theng-anga      m-ntu/u-Sabelo      u-kutya  
 NEG-17SA-buy-PST3    1-person/1-1Sabelo    15-15food  
 ‘NOBODY bought (the) food!’/‘SABELO didn’t buy the food.’      *obligatory subject focus*

This pattern motivates the following conclusions:

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<sup>9</sup> Note that the account might lead one to expect that the single structural Case-licenser that we identified in §4.2.3 as C could Case-value a [+A] object across a [-A] subject (whether in situ or raised to Spec, Foc). We assume that (defective) intervention prevents this. See §4.3.2 on why the object in (7)d must be [-A].

<sup>10</sup> On the combination of augmented subjects and augmentless NPIs in TECs see §5.3.

(58) *Implications of the ban on augmented objects in TECs with experiencer verbs*

- (i) Both arguments of an experiencer verb have inherent Case features.
- (ii) All augmented nominals in Xhosa have structural uCase features, requiring values.
- (iii) Both Case values that the Focus head can provide are incompatible with inherent Case.

We account for (58)iii with a hypothesis that, for speakers who accept TECs, the Case values from the Focus head are linked to binary [+/- Focus] features. The [+Focus]/Case feature goes to the raised argument, and the [-Focus]/Case feature to the internal argument. Because both values have a semantic component, they cannot be combined with the inherently Cased arguments of experiencer predicates without violating (55).

#### 4.4 In situ focus for a single post-verbal expression

The analysis developed above explains a restriction on experiencer verbs in TECs: the Case-values available from Foc are incompatible with inherent Cases that arguments of experiencer verbs bear. This cannot be the whole story, however: augmented subjects of intransitive experiencer verbs can have focused readings in ECs (see (59)). And there is a second, subject focus reading available for a sentence like (7)c (previously unmentioned for expository reasons) in which the object is a CP (see (60) and (61)). If full DP experiencer subjects cannot raise to Spec, Foc, these readings must have some other origin.

(59) *Experiencer subjects of intransitive verbs can have focus in ECs*

a. Ku-qumb-a      u-Sabelo  
17SA-be.sad-FV 1-1Sabelo  
'Sabelo is sad' OR 'It's Sabelo who is sad'

b. Ku-zil-a      u-Nomsa  
17SA-mourn-FV 1-1Nomsa  
Nomsa is mourning' OR 'It's Nomsa who is mourning'

(60) Ku-bon-é      u-gqirha ukuba u-m-ntwana u-ya-gula.      *OK: replace DP2 w/CP*  
17SA-see-PST1 1-1doctor that 1-1-child 1SA-DISJ2-be.sick  
'The doctor saw that the child was sick'      OR  
'It was the doctor who saw that the child was sick'

- (61) a. u-Loyiso u-cing-a u-kutya  
 1-1Loyiso 1SA-think-FV 15-15food  
 'Loyiso thinks of food'
- b. \*Ku-cing-a u-Loyiso u-kutya  
 17SA-think 1-1Loyiso 15-15food  
 'Loysio thinks of food/It's Loyiso who thinks of food'
- c. Ku-cing-a u-Sabelo ukuba u-mhlaba u-ngqukuv-a  
 17SA-think-FV 1-1Sabelo that 3-3world 3SA-be.round-FV  
 '(It's) Sabelo (who) thinks that the world is round'

Independently motivated proposals of Cheng & Downing 2012 for Zulu pave the way for an explanation of these facts. Cheng & Downing show that neutral word order in Zulu is [SVOX], (see (62)), but non-subject focused items appear in an immediately post-verbal position (IAV). For example, a *wh*-word like *ngani* – ‘how’ and its answer must be IAV (see (63)); glosses adapted; boldfaces added)). Crucially, Cheng & Downing argue that this kind of focus is derived not by leftward movement of the IAV constituent but by vacating the vP of everything else and assigning a focus interpretation to what remains alone in a domain of phrasal prominence. Among their evidence is the fact that the direct object in a case like (63) must be doubled by a pronominal object marker (OM) on the verb. Based on this phenomenon and patterns of phonological phrasing (indicated by parentheses), Cheng & Downing argue that everything following the IAV expression is right-adjoined. The IAV item is in situ within an otherwise empty vP. While an in-depth investigation lies outside our paper’s scope, Xhosa seems to exhibit quite similar phenomena, as shown in (64).

(62) *Neutral word order, in Zulu as in Xhosa: S-V-O-XP*

(Si-thwéle a-má-tha:nga ngó-bhasikí:di) [Zulu: Cheng & Downing 2011]  
 1plSA-6OM-carry 6-6-pumpkin with-1a-basket  
 ‘We are carrying the pumpkins in a basket’

(63) *Focused or questioned non-subjects are immediately post-verbal; all else is vP-external (internal arguments obligatorily doubled by object markers on the verb)*

Q: (u-**wa**-thwéle **ngá:n**) a-má-tha:nga)? [Zulu: Cheng & Downing 2011]  
 2sSA-6OM-carry **how** 6-6-pumpkin  
 'How are you carrying the pumpkins?'

A: (Si-**wa**-thwéle **ngó-bhasikí:d**) a-má-tha:nga).  
 1plSA-6OM-carry **with-1a-basket** 6-6-pumpkin  
 'We are carrying the pumpkins in a basket.'

(64) u-Sipho u-**yi**-phek-é **nini** i-nkuku emzinini wakho? [Xhosa]  
 1-1Sipho 1SA-9OM-cook **when** 9-chicken LOC.3.house 3.your  
 'When did Sipho cook chicken at your house?'

While Cheng & Downing take a prosodic approach to deriving the Zulu facts, given the evidence for a FocusP in Xhosa we suggest the following syntactic account. Suppose that, absent anything in its Spec, the Xhosa Focus head can confer a [+Focus] feature upon its complement, vP (on focus as an assignable feature, see Horvath 1986 and Tuller 1992). Whatever material the vP contains is accordingly interpreted as focused – but for reasons that lie outside the scope of our paper, this is always restricted to a single post-verbal expression (see Cheng & Downing 2012 for relevant discussion and (65)a, which for simplicity does not depict roll-up of Foc into the verbal complex). Locality might make this downward focus assignment the only possibility in SVO clauses: if an XP moves to Spec, FocP, the subject perhaps cannot raise across it to Spec, TP (see (65)b).

(65) a. *Focus feature assigned downwards to vP results in focus reading for its sole contents*

[<sub>TP</sub> Sipho SA-T-OM-v-cook [<sub>FocP</sub> Foc [<sub>vP</sub> when <v> ] chicken] at your house]]]]  
 [+Focus]

b. *Hypothesis: subjects cannot raise across material in Spec, Foc to derive SV order, so focus in SVO clauses relies on the downward feature-assignment strategy.*

[<sub>TP</sub> T...[<sub>FocP</sub> XP Foc [<sub>vP</sub> SU v...]]]

Cheng & Downing's proposal that there is focus available for a single item in an otherwise vacant vP permits the post-verbal subject in any intransitive EC to have a focus reading



without moving to Spec, Foc, and hence without being directly assigned the complex focus/Case feature that is illicit for a full DP argument of an experiencer verb. When there is a CP object, we assume it can extrapose string-vacuously (see (66)), and unlike right-adjoined DP arguments, CPs need not be doubled by an object marker (see Stowell 1981, Richards & van Urk 2013 and others on the tendency of finite CPs to extrapose).

(66) *CP direct objects extrapose string-vacuously, leaving the experiencer in the vP that obtains the focus feature by downwards assignment*

[<sub>TP</sub> T-v-saw [<sub>FocP</sub> Foc [<sub>vP</sub> the doctor <v> <CP>] [<sub>CP</sub> that the child was ill]]] [<sub>+Focus</sub>]

Summing up, we can neatly explain the ban on experiencer verbs in TECs in terms of a focus/Case connection. Adopting for Xhosa a version of Cheng & Downing's proposal of in situ focus for a single expression in Zulu vPs accounts for the residue: subjects of intransitive verbs or verbs with one CP argument can acquire focus without Case.

#### 4.5 The pronominalization asymmetry

As previously noted, pronominal objects are not possible in a Xhosa TEC, unlike in an SVO clause (see (22) and (23) repeated below). Only the highest DP in a TEC can be a pronoun.

- (22) a. u-Sindiswa u-cul-a **ona** *OK: Independent pronominal OB in SVO*  
 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'
- (23) a. 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)'

b. Ku-fik-é                    **yena**  
 17SA-arrive-PST1 1IndPron  
 'She arrived'

*OK: Indep Pro theme in unaccusative EC*

c. Ku-cul-w-a                    **ona**  
 17SA-sing-PASS-fv 6IndPron  
 'They were sung.' (i.e., the songs)

*OK: Indep Pro theme in impersonal passive*

It has often been observed that pronouns must raise out of VP. Diesing (1992, 1997) and Diesing & Jelinek (1995) tie this to the unambiguous definiteness of pronouns. They argue from contrasts like (67)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 optionally shift, object pronouns must do so obligatorily (see (68) - (69)).

(67) a. ... weil ich *nicht* **eine einzige 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 einzige Katze** *nicht* gestreichelt habe  
 since I a single cat not petted have  
 'since there is a single cat that I have not petted'

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

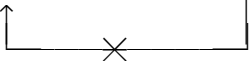
b. ...weil ich **sie** *nicht* gestreichelt habe  
 since I her not petted have  
 'since I have not petted her'

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

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

Assuming Spec, vP is the canonical object-shift position (Chomsky 1995, 2001) our proposal that little v\* is defective in Xhosa ECs accounts for this pattern. Defective v\* has no edge feature to shift pronouns:

(71) [<sub>vP</sub> <SU> v [<sub>vP</sub> V Pronoun]] *v\* of a TEC has no phasal edge feature so pronouns cannot escape VP*



If object shift to Spec, vP is not available, Spec, Foc would be the closest potential landing site for object pronouns to raise to. But in a TEC, Spec, Foc must be occupied by the external argument (which in any case intervenes to block closest c-command between Focus and the object). Hence object pronouns are predicted to be illicit.<sup>11</sup>

#### 4.6 The subject in situ generalization

Alexiadou & Anagnostopoulou 2002, 2007 (henceforth A&A) argue that Case-licensing is impossible when two DPs are left vP-internal.

(72) The subject-in-situ generalization (SSG): By Spell-Out, vP can contain only one argument with a structural Case feature.

The Xhosa TEC facts described in this paper parallel to some extent those that the SSG aims to capture. This section explores the possibility of a unified account.

A&A argue that the reason for SSG effects is that v adjoins to T before Case is checked, burying one of the potential Case-licensing features illicitly within a complex head.

Quite a number of problems accompany this approach. As A&A 2007:50(46) acknowledge, under a cyclic, derivationalist view of syntax there should be no obstacle to probing by v\* prior to its incorporation with T. Furthermore, Bruening 2013 presents evidence that in

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<sup>11</sup> Richards 2007 claims object shift (OS) is never possible in TECs because expletives Merge in the OS position, making it unavailable. Hoskuldur Thrainsson (personal communication) reports that OS is possible in Icelandic TECS, including for weak pronouns. Pronoun objects are also licit in Xhosa impersonal passives of ditransitives, though details lie outside this paper's scope; we leave further investigation for future research.

key English constructions the relevant subject is not actually in situ, and that in situ subjects of transitives do not always yield ungrammaticality.<sup>12</sup> Adding to the complexity of the picture, Baker & Collins 2006 show that a similar constraint in Kinande rules out the co-occurrence of two VP-internal nominal expressions even when one of them does not require Case-licensing (hence it applies even when one or both of them are augmentless). Thus while there do seem to be recurring challenges across languages associated with multiple low (post-verbal) arguments, an overarching explanation has been an illusive goal.

Perhaps the most successful approach to SSG phenomena attributes them to linearization issues. According to Richards (2010), two syntactic objects whose category labels are the same cannot be successfully linearized (see (73)). The proposal avoids Case-theoretic problems and as it is not restricted to vP, it is not subject to Bruening's criticisms. (73) *Distinctness*: If a linearization statement  $\langle \alpha, \alpha \rangle$  is generated, the derivation crashes. Let us suspend our proposal that v\* is defective in a Xhosa TEC and see whether the distinctness hypothesis can provide a good alternative account of the facts. Suppose it is not Case-valuation but distinctness that fails if the subject stays in situ in a Xhosa TEC. Raising the subject to Spec, FocP takes it outside the vP phase, so the grammar need not attempt to linearize it with the object.

Note first that this proposal cannot eliminate the role that abstract Case plays in the account of Xhosa TECs, so it does not make Xhosa consistent with the liberalizations of Case theory proposed Harford Perez 1985, Diercks 2012, or Halpert's 2011, 2012 approach to

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<sup>12</sup> Bruening argues that the crucial factor in determining whether low subjects are grammatical in English is whether the subject precedes the inflected verb. His proposals cannot be extended to Xhosa as they are not compatible with the Xhosa solution of raising one DP to (postverbal) Spec, Foc. Discussing this in the framework of his assumed top-to-bottom structure-building would lead us far afield, so we leave it aside.

Zulu. This is because the experiencer verb asymmetries still require reference to Case theory for a solution.

Note secondly that the analysis has nothing to say about the failure of object pronouns in TECs where the subject has raised to Spec, FocP. If  $v^*$  is not defective and the subject raises to Spec, Foc, it isn't clear why object pronouns could not raise to Spec,  $vP$ , the canonical object-shift position (Chomsky 1995, 2001).

(74) *If  $v^*$  is robust and the subject raises to Spec, Foc, object shift should be possible.*

[<sub>FocP</sub> SU Foc [<sub>vP</sub> OB [<sub>vP</sub> <SU> [<sub>v'</sub>  $v_{robust}$  [<sub>vP</sub> V <OB>]]]]]]

We might still address this under the hypothesis that the object shift position for Xhosa independent pronouns is in a location like XP of (75)): lower than TP (hence postverbal in SVO clauses), but higher than FocusP. Hence raising the subject to Spec, FocP would not place it high enough to avoid intervention problems for pronoun shift.

(75) [<sub>TP</sub> T [<sub>XP</sub> X [<sub>FocP</sub> SU Foc [<sub>vP</sub> <SU> v [<sub>vP</sub> V Pronoun]]]]

This approach to Xhosa object shift would be language-particular and stipulated: the “mapping principle” approach underlying Diesing 1997, Diesing & Jelinek 1995 only requires raising of pronouns out of VP, and a low,  $vP$ -level landing site for object shift has been well-motivated in a range of languages. While certain languages including varieties of Swedish optionally raise pronouns higher, this “long object shift” is able to cross low subjects (see (76) from Holmberg 1999:15), in contrast to the scenario sketched in (75).

(76) Därför gav mej Marit inte någon present  
 therefore gave me Marit not any present  
 ‘Therefore Mary did not give me any present’

Summing up, we can provide an alternative account by replacing the hypothesis of defective  $v^*$  with three ingredients: (i) distinctness/linearization problems, (ii) the

assumption that object pronoun shift cannot target Spec, vP in Xhosa (even when the subject raises to Spec, Foc, eliminating any potential intervention account of this); and (iii) consequently, restriction of object pronoun shift to a non-standard target above the low FocusP. The alternative does not eliminate the role of inherent Case or FocusP in the account since this is still required to explain the ban on experiencer verbs in TECs.

We claim that taken together, the components of this alternative constitute a more complex and hence less successful analysis than the one we have pursued here. Analyzing both T and v\* of Xhosa TECs as defective we capture the full constellation of TEC properties, motivating raising to Spec, Foc for the subject, predicting the impossibility of object pronouns, and tying these phenomena to the absence of agreement in TEC clauses. §5 shows that [-A] nominals rely on licensing from negation rather than Case, so their distribution, mysterious under a *distinctness* account, easily follows.

We would also like to suggest that our approach to Xhosa might offer new insights into SSG-type problems in other languages. Expletives in sentences with “weather” verbs are routinely taken to be a last-resort, rescue mechanism when nothing thematic is available to occupy Spec, TP. Suppose that, in line with our analysis of Xhosa, this is true wherever expletives are used: they fill Spec, TP when T is unable to raise the subject, just as English *do* fills T when it is unable to raise a verb. Transitivity restrictions on ECs frequently arise, cross-linguistically, because in a dependency reminiscent of the Feature Inheritance proposal of Chomsky 2007, 2008, clauses with defective T often have defective v\* as well.

It lies outside the scope of this paper to develop a fuller picture, making concrete the extension of these ideas to languages besides Xhosa. We leave this to future research.

#### **4.7 Against an expletive *pro* subject**

We have provided evidence that  $v^*$  of TECs is defective: it cannot Agree to shift pronouns or value accusative Case. It is striking that this kind of  $v^*$  is found in a clause with default subject agreement and in situ subjects. This seems to us unlikely to be a coincidence. We accordingly propose that T of Xhosa ECs is defective as well. The lack of agreement with the overt subject is treated as paralleling the absence of accusative Case and object pronominalization – thus the properties of T and  $v$  mirror each other in this construction.

A common approach to ECs in null subject languages has been to posit an expletive *pro* subject in Spec, TP. It is possible that Xhosa defective T retains the EPP feature, satisfied by a null expletive because T is unable to raise the subject. But there is no positive evidence for expletive *pro* in Xhosa. We tentatively conclude that Xhosa Spec, TP can be completely empty, as argued in Bobajik & Wurmbrand 2005 for German and Cable to appear for Luo.

#### **4.8 On the absence of definiteness effects**

Our approach to Xhosa ECs is compatible with several approaches to the definiteness effect, including that it is Case-related and/or a function of an expletive...associate chain (see among others Belletti 1988, Safir 1987, 2009). Since we are assuming that there is no expletive, there can be no such chain in Xhosa, and since subjects in Xhosa expletive constructions have a non-canonical Case-valuation strategy, Case-related approaches to the definiteness effect are generally likely to be compatible with the analysis.

Other researchers have argued that subjects of ECs must be indefinite because definites must vacate  $vP$ . As noted in §3.1, Diesing (1992, 1997) and Diesing & Jelinek (1995) conclude from interpretive contrasts like (67) (repeated below) that VP is the

domain of existential closure, where definites do not belong. The alternative approach to DE just analyzes this domain as a little bigger.

(67) a. ... weil ich *nicht eine einzige 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 einzige Katze nicht* gestreichelt habe  
since I a single cat not petted have  
'since there is a single cat that I have not petted'

While we have argued for a vP-internal location for some EC subjects, it is possible, given the intricacies of the tense/aspect system, that the lowest subject position in Xhosa ECs might in fact be in a functional category a little higher than Spec, vP. Our data thus do not give a clear answer as to which approach to the definiteness effect is preferable, for languages that have it. We leave resolution of this question to future research.

#### 4.9 Interim conclusions

This section has argued that the obligatory focus reading for subjects of TECs indicates that they must raise to Spec of a middle field FocusP -- a movement impossible for subjects of experiencer verbs because they bear an inherent Case. The facts support the conclusion that abstract Case is a force regulating DP positions in Xhosa syntax. A second, in situ focus strategy based upon Cheng & Downing 2012 neutralizes the distinction between experiencers and other subjects of intransitive verbs and verbs with CP direct objects.

We have also argued that objects cannot be pronominalized in TECs because pronouns must raise out of VP (see §5.5 for a proposal that the domain is any complement to v\*).

Our analysis attributes both Case and pronoun raising problems to the nature of v\* in TECs, claiming that v\* and T in TECs both lack the agreement and edge features involved in A-relations in SVO clauses.



Lastly we have argued that under our analysis, the absence of definiteness effects in Xhosa TECs is unsurprising.

## 5. *N*-words in disguise: the evidence of polarity items in TECs

### 5.1 Introduction

Halpert 2011, 2012 argues that full DPs in Zulu do not require Case licensing, based on some Case-theoretic anomalies in their distribution. In §6 we will show that Xhosa exhibits precisely the same anomalies, and provide explanations for them compatible with assuming full DPs must be Case-licensed. Given this, the motivation is greatly weakened for supposing that Zulu full DPs don't need Case. A unified analysis of shared phenomena in these two closely related languages is possible only if we abandon this conclusion.

Halpert draws much of her evidence from some distributional restrictions exhibited by [-A] NPIs, claiming they show that only NPIs have Case-licensing needs in Zulu. Here too there are similarities between the two languages that call for a unified account. In this section we argue that NPIs in Zulu and Xhosa are really *n*-words with negative concord features which must undergo leftwards movement to Agree with the operator of sentential negation (see Zeilstra 2008, Haegeman & Lohndal 2010). This proposal allows us to capture all the facts of DP and NPI distribution in both languages.

### 5.2 Pre-verbal subject position

Augmentless nominals are illicit in preverbal subject position in Xhosa, even in the scope of negation. This is demonstrated in the contrast between (14)a,b repeated below.

(14) a. *All DPs including [-A] nominals can occupy object positions in SVO clauses.* [Xhosa]

A-ndi-fun-i                      ukokuba u-Sabelo    a-bon-e                      ✓m-ntu                      / ✓u-m-ntu  
 NEG-1sSA-want-FV    that                      1-1Sabelo    1SA-see-SUBJ    1-1person[-A]/ 1-1person  
 'I don't want Sabelo to see anybody/some person'



the negative operator in the higher clause. Movement from the preverbal subject position is known to be highly restricted across languages (see among others Rizzi & Shlonsky 2007).

- (15) 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')

### 5.3 vP-internal [-A] forms

#### 5.3.1 Leftwards movement of [-A] NPIs

Another constraint on Zulu [-A] nominals that Halpert attributes to Case requirements is the fact that in a mono-transitive TEC, only the subject can be [-A] (see (78)).

- (78) a. **\*VSO augmentless-augmentless** [Zulu: Halpert 2011, 2012]

\*a-ku- phék-anga mu-ntu qanda  
 NEG- 17S- cook- NEG.PAST 1-person 5egg  
 (Nobody cooked any egg)

b. **✓VSO augmentless-augmented**

a- ku- phék- anga mu-ntu iqanda  
 NEG-17S- cook- NEG.PAST 1-person 5egg  
 'NOBODY cooked the/an/any egg.'

c. **\*VSO augmented-augmentless**

\*a-ku-phék-anga u-mu-ntu qanda  
 NEG- 17S- cook NEG.PAST 1-1person 5egg  
 (Nobody cooked any egg)

Like the subject/object asymmetry in (14), this pattern calls to mind the fact that so-called *n*-words in some negative concord languages must undergo leftwards movement. We illustrate in (79) with West Flemish data from Haegeman & Lohndal (2010):

- (79) 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







- b. a-ku-fund-is-anga                      mu-ntu    lutho  
 NEG- 17S- learn- CAUS-NEG.PAST    1person    16thing  
 'NOBODY taught anything.'

(91) **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- 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**

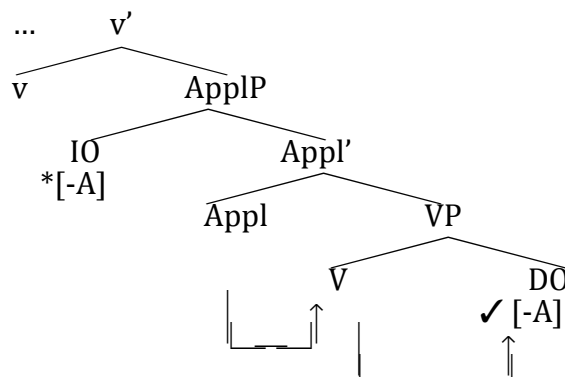
\*A-ku-thum-el-anga                      u-mama    zi-ngane    mali  
 NEG- 17S- send- APPL- NEG.PAST    1-1mother    10-child    9money

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

Following Marantz 1993, Pyllkannen 2002, 2008, Bantu ApplP is situated between vP and VP. The representation of (91)a is thus (92), adapted from Halpert's (33). According to Halpert, Appl and Caus confer Case-licensing on V by Feature Inheritance (FI) (Chomsky 2007): phase heads must pass their probe features to the heads of their complements.

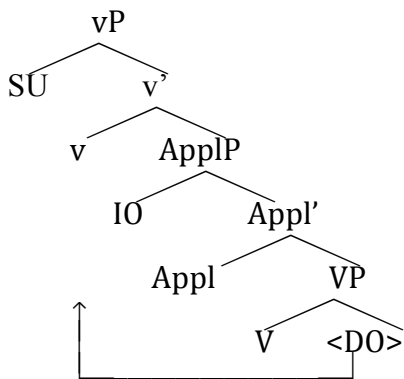
(92) *Halpert 2012: under Appl-to-V Feature Inheritance, DO but not IO can be Case-licensed*



Carstens (2010, 2011) argues that it is inconsistent with the broad distribution of agreement in Bantu to assume that all probe features originate with phase heads which must pass them off. The analysis also seems at odds with the common cross-linguistic pattern that IOs are dative and direct objects accusative. On the other hand, the Zulu data are quite compatible with our proposal that  $v^*$  is defective in TECs, stranding in its complement an expression that needs to raise. We claim Zulu Appl or Caus licenses the NPI by supplying an edge feature, allowing the NPI to shift leftwards. Since the [-A] direct object follows the IO in (91)a, we assume a “tucking in” derivation for Zulu double object constructions (DOCs) as proposed Adams 2010, following McGinnis 2001 (see below).

Support for the idea that Zulu Appl and Caus have phasal edge features exists in the fact that DOCs are “symmetrical” in Zulu. In an SVO clause, either object can pronominalize or passivize (see Adams 2010). Following McGinnis 2001, we take this to indicate that Appl has an edge feature that can raise the DO over the IO as shown in (93). Evidence of symmetry in applied and causative constructions is presented in (94) and (95) from Adams 2010:11,<sup>17</sup> (96) and (97) (thanks to Percy Buthelezi for these examples).

(93) *In a “symmetrical” language, Appl is a phase head with an edge feature*



<sup>17</sup> Some symmetrical languages allow the order [V-DO-IO] (see Carstens 2012 and Baker, Safir, & Sikuku 2012 on Lubukusu). While Zulu does not, the evidence of (94)-(97) argues that this is not structurally significant.



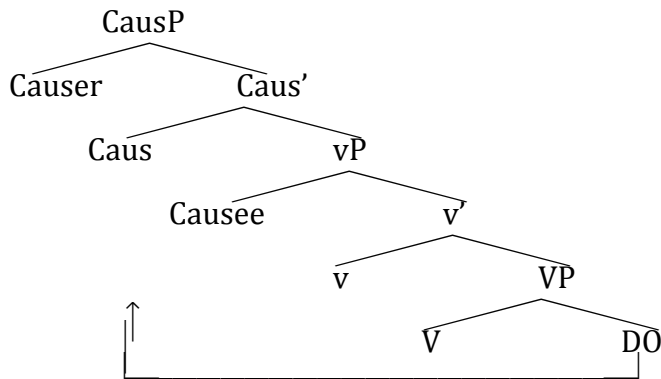
- (94) a. I-ncwadi y-a-fund-el-w-a a-ba-ntwana [Zulu]  
 9-9book 9SA-PRES-read-APPL-PASS 2-2-children  
 ‘The book is read to the children’
- b. A-ba-ntwana ba-fund-el-w-a i-ncwadi  
 2-2-children 2SA-read-APPL-PASS-FV 9-9book  
 ‘The children are read the book’
- (95) a. U-mama u-**ba**-nik-e i-ncwadi  
 1-1mother 1SA-2OM-give-PST 9-9book  
 ‘Mother gave them the book’
- b. U-mama u-**zi**-nik-e a-ba-ntwana  
 1-1mother 1SA-10OM-give-PASS 2-2-children  
 ‘Mother gave them to the children’ (i.e. the books)
- (96) 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’
- (97) 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 for Zulu causatives in (98) (see also Baker, Safir, and Sikuku 2012a, Pylkkanen 2008, McGinnis 2001). Since it is the causee and DO that are symmetrical in a transitive causative, Caus in a symmetrical language apparently selects a flavor of vP with an edge feature, on this analysis.<sup>18</sup> See §5.6 for an alternative proposal.

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<sup>18</sup> Halpert 2012 raises an interesting question: in a Zulu TEC containing both Appl and Caus, why aren’t two [-A] objects licit? Similarly, in an SVOOO clause, why must the medial object be [+A]? Halpert’s answer is the Feature Inheritance proposal in (92); see our comments on it. We hope a fuller exploration of Caus/AppI in (parasitic) licensing and Transfer will yield an alternative account, but that lies outside this paper’s scope.

(98) *Symmetry in causative constructions: Cause selects vP with an edge feature, permitting the direct object to raise across the causee*



Summing up, our proposal about the contribution of Appl and Caus is (99).

(99) **NPI licensing by Appl and Caus:** Appl and Caus introduce edge-features that allow a [-A] direct object NPI to shift leftwards, satisfying (89).

#### 5.4 The nature of the NPI movement requirement

We have argued that the edge of Appl/Caus is an acceptable location for a Zulu or Xhosa NPI to raise to, but we have also seen that an IO or Causee NPI base-generated in Spec Appl/Caus is not licit. We therefore propose that Xhosa and Zulu NPIs must move to an A'-position to be licensed via Agree with the operator of clausal negation (on which see Zeijlstra 2004, 2008 and Haegeman & Lohndal 2010), which we take to be an A' element. Although Xhosa's extra Specs of Appl/Caus are not exclusively A'-positions (since they feed passive and object marking, see (94)-(97)), we assume that they *can* be, following the proposal of McGinnis 2001 that Appl and Caus are phase-heads in "symmetrical" object languages. Spec, FocP and outer Spec, vP in an ordinary clause likewise *can* be A'-positions. Merge positions are never A'-positions, and outer Spec, vP is not available in a TEC. The preverbal subject position in (14) is not an A' position either.

We also suggest that the contrasts in the French (15)a,b might arise because these *n*-words too need to move *overtly* to A'-positions. The licit object *n*-word in (15)a might have

shifted string-vacuously to outer Spec, vP, which can serve as an A' position (Chomsky 2000). The preverbal subject following a complementizer in (15)b has not done this, and hence fails to satisfy a requirement that applies in surface syntax, just as in Zulu.

### 5.5 Comparing NPI movement and pronoun movement

Crucially, both Halpert's analysis and our re-interpretation of it assume that Appl and Caus heads are not defective in Zulu TECs: for Halpert, they have Case features to pass to V, and for us they introduce edge features that allow [-A] direct objects to shift. So it is interesting that the speakers I have consulted judge the Zulu examples in (100) to be unacceptable.

- (100) a. \*Ku-leth-el-a                    u-Monwa    a-ba-ntwana sona  
           17SA-buy-APPL-FV 1-1Monwa    2-2-children 6IndPron  
           'It's Monwa who brought it to the children' (i.e. a key)
- b. \*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)

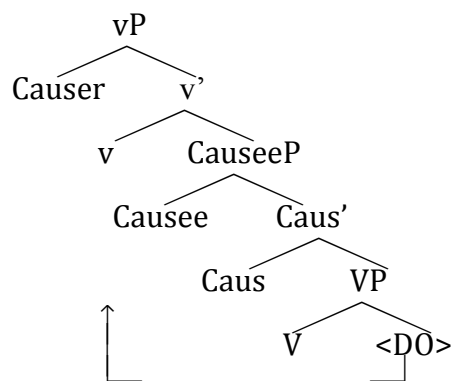
The data in (100) argue that the landing site of NPI raising is not high enough for a pronoun. Assuming local movement suffices for [-A] forms, and construing the complement to v\* as the domain pronouns must escape, we capture these facts easily for applicative constructions as (101) shows (for consistency, we depict both as tucking-in).

- (101) a. \* [<sub>VP</sub> SU V [<sub>AppIP</sub> IO [<sub>AppIP</sub> Pronoun [<sub>AppI'</sub> Appl [<sub>VP</sub> V <Pronoun>]]]]]]  
       b. [<sub>VP</sub> SU V [<sub>AppIP</sub> IO [<sub>AppIP</sub> NPI [<sub>AppI'</sub> Appl [<sub>VP</sub> V <NPI>]]]]]]

But under the analysis in (98) the restriction is not expected in causatives because a DO can raise over a causee, located in Spec, vP. (98) has a further disadvantage in attributing DO-over-causee movement to the edge feature of v\*, because v\* is hypothesized to have such a feature in most languages. It is therefore not transparent how to distinguish symmetrical from asymmetrical object languages where causatives are concerned, under this analysis.

For these reasons we suggest a reanalysis locating a CauseeP right above VP, parallel to ApplP (see (102)). 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. Admittedly the causee argument performs the action of the main verb while an applied object does not. We hope that the compositional semantics of causative and applied constructions can effect this difference, but details lie outside this paper's scope. For present purposes the approach is attractive in capturing the contrast between NPIs and pronouns in a consistent way.

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



## 5.6 Completing the picture: *n*-words in disguise

We have argued that Zulu and Xhosa [-A] NPIs share important properties with *n*-words in negative concord languages. We now present an explicit proposal:

(103) ***N*-words in disguise:** Xhosa and Zulu augmentless NPIs are *n*-words bearing uninterpretable negation features (*u*Neg). Following Ziejstra 2008, these drive them to participate in a relation [Agree [*i*Neg...*u*Neg]].

As noted above, we take the Agree relation that licenses *u*Neg features to be an A'-relation.

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:



accepted by many speakers, a fact that we will exemplify and discuss in §6.2.4. Following Carstens & Diercks 2010 we argue in §6.2.4 that some indicative complement clauses in Xhosa and Zulu are non-phasal. But as Halpert 2012:255-6 points out, there are Zulu speakers for whom indicative clauses are less transparent in disallowing certain kinds of leftwards movement out of them, and for those speakers, [-A] NPIs must either be clause-mates with negation or embedded only in a subjunctive complement (a pattern confirmed in our own research). For such speakers, examples like (109) are ill-formed just as in Italian, French, West Flemish, and other negative concord languages.

(109) \*A-ngi-cabang-i            ukuthi u-Zinhle u-phek-é            lutho            [Zulu]  
 Neg-1sSA-think-NEG that 1-1Zinhle 1SA-cook-PST1 16thing  
 'I don't think that Zinhle cooked anything'

Thus the judgments of speakers who lack the confounding factor of clausal permeability show us that the grammar of Zulu [-A] NPIs is not like that of English NPIs. It is locally constrained like that of *n*-words in negative concord languages, confirming that our analysis is on the right track. One locality issue remains to be addressed. The expression of negation by means of far left- and far right-edge morphemes on the verb suggests that interpretable negation is high in the Xhosa and Zulu clause, as is cross-linguistically common (see Zanuttini 1997; Haegeman 1995). If phasal Spec v\*P is unavailable in TECs, how is the *u*Neg feature of a direct object NPI valued before it undergoes Transfer?

(110) [<sub>NegP</sub> *i*Neg...[<sub>vP</sub> SU v [<sub>ApplP</sub> IO [<sub>ApplP</sub> NPI<sub>u</sub>Neg [<sub>Appl'</sub> Appl [<sub>vP</sub> V <NPI>]]]]]]

It is possible that defective v\* does not induce Transfer (see note 4 on some related issues). But in Xhosa, the subject must be augmentless in configuration (110), suggesting that parasitic licensing is required to bridge the vP phase-edge. Based on this we tentatively conclude that v\* of Xhosa TECs does induce Transfer so a locality violation would occur



- b. Ku-bon-w-é                      u-m-tana w-am  
 17SA-see-PASS-PST1    1-1-child    1-my  
 'My child has been seen' (e.g. by a doctor at a hospital)

(112) *Multiple subject agreement in mono-clausal constructions*<sup>20</sup>

- a. u-Sipho    **u**-phantse    **w**-a-tya            nge-cephe  
 1-1Sipho    1SA-almost    1SA-PST-eat    with-5spoon  
 'Sipho almost ate with a spoon'
- b. Wena        **u**-be        **u**-soloko    **u**-fund-a            lapha  
 2SIndPron    2sSA-RFUT    2sSA-often    2sSA-study-FV    here  
 'You will often study here'

(113) *Raising to object out of agreeing clauses*

- Ndi-funa    u-Nomahlubi [ okokuba    a-phek-e            a-ma-qanda]  
 1sSA-want    1-1Nomahlubi that            1SA-cook-SUB]    6-6-eggs  
 'I want Nomahlubi to cook eggs'  
 [Lit: I want Nomahlubi that she cook eggs]

(114) *Subject raising from finite clauses preserving idiomatic readings and feeding passive*

- a. U-Hili    u-bonakala [ okokuba u-phum-ile    e-ngcongolwe-ni]  
 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]
- b. U-Nomsa    u-khol-w-a                      [ okokuba u-phum-ile]  
 1-1Nomsa    1SA-believe-PASS=FV    that            1SA-depart-PST-FV  
 'Nomsa is believed to have left' [Lit: Nomsa is believed that left]

(115) *Post-verbal subjects licit when something else occupies Spec, TP and controls SA*<sup>21</sup>

- I-cephe    li-tya    u-Sipho  
 5-5spoon    5SA-eat    1-1Sipho  
 'Sipho is eating with a spoon' *Can answer the question, "Who is eating with the spoon?"*

In previous sections of this paper we have provided numerous arguments that abstract Case is present in Xhosa and a key determinant of DP positions. If we are correct, Case is responsible for (i) the obligatory subject focus in TECs, (ii) the ban on TECs with experiencer subjects, and (iii) the unacceptability of TECs to the numerous speakers who

<sup>20</sup> For arguments that constructions like (112) are truly monoclausal see references cited in §3.6.

<sup>21</sup> This construction was first documented in Zulu by Zeller (2011), who names it *instrument inversion*.



accept only intransitive ECs. It follows that the phenomena in (111) through (115) must be given explanations consistent with this assessment.

## 6.2 Explaining the anomalies

### 6.2.1 In situ subjects of passives

As Diercks (2012) points out, impersonal passive constructions are found in languages that clearly do have abstract Case, including German (see Bobaljik & Wurmbrand 2005 for related discussion). The hypothesis of downward probing Agree provides the theoretical apparatus for explaining this possibility. Our analysis has followed that of Halpert 2011, 2012 in assuming in situ subjects of Xhosa and Zulu impersonal constructions can acquire Case values under closest c-command from a higher Case licenser (though we have applied this mechanism to the licensing of full DPs in Xhosa, unlike in Halpert's analysis). This means that (111) is not problematical for the hypothesis that full DPs require Case.

### 6.2.2 Multiple subject agreement

The account of multiple subject agreement plays an explanatory role in several of the key Case anomalies so we present it in some detail. Carstens (2010) observes that iterating subject agreement (for which we adopt her term *hyperagreement*) is characteristic of both Bantu and Semitic languages (see (116)). Since Semitic languages have clear morphological Case distinctions (see (117), they show us that an absence of abstract Case is not a necessary condition for *hyperagreement*.

(116) *Hyperagreement in Arabic*

al-bint-aani    kaan-**ataa**    **ta**-ktub-**aani**    darsa-humaa  
the girls(F)-3D be+past-3FD    3F-write-D    lesson-FD    (D = dual)  
'the two girls were writing their lesson'

(117) *Case in Arabic*

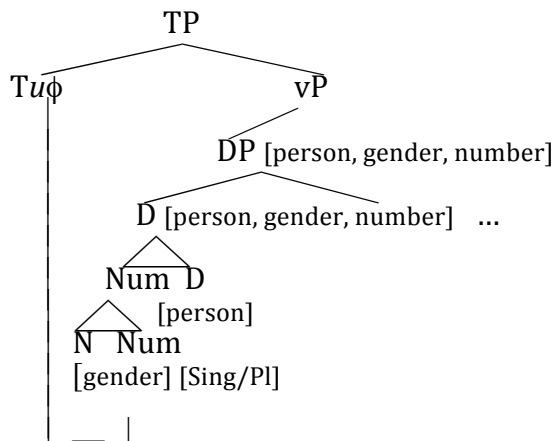
daxal-tu daar-a r-rajul-i-n  
 entered-I house-ACC the-man-GEN  
 'I entered a man's house of a man'

[Standard Arabic]

(adapted from Fassi Fehri 1993:219)

For Carstens (2010, 2011) the key factor in *hyperagreement* is the grammatical gender feature of nouns, made accessible to all clause-level probes in Semitic and Bantu by N-to-D raising and adjunction (see (118) and (119)). Word order evidence for Xhosa N-to-D is presented in (120). Absent N-to-D, Carstens argues that D's person feature blocks access to nominal gender by clause level probes (apart from one like a Romance participle, insensitive to person as a lexical property). (121) illustrates this intervention effect (Num = Number, head of a functional category between DP and NP. Not shown is DP-internal QR of Num, which Carstens argues makes it broadly available for agreement and concord).

(118) *Bantu N-to-D adjunction leads to SA in gender when T agrees with DP*



(119) *Arabic nouns also adjoin to D*

a. daxal-tu d-daar-a  
 entered-I the-house-ACC  
 'I entered the house'

(Fassi Fehri 1993:215)

b. [DP d-daar-a [NP t<sub>N</sub> ]]  
 the-house-ACC

(120) *Xhosa nouns adjoin to D*

[DP u-m-ntana [NumP w-am t<sub>Num</sub> [NP o-m-ncincii t<sub>N</sub> ]]]  
 1-1-child 1-my 1-1-small  
 'my small child'

(121) *Absent N-to-D, person intervenes to block probng of gender by T<sub>uφ</sub>*

[TP T<sub>uφ</sub> [DP D<sub>person</sub> ...N<sub>gender</sub> ]]

In Carstens's view, grammatical gender is a meaningless formal feature and hence satisfies the "activity requirement" of Chomsky 2000, 2001 (see (122)) like abstract Case. But unlike Case, nominal gender comes from the lexicon with a value which is not affected by Agree relations. The reusability of gender as an activity feature is demonstrated in the very common phenomenon of DP-internal concord on multiple items (see (124)). Carstens accordingly advocates a view of "deactivation" effects very similar to that of Nevins 2004 (see (123)), in which valuation of uCase makes its bearer unable to enter further Agree relations because multiple Case values are impossible to pronounce. But unlike Nevins, Carstens assumes there IS an activity condition; it is the ability of nominal gender to satisfy it that makes concord possible in Romance, Bantu and Semitic but not English. Bantu and Semitic have subject agreement that functions like concord because N-to-D gives DPs the uGen activity feature that does not obtain a value through Agree, unlike a DP's uCase.<sup>22</sup>

(122) **The Activity Requirement:** each participant in an Agree relation must have an unchecked uninterpretable feature (uF).


(123) **The Single Case Constraint:** A DP that is valued with more than one case feature is illegible to PF (Nevins 2004).

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<sup>22</sup> Because Romance T cannot obtain a gender value by agreeing with D, Carstens 2010 argues that there is no "Agree with agreement;" see also Carstens & Diercks 2012 for arguments that only intrinsic φ can value uφ.

(124) *Concord: iterating Agree relations with N, based on reusability of uGen (not Case).*

a. la grand-e maison [French]  
 the.Fsing large-Fsing house(FSing  
 'the green house')

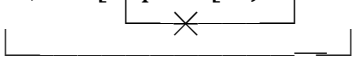
b. [DP D<sub>uPhi</sub> [NP AP<sub>uPhi</sub> [NP N<sub>iPhi</sub>]]]  
 Agree x 1  
 Agree x 2

One might still expect that multiple aspectuals could agree in English, since only the highest would occupy T and hence value the subjects' uCase. Carstens 2010, 2011 rules this out with a matching constraint on Agree that she calls the *strong activity condition* (see (125)), which prevents a pure uPhi probe from interacting with a DP whose sole "activity" feature is uCase. Hence English T but not lower Asps can agree because T has a Case-feature of its own (uNom) to match uCase of the subject DP. Bantu aspectuals can agree because their uPhi features are matched in kind by the uninterpretable nominal phi-feature uGen. While Carstens 2010, 2011 assumes with Diercks 2012 that Case is absent in Bantu, we assume it is present but irrelevant to Agree relations with heads that have no Case values to confer.

(125) **The Strong Activity Condition:** probe and goal in a licit Agree relation have matching uFs, one of which can value the other.

(126) *English: only T can agree*

a. \*Jessie has is skating

b. [T<sub>uNom, uPhi</sub> [Asp<sub>uPhi</sub> [vP Jessie uCase, iPhi v [VP skating]]]]  
 Agree ruled out because uFs don't match in kind  
 Agree possible because each participant has uCase

(127) *Bantu: involvement of uGen on N enables any head to agree*

a. [T<sub>uPhi, uNom</sub> [Asp<sub>uPhi</sub> [vP SU<sub>uGen, uCase</sub> v [VP ...]]]] Agree #1

b. [T<sub>uPhi, uNom</sub> [Asp<sub>uPhi</sub> [vP SU<sub>uGen, uCase</sub> v [VP ...]]]] Agree #2

*Both these relations are OK because each participant has uPhi*

### 6.2.3 Raising to Object

Raising to object in Xhosa takes place only out of subjunctives. In an exploration of Zulu raising, Zeller (2006) notes that subjunctives are more transparent than other clause types across languages, and in raising constructions perhaps do not value Case on their subjects. Assuming this is true, Raising to Object is not a strong challenge to the claim that abstract Case is functional in Xhosa. The fact that the raised DP is agreed with in both clauses (see (113)) is no different from the other forms of *hyperagreement* discussed above.

### 6.2.4 Hyper-raising

To a large extent the derivation of hyper-raising follows from the *hyperagreement* mechanics sketched out in §6.2.2: one DP is goal in serial Agree relations, yielding multiple instances of subject agreement. We assume this does not violate the Single Case constraint for the rather pedestrian reason that the DP involved is redundantly valued as nominative twice (note that this would not be the case for RTO of the subject of a robust finite clause).

More interesting is the question of how hyper-raising gets around the Phase Impenetrability Constraint of Chomsky 2000, reproduced in (128).

(128) The Phase Impenetrability Constraint: In a phase *a* with head *H*, the domain of *H* is inaccessible to operations outside *a*, only *H* and its edge are.

Carstens & Diercks 2010 and 2013 show that several strategies underlie raising out of tensed clauses in Bantu languages. The most relevant for our purposes is clausal complementation with a non-phasal CP. Carstens & Diercks argue that given the articulated left periphery of Rizzi 1997, 1999, it is not unexpected that some CPs would be non-phasal; Carstens 2012 argues that the CP-level phase head is Rizzi's Int(errogative) (see (129)), and that clausal complements transparent to raising in Luyia are bare FinPs. This is likely the case where the Xhosa embedded *okokuba* – 'that' clause is concerned in (114)a,b.

(129) ...<sub>[ForceP FORCE [FocP FOC [IntP INT [FinP FIN [TP SU T...]]]]]</sub>  
 |  
*CP-level phase head in Carstens 2012*

Rizzi 1997, 1999

### 6.2.5 Case for the post-verbal subject of inversion constructions

It has often been noted that the post-verbal subject in some unusual inversion constructions found in Bantu languages has a focused interpretation (see among others Ndayiragije 1999). This seems to be the case in the Xhosa (115), repeated below.<sup>23</sup>

(115) *Post-verbal subjects licit when something else occupies Spec, TP and controls SA*

I-cephe li-tya u-Sipho  
 5-5spoon 5SA-eat 1-1Sipho  
 ‘Sipho is eating with a spoon’ *Can answer the question, “Who is eating with the spoon?”*

We have argued at length that there is a low Spec, FocusP above vP and that it is a Case position. We have also provided evidence that there is one purely structural “downwards” Case-licenser available for the highest post-verbal argument in a VS construction even when that argument is not agreed with or focused. While full details lie outside this paper’s scope, we are confident that between them the two mechanisms can account for the licitness of postverbal subjects in such inversion constructions as these.

### 6.3 Summary and a conjecture about class 15

While Xhosa shares with other Bantu languages a set of properties that look rather anomalous from the standpoint of Case theory, TECs present strong evidence that Case is a factor in Xhosa grammar. This section acknowledges the significance of these anomalies and suggests some ways of analyzing them consistent with Case theory. It is worth noting that the Xhosa Case anomalies seem to be just like those of Zulu reported in Halpert 2012, weakening the motivation for supposing that full DPs in Zulu do not need abstract Case.

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<sup>23</sup> Percy Buthelezi reports that this construction in Zulu would be suited to answer, “Where is the spoon?” This gives a kind of topic status to the instrument; as in Xhosa any focus would have to be the post-verbal DP.

A full understanding of Case in Bantu must explain why apparent infinitives (= class 15, ku+V forms) in many Bantu languages can have preverbal subjects – a fact that Harford-Perez 1985 and Diercks 2012 point out is unexpected if abstract Case is present. The construction is absent in Xhosa so we illustrate with Swahili data from Carstens 1991:

(130) Ni-li-kumbuka Juma ku-funga m-lango  
 1sSA-PST-remember 1Juma 15-close 3-door  
 'I remembered Juma closing the door'

(131) Wa-toto ku-to-faulu katika mi-tihani ni shida kubwa  
 2-child 15-NEG-succeed in 4-exams COP 9trouble 9big  
 'Children not passing exams is a big problem'

Among the questions that arise is whether the preverbal subjects need Case-licensing, and/or whether we should take the absence of this construction in Xhosa as evidence that the languages which allow it are significantly different in being languages without Case.

Some class 15 forms control agreement and have adjectival modifiers and genitive arguments (see Baker, Safir and Sikuku 2012b for recent discussion). Carstens 1991 argues that the class includes derived nominals, two kinds of gerunds, and true infinitives.

(132) Ku-imba kwake ni ku-zuri [Swahili; Carstens 1991]  
 15-sing 15-POSS COP 15-good  
 'His singing is nice'

Carstens proposes that only the gerunds allow preverbal subjects. Her evidence includes the unavailability of a future reading for (133) and the unacceptability of (134), where the reading is forced (see Stowell 1981 on the temporal interpretation of infinitives).

(133) Ni-li-penda Juma ku-imba kila jioni  
 1sSA-PST-like 1Juma 15-sing every 9evening  
 'I liked Juma singing every evening' (entails that he did so)  
 \*'I liked for Juma to sing every evening' (though sometimes he declined)

(134) \* Ni-na-(wa)-taka watu wote ku-zungumza na Juma  
 1sSA-PRES-(2OM)want 2people 2all 15-talk with 1Juma  
 'I want everybody to talk to Juma'

Carstens's proposal provides a promising perspective on an otherwise puzzling question. The source of accusative Case for the subject of English so-called *acc-ing* gerunds (*Him writing a book was surprising*) has always been puzzling, especially since an overt subject alternates freely with PRO here. Whatever the explanation for this curious property of gerunds, perhaps it extends to the preverbal subjects in Bantu class 15, and their absence in Xhosa is thus due to the failure of a particular strategy for “exceptional” Case.

## **7. Conclusions**

Our paper has argued for the existence of a radically defective  $v^*$  in Xhosa, which pairs with a defective T to yield clauses with no agreement, no subject or object raising, and Case valuation through exceptional strategies. In §4.5 we speculated that defective versions of T and  $v^*$  may be present cross-linguistically, giving rise to the requirement for expletive subjects in clause types where T cannot raise a thematic subject to fulfill the EPP. This approach would extend the standard treatment of expletives in “weather” verb sentences to ECs of other kinds, making them analogous to English *do*-support constructions.

Facts of Xhosa transitive ECs argue that there is a low FocusP in Xhosa into whose Spec DPs can move, as Ndayiragije 1999 proposed for Kirundi. On the other hand, facts of experiencer verbs that are intransitive or have a CP internal object provide support for Cheng & Downing’s 2012 analysis of focus in Zulu as associated with a  $vP$  that is vacant of all but a single expression that hence receives the focus interpretation. Both of these focus mechanisms seem to be part of Xhosa grammar.

Halpert’s 2011, 2012 proposal of late, downward Case-licensing in Zulu VSO expletive constructions finds independent support in the curious asymmetries of ECs in closely related Xhosa.



But notwithstanding some similarities, the distribution of augmentless nominals in Xhosa clearly requires a different approach than Halpert proposed for Zulu. We have argued that in both languages they are *n*-words with morpho-syntactic *u*Neg features, participating in local, A' negative concord relations with the sentential negation operator.

Last but not least, we have argued that Xhosa DPs bearing full noun class morphology including the so-called augment or pre-prefix require abstract Case, unlike in Halpert's analysis of Zulu. This paper has built on a principled framework laid out in Carstens 2010, 2011 to explain multiple subject agreement and a variety of apparent Case-anomalies.

It is outside the scope of this paper to draw conclusions about all relevant constructions or to generalize across Bantu in a conclusive way. But our exploration of Xhosa expletive constructions has convinced us that abstract Case can manifest itself quite differently across languages. The motivation for rejecting Case in Bantu and hence as a universal seems significantly weaker as we close this investigation.

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