# **Implications of Xhosa expletive constructions for Bantu Case** and flavors of T and v\*

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

#### 1. Introduction

#### 1.1 Overview

In the Xhosa language (narrow Bantu, S.40), canonical word order is Subject Verb (Object...). The verb agrees with the preverbal subject in person, number, and noun class.<sup>1</sup>

- (1) a. i-ncwadi i-fik-il-e 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 1-1Themba 1SA-learn-CAUS-PST1 2-2-child 7-7-Xhosa 'Themba taught the children Xhosa'

Expletive constructions (henceforth ECs) are also possible, in which the verb bears invariant class 17 subject agreement (henceforth SA) and word order is V S (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 convey subject focus, and answer one of the subject questions in (2)c-d.

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

R#1: 'A letter arrived'

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

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

\* Acknowledgments.

<sup>&</sup>lt;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. DISI1 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. We indicate class on prefixes and, if there is only one prefix, on the root noun. NPIs and wh-words in questions lack the outer prefix systematically.

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>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.

2

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

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

- (5) The focus asymmetry: in TECs but not intransitive ECs, the subject MUST be focused.
  - a. Ku-lil-é u-Sindiswa Optional subject focus in an intransitive EC 17SA-cry-PST1 1-1Sindiswa R#1: 'Sindiswa cried' (answers 'What happened?')

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

- b. Ku-theth-a i-ndoda ende i-si-Xhosa.

  17SA-speak 9-9man 9tall 7-7-Xhosa
  'It's the tall man who speaks Xhosa.'

  Obligatory subject focus in a TEC

  (answers only, 'Who speaks Xhosa?')
- (6) The pronominalization asymmetry: in TECs, only the subject can be pronominalized.
  - a. Ku-cul-a yena (a-ma-culo) OK: pronoun SU in (T)EC 17SA-sing-FV 1IndPron (6-6-songs) '(It's) she (who) sings (songs)'
  - b. \*Ku-cul-a u-Sindiswa ona \*independent pronoun OB in TEC 17SA-sing-FV 1-1Sindiswa 6IndPron 'It's Sindiswa who sings them.'
  - c. \*Ku-wa-cula u-Sindiswa \*clitic pronoun OB in TEC 17SA-60M-sing 1-1Sindiswa 'It's Sindiswa who sings them'
- (7) The experiencer verb restriction: no experiencer verbs with 2 full DP arguments in a TEC.
  - a. \*Kw-a-bon-a u-m-fazi i-ntaka \*TEC of an experiencer verb with 2 17SA-PST2-see-FV 1-1-woman 9-9bird full DP 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-DISJ2-be.sick The doctor saw that the child was sick'
  - d. A-ku-bon-anga <u>m-ntu</u> <u>nto</u> *OK: negative experiencer TEC replacing full DPs with* 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), (5), and (7) are indicative of non-canonical 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 the first indicator that Case is at issue, and the experiencer verb contrasts in (7) provide the second. Both patterns illustrate that problems arise in a TEC when the verb has two full DP arguments. We propose that accusative Case is unavailable in TECs (see (8)). Raising of the subject into Spec of a low FocusP is the central strategy for surmounting this problem (see (9)).

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

(9)  $[_{TP} T [_{FocP} SU Foc [_{vP} < SU > v [_{VP} V OB]]]]$  Raising to Spec, Foc obligatory in transitive ECs The experiencer verb restriction arises because occupancy of Spec FocP is tied to a special Case linked to the focus reading. Experiencer subjects have an inherent Case (see (10)a,b, §4.4, and references therein), and cannot bear a second semantic Case feature. An implication is that the Case value that Focus confers 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.

(10) a. [FocP SU\_uCaseFoe [Foc' FocCase [vP < SU> V [VP V OB]]]] EA of most verbs can raise to Spec, Foc b. \*[FocP SU\_Inherent+Foe [Foc' FocCase [vP < SU> V [VP V OB]]]] \*raising of [+inherent] EA to Spec, Foc Turning to the restriction on pronoun use, we attribute this to a failure of object-shift in TECs, stranding pronouns illicitly in VP-internal positions:

(11) 
$$*[_{VP} < SU > v [_{VP} V Pronoun]]$$
 Pronouns cannot escape VP in TECs

We relate the absence of accusative and the unavailability of object shift to defectivity of v\* in TECs (see Bobaljik & Brannigan 2006 for a similar approach to ergative constructions in Chuckchi). It is not likely to be a coincidence that defective v\* occurs in clauses with low subjects and default SA. Absent evidence that T participates in EC syntax, we analyze it as inert as well. Hence T of an EC cannot agree, Case-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.<sup>3</sup> In contrast SVO clauses have robust T and v.

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

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:

(13) A probe above FocP would not be expected to reach across SU

We accordingly argue that the Focus head can enter into serial Agree relationships, valuing both the subject's and the object's uCase (see (14)). Foc must raise exactly one expression

\_

<sup>&</sup>lt;sup>3</sup> See §4.5 for discussion of some alternatives connected with Alexiadou & Anagnostoulou 2001's *subject in situ generalization* and the *distinctness* requirement on linearization of Richards 2010.

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 (14)b),<sup>4</sup> which does not raise and hence does not receive the focus interpretation.<sup>5</sup> (14) a. Foc probes and raises the subject to Spec, Foc giving it a Case value and +Focus feature

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

$$\left[ \text{TP SU}_{\text{uCase}; +Foc} \text{ T [FocP FocCASE [vP < SU_{uCase} > [v' \text{ V [VP V OB}_{\text{uCase}}...]]]]]} \right] \\ \text{Probing \& Case-valuing OB }$$

There seems to be one purely structural Case optionally available in a TEC and it goes to the highest argument, as proposed in Halpert 2011, 2012 for Zulu. Given the general inertness of T and v in Case relations, we speculate in §4.2.3 that this Case is valued by C.

### 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,

\_

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

<sup>&</sup>lt;sup>5</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.

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

Halpert argues that only NPIs require Case in Zulu partly because they cannot occupy preverbal subject position, even with c-commanding negation. While Xhosa NPIs share this distribution (see (16)a,b), we relate this in §5 to (17) -- a contrast that Kayne 1981, 1984, Rizzi 1982, and Haegeman 1995 explain by means of a requirement that certain negative expressions must undergo LF quantifier raising into locality with a negative operator (in these examples located in the higher clause). Movement from preverbal subject position is highly restricted cross-linguistically (see Rizzi & Shlonsky 2007 among many others).

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

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

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

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

- (17) a. Je ne demande que tu dises **rien** [French: Haegeman 1995] I *ne* demand that you say(subj) nothing 'I don't ask that you say anything'
  - b.\*Je ne demande que **personne** dise cela I *ne* demand that no one say that (I don't ask that anyone say that')

Halpert's analysis also aims to explain why [-A] object NPIs in Zulu TECs require not only c-commanding negation but also applied or causative morphology on the verb. In §5 we propose that Appl and Caus heads introduce edge features that make NPI-raising 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 Halpert 2011, 2012 proposes that apparent Case-theory violations in Zulu arise because full DPs have intrinsic Case-licensing, unlike augmentless NPIs. Based on the 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 (2006) and Halpert (2011, 2012) of ECs in closely-related Zulu, presenting insights they provide into the Xhosa facts and also several key questions that they cannot answer. In §4 we flesh out our proposals in terms of defective T, defective v\*, and a FocP between the two, whose head (for speakers who find TECs acceptable)

values uCase. §5 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 argues are the only Zulu nominals that require Case-licensing. We propose instead that in both languages NPIs must undergo leftward A'-movement to an edge position. §6 addresses apparent Case anomalies in Xhosa (and other Bantu languages that exhibit them). §7 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, 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 nominal Case are uninterpretable, unvalued features (uFs), uPhi and uCase respectively. When uPhi is Merged on a category  $\alpha$ , it immediately *probes* its c-command domain to find a *goal*  $\beta$  that can provide values for  $\alpha$ 's uFs. We assume a version of the "activity requirement" of Chomsky (2000; 2001) – that a participant in Agree must bear a uF. Following Boskovic (2011) we assume that Case-valuing heads have valued uCase features. Hence the robust versions of T and v come from the lexicon with uNom and uAcc features respectively, and confer these values on the unvalued uCase features of local DPs through the Agree relation.

# **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 (18) for the unergative verb 'sing.'

(2) a. Ku-fik-é i-ncwadi 17SA-arrive-PST1 9-9letter

Optional subject focus for unaccusative EC

R#1: 'It was a letter that arrived'

(answers, 'What arrived?') (answers, 'What happened?')

R#2: 'A letter arrived'

[Lit: (There) arrived letter.]

(18) Ku-cul-é u-Sindiswa 17SA-sing-PST1 1-1Sindiswa Optional subject focus in unergative EC

R#1:'It's Sindiswa who sang'

R#2: 'Sindiswa sang'

(answers, 'Who sang?') (answers, 'What happened?')

[Lit: (There) sings Sindiswa]

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

(19) a. Ku-theng-a a-ba-fazi i-i-ntvatvambo. 17SA-buy 2-2-women 10-10-flowers 'It's the women who buy flowers.'

TEC has subject focus

b. Ku-bhaq-é u-Sindiswa i-mali 17SA-discover-PST 1-1Sindiswa 9-9money 'It was Sindiswa who discovered the money.'

That subject focus is obligatory in TECs is confirmed by two diagnostics. First, only an intransitive EC is a felicitous answer to a "What happened?" question (see (20)a-c).6 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.

10

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

<sup>&</sup>lt;sup>6</sup> Buell 2005 reports that in Zulu a TEC can answer a "What happened?" question and gives one example. The

(20) a. Kw-enzek-é <u>ntoni</u>? 17-happen-PST1 9what

'What happened?' [Lit: (There) happened what?]

b. Ku-cul-é u-Sindiswa 17SA-sing-PST1 1-1Sindiswa

'Sindiswa sang.' [Lit: (There) sang Sindiswa]

- c. #Ku-cul-é u-Sindiswa a-ma-culo Infelicitous in context 17SA-sing-PST1 1-1Sindiswa 6-6-songs #'It was Sindiswa who sang songs' [Lit: (There) sang Sindiswa songs]
- (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!]
  - 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 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]

Compare with (8c)

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 1-1Sindiswa 1SA-sing-FV 6IndPron 'Sindiswa sings them'

OK: Independent pronominal OB in SVO

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

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

\*Independent pronoun OB in TEC

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

\* Clitic OM pronoun in TEC

(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

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) OK: Indep Pro theme in impersonal passive

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 (see (7), repeated below).

- (7) a. \*Kw-a-bon-a u-m-fazi i-ntaka \*TEC of an experiencer verb with 2 17SA-PST2-see-FV 1-1-woman 9-9bird full DP arguments '(It was) a/the woman (who) saw the bird'
  - b. Kw-a-bon-w-a i-ntaka OK: same V in impersonal passive 17SA-PST2-see-PASS-FV 9-9bird 'A bird was seen'
  - c. Ku-bon-é u-gqirha ukuba u-m-ntwana u-ya-gula. OK: replace DP2 w/CP 17SA-see-PST1 1-1docor that 1-1-child 1SA-DISJ2-be.sick The doctor saw that the child was sick'
  - d. A-ku-bon-anga <u>m-ntu</u> <u>nto</u> 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 2006, Halpert 2011 and 2012, Mletshe 1995, and Mali 1995. In §3.2-4 we discuss some analytical contributions from these works that we will draw on in constructing our account. §3.5-§3.7 present three additional diagnostics for the analysis of Xhosa expletives: §3.5 shows that VSO is only possible in a Xhosa expletive construction, arguing that agreement with the thematic subject correlates with its raising to Spec, TP and conversely that in its absence the subject has not done so. §3.6 shows that auxiliary verbs must all precede the thematic subject in an expletive construction, supporting a low subject position in TECs. §3.7 shows that ECs can occur in embedded clauses following an overt complementizer. This provides a final argument against a potential alternative structural analysis positioning the verb in C and the post-verbal subject in Spec, TP. §3.8 summarizes the conclusions the section has reached regarding the structure of ECs, and the issues they leave to be explained.

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

Xhosa expletive constructions resemble those of Zulu in featuring invariant class 17 agreement and VS(0) order. Buell (2006) provides a diagnostic for the low position of the post-verbal arguments in Zulu ECs which we will adopt in our analysis of Xhosa ECs. As in

Zulu, Xhosa verbs have some tense/aspect alternations that correlate primarily with whether the verb is final in some minimal domain to be made specific below. These alternations are demonstrated in (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 (2006) argues against such an interpretation partly because either conjoint or disjoint morphology can appear in the answer to a "What happened?" question depending on whether the verb has a complement; in this circumstance the domain of focus is the whole sentence. I therefore adopt Buell's proposal that the crucial factor is whether a constituent follows the verb within a local domain (see also Van der Spuy 1999 and Mali 1995); hence (27)a,b. We analyze the domain as TP, but were the verb to raise to C and precede a subject in Spec, TP, we suspect that the conjoint form would still be required. Hence the broad formulation in (28) (anticipating somewhat the pattern in ECs to be described below).<sup>7</sup>

(27) Conjoint/disjoint distribution (Buell 2006)

a. A disjoint verb form is final in its domain.

b. A conjoint verb form is non-final in its domain.

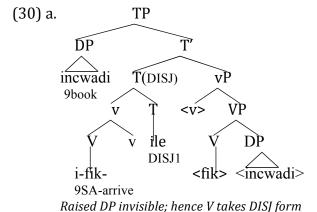
\_

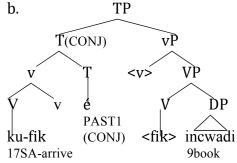
<sup>&</sup>lt;sup>7</sup> A very similar approach was independently proposed in Halpert 2012. Buell points out that the Zulu adverb *kahle* – 'well' triggers the conjoint form, as does a focused adverb like *phandle* – 'outside' (assume it occupies Spec, Foc). *Kahle* doubles as an adjective and bears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

(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 (2006) demonstrates that the conjoint/disjoint alternation 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'

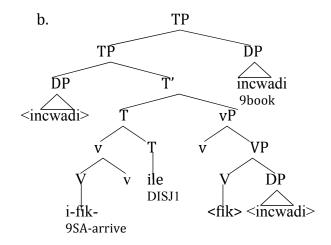




Unraised DP makes V non-final in its domain so so CONJ form required, as in transitive (26)b

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 2006 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'

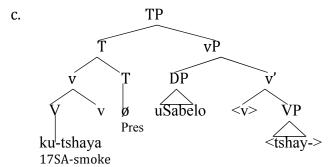


Buell 2004: After right-dislocation, raised OB remains invisible to DISI

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



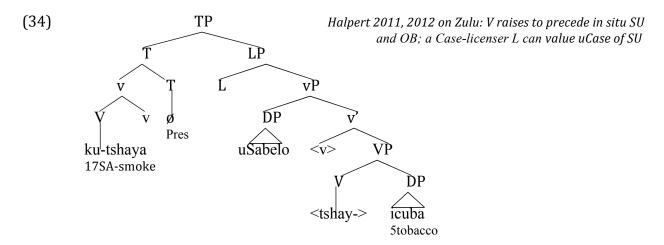
again adapting Buell 2006; unraised SU in V's domain blocks DISJ

# 3.4 Transitive expletive constructions in Halpert 2011, 2012

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

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

Halpert 2011, 2012 shows that TECs 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 VOS OK in a clause with SA 1SA-smoke-FV 5-5tobacco 1-1Sabelo 'Sabelo smokes tobacco'

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

This contrast supports our claim that 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 1-1Thandeka 1SA-almost 1SA-eat-FV 9-9polenta 'Thandeka almost ate the polenta'
  - b. Ku-phantse kw-aty-a **u-Thandeka** i-papa 17SA-almost 17-eat-FV 1-1Thandeka 9-9polenta It was Thandeka who almost ate the polenta'
  - c. \*Ku-phantse **u-Thandeka** kw-aty-a/w-aty-a i-papa
- (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>8</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'
  - 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 just above vP (see (41)a). Since 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 a functional head to which the verb always adjoins. (41)b,c represent the syntax of a sentence like (39)b. More detail follows in §3.7.
- (41) a. TP > AspPs > FocP > vP > VP

\_

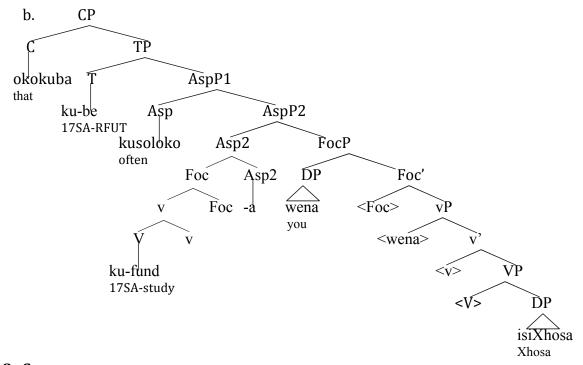
<sup>&</sup>lt;sup>8</sup> We have found only adverbs that appear at the right edges of Xhosa clauses, so cannot replicate the adverb position test that is frequently used to diagnose subject positions in Icelandic and German.

b. [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 1-1Sabelo 1SA-think-FV that 17SA-learn-CAUS-FV 1-1Loyiso 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 1-1Thandeka 1SA-ask-PST that whether 17SA-write-PST 1-1-child 9-9letter Q 'Thandeka asked if it was the child who had written the letter'
- (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 (2006) provides a useful diagnostic basis for determining that the arguments in

Nguni ECs are not in a right-adjoined position but rather clause-internal, c-commanded by the tense/aspect heads that precede them. In the analysis of Halpert 2011, 2012 this approach is extended to Zulu TECs. 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 properties of Xhosa ECs, addressing the questions we have already raised, summarized below:

(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 in §4.2 that the focused reading available for subjects in ECs indicates that they can 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, the pronominalization asymmetry, and the experiencer predicate facts argue strongly that little v\* in Xhosa TECs is defective, lacking the ability to license Case or shift objects (see §4.3 and §4.4). §4.5 discusses approaches to the so-called subject in situ generalization (Alexiadou & Anagnostopoulou 2001, 2007) and Richards's (2002) "distinctness" requirement, arguing that the alternatives fail to give a satisfactory account of all the Xhosa facts. We then turn to properties of T in §4.6, 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. Under our analysis the properties of T and v mirror each other in this construction. Lastly, §4.7 shows 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

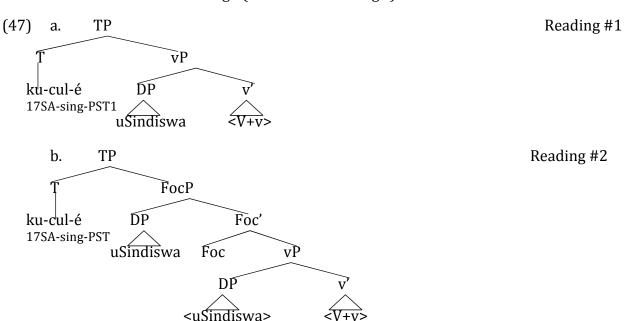
### 4.2.1 Intransitives

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 (though see §4.4.2 for a slightly more complex picture). 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 1-1Sindiswa

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

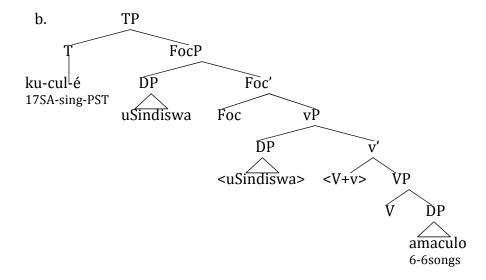
R#2: 'It's Sindiswa who sang' (answers 'Who sang?')



# 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 1-1Sindiswa 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 v\* of TECs cannot value accusative (see (12)b repeated below). Assuming v\* is defective, the focus asymmetry and the pronoun asymmetry have a single source.

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

As noted in the introduction, an important question arises regarding how local raising of the subject can facilitate Case-licensing of the object. For any potential Case-licenser above FocP, the subject would still intervene (see (13), repeated below). We accordingly propose that the Focus head can enter into serial Agree relations. Once the subject raises, Foc can probe and Case-license the direct object across defective (non-phasal) v\* (see (49)a,b).

Raising to Spec, Foc confers both a Case value and a Focus feature on the raised DP.9

(13) A probe above FocP would not be expected to reach across SU

\*
$$X_{Case2}$$
 [FocP SU<sub>uCase1</sub> [Foc' FOC Case1 [VP SUUCase]]] \* $X_{Case2}$  [FocP SU<sub>uCase1</sub> [Foc' FOC Case1 [VP SU> V [VP V DPuCase]]]]]

(49) a. 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:

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

This analysis builds on the mechanics proposed in Haegeman & Lohndal 2010 for accomplishing multiple Agree relations serially, and on Halpert's (2011, 2012) idea that Case-licensing in closely related Zulu can happen late, across a base position vacated by Amovement. 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

-

<sup>&</sup>lt;sup>9</sup> This assumes that the structural Case unlinked to Focus is optionally assigned/present; see §4.2.3.

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 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 for 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 §4.2.3). 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, pronominal objects are not possible in a Xhosa TEC, unlike in an SVO clause (see (24) and (25), repeated below). Only the highest DP in a TEC can be a pronoun.

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

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

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

d. \*Ku-(ya)-wa-cul-a u-Sindiswa 17SA-(DISJ2)-60M-sing-FV 1-1Sindiswa 'It's Sindiswa who sings them' \*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)' OK: Indep Pro SU in (T)EC

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

OK: Indep Pro theme in unaccusative EC

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

It has often been observed that pronouns must raise out of VP. Diesing (1992, 1997) and Diesing & Jelinek (1995) tie this to the unambiguous definiteness of pronouns. They argue from contrasts like (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 such interpretive contrasts that VP is the domain of existential closure, where definites do not belong. Then they present data from German, Icelandic, Arabic, and English demonstrating that even if full DP objects optionally shift, object pronouns must do so obligatorily (see (56) - (57)).

- (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'
- (57) a. Bert looked **the reference** up.
  - b. Bert looked up the reference.
  - c. Bert looked **it** up.
  - d.\*Bert looked up it.
- (58) Pronouns must vacate VP (Diesing 1992, Diesing & Jelinek 1995, Diesing 1997)
  Assuming Spec, vP is the canonical object-shift position (Chomsky 1995, 2001) our proposal that little v\* is defective in Xhosa ECs accounts for this pattern. Defective v\* has no edge feature to shift pronouns:

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>10</sup>

# 4.4 Case and experiencer predicates

# 4.4.1 Transitive experiencer verbs

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 (7) repeated below).

-

<sup>&</sup>lt;sup>10</sup> Richards 2007 claims object shift (OS) is never possible in TECs because expletives Merge in the OS position, making it unavailable Hoskuldur Thrainsson (personal communication) reports that OS is possible in Icelandic TECS, including for weak pronouns. Pronoun objects are also licit in Xhosa impersonal passives of ditransitives, though details lie outside this paper's scope; we leave further investigation for future research.

- (7) 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 full DP 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 'The doctor saw that the child was sick'
- d. A-ku-bon-anga <u>m-ntu</u> <u>nto</u> 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:

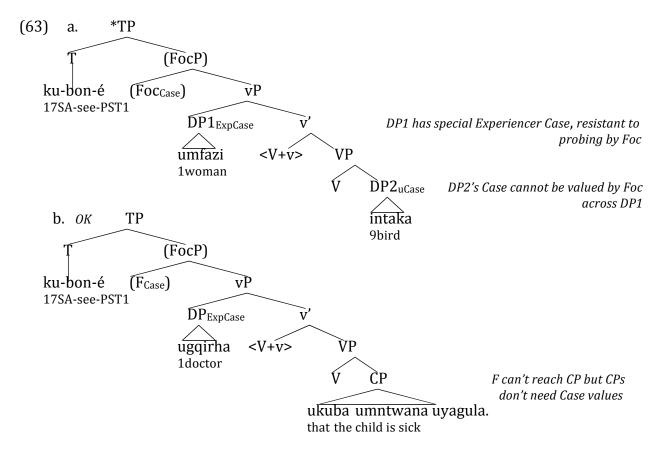
(60) a. ti-la rag ala [Marathi] b. hamraa ii naa miilal [Bhojpuri] she-Dat anger came I-Gen.Obl this not find 'She got angry' 'I didn't find it'

It has also been demonstrated that in Ukranian, experiencer predicates are barred from participation in a kind of transitive expletive construction (see (61)a versus (61)b). Lavin (2010) argues convincingly that the restriction underlying (61)a is Case-theoretic in origin.

(61) 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 full DP 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 (62)). We assume this is because a purely structural case is compatible with an inherent Case.

(62) 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 (63)a). The problem does not arise for a CP object because Xhosa CPs do not have uCase (see Stowell 1981 on English CPs).



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

The analysis developed above explains the restriction on transitive experiencer verbs in TECs: for the internal argument to be Case-valued, the external argument must raise out of the way to Spec, Foc, and the feature so obtained is incompatible with the inherent Case that experiencer subjects bear. This cannot be the whole story, however. The subjects of intransitive experiencer verbs can have a focused reading in ECs (see (64)).

And there is a second, subject focus reading available for a sentence like (7)c (previously unmentioned for expository purposes) in which the object of the experiencer verb in a TEC is a CP. This is shown in (7)c' and (65) below.

- (64) Experiencer subjects of intransitive verbs can have focus in ECs
  - a. Ku-qumb-a u-Sabelo 17SA-be.sad-FV 1-1Sabelo 'Sabelo is sad' *OR* 'It's Sabelo who is sad'
  - b. Ku-zil-a u-Nomsa 17SA-mourn-FV 1-1Nomsa Nomsa is mourning' *OR* 'It's Nomsa who is mourning'
- (7) 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

  'The doctor saw that the child was sick'

  OR

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

If experiencer subjects cannot raise to Spec, Foc, these readings must have some other explanation. What can account for optional subject focus on an experiencer subject of a verb that is intransitive or has a CP object?

An answer to this question is provided in independently motivated proposals of Cheng & Downing 2012 for Zulu. Cheng & Downing show that neutral word order in Zulu is [SVOX], (see (66)), but non-subject focused items must appear in an immediately postverbal position (IAV). For example, a wh-question word like *ngani* – 'how' and its answer must be IAV (see (67)); glosses are adapted; our boldface on OMs)). Crucially, Cheng & Downing argue that this kind of focus is derived not by leftward movement of the IAV

constituent but by vacating the vP of everything else and assignment of a focus feature to the remaining contents. Among their evidence is that a lexical direct object in a case like (67) is obligatorily doubled by a pronominal object marker (OM) on the verb. Based on this systematic phenomenon and significant patterns of phonological phrasing (indicated by parentheses), Cheng & Downing argue that everything following the IAV expression is right-adjoined. The IAV focused expression is in situ within an otherwise empty vP. Xhosa exhibits similar phenomena, as shown in (68).

- (66) Neutral word order, in Zulu as in Xhosa: S-V-O-XP
  - (Si-thwéle a-má-tha:nga ngó-bhasikí:di) [Zulu: Cheng & Downing 2011] 1plSA-60M-carry 6-6-pumpkin with-1a-basket 'We are carrying the pumpkins in a basket'
- (67) Focused or questioned non-subjects are immediately post-verbal; all else is vP external (internal arguments obligatorily doubled by object markers on the verb)
  - Q: (u-**wa**-thwéle *ngâ:n'*) a-má-tha:nga)? [Zulu: Cheng & Downing 2011] 2sSA-60M-carry how 6-6-pumpkin 'How are you carrying the pumpkins?'
  - A: (Si-wa-thwéle ngó-bhasikí:d') a-má-tha:nga). 1plSA-60M-carry with-1a-basket 6-6-pumpkin 'We are carrying the pumpkins in a basket.'
- (68) u-Sipho u-**yi**-pheke *nini* i-nkuku emzinini wakho? [Xhosa] 1-1Sipho1SA-9OM-cook **when** 9-chicken LOC.3.house 3.your 'When did Sipho cook chicken at your house?'

Suppose that, absent anything in its Spec, the Focus head of Zulu or Xhosa can confer a [+focus] feature on its complement, vP. Whatever material the vP contains is accordingly interpreted as focused – but for reasons that lie outside the scope of our paper, this is always restricted to a single post-verbal expression (see Cheng & Downing 2012 for details and (69), which for simplicity does not depict roll-up of Foc into the verbal complex).

(69) Focus feature assigned downwards to vP results in focus reading for its sole contents

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

This proposal makes it possible for the post-verbal subject in any intransitive EC to have a focused interpretation without moving to Spec, Foc and hence without being directly assigned the complex focus/Case feature that is incompatible with experiencer arguments. As for CP complements to experiencer verbs, we assume they can extrapose string-vacuously; unlike right-adjoined DP arguments, they are not doubled by an object marker (see Stowell 1981, Richards 2013 and others on the tendency of finite CPs to extrapose):

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

Summing up, we can neatly account for the ban on experiencer verbs in TECs in terms of a Focus/Case connection. Adopting for Xhosa Cheng & Downing's proposal of in situ focus for a single expression in Zulu vPs accounts for the residue: experiencer verbs with one argument or one DP and one CP argument.

### 4.5 The subject in situ generalization

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

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

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

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

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

key English constructions the relevant subject is not actually in situ, and that in situ subjects of transitives do not always yield ungrammaticality.<sup>11</sup> Adding to the complexity of the picture, Baker & Collins 2006 show that a similar constraint in Kinande rules out the co-occurrence of two VP-internal nominal expressions even when one of them does not require Case-licensing, proposing the condition in (72).

(72) By Spell-Out, if the VP complement of v contains a DP with a Case feature, then VP cannot contain any other nominal expression (includes augmentless NPs, semi-nominal locatives, and DPs with Case features).

Thus while there do seem to be recurring challenges across languages associated with multiple low (post-verbal) arguments, an overarching explanation has been an illusive goal.

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

Note first that this proposal cannot eliminate the role that abstract Case plays in the account of Xhosa TECs, so it does not make Xhosa consistent with the liberalizations of Case

35

.

<sup>&</sup>lt;sup>11</sup> Bruening argues that the crucial factor in determining whether low subjects are grammatical is whether the subject precedes the inflected verb. His proposals are at odds with the Xhosa solution of raising one DP to (postverbal) Spec, Foc. Discussing this in the framework of his assumed top-to-bottom structure-building would lead us far afield, so I leave it aside.

theory proposed Harford Perez 1985, Diercks 2012, or Halpert's 2011, 2012 approach to Zulu. This is because the experiencer verb asymmetries still require reference to Case theory for a solution.

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

[74] If  $v^*$  is robust and the subject raises to Spec, Foc, object shift should be possible. [FocP SU Foc [ $_{VP}$  OB [ $_{VP}$  <SU> [ $_{V'}$   $_{Vrobust}$  [ $_{VP}$  V <OB>]]]]]

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

(75) 
$$\left[ \text{TP T } \left[ \text{XP X } \left[ \text{FocP SU Foc } \left[ \text{vP } < \text{SU} > \text{v } \left[ \text{vP V Pronoun} \right] \right] \right] \right]$$

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

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

Summing up, we can provide an alternative account by replacing the hypothesis of defective v\* with three ingredients: (i) distinctness/linearization problems, (ii) the assumption that object pronoun shift cannot target Spec, vP in Xhosa (even when the subject raises to Spec, Foc, eliminating any potential intervention account of this); and (iii) consequently, restriction of object pronoun shift to a non-standard target above the low FocusP. The alternative does not eliminate the role of inherent Case or FocusP in the account since this is still required to explain the ban on experiencer verbs in TECs.

We claim that taken together, the components of this alternative constitute a more complex and hence less successful analysis than the one we have pursued here. Analyzing both T and v\* of Xhosa TECs as defective we capture the full constellation of TEC properties, motivating raising to Spec, Foc for the subject, predicting the impossibility of object pronouns, and tying these phenomena to the absence of agreement in TEC clauses. Perhaps our approach to Xhosa will offer new insights into SSG-type problems in other languages. We leave that possibility to future research.

## 4.6 Against an expletive pro subject

We have provided evidence that  $v^*$  of TECs is defective: it cannot Agree to shift pronouns or value accusative Case. It is striking that this kind of  $v^*$  is found in a clause with default subject agreement and in situ subjects. This seems to us unlikely to be a coincidence. We accordingly propose that T of Xhosa ECs is defective as well.

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. The alternative approach to DE just analyzes this domain as a little bigger.

- (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'

While we have argued for a vP-internal location for some EC subjects, it is possible, given the intricacies of the tense/aspect system, that the lowest subject position in Xhosa ECs might in fact be in a functional category a little higher than Spec, vP. Our data thus do not

give a clear answer as to which approach to the definiteness effect is preferable, for languages that have it. We leave resolution of this question to future research.

#### 4.8 Interim conclusions

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

We have also argued that objects cannot be pronominalized in TECs because pronouns must raise out of vP, and this is impossible in TECs.

Our analysis attributes both Case and pronoun raising problems to the nature of  $v^*$  in TECs. We claim that  $v^*$  and T in TECs lack the agreement and edge features involved in Arelations in SVO clauses.

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

In the next section we consider why some Xhosa speakers reject TECs, and present some insights that their judgments provide into NPIs and TECs in negative clauses.

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

## 5.1 Parameterization of the Case-feature of Focus

We turn now to 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 (77)a) and comparable examples to be ill-formed (see (77)b,c).

(77) 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 a/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 1-1Sindiswa 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 (and perhaps lacks an EPP feature; see §4.4.2 on in situ focus). Hence ECs can contain only one argument.<sup>12</sup>

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

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

<sup>&</sup>lt;sup>12</sup> For reasons of length we ignore the issue of Case in TECs that include applied and causative morphemes.

- (78) Conservative speakers prefer TECs with augmentless arguments
  - a. A-ku-theng-anga <u>m-ntu</u> <u>nto</u> NEG-17SA-buy-NEG.PST 1-person[-A] 9thing[-A] 'Nobody bought anything'
  - b. Ku-cul-é <u>bani</u> a-ma-culo? 17SA-sing-PST1 1who 6-6-songs 'Who sang songs?'
  - c. Ku-phek-é u-Loyiso <u>ntoni</u>? 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>13</sup>

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

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

Based on the facts in (7)d and (78), 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 (16)a,b repeated below.

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

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

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

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

41

<sup>&</sup>lt;sup>13</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.

Halpert 2011, 2012 documents this pattern in Zulu and claims it arises because Spec, TP is not a Case position. Unlike full DPs, Zulu augmentless nominals must be Case-licensed, in Halpert's view. They lack an intrinsic Case layer in the form of the augment:

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

But given our findings, this explanation cannot be extended to Xhosa: augmented DPs must occupy positions where they can obtain Case-values. We claim that Spec TP is a Case-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 (16) must receive a different explanation.

We propose that the contrast between (16)a,b is related to the well-known contrast in (17), repeated below. This pair of sentences demonstrates that NPI-like expressions which can participate in negative concord, for which we will adopt Laka's (1990) term *n*-words, are banned from subject positions in some languages, a pattern that Kayne 1981, 1984, Rizzi 1982, and Haegeman 1995 explain with a requirement that they must undergo LF quantifier raising into locality with the negative operator in the higher clause. Movement from the preverbal subject position is known to be highly restricted across languages (see among others Rizzi & Shlonsky 2007).

(17) a. Je ne demande que tu dises rien [French: Haegeman 1995]

I ne demand that you say(subj) nothing
'I don't ask that you say anything'

b.\*Je ne demande que personne dise cela I *ne* demand that no one say that (I don't ask that anyone say that')

The next subsections consider 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, and argues instead that they follow from a requirement that Nguni NPIs move leftwards to an A'-position for interaction with a sentential negation operator.

# 5.3 vP-internal [-A] forms and leftward NPI movement 5.3.1 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 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 (79) 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 adopt a leftwards movement requirement for Zulu [-A] NPIs in lieu of Halpert's view that Case-licensing determines where Zulu [-A] forms can appear.

## 5.3.2 Leftwards movement of negative 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 (80)).

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

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

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

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

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

a-ku-phek-anga u-mu-ntu <u>qanda</u> NEG- 17S- cook NEG.PAST 1-1person 5egg (Nobody cooked any egg)

Like the subject/object asymmetry in (16), this pattern calls to mind the fact that so-called *n*-words in some negative concord languages must undergo leftwards movement. We illustrate in (81) with West Flemish data from Haegeman & Lohndal (2010):

[Zulu: Halpert 2011, 2012]

- (81) 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
- [-A] forms cannot be used as negative sentence-fragment answers; in this they are more like English NPIs than like *n*-words. But suppose that the requirement of leftward movement may generalize to other kinds of polarity items in natural languages besides just *n*-words, including Zulu [-A] nominals. In this Zulu [-A] forms would appear to be a little different from those of Xhosa (though see discussion to come in §5.3.3).
- (82) **Zulu NPI licensing hypothesis**:[-A] NPIs must shift leftwards in Zulu. Suppose further that Zulu v\* of 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 Case-

licensing for objects is not available from  $v^*$ .<sup>14</sup> If Zulu  $v^*$  of TECs is defective and [-A] nominals must move leftwards, then the facts in (80) 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 (80)b; in terms of our analysis, it has raised to Spec, Foc, satisfying (82) 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 (80); it permits [-A] DOs in TECs. But they rely crucially on the subject's also being [-A]. Note that the (b) sentences in (83)-(85) are unacceptable with or without subject focus. (86) states the generalization.

- (83) a. A-ku-phek-anga <u>m-ntu</u> /<u>Sabelo</u> <u>qanda</u> [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 <u>qanda</u> NEG- 17SA- cook NEG.PAST 1-1-person/1-1Sabelo 5egg A/the person/Sabelo didn't cook any egg'
- (84) a. A-ku-bhal-anga <u>m-ntu</u> <u>ncwadi</u> NEG-17SA-write-NEG.PAST 1-person 9letter 'Nobody wrote any letter'
  - b. \*A-ku-bhal-anga u-Sabelo <u>ncwadi</u> NEG-17SA-write-NEG.PAST 1-1Sabelo 9letter 'Sabelo didn't write any letter'
- (85) a. A-ku-theng-anga <u>ba-ntwana</u> <u>ntyatyambo</u> NEG-17SA-buy-NEG.PAST 2-2children 10flowers 'No children bought any flowers'
  - b. \*A-ku-theng-anga a-ba-ntwna <u>ntyatyambo</u> NEG-17SA-buy-NEG.PAST 2-2-children 10flowers 'The children didn't buy any flowers'
- (86) **Licensing Xhosa NPI objects in TECs:** If the object in a Xhosa TEC is an NPI, the subject must also be an NPI.

<sup>&</sup>lt;sup>14</sup> Halpert however assumes that this is true across the board, while we restrict the proposal to ECs.

In this, negative ECs contrast with negative SVOO clauses in Xhosa, where either object (or both) can be augmented or augmentless (see (87)a-c). And even in a VSO construction, the subject can be augmentless and the object augmented (see (87)d). Halpert's work shows that sentences parallel to the Xhosa (87)a-c are acceptable in Zulu as well.

- (87) a. U-Sabelo a-ka-nik-é a-ba-ntwana <u>nto</u> [Xhosa] 1-1Sabelo NEG-1SA-PST 2-2-children 9thing 'Sabelo didn't give the children anything'
  - b. U-Sabelo a-ka-nik-é <u>ba-ntwana</u> a-ma-qanda 1-1Sabelo NEG-1SA-PST 2-children 6-6-eggs 'Sabelo didn't give any children eggs'
  - c. U-Sabelo a-ka-nik-é <u>ba-ntwana</u> <u>nto</u> 1-1Sabelo NEG-1SA-PST 2-children 9thing 'Sabelo didn't give any children anything'
  - d. A-ku-phek-é <u>mntu</u> a-ma-qanda NEG-17SA-cook-PST 1person 6-6-eggs 'NOBODY cooked eggs'
- (87)a,b argue against strict polarity concord among adjacent nominals as the basis for (83)-(85). (88) crucially demonstrates that it is not the lack of augments that makes (83)b (85)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.
- (88) Ku-phek-é u-Sabelo <u>ntoni?</u> 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 (89)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 (90)).

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

We conclude that the direct object position in Xhosa is an illicit location for a [-A] form functioning as an NPI in a TEC in Xhosa, just as it is in Zulu, because the NPI object cannot raise. The hypothesis in (82) is broadened in (91) to apply to both languages and, more speculatively, to [-A] NPIs in other Nguni languages (Haegaman 1995 relates the mechanics of parasitic licensing to so-called *wh*-absorption in multiple questions, but details lie outside this paper's scope).

- (91) **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 (92) and (93)).<sup>15</sup>
- (92) In a TEC, DO but not Causee object of V+Caus can be augmentless<sup>16</sup>
  - a. \*a- ku- fund- is-anga <u>mu-ntu</u> <u>ma-ntombazane</u> [Zulu] NEG-17S-learn- CAUS-NEG.PAST 1-person 6-girl (Nobody taught any girls)
  - b. a- ku- fund- is- anga <u>mu-ntu</u> <u>lutho</u> NEG- 17S- learn- CAUS-NEG.PAST 1person 16thing 'Nobody taught anything.'

<sup>15</sup> Halpert's 2011, 2012 works do not include examples illustrating whether a [+A] subject is acceptable when Appl contributes to make a [-A] object licit. Our ability to research Zulu is limited so we leave this open. It is at least clear from (80)a that a [-A] subject does not parasitically license a [-A] direct object.

47

\_\_

<sup>&</sup>lt;sup>16</sup> A Xhosa counterpart to (92)a is well-formed, a fact that like (83)a, we attribute to parasitic licensing. This section focuses on Zulu since asymmetries among [-A] positions are not obscured by the parasitic strategy.

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

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

[Zulu]

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

## b. \*Augmentless-Augmentless

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

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

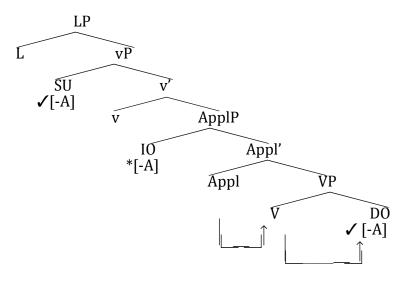
\*A-ku-thum-el-anga u-mama <u>zi-ngane</u> <u>mali</u> NEG- 17S- send- APPL- NEG.PAST 1-1mother 10-child 9money

## d. \*Augmentless-Augmentless-Augmented

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

Following Marantz 1993, Pylkannen 2002, 2008, Bantu ApplP is situated between vP and VP. The representation of (93)a is thus (94), 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.

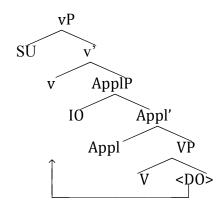
## (94) Halpert 2012: under Appl-to-V Feature Inheritance, DO but not IO can be Case-licensed



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 (93)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 0. Evidence of symmetry in applied and causative constructions is presented in (96) and (97) from Adams 2010:11),<sup>17</sup> (98) and (99) (thanks to Percy Buthelezi for these examples).

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



-

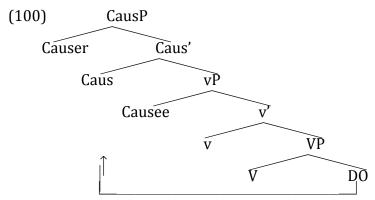
49

<sup>&</sup>lt;sup>17</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.

- (96) 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'
- (97) 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
- (98) 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'
- (99) 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 (100) (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 §5.6 for an alternative proposal

<sup>&</sup>lt;sup>18</sup> Halpert 2012 raises an interesting question: in a Zulu TEC with both applied and causative morphology, why aren't two [-A] objects licit? Similarly, in an SVOOO clause, why must the medial object be [+A]? 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). 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 puzzling that multiple heads cannot



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 (101).

(101) **NPI licensing by Appl and Caus:** Appl and Caus introduce edge-features that allow a [-A] direct object NPI to shift leftwards, satisfying (91).

#### 5.5 The nature of leftwards NPI movement

We have argued that the edge of Appl/Caus is an acceptable location for an NPI to raise to, but we have also seen that an IO or Causee NPI base generated in Spec Appl/Caus is not licit. We therefore propose that Xhosa and Zulu NPIs must move to an A'-position. Although Xhosa's extra Specs, Appl/Caus are not exclusively A'-positions (since they feed passive and object marking, see (96)-(99)), we assume that they *can* be, following the proposal of McGinnis 2001 that Appl and Caus are phase-heads in "symmetrical" object languages. Spec, FocP and outer Spec, vP in an ordinary clause likewise can be A'-positions. Merge positions are never A'-positions, and outer Spec, vP is not available in a TEC.

## 5.6 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

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.

51

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 (102) to be unacceptable.

(102) 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)

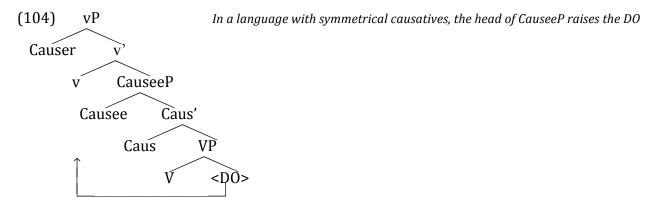
The data in (102) argue that the landing site of NPI raising is not high enough for a pronoun. Assuming very local movement suffices for [-A] forms, and taking vP to be the domain pronouns must escape (see §4.7), we capture these facts easily for applicative constructions as (103) shows (for consistency, we depict both as tucking-in).<sup>19</sup>

But under the analysis in (100) the restriction is not expected in causative constructions where symmetry can raise the DO over the causee in Spec, vP. (100) 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 (104)). 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

<sup>&</sup>lt;sup>19</sup>In this Zulu and Xhosa seem at odds with the broad SSG-like requirement discussed in Baker & Collins 2006 propose for Kinande, though perhaps not with the more narrow *distinctness* requirement of Richards 2010.

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 (103).



## 5.7 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). <sup>20</sup>

## (105) Licit in situ subjects of passives

- a. Ku-lumk-is-w-a i-lizwe ng'engculazi 17SA-be.aware-CAUS-PASS-FV 5-5world of AIDS 'The world is being made aware of AIDS'
- b. Ku-bon-w-é u-m-tana w-am 17SA-see-PASS-PST1 1-1-child 1-my 'My child has been seen' (e.g. by a doctor at a hospital)
- (106) Multiple subject agreement in mono-clausal constructions<sup>21</sup>
  - a. u-Sipho **u**-phantse **w**-a-tya nge-cephe 1-1Sipho 1SA-almost 1SA-PST-eat with-5spoon 'Sipho almost ate with a spoon'
  - b. Wena **u**-be **u**-soloko **u**-fund-a lapha 2SIndPron 2sSA-RFUT2sSA-often 2sSA-study-FV here 'You will often study here'
- (107) Raising to object out of agreeing clauses

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

(108) 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]

<sup>20</sup> Van der Wal 2012 takes a more nuanced view on the Case issue, pointing out that in some Bantu languages SA tracks the logical subject and proposing that such Bantu languages have Case in constrast to those of Dierks's study. Our claim is that even languages that on the surface have the "no Case" profiles may nonetheless have Case.

<sup>&</sup>lt;sup>21</sup> For arguments that constructions like (106) are truly monoclausal see references cited in §3.6.

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]

(109) Post-verbal subjects licit when something else occupies Spec, TP and controls SA<sup>22</sup>

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

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

In previous sections of this paper we have provided numerous arguments that abstract Case is present in Xhosa and a key determinant of DP positions. If we are correct, Case is responsible for (i) the obligatory subject focus in TECs, (ii) the ban on TECs with experiencer subjects, and (iii) the unacceptability of TECs to the numerous speakers who accept only intransitive ECs. It follows that the phenomena in (105) through (109) must be given explanations consistent with this assessment.

# 6.2 Explaining the anomalies

# 6.2.1 In situ subjects of passives

As Diercks (2012) points out, impersonal passive constructions are found in languages that clearly do have abstract Case, including German (see Bobaljik & Wurmbrand 2005 for related discussion). The hypothesis of downward probing Agree provides the theoretical apparatus for explaining this possibility. Our analysis has followed that of Halpert 2011, 2012 in assuming in situ subjects of 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 (105) is not problematical for the hypothesis that full DPs require Case.

<sup>22</sup> This construction was first documented in Zulu by Zeller (2011), who names it *instrument inversion*.

## 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 (110)). Since Semitic languages have clear morphological Case distinctions (see (111), they show us that an absence of abstract Case is not a necessary condition for *hyperagreement*.

## (110) Hyperagreement in Arabic

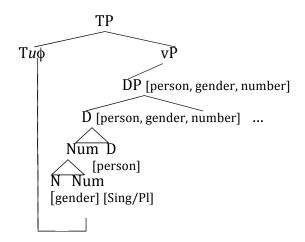
```
al-bint-aani kaan-ataa ta-ktub-aani darsa-humaa the girls(F)-3D be+past-3FD 3F-write-D lesson-FD (D = dual) 'the two girls were writing their lesson'
```

## (111) 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 (112) and (113)). Word order evidence for N-to-D is presented for Xhosa in (114). 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). (115) 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).

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



- (113) Arabic nouns also adjoin to D
  - a. daxal-tu d-daar-a entered-I the-house-ACC 'I entered the house'

(Fassi Fehri 1993:215)

b. [DP d-daar-a 
$$[NP t_N]$$
] the-house-ACC

- (115) 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 (116)) 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 (118)). Carstens accordingly advocates a view of "deactivation" effects very similar to that of Nevins 2004 (see (117)), in which valuation of uCase makes its bearer unable to enter further Agree relations because multiple Case values are impossible to pronounce. But unlike Nevins,

Carstens assumes there IS an activity condition; it is the ability of nominal gender to satisfy it that makes concord possible in Romance, Bantu and Semitic but not English. Bantu and Semitic have subject agreement that functions like concord because N-to-D gives DPs the uGen activity feature that does not obtain a value through Agree, unlike a DP's uCase.<sup>23</sup>

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

[French]

- (118) 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

Agree x 2

One might still expect that multiple aspectuals could agree in English, since only the highest would occupy T and hence value the subjects' uCase. Carstens 2010, 2011 rules this out with a matching constraint on Agree that she calls the *strong activity condition* (see (119)), 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.

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

<sup>23</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 $\phi$ .

## (120) 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

(121) 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. The fact that the raised DP is agreed with in both clauses (see (107)) 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 (122).

(122) 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 (123)), 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 (108)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 (109), repeated below.<sup>24</sup>

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

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

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

We have argued at length that there is a low Spec, FocusP above vP and that it is a Case position. We have also provided evidence that there is one purely structural "downwards" Case-licenser available for the highest post-verbal argument in a VS construction even when that argument is not agreed with or focused. While full details lie outside this paper's

60

\_

<sup>&</sup>lt;sup>24</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.

scope, we are confident that between them the two mechanisms can account for the licitness of postverbal subjects in such inversion constructions as these.

## 6.3 Summary and a conjecture about class 15

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

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

- (124) Ni-li-kumbuka Juma ku-funga m-lango 1sSA-PST-remember 1Juma 15-close 3-door 'I remembered Juma closing the door'
- (125) Wa-toto ku-to-faulu katika mi-tihani ni shida kubwa 2-child 15-NEG-succeed in 4-exams COP 9trouble 9big 'Children not passing exams is a big problem'

Among the questions that arise is whether the preverbal subjects have Case-licensing, and whether we should take the absence of this construction in Xhosa as evidence that the languages which allow it are significantly different in being Case-less languages.

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

(126) 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 (127) and the unacceptability of (128), where the reading is forced (see Stowell 1981 on the temporal interpretation of infinitives).

- (127) 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)
- (128) \* 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.

#### 7. Conclusions

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

Facts of transitive ECs argue that there is a low FocusP in Xhosa into whose Spec DPs can move, as Ndayiragije (1999) proposed for Kirundi. On the other hand, facts of experiencer verbs that are intransitive or have a CP internal objects provide support for Cheng & Downing's 2012 analysis of focus in Zulu as a feature assigned to a vP vacant save

for a single expression that hence receives the focus interpretation. Both of these focus mechanisms seem to be part of Xhosa grammar.

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.

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. Many interesting questions remain.

#### References

Adams, Nikki. 2010. The Zulu ditransitive verb phrase. University of Chicago PhD thesis. Alexiadou, Artemis, and Elena Anagnostopoulou. 2001. The subject-in-situ generalization and the role of case in driving computations. *Linguistic Inquiry* 32:193–231.

- Alexiadou, Artemis and Elena Anagnostopoulou. 2007. The subject in situ generalization revisited.
- Baker, Mark. 2003. Agreement, Dislocation, and Partial Configurationality, in A. Carnie, H. Harley, E. Jelinek, and M. Willie (eds.), *Formal Approaches to Function in Grammar*, John Benjamins, Amsterdam, pp. 107-132.
- Baker, Mark C. and Chris Collins. 2006 Linkers and the Internal Structure of vP. *Natural Language & Linguistic Theory* 24: 307–354.
- Baker, Mark, Safir, Ken, and Justine Sikuku. 2012a. Sources of (a)symmatery in Bantu double object constructions. To appear in the *Proceedings of WCCFL 30* (Santa Cruz).
- Baker, Mark, Safir, Ken, and Justine Sikuku. 2012b. Categories of clausal constituents in Lubukusu and limits to their selection. Ms, Rutgers University.
- Belletti, Adrianna.1988. The Case of Unaccusatives. *Linguistic Inquiry* 19: 1-34.
- Bhatt, Rajesh. 2003. Experiencer subjects. Unpublished course materials. http://web.mit.edu/rbhatt/www/24.956/dative.pdf
- Bobaljik, Jonathan and Phillip Branigan. 2006. Eccentric Agreement and Multiple Case-Checking. In Alana Johns, Diane Massam & Juvenal Ndayiragije (eds.), Ergativity: Emerging Issues, Springer: Dordrecht.
- Bobaljik, Jonathan and Susi Wurmbrand. 2005. The Domain of Agreement. *Natural Language and Linguistic Theory* 23:809-865.
- Bošković, Željko. 2007. On the locality and motivation of Move and Agree: An even more minimal theory. *Linguistic Inquiry* 38: 589-644.

Bošković, Željko. 2011. Last Resort with Move and Agree in derivations and representations. In *The Oxford Handbook of Linguistic Minimalism*, ed. Cedrix Boeckx, 327-353. New York and Oxford: Oxford University Press.

Bruening 2013.

Buell, L. 2006. The Zulu Conjoint/disjoint verb alternation: focus or constituency? ZAS Papers in Linguistics 43: 9-30.

Buell, Leston. 2005. Issues in Zulu morphosyntax. UCLA PhD thesis.

Cable, Seth. To appear. The optionality of movement and EPP in Dholuo. *Natural Language* and Linguistic Theory 31.1.

Carstens, Vicki. 1991. The morphology and syntax of DPs in Kiswahili. UCLA PhD thesis.

Carstens, Vicki. 2001. Multiple agreement and case deletion: Against phi-(in)completeness. Syntax 4:147–163.

Carstens, Vicki. 2010. Implications of grammatical gender for the theory of uninterpretable features. In *Exploring Crash Proof Grammars* M. Putnam (ed), 31-57. Amsterdam: John Benjamins.

Carstens, Vicki. 2011. Hyperactivity and hyperagreement in Bantu. Lingua 121.5: 721-741. Carstens, Vicki. 2012. Delayed valuation. Lingbuzz/001432.

Carstens, Vicki and Michael Diercks. 2010. Parameterizing Case and Activity: Hyper-raising in Bantu. Paper presented at NELS 40; to appear in *Proceedings of NELS 40*.

Carstens, Vicki and Michael Diercks. 2013. The great escape: raising out of finite clauses in Bantu languages. Paper presented at the annual meeting of the 31st West Coast Conference on Formal Linguistics.

Carstens, Vicki and Michael Diercks. To appear. Agreeing How? In Linguistic Inquiry 44.2.

- Cheng, Lisa & Downing, Laura. 2012. Against FocusP: arguments from Zulu. In *Information Structure*, ed. by Ivona Kucerova and Ad Neeleman.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays in honor of Howard Lasnik*, edited by R. Martin et al, 89-155. Cambridge, MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Kan Hale: A life in language*, edited by M. Kenstowicz, 1-52. Cambridge: MIT Press.
- Chomsky, Noam. 2007. Approaching UG from below. In *Interfaces +Recursion = Language?*, ed. by U. Sauerland and H.-M. Gartner, 1-29. Berlin: Mouton de Gruyter.

#### Collins 2003

- Diercks, Michael. 2012. Parameterizing Case: Evidence from Bantu. To appear in *Syntax* 15.3. Available as Early View online, DOI: 10.1111/j.1467-9612.2011.00165.x Diesing, Molly. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- Diesing Molly. 1997. Yiddish VP order and the typology of movement in Germanic. *Natural Language and Linguistic Theory* 15: 369-427.
- Diesing, Molly and Eloise Jelinek. 1995. Distributing Arguments. *Natural Language Semantics* 3.2: 123-176.
- Epstein, Sam & T.Daniel Seely. 2006. Derivations in Minimalism. Cambridge: Cambridge UP.
- Fassi Fehri, A., 1993. Issues in the Structure of Arabic Clauses and Words. Kluwer Academic Press, Dordrecht, Boston.
- Halpert, Claire. 2011. Argument Licensing in Zulu. LingBuzz/001400.
- Halpert, Claire. 2012. Argument licensing and agreement in Zulu. MIT PhD dissertation.

- Harford Perez, Carolyn. 1985. Aspects of complementation in three Bantu languages.

  Madison, WI: University of Wisconsin dissertation.
- Haegeman Liliiane. 1995. The Syntax of Negation. Cambridge and New York: Cambridge UP.
- Haegeman, Liliane and Terje Lohndal. 2010. Negative concord and (multiple) Agree: a case study of West Flemish. *Linguistic Inquiry* 41: 181-211.
- Hiraiwa, Ken. 2001. Multiple Agree and the Defective Intervention Constraint in Japanese.

  In MIT Working Papers in Linguistics 40: 67-80. Department of Linguistics &

  Philosophy, MIT, Cambridge, Mass.
- Holmberg, Anders, and Thorbjörg Hróarsdóttir. 2004. Agreement and movement in Icelandic raising constructions. *Lingua*. 114:651–673.
- Hyman, L. M. and J. R. Watters. 1984. Auxiliary focus. *Studies in African Linguistics* 15(3), 233-273.
- Johnson, Kyle. 1991. Object positions. *Natural Language and Linguistic Theory* 9.4: 577-636.
- Jonas, Dianne and Jonathan Bobaljik. 1993. Specs for subjects: the role of TP in Icelandic. In 

  Papers on Case and Agreement I, MIT Working Papers in Linguistics Vol. 18.

  Cambridge: MIT Linguistics Department.
- Julien, Marit. 2002. Syntactic Heads and Word Formation, New York: Oxford UP.
- Larson, Richard. 1985. Bare NP Adverbs. Linguistic Inquiry 16.4:595-621.
- Lavine, J. Case and events in Ukranian experiencer predicates. *Formal Approaches to Slavic Linguistics* 18, eds. W. Browne et al. Ann Arbor: Michigan Slavic Publ., 285-300.
- Legate, Julie Anne. 2003. Some interface properties of the phase. *Linguistic Inquiry* 34.3.
- Mali, Z.1995. The existential ssentences in Xhosa. University of Stellenbosch MA thesis.

- Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In Sam Mchombo (ed.), *Theoretical aspects of Bantu grammar*. Stanford: CSLI, 113–150.
- Melebari, Ala'a and T. Daniel Seely. 2012. Agreement without 'exception' in Standard Arabic? Presentation at the Illinois Symposium on Semitic Linguistics, University of Illinois Urbana-Champaign.
- McGinnis, Martha. 2001. Variation in the phase structure of applicatives. In *Linguistic Variation Yearbook 1:* 105-146.
- Milsark, Gary. 1977. Towards an explanation of certain peculiarities of the existential construction in English. Linguistic Analysis 3:1-29.
- Mletshe, Loyiso. 1995. The subject in Xhosa. University of Stellenbosch MA thesis.
- Ndayiragije, Juvenal. 1999. Checking Economy. *Linguistic Inquiry* 30.3: 399-444.
- Nevins, Andrew. 2005. Derivations without the Activity Condition. *MIT Working Papers in Linguistics* 49: 283-306.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Linguistic Inquiry Monograph. Cambridge, MA: MIT Press.
- Preminger, Otto. 2011. Agreement as a fallible operation. MIT PhD dissertation.
- Richards, Marc. 2007. Object shift, phases, and transitive expletive constructions in Germanic. In P. Pica et al (eds), *Linguistic Variation Yearbook 6*. Amsterdam/New York: John Benjamins, pp. 139-159.
- Rizzi, Luigi.1997.The fine structure of the left periphery. L. Haegeman, ed. *Elements of Grammar*, Kluwer, Dordrecht.
- Rizzi, Luigi. 1999. On the Position "Int(errogative)" in the Left Periphery of the Clause. Ms., University of Siena.
- Safir, Kenneth.1987. What explains the definiteness effect? In *The Representation of*

- (In)definiteness, eds. Eric J. Reuland and Alice G.B. ter Meulen, 71-97. Cambridge, MA: MIT Press.
- Safir, Kenneth. 2009. *Syntactic Chains. Cambridge Studies in Linguistics Book 40.* Cambridge, UK: Cambridge University Press.
- Stowell, Timothy. 1981. Origins of phrase structure. MIT PhD dissertation.
- Van der Wal, Guenever Johanna. 2012. Parameterizing Case: other evidence from Bantu.

  Talk at the meeting of the Linguistic Society of Great Britain, U. of Salford, Manchester.
- Vangsnes, Øystein Alexander. 2002. Icelandic expletive constructions and the distribution of subject types. In Peter Svenonius (ed.). *Subjects, Expletives, and the Extended Projection Principle*. Oxford: Oxford University Press, pp. 43-70.
- Zanuttini, Rafaella. 1991. Syntactic properties of sentential negation: a comparative study of Romance languages. PhD thesis, University of Pennsylvania.
- Zeijlstra, Hedde. 2004. Sentential Negation and Negative Concord. Utrecht: LOT.
- Zeller, Jochen. 2006. Raising out of finite CP in Nguni: the case of *fanele*. *Southern African Linguistics and Applied Language Studies* 24:255–275.
- Zeller, Jochen. 2011. Instrument inversion in Zulu. In Michael R. Marlo, Nikki B. Adams,

  Christopher R. Green, Michelle Morrison, and Tristan M. Purvis (eds.), *African Languages in Context* (selected Proceedings of the 42nd Annual Conference on African

  Linguistics), Somerville, Massachusetts: Cascadilla Proceedings Project, 134-148.