## Nguni bare nouns: licensing without Case\* Vicki Carstens

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Nguni bare or *augmentless* nominals ([-A]) are licit only as strict negative dependents and *wh*-words. They may not appear in any preverbal subject position unless local to a negation-licensed [-A] COMP of a subjunctive clause (Pietraszko 2021). This pattern motivates an analysis in terms of negative-concord and a labeling-theoretic approach to the EPP (Chomsky 2013): [-A] nouns have *u*Neg features which thwart agreement and labeling in [XP,YP] configurations (see also Bošković 2019, 2020) unless valued by interpretable negation in a syntactic Agree relation (Zeijlstra 2008, Penka 2011, Haegeman & Lohndal 2010). A cluster of further distributional restrictions on [-A] are predictable from an independently-motivated Nguni clausal topography of focus (Carstens & Mletshe 2016) eliminating any role for abstract Case in explaining the facts, contra Halpert (2015) and Pietraszko (2021). The analysis is inspired by and extends to parallel restrictions in Romance languages previously attributed to the ECP and the EPP (Contreras 1986, Deprez 2000, Landau 2007, Longobardi 1994).

# 1 Augmentless nominals: analytical challenges

### 1.1 Overview

A lively debate exists on the question of whether Bantu nominals have Case-licensing requirements and accordingly whether Case can be viewed as a universal (see among others Carstens & Diercks 2013a, Carstens & Mletshe 2015, 2016, Diercks 2012, Halpert 2015, Harford 1986, Pietraszko 2021, van der Wal 2015). In the Nguni languages of southern Africa this controversy centers on the distribution of bare, so-called *augmentless* nominals (henceforth [-A], underlined in examples). <sup>1</sup> These lack the outer of two class prefixes which most nominals bear as exemplified in the contrast between (1) and (2).<sup>2</sup>

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<sup>1</sup> Zulu, Xhosa, and Zimbabwean Ndebele are very closely related and grammatically similar languages of the Nguni subgroup (Guthrie's Zone S40). Data in this paper for which sources are not explicitly identified come from my field work with native speakers of Xhosa and Zulu in Cape Town, Durban, and New Haven.

<sup>2</sup> PVSP = preverbal subject position; [-A] = augmentless, [+A] = augmented, AUG = augment; NEG = negation; SM = subject marker; OM = object marker; SBJ = subjunctive; DISJ = disjoint, a VP-final verb form; REL = relative marker, NCI = negative concord item, X<sub>F</sub> means X is [+focus]. Numerals indicate noun class (number+gender). Subject agreement in person/number is 1sSM/2sSM or 1PISM/2PISM (first or second singular or plural) as opposed to e.g. 1SM = SM in noun class 1. [Xhosa/Zulu] = examples

(1)	a. u-mu-ntu	b. i-n-dawo	c. u-bani?	[Zulu]
	AUG-1-person	AUG-9-place	AUG-1who	
	'a/the person'	'a/the place'	'who?' (preverbal)	1

(2) a. Ø-<u>mu-ntu</u> b. Ø-<u>mi-fino</u> c. Ø-<u>bani?</u> [Zulu] Ø-1-person Ø-4-vegetables Ø-1who 'nobody/anybody' 'no/any vegetables' 'who?' (postverbal)

The distribution of [-A] nominals is constrained in several ways that play a role in the Case debate. First, [-A] nominals serve only as negative dependents and post-verbal *wh*-words, as (2) and (3) illustrate. (3)a is an object question formed with the [-A] in situ *wh-bani* – 'who'? A negative answer may include the [-A] *muntu* – 'anybody/nobody' as in (3)b. (3)c shows that *muntu* may be used as a negative fragment answer, but the unacceptability of (3)d arises because when *muntu* appears within a sentence, it must have the c-commanding negation that is present in (3)b.

- (3) a. U-bon-e <u>bani</u>? b. A-ngi-bon-anga <u>mu-ntu</u>! [Zulu]
  2sSM-see-PST 1who
  'Who did you see?' 'I didn't see anybody!'
  - c. Mu-ntu! d. \*Ngi-bon-e mu-ntu.
    1-person 1SM-see-PST 1-person
    'Nobody!' Intended: I saw somebody *or* I saw nobody.

A second constraint, brought to light in Halpert (2015), is the exclusion of [-A] nominals from all vP-external positions including preverbal subject position (henceforth PVSP) as shown in (4). The restriction leads Halpert to propose that [-A] require Caselicensing which is available only vP-internally from a clause-medial downwards probing head L, as illustrated in (5).<sup>3</sup> Because [+A] are encased in KP shells headed by the augment (see (5)b), they do not require Case from a clause-level functional head and so

homophonous in the two languages. I do not mark tone, which does not play a role in the phenomena of concern.

<sup>&</sup>lt;sup>3</sup> Appl or Caus adds a Case-licenser to ditransitives, in Halpert's account; this will not be relevant here.

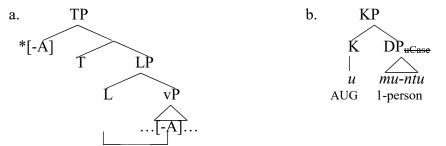
do not exhibit the same restrictions, under Halpert's account.<sup>4</sup>

(4) a. \*Bani u-fik-ile? 1who 1SM-arrive-DISJ.PST Intended: Who arrived? [Xhosa/Zulu]

b. \*Mu-ntu u-fik-ile /a-ka-fik-ile. 1person 1SM-arrive-DISJ.PST/NEG-1SM- arrive-DISJ.PST Intended: Nobody arrived.

[Zulu]

(5) Halpert (2015): A single Case-licenser L of Nguni (in)transitive clauses licenses [-A].



A third significant restriction is a clausemate requirement for negative-dependent [-A] in indicative contexts as exemplified in (6). Carstens & Mletshe (2016) propose that negative-dependent [-A] bear negative concord features which must be valued in a clause-bound Agree relation with negation ((6) = Carstens & Mletshe 2016:769:(22)a).

(6) \*U-Simiso a-ka-shongo [ukuthi u-Nothando u-theng-e mi-fino]. [Zulu] AUG-1Simiso NEG-1SM-say COMP AUG-1Nothando 1SM-eat-PST 4-vegetables 'Simiso didn't say that Nothando bought any vegetables.'

These disparate factors all enter into debate on the question of how best to characterize the properties of [-A] nominals and whether they reveal something about Case in Nguni. Researchers differ in their opinions of what is relevant. Halpert (2015) and Pietraszko (2021) argue that the *wh*-hood and negative dependence of [-A] nominals have little

<sup>&</sup>lt;sup>4</sup> Under Halpert's (2015) analysis the KP shells explain much-discussed Bantu Case anomalies in which Nguni [-A] cannot participate including hyper-raising from tensed clauses, multiple subject agreement, and overt preverbal subjects within clauses whose verbs bear the noun class morphology of infinitives. As a review lies outside this brief paper's scope I refer the interested reader to Halpert (2015) and Pietraszko (2021) for descriptions of the facts in Zulu and Ndebele; to Harford (1986), Carstens & Diercks (2013), Diercks (2012) for analyses in terms of a complete absence of Case in Bantu; and to Baker (2003) and Carstens & Mletshe (2015) for the view that only [+A] nominals require Case. See §9 for brief discussion.

bearing on their syntactic distribution, while Carstens & Mletshe (2016) propose that the functions of [-A] as *wh*- and strict negative dependents indicate that they have focus features which bar them from clausal positions that have been identified as inhospitable to [+focus] material, including PVSP (on which see Sabel & Zeller 2006, Zeller 2008).

The most recent chapter in this controversy opens with some previously unnoticed instances of the PVSP restriction which Pietraszko (2021) presents as proof that the Case approach is correct. If her argument holds up, then the question may be viewed as settled. If not, the evidence that her paper brings to light requires an alternative analysis.

Pietraszko (2021) describes PVSP restrictions in several Ndebele dependent clause types as exemplified in (7)a-c. She argues that [-A] are excluded in these PVSPs because Case-licensing by Halpert's L is clause-bound, an analysis illustrated in (8).<sup>5</sup>

- (7) [-A] are excluded from PVSP of (a) subjunctive, (b) relative, (c) participial clauses.
  - a. \*U-fun-a ukuthi [bani a-buy-e]? [Ndebele; Pietraszko 2021:589]
    2sSM-want-FV COMP 1who 1SM-come-SBJ
    Intended: Who do you want to come?
  - b. \*U-zwe i-n-goma [bani a-yi-hlabelileyo]? 2sSM-heard AUG-9-song 1who 1SM-9OM-sing.PST.REL Intended: You heard the song that who sang?
  - c. \*U-za-pheka [<u>bani</u> e-nga-ka-fiki]?
    2sSM-FUT-cook 1who 1SM-NEG-yet-arrive
    Intended: You will cook with who not having arrived yet?
- (8) Case locality failure into dependent clauses

[Pietraszko 2021:592]

# 1.2 Conflicting evidence

Pickiness about the properties of preverbal subjects is common, across languages.

<sup>&</sup>lt;sup>5</sup> Pietraszko's account of participial clauses is slightly different in that she proposes they adjoin to matrix TP and hence are not c-commanded by L; this is irrelevant for present purposes.

Researchers typically relate such phenomena to the Extended Projection Principle (EPP) of Chomsky (1981); see among many others Buell (2007) and Halpert (2015) on exclusion of PPs and CPs respectively from Zulu PVSPs, and Deprez (2000) on exclusion of bare nouns from PVSPs in Romance. The EPP seems at least as plausible a source of the [-A] restrictions in (7) as is the hypothetical absence of abstract Case preverbally, particularly given Halpert's and Buell's reports of other Nguni PVSP restrictions.

Moreover, there is reason for skepticism about the Case approach in additional Ndebele data, some of which Pietraszko (2021) presents in a footnote. Pietraszko (2021:592 note 12) shows that a [-A] nominal may in fact appear in subjunctive PVSP just in case the local COMP is augmentless. Compare (9) with the well-formed (10). Here the augment drops from the COMP (*u*-)*kuthi*, a nominalization of the verb 'to say' (Pietraszko 2019), and the augment of the subject which follows it may drop as well.<sup>6</sup>

- (9) A-ngi-fun-i [u-kuthi \*(u-)Sipho a-buy-e]. [Ndebele; Pietraszko 2021:591] NEG-1sSM-want-NEG AUG-COMP AUG-1Sipho 1SM-come-SBJ 'I don't want Sipho to come.'
- (10) A-ngi-fun-i [kuthi (u)Sipho a-buy-e]. [Ndebele; Pietraszko 2021:592] NEG-1sSM-want-NEG COMP AUG-1Sipho 1SM-come-SBJ 'I don't want Sipho to come.'

Pietraszko (2021) suggests that (10) is an instance of a broad phenomenon wherein Agree with a phasal category allows the probe involved to subsequently ignore the phase boundary, accessing material within it (see (11) from Rackowski & Richards 2005: 582). She accordingly characterizes (10) as support for the Case account of the PVSP exclusion of [-A] nominals. I illustrate her proposal in (12), taking the probe that hypothetically

suggesting that they are not fully nominal like the Ndebele COMP.

<sup>&</sup>lt;sup>6</sup> Two points concerning these examples: (i) §4.1 shows that [-A] proper names pattern syntactically like other [-A] negative dependents in all respects. (ii) Zulu has a homophonous COMP cognate to Ndebele's COMP *ukuthi*, while Xhosa's counterpart COMP is a form of the verb 'be'. Neither can augment-drop,

Case-licenses the CP and the preverbal subject to be Halpert's L as in Pietraszko (2021). <sup>7</sup>

- (11) *Principle of Minimal Compliance:* Once a probe P Agrees with a goal G, P can ignore G for the rest of the derivation (Richards 1998, Hiraiwa 2001).
- (12) Agreement unlocking a phase for Case-licensing into it

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L want [CP] Ø-<u>kuthi</u> [TP Ø-Sipho come]].

Agree (L, CP) makes possible case-licensing Agree (L, Sipho)
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A first problem with this approach concerns the role of negation, which is essential for augment-drop. This is clear from comparison of (10) with examples (13)a,b wherein the matrix clauses are affirmative. Augment-drop is impossible from COMP and the subject in both the statement (13)a and the question in (13)b, though for Halpert and Pietraszko the licenser L is present in every clause. In light of this pattern, a syntactic "unlocking" role for negation as sketched in (14) seems a better fit than (12) to explain (10).

- (13) a. Ngi-fun-a [\*(u)-kuthi [\*(u-)Sipho a-buy-e ]] [Ndebele; Sibanda p.c.] 1sSM-want AUG-COMP AUG-1Sipho 1sM-come-SBJ 'I want Sipho to come.'
  - b. U-fun-a [\*(u)-kuthi \*(u)-bani a-buy-e?] [Ndebele; Pietraszko p.c.] 2sSM-want AUG-COMP AUG-1who 1SM-come-SBJ 'Who do you want to come?'

<sup>&</sup>lt;sup>7</sup> An anonymous reviewer points out that Pietraszko (2019) claims Ndebele CPs are encased in DP shells headed by the augment: [DP AUG [CP kuthi [TP SU...]]]. Agree (L, DP) cannot suffice under (11) to unlock a DP-encased CP for probing of the preverbal subject within it. Access is not likely improved by NEG-licensed augment-drop from COMP: clauses introduced by [-A] COMPs pattern like [-A] DPs in that they cannot control agreement or dislocate (Pietraszko 2019:72), so Pietraszko suggests that they and other [-A] nominals have null D heads; hence paralleling Halpert's (5)b their structure would be [DP Ø [CP kuthi [TP SU...]]]. An alternative might take the DP layer to be omissible in negation's scope to yield bare NPs and CPs as complements to negated verbs (note this would seem to involve syntactic licensing by NEG of something akin to S'-deletion). While such an approach might make possible Pietraszko's account of (9) vs. (10) under (12), all other arguments against the Case account to be presented in this article stand: (15) can only be explained by focus-features of [-A] incompatible with indicative PVSP; a syntactic licensing role for negation vis-à-vis [-A] is independently motivated by negative concord phenomena (see §3); and L is superfluous given ample evidence that negative concord, focus, and EPP determine [-A] distribution. See also Carstens (to appear) for evidence that [-A] nominals are opaque to extraction just like [+A] nominals, providing no support for a difference in their size (a diagnostic from Bošković (2005, 2008c).

(14) Alternative hypothesis: negation as a syntactic licenser "unlocking" CP in (10)

NEG want ... [CP Ø-kuthi [TP (u)-Sipho come]].

Given the indispensability of negation for augment-drop to succeed in these cases, a question arises as to whether the role of L can be eliminated to yield a simpler analysis.

For Pietraszko (2021:583), negation (or *wh*-hood) is purely a "semantic precondition" for augment-drop and not a structural licensing factor; in this Pietraszko builds on Halpert's (2015) analysis of Zulu [-A] in negative contexts as NPIs. But her glosses indicate no semantic correlates to augment-drop from complementizers and proper names paralleling the interpretive phenomena that argue for semantic dependency of NPIs on negation (see Kadmon & Landman 1993, Chierchia 2006 on domain widening; Giannakidou 2019 on referential deficiency). Pietraszko's division of labor for negation and L therefore seems arbitrary. <sup>8</sup>

A second problem with Pietraszko's approach is that it gives rise to a false prediction. Pietraszko (2019) shows that the augment of an Ndebele COMP introducing an indicative clause may drop in the scope of negation, just like that of the COMP introducing the subjunctive in (10). As noted above, Pietraszko (2021) claims that a [-A] COMP indicates an Agree relation between L and CP, unlocking the CP for L to Case-license its contents. Given this, the preverbal subject of an indicative complement to a [-A] COMP

<sup>&</sup>lt;sup>8</sup> The absence of NPI-like semantic correlates to augment-drop from Ndebele COMP and proper names in Pietraszko's examples suggests that NEG-licensing of these items is purely syntactic. Consistent with this Pietraszko (2019:72) reports that augment-drop from COMP seems to convey only emphasis, and for [-A] proper names in negation's scope Xhosa speakers have only contrastive focus readings; see §2 on focus features of [-A]. However Galen Sibanda, the one Ndebele speaker I am able to consult, gets a focus reading for 'Sipho' in (10) but finds more salient an alternative NPI-like reading 'any Sipho'. This is not surprising or problematic for a syntactic approach, since syntactic NEG-licensing is generally close companion to semantic dependence rather than an opposing option: Chierchia (2006) encodes NPIs' dependency on NEG in a morpho-syntactic feature; negative concord is syntactic Agree between NEG and local (semantic) dependents Zeijlstra (2004, 2008).

should be able to augment-drop, but (15) shows that it cannot ((15) adapted from Pietraszko 2019: (12a) and Pietraszko 2021:(27)).

(15) A-ngi-cabang-i [(u)kuthi [\*(u)-Sipho u-za-pheka]] [Ndebele]

NEG-1SM-think-NEG AUG COMP AUG-Sipho 1SM-FUT-cook
'I don't think Sipho will cook.'

Summing up, Pietraszko's (2021) account of (10) wrongly predicts that when Ndebele's indicative clause COMP drops its augment under negation in (15), Case from L should enable the local subject to augment-drop too. The account thus falls short of its goal of explaining the distribution of [-A] nominals as preverbal subjects. Analytical questions also arise from the claim that Case from L is the crucial syntactic licensing factor in Ndebele (10), since the grammaticality contrast between (10) and (13) hangs on the presence or absence of negation. In Zulu and Xhosa, COMPs cannot augment-drop (see note 6) but proper names may do so in the scope of clause-mate negation, yielding the same questions as arise in Ndebele vis-à-vis the nature of negation's role.

This article presents an alternative approach in which negation is the syntactic licenser of augment-drop in negative contexts, analyzed as a form of negative concord. Negative concord licenses both the [-A] COMP and the [-A] subjunctive subject in (10). [-A] are excluded from PVSP of indicatives like (15) because it is antifocus (Sabel & Zeller 2006, Zeller 2008); as strict negative dependents and wh-, [-A] have focus-features incompatible with this location. The remaining PVSP restrictions are EPP-effects.

The rest of the article is structured as follows. §2 shows how the Nguni topography of focus and anti-focus accounts for all distributional restrictions on [-A] nominals apart from the non-indicative PVSP facts in (7) (Carstens & Mletshe 2016). §3

establishes the properties of negative concord in Xhosa and Zulu and demonstrates that the licensing of a subjunctive clause [-A] subject perfectly parallels augment-drop negative concord spreading into DPs. §4 proposes that all [-A] nominals must be syntactically licensed by NEG or interrogative  $C_Q$  and shows that of the two relations, only NEG-licensing involves feature-valuation. These factors pave the way for §5 to present an EPP-as-labeling-theoretic account of residual PVSP restrictions and of their ability to be neutralized by negative concord. §6 provides evidence that each [-A] noun has a null D which can be licensed by only one or the other of NEG or  $C_Q$  (never both) and assimilates the relations to operator-variable binding. §7 extends the labeling approach to post-verbal subjects in Nguni TECs. §8 analyzes parallels in Romance languages. §9 concludes that negative concord, focus, and wh-hood play vital syntactic roles in Nguni contra Pietraszko (2021), eliminating any explanatory role for abstract Case. The upshot is that all aspects of the distribution of [-A] nominals reduce to morpho-syntactic features associated with their functions as negative dependents and wh-words.

### 2. PVSP and the Focus/Case debate

# 2.1 Successes of a Focus-based account

§1.2 demonstrated that the Case approach advocated in Pietraszko (2021) does not fully explain the distribution of [-A] nominals in PVSPs. This is important because the viability of the approach depends on its success in the preverbal domain, since several other restrictions identified in Halpert (2015) and attributed to Case-licensing failures for [-A] are shared by certain [+A] expressions which, under Halpert's approach, do not require Case. Thus while Halpert shows that [-A] cannot be right-dislocated (diagnosed by cooccurrence of an agreeing object marker) or appear as O of a VSO(O) Transitive

Expletive Construction (TEC), Carstens & Mletshe (2016) point out that [+A] wh-phrases are barred from the same range of locations, as is the expression 'only XP' (see (16) -

- (18)). The same is true of indicative PVSP, whether matrix or embedded: both [-A] and [+A] wh- phrases are excluded there, as is 'only XP' (see (19)a-c). For completeness (20) demonstrates the same pattern of exclusions affecting negative dependent [-A].
- (16) Neither [+A] nor [-A] wh may clitic-dislocate

[Xhosa/Zulu]

- a. \*U-m-bon-ile] $_{\rm vP}$  <u>bani</u>/u-bani? 2sSM-3sOM-see-DISJ.PST 1who/AUG-1who Intended: Who did you see?
- b. \*Bani /\*u-bani u-m-bon-ile? 1who/AUG-1who 2sSM-3sOM-see-DISJ.PST Intended: Who did you see?
- (17) Both [+A] and [-A] wh are excluded as  $\underline{O}$  of  $VS\underline{OO}$

[Xhosa/Zulu]

[Xhosa/Zulu]

- \*Ku-fund-is-e u-Loyiso <u>bani</u>/**u-bani** i-si-Xhosa 17SM-learn-CAUS-PST AUG-1Loyiso 1who/AUG-1who AUG-7-Xhosa Intended: Who did Loyiso teach Xhosa to?
- (18) [+A] 'only' XP cannot be  $\underline{O}$  of VS $\underline{O}(O)$  or clitic-dislocate [Xhosa/Zulu]
  - a. \*Ku-fund-is-e u-Loyiso [**U-John kuphela**] (i-si-Xhosa) 17SM-learn-CAUS-PST AUG-1Loyiso AUG-1John only AUG-7-Xhosa Intended: Loyiso taught only John Xhosa.
  - b. \*U-m-bon-ile]<sub>vP</sub> [U-John kuphela] 1SM-3sOM-see-DISJ.PST AUG-1John only Intended: S/he saw only John.
- (19) [+/-A] wh- and 'only' XP are all excluded from indicative PVSP
  - a. \*(U-)<u>bani</u> u-fik-ile?
    AUG-1who 1SM-arrive-DISJ.PST
    Intended: Who arrived?

b. \*[U-John kuphela] u-fik-ile

AUG-1John only 1SM-arrive-DISJ.PST Intended: Only John arrived.

c. \*U-cinga ukuba [(u-)bani w-emka]? [Xhosa] 2sSM-think COMP AUG-1who 1SM-leave Intended: Who do you think left?

### (20) [-A] negative dependents share the distributional restrictions

- a. \*A-ngi-**m**-bon-i <u>mu-ntu</u> [Zulu; \*clitic right-dislocation of [-A]] NEG-1sSM-1OM-see- NEG 1-person Intended: I don't see anybody.
- b. \*A-ku-phek-anga u-Sabelo <u>n-to!</u> [Xhosa; \*[-A] as <u>O</u> of VS<u>O</u>]
  NEG-17sSM-buy-NEG.PST 1-Sindiswa 9-thing
  Intended: Sabelo didn't buy anything!
- c. \*A-ngi-funi ukuthi <u>mu-ntu</u> a-phek-e [Zulu; \*[-A] as <u>S</u> of SV<u>O</u>]

  NEG-1sSM-want COMP 1-person 1SM-cook-SBJ

  Intended: I don't want anybody to cook.

Taking *wh*- and 'only XP' to be [+focus] expressions, there is a robust generalization: wherever [+focus] material is ruled out, [-A] nominals are excluded also (see (21)).

# (21) <u>Predicting [-A] distribution from [+Focus] restrictions</u>

If XP<sub>[+Focus]</sub> is barred from Position P, then [-A] nominals are barred from P
The distribution of [+A] wh-words and 'only XP' is the basis for [+/-focus] clausal
positions proposed in Sabel & Zeller (2006), Zeller (2008), Carstens & Mletshe (2015),
Carstens & Zeller (2020); antifocus positions include S of indicative SVO, O of VSO(O),
and dislocated positions. Assuming with Carstens & Mletshe (2016) that all wh-words
and [-A] negative dependents have focus-features in Nguni, the above patterns of
exclusion follow (they cite Watanabe 2004 and Shimoyama 2011 on focus-features of
negative dependents in Japanese, Sells 2006 and Giannakidou & Yoon 2016 on Korean,
and Giannakidou & Zeijlstra 2017 for discussion; see also Bošković 2008a, 2009 on the
role of focus particles in deriving negative concord items in Serbo-Croatian). Under this
approach, the unacceptability of a [-A] subject in the embedded clause of (15) is due to
the antifocus property of indicative PVSP. Table 1 is from Carstens &Mletshe (2016).9

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<sup>&</sup>lt;sup>9</sup> The variability of judgements on *wh*- as <u>O</u> of VS<u>O</u> is puzzling but as Carstens & Mletshe (2016) note, a problem for focus and Case accounts equally since it holds of both [+A] and [-A] *wh*-. §4.3:(60) provides evidence of *focus projection* from Nguni *wh*-phrases to their containing category, which might be relevant

**Table 1:** Summary of correspondences between [-A] and [+focus] material in Nguni

	Restriction #1	Restriction #2	Restriction #3	Restriction #4
Nominal type	S of SV indicative	Clitic-dislocate	O of VSO	O <sub>1</sub> of VSO <sub>1</sub> O <sub>2</sub>
[+A] 'only' DP	Х	Х	Х	Х
[-A] neg. dep.	Х	Х	Х	Х
[+/-A] <i>wh</i> -word	Х	Χ	variable	Χ

The parallels summarized in Table 1 are quite analytically significant. Consider the evidence in (17) and (19) that both [+A] and [-A] wh-phrases are barred from indicative PVSP and O of VSOO. Under Halpert's and Pietraszko's approach, these identical patterns of restriction have entirely distinct origins: [-A] wh- are excluded by an absence of Case, but since [+A] do not require Case, [+A] wh- must be excluded by a different factor -- an analytical anomaly which the focus-based account eliminates. Turning to (16) and (20)a, Halpert and Pietraszko view the ill-formedness of clitic-dislocated [-A] as indicators that in Nguni, movement is not possible from a Case-licensed position to an A'-position. The plausibility of this unusual proposal is undermined by the fact that not only is the dislocation restriction the same for [-A] and [+A] wh- as detailed above; the pattern is also cross-linguistically pervasive: the contrasts in (22) demonstrate that wh-, negative dependents, and negative quantifiers are quite generally resistant to dislocation even in English. For relevant discussion of this restriction see among others Zeller (2016) on anti-focus positions in Nguni, Rizzi (1997) on the ability of 'no one' to be focus but not topic, Kallulli (2000) on the incompatibility of wh-phrases with clitic-doubling because they are [+focus], and Baker (2003) on why Kinande [-A] cannot dislocate. 10

here, assuming with Carstens & Mletshe that S of VSO raises to Spec of a low FocusP leaving the wh-O as

the sole occupant of vP, to which it might project its focus-feature. Details exceed this paper's scope.

10 §5.4 discusses and analyzes one further restriction that Halpert (2015:69) cites as evidence for the claim that Case-licensing cannot feed A'-movement: [-A] cannot cleft.

- (22) a. √I didn't see him, your brother. b. I didn't see (\*him,) anybody/nobody.
  - c. ✓Your brother, I didn't see him. d. \*Nobody, I saw (him).
  - e. You didn't see (\* him,) WHO? f. \*Who, you saw (him)?
  - g. \*I don't think that anybody, John saw (him).

Despite the correspondences in Table 1 and the widespread incompatibility of [+focus] expressions with dislocation, Pietraszko (2021:597) rejects any role for focus in the distribution of [-A] nominals, suggesting that Case-licensing and focus domains overlap coincidentally because Case is licensed downwards into vP by L and focus "tends to be assigned *in situ*". But this characterization is incompatible with the fact that  $\underline{O}$  in a VS $\underline{O}$ (O) TEC *cannot* be [+focus] *or* [-A] as shown in (17), (18), and (23)a,b.

- (23) O of VSO can be neither [+focus] nor [-A]
  - a. \*Ku-theng-e u-Sindiswa [a-ma-qanda kuphela]. [Zulu/Xhosa] 17SM-buy-PST AUG-1-Sindiswa AUG-6-eggs only Intended: Sindiswa bought only a book.
  - b. A-ku-phek-i (u-)Zodwa \*(i)suphu. [Ndebele; Pietraszko 2021:584]

    NEG-17SM-cook-NEG AUG-1Zodwa AUG-9soup

    'Zodwa<sub>F</sub> didn't cook soup.'

If focus is assigned *in situ* as Pietraszko's suggests, we would expect [+focus] material to be acceptable as <u>O</u> of VS<u>O</u> in (23)a, contrary to fact. There is a tight correspondence between licit positions for focus material and [-A] nominals that cannot be explained away in terms of coincidental domains.

#### 2.2 Where Focus falls short

Focus turns out not to be the whole story, however. Pietraszko (2021) shows that in subjunctives, relatives, and participial clauses, [+A] [+focus] expressions and [-A] nominals do not distribute identically: the former can appear in PVSP of these clause types while, as we saw in (7), [-A] cannot. Herein lies the challenge of Pietraszko's new

data. The relevant contrasts are illustrated in (24)-(26).

#### (24) Subjunctive clause

[Ndebele; Pietraszko 2021:589-91]

- a. U-fun-a ukuthi [**u-bani** a-buy-e]? [+A] *wh*-SU OK 2sSM-want-FV COMP AUG-1who 1SM-come-SBJ 'Who do you want to come?'
- b. Ngi-funa ukuthi [**u-Sipho kuphela** a-buy-e]. [+A] *only-*SU OK 1sSM-want-FV COMP AUG-1Sipho only 1SM-come-SBJ 'I want only Sipho to come.'
- c. \*U-fun-a ukuthi [bani a-buy-e]? \*[-A] in same environment 2sSM-want-FV COMP 1who 1SM-come-SBJ Intended: who do you want to come?

### (25) Relative clause

- a. U-zwe i-n-goma [**u-bani** a-yi-hlabelileyo]? [+A] wh-SU OK 2sSM-heard AUG-9-song AUG-1who 1SM-9OM-sing.PST.REL 'You heard the song that who sang?'
- b. Ngi-zwe ingoma [**u-Sipho kuphela** a-yi-hlabelileyo]. [+A] *only-*SU OK 1sSM-heard 9song AUG-1Sipho only 1SM-9OM-sing.PST.REL 'I heard the song that only Sipho sang.'
- c. \*U-zwe i-n-goma [<u>bani</u> a-yi-hlabelileyo]? \*[-A] wh SU 2sSM-heard AUG-9-song 1who 1SM-9OM-sing.PST.REL 'You heard the song that who sang?'

#### (26) Participial clause

- a. U-suk-e [u-bani e-hlabela]? [+A] wh-SU OK 2sSM-leave-PST AUG-1who 1SM-sing 'Who is such that you left while they were singing?'
- b. Ngi-za-pheka [**u-Sipho kuphela** e-nga-ka-fiki]. [+A] *only-*SU OK 1sSM-FUT-cook AUG-1Sipho only 1SM-NEG-yet-arrive 'I will cook when only Sipho hasn't arrived.'
- c. \*U-suk-e [bani e-hlabela]? \*[-A] wh SU 2sSM-leave-PST 1who 1SM-sing Intended: Who is suchthat you left while they were singing?

I adopt Pietraszko's proposal that subjects of indicative clauses surface in TopP, a CP layer absent in subjunctives, relatives, and participial clauses as depicted in (27). TopP is inhospitable to [+focus] material including 'only XP' and wh-phrases whether [+A] or

[-A]. This explains why they are excluded from PVSP of indicatives alone:

Table 2 summarizes the contrasts between [-A] and [+focus] material in Nguni PVSPs that Pietraszko describes. The relationship between focus and [-A] distribution is clearly not a biconditional; (28) expands on (21) to explicitly reflect this fact.

**Table 2**: Contrasting distribution of [-A] and [+focus] material in Nguni PVSPs

Nominal type	S of SV <sub>indicative</sub>	S of SV <sub>non-indicative</sub> following [+A] COMP
[+A] 'only' DP	Х	<b>✓</b>
[+A] wh-word	Х	✓
[-A] negative dependent	Х	X
[-A] wh-word	Х	X

### (28) [+Focus] and [-A] distribution: a one-way correlation

- a.  $\sqrt{If} XP_{[+Focus]}$  is barred from Position P, then [-A] nominals are barred from P
- b. XIf [-A] nominals are barred from Position P, then XP<sub>[+Focus]</sub> is barred from P

The one exception Pietraszko provides to the exclusion of [-A] from PVSPs is the ability of a [-A] negative dependent to follow a [-A] COMP exemplified in (10), repeated below.

(10) A-ngi-fun-i [kuthi (u)Sipho a-buy-e]. [Ndebele; Pietraszko 2021:592] NEG-1sSM-want-NEG COMP AUG-1Sipho 1SM- come.SBJ 'I don't want Sipho to come.'

#### 2.3 Discussion

The facts of (24)-(26) are convincing evidence that focus-features alone cannot explain all of the facts of [-A] distribution, since [-A] and [+focus] expressions do not pattern alike in non-indicative PVSPs. But we saw in §2.1 that the Case account suffers from redundancy with the independently motivated topography of focus in other environments. Moreover, the Case account cannot explain why a [-A] preverbal subject is licit in (10) but not in the embedded indicative (15) despite augment-drop from its COMP. And the

unacceptability of a [-A] in the affirmative (13)a shows that Pietraszko's account of (10) implicitly relies on two licensers, because the proposed Case-licensing is possible only when negation sanctions the presence of a [-A] COMP (examples reproduced below).

- (15) A-ngi-cabang-i [ (u)kuthi [\*(u)-<u>Sipho</u> u-za-pheka ]] [Ndebele] NEG-1SM-think-NEG COMP AUG-Sipho 1SM-FUT-cook 'I don't think Sipho will cook.'
- (13) a. Ngi-fun-a [\*(u)-kuthi [\*(u-)Sipho a-buy-e ]] [Ndebele; Sibanda p.c.] 1sSM-want AUG-COMP AUG-1Sipho 1SM-come-SBJ 'I want Sipho to come.'

As I mentioned above, a different interpretation of the PVSP restrictions merits consideration: the EPP. EPP-effects vary across languages from the simple requirement that there be some expression in PVSP (Holmberg 2000) to fine-grained restrictions regarding the category and size of the occupant as detailed in Buell (2007) on exclusion of PPs from Zulu PVSPs, Halpert (2015) on exclusion of Zulu CPs (though Pietraszko reports them to be accepted in PVSPs of Ndebele), and Deprez (2000) on exclusion of Romance bare nominal subjects, among others. The illicitness of [-A] nominals in PVSPs seems very much akin to this family of constraints. Table 3 adds my proposal to results of existing explorations of the EPP in Nguni languages. <sup>11</sup>

**Table 3**: What satisfies the EPP in Nguni?

Category	Status	Comments
[+A] nominals	<b>√</b>	though *[+focus] 'only XP' and wh- in indicative Spec, TopP
CPs	variable	XZulu (Halpert 2015, 2018), √Ndebele (Pietraszko 2019)
PPs	Χ	See Buell (2007) on Zulu; Carstens (2022) on Xhosa
[-A] nominals	Χ	Ruled out in all 3 languages

I henceforth adopt Carstens & Mletshe's focus-based account of the restrictions in (16)-(20) and advocate an EPP-analysis of the PVSP facts in (24)-(26) approached in

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<sup>&</sup>lt;sup>11</sup> I have found CPs to be fully acceptable in PVSP of Zulu and Xhosa non-indicative clauses. See Carstens (2022) for details and a labeling-theoretic account of the CP and PP facts in Table 3.

terms of the labeling theory of Chomsky (2013) and reflecting a generalization not yet considered, namely that [-A] cannot be agreed with. This and negative concord are key factors in labeling, I will argue. After mapping out the workings of negative concord and wh-licensing in §3 and §4, I argue in §5 that negative concord impacts labeling in a way that neatly explains the distribution of both negative-dependent and wh- [-A] in PSVPs.

# 3 Negative concord and licensing through COMP

My account builds on a parallel between the facts of augment-drop on a subjunctive subject and a hitherto unnoticed generalization about Nguni augment-drop within complex nominal expressions, many facts of which are described for Zulu in Halpert (2015). Halpert shows that augments may be dropped from modifiers within a complex [-A] nominal and describes this as augment-drop concord. Further investigation reveals concordial augment-drop to be consistently licit within complex negative dependents as in (29)a,b, but not within complex *wh*-phrases like the Xhosa (30)a-c or Zulu (31) (from Halpert 2015:224), despite the *wh*-word itself being [-A]. (30)c shows that augment-drop also fails under an alternative noun-initial word order within the *wh*-phrase. <sup>12</sup>

(29) Augment-drop concord is possible within a complex [-A] in negation's scope

a. A-ndi-bon-i ø-<u>zi-hlangu</u> ø-<u>zi-bomvu</u>. [Xhosa]

NEG-1sSM-see-NEG 8-shoes 8-red

'I don't see any red shoes.'

<sup>&</sup>lt;sup>12</sup> Zulu 'what time' in (i)a has two [-A] members but seems to be a phrasal compound since neither *si-ni* – 'what' nor *si-kathi* – 'time' may bear an augment as shown in (i)b, regardless of syntactic context; there are inner prefixes but no augments on the second members of compounds (Halpert 2015:224). Similarly *-ni* in Xhosa 'what gender/kind' is always [-A] and must be preceded by a [-A] noun (Taraldsen 2019), but nominal modifiers nonetheless cannot augment-drop; a compounding analysis seems plausible. That both involve *-ni*, otherwise a morphologically dependent element (Zulu's verbal enclitic 'what'), lends support.

<sup>(</sup>i) a. U-zo-fika nga-<u>si-kathi</u> <u>si-ni</u>? b. ..(\*Yi/i)-<u>si-kathi</u> (\*e-/i-)<u>si-ni</u>...? [Zulu] 2sSM-FUT- come NGA-7-time 7-what COP/AUG-7-time REL/AUG-7-what 'What time will you come?' '...what time...?'

- b. U-Mary a-ka-thand-i ø-<u>zi-nja</u> ø-<u>zi-nkulu</u> zi-ka-<u>John</u>.

  AUG-1Mary NEG-1SM-like-NEG 10-dogs 10-big 10-poss-1John 'Mary doesn't like (any of) John's big dogs.'
- (30) Augment-drop concord is impossible within a complex wh-expression
  - a. U-Mary u-thanda ø-zi-phi \*(i-)zi-hlangu \*(e-)zi-bomvu? [Xhosa] AUG-1Mary 1SM-like 8-which AUG-8-shoes AUG.REL-8-red 'Which red shoes does Mary like?
  - b. U-thanda ø-<u>zi-njani</u> \*(i)-<u>zi-nja</u> \*(e)-<u>zi-ncincini</u>? [Xhosa] 2sSM-like 10-what.kind AUG-10-dogs AUG-10-small 'What kind of small dogs do you like?'
  - c. U-thanda \*(i)-<u>zi-nja</u> \*(e)-<u>zi-njani</u> \*(e)-<u>zi-ncincini</u>? [Xhosa] 2sSM-like AUG-10-dogs AUG-10-what.kind AUG-10-small 'What kind of small dogs do you like?'
- (31) W-a-bona <u>mu-phi</u> \*(u-)<u>mu-ntu</u>? [Zulu] 2sSM-see-PST 1-which AUG-1-person 'Which person did you see?'

Halpert (2015) analyzes augment-drop concord as Case concord, but the contrasts in (29)-(31) make this unlikely. All the [-A] nominals in these examples occupy vP-internal positions that Halpert analyzes as Case-licensed. Halpert points out that [-A] -phi – 'which' (see her (31) and Xhosa (30)a) is possible only vP-internally, as her account predicts; a [+A] form of -phi is required in vP-external locations like the PVSP in (32) (Zulu; adapted from Halpert (2015:225 (368)). Halpert argues that the augmentless -phi exemplified in (31) relies on vP-internal Case-licensing. She does not suggest an account for why augment-drop concord is ruled out on the noun that -phi introduces.

(32) A-ng-azi ukuthi \*(u-)<u>mu-phi</u> u-m-sakazi o-zo-hlukanisa NEG-1sSM-know COMP AUG-1-which AUG-1-broadcaster 1REL-FUT-divide u-nyaka.

AUG-3.year

'I don't know which DJ will be closing out the year.'

I propose instead that clause-level licensing of productive augment-drop concord is provided not by L but by NEG. It is *negative* concord, reflecting syntactic Agree between interpretable negation and unvalued, uninterpretable negation features, henceforth *u*Neg

(see Zeijlstra 2004, 2008, Penka 2011 among others).<sup>13</sup> I follow Haegeman & Lohndal (2010) in analyzing this as a very local relation, the reach of which may be extended through a chain of concord-bearers as illustrated in the West Flemish (33), adapted from Haegeman & Lohndal (2010:194).<sup>14</sup> A West Flemish DP must have a negative head *niet* if NCIs are to be licit within it, much like what we have seen for augment-drop within an Nguni DP. I represent Nguni [-A] as a null D Ø and as a null head on a modifier  $\alpha$  in (34); empirical support is provided in §6.

- (33) Negative concord spreading from D into DP in West Flemish
  - a. dan ze [van \*(niet vele) geen boeken] ketent zyn that they of not many no book contented are 'that they are not pleased with many books'

b. 
$$[NegP OP[iNeg]...[DP niet_{[iNeg]} vele_{[iNeg]} geen_{[iNeg]}]$$

(34) Nguni augment-drop concord:

$$Agree (Neg...[DP] \emptyset D_{uNeg}... \emptyset \alpha_{uNeg}]$$

Returning to the PVSP restriction, (35) and (36) bring out a striking parallelism between augment-drop concord within nominals and CPs. In (35)a NEG licenses nominal augment-drop and, as we saw already in (29), an adjective within the nominal phrase can then augment-drop. As noted in Halpert (2015) for Zulu and shown in (35)b, absent nominal augment-drop the adjective *cannot* augment-drop. The facts of augment-drop on COMP and the subjunctive subject are reproduced in (36) for direct comparison to (35): the subject can augment-drop only if COMP does so. In other words, strict locality allows

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<sup>&</sup>lt;sup>13</sup> A prenominal demonstrative can license augment-drop on material that follows it within DP (see Mbana 2021). I leave unification to future research. See §6 on augments in negative *wh*-questions.

<sup>&</sup>lt;sup>14</sup>See Haegeman & Lohndal (2010) for complex adjacency and anti-adjacency effects which they capture via the binary Agree dependences among concord bearers depicted in (33)b.

augment-drop concord to spread into NEG-licensed DPs and CPs alike.

- (35) Augment-drop concord licit only in a complex negative dependent with a [-A] head
  - a. A-ndi-bon-i <u>zi-hlangu</u> <u>zi-bomvu</u>. [Xhosa]
    NEG-1sSM-see-NEG 8-shoes 'I don't see any red shoes.'
  - b. A-ndi-bon-i i-zi-hlangu \*(e-)zi-bomvu. [Xhosa]

    NEG-1sSM-see-NEG AUG-8-shoes AUG.REL-8-red

    'I don't see any red shoes.'
- (36) Augment-drop in PVSP only in the scope of negation when CP has a [-A] head
  - a. A-ngi-fun-i [kuthi (u)Sipho a-buy-e]. [Ndebele; Pietraszko 2021:592] NEG-1sSM-want-NEG COMP 1AUG-Sipho1SM- come-SBJ 'I don't want Sipho to come.'
  - b. A-ngi-fun-i [u-kuthi \*(u-)Sipho a-buy-e].

    NEG-1sSM-want-NEG AUG-COMP 1AUG-Sipho 1SM-come-SBJ
    'I don't want Sipho to come.'

I propose the account in (37). Here, negation licenses augment-drop on the COMP *ukuthi*, which in turn makes it possible on the local subject of the subjunctive clause (recall from (24)a,b that [+focus] material is licit in subjunctive PVSP). The facts are consistent with the well-established ability of negative concord to spread link-by-link into complex and otherwise opaque expressions as was illustrated in the West Flemish (33) (see also Haegeman & Zanuttini 1991, Hoeksma 2007, den Dikken 2002, 2006, Postal 2005 among many others on *parasitic licensing* of NPIs and NCIs).<sup>15</sup>

(37) Negative concord spreading from C to SU yields a licit [-A] preverbal subject

A-ngi-fun-i

NEG-I-want

COMP

[TP ØuNeg-Sipho a-buy-e]].

1Sipho 1SM-come-SBJ

The Ndebele facts bring to mind an aspect of Basque negative concord discussed in Laka (1990). Laka shows that there is a Basque COMP *duenik* with negative features which is

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<sup>&</sup>lt;sup>15</sup>Under Pietraszko's (2019) proposal that CPs are encased in DP shells, the parallels are even stronger.

licensed by matrix negation. For negative dependents to be acceptable in an embedded clause, that clause must be a subjunctive introduced by *duenik* as shown in the contrast between (38)a,b (Laka 1990:217:(53); labeled bracketing added). Under my analysis of the [-A] ø-kuthi, both cases illustrate strategies to overcome clausal opacity for negative concord by spreading it downwards via a bridging COMP (see also Progovac 1992 for arguments that some embedded NPI-licensing in English works similarly).

- (38) a. \*Inigok ez du sinisten [CP [TP ezerk eztanda egingo] duela]] [Basque] Inigo no has believe anything explode do will that Intended: Inigo does not believe that anything will explode
  - b. Inigok ez du sinisten [CP [TP ezerk eztanda egingo] due<u>nik</u>]] Inigo no has believe anything explode do will that<sub>NEG</sub> 'Inigo does not believe that anything will explode'

In the following section I map out in detail the syntactic relations sanctioning [-A] nominals as dependents of negation and as *wh*-words. This paves the way for my labeling-theoretic analysis of the PVSP constraints in §5.

# 4 The licensing relations

# 4.1 Neg-licensing: heterogeneity with uniform locality

Let us return to the first property of [-A] nominals introduced in §1.1, namely that they may surface only as *wh*-phrases and in the scope of negation. It is commonly assumed that *in situ wh*- lack intrinsic quantificational force and therefore must be unselectively bound by the interrogative clause-typing  $C_Q$  (see among many others Baker 1970, Pesetsky 1987 and Cheng 1997). The syntactic reliance of negative dependents on local negation is also well-established (Haegeman 1995, Zanuttini 1997, Laka 1990/2019, Progovac 1988, 1993a, among many others). I propose the baseline requirement (39)

(assuming a chain of negative concord provides an indirect strategy for NEG-licensing). 16

(39) [-A] must be syntactically licensed by c-commanding *i*NEG or C<sub>Q</sub>.

The facts of [-A] in negative contexts are heterogenous and intricate. Because they will play an important role in the analysis I provide full details.

Carstens & Mletshe (2016) show that in addition to combining with a clausal negator to yield single negation readings, three Zulu [-A] are acceptable negative fragment answers as exemplified in (40)a-c. This duality of function is a hallmark of true negative concord items (Valduví 1994, Giannakidou 2006). Other [-A] are ill-formed as fragment answers (see (40)d,c), like English NPIs: \*(I didn't see) any woman!<sup>17</sup>

All nominals including proper names seem able to drop their augments in the scope of negation; see the Ndebele (41) from Pietraszko (2021) and the Xhosa/Zulu (42).

- (41) A-ba-bon-i (u)-<u>Zodwa</u>. [Ndebele; Pietraszko 2021:583] NEG-2SM-see-NEG AUG-Zodwa 'They don't see Zodwa.'
- (42) U-Sabelo a-ka-thand-i <u>Zodwa/m-fazi/zi-nja</u>. [Xhosa/Zulu] AUG-1Sabelo NEG-1SM-like-NEG Zodwa/1-woman/10-dogs 'Sabelo doesn't like Zodwa<sub>F</sub> /any woman/any dogs.'

Despite their heterogeneity, all [-A] in negative contexts share several syntactic

 $^{16}$  For brevity's sake I ignore raising approaches to NCIs and Qs (Collins & Postal 2015, Cable 2010). Carstens & Mletshe (2016) report that 1/3 of the Xhosa speakers in their study accepted [-A] in polar questions. For speakers who do not, the licenser is better identified as  $C_{WH}$  but I leave this aside.

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<sup>&</sup>lt;sup>17</sup> Carstens & Mletshe (2016) also show that Zulu *muntu* – 'nobody' and *lutho* 'nothing' may be modified by *cishe* – 'almost', another common NC diagnostic. A third, the ability to appear in PVSP with apparent negative force, is unhelpful in Nguni due to independent factors ruling [-A] out in this location; see §1.2.

constraints previewed in §1. These include the PVSP exclusion, the restrictions that (17)–(18) showed to be shared with [+focus] material, and the requirement of clausemate negation in indicatives exemplified in (43).<sup>18</sup>

- (43) a. \*U-Mary a-ka-tshongo [ukuthi u-John u-thanda <u>m-fazi/Zodwa]</u>. [Zulu] AUG-1Mary NEG-1SM-say COMP AUG-1-John 1SM-like 1-woman/Zodwa Intended: Mary didn't say that John likes any woman/likes Zodwa<sub>F</sub>.
  - b. \*U-Simiso a-ka-zi [ukuthi u-Sabelo u-dl-e nyama]. [Zulu] 1-1Simiso NEG-1SM-know COMP AUG-1Sabelo 1SM-eat-PST 9meat 'Simiso doesn't know that Sabelo ate any meat.'
  - c. \*A-ndi-cabang-i [ukuba u-bon-e m-ntu/Zodwa.] [Xhosa]

    NEG-1SM-think-NEG.PRES COMP 1SM-see-PST 1-person/Zodwa

    Intended: I don't think that (s)he saw anyone/saw (any) Zodwa<sub>F</sub>.'
  - d. \*A-ndi-qond-i [ukuba a-ba-ntwana ba-bona m-fazi]. [Xhosa] NEG-2SM-believe-NEG COMP AUG-2-children 2SM-see 1-woman 'I don't believe that the children see any woman.'

The speakers I consulted also found relative and participial clauses opaque to negationlicensing, providing further evidence of its local character.<sup>19</sup>

- (44) Participial adjunct clauses are opaque to cross-clausal negation-licensing
  - a. U-suk-e [ku-hlabela <u>bani</u>]? 2ssm-left 17sm-sing 1who Lit: You left while who singing?'

[Ndebele; Pietraszko 2021]

b. **A**-ngi-soze ngi-suke [\*(u-)<u>Sabelo</u> e-hlabela]

NEG-1sSM-AUX.FUT 1sSM-leave AUG-Sipho 1sM-sing
'I will not leave while Sipho is singing.'

<sup>&</sup>lt;sup>18</sup> Carstens & Mletshe (2016) report that 10/10 Xhosa and 7/7 Zulu speakers in their study strongly rejected cross-clausal licensing except into subjunctives, as did all 3 Zulu and 5 Xhosa speakers in the present study. In contrast, Halpert (2015) reports that more than half the Zulu speakers in her study accepted cross-clausal licensing into indicatives. See Carstens & Mletshe (2016) for a proposal that NEG-raising and the permeability of Bantu clauses exhibited in hyper-raising may underlie this discrepancy; Halpert (2015:240) notes a correlation between acceptance of hyper-raising and cross-clausal NEG-licensing. Pietraszko (2021) exemplifies cross-clausal licensing into the indicative complement of 'think', a classic NEG-raising verb.

<sup>19</sup> Halpert (2015: 213) provides example (i) in which the head of a relative and its modifiers are [-A]. This resembles negative concord reaching into other opaque constituents as represented in (33) and (37).

<sup>(</sup>i) A-ngi-bon-i <u>bantu</u> <u>ba-gqoka</u> <u>zi-gqoko</u> <u>zi-bomvu</u>

NEG-1sSM-see-NEG AUG-2-people 2-wear 8-hat 8-red

<sup>&#</sup>x27;I don't see any people wearing red hats.'

- c. **A**-ngi-soze ngi-suke [ku-hlabela \*(u-)<u>Sipho</u>]

  NEG-1sSM-AUX.FUT 1sSM-leave 17SM-sing AUG-Sipho
  'I will not leave while Sipho is singing.'
- (45) Relative clauses are opaque to negation-licensing

**A**-ndi-zange ndi-yi-bon-e [RC i-ndoda i-theng-e \*(i)-ncwadi.] [Xhosa] NEG-1sSM-NEG 1SM-9OM-see-PST AUG-9man 9REL-buy-PST AUG-9book 'I didn't see the man who bought a/the/any book.'

On the other hand, [-A] are licit as internal arguments in subjunctives under superordinate negation as shown in the Xhosa (46). This is a difference between the Nguni facts and those of Basque introduced in (38) which will be discussed in detail in §4.2.

(46) **A**-ka-cel-i [ukuba \*(u-)Sabelo a-bon-e <u>m-ntu/Zodwa</u>]

NEG-1SM-ask-NEG COMP AUG-1-person 1SM-cook-SUBJ 1-person/Zodwa 'S/he isn't asking that Sabelo see anybody/see Zodwa<sub>F</sub>.'

Table 4 summarizes these aspects of [-A] nominal distribution.

**Table 4**: Distributional properties of [-A] nominals (IA = internal argument)

Type of	Negative	PVSP in	PVSP in	Clausemate NEG	Clausemate NEG
[-A]	fragment	indicatives	subjunctives,	needed for IA in	needed for IA in
	answer		relatives, participials	indicatives	subjunctives
Zulu <i>lutho</i> ,	Yes	No	No	Yes	No
muntu, ndawo					
Other negative	No	No	Only in Ndebele	Yes	No
dependent			under [-A] COMP		
Proper names	No	No	As above	Yes	No
Wh-	N/A	No	No (but see §5.1)	No	No

The facts in (40)-(45) are best reflected by designating all negation-licensed [-A] in Nguni as *strict negative dependents* including [-A] proper names, [-A] NPIs like (3)d *mfazi* – 'any woman', and the true NCIs *muntu* – 'nobody', *ndawo* – 'no place' and *lutho* – 'nothing' in (40). This raises a potential complication concerning the negative concord analysis of augment-drop: if only *muntu*, *ndawo*, and *lutho* are full-fledged NCIs (see (40)), a question arises as to why modifiers within the other negative-dependent [-A] can participate in augment-drop concord. To account for this I adopt a proposal of Carstens &

Mletshe (2016) that [-A] nominals which fail the fragment-answer diagnostic have negative concord features nonetheless, but they are too weak to be compatible with the silent or elided negation often posited as the licenser of negative fragment answers in negative concord languages (see (47), from Zeijlstra 2004). Carstens & Mletshe draw a comparison to the idea that *u*phi features of T vary in whether they are compatible with *pro*-drop -- those of Italian T are strong enough, while those of English are too weak.

(47) [OP<sub>iNeg</sub>....nessuno<sub>uNeg</sub>] (Zeijlstra 2004) *Licensing an n-word in all fragment answers* 

# 4.2 The subjunctive puzzle

As we have seen, the clausemate restriction has a systematic exception: matrix negation licenses [-A] internal arguments within subjunctive complements (see the Zulu (48)).

(48) A-ka-cel-i [ukuthi u-Sabelo a-bon-e <u>mu-ntu/Zodwa</u>] NEG-1SM-ask-NEG COMP AUG-1-person 1SM-cook-SUBJ 1-person/Zodwa 'S/he isn't asking that Sabelo see anybody/see Zodwa<sub>F</sub>.'

On the other hand, we have also seen that subjunctives disallow [-A] preverbal subjects, leading Pietraszko (2021) to treat them as opaque to Case-licensing from matrix L.

(9) A-ngi-fun-i [u-kuthi \*(u-)Sipho a-buy-e]. [Ndebele; Pietraszko 2021:591] NEG-1sSM-want-NEG AUG-COMP AUG-1Sipho1sM-come-SBJ 'I don't want Sipho to come.'

PVSP of a subjunctive contrasts with the position of internal arguments in that it can be reached for negation-licensing only via a negative-licensed COMP, strongly suggesting the existence of clausal opacity to Agree (Neg, [-A]) reaching into subjunctives.

(10) A-ngi-fun-i [kuthi (u)<u>Sipho</u> a-buy-e]. [Ndebele; Pietraszko 2021:592] NEG-1sSM-want-NEG COMP 1AUG-Sipho 1SM- come-SBJ 'I don't want Sipho to come.'

To reconcile the seemingly contradictory properties of subjunctives with respect to [-A] distribution I propose that they are in fact opaque to negation-licensing. A special

mechanism makes possible negative-dependent internal arguments in cases like (48).

Cross-linguistically, the exceptionality of subjunctives with respect to otherwise strict clausemate requirements is widespread and has received extensive attention (see Giannakidou & Quer 1997, Haegeman & Zanuttini 1991, Giannakidou 1998, 2009, Progovac 1993b, Picallo 1984, Penka 2011 among others). For example, Progovac (1993)b shows that NCIs are licit in the clausal complements to verbs like 'want' in Serbo-Croatian but not in clausal complements to verbs like 'claim', a contrast that she analyzes in terms of a subjunctive vs indicative distinction (see (49)-(50)). The pattern is typical for languages with NCIs; Spanish examples in (51) are from Arnaiz (1996).<sup>20</sup>

- (49)\*Ne tvrdim [da vidim *nikoga*]. [Serbo-Croatian; Progovac 1993b:117-119] not claim that see no one Intended: I don't claim that I can see anyone.
- (50) Ne zelim [da vidim nikoga]. not want that see no one 'I don't wish to see anyone.'
- (51) a.\*No dijo que Juan besó a nadie. [Spanish; Arnaiz 1996:54]

  NEG said.3s that Juan kissed.3s P n-body

  'She didn't say that Juan kissed anybody.'
  - b. No espero que Juan bese a nadie NEG expect.1s that Juan kiss.SBJ P n-body 'I do not expect Juan to kiss anybody.'

Many existing syntactic approaches assume subjunctive clauses have reduced size (Giorgi 2006) and/or a dependency relation between their inflection and that of the matrix clause (Progovac 1993b, Bobaljik & Wurmbrand 2013), permitting all arguments within

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<sup>&</sup>lt;sup>20</sup> In Xhosa, infinitives are also transparent to negation-licensing as reported for other languages (Giannakidou 2000) (see (i)). Clauses with class 17 expletive subject agreement seem more transparent than those with full agreement; (ii) is judged somewhat more acceptable than the examples in (43)).

<sup>(</sup>i) A-ndi-fun-i [ku-bona Ø-m-ntu]. (ii) ??U-Sabelo a-ka-tshongo ukuba [ku-phek-e mntu] NEG-1SSM-want 15-see Ø-1person 'I don't want to see anybody.'

AUG-Sabelo NEG-1SM-say that 17SM-cook-PST 1person 'Sabelo didn't say that anybody cooked.'

a subjunctive clause to be equally accessible to matrix negation. Something different is needed to accommodate the Nguni subject-object asymmetry.

My account builds on the evidence that local, c-commanding negation is necessary for licensing and on an intuition underlying most existing accounts, namely that subjunctive inflection is anaphoric. I suggest that as part of this anaphoricity the Nguni subjunctive clause may include a silent copy of matrix negation, able to license negative dependents that it c-commands within the subjunctive clause.<sup>21</sup> The silent negation functions rather like controlled PRO: <sup>22</sup> while it obtains its features from a binder, it can itself function as a binder as well.

(52) John<sub>i</sub> wants [PRO<sub>i</sub> to see himself<sub>i</sub> in the mirror]

I adopt for Xhosa and Zulu a proposal of Pietraszko (2018a) that negation's locus is low in Ndebele subjunctives. Taking the position of the silent negation to be the same as that of its overt, independent counterpart, it provides licensing only to internal arguments in the subjunctive complement, since only internal arguments are within its e-command domain as (53) shows.

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<sup>&</sup>lt;sup>21</sup> Pietraszko (2018)b reports that the tense of an Ndebele subjunctive clause does not covary with its selecting verb and suggests that it is exceptionally *not* anaphoric. Absence of temporal co-variation between subjunctive and matrix tenses is not uncommon and not viewed as inconsistent with the anaphoric approach; see among others Quer (2020) for helpful discussion. For concreteness sake I suggest that Ndebele subjunctive clauses might feature an invariant anaphoric tense form like Bantu 'self' anaphors; in Nguni *zi*: *Ndazibona* – 'I saw **myself**', *Bazibona* – 'They saw **themselves**' etc.

<sup>&</sup>lt;sup>22</sup> Vergara (2017) shows that Spanish object but not subject n-words are licit in complements to subjunctive-selecting verbs 'doubt' and 'deny' and on this basis argues that apparent cross-clausal licensing of an embedded n-word subject in reality relies on NEG-raising from subjunctive clauses to a position high enough to c-command the subject – a movement blocked out of complements to 'doubt' and 'deny'. A problem for a NEG-raising approach to subjunctive clause transparency exists in verbs like 'ask' (see (48)) since I didn't ask that John see anybody  $\neq I$  asked that John not see anybody. For this reason I propose the copy account sketched here and leave the Spanish restriction aside.

(53) Analysis of (48): a silent anaphoric negation in the subjunctive is bound by the superordinate clause Neg. It can license a [-A] direct object but not the subject in PVSP due to a failure of c-command.

$$[ \text{Indicative } T1_i \, \text{NEG1}_j \, \dots \, [ \text{CP COMP } \, [ \text{Subjunctive *[-A] } \, T2_i \, \text{NEG2}_j \, \, \, \checkmark [\text{-A]]]]]$$

It follows that a single factor underlies the ungrammaticality of (54)a,b: the local NEG does not c-command the subjunctive subject in either case.

- (54) a. \*Ngi-cela [ ukuthi [<u>mu-ntu</u> a-**nga**-phek-i ]] [Zulu] 1sSM-ask COMP 1-person 1SM-NEG-cook.SBJ Intended: I ask that nobody cook.'
  - b. \*A<sub>i</sub>-ngi-cel-i [ukuthi [\*mu-ntu a-Ø<sub>i</sub>-phek-e.]]

    NEG<sub>i</sub> -1sSM-ask-NEG COMP 1-person 1SM- NEG<sub>i</sub>-cook-SBJ

    Intended: I don't ask that anybody cook.'

Under this account, the absence of subject-object asymmetries for embedded NCIs in other languages suggests that their subjunctive clauses include negation with scope over PVSP. This may take the form of a (silent) clausal negation that is higher than in Nguni subjunctives, like that commonly assumed to license fragment answers and preverbal NCIs. Alternatively, following Laka (1990), languages may have a negative COMP in the scope of negative subjunctive-selecting verbs like that of Basque (exemplified in my (38)), but different in being homophonous with their ordinary non-negative COMP. Both scenarios would suffice to explain why NCIs are uniformly licit within a subjunctive clause under matrix negation as they are in Nguni clauses headed by augmentless *kuthi*. Details likely vary cross-linguistically; I leave this to future research.

Summing up, apart from an anomaly associated with internal arguments in subjunctives, clausemate effects add to the evidence of augment-drop concord that negative-dependent [-A] nominals have negative concord features, uNeg, which require

valuation in clause-bound Agree. We will see in §4.3 that unselective binding of *wh*- by C<sub>Q</sub> differs in being non-local. It follows that an agreement-based feature-sharing account is appropriate for negative dependent [-A] alone.

## 4.3 The non-locality of unselective binding by C<sub>Q</sub>

Assuming wh-questions involve a clause-typing  $C_Q$  (Cheng 1997) I have suggested that there is a relation  $[C_Q...[-A]]$  comparable to [NEG...[-A]] in making [-A] nominals licit. This section establishes the non-local profile of  $C_Q$ -licensing and hence its distinctness from the Agree relation licensing augment-drop concord under negation.

A small, closed class of lexical items serve as *wh*-words: in Zulu, *-phi* 'which', (*ku-)phi* – 'where', (*u-)bani* 'who', (*i-)ni* 'what,' *-ngaki* 'how many', *-njani* 'what kind/how', *nini* – 'when' and *ngani* 'why'. I assume that *wh*-features of these items make them compatible with and requiring of licensing by C<sub>Q</sub>. While all postverbal *wh*- are [-A] in Xhosa (see (55)a), Zulu allows [+A] *wh*- in situ as shown in (55)b.<sup>23</sup> These too by assumption have *wh*-features requiring unselective binding by C<sub>Q</sub>.

The examples in (55) show that a [+/-A] *wh*- may take matrix scope from within an embedded clause. This is a first indicator that licensing by C<sub>Q</sub> is non-local.

- (55) a. U-cinga ukuba u-Mary u-thanda (\*u-)<u>bani</u>? [Xhosa: \*postverbal [+A] wh] 2sSM-think COMP AUG-1Mary 1SM-like AUG-1who 'Who do you think Mary likes?'
  - b. U-cabanga ukuthi u-Mary u-thanda (u-)<u>bani</u>? [Zulu]
    2sSM-think COMP AUG-1Mary 1SM-like AUG-1who
    'Who (exactly) do you think Mary likes?'

Both [+A] and [-A] wh- are licit within adjuncts and relative clauses (see the Zulu (56)-

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<sup>&</sup>lt;sup>23</sup> While there is a preference in Nguni for *wh*- to appear immediately after the verb, my investigation uncovered no correlates between word order and scope-taking so I leave this aside.

- (57) and Xhosa (58)-(59)). They may also ignore islands in taking matrix scope from an embedded clause construed as a reported *wh*-question or 'whether' complement as in the Xhosa (58)a,b (this test from Lasnik & Saito 1992, Watanabe 1992).
- (56) U-Mary w-a-hamba ngaphambi kokuthi u-John a-fik-e <u>kuphi</u>? AUG-1Mary 1SM-PST-leave before COMP AUG-1John 1SM-arrive-SBJ where 'Where did Mary leave before [John arrived <where>]?
- (57) U-Sabelo w-a-hlangana nowesifazane o-funa-<u>ni/i-ni?</u>
  AUG-1Sabelo 1SM-PST-meet with. AUG-1woman1REL-want-9what/ AUG-9what 'What did Sabelo meet the woman who wants?'
- (58) a. U-John u-funa u-kw-azi ukuba u-Mariya u-thenge i-n-cwadi. AUG-1John 1SM-want AUG-15-know COMP AUG-1Mary 1SM-buy AUG-9-book 'John wants to know whether Mary bought a book.'
  - b. U-John u-funa u-kw-azi ukuba u-Mariya u-thenge <u>ntoni.</u> AUG-1John 1SM-want AUG-15-know COMP AUG-1Mary 1SM-buy 9what 'John wants to know what Mary bought.' *OR* 'What does John want to know whether Mary bought?'

A question in which a *wh*- appears within an island may be answered with a single word, as in the (59) Q and A pair. This is at odds with a potential analysis in terms of covert pied-piping of the *wh*-, for which a diagnostic is a requirement that the answer must repeat the whole island (see Nishigauchi 1984, Choe 1987, Pesetsky 1987 on Japanese).

(59) Q: U-bon-e u-mu-ntu o-thanda (u-)bani? A: John [Zulu] 2sSM-see-SBJ AUG-1-person 1REL-like AUG-1who 'Who did you see the person that likes?' 'John.'

The sole island in which wh- are consistently ruled out is indicative PVSP, though they are fine in subjunctive PVSP as shown in the contrast of (60)a with (60)b.

- (60) a. \*[I-si-thombe si-ka-<u>bani</u>] si-lenga odong-eni. [Zulu]

  AUG-7-picture 7-POSS-1who 7SM-hang LOC.3wall-LOC

  Intended: Who does a picture of hang on the wall?
  - b. \( \sqrt{U-funa} \) ukuthi [[i-si-thombe si-ka-\( \frac{bani}{ani} \)] si-leng-e odong-eni]? 2sSM-want COMP AUG-7-picture 7-POSS-1who 7SM-hang-SBJ LOC.3wall-LOC 'Who do you want a picture of to hang on the wall?'

Focus-features account for this contrast. Recall Pietraszko's (2021) demonstration that subjunctives differ from indicatives in permitting [+focus] material in PVSP (see (61) vs (19)a,b, repeated below).

- (61) a. Ngi-funa [ukuthi √[u-John kuphela] a-pheke] [Ndebele; Pietraszko 2021:589] 1SM-want COMP AUG-1John only 1-cook.SBJ 'I want only John to cook.'
  - b. U-funa [ukuthi √u-bani a-pheke]? 1SM-want COMP AUG-1who 1-cook.SBJ 'Who do you want to cook?'
- (19) a. \*(U-)<u>bani</u> u-fik-ile?
  AUG-1who 1SM-arrive-DISJ.PST
  Intended: Who arrived?
  - b. \*[U-John kuphela] u-fik-ile [Xhosa/Zulu]
    AUG-1John only 1SM-arrive-DISJ.PST
    Intended: Only John arrived.

[Xhosa/Zulu]

I have adopted Carstens & Mletshe's (2016) proposal that [-A] nominals are [+focus] expressions. Assuming there is *focus-projection* from a *wh*-phrase to its containing DP, the antifocus status of indicative PVSP explains the ill-formedness of (60)a just as it does (19)a,b (see Cinque 1993, Selkirk 1984, Adger 2006, Bresnan 1971, Arregi 2016 among others on focus projection).<sup>24</sup> In contrast, it is unclear how these facts could be approached in terms of Case. Since *bani* in (60)b is well-formed, Halpert and Pietraszko's accounts would need to assume that it has Case-licensing, perhaps from the possessive marker *ka* (paralleling English 'of'). But *ka* is also present in (60)a, yielding a conundrum as to the source of ill-formedness. That the focus-approach can easily explain the contrast between (60)a and (60)b is an argument in its favor.

<sup>&</sup>lt;sup>24</sup> There is no [+A] counterpart to *ka-bani* 'whose/of whom' to explore with respect to the focus projection analysis of (60)a,b. Thanks to an anonymous reviewer for help clarifying this.

Returning to the issue of locality, the general absence of island effects suggests that there is neither raising of a silent element to the scope position of wh-, nor feature-valuation via Agree between  $C_O$  and wh, nor covert raising of a wh-phrase itself in Nguni.

# 5 EPP effects, obligatory subject agreement, and labeling

## 5.1 The ubiquity of uNeg

With the properties of negative- and *wh*-licensing established I return now to the PVSP restriction on [-A] nominals exemplified in (7)a and (9), repeated below.

- (7) a. \*U-fun-a u-kuthi [<u>bani</u> a-buy-e]? [Ndebele; Pietraszko 2021:589] 2sSM-want-FV AUG-COMP 1who 1SM-come-SBJ Intended: Who do you want to come?
- (9) A-ngi-fun-i [u-kuthi \*(u-)Sipho a-buy-e].[Ndebele; Pietraszko 2021:591] NEG-1sSM-want-NEG AUG-COMP 1AUG-Sipho 1SM-come-SBJ 'I don't want Sipho to come.'

As we saw in §4, augment-drop in (9) is ruled out by the locality of negation-licensing: §4.1 showed that negative concord is clause-bound, and §4.2 extended this to subjunctives, arguing that they are opaque, contrary to appearances. The obfuscating factor is that [-A] internal arguments within subjunctive complements are in the c-command domain of an anaphoric copy of the selecting verb's negation as shown in (62). The embedded subject of a subjunctive is not local to the matrix negation and is outside the c-command domain of its low copy, so it can only be licensed through a negative concord relation with the local COMP as shown in (37), repeated below.

- (62) A<sub>i</sub>-ka-cel-i [CP ukuthi [TP \*(u-)Sabelo a-Ø<sub>i</sub>-bon-e muntu/Zodwa]]. NEG-1SM-ask COMP 1SM-NEG<sub>i</sub>-see-SBJ 1-person/Zodwa 'S/he isn't asking that Sabelo see anybody/see Zodwa<sub>F</sub>.'
- (37) Negative concord spreading from C to SU yields a licit [-A] preverbal subject

  A-ngi-fun-i

  NEG-I-want

  COMP

  Type of the subject of the

The status of (7)a is more puzzling. Since wh-phrases have no obvious dependency on negation, and since no locality characterizes their relationship to  $C_Q$  the way that clausal opacity to negative concord rules out augment-drop in (9), why should (7)a be out?

I propose that a featural deficiency excludes [-A] wh- from PVSPs, and in particular that it is the same one which rules out the [-A] negative dependent in (9): unvalued uNeg. Recall from §2.1 that any common noun, or proper name, or even the COMP u-kuthi, can become a strict negative dependent by dropping its augment. If uNeg is a consistent ingredient in the feature content of every Nguni [-A] nominal, the full productivity of this process is explained and the exclusion of a wh- in PVSP automatically follows.

Supporting evidence is provided by Galen Sibanda (personal communication), a native speaker of Zimbabwean Ndebele. In his judgment, the *wh*-subject of a subjunctive clause introduced by a [-A] COMP may be [-A] in the scope of negation (see (63)), the same as a common noun or proper name (see (10), repeated below). This makes perfect sense under my proposal that all [-A] nominals have *u*Neg features, including [-A] *wh*-. I view (63) as valuable confirmation for the approach.

- (63) **A**-wu-fun-i [Ø-<u>kuthi</u> [ (u-)<u>bani</u> a-buy-e]]? [Galen Sibanda p.c.] NEG-2sSM-want-NEG COMP AUG-1who 1SM- come-SBJ 'Who don't you want to come?'
- (10) A-ngi-fun-i [kuthi (u)Sipho a-buy-e]. [Ndebele; Pietraszko 2021:592] NEG-1sSM-want-NEG COMP AUG-Sipho 1SM-come-SBJ 'I don't want Sipho to come.'

What remains to be captured is why [-A] wh- should require negation-licensing when they occupy PVSP but apparently in no other clausal location, given the licitness of their appearance as internal arguments in affirmative clauses like (55)b, repeated below.

(55) b. U-cabanga ukuthi u-Mary u-thanda (u-)<u>bani</u>?

2sSM-think COMP AUG-1Mary 1SM-like AUG-1who

'Who (exactly) do you think Mary likes?'

[Zulu]

In what follows I propose that the unvalued uNeg features of preverbal [-A] nominals block them from valuing agreement that is needed to label clauses (see Chomsky 2013 on labeling). And as we have seen, [-A] serving as strict negative dependents rely on Agree with NEG to meet the [-A] licensing requirement in (39). But wh- instead meet the licensing requirement through their relationship with c-commanding  $C_Q$ . Therefore wherever feature-sharing is not needed for labeling, the uNeg of [-A] wh- need not be valued, following Preminger's (2014) proposals that agreement may licitly fail.

# 5.2 The labeling algorithm and unvalued features

This approach has three ingredients. Following Chomsky (2013), labeling is accomplished by an algorithm that applies at the phase level. A configuration [X, YP] is labeled XP based on its unique head X as in (64)a. In contrast an [XP, YP] configuration lacks a unique head and must be labeled by shared features as shown in (64)b. (64) Chomsky (2013) labeling by algorithm:

a. A unique head labels ?  $\rightarrow$  XP X YP X YPb. Shared features must label [XP, YP] ?  $\rightarrow$   $_{\phi}P$   $XP_{\phi} YP_{\phi} XP_{\phi} YP_{\phi}$ 

Merge of an agentive subject creates an illicit [XP, YP] configuration: \*[DP vP]. The subject therefore raises obligatorily out of vP to a landing site where shared features can provide a label — canonically, a PVSP position associated with subject-verb agreement, in a classic EPP-effect. I maintain the standard assumption that agreement is

accomplished via downwards-probing Agree, as in Chomsky's account, but its success becomes crucial for convergence once a subject has raised and labeling is attempted.

Chomsky's labeling approach straightforwardly accounts for why agreement is obligatory with preverbal subjects in Bantu. It eliminates the need for a proposed linkage between T's uPhi and an EPP-feature proposed in Baker (2003), Baker & Collins (2002), Carstens (2005) to capture the fact that whatever precedes T must agree with it.

The second ingredient of my account is a proposal that Nguni [-A] nominals are unable to participate in the feature-sharing needed to label if they have unvalued uNeg features, as sketched in (65).

(65) Absent valuation, uNeg of a [-A] negative dependent excludes it from PVSP

\*...[CP u-kuthi [? Ø<sub>uNeg</sub>-Sipho a-buy-e]].

AUG-COMP 1Sipho 1SM-come-SBJ

As above discussion has noted, phi-agreement is a standard mechanism of feature-sharing for preverbal subjects. It is therefore highly relevant that [-A] are never agreed with.<sup>25</sup> We have seen this in the fact that they cannot occupy *any* PVSP, even those tolerant of other [+focus] material like 'only XP' and [+A] *wh* (see (24)-(26); this is the core of Pietraszko's argument for advocating that the Case account of the PVSP restriction is superior to the focus-based account. We have also seen that [-A] cannot be doubled by object-marking under dislocation; see (16)-(19) and (66)a. (66)b shows that they cannot

<sup>&</sup>lt;sup>25</sup> Halpert (2015:77) argues that a [-A] values subject agreement just in case it undergoes raising-to-object from a subjunctive clause (see (i)). I assume instead that agreeing T labels TP in a case like (i) (the lower copy of *muntu* is invisible to the labeling algorithm, following Chomsky 2013).

<sup>(</sup>i) A-ngi-fun-i <u>muntu</u> [ukuthi [TP <muntu> a-phek-e i-qanda]]. NEG-1sSM-want-NEG 1person COMP 1SM-cook-SBJ AUG-5egg

<sup>&#</sup>x27;I don't want anyone to cook a(ny) egg.'

surface as agreeing post-verbal subjects. <sup>26</sup>

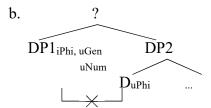
- (66) a. U-**m**-bon-ile]<sub>vP</sub> \*(u-)<u>Sipho?</u> [Xhosa/Zulu] 2sSM-3sOM-see-DISJ.PST AUG-1Sipho 'Did you see Sipho?'
  - b. U-fik-ile \*(u-)<u>Sipho</u>.
    1SM-arrive-DISJ.PST AUG-1who
    'Sipho arrived.'

I accordingly propose that a uNeg feature of a [-A] expression renders it unable to serve as goal in Agree under (67), unless successfully valued as it is in (37).

(67) <u>The Agreement Mixing Prohibition</u>: An expression with an unvalued agreement feature may not value agreement.

This approach converges in a significant way with a proposal in Bošković (2019, 2020, 2021) that uFs in general thwart labeling (see (68)). I explore this connection in §5.4.

- (68) The presence of an uninterpretable feature blocks labeling via feature-sharing in XP-YP configurations (from Bošković 2020, 2021:10 (24)).
- (67) is an update of a proposal made in Carstens (1991) to address a gap in DP-internal agreement. I pointed out there that while many languages have possessor agreement and many have nominal concord within DPs, bidirectional agreement along the lines of (69) seems to be rare or non-existent.
- (69) a. \*my-masc.pl sons-1s

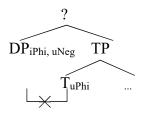


Like the problem at hand, this is compatible with the view that the goal in Agree cannot

<sup>&</sup>lt;sup>26</sup> As previously noted, indicative PVSPs and dislocated positions exclude [+focus] material so [-A] are doubly ruled out in such positions. I leave labeling of [+A] dislocated material to future research; see Zeller (2015)a,b for relevant discussion.

itself have unvalued agreement features.<sup>27</sup> Let us take that insight as the basis for hypothesizing that labeling fails when any [-A] appears in PVSP. In (70) uNeg cannot obtain a value in the Agree relation valuing uPhi. This circumstance seems to be incompatible with successful feature-sharing in PVSP. <sup>28</sup>

### (70) Feature-sharing thwarted when the goal bears unvalued agreement features



The formulation in (67) leaves the door open for successful feature-sharing without phiagreement. This is important in relation to postverbal subjects in transitive expletive constructions (TECs) to be discussed in §7, where I argue that labeling by focus-features is possible because phi-agreement plays no role in it.

## 5.3 Permanently unvalued uNeg are licit outside of [XP, YP] contexts

Clearly there is more to be said about [-A] wh-phrases since they are licit without negation-licensing outside of PVSP as demonstrated in (3)a, repeated below. If [-A] wh-have uNeg features as shown in (71), why are they not ruled out in such contexts?

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evidence that that problems do arise, as is the fact that a [-A] in PVSP is well-formed only if negation-licensed. See also Bošković (2009)a on failures of gender agreement with singular first conjuncts. Bošković notes that if each unvalued feature probed separately, uNum could be valued by [+plural] &P and uGender by singular DP1, but this fails in many cases (see Taraldsen et al 2018, Carstens 2019 on Xhosa).

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<sup>&</sup>lt;sup>27</sup> Norris (2014) argues that Case-concord and possessor agreement cooccur in Finnish and Skolt Saami, pointing out that such cooccurrences are expected if agreement and concord are non-overlapping in their domains of application, as he proposes (morphological vs. syntactic components). This overlap need not in principle be incompatible with my proposals here, which can be formulated so as to differentiate among varieties of features. But Carstens (2020) argues that the evidence supports the opposite conclusion. It's accordingly possible that Case-concord falls under (67), though I leave this to future research.

<sup>28</sup> An anonymous reviewer argues that if uFs probe individually problems should not arise. I take (67) as evidence that that problems do arise, as is the fact that a I-A1 in PVSP is well-formed only if negation-

- (3) a. U-bon-e <u>bani?</u>
  2sSM-see-PST 1who
  'Who did you see?'
- (71) [TP U-bone baniuNeg]? you-saw 1who

This brings us to the third ingredient of the account: as mentioned in §5.1 I follow Preminger (2014) in assuming that all else being equal, unvalued agreement features are licit in syntax; they do not cause derivational crashes. Recall that [-A] *must* be licensed (see (39), repeated below). For negative-dependent [-A] like *lutho* – 'anything/nothing', mfazi – 'any woman' and [-A] proper names like  $\emptyset$ -Sipho – 'Sipho', the only possibility is negation-licensing, so we find they are licit only where their features can be valued in a clause-bound Agree relation (*i*Neg, *u*Neg). But for [-A] with *wh*-features, on the other hand, the licenser  $C_Q$  suffices to fulfill the licensing requirement in (39).

(39) [-A] must be syntactically licensed by c-commanding iNEG or C<sub>Q</sub>.

Absent valuation of their uNeg we might expect [-A] wh- to surface with some kind of default morphology, but this would likely take the form of the augment. Since  $C_Q$  is an alternative licenser of augment-drop, default augments do not surface on  $C_Q$ -licensed wh.

Summing up, I have argued that uNeg features are not intrinsically in need of valuation – a freedom that they share with uPhi, assuming Preminger (2014). As a result, wh-phrases may surface in augmentless form with uNeg unvalued, and augment-drop licensed by  $C_Q$ . They may not, however, surface augmentless in PVSP, unless their uNeg is valued via negation-licensed [-A] COMP as in (63), repeated below.

(63) **A**-wu-fun-i [Ø-<u>kuthi</u> [ (u-)<u>bani</u> a-buy-e]]? [Galen Sibanda p.c.] NEG-2sSM-want-NEG COMP AUG-1who 1sSM- come-SBJ 'Who don't you want to come?'

#### 5.4 Mechanics

The mechanics of my account build on a proposal of Arregi & Nevins (2012) that agreement involves two components. The first of these, their *Agree Link*, establishes a probe-goal relationship. I build on Arregi & Nevins' assumptions in taking Agree-Link to be common to all probe-goal relations (not just phi-valuation) and in proposing that it constitutes a very simple form of feature-sharing by confirming a match. Phi-agreement involves *Agree Copy* -- an additional step of copying the features of the goal; for person those values might be 1<sup>st</sup> or 2<sup>nd</sup> person; for noun class, any of roughly 5 gender values + singular or plural. I propose that Agree-Copy cannot accommodate unvalued agreement features on the goal and faced with them, it aborts. Unlike Arregi & Nevins I take Agree-Copy to be syntactic, since (in the way that I employ it here) it feeds labeling.

- (72) Two-step agreement of Probe P with Goal G (Arregi & Nevins, adapted)
  - a. <u>Agree-Link</u>: P has unvalued features triggering Agree (P,G). The result is a link between P and G establishing that a match is present.
  - b. Agree-Copy: The values of the  $\phi$ -features of G are copied onto P.

I summarize the labeling problems that arise for a [-A] preverbal *wh*-phrase in an affirmative context in (73) and for a negative dependent following a [+A] COMP in (74).

- (73) Though unselective binding of *wh* is possible long-distance, labeling fails when a [-A] *wh* is preverbal because its unvalued *u*Neg aborts Agree-Copy.
  - a. \*U-fun-a [(u-)kuthi [bani a-buy-e]? 2sSM-want (AUG-)COMP 1who 1sM-come-SBJ Intended: Who do you want to come?
  - b.  $C_Q$  \*Ufuna [(u-)kuthi [? bani<sub>WH, uNeg, iPhi</sub> T<sub>uPhi</sub>] X Agree Copy (SU, T) fails

- (74) Following a [+A] COMP, *u*Neg of a [-A] negative dependent is in an opaque domain (the CP phase), cannot be valued, and aborts Agree-Copy
  - a. \*A-ngi-fun-i [u-kuthi <u>Sipho</u> a-buy-e].

    NEG-1sSM-want-NEG AUG-COMP Sipho 1SM- come.SBJ
    Intended: I don't want Sipho to come.'

I assume that while Agree Link is established once uPhi of T finds a DP in its c-command domain, Agree Copy can take place after movement. This permits Agree Copy to be facilitated by the concord relationship between  $\theta$ -kuthi and a preverbal [-A] subject in (75)a,b. I assume also that negative concord is passed down from a NEG-licensed [-A] COMP to T via Feature Inheritance (Chomsky 2007, 2008), so that T and the [-A] subject match in this feature when Agree Copy takes place, after the subject raises. (75)b depicts both this and direct licensing of the preverbal subject by NEG. However we will see evidence in §6 that licensing by NEG and  $C_Q$  are mutually exclusive, which is relevant to the account of the licit wh-subject in (76)a. Given Feature Inheritance, Agree (T, SU) can value the subject's uNeg and permit labeling as (76)b illustrates.

- (75) Labeling succeeds when C has a negative concord value that it can share with the embedded preverbal subject and T
  - a. A-ngi-fun-i [Ø-kuthi Ø-<u>Sipho</u> a-buy-e].

    NEG-1sSM-want-NEG COMP 1Sipho 1SM- come-SBJ

    'I don't want Sipho to come.'

    √ Agree (Neg, kuthi)

(76) a. A-wu-fun-i [Ø-kuthi Ø-bani a-buy-e]?

NEG-2sSM-want-NEG COMP 1who 1SM- come.SBJ

'Who don't you want to come?'

b. Valuing *u*Neg features of the preverbal subject need not rely on a direct relation with NEG given C-T Feature-Inheritance and Agree (T, SU)

```
√C<sub>Q</sub> Neg ... [Ø-kuthi<sub>uNeg</sub> [PhiP Ø-bani<sub>uNegs</sub>, iPhi T<sub>uPhi, uNeg</sub>]]

√Agree (Neg, kuthi)

C-T Feature Inheritance of uNeg

√Agree Copy (SU, T] succeeds
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As mentioned in note 11, Halpert (2015) points out one additional restriction on [-A] that I have so far not considered: they may not be clefted ((77) from Halpert 2015:69, adapting Sabel & Zeller 2006:273).

Sabel & Zeller (2006:279) show that the shape of the cleft copula obligatorily reflects the noun class of what is clefted (see (78), adapted from their (24)).

My analysis predicts that an augment is necessary in (77) because the cleft copula has uPhi to be valued, and agreement is impossible with [-A].

The syntax of Nguni clefts has received divergent analyses in Cheng & Downing (2013), Sabel & Zeller (2006), though these authors agree on a predicate inversion approach to the position of the cleft copula. For concreteness I adopt the account of Sabel & Zeller (2006) under which the copula raises to T and the clefted expression occupies a low Spec, Foc as depicted in (79)a. While Sabel & Zeller posit a null expletive in Spec, TP, plausibly the preverbal position is simply empty; also, the clefted expression might originate low and raise to its surface position, so that there is downward Agree (COP,

uSipho) before movements take place as sketched in my (79)b.

(79) a. 
$$[TP \ pro \ ng-FOC-T \ [FocP \ uSipho < Foc> \ [VP < COP > ]]]$$
b.  $[TP \ ng-FOC-T \ T \ [FocP \ uSipho < Foc> \ [VP \ < COP \ u\phi> < uSipho > ]]]$ 

For reasons of length I will not pursue details of the construction further. It suffices to note that agreement is involved between the cleft and clefted expression, and the requirement that the latter be [+A] follows.

## 5.5 Discussion: feature-checking, agreement, and other uFs

- §5.1 noted a proposal of Bošković (2020, 2021) that there is broad incompatibility between unvalued uFs and feature-sharing, as stated in (68) repeated below.
- (68) The presence of an uninterpretable feature blocks labeling via feature-sharing in XP-YP configurations (Bošković 2021:10 (24))
- (68) builds on existing proposals that feature-checking is impossible in intermediate positions (Bošković 2002, 2008b, 2019b, Boeckx 2003). Some Bantu evidence for this comes from Schneider-Zioga's (2009) demonstration that in Kinande, where there is obligatory *wh*-agreement on intermediate COMPs, reconstruction effects are present in short but not long dependencies, arguing that the former but not the latter are movement-derived. For this reason a bound reading is available for the fronted pronoun in (80) but not (81) (from Schneider-Zioga 2009:5, and see Bošković 2008b for discussion).
- (80) Ekitabu kiwe k/j kyo [oluli mukolo]<sub>j</sub> akasoma \_\_ kangikangi. 7book 7his 7wh.agr every student reads regularly '(It is) His k/j book that [every student]<sub>j</sub> reads regularly.'
- (81) Ekitabu kiwe <sub>k/\*j</sub> kyo ngalengakanaya [CP nga kyo [oluli mukolo]<sub>j</sub> 7book 7his 7wh.agr I.think that 7wh.agr every student

```
akasoma __ kangikangi.
reads regularly
```

'(It is) His k/\*i book that I think [every student] i reads regularly.'

While this is evidence against movement from one A'-feature-checking relation to another, Bošković (2008)b argues that feature-checking relations are broadly limited to one. Following McCloskey (2000), licit stranding of *all* in (82)a strongly suggests that *who* does not raise via PVSP; otherwise the result should be unacceptable, as in (82)b.

- (82) a. Who<sub>i</sub> was arrested all t<sub>i</sub> in Duke Street?
  - b. \*Theyi were arrested all ti last night.

Another kind of evidence is the impoverishment or suppression of subject-verb agreement with extracted subjects in the phenomenon referred to as antiagreement (Ouhalla 1993), found in many Bantu languages and exemplified in (83) (see among others Kinyalolo 1991, Schneider-Zioga 2007, Diercks 2009, Henderson 2013).

(83) a. mutu ú-mozi **á**-ku-kít-ag-a bubo [Kilega; Kinyalolo 1991: 26: (24)] 1 person 1 agr-one 3 <sup>rd</sup>Sing-PROG-do-HAB-FV 14that 'Someone usually does that'

b. nází **ú-**(\*á)-ku-kít-ag-a búbo? 1who **1whA-**(\*3 <sup>rd</sup>Sing)-PROG-do-HAB-FV 14that 'Who (usually) does that?'

Bošković (2008)b, (2020), (2021) argues that feature checking has a freezing effect. He takes (68) to underly imperfection-driven movement, propelling expressions that bear uFs to positions where the offending feature can be valued and labeling via feature-sharing can therefore succeed.

My approach to the distribution of [-A] is along similar lines. The commonalities are striking, but there are important caveats.

First, I mentioned the need to permit feature-sharing without phi-agreement in TECs with [-A] subjects, to be described in more detail in §7. If *any* uninterpretable feature blocks *any* form of labeling via feature-sharing, this ought not to be possible.

Second, while Bošković (2020) proposes that uFs thwart labeling in [XP, YP] configurations, Bošković (2021) goes further in proposing that uFs block labeling even in head-complement configurations, as a unified approach to movement. The idea that uNeg features remain licitly unvalued outside of [XP,YP] configurations is inconsistent with this latter view. While many approaches to negative dependents assume they move to a NegP or PolP (see Vergara 2017 for a recent example), I have argued that Nguni wh- in situ also have uNeg features. Though it is possible that they undergo string-vacuous short movement of some kind, there is no reason to think that in affirmative clauses, they raise to a position where uNeg can be valued.

While I cannot do full justice to this topic, these factors suggest that agreement features on the goal are different from other uFs. While they impact feature-sharing in [XP, YP] configurations as described above, agreement features are otherwise "under the radar" and ignored by the grammar as in Preminger (2014). In contrast, those *u*Fs that drive movement of *wh*-phrases, topics, and the like have consequences for the C-I interface. Perhaps for or this reason they will crash a derivation if transferred unvalued, and thwart feature-sharing relations that fail to value them.<sup>29</sup>

# 6. Null D and the licensing requirements

I turn to some empirical evidence from negative concord that [-A] nominals are headed

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<sup>&</sup>lt;sup>29</sup> I forego discussing Case given questions outside the scope as to whether it always triggers raising (Bošković 2011) or not (Bobalijk & Wurmbrand 2005), to what extent it merits the classic role attributed to it in raising (Marantz 2000), and variation in its linkage to C-I-relevant features such as specificity.

by null Ds. These function like variables in that NEG and C<sub>Q</sub> compete to bind them.

Noting that Zulu augments and prenominal demonstratives are in complementary distribution (see (84)a), De Dreu (2008) proposes that they are both Ds (see (84)b).

Negative *wh*-questions provide compelling evidence for the null D approach to [-A] nominals. We have already seen in example (30) of §2.1 (repeated below) that augment-drop concord is not generally possible within complex *wh*-phrases in affirmative questions. Comparing the negative statements in the Xhosa (85) with their *wh*-counterparts in (86) we see that augment-drop concord on modifiers within a [-A] *wh*- is ruled out even with local c-commanding negation. On the other hand, Xhosa (87) shows that within a complex expression in a negative Yes/No question, augment-drop concord is licit. This makes it clear that interrogation and concordial augment-drop are compatible in the same clause, as long as there is no augment-drop concord within a *wh*-phrase.

- (30) Augment-drop concord is impossible within a complex wh-expression
  - a. U-Mary u-thanda ø-<u>zi-phi</u> \*(i-)<u>zi-hlangu</u> \*(e-)<u>zi-bomvu</u>? [Xhosa] AUG-1Mary 1SM -like 8-which AUG-8-shoes AUG.REL-8-red 'Which red shoes does Mary like?
  - b. U-thanda ø-<u>zi-njani</u> \*(i)-<u>zi-nja</u> \*(e)-<u>zi-ncincini</u>? [Xhosa] 2sSM-like 10-what.kind AUG-10-dogs AUG-10-small 'What kind of small dogs do you like?'
- (85) ✓ Augment drop concord within a complex [-A] in negation's scope
  - a. U-Simiso a-ka-theng-anga <u>zi-hlangu</u> <u>zi-bomvu</u>.

    AUG-1Simiso NEG-1SM-buy-NEG 8-shoes 8-red
    'Nandi didn't buy (any) red shoes.'
  - b. U-Nomsa a-ka-thand-i <u>zi-nja zi-nkulu</u> zi-ka-<u>Sabelo</u>.

    AUG-1Nomsa NEG-1SM-like-NEG 10-dogs 10-big 10-POSS-1Sabelo

    'Sindiswa doesn't like (any of) Sabelo's big dogs.'

- (86) X Augment-drop concord within complex wh-, despite c-commanding Neg
  - a. U-Simiso a-ka-theng-anga <u>zi-phi</u> \*(i-)<u>zi-hlangu</u> \*(e-)<u>zi-bomvu</u>?

    AUG-1Simiso NEG-1SM-like-NEG.PST 8-which AUG-8-shoes AUG.REL -8-red

    'Which red shoes did Simiso not buy (any of)?'
  - b. A-wu-thand-i \*(i-)<u>zi-nja</u> \*(e)<u>zi-njani</u> \*(e-)<u>zi-nkulu</u>?

    NEG-1SM-like-NEG AUG-10-dogs AUG.REL-10-what.kind AUG.REL-10-big

    'What kind of big dogs don't you like (any of)?'
- (87) ✓ Augment drop concord within a complex [-A] in negation's scope of a Y/N Q
  - a. (Ngaba) U-Simiso a-ka-theng-anga <u>zi-hlangu</u> <u>zi-bomvu</u>? Q AUG-1Simiso NEG-1SM-buy-NEG.PST 8-shoes 8-red 'Didn't Simiso buy (any) red shoes?'
  - b. (Ngaba) U-Nomsa a-ka-thand-i <u>zi-nja</u> <u>zi-nkulu</u> zi-ka-<u>Sabelo</u>?

    Q AUG-1Nomsa NEG-1SM-like-NEG 10-dogs 10-big 10-POSS-1Sabelo 'Doesn't Sindiswa like (any of) Sabelo's big dogs?'

I consider the pattern in (85)-(87) important evidence that when C<sub>Q</sub> and NEG are both local to a [-A] nominal they compete as potential licensers. The facts follow easily from assuming that licensing is a kind of binding of a null D counterpart to the overt augment, as D is unique and structurally accessible to clause-level operators (see also Gambarage's 2019 analysis of Nata [-A] as having operator-bound null Ds). I reflect this in a revision of the base-level licensing requirement for [-A] nominals: <sup>30</sup>

(88) [-A] licensing requirement: null D must be unselectively bound by NEG or  $C_Q$ . We can think of null D as functioning rather like a variable, since it can have one and only one binder.  $C_Q$  clearly trumps NEG when both are candidates to bind null D as depicted in (89). This is easily explained: if  $C_Q$  does not bind a wh- the resulting interpretation is perhaps a polar question, in which case the presence of the wh-phrase is

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<sup>&</sup>lt;sup>30</sup> While Gambarage (2019) proposes a null D operator-binding approach to [-A] nominals in Nata, the properties differ considerably: Nata [-A] nominals are licit in PVSPs, do not require surface c-command or a clause-mate licenser, their class of licensers is much broader, they may serve as predicates and, Gambarage argues, Nata augments convey speaker's belief in the referent's existence. Given so many contrasts our analyses differ considerably. Further consideration lies outside this paper's scope.

anomalous (see Chomsky 1995:291 for relevant discussion), or perhaps the result is nothing intelligible at all. In contrast, NEG's primary function is to negate the clause. While it may unselectively bind and value uNeg of any null D in its scope, there is no need for it to do so if the binding requirement is met by  $C_Q$ .<sup>31</sup>

(89) 
$$C_Q \dots NEG \dots [DP] \emptyset_{D; WH, uNeg} \dots]$$

The variable-binding approach provides a simple explanation for the failure of augment-drop concord within [-A] wh-phrases in negative contexts. While feature-valuing Agree relations are not typically analyzed as binding, the valuer of negative concord is a sentential operator whereas the valuer of phi-agreement is typically an argument. For these reasons I think it makes sense to view the commonality underlying licensing by NEG and  $C_Q$  as a kind of A'-binding, albeit with differing characteristics in the two cases.

Summing up, to capture the similarities and differences between [-A] wh- and [-A] negative dependents I have proposed that both are operator-bound. C<sub>Q</sub> legitimizes a [-A] serving as a wh-word by unselectively binding its null D, assuming Pesetsky's (1987) approach to island-impervious wh- in situ. Negative dependence is accounted for here in a similar way, building on the status of negation as a clausal operator and on the fact that, like wh-in situ, negative dependents lack independent quantificational force (see Giannakidou & Quer 1997 for helpful discussion). I summarize in (90) below.

(90) a. Negation binds [-A]'s null D through clause-bound Agree (Neg...
$$u$$
Neg)
$$Agree \text{ Neg...}(*[CP]) \dots \varnothing_{D, uNeg} \dots$$

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<sup>&</sup>lt;sup>31</sup> Thanks to Martha McGinnis (personal communication) for a suggestion that  $\emptyset_D$  is bound at the phase level when both Neg and  $C_Q$  are present.

b.  $C_Q$  binds a wh- [-A] without sensitivity to locality  $C_Q$  ..... ([CP)... $O_D$ , wh, uNeg ...

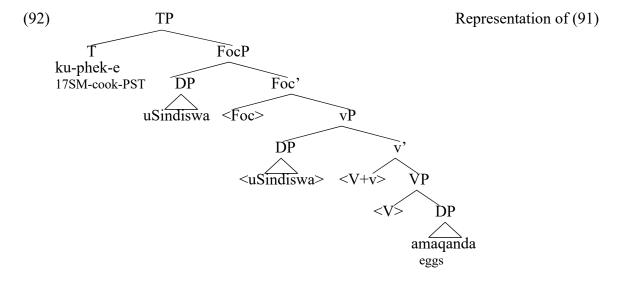
## 7. Focus and labeling of postverbal subjects

The account I have presented attributes the PVSP restriction on [-A] nominals not to Case but to labeling-theoretic issues: feature-sharing is needed to label [XP, YP] configurations but uFs block it, and these include uNeg features of [-A] nominals.

[XP, YP] configurations arise also in VSO constructions like (91). An obligatory focus-reading for the post-verbal subject signals how labeling works in this domain.

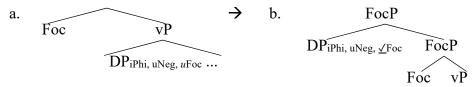
(91) Ku-phek-e u-Sindiswa a-ma-qanda. (answers 'Who cooked eggs?') 17SM-cook-PST AUG-1Sindiswa AUG -6-eggs (cannot answer 'What happened?') 'Sindiswa<sub>F</sub> cooked eggs.' (cannot answer 'What did Sindiswa cook?')

Carstens & Mletshe (2015) propose that there is a low FocusP in Xhosa immediately dominating vP as shown in (92). In keeping with a general ban on both subject and object staying in situ (Alexiadou & Anagnostopoulou 2001) the subject of a VSO TEC must raise to Spec, Foc. Following Chomsky (2013) I assume this is necessary because a labeling failure arises in the [XP, YP] configuration [SU, vP].



According to my proposals in §5, Agree-Copy aborts when it encounters an unvalued agreement feature on a goal. I propose that since there is no phi-feature copying associated with labeling between the Focus head and a post-verbal argument bearing uNeg, the problem does not arise. Agree Link is established between the Focus head and a focused expression, confirming a match (represented by  $\underline{\checkmark}$  in (93)b). The subject raises to Spec, Foc where the shared focus-features can label.<sup>32</sup>

### (93) Labeling FocusP



The facts highlight a need for more detailed work on the comparative properties of different kinds of feature-sharing. (93) is only an initial step in this direction, but I must leave further exploration to future research. <sup>33</sup>

## 8. Extension to parallels in Romance

The analysis of [-A] nominals that I have presented was inspired by work on an exclusion of bare nouns from PVSP in Romance languages. Contreras (1986) provides the data in (94) illustrating that a Spanish preverbal subject is exceptional in requiring a determiner.

(94) a. Quiero café. b. \*Café me gusta. [Spanish; Contreras 1986] 'I want coffee.' coffee me pleases 'I like coffee.'

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<sup>&</sup>lt;sup>32</sup> I tentatively adopt the suggestion of an anonymous reviewer that [+focus] material is formally uFocus. This entails that 'only XP' and [+A] wh- can surface in PVSP of non-indicative clauses because iFocus is available there, and similarly for focus-tolerant  $\underline{O}_2$  of VSO<sub>1</sub> $\underline{O}_2$ ; see Carstens & Mletshe (2016). Alternative approaches are easily imaginable (including uFocus or an edge feature on Foc itself); I leave pursuit of the many related issues to future research.

<sup>&</sup>lt;sup>33</sup> The licit [-A] O of a SVOO construction merged in Spec, Appl or Caus creates an [XP, YP] configuration. Arguably it surfaces in Nguni's postverbal [+focus] position, so falls under (93).

c. El café me gusta. the coffee me pleases 'I like coffee.'

Longobardi (1994) points out that the same asymmetry characterizes bare nominals in Italian (see (95)). Only PVSP is subject to a determiner requirement.

- (95) a. \*Acqua viene giù dalle colline. [Italian; Longobardi 1994: 616] water comes down from-the hills
  - b. Viene giù acqua dalle colline. comes down water from-the hills
  - c. Ho presto acqua dalla sorgente.

    I took water from-the spring

Deprez (2000) shows that an identical restriction affects bare nouns in Portuguese and Sardinian as well: though permitted as objects of verbs and prepositions, they may not be preverbal subjects ((96) from Deprez 2000:256; glosses added).

- (96) a. ??Criancas estao a gritar ao telefone. [Portuguese] children are screaming on phone Intended: Children are screaming on the phone.
  - b. \*Sórrikas an mandicatu su casu. [Sardinian] mice AUX ate the cheese Intended: Mice ate the cheese.

In a highly significant parallel to the Nguni facts, this restriction is consistent across clause types – determiners are required for nominals in PVSP of subjunctives and relative clauses of Spanish (97) Italian (98), Portuguese (99) and Sardianian (100). <sup>34</sup>

(97) a. No quiero que \*(el) agua entre en la casa. [Spanish]

NEG want.1s that the water enter.SBJ in the house
'I don't want water to come into the house.'

<sup>&</sup>lt;sup>34</sup> For assistance in assembling the data in this section my thanks to Guido Menshing for Sardinian, Andrea Calabrese for Italian, Pilar Barbosa for European Portuguese, and the late Paula Kempchinsky for Spanish and for helpful discussion.

- b. Este es un maestro que \*(los) ninos odian. this is a teacher that the children hate 'This is a teacher that children hate.'
- (98) a. Voglio che \*(i) bambini giochini sempre in questo parco. [Italian] want.1s that the children play.SBJ always in this park 'I want children always to play in this park.'
  - b. Questo e un insegnante che \*(i) bambini amano. this is a teacher that the children love 'This is a teacher that children love.'
- (99) a. Eu conheci um politico que \*(os) cidadaos respeitam. [Portuguese]

  I met a politican that the citizens respect

  'I met a politican that citizens respect.'
  - b. Eu nao quero que \*(a) agua entre na casa. I NEG want that the water enter.SBJ the house 'I don't want water to come into the house.'
- (100) a. Custu est unu professore chi (\*sos) pitzinnos aman. [Sardinian] this is a teacher that the children love.PRES.IND.3PL 'This is a teacher that children love.'
  - b. Cherzo chi \*(sos) pitzinnos gioghen sempre in custu parcu. want.PRES.IND.1SG that the children play.SBJ.3PL always in this park 'I want children always to play in this park.'

Table 5 summarizes the results for the Romance languages and Nguni. 35

**Table 5:** Exclusion of bare nominals from preverbal subject positions

Bare nominals	Nguni [-A]	Italian	Spanish	Portuguese	Sardinian
SV (indicative)	X	Χ	Χ	Χ	Χ
SV (subjunctive)	Х	Χ	Χ	X	Χ
SV (rel. clause)	Х	Χ	Χ	Х	Χ
SV (participial)	Х	N/A	N/A	N/A	N/A

A unified account of these point-by-point correspondences between Nguni and Romance PVSP restrictions is a theoretically attractive goal. Absent evidence that Romance bare nominals have special Case needs, the approach to Nguni [-A] in Halpert (2015) and Pietraszko (2021) cannot be extended to them. But negative concord plays a major

<sup>&</sup>lt;sup>35</sup> VS order seems predominant in Romance participial regardless of the subjects' properties.

syntactic role in Romance, just as in Nguni – a state of affairs that I take to be non-coincidental, like the correspondences in Table 5.

In fact, the ability of negative concord to neutralize the Ndebele PVSP restriction has a striking parallel in Romance languages discussed in Deprez (2000): negative concord items (NCIs) are a systematic exception to the exclusion of bare nominals from PVSP in (94)-(100) (see (101) adapted from Deprez 2000:254 (4); glosses added).

(101) Nessuno ha telefonato. no one has telephoned 'No one called.' [Italian]

I adopt a proposal of Zeijlstra (2008) that *nessuno* has *u*Neg features which in (101) obtain valuation from a silent negation operator that c-commands PVSP (see (102)).

Valuation makes subject agreement with the NCI possible, and labeling can succeed.

- (102) iNeg...Ø<sub>uNeg</sub>-Nessuno<sub>-</sub>ha telefonato. [Adapting Zeijlstra 2008:27]
- (101) is thus grammatical because of successful Neg-licensing from the left edge just as in the Nguni (37), repeated below.
- (37) Negative concord spreading from C to SU yields a licit [-A] preverbal subject

  A-ngi-fun-i
  NEG-I-want

  [CP Ø<sub>uNeg</sub>-kuthi
  COMP

  [TP Ø<sub>uNeg</sub>-Sipho a-buy-e]].
  1Sipho 1SM-come-SBJ

Turning to Romance bare mass nouns and plurals, I suggest that they have null Ds with uNeg features, just like bare nouns in Nguni. These thwart agreement and hence labeling as in Nguni, yielding the familiar pattern of facts in (94)-(100) (see (103)).

(103) \*[TP Acqua<sub>uNeg</sub> 
$$T_{uPhi}$$
 viene giù dalle colline. = (95)a water comes down from-the hills  $u$ Neg of  $acqua$  blocks Agree

I also extend to these expressions a proposal of Carstens & Mletshe (2016) that I

advocated in §3.1 for strict negative dependents like *mifino* – 'any/no vegetables': their *u*Neg features are too weak to be compatible with a silent negator, just as *u*Phi of T in English is too weak for compatibility with *pro*-drop. For this reason bare plurals and mass nouns of Romance cannot be licensed in PVSP as *nessuno* is in (102). Nor can they serve as negative fragment answers as (104) shows, for the same reason: following Zeijlstra (2004, 2008) among others, negative fragment answers rely on a silent negator.

(104) Q. Quanta acqua hai bevuto? Ans. \*Acqua! how.much water have.2s drunk? water
'How much water have you drunk? Intended: no water!

Outside of PVSP, it may be that the uNeg features of Romance bare nouns enable them to function as negative dependents, when NEG-licensing is available:

Absent local negation they simply express mass or plural meanings which do not require a relation with NEG (see (106)). In this they parallel Nguni [-A] wh: their possession of uNeg features is irrelevant to their core semantic content and primary functions.

(106) Ho presto 
$$O_{uNeg}$$
-acqua dalla sorgente. I took water from the spring 'I took water from the spring.'

In contrast, negative dependent expressions like the Italian nessuno – 'anybody/nobody' and Xhosa  $\emptyset$ -mifino 'any/no vegetables' have no meanings when not bound by negation; in this they are like wh-phrases without binding by  $C_Q$ .

A question arises regarding why the licensing strategy in (102) fails for the three NCIs *lutho* – 'anyplace/no place', *muntu* – 'anybody/nobody' and *ndawo* – 'anyplace/no

place' in the PVSPs of (107). I noted in §3.1:(40), repeated below, that these three may serve as fragment answers, and on that basis I've hypothesized that a silent negator exists in Zulu. In indicative clauses, PVSP is inhospitable to [+focus] material as we have seen, so the exact counterpart to (102) would be doomed. But something must be said about why it doesn't work in subjunctives like (107)a,b:

- b. √Lutho! c. √Ndawo! (40) Fragment answers: a. √Mu-ntu! [Zulu] 1-person 11thing 9place 'Nothing!' 'Nobody!' 'No place!' \*M-fazi! e. \*Zi-hlangu! d. 1-woman 8-shoes 'No shoes!' Intended: No woman!
- (107) a. \*Ngi-funa [(ukuthi) <u>lutho</u> li-phuk-e] [Zulu] 1sSM-want (COMP) 11thing 11SM-break-SBJ Intended: I want nothing to break.'
  - b. \*Ngi-funa [(ukuthi) <u>mu-ntu</u> a-phek-e] 1sSM-want (COMP) 1-person 1SM-cook-SBJ Intended: I want no one to cook.

I take the ill-formedness of (107)a,b to indicate that the silent negator is absent in Nguni subjunctives as is consistent with the clause-medial location of overt negators within subjunctives as illustrated in (108)c (compare to (108)a and (108)b). Pietraszko proposes that the higher negation available in indicative clauses like (108)a is absent in subjunctives, where the left periphery is truncated.

- (108) a. Ngi-cabanga ukuthi a-bafana a-ba-phek-i. [Ndebele; Pietraszko 2021:595] 1sSM-think COMP AUG-2-boys NEG1-2SM-cook-NEG 'I think that the boys do not cook.
  - b. \*Ngi-funa ukuthi a-bafana **a-**ba-phek-i. 1sSM-want COMP AUG-2-boys NEG1-2SM- cook-NEG Intended: I want the boys not to cook.'
  - c. Ngi-funa ukuthi a-ba-fana ba-**nga**-phek-i. 1sSM-want COMP AUG-2-boys 2SM-NEG2-cook-NEG 'I want the boys not to cook.'

Another question that arises is why exactly bare nouns are systematically endowed with uNeg features in Nguni and Romance, under this proposal. I conjecture that this might be a simple general strategy for equipping languages with the foundation for a negative concord system. NCIs are non-referential; if overt articles facilitate denotation and reference (Longobardi 1994), and non-referentiality correlates even partially with their absence, then bare nouns have a baseline profile more compatible with serving as NCIs than do nouns with determiners. uNeg features and null Ds are thus a natural-enough marriage. It is arguably efficient to supply uNeg features to bare nouns, in negative concord languages, especially given that the grammar can ignore them in any circumstances where they are not relevant, apart from labeling contexts.

A loose end remains in the availability of bare singular preverbal subjects in certain Romance languages, most often with generic readings ((109) is from Rinaldi 2018, p. 85:(2), citing Muller & Oliveira 2004).

(109) Elefante é intelligente. Elephant is intelligent 'Elephants are intelligent.' [Brazilian Portuguese]

I can only suggest that the feature-content of their determiners, if they have them, excludes uNeg. I must leave a deeper treatment to future research. I also leave to future research the absence of tell-tale default morphology on Romance bare nominals which lack negation-licensing.

# 9. Concluding remarks

The central claim of this article is a rather simple one: that the distribution of Nguni bare nouns follows from their nature as negative dependents and wh-question words. One

surprising distributional fact to be captured is their exclusion from PVSPs, but Pietraszko (2021) shows that in Ndebele, negation-licensing overrides this prohibition. I have accordingly proposed that valuation of *u*Neg features is the crucial factor in this pattern. More broadly, an XP bearing unvalued agreement cannot value agreement on a probe Y and thereby thwarts feature-sharing relations on which labeling relies in [XP, YP] configurations (Chomsky 2013, Bošković 2020, 2021). The PVSP restrictions are thus a variety of EPP-effect arising from the valuation dependency that [-A] have on *i*Neg.

§1.1 noted controversy over whether negative-dependence and *wh*-hood are relevant to Nguni [-A] syntax. In promoting Halpert's (2015) approach Pietraszko (2021) writes:

Halpert proposes that negative polarity and wh-hood...are semantic preconditions on their appearance. The distribution of augmentless DPs is additionally regulated by purely syntactic factors, and [Halpert's] theory is a theory of the structural (not the semantic) licensing conditions.

My article has presented an array of evidence that the heavy lifters in syntactic licensing of [-A] are negation, focus, and C<sub>Q</sub>. Alongside of their semantic properties I have shown that these categories play important morpho-syntactic roles in Nguni.

Abstract Case plays no part in this account, unlike in the analyses of Halpert (2015) and Pietraszko (2021). The case for Case in most Bantu languages hangs on the question of how to interpret a very narrow range of phenomena. A 'no' setting for Nguni seems within reach for Diercks's (2012) Bantu-inspired Case parameter in (110) under my analysis of [-A] nominal distribution.

(110) <u>Case parameter</u>: uninterpretable Case features are/are not present in a language

A welcome simplification of our conception of Nguni grammar would result from this,
consonant with the major, striking roles that other kinds of morphosyntactic features play

in regulating the positions of Nguni nominals (Zeller 2008, Sabel & Zeller 2006, Carstens & Mletshe 2015, 2016, Carstens & Zeller 2020).

Romance languages exhibit an exclusion of bare nouns from PVSPs quite similar to that which I explored in Nguni; some prior accounts have attributed this to unvalued D-features of T or phi-feature visibility problems (Deprez 2000, Landau 2000). I have suggested instead extending the labeling account of Nguni to bare nouns in Romance, though this is speculative and leaves some open questions.

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