

# Radical defectivity: implications of Xhosa expletive constructions\*

Vicki Carstens & Loyiso Mletshe

University of Missouri & University of the Western Cape

In addition to SVO clauses with full-featured subject agreement (SA), Xhosa has VSO clauses in which SA exhibits 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 subject agreement, 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 unvalued, structural 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 Case-theoretic problem facts are consistent with the presence of abstract Case in Xhosa and by extension, other Bantu languages that exhibit the same anomalies. The Xhosa VSO clause type provides a novel window into the general workings of agreement A-movement, and Case.

## 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>

- |        |                    |              |    |                            |              |             |
|--------|--------------------|--------------|----|----------------------------|--------------|-------------|
| (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' |              |             |

---

\* Acknowledgments.

<sup>1</sup> In glosses, SA=subject agreement; OM=object marker; Arabic numbers = noun classes (number + gender) unless followed by s or pl in which case they are person features. DISJ1-2 are tense morphemes on verbs that are final in their domains; CONJ1-2 are tense morphemes on verbs non-final in their domains. RFUT = remote future; NEG = negative; PST = past; SUBJ = subjunctive; LOC = locative; CAUS = causative; APPL = applicative; RM = relative marker; IndPron = independent pronouns that can be conjoined and dislocated. 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-*).

- c. U-Themba u-fund-is-é a-ba-ntwana i-si-Xhosa.  
 1-1Themba 1SA-learn-CAUS-CONJ1 2-2-child 7-7-Xhosa  
 'Themba taught the children Xhosa'

VS(O) constructions with default subject agreement (henceforth SA) are also possible.

Henceforth we refer to these by their traditional label, expletive constructions (ECs), though this should be understood as a matter of convention. We will argue that while subject agreement features are indeed expletive in VSO clauses, there is nothing in the preverbal position where subjects typically appear in SVO sentences.

(2)a illustrates an unaccusative EC. As the glosses indicate, two readings are available 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.<sup>2</sup>

- (2) a. Ku-fik-é i-ncwadi. *Felicitous answer to (2b-d)*  
 17SA-arrive-CONJ1 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?  
 17SA-happen-CONJ1 9what today  
 'What happened today?'  
 [Lit: (There) happened what today?] OR
- c. Ku-fik-é ntoni? d. Yi ntoni e-fik-ile-yo?  
 17SA-arrive-CONJ1 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:

---

<sup>2</sup> We use clefts to translate subject focus readings in affirmative clauses. This is for convenience and based on rough functional equivalency, not analogous structural properties – the ECs we so translate are not in fact clefts. We indicate focus of NPI subjects with upper case.

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. There are no “definiteness effects” for the post-verbal arguments in an EC, whether transitive or intransitive.
- ii. The inverted subject of a TEC is obligatorily [+Focus]. In contrast, the subject focus interpretation is optional in intransitive ECs.
- 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>3</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).

Augmentless nominals can be recognized by their lack of a prefix vowel and by underlining.

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

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

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

---

<sup>3</sup> Mali 1995 also noted this restriction. Relatedly, reflexives (which seem to occupy the same morphological slot as object markers) are impossible in Xhosa TECs, though the reciprocal ending is licit. In contrast, Buell 2005 reports that reflexive markers are possible in Zulu ECs. We leave these mysteries to future research.

(5) *The focus asymmetry: in TECs but not intransitive ECs, the subject MUST be focused.*<sup>4</sup>

- a. Ku-lil-é                      u-Sindiswa.                      *Optional subject focus in an intransitive EC*  
 17SA-cry-CONJ1    1-1Sindiswa  
 R#1: 'Sindiswa cried'                      (answers 'What happened?')  
 R#2: 'It's Sindiswa who cried'                      (answers 'Who cried?')  
 [Lit: (There) cried Sindiswa]
- b. Ku-theth-a                      i-ndoda ende i-si-Xhosa.                      *Obligatory subject focus in a TEC*  
 17SA-speak-FV    9-9man 9tall 7-7-Xhosa  
 'It's the tall man who speaks Xhosa.'                      (answers only, 'Who speaks Xhosa?')

(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**-cul-a                      u-Sindiswa.                      *\*clitic pronoun OB in TEC*  
 17SA-6OM-sing-FV    1-1Sindiswa  
 'It's Sindiswa who sings them'

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


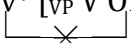
- a. \*Kw-a-bon-a                      u-m-fazi                      i-ntaka.                      *\*TEC of an experiencer verb with 2*  
 17SA-CONJ2-see-FV    1-1-woman    9-9bird                      *full DP arguments*  
 '(It was) a/the woman (who) saw the bird'
- b. Kw-a-bon-w-a               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

---

<sup>4</sup> We use clefts to translate subject focus readings in affirmative clauses. This is for convenience and based on rough functional equivalency, not analogous structural properties (the ECs we so translate are not in fact clefts). We use upper case to indicate focus when the subject is an NPI.

## 1.2 Sketch of the analysis

We argue that Xhosa ECs are clauses in which T and v\* are defective – unable to agree, raise DPs, or value Case (see (8)a,b). The properties in (3), (5), and (7) are indicative of non-canonical Case licensing. In contrast, SV(O) syntax involves robust Case, agreement, and A-movement (see (8)c). These findings are significant because the status of Case in Bantu languages is controversial (see Harford Perez 1985, Diercks 2012, Halpert 2012, Van der Wal 2012), as is the (non-)universality of the EPP (see Cable 2012 among others). They also indicate a tight, unexpected dependency between features of v and T (see (9)).

- (8) a.  ${}^*[{}_{TP} T [{}_{VP} SU_{uCase} \dots]]$  *T of VSO is inert: default SA, no EPP, no nominative*  
  
 b.  ${}^*[{}_{vP} v^* [{}_{VP} V OB_{uCase}]]$  *v\* of VSO is inert: no object pronouns/object shift or accusative*  
  
 c.  $[{}_{TP} SU_{uCase} T [{}_{vP} <SU_{uCase}>. v^* [{}_{VP} OB_{uCase} V <OB_{uCase}>]]$  *SVO: A-movement, Case (and agreement) functional normally*

### (9) Profile of Xhosa SVO and VSO constructions

|  |
|--|
| 2 opposing clause-types: (i) T <sub>+EPP</sub> ; full Agr; V <sub>robust</sub> (ii) T <sub>-EPP</sub> ; default Agr (FocP) v <sub>defective</sub><br>In Xhosa, <b>defective v</b> $\leftrightarrow$ <b>defective T</b> |
|--|

The correlation of obligatory focus with transitivity in Xhosa ECs is the first indicator that Case is an issue in TECs, and the experiencer verb contrasts in (7) provide the second. Both patterns illustrate that problems arise if a TEC contains two augmented nominals, henceforth [+A]. We analyze the augment as D, and [+A] nominals as full DPs needing Case values because uCase is a feature of D.

Since the sole argument in any intransitive or passive EC can be a [+A] DP with a neutral, non-focused interpretation, we propose that there is one structural Case optionally available for the highest argument in an EC (§4.2.3 suggests this Case is valued by a particular choice of null C). In TECs, the inclusion of a second nominal creates a challenge.

We interpret the focus-transitivity connection as a strategy to surmount the absence of accusative: a middle field Focus head probes both subject and object, raising the former to its Spec and giving both arguments Case-values linked to [+/-Focus] features (see (10)).<sup>5,6</sup>

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

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

(7)a shows that DP arguments of experiencer verbs cannot be licensed via this strategy. In keeping with a common pattern in languages with overt Case systems, we propose that arguments of experiencer verbs bear inherent Cases. Adding the augment gives them an unvalued uCase feature as well. The inherent Cases are compatible with purely structural Cases; hence experiencer verbs and their arguments are licit in passive (or intransitive) VS clauses (see (7)b) and in SVO clauses (see (11)).

- (11) U-Sindiswa u-bon-é u-gqirha  
 1-1Sindiswa 1SA-see-CONJ1 1-1doctor  
 'Sindiswa saw the doctor'

But the inherent Cases of an experiencer verb's arguments are not compatible with a second semantically linked Case (see (12)).

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

If an experiencer verb in a TEC has a [+A] object, the result is ill-formed since the only available Case-value is linked to a Focus value (see (13)). (7)c,d show that TECs of

<sup>5</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 2012.

<sup>6</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; we leave it aside.

experiencer verbs are possible if the object is a bare NP (= [-A]) or a CP. This follows if NPs and CPs lack uCase features, so structural Case-licensing is inapplicable for them.

- (13) *An experiencer verb with a [+A] DP object cannot participate in a TEC. The only Case available for this DP would be Focus-linked.*

$$*[\text{FocP} \dots \text{Foc} [\text{VP} <\text{SU}> \text{v} [\text{VP} \text{V DP}_{\text{Inherent}; \text{uCase}[-\text{Foc}]]]]]$$

An implication is that Case values coming from the Xhosa Focus head straddle the line between structural and inherent: they have semantic associations, but are related to particular structural positions and compatible with a variety of thematic roles.

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:

- (14)  $*[\text{VP} <\text{SU}> \text{v} [\text{VP} \text{V Pronoun}]]$  *Pronouns cannot escape VP in TECs*
- 

Summing up, we relate the absence of accusative and the unavailability of pronouns/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. Absent evidence that probe features of T participate in EC syntax we analyze T as lacking EPP, Case, and  $u\phi$  in ECs. 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>7</sup> (following Preminger 2011, agreement failures do not cause a derivation to crash). In contrast SVO clauses have robust T and v, that is, versions equipped with the standard probe features.

<sup>7</sup> See §4.6 for discussion of Alexiadou & Anagnostoulou 2001's *subject in situ generalization* and some related alternatives: *distinctness* for linearization (Richards 2010, and the labeling algorithm of Chomsky 2013).

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 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.

### **1.4 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 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 addresses apparent Case anomalies in Xhosa (and other Bantu languages that exhibit them). §6 concludes.

## 1.5 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  $v^*$  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 (15) for the unergative verb ‘sing.’

- (2) a. Ku-fik-é                      i-ncwadi.                      *Optional subject focus for unaccusative EC*  
       17SA-arrive-CONJ1 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.]

- (15) Ku-cul-é                      u-Sindiswa.                      *Optional subject focus in unergative EC*  
       17SA-sing-CONJ1    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.

- (16) a. Ku-theng-a            a-ba-fazi    i-i-ntyatyambo.                      *TEC has subject focus*  
       17SA-buy-FV        2-2-women 10-10-flowers  
       'It's the women who buy flowers.'
- b. Ku-bhaq-é                      u-Sindiswa    i-mali.  
       17SA-discover-CONJ1 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 (17)a-c). Second, an indefinite can be subject of an SVO sentence (see (18)a), or subject of an intransitive EC, as shown in (18)b, d; but is anomalous as subject of a TEC, as shown in (18)c.<sup>8</sup>

- (17) a. Kw-enzek-é                      ntoni?  
       17SA-happen-CONJ1    9what  
       'What happened?' [Lit: (There) happened what?]
- b. Ku-cul-é                      u-Sindiswa.  
       17SA-sing-CONJ1    1-1Sindiswa  
       'Sindiswa sang.' [Lit: (There) sang Sindiswa]
- c. #Ku-cul-é                      u-Sindiswa    a-ma-culo.                      *Infelicitous in context*  
       17SA-sing-CONJ1 1-1Sindiswa    6-6-songs  
       # 'It was Sindiswa who sang songs'  
       [Lit: (There) sang Sindiswa songs]
- (18) a. U-m-ntu    u-b-é                      i-ncwadi    y-am!  
       1-1-person 1SA-steal-CONJ1 9-9book    9my  
       'Somebody stole my book!' OR                      *Indefinite SU OK if order is SVO*
- 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-CONJ1 9-9book    9-my  
       'Somebody stole my book!'  
       [Lit: (There) is a person who stole my book!]

---

<sup>8</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 we consulted did not share the judgment.

c. \*Ku-b-é                      u-m-ntu    i-ncwadi   y-am!  
     17SA-steal-CONJ1 1-1-person 9-book    9-my  
     ‘Somebody stole my book!’  
     [Lit: \*(There) stole a person my book]

*\*Indefinite SU in TEC  
 (Reversal of “definiteness effect”)*

d. Ku-cul-é                      u-m-ntu.  
     17SA-sing-CONJ1 1-1-person  
     ‘Somebody sang’  
     [Lit: (There) sang a person]

*Compare with (8c)*

It is important to note that a sentence like (19) with [SV... ] word order does not have obligatory focus on the first post-verbal constituent (though focus is optionally available post-verbally in such clauses if the vP is otherwise empty; see §4.4). Hence there is no general Xhosa requirement of focus on an expression immediately following the verb.<sup>9</sup>

(19) U-mama    u-nik-é                      a-ba-ntwana   i-ncwadi.  
       1-1mother   1SA-give-CONJ1 2-2-children   9-9book  
       ‘Mother gave the children a book.’

The examples in (17) and (18) make it very clear that Xhosa 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’

---

<sup>9</sup> Thanks to an anonymous reviewer for raising this question. Other VS constructions also have subject focus readings; see discussion of (94) in §6.2.5; and as mentioned above, see §4.4 on focus in SVO clauses.

Xhosa also clearly lacks the restriction to unaccusatives that is common for ECs in more familiar languages. This, the focus/transitivity correlation and the difference between Xhosa and Germanic ECs with respect to definiteness all require explanation. We argue in §4 that these striking characteristics of Xhosa ECs are due to non-canonical, Focus-linked Case-licensing necessitated by the absence of probe features on T and v of Xhosa ECs.

### 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-CONJ1 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 are NPIs, lacking the 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-CONJ2-see-FV1-1-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-CONJ2-see-PASS-FV    9-9bird  
           'A bird was seen'
- c. Ku-bon-é                      u-gqirha [CP ukuba u-m-ntwana u-ya-gula].                      *OK: replace DP2 w/CP*  
           17SA-see-CONJ1 1-1doctor    that    1-1-child    1SA-DISJ2-be.sick  
           The doctor saw that the child was sick'
- d. A-ku-bon-anga                      m-ntu      nto.                      *OK: negative experiencer TEC replacing both full DPs*  
           NEG-17SA-see-NEG.PST 1person    9thing                      *with "augementless" NPIs*  
           'NOBODY saw anything!'  
           [Lit: (There) didn't see anybody anything]

Tables 1 and 2 summarize 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/\*CONJ1  
‘The children studied’
- b. A-ba-ntwana ba-fund-é/\*ile *conjoint form is non-final*  
2-2-children 2SA-learn-CONJ1/\*DISJ1 i-si-Xhosa.  
‘The children studied Xhosa’ 7-7-Xhosa

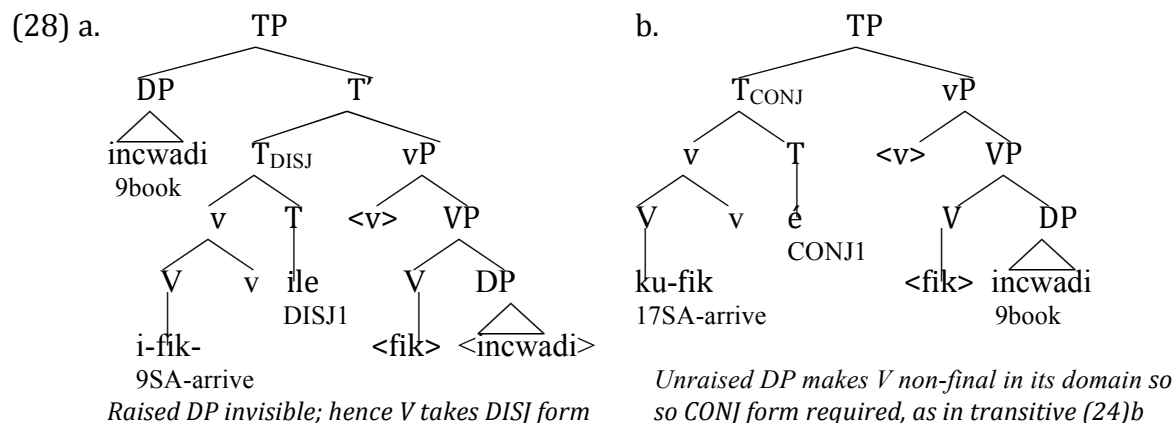
While this kind of alternation has sometimes been attributed to the presence or absence of verb focus (Hyman & Waters 1984, Ndayiragije 1999), Buell (2006) argues against such an interpretation partly because either conjoint or disjoint morphology can appear in the answer to a “What happened?” question 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).

- (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 intrinsic phi-features; a disjoint form cannot.<sup>10</sup>

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 conjunct 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/\*CONJ1  
 'A letter arrived'  
 b. Ku-fik-é/\*ile i-ncwadi.  
 17SA-arrive-CONJ1/\*DISJ1 9-9letter  
 'A letter arrived'



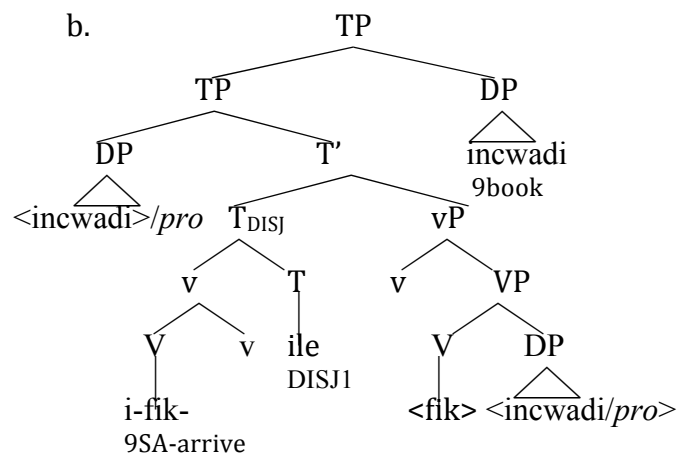
On the other hand, when a post-verbal subject controls SA, the verb takes the disjoint form (see (29)a). This follows from the reasonable assumption that the overt subject in such

<sup>10</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 *ka-* is historically noun class morphology; *phandle* descends from locative class 16. Thus they are plausibly viewed as having phi-features. See §4.3.2 on CP complements.



cases is not in situ but in a right-dislocated position. Building on Halpert 2012 and Buell 2006, we assume that doubling by subject agreement or by an object clitic is prerequisite for right-dislocation of argument DPs.<sup>11</sup> (29)b illustrates two plausible hypotheses: that the right-dislocated subject in (29)a moves there via Spec TP, and an alternative under which the structural subject is *pro*, doubled by the DP Merged in right-adjointed position (both ideas come from Buell 2006). The choice among these options is tangential to our paper's concerns so we leave it aside.

- (29) a. I-fik-ile/\*é                      i-ncwadi.  
           9SA-arrive-DISJ1/CONJ1    9-9letter  
           'A letter arrived'



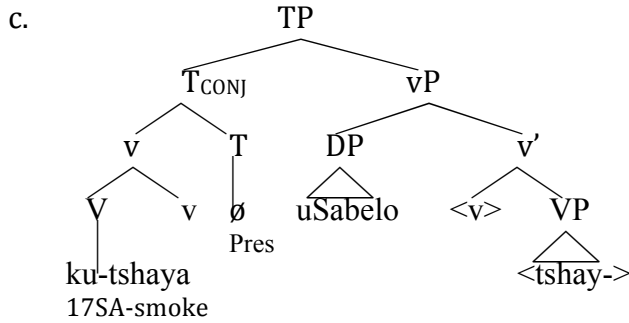
*Buell 2006: The right-dislocated object and in situ copy are invisible to DISJ*

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

<sup>11</sup> Diagnostics in Cheng & Downing 2012 and Halpert 2012 suggest that the Zulu object marker is a clitic, and Xhosa patterns alike. In contrast, since subject marking iterates in clauses with certain auxiliaries (see §3.6: (36)) we analyze it as true agreement.



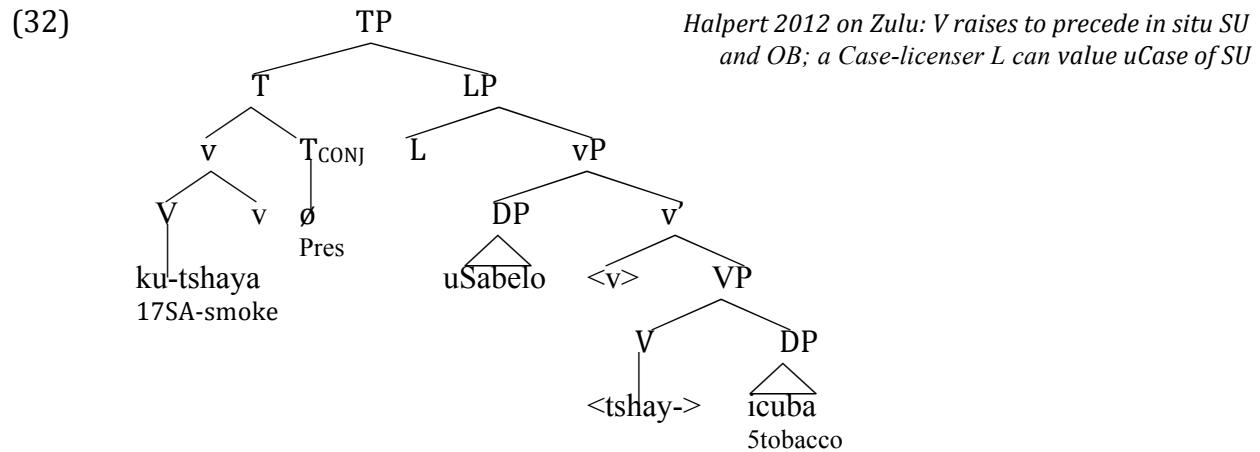
again adapting Buell 2006;  
unraised SU in V's domain blocks DISJ

### 3.4 Transitive expletive constructions in Halpert 2012

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

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

Halpert 2012 shows that TECs exist in Zulu, and proposes that their arguments remain in situ. She posits a “downwards” Case-licenser between T and vP that she labels L.



### 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. The results confirm our proposal that subject agreement correlates with subject raising to Spec, TP.

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

This contrast supports our claim that EPP and uPhi probe features of T go together, 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 (whether *pro* or the right-adjoined DP; see the intransitive VS clause in (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)<sup>12</sup> (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, Slaterry 1981).

---

<sup>12</sup> Following Slaterry’s 1981 analysis of Zulu we analyze these items as auxiliaries rather than adverbs. They appear between the subject and the inflected verb where categorically unambiguous adverbs are illicit, and they bear subject agreement as is common for clause-medial auxiliaries in Bantu languages.

- (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 evidence to be presented in §4.2 we propose that a FocusP lies just above vP (see (37)a). In a clause like (36)b, there are two free-standing auxiliaries and the subject can have a focused interpretation that we will tie to occupancy of Spec, FocP. The fact that the thematic verb nonetheless precedes the subject suggests that  $V_{main}$  always raises beyond vP and Spec, FocP. Following proposals of Ngonyani 1999, 2006, Kinyalolo 2003, and Carstens 2005, we assume that the final vowel of the inflected verb is a mid-level functional head, Mood, to which the verb always adjoins. These assumptions are sketched out in (37)b,c, = (36)b).

- (37) a. TP > (AspPs) > MoodP > (FocP) > vP > VP *Partial cartography of Xhosa clauses*
- b. [<sub>TP</sub> T [<sub>AspP</sub> Aux [<sub>MoodP</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>MoodP</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. (38) –

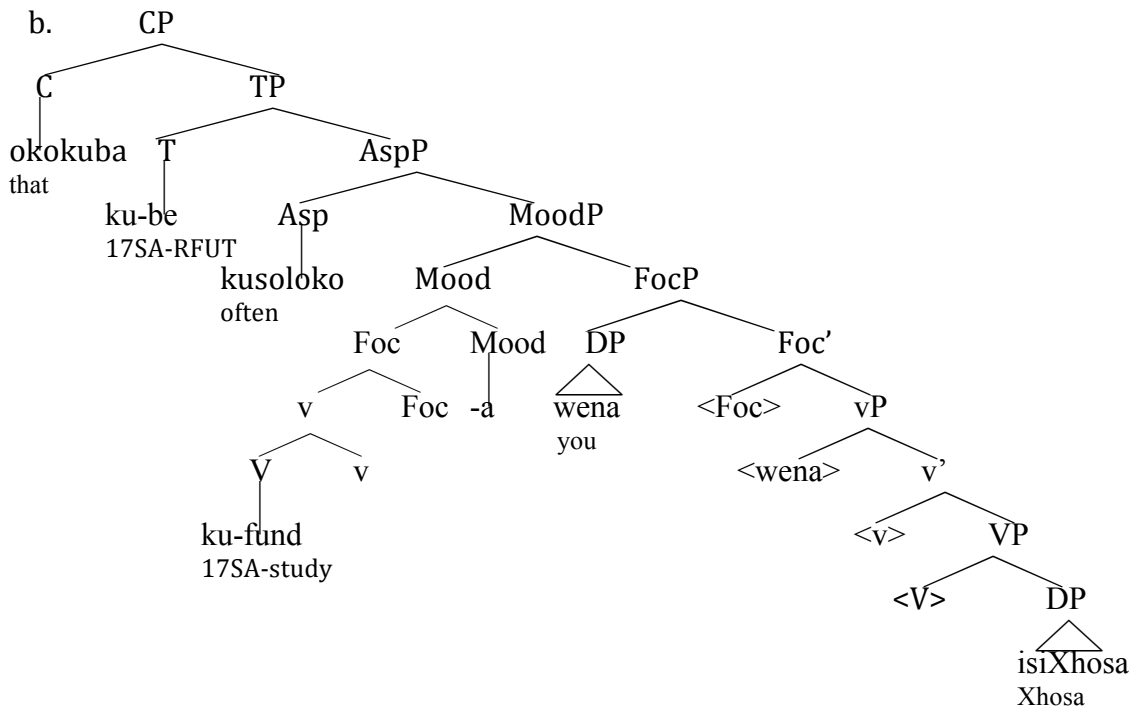
(39) show that ECs are possible in embedded clauses following overt complementizers.

Putting together the full set of facts, we arrive at the representation in (40)b for (40)a.

(38) U-Sabelo u-cing-a [CP okokuba ku-fund-is-a 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-Sipho u-buz-é [CP okokuba ngabe ku-bhal-é u-m-ntwana i-ncwadi na].  
 1-1Sipho 1SA-ask-CONJ1 that whether 17SA-write-CONJ1 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 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 restrictions on transitive 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 alternative 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 that our analysis is compatible with several approaches to the so-called Definiteness Effect in ECs of familiar languages. §4.9 concludes the section.

## 4.2 Deriving the focus interpretation

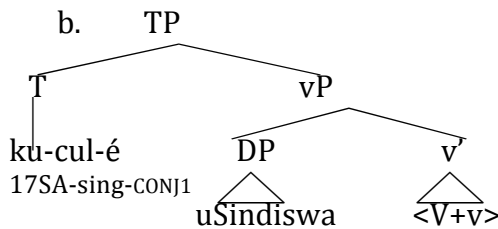
### 4.2.1 Intransitives

Consider the intransitive EC in (42)a. 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.

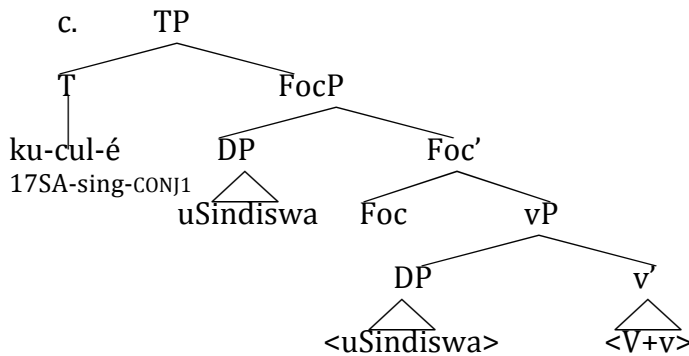
We propose that this difference reduces to whether or not a middle field Focus head is present to raise the subject to its Spec (though see §4.5 for a slightly more complex picture). Hence the representations in (42)b,c correspond to the two readings.<sup>13</sup>

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

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



Reading #1



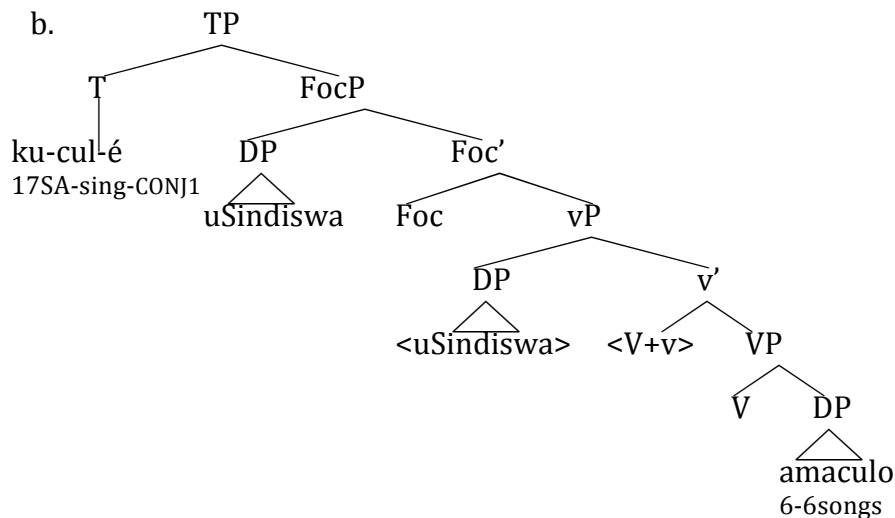
Reading #2

<sup>13</sup> As an anonymous reviewer points out, the possibility of a low FocusP in Nguni and other Bantu languages has been much discussed. See §4.4 for facts connected with post-verbal focus in SV(O) clauses that lead Buell 2007, Cheng & Downing 2012 to argue against a low FocusP in Zulu (and see Hyman & Polinsky 2007 for arguments against FocusP in Aghem). In contrast Ndayiragije 1999, van der Wal 2006, and Riedel 2009 argues for low FocusPs in Kirundi, Makhuwa, and Samba respectively. The facts of focus in Xhosa TECs provide novel evidence hitherto undiscussed for any language we know of in relation to this debate.

## 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 where they obtain a [+Focus] reading. Thus the only representation for (43)a is (43)b.

(43) a. Ku-cul-é            u-Sindiswa    a-ma-culo.  
           17SA-sing-CONJ1 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.<sup>14</sup> But the optionality of focus in intransitives argues that raising is not required in ECs to Case-license the subject. We accordingly propose that  $v^*$  of Xhosa TECs cannot value accusative. There is just one structural Case in a Xhosa EC independent of focus, and it goes to the highest argument (see (8)b repeated below). In the grammars of many speakers, this limitation cannot be

<sup>14</sup> See §4.6 for consideration of other possibilities including labeling problems (Chomsky 2013) and linearization problems (Richards 2010). The ban on TECs of experiencer verbs with 2 arguments is something these proposals seem to offer no insight into, as is the ban on pronominal subjects (see §4.5). Under the Case approach these are a package; under labeling or distinctness approaches, they are coincidental.



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>15</sup>

- (8) b.  $[_{vP} v [_{VP} V DP_{uCase}]]$  *v of ECs cannot value uCase or raise the internal argument*

A locality question arises since, for any potential licenser above FocP, the subject would intervene to block access to the direct object (see (44)). We accordingly propose that Focus can Agree with both subject and object with the result that the object is Case-licensed.

§4.3.2 presents evidence that the Case value that the object so acquires has a semantic component, which we identify as linkage to a [-Focus] feature. It might be that only [-Focus] is linked to a Case-value in this way, but in the interests of symmetry and avoiding stipulation we suggest that both Focus values are linked to Case-values (see (45)a,b).<sup>16</sup>

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

$$*X_{Case} [_{FocP} SU_{uCase} [_{Foc'} Foc [_{vP} <SU> v [_{VP} V DP_{uCase}]]]]$$

(45) a. *Foc probes and raises SU to its Spec, giving it [+Focus] and a linked Case-value:*

$$[_{FocP} SU_{[+Focus], uCase} Foc [_{vP} <SU> [_{v'} v [_{VP} V OB_{uCase...}]]]]$$

<sup>15</sup> As an anonymous reviewer notes, this entails that the one structural Case available to the highest argument in ECs must be optional; on this see §4.2.3. Our proposal that Focus can value Case is intended to be language-particular. We are not claiming that Focus can do this generally in other languages (though see §5.2.5 for a conjecture that Focus *might* have a Case involvement in other Bantu languages where inverted subjects have obligatory focus readings). Even in the grammars of Xhosa speakers who do not accept TECs, we assume Focus cannot value Case. Thanks to an anonymous reviewer for raising these points. For reasons of length we ignore the issue of Case in TECs that include applied and causative morphemes.

<sup>16</sup> An anonymous reviewer asks if Focus can value uCase, what the implications are for passive clauses. Xhosa allows both SV and VS impersonal passives (the latter illustrated in (i)) in which the internal argument surfaces low and may but need not have a focused reading.

(i) Ku-theng-w-a i-i-ntyatyambo.  
17SA-buy-PASS 10-10-flowers  
'Flowers are bought/It's flowers that are bought.'

The facts are suggestive of the same mechanisms that function in (T)ECs to value the highest argument's Case: Focus or "downwards" structural. Exploration of how these work lies outside this paper's scope.

b. *Foc probes the object, giving it [-Focus] and a linked Case-value:*

[<sub>FoP</sub> SU<sub>[+Foc]</sub> <sub>uCase</sub> [<sub>Foc</sub> Foc [<sub>VP</sub> < SU<sub>uCase</sub>, > [<sub>v</sub> v [<sub>VP</sub> V OB<sub>[-Foc]</sub> <sub>uCase</sub>...]]]]]

This analysis builds on a proposal in Haegeman & Lohndal 2010 for accomplishing multiple Agree relations serially, and on Halpert's 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. In (46)-(48) 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 as shown in (45)a,b.

(46) *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

(47) *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.'

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

- a. [<sub>TP</sub> T+Num [<sub>VP</sub> DAT [<sub>v</sub> v [<sub>VP</sub> V [<sub>TP</sub> 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 converges with Halpert's approach to Zulu in assuming that v\* cannot license accusative, but differs from Halpert's approach in assuming this is true only in TECs. It differs also 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 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 there is always "downward" Case licensing available for a single post-verbal argument in any EC (see (2), (5)a, (7)b,c and (42)a). Since 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 complementizers in some languages have the ability to independently confer a Case value. We reproduce Standard Arabic data from Melebari & Seely 2012 in (49) showing that while T values nominative, the C *ʔanna* values accusative. Given the apparent inertness of T and v\*'s probe features in Xhosa ECs we conjecture that there is a particular null Xhosa C that, like



### 4.3 Case and experiencer predicates

#### 4.3.1 Prologue on [-A] NPIs

Contrasts in the distribution of [-A] and [+A] nominals plays a significant role in the analysis of experiencer predicates in TECs that we develop in this section, and in the conclusions we draw from them regarding the workings of abstract Case in Xhosa. Before we get started on that topic, though, we need to introduce a constraint on [-A] NPI distribution which is constant across verb classes and which, in our view, has nothing to do with Case. This is a general ban on [-A] NPIs in the object position of TECs, illustrated in the contrast between (51)a and (51)b. In the interests of providing complete paradigms, our presentation of the facts of nominal arguments of experiencer verbs in TECs will include such cases. So it is important to establish at the outset that they are part of a broader pattern, and therefore fall under a broader solution rather than our experiencer verb related proposals. In what follows we describe just enough of the facts and analysis from Carstens & Mletshe 2013 to make the pattern and outlines of an analysis clear.

#### (51) a. ✓VSO augmentless-augmented

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

#### b. \*VSO augmented-augmentless

\*A-ku-phek-anga                      u-m-ntu    qanda  
NEG-17SA-cook-NEG.PAST    1-1person    5egg  
[Intended: A/the person didn't cook any egg]

In Xhosa the ban on [-A] objects in TECs is overcome if there is a [-A] NPI subject in the same clause (see (52)a). In closely related Zulu, where an identical ban on direct object [-A] in TECs is documented in Halpert 2012, a [-A] NPI object additionally requires applied or causative morphology on the verb (52)b:

(52) a. ✓ **Augmentless–Augmentless** [Xhosa]

A-ku-phek-anga                      m-ntu                      qanda  
 NEG- 17SA- cook NEG.PAST 1-person                      5egg  
 ‘Nobody cooked any egg!’

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

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

There are several further systematic constraints on the positions of [-A] NPIs: they cannot occupy preverbal subject position of an SVO clause, even embedded under negation (see Na). They cannot clitic-dislocate, and they cannot appear DP-internally if higher material in the DP is [+A]. Carstens & Mletshe 2013 account for the full pattern of facts by claiming that [-A] NPIs are *n*-words: negative concord items that must raise to enter into a local Agree relation with a sentential operator, most commonly negation (interrogation also licenses them as it does NPIs and *n*-words in some negative concord languages; details lie outside this paper’s scope). The ill-formedness of (53)a is exactly parallel to that of the French (53)b, attributed by Kayne 1981 to the need for *personne* to raise into the matrix clause to interact with negation. The West Flemish word order contrast in (54) also illustrates a leftwards movement requirement for *n*-words.

(53) a. \*A-ndi-fun-i                      ukuthi mntu                      a-phek-e  
              NEG-1SSA-want-NEG.PST                      that 1person                      1SA-cook-SUBJ  
              ‘I don’t want anyone to cook’

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

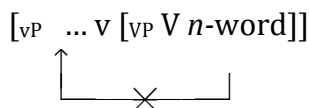
(54) *West Flemish n*-words must move leftwards in overt syntax (Haegeman 1995)

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

The ban on [-A] NPIs as objects in TECs arises because  $v^*$  is defective and cannot accomplish object shift. We will see in §4.5 that this conclusion has independent support in the ban on object pronouns in TECs.

(55) [-A] NPIs in Xhosa are *n*-words which must move leftwards. Objects of TECs cannot do so because  $v^*$  is defective in TECs



Subject *n*-words (= [-A] NPIs) in Xhosa and Zulu TECs satisfy the raising requirement by moving to Spec, FocusP. The fact that a [-A] NPI object is acceptable in (52)a is attributed by Carstens & Mletshe 2013 to *parasitic negation*, a strategy documented in other negative concord languages and likened to parasitic gaps ((56) and (57) taken from Haegeman 1995). Under parasitic negation, an *n*-word in an illicit location is rescued by a local *n*-word in a licit location.

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

Summing up, the *n*-word analysis accounts for several general restrictions on [-A] NPIs in terms of locality with negation and the raising requirement in (55).

With this background established, we are ready to approach the distribution of nominals and CPs in experiencer predicate TECs.

#### 4.3.2 Nominals and CPs in experiencer predicate TECs

Recall that an experiencer verb with two [+A] 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 does not arise if: (i) one of the arguments is removed by passivization, (ii) one of the arguments is a CP, or (iii) both of the arguments are [-A] NPIs (see (7) repeated below).

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

(58)a shows that if an experiencer verb in a TEC has two arguments, it is not acceptable for the subject alone to be [-A]. (58)b shows that, as expected under the account in §4.3.1, it is not sufficient for just the object to be [-A] either. But if there is only one argument in the clause, or the second argument is a CP, either a [-A] or a [+A] subject is possible (see (58)c,d). (59) is a reminder that the ban on [+A] objects in TECs disappears when the experiencer verb is replaced with an agentive verb (focus is indicated with upper case in these examples).

- (58) a. \*A-ku-bon-anga                    m-ntu                    i-ntaka  
              NEG-17SA-see-NEG.PST   1person                    9-9bird  
              [Intended: NOBODY saw a/the bird!]
- b. \* A-ku-bon-anga                    i-ndoda   nto  
              NEG-17SA-see-NEG.PST   9-9man   9thing  
              [Intended: (It was) the man (who) didn't see anything']
- c. A-ku-bon-anga                    m-ntu                    [CP ukuba u-m-ntwana   u-ya-gula].  
              NEG-17SA-see-NEG.PST   1person                    that   1-1-child                    1SA-DISJ2-be.sick  
              'NOBODY saw that the child was sick'



- d. A-ku-bon-w-anga                      ntaka  
 NEG-17SA-see-PASS- NEG.PST    9bird  
 'NO BIRD was seen'
- (59) a. \*A-ku-cing-anga                      m-ntu                      u-kutya.  
 NEG-17SA-think-NEG.PST    1-person                      15-15food  
 [Intended: NOBODY thought of (the) food]
- b. A-ku-theng-anga                      m-ntu /u-Sabelo                      u-kutya.  
 NEG-17SA-buy- NEG.PST    1-person/1-1Sabelo                      15-15food  
 'NOBODY bought (the) food!'/ 'SABELO didn't buy the food.'    *obligatory subject focus*

We summarize the distributional generalizations about ECs of experiencer verbs in (60).

(60) *Licit and illicit arguments in experiencer ECs*

|    | Status | Subject | Object |
|----|--------|---------|--------|
| a. | ✓      | +A      |        |
| b. | ✓      | -A      |        |
| c. | ✓      | -A      | CP     |
| d. | ✓      | +A      | CP     |
| e. | ✓      | -A      | -A     |
| f. | ×      | +A      | +A     |
| g. | ×      | -A      | +A     |
| h. | ×      | +A      | -A     |

The assumption that [-A] NPIs are negative concord items which must satisfy the raising requirement in (55) plays a role in explaining (60)h (see §4.3.1 and analysis to come in (65)). But it has nothing to say about key contrasts like (60)c and (60)d versus (60)e-g. The question these facts raise is, why should arguments in TECs of experiencer verbs exhibit restrictions that arguments of agentive verbs in TECs do not share?

Only Case theory seems to have the potential to address these curious patterns. Many languages with overt Case morphology 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:

- (61) a. Ti-la                      rag                      ala.                      [Marathi]  
          she-Dat                      anger                      came  
          'She got angry'
- b. Hamraa                      ii                      naa miilal.                      [Bhojpuri]  
          I-Gen.Obl                      this not find  
          '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 (62)a versus (62)b). Lavin (2010) argues convincingly that the restriction underlying (62)a is Case-theoretic in origin.

- (62) 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 arguments of experiencer predicates in Xhosa bear special inherent, hence semantic Cases. Since experiencer subjects routinely raise to Spec, TP and value subject agreement in SVO clauses (see (63)) we assume the inherent Cases are compatible with purely structural Cases.<sup>19</sup> In (63), the [+A] DPs obtain nominative and accusative Case values from T and v\* respectively.

- (63) U-m-fazi u-bon-é i-ntaka.  
       1-1-woman 1SA-see-CONJ1 9-9bird  
       'The/a woman saw the/a bird'

Suppose further that all and only [+A] nominals have uCase features needing values, because uCase is a property of D. Then adding the augment to an inherently Cased argument of an experiencer verb entails that it will have to obtain an additional Case value. But the Case values that the Xhosa Focus head confers are linked to binary [+/- Focus] features as proposed in §4.2.2. The [+Focus]/Case feature goes to the raised argument, and the [-Focus]/Case feature to the internal argument. Experiencer arguments, already marked with the special semantic Cases, cannot bear a second such feature (see (64)):

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

---

<sup>19</sup> An anonymous reviewer points out that Icelandic DPs bearing inherent dative cannot value subject agreement. The compatibility of inherent and structural Cases would seem to be an area of cross-linguistic variation. See Jelinek 1984 for a proposal that certain structural and inherent Cases licitly combine in Warlpiri [clitic...DP] chains, and Halpert 2012 for arguments that agreement with inherent Cases is a logical possibility (though we differ with her analysis of augmented nominals as inherently Cased, we agree with the spirit of the proposal). And see Woolford 2006 for arguments that there are different kinds of inherent Case.

Under these assumptions, experiencer verbs can only have [+A] arguments if they are local to a purely structural Case-valuer: T and v\* of SVO clauses and C of TECs. [-A] NPIs are immune to Case-clashes because they have no uCase features that might obtain values incompatible with their inherent Cases. And Case problems do not arise for CP arguments, assuming with Stowell 1981 that they do not (necessarily) have uCase.

(65) summarizes the proposals so far regarding arguments of experiencer verbs in ECs:

(65) *Licit and illicit arguments of experiencer verbs in ECs with proposed accounts*

|    | Status | Subject | Object | Explanation   |
|----|--------|---------|--------|---|
| a. | ✓      | +A      |        | [+A] SU obtains structural Case-value from C.   |
| b. | ✓      | -A      |        | [-A] SU has no uCase needing a value; raising to Spec, Foc satisfies the <i>n</i> -word raising requirement in (55).  |
| c. | ✓      | -A      | -A     | [-A] SU and OB have no uCase features. SU meets (55) by raising to Spec, Foc, and OB satisfies (55) parasitically.  |
| d. | ✓      | -A      | CP     | [-A] SU and CP OB have no uCase to require values; SU meets (55) by raising to Spec, Foc.   |
| e. | ✓      | +A      | CP     | [+A] SU gets Case from C; CP OB needs no uCase.   |
| f. | ✗      | +A      | +A     | FocusP strategy ruled out by (64). [+A] SU can get Case in situ from C but [+A] OB's uCase cannot be valued   |
| g. | ✗      | -A      | +A     | [-A] SU has no uCase and can meet (55) by raising to Spec, Foc; but [+A] OB either lacks a needed Case value, or gets one from Foc that is illicit under (64) <sup>20</sup> |
| h. | ✗      | +A      | -A     | [+A] SU gets Case from C. [-A] OB can't satisfy (55)  |

### 4.3.3 Independent evidence that CPs and [-A] NPIs do not require Case

The fact that Xhosa CPs can appear in the locations for which there is independent evidence of Case-theoretic difficulties is powerful language-internal evidence for Stowell's 1981 proposal that CPs do not (always) require Case. There is further evidence that Xhosa CPs need not obtain Case values: unlike nominals, they can appear vP-externally without accompanying object-marking on the verb.<sup>21</sup> Recall from §3.2 that "disjoint" verbal

<sup>20</sup> This account might lead one to expect that the structural Case-licenser which we identified in §4.2.3 as C could Case-value a [+A] object across a [-A] subject. We assume that (defective) intervention prevents this.

<sup>21</sup> See Halpert 2012 for arguments that Zulu clauses headed by *ukuthi* 'that' differ in this respect from CPs headed by *sengathi* – 'as if', and for evidence that Zulu CPs can but need not be agreed with. The full set of

(66) U-gqirha u-\*(m)-bon-ile ]<sub>VP</sub> u-m-ntwana.  
1-doctor 1SA-\*(10M)-see-DISJ1 1-1-child  
'The doctor saw the child'

(67) a. u-gqirha u-bon-é [v<sub>VP</sub> <V+v> [c<sub>CP</sub> ukuba u-m-ntwana u-ya-gul-a]].  
 1-doctor 1SA-see-CONJ1 that 1-1-child 1SA-DISJ2-be.sick-FV  
 'The doctor saw that the child is sick'

b. u-gqirha u-bon-ile [v<sub>VP</sub> <V+v> <CP>]v<sub>VP</sub> [c<sub>CP</sub> ukuba u-m-ntwana u-ya-gul-a].  
 1-doctor 1SA-see-DISJ1-FV that 1-1-child 1SA-DISJ2-be.sick-FV  
 'The doctor saw that the child is sick'

(68) *Speakers conservative about TECS accept them if the object is a CP*

- a. \*Ku-tsho u-Sindiswa i-gama l-am  
17SA-say 1-1Sindiswa 5-5name 5-my  
'It was Sindiswa who said my name'
- b. A-ku-tshongo u-Sindiswa [<sub>CP</sub> ukuba u-mntwana u-ya-gula].  
NEG-17SA-say 1-1Sindiswa that 1-1child 1SA-DISJ1-be.sick  
'Sindiswa didn't say that the child was ill' (OK with or without subject focus)

<sup>22</sup> In contrast, if the role of clitic-doubling were construed as necessary for linkage to a theta position, the CP exemption would be mysterious.

The conservative dialect also supports our claim that [-A] NPIs do not require Case-licensing. Speakers who reject TECs with [+A] arguments find them much improved if both arguments are [-A] NPIs (see the contrast in (69) versus (70)):

(69) *Conservative dialect: TECs with [+A] arguments rejected*

\*Ku-theng-a      a-ba-fazi      i-i-ntyatyambo.  
 17SA-buy-kFV    2-2-women 10-10-flowers  
 'It's the women who buy flowers.'

(70) *Conservative speakers judge TECs much improved with [-A] NPI arguments*

A-ku-theng-anga    mntu      nto!  
 17SA-buy-NEG.PST   1person   9thing  
 NOBODY bought anything!.'

Thus the distinctions we have made regarding the Case needs of [+A], [-A], and CP arguments have independent support from facts unrelated to experiencer verbs.

#### 4.3.4 Interim summary

This section has so far made the following proposals based on subject focus and the distribution of nominals and CPs in TECs:

(71) *Implications of the distribution of arguments in Xhosa ECs*

- (i) All and only [+A] nominals in Xhosa have uCase features, requiring valuation.
- (ii) In contrast, [-A] nominals and CPs do not have uCase and hence do not need Case-licensing.
- (iii) T and v\* of TECs are defective, leading to a paucity of structural Cases in TECs.
- (iv) There is one purely structural Case available to the highest EC argument from a particular (optional) choice of C.
- (v) A middle-field Focus head can confer 2 Case-values linked to [+/-Focus] features.
- (vi) This does not work for arguments of experiencer verbs in TECs, which have inherent, thematically linked Cases and cannot bear an additional semantically-lined Case.
- (vii) Hence experiencer verbs in TECs can only have CP objects or [-A] objects, the latter subject to an important proviso in (viii).
- (viii) A general requirement that [-A] NPIs raise leftwards precludes them from many positions including object in a Xhosa TEC, since v\* of TECs has no edge feature, unless

the NPI object is parasitically licensed by a co-occurring NPI subject.

The remainder of §4 completes our analysis of TEC syntax by explaining an additional focus fact and the pronoun restriction, considering some alternative analyses, and addressing the absence of definiteness effects and expletive *pro* subjects in our account.

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

The analysis developed above explains a ban on experiencer verbs in TECs: the Case-values available from Foc are incompatible with the inherent Cases that arguments of experiencer verbs bear. This cannot be the whole story, however. Subjects of intransitive experiencer verbs can have focused readings in ECs (see (72)). And there is a second, subject focus reading available for a sentence like (7)c (previously unmentioned for expository reasons) in which the object of the experiencer verb is a CP (see (73) and (74)). If full DP experiencer subjects cannot raise to Spec, Foc, these readings must have some other origin.

(72) *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'

(73) Ku-bon-é      u-gqirha ukuba u-m-ntwana u-ya-gul-a.      *OK: replace DP2 w/CP*  
 17SA-see-CONJ1 1-1doctor that 1-1-child 1SA-DISJ2-be.sick-FV  
 'The doctor saw that the child was sick' OR  
 'It was the doctor who saw that the child was sick'

(74) 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  
 'Loyiso thinks of food' OR '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  
 'Sabelo thinks that the world is round' *OR*  
 'It's Sabelo who thinks 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 [SVO...], (see (75)), but non-subject focused items appear in an immediately post-verbal position (IAV, = immediately after verb). For example, a *wh*-word like *ngani* – 'how' and its answer must be IAV (see (76)); glosses adapted; our boldface on OM(s)). 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 (see also Buell 2007 for arguments along similar lines against leftwards movement into a Spec, FocusP as the mechanism for obtaining post-verbal focus readings). Among their evidence is the fact that the direct object in a case like (76) 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 (77).

(75) *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.'

(76) *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 ngâ: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.'

(77) U-Sipho u-**yi**-phek-é nini i-nkuku emzinini wakho? [Xhosa]  
 1-1Sipho 1SA-9OM-cook-CONJ1 **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 (78)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 (78)b).

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

[TP 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, so focus in SVO clauses relies on the downward feature-assignment strategy.*

[TP T...[<sub>FocP</sub> XP Foc [<sub>vP</sub> SU v...]]]  
└──────────┘  
×

Assuming with Cheng & Downing that there is focus available for a single item in an otherwise vacant vP, the post-verbal subject in any intransitive EC can obtain a focus



reading without moving to Spec, Foc, and hence without being directly assigned the complex focus/Case feature that is incompatible with full DP experiencer subjects.<sup>23</sup> As for CP objects of experiencer verbs, we have already argued that they can extrapose string-vacuously (see (67)b and (79)), 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).

(79) *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-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.<sup>24</sup>

(22) a. U-Sindiswa u-cul-a **ona**.  
 1-1Sindiswa 1SA-sing-FV 6IndPron  
 'Sindiswa sings them'

*OK: Independent  
 pronominal OB in SVO*

<sup>23</sup> As previously noted, an alternative might be to assume that the [+Focus] feature assigned to the subject that raises to Spec, Foc is NOT Case-linked. A subject in Spec, Foc can only acquire Case from C. This seems a little hard to justify and, as an in situ focus strategy is independently motivated in Cheng & Downing's work, it is an unnecessary complication. We leave it aside.

<sup>24</sup> An anonymous reviewer asks how pronominalization works in double object constructions. Neither object can pronominalize in a TEC. In an SVO clause either object can be a clitic pronoun, and both objects can be independent pronouns simultaneously. Double object constructions are "symmetrical" in Xhosa in that either DO or IO can passivize or pronominalize. We assume with McGinnis 2001 that the Appl head raises the DO out of VP to the level of the IO (= outer Spec, ApplP), satisfying the pronoun raising requirement. Further details would take us too far afield, but see Carstens & Mletshe 2013.

b. U-Sindiswa u-ya-**wa**-cul-a.  
 1-1Sindiswa 1SA-DISJ2-6OM-sing-FV  
 'Sindiswa sings them'

*OK: clitic OM in SVO*

c. \*Ku-cul-a u-Sindiswa **ona**.  
 17SA-sing-FV 1-1Sindiswa 6IndPron  
 'It's Sindiswa who sings them.'

*\*Independent pronoun OB in TEC*

d. \*Ku-(ya)-**wa**-cul-a u-Sindiswa.  
 17SA-(DISJ2)-6OM-sing-FV 1-1Sindiswa  
 'It's Sindiswa who sings them'

*\*OM ponominal OB in TEC*

(23) a. Ku-cul-a **yena** (a-ma-culo).  
 17SA-sing-FV 1IndPron (6-6-songs)  
 '(It's) she (who) sings (songs)'

*OK: Indep Pro SU in (T)EC*

b. Ku-fik-é **yena**.  
 17SA-arrive-CONJ1 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*

Many languages require pronouns to undergo object shift out of VP. Diesing (1992, 1997) and Diesing & Jelinek (1995) tie this to the unambiguous definiteness of pronouns. They argue from contrasts like (80)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 (see also the Novelty Condition of Heim 1982 requiring that VP-internal material be discourse-novel; something never true of pronouns). 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 (81) - (82)).

(80) 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'

- (81) 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'

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

(83) 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:<sup>25</sup>

- (84) [<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

---

<sup>25</sup> An anonymous reviewer suggests that only clitics and non-conjoined, unstressed weak pronouns should have to raise, and that clitics do so for morphological reasons. This is at odds with well-established semantic accounts of the pressure for pronoun raising discussed above (and see Diesing & Jelinek 1995 for a proposal that object clitics are a grammaticized means of meeting the semantic pressure). Conjoining or stressing Xhosa independent object pronouns does not make them felicitous in TECs though in some languages these factors eliminate pronoun shift. But there is a precedent in Spanish, where Suner 2000 shows that even independent conjoined or stressed pronouns are subject to the raising requirement. Suner argues that, on a language particular basis, LF raising may suffice if overt pronoun shift is not available, and in some languages conjunction or stress makes them too "heavy". But by assumption, all pronouns and definite DPs raise out of VP by LF. In Spanish, systematic clitic doubling of all object pronouns allows overt satisfaction of the requirement in a uniform way. Further details lie outside this paper's scope.

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>26</sup>

#### **4.6 The subject in situ generalization, distinctness, and labeling**

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

(85) 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 key English constructions the relevant subject is not actually in situ, and that in situ subjects of transitives do not always yield ungrammaticality.<sup>27</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).

---

<sup>26</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 investigation for future research.

<sup>27</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.

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.

Another 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 (86)). The proposal avoids Case-theoretic problems and as it is not restricted to vP, it is not subject to Bruening's criticisms.

(86) *Distinctness*: If a linearization statement  $\langle \alpha, \alpha \rangle$  is generated, the derivation crashes.

Chomsky 2013 (henceforth PoP) also presents an alternative interpretation of SSG phenomena. PoP argues that syntactic objects obtain labels by an algorithm that applies at the phase level. If the labeling algorithm encounters a configuration of the form [XP YP], labeling fails, and either XP or YP has to move. This drives raising of external arguments out of vP, where the external argument = XP and  $v' = YP$ .

Let us suspend our proposal that  $v^*$  is defective in a Xhosa TEC and see whether the labeling or distinctness hypotheses can provide a good alternative account of the facts. Suppose it is not Case-valuation but one of these 2 processes 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. Similarly under the PoP approach, raising the subject to Spec, FocP eliminates the structural obstacle to correct labeling of vP.

Note first that while raising of subjects to Spec, Foc makes Xhosa TECs compliant with distinctness and the labeling hypothesis, these approaches cannot eliminate the role that abstract Case plays in the account of Xhosa TECs. This is because the experiencer verb asymmetries still require reference to Case theory for a solution.

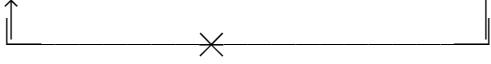
Note secondly that analyses along these lines have nothing to say about the failure of object pronouns in TECs where the subject has raised to Spec, FocP. If  $v^*$  is not defective and the subject raises to Spec, Foc, it isn't clear why object pronouns could not raise to Spec, vP, the canonical object-shift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

(87) *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>  $v_{\text{robust}}$  [<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 (88)): 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.

(88) [<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 (89) from Holmberg 1999:15), in contrast to the scenario sketched in (88).

(89) 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) linearization/labeling 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 alternatives do 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 the alternatives constitute more complex and hence less successful analyses 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.

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 2012 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 (80) (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.

- (80) 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.

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 probe 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. Addressing Case anomalies**

#### **5.1 The case for no Case**

Xhosa exhibits some Case-theoretic anomalies that led Halpert 2012 to propose that full DPs are intrinsically Case-licensed in Zulu. Other researchers encountering similar

phenomena recurring in Bantu languages have argued that Case is absent altogether in the family (Harford Perez 1985, Diercks 2012).<sup>28</sup>

(90) *Licit in situ subjects of passives*

- a. Ku-lumk-is-w-a                      i-lizwe    ng'engculazi.  
17SA-be.aware-CAUS-PASS-FV    5-5world of AIDS  
'The world is being made aware of AIDS.'
- b. Ku-bon-w-é                      u-m-tana    w-am.  
17SA-see-PASS-CONJ1    1-1-child    1-my  
'My child has been seen.' (e.g. by a doctor at a hospital)

(91) *Multiple subject agreement in mono-clausal constructions*<sup>29</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'

(92) *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]

(93) *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-DISJ1  
'Nomsa is believed to have left' [Lit: Nomsa is believed that left].

(94) *Post-verbal subjects licit when something else occupies Spec, TP and controls SA*<sup>30</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?"*

<sup>28</sup> Van der Wal 2012 takes a more nuanced view on the Case issue, pointing out that in some Bantu languages SA tracks the logical subject, and proposing that such Bantu languages have Case in contrast to those of Diercks's study. Our claim is that even languages that exhibit "no Case" profiles may nonetheless have Case.

<sup>29</sup> For arguments that constructions like (91) are truly monoclausal see references cited in §3.6.

<sup>30</sup> This construction was first documented in Zulu by Zeller (2011), who names it *instrument inversion*.

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 accept only intransitive ECs. It follows that the phenomena in (90) through (94) must be given explanations consistent with this assessment.

## **5.2 Explaining the anomalies**

### **5.2.1 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 2012 in assuming in situ subjects of 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 (90) is not problematical for the hypothesis that full DPs require Case.

### **5.2.2 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 not just of Bantu but also of Semitic languages (see (95)). Since Semitic languages have clear morphological Case distinctions (see (96)), they show us that an absence of abstract Case is not a necessary condition for *hyperagreement*.

(95) *Hyperagreement in Arabic*

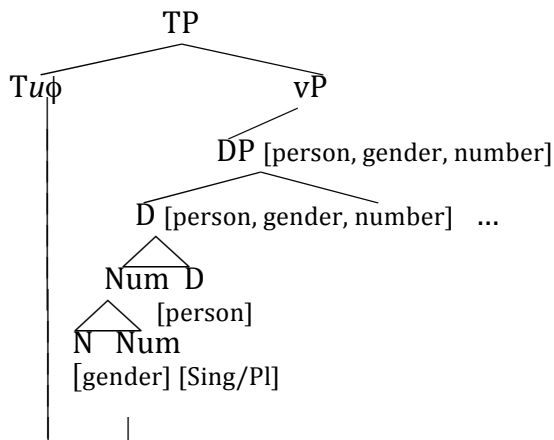
Al-bint-aani kaan-**ataa** **ta**-ktub-**aani** dars-a-humaa.  
 the girls(F)-3D be+past-3FD 3F-write-D lesson-ACC-FD (D = dual)  
 'the two girls were writing their lesson'

(96) *Case in Arabic*

Daxal-tu daar-**a** r-rajul-**i**. [Standard Arabic]  
 entered-I house-ACC the-man-GEN  
 'I entered a house of a man' (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 (97) and (98)). Word order evidence for Xhosa N-to-D is presented in (99). 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). (100) 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).

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



(98) *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

(99) *Xhosa nouns adjoin to D*

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

(100) *Absent N-to-D, person intervenes to block probng of gender by T<sub>u $\phi$</sub>*

[TP T<sub>u $\phi$</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 (101)) 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 (103)). Carstens accordingly advocates a view of "deactivation" effects very similar to that of Nevins 2004 (see (102)), 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>31</sup>

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

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

---

<sup>31</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  $\phi$  can value  $u\phi$ .

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

- a. la grand-e maison [French]  
the.F.SING large- F.SING house(F.SING)  
'the large 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 (104)), 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.

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

(105) *English: only T can agree with uNom...uCase matching*

- a. \*Jessie has is skating
- b.  $[T_{uNom, uPhi} [Asp_{uPhi} [vP \text{ Jessie }_{uCase, iPhi} v [vP \text{ skating}]]]]$
- Agree ruled out because uFs don't match in kind*  
*Agree possible because each participant has uCase*

(106) *Bantu*: involvement of *uGen* on *N* enables any head to agree because nominal *uGen* is a variety of *uPhi*; hence probe and goal meet the matching requirement in (104)).

- 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

### 5.2.3 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 (92)) is no different from the other forms of *hyperagreement* discussed above.

### 5.2.4 Hyper-raising

To a large extent the derivation of hyper-raising follows from the *hyperagreement* mechanics sketched out in §5.2.2: 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 tensed clause).

More interesting is the question of how hyper-raising gets around the Phase Impenetrability Constraint of Chomsky 2000, reproduced in (107).

(107) 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 (108)), 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 (93)a,b.

(108) ...[<sub>ForceP</sub> FORCE [<sub>FOCP</sub> FOC [<sub>IntP</sub> INT [<sub>FinP</sub> FIN [<sub>TP</sub> SU T...]]]]]

Rizzi 1997, 1999

|  
CP-level phase head in Carstens 2012

### 5.2.5 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 (94), repeated below.<sup>32</sup>

(94) *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.

### 5.3 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.

---

<sup>32</sup> Percy Buthelezi (personal communication) 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:

- (109) Ni-li-kumbuka            Juma   ku-funga   m-lango.  
1SSA-PST-remember   1Juma   15-close   3-door  
'I remembered Juma closing the door'
- (110) 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.

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

Carstens 1991 proposes that only the gerunds allow preverbal subjects. Her evidence includes the unavailability of a future reading for (112) and the unacceptability of (113), where the reading is forced (see Stowell 1981 on the temporal interpretation of infinitives).

- (112) 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)
- (113) \*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.'

This proposal does not really answer the question of how the preverbal subjects obtain Case, but it does reduce it to another familiar problem. 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.

## 6. Conclusions and directions for future research

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. The phenomena suggest strong linkages in Xhosa among the so-called probe features involved in A-relations as stated in (9), repeated below.

### (9) *Profiles of Xhosa SVO and VSO constructions*

2 opposing clause-types: (i)  $T_{+EPP; \text{ full Agr; } V_{\text{robust}}}$  (ii)  $T_{-EPP; \text{ default Agr (FocP) } V_{\text{defective}}}$   
**In Xhosa, defective  $v \leftarrow \rightarrow$  defective T**

In fact, the evidence of constructions with auxiliaries suggests that in VSO clauses, *all* the usual probe features are absent. Recall from §3.6 that every auxiliary or verbal element in a TEC bears default agreement, and subjects can only surface to their right (see (36), repeated below). This, we saw, contrasts with the Icelandic (34). (114) and (115) add demonstrations that no auxiliary or verbal element can agree or raise the subject when any other in the clause fails to do so.

- (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

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

(114) *Agreeing and non-agreeing auxiliaries and verbs cannot mix in a clause*

- a. \*Wena u-be ku-soloko u-fund-a lapha.  
       2SIndPron 2SSA-RFUT 17SA-often 2SSA-study-FV here  
       ‘You will often study here’  
       b. \*Ku-be u-soloko ku-fund-a **wena** lapha.  
           17SA-RFUT 1SA-often 17SA-study-FV 2SIndPron here  
       c. \*Ku-be ku-soloko u-fund-a **wena** lapha.  
           17SA-RFUT 17SA-often 1SA-study-FV 2SIndPron here

(115) *Combining agreement “mixing” with intermediate subject raising also does not work*

- a. \*Ku-be **wena** u-soloko u-/ku-funda lapha  
 d. \*Ku-be ku-soloko **wena** u-funda lapha

Where the subject has the focused reading, the impossibility of raising and agreement on higher heads may reduce to something like *criterial freezing* of the subject in Spec, FocusP (see Rizzi & Shlonsky 2007). When the subject focus reading is absent, assuming Case can be valued “downwards” (perhaps, as we have suggested, by a C), questions remain. And a basis for the dependencies among flavors of T and v is not obvious: why should defective T not co-occur with robust v\*? This aspect of Xhosa clausal properties bears a resemblance to co-occurrence patterns involving English C and T. Because English finite, agreeing T is always found within CPs, Chomsky 2007, 2008 argues that robust T obtains its features from C through a process of Feature Inheritance. If we apply the same reasoning to the co-occurrence patterns exhibited by the two varieties of Xhosa T and v, we might be led to the

somewhat surprising conclusion that *v* gets its features from *T* in Xhosa. Regretably, it lies outside the scope of this paper to do justice to this issue. We leave it to future research.

It is also outside the scope of this paper to generalize about all of 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.

## References

- Adams, Nikki. 2010. The Zulu ditransitive verb phrase. University of Chicago PhD thesis.
- Alexiadou, Artemis, and Elena Anagnostopoulou. 2001. The subject-in-situ generalization and the role of case in driving computations. *Linguistic Inquiry* 32:193–231.
- Alexiadou, Artemis and Elena Anagnostopoulou. 2007. The subject in situ generalization revisited.
- Baker, Mark. 2003. Agreement, Dislocation, and Partial Configurationality, in A. Carnie, H. Harley, E. Jelinek, and M. Willie (eds.), *Formal Approaches to Function in Grammar*, John Benjamins, Amsterdam, pp. 107-132.
- Baker, Mark C. and Chris Collins. 2006 Linkers and the Internal Structure of *vP*. *Natural Language & Linguistic Theory* 24: 307–354.
- Baker, Mark, Safir, Ken, and Justine Sikuku. 2012a. Sources of (a)symmetry in Bantu double object constructions. To appear in the *Proceedings of WCCFL 30* (Santa Cruz).
- Baker, Mark, Safir, Ken, and Justine Sikuku. 2012b. Categories of clausal constituents in Lubukusu and limits to their selection. Ms, Rutgers University.
- Belletti, Adrianna. 1988. The Case of Unaccusatives. *Linguistic Inquiry* 19: 1-34.

- Bhatt, Rajesh. 2003. Experiencer subjects. Unpublished course materials.  
<http://web.mit.edu/rbhatt/www/24.956/dative.pdf>
- Bobaljik, Jonathan David and Dianne Jonas. 1996. Subject Positions and the Roles of TP. *Linguistic Inquiry* 27.2.
- Bobaljik, Jonathan and Phillip Branigan. 2006. Eccentric Agreement and Multiple Case-Checking. In Alana Johns, Diane Massam & Juvenal Ndayiragije (eds.), *Ergativity: Emerging Issues*, Springer: Dordrecht.
- Bobaljik, Jonathan and Susi Wurmbrand. 2005. The Domain of Agreement. *Natural Language and Linguistic Theory* 23:809-865.
- Bošković, Željko. 2007. On the locality and motivation of Move and Agree: An even more minimal theory. *Linguistic Inquiry* 38: 589-644.
- Bošković, Željko. 2011. Last Resort with Move and Agree in derivations and representations. In *The Oxford Handbook of Linguistic Minimalism*, ed. Cedrix Boeckx, 327-353. New York and Oxford: Oxford University Press.
- Bruening, Benjamin. 2013. Restrictions on inversion in English: not the subject-in-situ generalization, but linear order. Ms., University of Delaware.
- Buell, L. 2006. The Zulu Conjoint/disjoint verb alternation: focus or constituency? *ZAS Papers in Linguistics* 43: 9-30.
- Buell, Leston. 2005. Issues in Zulu morphosyntax. UCLA PhD thesis.
- Cable, Seth. 2012. The optionality of movement and EPP in Dholuo. *Natural Language and Linguistic Theory* 30.3:651-697.
- Carstens, Vicki. 1991. The morphology and syntax of DPs in Kiswahili. UCLA PhD thesis.
- Carstens, Vicki. 2001. Multiple agreement and case deletion: Against phi-

- (in)completeness. *Syntax* 4:147–163.
- Carstens, Vicki. 2005. Agree and EPP in Bantu. *Natural Language and Linguistic Theory* 23:219-279.
- Carstens, Vicki. 2010. Implications of grammatical gender for the theory of uninterpretable features. In *Exploring Crash Proof Grammars* M. Putnam (ed), 31-57. Amsterdam: John Benjamins.
- Carstens, Vicki. 2011. Hyperactivity and hyperagreement in Bantu. *Lingua* 121.5: 721-741.
- Carstens, Vicki. 2012. Delayed valuation. Lingbuzz/001432. To appear in *Syntax*.
- Carstens, Vicki and Loyiso Mletshe. 2013. N-words in disguise: a negative concord analysis of augmentless NPIs in Xhosa and Zulu. Lingbuzz/001938.
- Carstens, Vicki and Michael Diercks. 2010. Parameterizing Case and Activity: Hyper-raising in Bantu. Paper presented at NELS 40; to appear in *Proceedings of NELS 40*.
- Carstens, Vicki and Michael Diercks. 2013. The great escape: raising out of finite clauses in Bantu languages. Paper presented at the annual meeting of the 31<sup>st</sup> West Coast Conference on Formal Linguistics.
- Carstens, Vicki and Michael Diercks. To appear. Agreeing How? In *Linguistic Inquiry* 44.2.
- Cheng, Lisa & Downing, Laura. 2012. Against FocusP: arguments from Zulu. In *Information Structure*, ed. by Ivona Kucerova and Ad Neeleman.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays in honor of Howard Lasnik*, edited by R. Martin et al, 89-155. Cambridge, MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Kan Hale: A life in language*, edited by M. Kenstowicz, 1-52. Cambridge: MIT Press.

- Chomsky, Noam. 2007. Approaching UG from below. In *Interfaces + Recursion = Language?*, ed. by U. Sauerland and H.-M. Gartner, 1-29. Berlin: Mouton de Gruyter.
- Chomsky, Noam. 2013. Problems of Projection. *Lingua* 130: 33-49.
- Diercks, Michael. 2012. Parameterizing Case: Evidence from Bantu. *Syntax* 15.3: 253-286
- Diesing, Molly. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- Diesing Molly. 1997. Yiddish VP order and the typology of movement in Germanic. *Natural Language and Linguistic Theory* 15: 369-427.
- Diesing, Molly and Eloise Jelinek. 1995. Distributing Arguments. *Natural Language Semantics* 3.2: 123-176.
- Epstein, Sam & T. Daniel Seely. 2006. *Derivations in Minimalism*. Cambridge: Cambridge UP.
- Fassi Fehri, A., 1993. Issues in the Structure of Arabic Clauses and Words. Kluwer Academic Press, Dordrecht, Boston.
- Halpert, Claire. 2012. Argument licensing and agreement in Zulu. MIT PhD dissertation.
- Harford Perez, Carolyn. 1985. Aspects of complementation in three Bantu languages. Madison, WI: University of Wisconsin dissertation.
- Haegeman Liliiane. 1995. *The Syntax of Negation*. Cambridge and New York: Cambridge UP.
- Haegeman, Liliane and Terje Lohndal. 2010. Negative concord and (multiple) Agree: a case study of West Flemish. *Linguistic Inquiry* 41: 181-211.
- Henderson, Brent. 2006. Multiple agreement and inversion in Bantu. *Syntax* 9.3: 275-287.
- Hiraiwa, Ken. 2001. Multiple Agree and the Defective Intervention Constraint in Japanese. In MIT Working Papers in Linguistics 40: 67-80. Department of Linguistics & Philosophy, MIT, Cambridge, Mass.

- Holmberg, Anders. 1999. 'Remarks on Holmberg's Generalization'. *Studia Linguistica* 53: 1-39.
- Holmberg, Anders, and Thorbjörg Hróarsdóttir. 2004. Agreement and movement in Icelandic raising constructions. *Lingua*. 114:651-673.
- Horvath, Julia. 1986. *FOCUS in the theory of grammar and the syntax of Hungarian*. Dordrecht: Foris Publications.
- Hyman, Larry. M. and J. R. Watters. 1984. Auxiliary focus. *Studies in African Linguistics* 15(3), 233-273.
- Hyman, Larry M. and Maria Polinsky. 2007. Focus in Aghem. Ms, UC Berkeley and Harvard.
- Jelinek, Eloise. 1984. Empty categories, case, and configurationality. *Natural Language and Linguistic Theory* 2:39-76.
- Johnson, Kyle. 1991. Object positions. *Natural Language and Linguistic Theory* 9.4: 577-636.
- Jonas, Dianne and Jonathan Bobaljik. 1993. Specs for subjects: the role of TP in Icelandic. In *Papers on Case and Agreement I*, MIT Working Papers in Linguistics Vol. 18. Cambridge: MIT Linguistics Department.
- Julien, Marit. 2002. *Syntactic Heads and Word Formation*, New York: Oxford UP.
- Kayne, Richard. 1981. Two notes on the NIC. In A. Belletti, L. Brandi, and L. Rizzi (eds.), *The Theory of Markedness in Generative Grammar*. Pisa: Scuola Normale.
- Kayne, Richard. 1984. *Connectedness and Binary Branching*. Dordrecht: Foris Publications.
- Kinyalolo, Kasangati K.W. 2003. Limiting the scope of V-movement in Kilega. Handout of a talk given at Stony Brook, New York.
- Larson, Richard. 1985. Bare NP Adverbs. *Linguistic Inquiry* 16.4:595-621.



- Lavine, J. Case and events in Ukrainian experiencer predicates. *Formal Approaches to Slavic Linguistics* 18, eds. W. Browne et al. Ann Arbor: Michigan Slavic Publ., 285-300.
- Legate, Julie Anne. 2003. Some interface properties of the phase. *Linguistic Inquiry* 34.3.
- Mali, Z. 1995. The existential sentences in Xhosa. University of Stellenbosch MA thesis.
- Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In Sam Mchombo (ed.), *Theoretical aspects of Bantu grammar*. Stanford: CSLI, 113–150.
- Melebari, Ala'a and T. Daniel Seely. 2012. Agreement without 'exception' in Standard Arabic? Presentation at the Illinois Symposium on Semitic Linguistics, University of Illinois Urbana-Champaign.
- McGinnis, Martha. 2001. Variation in the phase structure of applicatives. In *Linguistic Variation Yearbook 1*: 105-146.
- Milsark, Gary. 1977. Towards an explanation of certain peculiarities of the existential construction in English. *Linguistic Analysis* 3:1-29.
- Mletshe, Loyiso. 1995. The subject in Xhosa. University of Stellenbosch MA thesis.
- Ndayiragije, Juvenal. 1999. Checking Economy. *Linguistic Inquiry* 30.3: 399-444.
- Nevins, Andrew. 2005. Derivations without the Activity Condition. *MIT Working Papers in Linguistics* 49: 283-306.
- Ngonyani, Deo. 1999. X<sup>0</sup>-Movement in Kiswahili Relative Clauses. *Linguistic Analysis* 29, 1-2: 137-159.
- Ngonyani, Deo. 2006. Attract F and verbal morphology in Kiswahili. *The Linguistic Review* 23, 1:35-66.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Linguistic Inquiry Monograph. Cambridge, MA: MIT Press.

- Preminger, Omer. 2011. Agreement as a fallible operation. MIT PhD dissertation.
- Richards, Marc. 2007. Object shift, phases, and transitive expletive constructions in Germanic. In P. Pica et al (eds), *Linguistic Variation Yearbook 6*. Amsterdam/New York: John Benjamins, pp. 139-159.
- Richards, Norvin. 2010. *Uttering Trees*. Cambridge: MIT Press
- Richards, Norvin & Coppe van Urk. 2013. Two components of long-distance extraction: Successive cyclicity in Dinka. *lingbuzz/001766*.
- Riedel, Kristina. 2009. The syntax of object marking in Sambaa. Leiden University PhD thesis.
- Rizzi, Luigi. 1982. *Issues in Italian Syntax*. Dordrecht: Foris Publications.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. L. Haegeman, ed. *Elements of Grammar*, Kluwer, Dordrecht.
- Rizzi, Luigi. 1999. On the Position "Int(errogative)" in the Left Periphery of the Clause. Ms., University of Siena.
- Rizzi, Luigi and Ur Shlonsky. 2007. Strategies for subject extraction. In *Interfaces + recursion = language?; Chomsky's minimalism and the view from syntax-semantics*, edited by U. Sauerland and H.-M. Gartner, 115-160. Studies in Generative Grammar 89. Berlin: Mouton de Gruyter.
- Safir, Kenneth. 1987. What explains the definiteness effect? In *The Representation of (In)definiteness*, eds. Eric J. Reuland and Alice G.B. ter Meulen, 71-97. Cambridge, MA: MIT Press.
- Safir, Kenneth. 2009. *Syntactic Chains. Cambridge Studies in Linguistics Book 40*. Cambridge, UK: Cambridge University Press.

- Slattery, H. 1981. *Auxiliary verbs in Zulu*. Occasional Papers, Department of African Languages. Rhodes University, Grahamstown, South Africa: Department of African Languages.
- Stowell, Timothy. 1981. Origins of phrase structure. MIT PhD dissertation.
- Suner, Margarita. 2000. Object-shift: comparing a Romance language to Germanic. *Probus* 12: 261-289.
- Tuller, Laurice. 1992. The syntax of postverbal focus constructions in Chadic. *Natural Language and Linguistic Theory* 10: 303-334.
- Van der Wal, Guenever Johanna. 2012. Parameterizing Case: other evidence from Bantu. Talk at the meeting of the Linguistic Society of Great Britain, U. of Salford, Manchester.
- Van der Wal, Guenever Johanna. 2009. Word order and information structure in Makhuwa-Enahara. Leiden University PhD dissertation.
- Vangsnes, Øystein Alexander. 2002. Icelandic expletive constructions and the distribution of subject types. In Peter Svenonius (ed.). *Subjects, Expletives, and the Extended Projection Principle*. Oxford: Oxford University Press, pp. 43-70.
- Zanuttini, Rafaella. 1991. Syntactic properties of sentential negation: a comparative study of Romance languages. PhD thesis, University of Pennsylvania, Philadelphia.
- Zanuttini, Rafaella. 1997. *Negation and clausal structure: a comparative study of Romance languages*. New York/Oxford: Oxford University Press.
- Zeijlstra, Hedde. 2004. *Sentential Negation and Negative Concord*. Utrecht: LOT.
- Zeijlstra, Hedde. 2008. Negative concord is syntactic agreement. Ms., University of Amsterdam.
- Zeller, Jochen. 2006. Raising out of finite CP in Nguni: the case of *fanele*. *Southern African*

*Linguistics and Applied Language Studies* 24:255–275.

Zeller, Jochen. 2011. Instrument inversion in Zulu. In Michael R. Marlo, Nikki B. Adams, Christopher R. Green, Michelle Morrison, and Tristan M. Purvis (eds.), *African Languages in Context* (selected Proceedings of the 42nd Annual Conference on African Linguistics), Somerville, Massachusetts: Cascadia Proceedings Project, 134-148.