# Radical defectivity: implications of Xhosa expletive constructions for Bantu Case and flavors of T and $\mathbf{v}^*$

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#### 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.

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

Expletive constructions (henceforth ECs) are also possible, in which the verb bears invariant class 17 subject agreement (henceforth SA) and word order is V S (0...). We demonstrate with an unaccusative verb in (2)a. As the glosses indicate, two readings are possible for this sentence. It can function as a simple report or narration of a past event, and is thus a felicitous answer to a "What happened?" question like (2)b. It can also be interpreted with subject focus, and answer one of the subject questions in (2)c-d.

(2) a. Ku-fik-é i-ncwadi Felicitous answer to (2b-d) 17SA-arrive-PST1 9-9letter

R#1: 'A letter arrived'

R#2: 'It was a letter that arrived' [Lit: (There) arrived a letter.]

b. Kw-enzek-é ntoni namhlanje? 17-happen-PST1 9what today 'What happened today?' [Lit: (There) happened what today?] *OR* 

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c. Ku-fik-é ntoni? d. Yi ntoni i-fik-ile-yo? 17SA-arrive-PST1 9what? 9COP 9what 9SA-arrive-DISJ1-RM 'What arrived?' [Lit: (There) arrived what?] 'What is it that arrived?'

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

# (3) Properties of expletive constructions in Xhosa

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

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

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

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

<sup>1</sup> In glosses, SA=subject agreement; OM=object marker; Arabic numbers = noun classes (number + gender) unless followed by s or pl in which case they are person features. DISJ1 and 2 are tense morphemes on verbs that are final in their domains; PST1 and 2 are tense morphemes on verbs non-final in their domains. Some but not all nouns have 2 separable class prefixes. Wh-words and NPIs lack the outer prefix systematically.

<sup>2</sup> Mali (1995) also noted this restriction. All speakers we consulted judged object marker (clitic) pronouns impossible in ECs including impersonal passive. One speaker permitted independent object pronouns consistently in TECS, one inconsistently, and five not at all, including in applicative and causative TECs.

- b. "Augmentless" nominals (henceforth abbreviated [-A]) function as negative polarity items (NPIs) and wh-words in questions:
  - i. m-ntu iii. bani /ba-ntu ii. ntoni etc. 1-person /2-person 9what 1who 'what?' 'who?' 'anybody/any people'

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

(5) *The focus asymmetry:* 

Ku-lil-é u-Sindiswa Optional subject focus in an intransitive EC 17SA-cry-PST1 1-Sindiswa

R#1: 'Sindiswa cried' (answers 'What happened?') (answers 'Who cried?') R#2: 'It's Sindiswa who cried'

[Lit: (There) cried Sindiswa]

b. Ku-theth-a i-ndoda ende i-si-Xhosa. Obligatory subject focus in a TEC 17SA-speak 9-9man 9tall 7-7-Xhosa 'It's the tall man who speaks Xhosa.' (answers only, 'Who speaks Xhosa?')

(6) The pronominalization asymmetry:

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-Sindiswa 6IndPron 'It's Sindiswa who sings them.'

c. \*Ku-wa-cula u-Sindiswa 17SA-60M-sing 1-Sindiswa 'It's Sindiswa who sings them'

\*clitic pronoun OB in TEC

(7) *The experiencer verb restriction:* 

a. \*Kw-a-bon-a u-m-fazi i-ntaka \*TEC of an experiencer verb with 2 17SA-PST2-see-FV 1-1-woman 9bird nominal arguments '(It was) a/the woman (who)n saw the bird'

b. Kw-a-bon-w-a i-ntaka OK: same V in impersonal passive 17SA-PST2-see-PASS-FV 9-9bird 'A bird was seen'

c. Ku-bon-é u-gqirha ukuba u-m-ntwana u-ya-gula. OK: replace DP2 w/CP 17SA-see-PST1 1-1docor that 1-1-child 1SA-DISI2-be.sick '(It was) the doctor (who) saw that the child was sick'

OK: negative experiencer TEC replacing full DPs with d. A-ku-bon-anga m-ntu nto NEG-17SA-see-PST2 1-person 9thing "augmentless" NPIs 'Nobody saw anything.'

[Lit: (There) didn't see anybody anything]

## 1.2 Sketch of the analysis

We will argue that Xhosa expletive constructions do not actually involve expletives at all. They are clauses in which both T and v\* are defective – unable to agree, raise DPs, or value Case. The properties in (3) and (5)-(7) result from non-canonical means of Case licensing. These findings are significant because the role of Case in Bantu languages is a matter of ongoing controversy (see Harford Perez 1985, Diercks 2012, Halpert 2011 and 2012).

The correlation of obligatory focus with transitivity in Xhosa ECs is a key indicator that Case-licensing is at issue. We interpret the focus reading to mean that the subject of a TEC raises to Spec of a FocusP between TP and vP. We argue that this movement is optional in intransitives because Case-licensing is not a problem when there is only one argument.

(8) [FocP SU [Foc' Foc [vP <SU> v [vP V ...]]]] In ECs, the focus reading derives from raising to Spec, Foc Why should Case-licensing be compromised in a TEC, and rely on a Focus head for remedy? A reasonable first hypothesis might be that a low subject and accusative Case licensing conflict in some way (see (9)).³ Raising the subject to Spec, Foc resolves the problem.

(9) \*[vP SUuCase v [vP V OBuCase]] v of ECs cannot value uCase of the internal argument But such an approach cannot capture the whole pattern of facts. The restriction on pronoun use exemplified in (6) argues that object-shift is impossible in TECs, stranding pronouns illicitly in VP-internal positions. If the obligatory subject focus reading indicates that the subject must move, then the persistence of the object pronoun restriction is mysterious.

(10)  $*[_{vP} < SU > v [_{VP} V Pronoun]]$ 

Pronouns cannot escape VP in TECs

<sup>&</sup>lt;sup>3</sup> Alexiadou & Anagnostoulou 2001 claim two DPs can never remain vP-internal because v-to-T makes one Case feature unavailable, giving a potential angle on this problem. See discussion in §4.4.

The combination of obligatory subject focus and impossible object pronouns leads us to conclude that TECs are clauses in which v\* completely lacks agreement and edge features that are involved in successful A-relations in SVO clauses (see Bobaljik & Brannigan 2006 for a similar approach to ergative clauses in Chuckchi). It seems unlikely to be a coincidence that this defective kind of v\* occurs in clauses with low subjects and default subject agreement. Absent evidence that T participates in EC syntax, we analyze it as inert as well. Hence T of an EC cannot agree, Csae-license or raise the subject (following Preminger 2011, failures of agreement do not cause a derivation to crash), just as v\* of an EC cannot shift objects or value accusative. In contrast SVO clauses have robust T and v.

$$(11) a. \ [\text{TP T} \ [\text{VP SU}_{uCase} \ V \ [\text{VP ...}]]] \\ V of ECs \ cannot \ agree \ with \ or \ raise \ the \ subject \\ v of ECs \ cannot \ value \ uCase \ or \ raise \ the \ internal \ argument \\ c. \ [\text{TP SU}_{uCase} \ T_{uphi} \ [\text{VP OB}_{uCase} < SU> \ V_{uphi} \ [\text{VP V} < OB>]]] \ T \& \ v \ of SVO \ clauses \ are \ fully \ functional \\ (11) a. \ [\text{TP SU}_{uCase} \ V_{uphi} \ [\text{VP V} < OB>]]] \ T \& \ v \ of SVO \ clauses \ are \ fully \ functional \\ (12) a. \ [\text{TP SU}_{uCase} \ V_{uphi} \ [\text{TP SU}_{uCase$$

Assuming this is so, questions of mechanics arise regarding how local raising by the subject can facilitate Case-licensing of an object in TECs. For any potential Case-licenser above FocP, the subject would still intervene to block a relationship with the object:

(12) a probe above FocP would not be expected to reach across SU  $X_{Case2} \left[ FocP SU_{uCase1} \left[ Foc' Foc_{Case1} \left[ vP < SU > v \left[ VP V DP_{uCase} \right] \right] \right] \right]$ 

We accordingly argue that the Focus head can enter into serial Agree relationships, valuing both the subject's and the object's uCase (see (13)). Foc must raise exactly one expression to its Spec, conferring an interpretable [+Focus] feature as well as a Case value. For its highest goal, these two features are inextricably linked. But once an external argument is in

Spec, FocusP and [+Focus] discharged, Foc can probe and Case-license the direct object (see (13)b), which does not raise and hence does not receive the focus interpretation.<sup>4</sup>
(13) a. Foc probes and raises the subject to Spec, Foc giving it a Case value and +Focus feature

$$[FocP \ SU_{uCase}; +Foc \ [Foc' \ Foc_{CASE} \ [vP < SU_{uCase}> [v' \ V \ [vP \ V \ OB_{uCase}...]]]]]] \\ Probing \ of \ EA \\ Raising \ to \ [+Focus] \ \& \ Case-valuation \\ [Problem \ A \ Case \ V \ [vP \ V \ OB_{uCase}...]]]]$$

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

Turning to experiencer verbs, the contrasts in (7) illustrate that problems arise only when there are two full DP arguments – another state of affairs strongly suggestive of Case issues. We propose that Xhosa experiencer subjects bear an inherent Case, as is true in many languages with systems of overt Case marking (see §4.5 and references therein). The connection between the Focus and Case features on the argument that raises to Spec, Foc rules out the central strategy for Case-licensing in TECs, where an inherently Cased subject is involved. In essence, an argument can bear only one semantically linked Case feature. An implication is that the Case that Focus values on the argument in Spec, Foc straddles the line between structural and inherent Cases: it comes with a semantic value, but is related to a particular structural position and compatible with a variety of thematic roles.

There seems to be one purely structural Case readily available in a TEC which goes to the highest argument, as proposed in Halpert 2011, 2012 for Zulu. Given the general

<sup>&</sup>lt;sup>4</sup> This proposal is inspired by Hiraiwa's (2001) Multiple Agree, but differs in assuming that Agree with multiple goals happens serially as in Haegeman & Lohndal (2010). See also §4.2.2 and references therein on

Agree relations that Icelandic T initiates to first raise a dative and then subsequently agree with a nominative object, the relevance of which is pointed out in Halpert 2011 and 2012. Another difference between our analysis and Hiraiwa's proposals is that only the highest of Foc's goals can and must raise to Xhosa Spec, Foc, probably due to a lexical property of Foc requiring one and only one specifier.

inertness of T and v in Case relations, we speculate in §4.2.3 that the structural Case available to the highest argument in an EC is valued by C.

(14) 
$$[CPC]_{TP}C_{def}[VPSU]_{UCase}$$
  $V_{def}[VP...]]]]$  C can provide one Case for the highest DP in an EC probing across inert, defective T.

## 1.3 On augmented and augmentless nominals

In the grammars of those speakers who do not accept TECs, we propose that the Focus head lacks the ability to value a DP's uCase. Interestingly, even these conservative speakers accept negative TECs in which both arguments are bare [-A] NPIs (see (4)) lacking the outer of two noun class prefixes that are standard in other contexts. And as noted above, experiencer verbs with two nominal arguments can participate licitly in TECs if they are [-A] forms in negative clauses. Wh-expressions, which are also [-A], greatly improve TECs that speakers judge unacceptable or marginal with full DP arguments. These systematic liberalizations of TECs with [-A] arguments we explain with a proposal that Xhosa [-A] nominals do not have uCase features needing valuation. In this, our analysis of Xhosa is virtually the mirror image of Halpert's 2011, 2012 analysis of Zulu, and aligns with a proposal in Baker 2003 that [-A] NPIs in Kinande do not need Case. Halpert argues that only NPIs require Case in Zulu partly because they cannot occupy preverbal subject position. While Xhosa NPIs share this distribution, so do English and Xhosa CPs (see (15) and (16)). Following Stowell 1981 we assume CPs in many languages lack uCase and avoid positions where Case values are assigned. We extend this approach to Xhosa [-A] nominals. (15) [-A] nominals cannot occupy preverbal subject position even with c-commanding negation.

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

# (16) *CPs are also barred from preverbal subject position*

\*Ndi-cinga okokuba [CP okokubaa u-John w-a-hamba] w-a-mangala u-Mary 1sSA-think that that 1-1John 3sSA-PST-go 3sSA-PST-upset 1-1Mary \*'I think that John left upset Mary'

Halpert's claim also aims to explain why [-A] object NPIs in TECs depend on applied and causative morphology. In §5 we propose that, like *n*-words in West Flemish, Nguni NPIs must raise leftwards. Appl and Caus heads introduce edge features that make this possible.

# **1.4** Implications for Case in Bantu

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

# 1.5 Structure of the paper

This paper is structured as follows. In §1.6 we summarize our theoretical assumptions. In §2 we describe in more detail the striking asymmetries that characterize Xhosa ECs. In §3 we review analyses by Buell (2004) and Halpert (2011, 2012) of ECs in closely-related

Zulu, presenting several insights they provide into the Xhosa phenomena and also several key questions that they cannot answer – gaps that we argue our analysis can fill. 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 proposes that in the grammars of speakers who reject TECs, Foc is not a Case-licenser. §5 also addresses [-A] NPIs, which Halpert 2011, 2012 argued to be the only kind of Zulu nominals that require Case-licensing, proposing instead that in both languages they must have access to an edge feature (in a TEC, Appl or Caus). §6 provides accounts of the Case anomalies of Xhosa (and other Bantu languages that exhibit them). In §7 we compare Xhosa passives, TECs, and impersonal passives and explain the similarities and differences among them, developing a fine-grained typology of the components of these different clause types. §8 concludes.

# 1.6 Theoretical background

This paper is written within the Minimalist theoretical framework of Chomsky (2000; 2001). In particular, we assume that syntactic objects are constructed from bottom to top by the Merge operation, and that Transfer to the Conceptual-Intentional (C-I) and Sensory Motor (PF) interfaces is cyclic. We follow Chomsky (2000) in taking Transfer of the complement of a phase head  $v^*$  or C to occur when that head has Merged and probed. We assume with Chomsky that  $v^*$  and C have phasal edge features that can raise material out of their complements before those domains are removed. Also following Chomsky, we assume agreement and 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*  $\beta$  -- an expression that can provide values for  $\alpha$ 's unvalued features. We assume a version of the "activity requirement" of Chomsky (2000; 2001) – that an

expression participating in Agree must itself bear a uF. Following Boskovic (2011) we assume that Case-valuing heads have particular 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 (17) for the unergative verb 'sing.'

(2) a. Ku-fik-é i-ncwadi Optional subject focus for unaccusative EC 17SA-arrive-PST1 9-9letter

R#1: 'It was a letter that arrived' (answers, 'What arrived?')
R#2: 'A letter arrived' (answers, 'What happened?')
[Lit: (There) arrived letter.]

(17) Ku-cul-é u-Sindiswa
17SA-sing-PST11-Sindiswa
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.

- (18) Ku-theng-a a-ba-fazi i-i-ntyatyambo. TEC has subject focus 17SA-buy 2-2-women 10-10-flowers 'It's the women who buy flowers.'
- (19) Ku-fund-is-a u-Loyiso a-ba-ntwana i-si-Xhosa 7SA-learn-CAUS 1-Loyiso 2-2-children 7-7-Xhosa 'It's Loyiso who teaches the children Xhosa.'

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 (20)a-c).<sup>5</sup> Second, a true indefinite can be subject of an SVO sentence (see (21)a), or subject of an intransitive EC, as shown in (21)b, d); but not subject of a TEC, as shown in (21)c.

- (20) a. Kw-enzek-é ntoni? 17-happen-PST1 9what 'What happened?' [Lit: (There) happened what?]
  - b. Ku-cul-é u-Sindiswa17SA-sing-PST1 1-Sindiswa'Sindiswa sang.' [Lit: (There) sang Sindiswa]
  - c. #Ku-cul-é u-Sindiswa a-ma-culo 17SA-sing-PST1 1-Sindiswa 6-6-songs #'It was Sindiswa who sang songs' [Lit: (There) sang Sindiswa songs]
- (21) a. U-m-ntu u-b-é i-ncwadi y-am Indefinite SU OK if order is SVO 1-1-person 1SA-steal-PST1 9-9book 9my 'Somebody stole my book!' *OR* 
  - b. Ku-kho u-m-ntu o-b-é i-ncwadi y-am *Indefinite SU OK in intrans EC* 17SA-be 1-1-person wh.AGR-steal-PST 9-9book 9-my 'Somebody stole my book!' [Lit: (There) is a person who stole my book!]

*Infelicitous in context* 

- c.\*Ku-b-é u-m-ntu i-ncwadi y-am! \*Indefinite SU in TEC 17SA-steal-PST1 1-1-person 9-book 9-my (Reversal of "definiteness effect") 'Somebody stole my book!' [Lit: \*(There) stole a person my book]
- d. Ku-cul-é u-m-ntu Compare with (8c)
  17SA-sing-PST1 1-1-person
  'Somebody sang'
  [Lit: (There) sang a person]

Xhosa clearly lacks the "definiteness effect" (DE) that characterizes ECs in Indo-European languages as discussed in Milsark 1977, Safir 1987, 2009, Belletti 1988 Vangsnes 2002 among many others; see (22)a-c, adapted from Belletti 1988 and (23) from Vangsnes 2002.

(22) a. There is a/\*the man in the room

[English]

<sup>5</sup> Buell 2005 reports that in Zulu a TEC can answer a "What happened?" question and gives one example. The

contrast is potentially interesting though two Zulu speakers I consulted did not share the judgment.

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b. Il est arrivé trois filles/\*la fille there be.3S arrived three girls/\*the girl 'There arrived a girl/\*the girl'

[French]

c. Es liegt ein/\*?der Brief auf dem Tisch. there lies a /\*the letter on the table 'There lies a letter/\*the letter on the table'

[German]

(23) Það hafa verið nokkrir kettir/\*allir kettirnir í eldhúsinu there have been some cats /\*all cats.the in kitchen.the 'There have been some cats/all the cats in the kitchen'

[Icelandic]

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

# 2.3 Asymmetry #2: pronominalization in ECs

In Xhosa SVO clauses, an internal argument can be realized as a pronoun – either an independent pronoun (24)a or a clitic-like object marker (24)b. In contrast, the internal argument in a TEC cannot be a pronoun of either variety (see (24)c-d). The subject of a TEC or the sole argument of any intransitive EC can however be pronominalized (see (25)).

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

OK: Independent pronominal OB in SVO

b. u-Sindiswa u-ya-wa-cul-a 1-Sindiswa 1SA-DISJ2-60M-sing-FV 'Sindiswa sings them' OK: clitic OM in SVO

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

d. \*Ku-(ya)-wa-cul-a u-Sindiswa 17SA-(DISJ2)-60M-sing-FV 1-Sindiswa 'It's Sindiswa who sings them'

(25) 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

\* Clitic OM pronoun in TEC

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

OK: Indep Pro theme in unaccusative EC

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

These examples make it clear that the pronominalization restriction in ECs is not connected with thematic roles. Rather, the correct generalization appears to be that only the highest argument can pronominalize.

# 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) the arguments of the verb lack the initial augment vowel and function as negative polarity items. These generalizations are illustrated in (7), repeated below.

- (7) a. \*Kw-a-bon-a u-m-fazi i-ntaka \*TEC of an experiencer verb with 2 17SA-PST2-see-FV 1-1-woman 9-9bird nominal arguments '(It was) a/the woman (who)n saw the bird'
  - b. Kw-a-bon-w-a i-ntaka OK: same V in impersonal passive 17SA-PST2-see-PASS-FV 9-9bird 'A bird was seen'
  - c. Ku-bon-é u-gqirha ukuba u-m-ntwana u-ya-gula.

    17SA-see-PST1 1-1docor that 1-1-child 1SA-DISJ2-be.sick

    (It was) the doctor (who) saw that the child was sick'
  - d. A-ku-bon-anga m-ntu nto
    NEG-17SA-see-PST3 1person 9thing
    '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 2004, 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 2004)

Xhosa expletive constructions resemble those of Zulu in featuring invariant class 17 agreement and VS(O) order. Buell (2004) 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 (26) 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*.

(26) a. A-ba-ntwana ba-fund-ile/\*é
2-2-children 2SA-learn-DISJ1/\*PST1
'The children studied'

disjoint form is final

b. A-ba-ntwana ba-fund-é/\*ile i-si-Xhosa 2-2-children 2SA-learn-PST1/\*DISJ1 7-7-Xhosa 'The children studied Xhosa'

conjoint form is non-final

While this kind of alternation has sometimes been attributed to the presence or absence of verb focus (Hyman & Waters 1984, Ndayiragije 1999), Buell (2004) argues against such an interpretation partly on the grounds that either conjoint or disjoint morphology can appear in the answer to a "What happened?" question depending on whether the verb has a following argument. In such a circumstance the domain of focus is the whole sentence. I therefore adopt Buell's proposal that the crucial factor is the presence or absence of a constituent following the verb within a local domain (see also Van der Spuy 1999 and Mali 1995); hence (27)a,b. Bantu verbs raise into the middle field of the clause, and Buell accordingly identifies the domain as AgrP. We analyze it instead as TP (for arguments

against AgrP, see Chomsky 1995), 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 (28) (anticipating somewhat the pattern in ECs to be described below).

- (27) Conjoint/disjoint distribution (Buell 2004)a. A disjoint verb form is final in its domain.b. A conjoint verb form is non-final in its domain.
- (28) Condition on conjoint/disjoint forms: T in the conjoint form must c-command an expression with phi-features (hence  $\neq$  vP or VP); a disjoint form cannot.

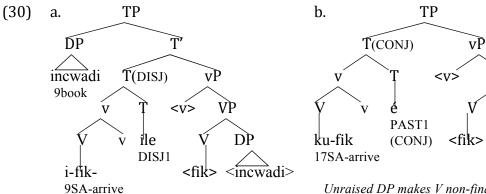
Buell (2004) demonstrates that the conjoint/disjoint distinction sheds light on inversion constructions in Zulu, and his observations extend to Xhosa. Consider (29)a: the unaccusative subject is preverbal, leaving the verb final in its domain save for the subject's unpronounced copy. The morphology on the verb is accordingly of the disjoint variety. In contrast, the verb must bear the conjoint morphology in an EC like (29)b. Leaving aside temporarily the focused reading, 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 (30)a,b respectively.

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

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they are plausibly viewed as having phi-features. For reasons of length we ignore CP complements here.

<sup>&</sup>lt;sup>6</sup> A very similar approach was independently proposed in Halpert 2012. Buell points out that the Zulu adverb *kahle* – 'well' triggers the conjoint form, as does a focused adverb like *phandle* – 'outside' (assume it occupies Spec, Foc). *Kahle* doubles as an adjective and bears agreement; *phandle* descends from locative class 16. Thus



Unraised DP makes V non-final in its domain so so CONJ form required, as in transitive (26)b

ĎΡ

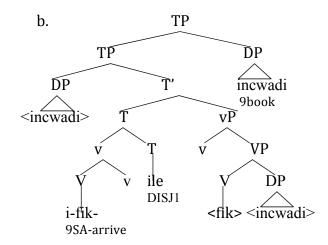
incwadi

9book

On the other hand, when a post-verbal subject controls SA, the verb takes the disjoint form (see (31)a). This follows from the reasonable assumption that the subject in such cases has raised to Spec, TP and right-dislocated (31)b as Buell 2004 proposes for Zulu. A conjoint form would not meet the requirement in (28) that it c-command an overt expression.

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

Raised DP invisible; hence V takes DISI form

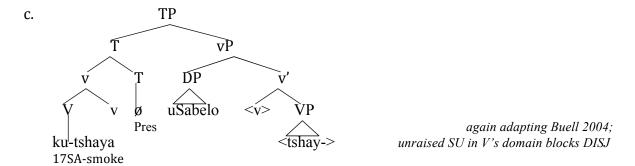


Buell 2004: After right-dislocation, raised OB remains invisible to DISI

# 3.3 Unergatives

Unergative verbs with preverbal subjects bear disjoint morphology, as expected. In an unergative EC, (28) correctly predicts the conjoint form since T c-commands the subject:

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

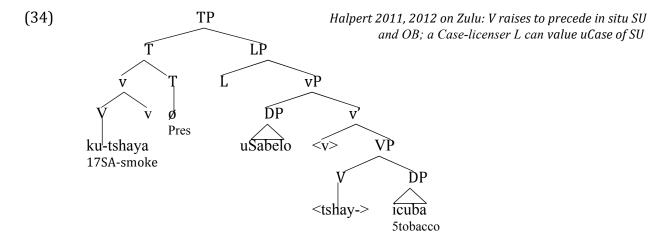


## 3.4 Transitive expletive constructions in Halpert 2011, 2012

We have noted that many speakers accept TECS (see (33)b).

- (33) a. u-Sabelo u-tshay-a i-cuba 1-Sabelo 1SA-smoke-FV 5-tobacco 'Sabelo smokes tobacco'
- b. Ku-tshay-a u-Sabelo i-cuba 17SA-smoke-FV u-Sabelo 9-tobacco 'It's Sabelo who smokes tobacco'

Halpert 2011, 2012 shows that TECs are found in Zulu, and proposes that their arguments remain in situ. Halpert posits a Case-licenser between T and vP that she labels L (on Halpert's approach to Case-licensing NPI objects, see §5.4).



# 3.5 VSO order -> expletive agreement

Halpert's analysis is consistent with Buell's in assuming that the inverted subject in VSO has never raised to occupy Spec, TP. In addition to the conjoint/disjoint facts, there is also support for extending this conclusion to Xhosa in that VSO order is impossible if the verb agrees with the subject (see (35)). In this case the licit orders are only SVO and VOS:

(35) a. u-tshay-a i-cuba u-Sabelo 1SA-smoke-FV 5-tobacco 1-Sabelo 'Sabelo smokes tobacco'

VOS OK in a clause with SA

b.\*u-tshay-a u-Sabelo i-cuba 1SA-smoke-FV 1-Sabelo 5-tobacco \*VSO in a clause with SA

This contrast supports our claim that a robust T has both EPP and uPhi probe features, while a defective T lacks both of these properties. A sentence like (35)b cannot be generated because T agrees with the subject but leaves it in situ. In (35)a, T agrees with and raises the subject which then right-adjoins, as in the intransitive VS sentence (31)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 expletive construction, they have not ruled out the possibility that the subject undergoes raising to fairly high position in the middle field of the clause as in the analysis of Icelandic in Bobaljik & Jonas (1996). The examples in (36) from Vangsnes (2002) illustrate two positions for subjects within Icelandic expletive constructions:

(36) 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 (37) with the auxiliary *phantse* – 'almost' and in (38) with *soloko* – 'often'; and with the combination of *soloko* and a remote future auxiliary (=RFUT) in (39) (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).

(37) a. u-Thandeka u-phantse w-aty-a i-papa 1-Thandeka 1SA-almost 1SA-eat-FV 9-polenta 'Thandeka almost ate the polenta'

- b. Ku-phantse kw-aty-a **u-Thandeka** i-papa 17SA-almost 17-eat-FV 1-Thandeka 9-polenta It was Thandeka who almost ate the polenta'
- c. \*Ku-phantse u-Thandeka kw-aty-a/w-aty-a i-papa
- (38) a. A-ba-ntwana ba-soloko be-cul-a 2-2-children 2SA-often 2SA-sing-FV 'The children often sing'
  - b. Ku-soloko ku-cul-a **a-ba-ntwana** 17SA-often 17SA-sing-FV 2-2-children '(It's) the children (who) often sing'
  - c.\*Ku-soloko **a-ba-ntwana** ku-cul-a /be-cul-a 17SA-often 2-2-children 17SA-sing-FV/2SA-sing-FV
- (39) 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

Full consensus is lacking as to precisely where the lowest subject position is located in Icelandic and what the exact mapping is between interpretations and positions. Bobaljik & Jonas (1996) argue that a true definite cannot appear in the lowest Icelandic subject position see (40), and that indefinites in the higher post-verbal position sound somewhat odd. Vangsnes (2002) presents some potential counter-examples, but notes that much of his data supports a definiteness distinction among the two positions.<sup>7</sup>

(40) a. Í gaer kláruðu (þessar mys) sennilega (\*þessar mys) ostinn yesterday finished (these mice) probably (these mice) the.cheese 'These mice probably finished the cheese yesterday'

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<sup>&</sup>lt;sup>7</sup> We have found only adverbs that appear at the right edges of Xhosa clauses, so cannot replicate the adverb position test that is frequently used to diagnose subject positions in Icelandic and German.

b. Í gaer kláruðu (?margar mys) sennilega (margar mys) ostinn yesterday finished (many mice) probably (these mice) the.cheese 'These mice probably finished the cheese yesterday'

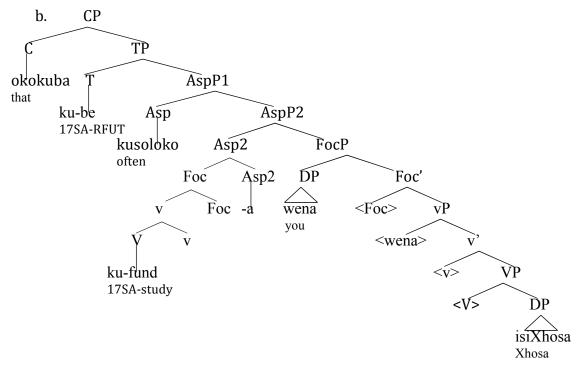
(37)-(39) help to flesh the representation of Xhosa clauses. Anticipating the content of §4.2 we propose that a FocP lies above vP, below phrases headed by the auxiliary verbs (see (41)a). Given that the main verb precedes the external argument even in a clause like (39)b containing two auxiliaries, it seems  $V_{main}$  always raises beyond vP and FocP. To account for this we assume that the final vowel of the verb is itself an aspectual head to which the verb always adjoins after combining with any other heads along the way. (41)b,c represent the syntax of a sentence like (39)b. Auxiliaries occupy T and Asp but the main verb nonetheless surfaces in the middle field, adjoined to -a. More detail follows in §3.7.

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

#### 3.7 ECs in embedded clauses

A question remains regarding the location of the highest inflected verb in a Xhosa EC. We now present (42) – (43) showing that ECs are possible in embedded clauses following overt complementizers. The pattern of facts supports the representation in (44)b for (44)a.

- (42) u-Sabelo u-cing-a okokuba ku-fundisa u-Loyiso i-si-Xhosa 1-Sabelo 1SA-think-FV that 17SA-learn-CAUS-FV 1-Loyiso 7-7-Xhosa 'Sabelo thinks that it's Loyiso who teaches Xhosa'
- (43) u-Thandeka u-buz-é okokuba ngabe ku-bhal-é u-m-ntwana i-ncwadi na 1-Thandeka 1SA-ask-PST that whether 17SA-write-PST 1-1-child 9-letter Q 'Thandeka asked if it was the child who had written the letter'
- (44) 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 (2004) provides a useful diagnostic basis for determining that the arguments in Nguni ECs are not in a right-adjoined position but rather clause-internal, c-commanded by the tense/aspect heads that precede them. In the analysis of Halpert 2011, 2012 this approach is extended to Zulu TECs. I 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 more detail our analytical approach to the property of Xhosa ECs, addressing the questions we have already raised, summarized below:

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(45) Issues in the analysis of Xhosa expletive constructions

- Focused reading is optional for subjects of V<sub>intrans</sub> but obligatory for subjects of V<sub>trans</sub>.
- •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 that the focused reading available for subjects in ECs is due to their ability to raise into Spec, Foc. Given that the focused reading is obligatory in TECs, we propose that this raising makes possible a non-canonical strategy for valuing uCase of the internal argument. This and the pronominalization asymmetry argue strongly that little v\* in Xhosa TECs is defective, lacking the ability to license Case or shift objects. We argue in §4.4 that an alternative analysis, wherein v\* is robust but object shift/accusative fails when the subject is in situ, cannot account for all the facts. We then turn to properties of T, arguing against the presence of an expletive pro in Spec, TP. If T of a TEC were perfectly ordinary and just happened to agree with an expletive in its Spec, there would be no clear basis for the correlation of default subject agreement with the peculiar syntax of objects in TECs. Rather, it seems that an active clause whose subject agreement has default, expletive values is necessarily a defective kind of clause. The unavailability of pronominalization and the need for a special Case-strategy for the object is explained; and the lack of agreement with the overt subject is treated as paralleling the absence of accusative Case – thus the properties of T and v mirror each other in this construction. We summarize this proposal in Table 3.

2 opposing Xhosa clause-types: (i)  $T_{+EPP; full Agr; V_{robust}}$ ; (ii)  $T_{-EPP; default Agr}$  (FocP)  $V_{defective}$  Table 3 **defective V**  $\rightarrow$  **defective T** 

Lastly, we show that our analysis is compatible with several approaches to the so-called Definiteness Effect characteristic of ECs in more familiar languages, but absent in Xhosa.

## 4.2 Deriving the focus interpretation

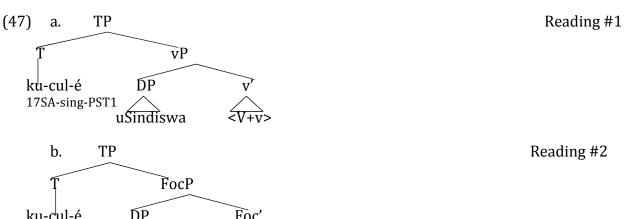
## 4.2.1 Intransitives

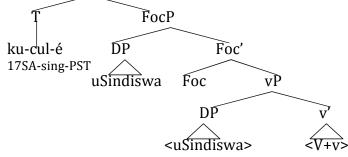
Consider the intransitive EC in (46). As indicated, it can be a simple narration of a past event and a potential answer to, "What happened?" It can also have a subject-focus reading. We propose that this difference reduces to whether or not a middle field Focus head is present to raise the subject to its Spec. Hence the representations in (47) correspond to the two readings (§4.2.2 and §4.2.3 address how the subject gets Case in (47)).

(46) Ku-cul-é u-Sindiswa 17SA-sing-PST1 1-Sindiswa

R#1: 'Sindiswa sang' (answers 'What happened?')

R#2: 'It's Sindiswa who sang' (answers 'Who sang?')

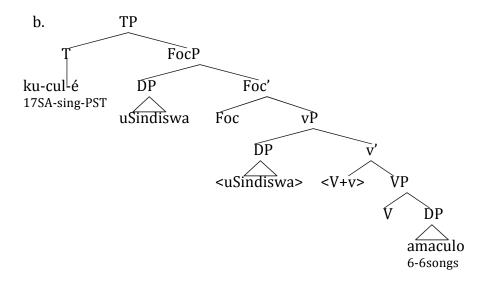




# 4.2.2 Obligatory focus in TECs

The fact that subjects of TECs MUST have the focus reading strongly suggests that they cannot remain in their base positions; they are forced to raise to Spec, FocP. Thus the only representation for (48)a is (48)b.

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



Why should focus-raising of subjects be obligatory in transitive clauses while it is optional in intransitives? The need for Case-licensing is a very common factor underlying forced movement of arguments. We accordingly propose that there is just one structural Case available in a Xhosa EC independent of focus. Only raising of the highest DP to Spec, FocusP permits Case-licensing of a second DP, because little v of TECs is defective (see (9) repeated below). The focus asymmetry and the pronoun asymmetry thus have a single source.

(9) 
$$*[vP SU v [vP V DP_{uCase}]]$$
  $v of ECs cannot value uCase of the internal argument$ 

As noted in the introduction, an important question arises regarding the mechanics of Case in focus TECs, specifically how probing of and local raising by the subject can facilitate Case-licensing of the object. For any potential Case-licenser above FocP, the subject would still intervene (see (49)a). We accordingly propose that the Focus head can enter into serial Agree relationships, valuing both the subject and the object. Once the subject raises out of the way to Spec, FocusP, Foc can probe and Case-license the direct object (see (49)b). Raising to Spec, Foc confers both a Case value and a Focus feature on the raised DP.8

<sup>&</sup>lt;sup>8</sup> This assumes that the structural Case unlinked to Focus is optionally assigned/present; see §4.2.3.

(49) a. Though the highest argument in an EC can get structural Case from a licenser above it (see §4.2.3), the object is unlicensed under this scenario:

\*...[XP 
$$X_{CASE}$$
 [vP  $SU_{uCase}$  [v'  $v$  [VP  $V$   $OB_{uCase}$ ...]]]]]

b. Foc probes and raises SU to its Spec, conferring the Focus/Case value on it instead:

c. Foc probes again and case-licenses the object in situ:

$$[ \text{TP SU}_{\text{uCase,:}} + \text{Foc T [FocP FocCase [vP < SU}_{\text{uCase,}} > [v' \text{ V [vP V OB}_{\text{uCase}}...]]]]] } \\ \text{Probing \& Case-valuing OB }$$

This analysis builds on Halpert's (2011, 2012) idea that Case-licensing in closely related Zulu can happen late, across a base position vacated by A-movement. Halpert draws a parallel that we adopt between this proposal and a well-known Icelandic pattern with respect to 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. We reproduce Halpert's examples (taken from Holmbert & Hroarsdottir 2004) and consolidated illustrations below (adapted from Halpert 2011 and 2012 and 2012:(46)). Inspired by Halpert's account, our proposal is that just as Icelandic T probes and raises the dative and then agrees with the lower nominative, so Xhosa Foc can raise and Case-value the subject; then probe and Case-value the object.

- (50) *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

- (51) Icelandic raised dative experiencers do not block object agreement
- a. einhverjum stúdent finnst tolvurnar ljótar some studentDAT findSGthe 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.'
- (52) *Icelandic dative raising feeds number agreement:*
- a. [TP T + Num [vP DAT [v' V [VP V [TP NOM...]]]]]] Agreement blocked across in situ dative
- b. [TP DAT T + Num [vP DAT [v' v [vP V [TP NOM...]]]]]]Agreement OK after dative raises

But our account of the Case issues in TECs differs from Halpert's in that it assumes full DPs require Case and [-A] nominals do not, an inversion of her conclusions, and in linking non-canonical Case-licensing to focus interpretations, verb class asymmetries, and pronominalization asymmetries, all properties that our investigation is the first that we know of to explore. Whether these same phenomena also exist in Zulu and other Nguni languages is a question for future research (though see §5 and §6 for some discussion).

#### 4.2.3 Case-licensing a single argument without focus

As noted above, assuming that Case is a major determinant of DP positions in Xhosa, intransitive examples without the focus reading argue that there is always "downward" Case licensing available for a single post-verbal argument in an EC without recourse to Focus (see (2), (5a), (7b,c) and (47)a). Given that this Case is not linked to any particular thematic role or semantic interpretation, we analyze it as a purely structural Case. It is possible that a single argument of an intransitive verb bears nominative, licensed downward by T, as attested in German and Icelandic (see Bobaljik & Wurmbrand 2005 on German, and discussion of Icelandic in §4.3). But this is not a necessary conclusion given

that certain complementizers in some languages have the ability to independently confer a Case value. We reproduce Standard Arabic data from Melebari & Seely 2012 in (53) showing that while T values nominative, the C *7anna* values accusative in that language. Given the inertness of T and v in ECs we conjecture that there is a particular null Xhosa C that, like 7anna, can value Case on the argument it closest c-commands (see (54)).

- (53) a. 7al-7awlad-u qara7-u d-dars-a Main clause SU is NOM the-boys-NOM read-3PL.MASC the-lesson-ACC 'The boys read the lesson.'
  - b. 7anna al-7awlad-a 7akal-u T-Ta\aam-a yus\idu-ni 7anna values SU as ACC that the-boys-ACC ate-3PL.MASC the-food-ACC pleases 3PL.MASC-me 'That the boys ate the food pleases me.'
- (54) Case for the sole argument of an intransitive is not linked to focus or restricted by thematic role. Hence it is a purely structural Case, perhaps from C, since T seems inert:

The hypothesis reflects and completes the symmetries between Xhosa T and v in TECs: neither raises the argument that it typically raises; neither agrees or values uCase features.

## 4.3 The pronominalization asymmetry

As previously noted, an object cannot be pronominalized at all in a Xhosa TEC, unlike in an SVO clause with full agreement. In ECs only one argument can pronominalize – the highest one (see (24) and (25), repeated below).

(24) a. u-Sindiswa u-cul-a ona 1-Sindiswa 1SA-sing-FV 6IndPron 'Sindiswa sings them' OK: Independent pronominal OB in SVO

- b.u-Sindiswa u-ya-wa-cul-a 1-Sindiswa 1SA-DISJ2-60M-sing-FV 'Sindiswa sings them'
- c. \*Ku-cul-a u-Sindiswa ona 17SA-sing-FV 1-Sindiswa 6IndPron 'It's Sindiswa who sings them.'

\*Independent pronoun OB in TEC

d. \*Ku-(ya)-wa-cul-a u-Sindiswa 17SA-(DISJ2)-60M-sing-FV 1Sindiswa 'It's Sindiswa who sings them'

OK: Indep Pro SU in (T)EC

\*OM ponominal OB in TEC

- (25) a. Ku-cul-a yena (a-ma-culo) 17SA-sing-FV 1IndPron (6-6-songs) '(It's) she (who) sings (songs)'
  - b. Ku-fik-é yena OK: Indep Pro theme in unaccusative EC 17SA-arrive-PST1 1IndPron 'She arrived'
  - c. Ku-cul-w-a ona 17SA-sing-PASS-fv 6IndPron 'They were sung.' (i.e., the songs)

OK: Indep Pro theme in impersonal passive

It has often been observed that pronouns must raise out of VP. Diesing (1992, 1997) and Diesing & Jelinek (1995) tie this to the unambiguous definiteness of pronouns. They argue from contrasts like (55)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 interpretive contrasts like (56a,b) that the VP is the domain of existential closure, where definites do not belong. Then they present data from German, Icelandic, Arabic, and English demonstrating that even if full DPs can licitly shift or not, object pronouns must do so (see (56)).

- (55) 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'
- (56) 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'

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:

- (57) Pronouns must vacate VP (Diesing 1992, Diesing & Jelinek 1995, Diesing 1997)
- (58) a. Bert looked **the reference** up.
  - b. Bert looked up the reference.
  - c. Bert looked **it** up.
  - d. \*Bert looked up it.
- (59) \*[vP <SU> v [vP V Pronoun]] Xhosa v has no phasal edge feature so pronouns cannot escape VP

If object shift to Spec, vP is not available, Spec, Foc would be the closest potential landing site for object pronouns to raise to. But in a TEC, Spec, Foc must be occupied by the external argument (which in any case intervenes to block closest c-command between Focus and the object). Hence object pronouns are predicted to be illicit.<sup>9</sup>

### 4.4 A failed alternative

Suppose in a TEC that Spec, TP is unavailable as we have claimed, but v\* is robust. If Case-valuation by v\* depends on object shift, and OS is blocked when the subject remains in situ, then the results we have described are also predicted: object pronouns will be illicit because they cannot shift, and providing Case for the direct object will require a non-canonical strategy. We could attribute the impossibility of object shift to an intervention effect, blocking Case-licensing of the subject:

(60) Alternative hypothesis: object shift is blocked by in situ SU, so accusative Case licensing fails

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<sup>&</sup>lt;sup>9</sup> Richards 2007 claims that object shift (OS) is never possible in TECs because expletive subjects Merge in the OS position, making it unavailable. TECs exist only in languages with overt object shift. Hoskuldur Thrainsson (personal communication) reports that object shift is possible in Icelandic TECS, including shifting of weak pronouns. Questions also arise in relation to OS in impersonal passives to be discussed in §7. I leave fuller investigation for future research.

\*
$$[TP T_{def}[vP OB [vP SU [v' V_{robust} [VP V < OB >]]]]]]$$

While this approach has some appeal, it raises more questions than it answers. It would lead us to expect that, once the subject of a TEC raises to Spec, Foc, object shift and hence object pronouns should be possible, contrary to fact.

(61) If  $v^*$  is robust and the subject raises to Spec, Foc, object shift should be possible:  $[FOCP SU FOC [vP OB [vP < SU > [v' V_{robust} [vP V < OB >]]]]]$ 

The derivation of raising to Spec, Foc satisfies the requirement proposed in Alexiadou and Anagnostopoulou's 2001, that two DPs not remain vP internal. Hence if nothing else were amiss, we would expect not only that an object would be licitly Case-licensed, but that object shift and hence object pronouns would be available as well.

We could instead suppose that subjects do not raise to obtain the focus interpretation in TECs. But then, our explanation for the correlation between focus and transitivity is lost.

Only the assumption that both T and v\* are defective accounts for the full constellation of facts, motivating raising to Spec, Foc for the subject and explaining the impossibility of object pronouns at the same time. Due to its shortcomings, we consider the alternative proposal no further here.

### 4.5 Case and experiencer predicates

Recall that an experiencer verb with two full DP arguments cannot participate in a TEC. As noted in the introduction, neither the identity of the verbs nor their argument structures suffice to explain this restriction because it is voided under certain conditions: (i) if one of the arguments is removed by passivization, (ii) if one of the arguments is a CP, or (iii) if both of the arguments are augmentless NPIs (see (53), repeated below).

(53) a. \*Kw-a-bon-a u-m-fazi i-ntaka 17SA-PST2-see-FV 1-1-woman 9bird '(It was) a/the woman (who) saw the bird'

\*TEC of an experiencer verb with 2 nominal arguments

b. Kw-a-bon-w-a i-ntaka 17SA-PST2-see-PASS-FV 9-9bird 'A bird was seen'

OK: same V in impersonal passive

- c. Ku-bon-é u-gqirha ukuba u-m-ntwana u-ya-gula. OK: replace DP2 w/CP 17SA-see-PST1 1-1docor that 1-1-child 1SA-DISJ2-be.sick '(It was) the doctor (who) saw that the child was sick'
- d. A-ku-bon-anga m-ntu nto
  NEG-17SA-see-PST3 1-person 9thing
  'Nobody saw anything.'
  [Lit: (There) didn't see anybody anything]

Only Case theory seems to have the potential to address this curious pattern. Many languages with overt Case mark the subjects of experiencer predicates with an inherent Case. Bhatt (2003) shows that in Marathi this Case is dative, while in Bhojpuri it is genitive:

(62) a. ti-la rag ala [Marathi] b. hamraa ii naa miilal [Bhojpuri] she-Dat anger came I-Gen.Obl this not find 'She got angry' 'I didn't find it'

It has also been demonstrated that in Ukranian, experiencer predicates are barred from participation in a kind of transitive expletive construction (see (63)a versus (63)b). Lavin (2010) argues convincingly that the restriction underlying (63)a is Case-theoretic in origin.

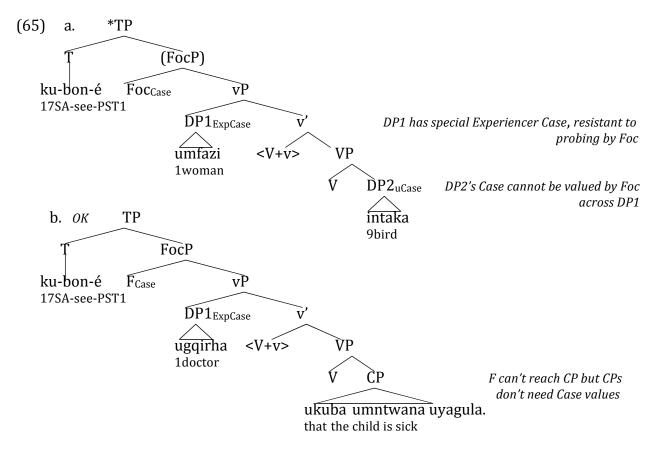
(63) a. \*Ivana bulo zdyvovano blyskavkoju b. Kulju rozirvano evjaxom Ivan.acc was surprised lightening.instr 'Ivan was surprised by lightening' b. Kulju rozirvano evjaxom balloon.acc pierced nail.instr 'The balloon was pierced by a nail'

Based on these precedents we propose that subjects of experiencer predicates in Xhosa bear a special inherent, hence semantic Case. This Case is clearly compatible with the subject's interacting with T, raising to Spec, TP and valuing subject agreement (see (64)). We assume this is because a purely structural case is compatible with an inherent Case.

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

Suppose however that the Focus head confers a complex Focus/Case feature on the DP that it raises, and that the experiencer subject, already marked with the special semantic Case,

cannot bear a second such feature. Then the subject will be unable to raise to Spec, Foc, yielding a failure of Case-licensing for the object see (65)a). The problem does not arise for a CP object because Xhosa CPs do not have uCase (see Stowell 1981 on English CPs).



## 4.6 Against an expletive pro subject

We have provided strong evidence that v of TECs is defective: it can neither shift pronouns nor value accusative Case. It is striking that this kind of v is found in a clause with default 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.

A common approach to ECs in null subject languages has been to posit an expletive *pro* subject in Spec, TP. But if T of a Xhosa TEC were perfectly ordinary, and just happened to have an expletive in its Spec to agree with, there would be no clear basis for the correlation of expletive subject agreement with the peculiar syntax of objects exhibited in ECs. Rather,

it seems that an active clause whose subject agreement has default, expletive values is necessarily a defective kind of clause. 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.

#### 4.7 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, other Case-related approaches to the definiteness effect are likely consistent 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 (55) (repeated below) that VP is the domain of existential closure, where definites do not belong.

- (55)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'

§7 will present some arguments from impersonal passives that the lowest subject position in ECs may in fact be 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.

# 5. Negatives, polarity items, and the conservative dialect

# 5.1 Parameterization of the Case-feature of Focus

In this section we consider the judgments of speakers who reject transitive ECs with two full DP arguments, and address some related issues in the distribution of [-A] nominals.

More than half of the speakers consulted at various points in our investigation did not generally accept transitive ECs. Thus these speakers find (5)b (repeated below as (66)a) and comparable examples to be ill-formed (see (66)b,c).

(66) Conservative dialect: transitive verbs with full DP arguments cannot participate in ECs

- a. \*Ku-theth-a i-ndoda ende i-si-Xhosa. 17SA-speak 9-9man 9tall 7-7-Xhosa 'It's the tall man who speaks Xhosa.'
- b. \*Ku-theng-é a-ba-fazi i-i-ntyatyambo 17SA-buy-FV 2-2-women 10-10-flowers 'It was the women who bought flowers'
- c. \*Ku-cul-é u-Sindiswa a-ma-culo 17SA-sing-FV 1-1Sindiswa 6-6-songs 'It was Sindiswa who sang songs'

Like the speakers of the liberal dialect, the conservative speakers accept intransitive ECs and report an optional focus reading for the post-verbal subject (see (5a), repeated below).

(5) a. Ku-lil-é u-Sindiswa 17SA-cry-FV 1-Sindiswa R#1: 'Sindiswa cried'

R#2: 'It's Sindiswa who cried'

Optional subject focus in an intransitive EC

(answers 'What happened?') (answers 'Who cried?)

To account for this pattern of facts we propose that in the conservative dialect, FocP can occur between TP and vP just as in the liberal dialect. The contrasting judgment on TECs arises because in the conservative dialect, Foc is not a Case-licenser. Hence ECs can contain only one argument.<sup>10</sup> Much prior work has attributed the failure of TECs to Case-theoretic

 $<sup>^{10}</sup>$  For reasons of length we ignore the issue of Case in TECs that include applied and causative morphemes.

problems for licensing both external and internal arguments in situ (see Alexiadou and Anagnostopoulou 2001 among many others). Our proposal is in line with this tradition.

## 5.2 [-A] nominals don't need Case-licensing

Curiously, even speakers of the conservative dialect accept negative TECs with [-A] nouns functioning as negative polarity items, and positive TECs with augmentless question words.

- (67) Conservative speakers prefer TECs with augmentless arguments
  - a. A-ku-theng-anga m-ntu nto NEG-17SA-buy-NEG.PST 1-person[-A] 9thing[-A] 'Nobody bought anything'
  - b. Ku-cul-é bani a-ma-culo? 17SA-sing-PST1 1who 6-6-songs 'Who sang songs?'
  - c. Ku-phek-é u-Loyiso ntoni? 17SA-cook-PST1 1-Loyiso 9what 'What did Loyiso cook?'

TECs with experiencer subjects are much improved if their arguments are [-A] nominals rather than full, augmented DPs (see (7)d, repeated below).<sup>11</sup>

(7) d. A-ku-bon-anga m-ntu nto OK: negative experiencer TEC replacing full DPs with NEG-17SA-see-PST3 1-person 9thing "augmentless" NPIs 'Nobody saw anything.'

[Lit: (There) didn't see anybody anything]

There is also some evidence that subject focus is not necessarily involved in negative TECs with NPI arguments. The context created below strongly favors object focus.

- (68) I leave you minding my store, where sale items include a display of new books. When I come back they seem not to have been touched. The following discourse occurs:
  - a. A-ku-theng-anga m-ntu ncwadi? NEG-17SA-buy-NEG.PST 1-person[-A] 9book[-A] 'Didn't anybody buy books?

<sup>11</sup> The analysis so far might lead one to expect that if an experiencer subject of a TEC is [-A], the one structural Case-licenser could value Case of a [+A] DO across it. We assume (defective) intervention prevents this.

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b. A-ku-theng-anga m-ntu nto!

NEG-17SA-buy-NEG.PST 1-person[-A] 9thing[-A]

'Nobody bought anything!'

Based on these facts, we propose that Xhosa augmentless nominals do not have uCase features that need to obtain values (Baker 2003 makes a comparable proposal to account for the distribution of augmentless nominals in Kinande).

Interestingly, augmentless nominals are illicit in preverbal subject position in Xhosa, This is demonstrated in the contrast between 0 and (15), repeated below.

(69) All DPs including [-A] nominals can occupy object positions.

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

(15) [-A] nominals cannot occupy preverbal subject position even with c-commanding negation.

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

Halpert 2011, 2012 documents this pattern in Zulu and claims it arises because Spec, TP lacks Case-licensing. Unlike full DPs, Zulu augmentless nominals must be Case-licensed, in Halpert's view. They lack an intrinsic Case-licensing layer in the form of the augment:

b. Halpert 2011, 2012: augmentless nominals require Case-licensing in Zulu; augmented nominals do not.

But given the findings of our study, this explanation cannot be extended to Xhosa: full, augmented DPs *must* occupy positions where they can obtain Case-values. I claim that Spec TP is a Case-licensing position in Xhosa (see Bošković 2007, 2011; Epstein & Seely 2006,

Bobaljik & Wurmbrand 2005, and Carstens 2012 for proposals that locality often forces DPs to raise to Spec, TP to obtain nominative values). The pattern in (15) and 0 must receive a different explanation.

We have already seen evidence that Xhosa's augmentless nouns can appear in positions where Case is unavailable. We accordingly interpret the facts in (15) and (69) to mean that Xhosa [-A] nouns not only do not need but also cannot occupy Case positions. In this they resemble English CPs, which are also barred from Spec, TP (see Stowell 1981 and (71), and the Xhosa counterpart in (72)). The parallelism and our approach to it support a version of the so-called "inverse Case-filter" notion that certain heads automatically "assign" Case values to occupants of the relevant local positions.<sup>12</sup>

- (71) a. \*I think that [CP that John left] upset Mary. b. I think that [DP John's departure] upset Mary
- (72) \*Ndi-cinga ukokuba [CP ukokuba u-John w-a-hamba] w-a-mangala u-Mary 1sSA-think that that 1-1John 3sSA-PST-go 3sSA-PST-upset 1-1Mary \*'I think that John left upset Mary'

The next subsection considers some additional aspects of the behavior of [-A] forms that Halpert 2011, 2012 attributes to their having a special need for Case-licensing in Zulu.

# 5.3 vP-internal [-A] forms and leftward n-word movement5.3.1 Introduction

As noted above, Halpert 2011, 2012 argues that full DPs do not require Case-licensing in Zulu, but [-A] nominals do. In §6 we show that all the Case-anomalies this proposal is intended to account for in Zulu are also present in Xhosa. We offer analyses compatible

position, then the location of NPIs there might be doubly excluded, since the proposal that they bear no Case features is independently motivated by (7)d and (67). But Spec, TP is not the Merge location of subjects, so raising there from Spec, vP should satisfy the requirement. Nothing hangs on this, so we leave it aside.

 $<sup>^{12}</sup>$  §5.3 proposes that [-A] NPIs must most leftwards. If such movement is impossible from preverbal subject

For reasons of space we do not discuss the potentially relevant issue of conjoint/disjoint morphology in relation to CPs, or explore potential contrasts among CPs headed by different complementizers (on which see Halpert 2011 for interesting discussion of Zulu clausal complements).

with assuming full DPs must be Case-licensed. Given this, the motivation is greatly weakened for supposing that Zulu full DPs don't need Case: a unified analysis of the Case-anomalies is possible that could not be obtained under Halpert's assumptions about Zulu.

The principal remaining arguments for maintaining Halpert's proposals in (70) have to do with the distribution of [-A] forms vP-internally. Here too, there are some similarities between Xhosa and Zulu that can be explained in a unified fashion if we abandon Halpert's view that Case-licensing determines where Zulu [-A] forms can appear.

## **5.3.2** Leftwards movement of polarity words

There are additional constraints on the distribution of [-A] nominals in Zulu that Halpert accounts for in terms of Case-licensing requirements. Among them is the fact that in a mono-transitive TEC, only the subject can be [-A] (see (73)).

[Zulu: Halpert 2011, 2012]

# (73) a. \*VSO augmentless-augmentless

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

# b. **VSO** augmentless-augmented

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

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

a-ku-phek-anga umuntu qanda NEG- 17S- cook NEG.PAST 1person 5egg (Nobody cooked any egg)

The pattern calls to mind the fact that so-called *n*-words in some negative concord languages must undergo leftwards movement. We illustrate in (74) with West Flemish data from Haegeman & Lohndal (2010):

(74) 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

Suppose that the phenomenon may generalize to other kinds of polarity items in natural languages besides n-words, including Zulu [-A] nominals. In this Zulu [-A] nominals would appear to be a little different from those of Xhosa (though see discussion to come in §5.3.3). (75) **Zulu NPI licensing hypothesis**:[-A] NPIs must shift leftwards in Zulu. Suppose further that Zulu v in TECs is defective in ways parallel to that of Xhosa. This is consistent with major aspects of Halpert's analysis which, like our own, assumes that Caselicensing for objects is not available from v.<sup>13</sup> If Zulu v of TECs is defective and [-A] nominals must move leftwards, then the facts in (73) fall together with the impossibility of Xhosa object pronouns, because a [-A] object will be trapped in its base position. Note that Halpert's translation indicates subject focus in the licit (73)b; in terms of our analysis, it has raised to Spec, Foc, satisfying (75) and paving the way for Case-licensing of the [+A] object.

#### 5.3.3 The contribution of parasitic licensing

Xhosa does not manifest precisely the restriction exemplified in (73); it permits [-A] DOs in TECs. But they rely crucially on the subject's also being [-A]. Note that the (b) sentences in (76)-(78) are unacceptable with or without subject focus. (79) states the generalization.

- (76) a. A-ku-phek-anga m-ntu /Sabelo qanda [Xhosa] NEG- 17SA- cook NEG.PAST 1-person/1Sabelo 5egg 'Nobody/Sabelo didn't cook any egg'
  - b. \*A-ku-phek-anga u-m-ntu /u-Sabelo qanda NEG- 17SA- cook NEG.PAST 1-1-person/1-1Sabelo 5egg A/the person/Sabelo didn't cook any egg'
- (77) a. A-ku-bhal-anga m-ntu ncwadi NEG-17SA-write-NEG.PAST 1-person 9letter 'Nobody wrote any letter'

 $^{\rm 13}$  Halpert however assumes that this is true across the board, while we restrict the proposal to ECs.

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- b. \*A-ku-bhal-anga u-Sabelo ncwadi NEG-17SA-write-NEG.PAST 1-1Sabelo 9letter 'Sabelo didn't write any letter'
- (78) a. A-ku-theng-anga ba-ntwnaa i-ntyatyambo NEG-17SA-buy-NEG.PAST 2-2children 10-flowers 'No children bought any flowers'
  - b.\*A-ku-theng-anga a-ba-ntwnaa i-ntyatyambo NEG-17SA-buy-NEG.PAST 2-2-children 10-flowers 'The children didn't buy any flowers'
- (79) **Licensing Xhosa NPI objects in TECs:** If the object in a Xhosa TEC is an NPI, the subject must also be an NPI.

In this, negative ECs contrast with negative SVOO clauses in Xhosa, where either object can be augmented or augmentless (see (80)). And even in a VSO construction, the subject can be augmentless and the object augmented. Halpert's work shows that sentences parallel to the Xhosa (80) are acceptable in Zulu as well.

- (80) a. U-Sabelo a-ka-nik-é a-ba-ntwana nto [Xhosa] 1-1Sabelo NEG-1SA-PST 2-2-children 9thing 'Sabelo didn't give the children anything'
  - b. A-ku-phek-é mntu a-ma-qanda NEG-17SA-cook-PST 1person 6-6-eggs 'NOBODY cooked eggs'
- (80)a,b argue against strict polarity concord among adjacent nominals as the basis for (76)-(78). (81) crucially demonstrates that it is not the lack of augments that makes (76)b (78)b unacceptable. A [-A] question word is fine as direct object in a TEC with augmented subject. If Xhosa NPIs had special licensing needs because of their lack of augment vowels as Halpert proposed for Zulu, it isn't clear why question words might be exempt.
- (81) Ku-phek-é u-Sabelo ntoni? 17SA-cook-PST 1-1Sabelo 9what 'What did Sabelo cook?'

Dependencies that shed light on this otherwise mysterious pattern have been documented for *n*-words in negative concord languages. In particular, an *n*-word may appear in an

impossible context if closest c-commanded by another *n*-word. This is shown in (82)a,b for an *n*-word within an adjunct clause. Haegeman 1995 labels the phenomenon *parasitic negation* and follows Zanuttini 1991 among others in relating it to the licensing of a parasitic gap by a licit *wh*-extraction (see (83)).

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

I conclude that the direct object position in Xhosa is an illicit position for a [-A] form functioning as an NPI in a TEC in Xhosa, just as it is in Zulu, because the absence of a phasal edge feature on v\* of a TEC means that the NPI cannot raise. The hypothesis in (75) is broadened in (84) to apply to both languages and, more speculatively, to [-A] NPIs in other Nguni languages (the mechanics of parasitic licensing lie outside this paper's scope).

- (84) **Nguni NPI licensing hypothesis**: When [-A] nominals function as NPIs, they must shift leftwards (unless a parasitic strategy can license them).
- 5.4 Phasal edge features of Appl and Caus license Zulu [-A] nouns by raising them Halpert shows that giving a Zulu verb applied or causative morphology makes possible a [-A] direct object, but not a [-A] indirect object or causee (see (85) and (86)).
- (85) In a TEC, DO but not Causee object of V+Caus can be augmentless<sup>14</sup>
  - a. \*a- ku- fund- is-anga muntu mantombazane [Zulu] NEG-17S-learn- CAUS-NEG.PAST 1person 6girl (Nobody taught any girls)
  - b. a- ku- fund- is- anga muntu lutho NEG- 17S- learn- CAUS-NEG.PAST 1person 16thing 'Nobody taught anything.'

<sup>&</sup>lt;sup>14</sup> A Xhosa counterpart to (85)a is well-formed, a fact that like (76)a, we attribute to parasitic licensing. This section focuses on Zulu since asymmetries among [-A] positions are not obscured by the parasitic strategy.

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

## a. \( \sqrt{Augmentless-Augmented-Augmentless} \)

[Zulu]

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

#### b. \*Augmentless-Augmentless

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

#### c. \*Augmented-Augmentless-Augmentless

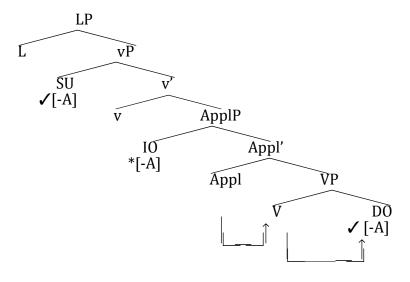
\*A-ku-thum-el-anga umama zingane mali NEG- 17S- send- APPL- NEG.PAST 1mother 10child 9money

#### d. \*Augmentless-Augmentless-Augmented

\*A- ku- thum- el- anga mama zingane imali NEG- 17S- send- APPL- NEG.PAST 1mother 10child 9money

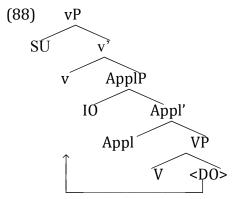
Following Marantz 1993, Pylkannen 2002, 2008, Bantu ApplP is situated between vP and VP. The representation of (86)a is thus (87), adapted from Halpert's (33) (L = the highest structural Case-licenser, in Halpert's account). According to Halpert, Appl and Caus confer Case-licensing features onto V by means of Feature Inheritance (FI) (see Chomsky 2007): phase heads must give their probe features to the heads of their complements.

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



Carstens (2010, 2011) argues that the FI hypothesis is inconsistent with Bantu multiple agreement, and the analysis also seems at odds with the common cross-linguistic pattern that IOs are dative, and direct objects accusative. On the other hand, the Zulu data are quite compatible with our proposal that little v is defective in TECs, stranding in its complement an expression that needs to raise. Where Halpert assumes that Zulu Appl or Caus licenses the NPI by supplying an otherwise unavailable Case value (one that full DPs do not need), we claim it supplies an edge feature, allowing the NPI to raise. Since the [-A] direct object follows the indirect object in (86)a, we assume a "tucking in" derivation for Zulu double object constructions (DOCs) as proposed Adams 2010, following McGinnis 2001; see below.

Support for the idea that Zulu Appl and Caus have phasal edge features exists in the fact that DOCs are "symmetrical" in Zulu. In an SVO clause, either object can pronominalize or passivize (see Adams 2010). Following McGinnis 2001, we take this to indicate that Appl has an edge feature that can raise the DO over the IO as shown in (88). Evidence of symmetry in applied and causative constructions is presented in (89) and (90) from Adams 2010:11), 15 (91) and (92) (thanks to Percy Buthelezi for these examples).



In a "symmetrical" language, Appl is a phase head with an edge feature

<sup>&</sup>lt;sup>15</sup> Some symmetrical languages allow the order [V-D0-I0] (see Carstens 2012 and Baker, Safir, & Sikuku 2012 on Lubukusu). While Zulu disallows this order, the evidence argues that this is not structurally significant.

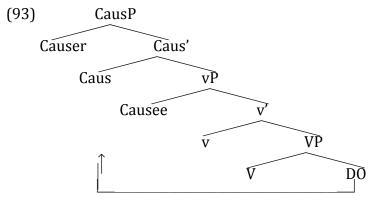
- (89) a. I-ncwadi y-a-fund-el-w-a a-ba-ntwana 9-9book 9SA-PRES-read-APPL-PASS 2-2-children 'The book is read to the children'
  - b. A-ba-ntwana ba-fund-el-w-a i-ncwadi 2-2-children 2SA-read-APPL-PASS-FV 9-9book 'The children are read the book'
- (90) a. U-mama u-ba-nik-e i-ncwadi 1-1mother 1SA-20M-give-PST 9-9book 'Mother gave them the book'
  - b. U-mama u-zi-nik-e a-ba-ntwana 1-1mother 1SA-100M-give-PASS 2-2-children
- (91) a. I-si-Zulu si-fund-is-w-a a-ba-ntwana 7-7-Zulu 7SA-read-CAUS-PASS-FV 2-2-children 'Zulu is taught to the children'
  - b. A-ba-ntwana ba-fund-is-w-a i-si-Zulu 2-2-children 2SA-read-CAUS-PASS-FV 7-7-Zulu 'The children are taught Zulu'
- (92) a. u-Sabelo u-si-fund-is-a abantwana i-si-Zulu 1-1-Sabelo 2SA-70M-read-CAUS-PASS-FV 2-2-children 7-7-Zulu 'Sabelo teaches it to the children' (i.e. Zulu)
  - b. u-Sabelo u-ba-fund-is-a i-si-Zulu 1-1-Sabelo 2SA-2OM-read-CAUS-PASS-FV 7-7-Zulu 'Sabelo teaches them Zulu' (i.e. the children)

Halpert 2011, 2012 proposes the structure for Zulu causatives in (93) (see also Baker, Safir, and Sikuku 2012a, Pylkkanen 2008, McGinnis 2001 among others). Since it is the causee and DO that are symmetrical in the causative of a transitive, the causative morphology of a symmetrical language must be taken to select a flavor of vP with an edge feature, on this analysis. See §5.5 for an alternative proposal.

Carstens 2011, 2012, and Carstens & Diercks to appear present evidence against FI in Bantu, in the form of multiple agreeing heads between CP and vP (C, T, and Asps). If multiple heads in a single phase can Agree, it is

45

<sup>&</sup>lt;sup>16</sup> Halpert 2012 raises an interesting question: in a Zulu TEC with both applied and causative morphology, why aren't two [-A] objects licit? Halpert 's answer is that Appl and Caus have no direct licensing relationship with arguments since they must pass their Case features to V via FI, and V can license only a single argument. This does not seem to hold in languages with overt Case systems – applied arguments are usually dative and direct objects accusative (and see Carstens 2012 for arguments that Luyia Appl and Caus license dative).



Symmetry in causative constructions: Cause selects vP with an edge Feature, permitting the direct object to raise across the causee

Summing up, our proposal about the contribution of Appl and Caus is (94).

(94) **NPI licensing by Appl and Caus:** Appl and Caus introduce edge-features that allow a [-A] direct object NPI to shift leftwards, satisfying (84).

#### 5.5 Comparing polarity item movement and pronoun movement

Crucially, both Halpert's analysis and our re-interpretation of it assume that Appl and Caus heads are not defective in Zulu TECs: for Halpert, they have Case features to pass to V, and for us they introduce edge features that allow [-A] direct objects to shift. So it is interesting that the speakers I have consulted judge the Zulu examples in (95) to be unacceptable.

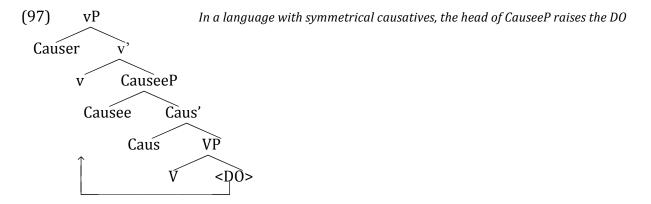
- (95) a. \*Ku-leth-el-a u-Monwa a-ba-ntwana sona 17SA-buy-APPL-FV 1-1Monwa 2-2-children 6IndPron 'It's Monwa who bought it to the children' (i.e. a key)
  - b. \*Ku-fund-is-a u-Sipho a-ba-ntwana sona 17SA-learn-CAUS-FV 1-1Sipho 2-2-children 6IndPron '(It is) Sipho (who) teaches it to the children' (i.e. Xhosa)

The data in (95) argue that the landing site of NPI movement is not high enough for a pronoun. Assuming very local leftwards movement suffices for [-A] forms, and construing vP as the domain that pronouns must escape, we capture these facts easily for applicative constructions as we demonstrate in (96) (for consistency, we depict both as tucking-in).

puzzling that multiple heads cannot value Case. A full exploration of the interactions of causative and applicative within the same clause should yield an alternative account, but that lies outside this paper's scope.

But under the analysis in (93) the restriction is not expected in causative constructions where symmetry can raise the DO over the causee in Spec, vP. (93) has a further disadvantage in attributing DO-over-causee movement to the edge feature of v\* because v\* is hypothesized to have such a feature in most languages. It is therefore not transparent how to distinguish symmetrical from asymmetrical object languages where causatives are concerned, under this analysis.

For these reasons we tentatively suggest a reanalysis locating a CauseeP right above VP, parallel to ApplP (see (97)). If the causee is an agent it Merges in Spec of CauseeP; otherwise, perhaps the theme argument of an unaccusative raises. In languages with symmetrical causatives, Caus has a phasal edge feature. Admittedly the causee argument performs the action of the main verb in a causative construction, while the applied object in an applicative does not. We hope that the compositional semantics of causative and applied morphology can effect this difference, but details lie outside this papers scope. For present purposes the approach is attractive in capturing the contrast between NPIs and pronouns in causatives in a way parallel to the account of applicatives in (96).



## 5.6 Summary

In this section we made the following observations and proposals:

- Xhosa [-A] nominals are licit in TECs where full DPs are disallowed, arguing that they do not require Case-licensing.
- •Assuming Zulu [-A] nominals to shift leftwards like *n*-words in West Flemish, aspects of their distribution particular to Zulu are explained.
- •Since *n*-words in various languages can obtain licensing through parasitic negation, the analysis permits an account of an otherwise mysterious concord-like requirement among [-A] nominals that holds only in TECs in Xhosa.
- The contributions of applied and causative morphology are easily accounted for in terms of their edge features.

While we think there is ample motivation in the common properties of Zulu and Xhosa augmentless nominals for pursuing the unified account that we have proposed, we have also promised to justify this further through an exploration of the Case-anomalies that the two languages share. We turn to this next.

# 6. Addressing Case anomalies

#### 6.1 The case for no Case

Xhosa exhibits some Case-theoretic anomalies that have led researchers encountering similar phenomena in other Bantu languages to conclude that Case is absent altogether in the family (Harford Perez 1985, Diercks 2012).

(98) 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-mtana w-am 17SA-see-PASS-PST1 1-1child 1-my 'My child has been seen' (e.g. by a doctor at a hospital)

- (99) Multiple subject agreement in mono-clausal constructions<sup>17</sup>
  - a. uSipho **u**-phantse **w**-a-tya nge-cephe 1Sipho 3sSA-almost 3sSA-PST-eat with-5spoon 'Sipho almost ate with a spoon'
  - b. Wena **u**-be **u**-soloko **u**-fund-a lapha 2SIndPron 2sSA-RFUT2sSA-often 2sSA-study-FV here 'You will often study here'
- (100) Raising to object out of agreeing clauses

Ndi-funa u-Nomahlubi [ okokuba a-phek-e a-ma-qanda] 1sSA-want 1-1Nomahlubi that 3sSA-cook-SUBJ 6-6-eggs 'I want Nomahlubi to cook eggs' [Lit: I want Nomahlubi that she cooks eggs]

- (101) Subject raising from finite clauses preserving idiomatic readings and feeding passive
  - a. U-Hili u-bonakala [ okokuba u-phum-ile e-ngcongolwe-ni] 1-1Hili 1SA-seem that 1SA-exit-PST LOC-10weeds-LOC 'The secret seems to have come out' [Lit: the troll seems that exited the weeds]
  - b. U-Nomsa u-khol-w-a [okokuba u-phum-ile] 1-1Nomsa 1SA-believe-PASS=FV that 1SA-depart-PST-FV 'Nomsa is believed to have left' [Lit: Nomsa is believed that left]
- (102) Post-verbal subjects licit when something else occupies Spec, TP and controls SA<sup>18</sup>

I-cephe li-tya uSipho 5-5spoon 5SA-eat 1Sipho

'Sipho is eating with a spoon' Can answer the question, "Who is eating with the spoon?"

In previous sections of this paper we have provided numerous arguments that abstract Case is present in Xhosa and a key determinant of DP positions. If we are correct, Case is responsible for (i) the obligatory subject focus in TECs, (ii) the ban on TECs with experiencer subjects, and (iii) the unacceptability of TECs to the numerous speakers who accept only intransitive ECs. It follows that the phenomena in (98) through (102) must be given explanations consistent with this assessment.

<sup>&</sup>lt;sup>17</sup> For arguments that constructions like (99) are truly monoclausal see references cited in §3.6.

<sup>&</sup>lt;sup>18</sup> This construction was first documented in Zulu by Zeller (2011), who names it *instrument inversion*.

# 6.2 Explaining the anomalies

#### 6.2.1 In situ subjects of passives

As Diercks (2012) points out, impersonal passive constructions are found in languages that clearly do have abstract Case, including German (see Bobaljik & Wurmbrand 2005 for related discussion). The hypothesis of downward probing Agree provides the theoretical apparatus for explaining this possibility. Our analysis has followed that of Halpert 2011, 2012 in assuming in situ subjects of 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 (98) is not problematical for the hypothesis that full DPs require Case.

#### 6.2.2 Multiple subject agreement

The account of multiple subject agreement plays an explanatory role in several of the key Case anomalies so we present it in some detail. Carstens (2010) observes that iterating subject agreement (for which we adopt her term *hyperagreement*) is characteristic of both Bantu and Semitic languages (see (103)). Since Semitic languages have clear morphological Case distinctions (see (104), they show us that an absence of abstract Case is not a necessary condition for *hyperagreement*.

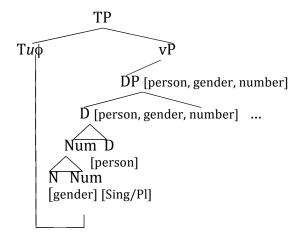
#### (103) Hyperagreement in Arabic

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

#### (104) Case in Arabic

daxal-tu daar-a r-rajul-i-n [Standard Arabic] entered-I house-ACC the-man-GEN 'I entered a man's 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 the operation of N-to-D raising and adjunction (see (105) and (106)). Word order evidence for N-to-D is presented for Xhosa in (107). 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). (108) illustrates this intervention effect (Num = Number, head of a functional category between DP and NP. Not shown is DP-internal QR Num, which Carstens argues makes number features broadly available in agreement and concord).

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



(106) 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 the-house-ACC 
$$[NP t_N]$$
]

(108) Absent N-to-D, person intervenes to block probing of gender by  $T_{u_{\varphi}}$  [TP  $T_{u_{\varphi}}$  [DP  $D_{person}$  ... $N_{gender}$  ]]

In Carstens's view, grammatical gender is a meaningless formal feature and hence satisfies the "activity requirement" of Chomsky 2000, 2001 (see (109)) 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 (111)). Carstens accordingly advocates a view of "deactivation" effects very similar to that of Nevins 2004 (see (110)), in which valuation of uCase makes its bearer unable to enter further Agree relations because multiple Case values are impossible to pronounce. Bantu and Semitic have subject agreement that functions like concord because N-to-D gives DPs the activity feature uGen that does not obtain a value through Agree, unlike a DP's uCase. 19

- (109) **The Activity Requirement**: each participant in an Agree relation must have an unchecked uninterpretable feature (uF).
- (110) **The Single Case Constraint**: A DP that is valued with more than one case feature is illegible to PF (Nevins 2004).

[French]

- (111) Concord: iterating Agree relations with N, based on reusability of uGen (not Case).
  - a. la grand-e maison the.Fsing large-Fsing house(FSing 'the green house'

b. [DP DuPhi [NP APuPhi [NP NiPhi]]

Agree x 1

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

 $<sup>^{19}</sup>$  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 $\phi$ .

with a matching constraint on Agree that she calls the *strong activity condition* (see (112)), 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.

- (112) **The Strong Activity Condition:** probe and goal in a licit Agree relation have matching uFs, one of which can value the other.
- (113) English: only T can agree
  - a. \*Jessie has is skating

b. 
$$[T_{uNom, uPhi} \ [Asp_{uPhi} \ [vP \ Jessie_{uCase, iPhi} \ V \ [vP \ skating]]]$$

Agree ruled out because uFs don't match in kind Agree possible because each participant has uCase

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

a. 
$$[T_{uPhi,\,uNom} \ [Asp_{uPhi} \ [vP \ SU_{uGen,\,uCase} \ v \ [VP \ ...]]]$$

$$Agree \#1$$
b.  $[T_{uPhi,\,uNom} \ [Asp_{uPhi} \ [vP \ SU_{uGen,\,uCase} \ v \ [VP \ ...]]]$ 

$$Agree \#2$$

Both these relations are OK because each participant has uPhi

#### 6.2.3 Raising to Object

Raising to object in Xhosa takes place only out of subjunctives. In an exploration of Zulu raising, Zeller (2006) notes that subjunctives are more transparent than other clause types across languages and perhaps do not value Case on their subjects. Assuming this to be correct, Raising to Object is not a strong challenge to the claim that abstract Case is functional in Xhosa. Xhosa Raising to Object differs from its English counterpart in that the

raised DP is agreed with in the source clause (see (100)). But this is no different from the other forms of *hyperagreement* discussed above.

#### 6.2.4 Hyper-raising

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

More interesting is the question of how hyper-raising gets around the Phase Impenetrability Constraint of Chomsky 2000, reproduced in (115).

(115) 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 (116)), 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 (101)a,b.

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

It has often been noted that the post-verbal subject in some unusual inversion constructions found in Bantu languages has a focused interpretation (see among others Ndayiragije 1999). This seems to be the case in the Xhosa (102), repeated below.<sup>20</sup>

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

I-cephe li-tya uSipho 5-5spoon 5SA-eat 1Sipho

'Sipho is eating with a spoon' Can answer the question, "Who is eating with the spoon?"

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

#### 6.3 Summary

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.

# 7. Pronoun shift revisited: impersonal passives with Appl and Caus

# 7.1 Properties of passive and impersonal passive

In this paper we have argued that Xhosa has a "defective" version of little v\*, lacking the ability to value accusative case or an edge feature to shift object pronouns. This pairs with a

<sup>&</sup>lt;sup>20</sup> Percy Buthelezi reports that this construction in Zulu would be suited to answer, "Where is the spoon?" This gives a kind of topic status to the instrument; as in Xhosa any focus would have to be the post-verbal DP.

defective T in TECs, yielding a clause type that shows only default subject agreement features and leaves the subject in its base position. Only the addition of a Focus head, which can raise the highest argument to its Spec, permits successful Case-valuation for two arguments. Focus can raise only one argument, so this strategy does not make object pronouns possible in TECs.

Before concluding, we flesh out this picture of Xhosa clause types with a brief comparision of TECs, passives, and impersonal passives. The results permit us to complete the analysis of how pronoun shift and low subject positions mesh.

Passives have robust T, which raises the highest internal argument and agrees with it.

Interestingly, object pronouns are licit within passive sentences involving ditransitive verbs. This is true whether the pronoun is a clitic or the independent variety.

- (117) Passive: Robust T & v but minus EA
  - a. u-Sindiswa u-nik-w-é **zona** 1-Sindiswa 1SA-give-PASS-PAST 10IndPron 'Sindiswa was given them (i.e. flowers)'

*Independent object pronoun OK* 

b. u-Sindiswa u-**zi**-nik-iw-é

Clitic pronoun object OK

There is a difference between regular and impersonal passives in this regard. The latter allow objects to be realized as independent pronouns, but not as the clitic variety.

- (118) Impersonal passive: only independent object pronouns are acceptable
  - a. Ku-nik-iw-é a-ba-ntwana **zona** 17SA-give-PASS-PAST 2-2children 10IndPron 'The children were given them' (i.e. flowers)
  - b. \*Ku-**zi**-nik-iw-é a-ba-ntwana
  - c. \*Ku-**ba**-nik-iw-é i-i-ntyatyambo

We conclude from this that while both kinds of pronouns have to undergo shift to an edge position, clitic object pronouns must attach to the robust T that is lacking in ECs of all kinds, including impersonal passives. Note the strong support this pattern provides for the

proposal that T of ECs is defective, and not a robust T that happens to agree with an expletive *pro*. Under the latter approach it is not clear how the facts could be addressed.

#### 7.2 Implications for pronoun shift and the location of the highest argument in ECs

We turn next to the question of precisely where the relevant edge position for pronoun shift is located and what the structural position is of an argument to its left.

Recall the evidence from §5.4 that in Zulu TEC sentences, [-A] objects can satisfy a requirement that NPIs move leftwards provided applied or causative morphology are present see (86)a repeated below).

## (86) a. **✓ Augmentless-Augmented-Augmentless**

[Zulu]

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

But we saw that pronominal direct objects cannot be substituted for NPIs. We argued that pronouns have to shift further than NPIs: to Spec, vP (see (95) and (96) repeated below.

- (95) a. \* Ku-leth-el-a u-Monwa a-ba-ntwana **sona** 17SA-buy-APPL-FV 1-1Monwa 2-2-children 6IndPron 'It's Monwa who bought it to the children' (i.e. a key)
  - b. \*Ku-fund-is-a u-Sipho a-ba-ntwana **sona** 17SA-learn-CAUS-FV 1-1Sipho 2-2-children 6IndPron '(It is) Sipho (who) teaches it to the children' (i.e. Xhosa)
- (96) a. \* [ $_{\text{VP}}$  SU v [ $_{\text{ApplP}}$  IO [ $_{\text{ApplP}}$  Pronoun [ $_{\text{Appl'}}$  Appl [ $_{\text{VP}}$  V < Pronoun>]]]]]]
  - b. [vP SU v [ApplP IO [ApplP NPI [Appl' Appl [vP V < NPI >]]]]]
- (119) and (120) illustrate the pattern for impersonal passives of verbs bearing applied and causative morphology: either argument can be realized as an independent pronoun.
- (119) a. Ku-fund-is-w-a bona i-si-Xhosa 17SA-learn-CAUS-PASS-FV 2IndPron 7-7-Xhosa 'They are taught Xhosa'
  - b. Ku-fund-is-w-a a-ba-ntwana **sona** 17SA-learn-CAUS-PASS-FV 2-2-children 7IndPrin 'The children are taught it'

- (120) a. Ku-theng-el-w-é **bona** i-i-nytatyambo 17SA-buy-APPL-PASS-FV 2-2-children 10-10-flowers 'Flowers were bought for them' (i.e. children)
  - b. Ku-theng-el-w-é a-ba-ntwana **zona** 17SA-cook-APPL-PASS-FV 2-2-children 6IndPron "The children were brought them" (i.e. flowers)"

In contrast, only the highest argument of any TEC can pronominalize (see (121) and (122)).

- (121) a. Ku-fund-is-a **yena** a-ba-ntwana i-si-Xhosa 17SA-learn-CAUS-FV 1IndPron 2-2-children 7-7-Xhosa 'It's he who teaches the children Xhosa' (i.e. Sipho)
  - b.\*Ku-fund-is-a u-Sipho **bona** i-si-Xhosa 17SA-learn-CAUS-FV 1-Sipho 2IndPron 7-7-Xhosa 'It's Sipho who teaches them Xhosa' (i.e. the children)
  - c.\*Ku-fund-is-a u-Sipho a-ba-ntwana **sona** 17SA-learn-CAUS-FV 1-Sipho 2-2-children 7IndPron 'It's Sipho who teaches it to the children' (i.e. Xhosa)
- (122) a. Ku-nik-é **yena** a-ba-ntwana i-i-ntyatyambo 17SA-give-PASS-PAST 1IndPron 2-2-children 10IndPron 'It's was she who gave the children flowers' (i.e. Sindiswa)
  - a. \*Ku-nik-é u-Sindiswa **bona** i-i-ntyatyambo 17SA-give-PASS-PAST u-Sindiswa 2IndPron 10-10-flowers 'It's was Sindiswa who gave them flowers' (i.e. the children)
  - b.\*Ku-nik-é u-Sindiswa a-ba-ntwana **zona** 17SA-give-PASS-PAST u-Sindiswa 2IndPron 'It's was Sindiswa who gave them flowers' (i.e. the children)

Crucially, impersonal passives show us that pronominalization is in principle possible even when there is a higher internal argument to the pronoun's left. TECs are special in their limitations in this regard. The contrast is most plausibly and economically reduced to defective  $v^*$ , which as we have seen is independently motivated to explain the necessity of non-canonical Case strategies in TECs.

This established, there are several viable accounts of the word order and pattern of facts. We suggest that, to obtain the single "downward" structural Case available in ECs, the left-most post-verbal argument always raises out of vP, even when it does not move to

Spec, Foc. It lands in Spec of a functional category (= XP below). Hence the representation of an unergative EC without subject focus is shown in (123)a, while an impersonal passive of an applied verb is shown in (123)b. When the direct object pronominalizes in an impersonal passive it raises to Spec, vP as shown in (123)c. The pronouns in the impersonal passive shift licitly to Spec, vP because v of impersonal passives has an edge feature as shown in (123) (see Legate 2003 on weak v as a phase head). Given the intricacies of Bantu tense/aspect systems, XP is probably connected with verbal inflection.

(123) Revised subject position in Xhosa ECs: a little higher than Spec, vP

a. ... 
$$[XP EA X [vP < EA > v [VP V ...]]]$$

unergative ECs

b. ... 
$$[XP IO X [vP V [ApplP < IO > Appl [vP V DO]]]]$$

Impersonal passive of applied V

c. ...[
$$x_P$$
 IO X [ $v_P$  Pronoun v [ $Appl_P$   Appl [ $v_P$  V ]]] Pronoun shift of DO Alternatively the highest argument of an impersonal passive might surface in Spec of a PassP (see (124)), or in Spec of (weak, non-defective) vP with "tucking in" of the shifted

pronoun (see (125); recall from §5.4 that DO can "tuck in" in symmetrical DOCs).

(124) 
$$[PassP IO PASS [vP < IO > Pronoun v [ApplP < IO > [vP V < Pronoun > ...]]]]$$

(125) ... [
$$_{VP}$$
 IO Pronoun v [ $_{ApplP}$   [ $_{VP}$  V ...]]]

While each of these analyses can account for the facts of impersonal passives, the analysis in (123) has the significant advantage of contributing to the account of why definiteness effects are absent for the post-verbal subject in Xhosa TECs and we therefore adopt it.

Table 4 presents a summary of the various clause types we have uncovered in Xhosa. Expletive constructions provide the basis for a very fine-grained typology.

Table 4: Summary of Xhosa clause types

(ii) TEC: T<sub>defective</sub>; v<sub>defective</sub> hence no SA and neither kind of object pronouns

<sup>(</sup>i) SVO/VOS:  $T_{robust}$ ;  $v_{robust}$  hence subject agreement, and both kinds of object pronouns

<sup>(</sup>iii) Passive: T<sub>robust</sub>; v<sub>weak</sub> (no EA or ACC); hence SA and both kinds of object pronouns

<sup>(</sup>iv) Impersonal passive:  $T_{defective}$ ;  $v_{weak}$  (no EA or ACC); hence no SA and only independent object pronouns because T can't host the object clitic.

#### 8. Conclusions

Our paper has argued for the existence of a radically defective v\* in Xhosa, which pairs with a defective T to yield clauses with no agreement, no subject or object raising, and Case valuation through exceptional strategies.

Both transitive and intransitive ECs give independent support for the presence of a low FocusP like that which Ndayiragije (1999) proposed for Kirundi, contra Cheng & Downing's (2011) arguments that low focus in Nguni does not involve a FocusP.

Halpert's (2011) proposal of late, downward Case-licensing for DPs within Zulu VSO expletive constructions finds independent support in the curious asymmetries of ECs in closely related Xhosa.

But notwithstanding some similarities, the distribution of augmentless nominals in Xhosa clearly requires a different approach than Halpert proposed for Zulu.

Last but not least of our conclusions is that Xhosa DPs bearing full noun class morphology including the so-called augment or pre-prefix require abstract Case, unlike in Halpert's analysis of Zulu.

This paper has proposed Case-compatible solutions to the issues raised by Xhosa in situ subjects and the contrasting distribution of full DPs and [-A] NPIs. We have adopted a principled framework laid out in Carstens 2010, 2011 to explain multiple subject agreement and a variety of other apparent Case-anomalies.

A full understanding of Case in Bantu must explain why 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:

- (126) Ni-li-kumbuka Juma ku-funga m-lango 1sSA-PST-remember 1Juma 15-close 3-door 'I remembered Juma closing the door'
- (127) 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 are whether the preverbal subjects have Case-licensing, or whether we should take the absence of this construction in Xhosa as evidence that the languages which allow it are no-Case languages?

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

(128) Ku-imba kwake ni ku-zuri 15-sing15-POSS COP 15-good 'His singing is nice' [Swahili; Carstens 1991]

Carstens proposes that only the gerunds can have preverbal subjects. Her evidence includes the unavailability of a future reading for (129) and the unacceptability of (130), where the reading is forced (see Stowell 1981 on the temporal interpretation of infinitives).

- (129) 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)
- (130) \* Ni-na-(wa)-taka watu wote ku-zungumza na Juma 1sSA-PRES-(20M)want 2people 2all 15-talk with 1Juma 'I want everybody to talk to Juma'

Carstens's proposal provides a promising perspective on an otherwise puzzling question.

The source of accusative Case for the subject of English so-called *acc-ing* gerunds (*Him writing a book was surprising*) has always been puzzling, especially since an overt subject alternates freely with PRO. 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.

It is outside the scope of this paper to draw conclusions about all relevant constructions or to generalize across Bantu in a conclusive way. But our exploration of Xhosa expletive constructions has convinced us that abstract Case can manifest itself quite differently across languages. The motivation for rejecting Case in Bantu and hence as a universal seems significantly weaker as we close this investigation.<sup>21</sup> Many interesting questions remain.

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<sup>&</sup>lt;sup>21</sup> Van der Wal 2012 takes a more nuanced view on the Case issue, pointing out that in some Bantu languages xSA tracks the logical subject and proposing that's such Bantu languages have abstract Case unlike those of Dierks's study. Our claim is that even languages that on the surface fit the profile of "no Case" may nonetheless have Case.

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