Case, Agreement, EPP and Information Structure:
A Quadruple-Dissociation in Zulu

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1. Introduction

Several recent proposals have suggested that Case and agreement can be reduced to other components of syntax, including the idea that Case-licensing is a function of agreement, or vice versa (e.g. Chomsky 2000, Bobaljik 2008); that subject-Case is a function of the EPP, or vice versa (e.g. Boskovic 2002, Marantz 2000); and that information structure is a function of agreement (e.g. Zeller 2008, Cheng and Downing 2009 for Zulu).

In this paper, I discuss facts from Zulu that force us to re-evaluate such claims, as exemplified by the raising verb alternation in (1).[1]

(1)   a. ku- bonakala [sengathi **iqhina** **li**- phum- ile embizeni]
           17s- seems   C   5steinbok 5s- exit- PRF LOC-9cooking.pot
           'It seems that the secret came out.' (lit. 'It seems as if the steinbok exited the cookingpot.')

        b. **iqhina** **li**- bonakala [sengathi **li**- phum- ile embizeni]
           5steinbok 5s- seems   C   5s- exit- PRF LOC-9cooking.pot
           'The secret seems to have come out.'

The constructions in (1) are surprising from standard Case-driven viewpoints of raising: the grammaticality of both (3a) and (3b) indicates that the raising is optional and (3b) shows that it can occur out of an agreeing finite clause. The alternation in (1) is problematic for views that try to formally link Case/agreement to other components of the grammar, since if Case and agreement are linked, we expect agreement only where the DP is Case-licensed. Similarly, if EPP and Case are the same component, we again expect the DP to be related to a single position.

I argue that the behavior of a subclass of morphologically impoverished "augmentless" DPs provides additional evidence that DPs are not Case-licensed in Spec,TP, the position of subject agreement in Zulu. Instead, the system of argument licensing for these DPs in Zulu takes place completely within *v*P. In the system I propose, (1) augmented DPs in Zulu are inherently Cased; (2) augmentless DPs must receive structural Case; and (3) Case is assigned *only* to elements within *v*P. The Zulu facts that support this analysis thus provide an argument that Case, EPP, agreement, and information structure are dissociated in Zulu: while augmentless DPs are licensed in non-agreeing, non-EPP positions, they can, however, *move through* the subject agreement position on the way to a licensed *v*P-internal position. This movement yields agreement in the lower position, but the moved DP displays none of the licensing or information structure effects supposedly associated with agreement.

[1]A note on glosses: Bantu noun classes agree for person, number, and noun class. Cardinal numbers indicate noun class (number is encoded into class), while ordinal numbers indicate person, with S for subject and O for object agreement.Nouns are marked with their class number. In subjunctive verb forms in Zulu, full phi-agreement occurs with a slightly different morphological paradigm and will be glossed with the abbreviation SJC.

Since Harford Perez (1985), various work on Bantu has suggested that Case is not active in Bantu grammar (Ndayiragije 1999; Alsina 2001; Baker 2003; Carstens and Diercks to appear; Diercks to appear). These claims stem from the absence in Bantu of effects that we associate with Case-licensing in Spec,TP, including raising out of finite clauses, as in (1) in Zulu (see also Diercks to appear for a cross-Bantu overiview); licit subjects of nonfinite clauses (e.g. Harford Perez 1985, Diercks to appear); inversion constructions, where a preverbal object or locative phrase controls 'subject' agreement while the subject remains after the verb (e.g. Harford Perez 1985; Ndayiragije 1999); and expletive constructions, where the subject again remains low and expletive agreement appears on the verb (e.g. Harford Perez 1985). These proposals focus on the lack of Case effects in 'subject agreement' position and on morphologically unimpoverished nouns. I argue that Zulu shows no evidence of Case-licensing in Spec,TP, but *does* have licensing within *v*P.

2. Raising

In this section, I will discuss raising-to-subject and raising-to-object in Zulu. In both cases, raising appears to be optional and the lower predicate agrees with the raised argument in both constructions.

2.1. Raising-to-subject

Zulu has two (optional) raising-to-subject predicates: *fanele* 'be necessary' and *bonakala* 'seem'. *Fanele* takes an embedded CP with an optional complementizer and a *subjunctive* predicate (Zeller 2006). *Bonakala* takes an embedded CP with an obligatory complementizer and an *indicative* predicate. In both constructions, the embedded subject may either remain in situ, with expletive agreement on the raising verb ((2a) and (3a) below), or raise to subject position in the matrix clause, controlling agreement on the raising verb ((2b) and (3b)):

(2) **Raising-to-subject:** *fanele* **(subjunctive complement)**

    a. **ku**- fanele   [(ukuthi) iqhina   li- phum- e   embizeni]
       17S- necessary that   5steinbok 5S- exit-   PRF LOC.9cooking.pot
       The secret must come out.

    b. **iqhina**   **li**- fanele   [(ukuthi) **li**- phum- e   embizeni]
       5steinbok 5S- necessary that   5S- exit-   PRF LOC.9cookingpot
       The secret must come out.

(3) **Raising-to-subject:** *bonakala* **(indicative comlement)**

    a. **ku**- bonakala [sengathi iqhina   li- phum- ile   embizeni]
       17S- seems   C   5steinbok 5S- exit-   PRF LOC.9cookingpot
       It seems like the secret came out.

    b. **iqhina**   **li**-bonakala [sengathi **li**-phum- ile   embizeni]
       5steinbok 5S-seems   C   5S-exit-   PRF LOC.9cookingpot
       The secret seems to have come out.

Again, these constructions are problematic for Case-based theories of raising[2] because of the optionality, which suggests the embedded subject is equally well licensed in either position, and because the embedded predicates of the raised and non-raised variants are identical, which suggests the status of the lower predicate does not drive raising. Furthermore, agreement with the raised subject appears on both the lower and higher predicates. If Case and agreement are a single mechanism, agreement is expected wherever the DP is Case-licensed.

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[2]Zeller (2006), following Alexiadou and Anagnostopoulou (1999), argues that raising is Case-driven in the *fanele* construction: subjunctive phrases can be defective in Zulu and thus fail to assign Case, resulting in raising. He ties the defectiveness of subjunctive T to a weak-phase CP, which allows for raising, while the non-raised variant contains a strong phase CP and non-defective T. This account lacks a principled way to distinguish between strong and weak CP complements in constructions like (2), where both embedded clauses can contain an overt C^o and have identical subjunctive inflection, and cannot easily be extended to the indicative *bonakala* cases.

2.2. Raising-to-object

Certain Zulu verbs also allow raising-to-object out of embedded subjunctives. In the relevant constructions, an overt DP can appear either before or after the complementizer *ukuthi*[3]:

(4) **Raising to object (subjunctive complement)**

    a. ngi-funa   [ukuthi uSipho a-pheke iqanda]
    1^{st}SG.S-want that   1Sipho that   1SJC-cook 5egg
    'I want Sipho to cook an egg.'

    b. ngifuna   uSipho [ukuthi a-pheke   iqanda]
    1^{st}SG.S-want 1Sipho that   1SJC-cook 5egg
    'I want Sipho to cook an egg.'

In pre-complementizer position, the DP behaves like it's inside the matrix *v*P: it can undergo object agreement as in (5), or receive *v*P-internal information structure in non-agreeing position in the higher clause (ie. new information or focus, but not topic: Cheng & Downing 2009)

(5) **Raising-to-object feeds object agreement in the higher clause**

    a. ngi-   ya- **m**- funa uSipho (ukuthi) apheke   iqanda
    1^{st}SG.S- YA- 1o- want 1Sipho (that)   1SJC-cook 5egg
    'I want Sipho to cook an egg.'

    b. *ngi-   (ya)- **m**- funa ukuthi uSipho apheke   iqanda
    1^{st}SG.S- YA- 1o- want that   1Sipho 1SJC-cook 5egg
    'I want Sipho to cook an egg.'

However, the pre-complementizer DP behaves thematically like a part of the lower clause in that idiomatic readings in the lower clause are retained, as illustrated by (6) below. The behavior of idioms in (6) contrasts with object control constructions like (7), where an object in the higher clause cannot participate in the embedded idiom. The optionality of raising-to-object in (6) again suggests that the DPs involved in the constructions are licensed in either position.

(6) **Raising-to-object: idiomatic reading retained**

    a. Ngi-lindela   [(ukuthi) **iqhina**   **li**-phume embizeni]
    1^{st}SG.S-expect that   5steinbok 5SJC-exit LOC.9cooking.pot
    'I expect the secret to come out.' (idiomatic reading available)

    b. Ngi-lindela   iqhina   [(ukuthi) **li**-phume embizeni]
    1^{st}SG.S-expect 5steinbok that   5SJC-exit LOC.9cooking.pot
    'I expect the secret to come out.' (idiomatic reading available)

(7) **(Optional) object control: idiomatic reading lost**

    a. A-ngi-khutazanga   [(ukuthi) iqhina   liphume   embizeni]
    NEG-1^{st}SG.S-encourage.PST that   5steinbok 5SJC-exit LOC.9cooking.pot
    'I didn't encourage that the secret get out.' (idiomatic reading available)

    b. #A-ngi-khuthazanga   iqhina   [ukuthi liphume embizeni]
    NEG.1^{st}SG.S-encourage.PST 5steinbok that   5s.exit LOC.9cooking.pot
    'I didn't encourage the steinbok to leave the pot.' (idiomatic reading impossible)

To summarize, the Zulu raising-to-subject facts match similar facts in other Bantu languages that have been argued to not have Case. The raising-to-object construction shares the basic properties of Zulu raising-to-subject. The optionality of raising suggests that arguments are equally well licensed in either high or low position, and that agreement/EPP processes are occurring independently from a DP's need for licensing.

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[3]The complementizer is optional throughout these examples.

3. Licensing of Augmentless DPs

In this section, I argue that in a certain subclass of Zulu nominal, we see structural licensing effects, but that the behavior of these structurally restricted nominals in raising still shows no evidence for nominative Case in Spec,TP. What we *do* find is evidence for structural Case for these nominals below T, inside *v*P. This evidence comes from from two types of construction: constructions with multiple augmentless arguments inside *v*P and predicates that agree with augmentless arguments.

Zulu nouns have 2-part prefixal morphology: the augment vowel and a C/CV/CVC/Ø prefix:

(8) a. **u**- mu- ntu 'person' (cl. 1)   c. **i**- n- cwadi 'book' (cl. 9)

     b. **a**- ma- qanda 'eggs' (cl. 6)   d. **i**- xoxo 'frog' (cl. 5)

Nouns appear without an augment in several restricted environments (Buell 2011, Von Staden 1973, Mzolo 1968), but as 'plain' arguments, augmentless nouns either appear under negation (typically with an NPI interpretation) or as wh-words. I focus on augmentless nouns under negation, which must appear in a downward entailing environment, such as c-commanding negation, as illustrated in (9) below.[4]

(9) a. **A**- ngi-   bon- **i**   muntu   b. *ngi-   bona muntu
        NEG- 1stSG.S- see- NEG 1person   1stSG.S- see 1person
   'I don't see anybody."

As expected for NPIs, (10) shows that there is no clausemate restriction on the licenser:

(10) **A**- ngi-   cabang- **i**- [ukuthi uSipho u- bon- e **muntu/lutho**
         NEG- 1stSG.S- think- NEG that   1Sipho 1S- see- PST 1person/13thing
         'I don't think Sipho saw anyone/anything.'

Beyond these basic restrictions on the distribution of augmentless nominals, I argue in this section that they are governed by syntactic licensing principles. I first outline the system of structural licensing and then demonstrate how it accounts for the full picture of augmentless nominal distribution in Zulu.

3.1. Structural Licensing Conditions on Augmentless Nominals

I propose licensing of augmentless nominals takes place within *v*P via two licensing heads: a L(icensing) head immediately above *v*P and an additional APPL head in applied constructions. The locations of these licensing heads are schematized in (11) below:

(11)
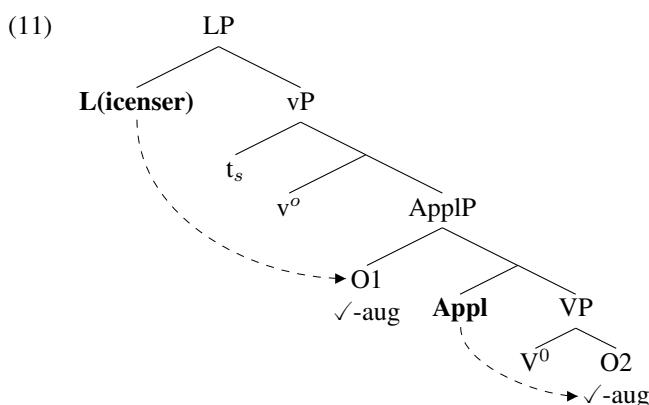
As (11) illustrates, at most two augmentless nominals can be licensed in an applied construction, while at most one can be licensed in constructions without an applicative. As I will show in the following sections, this licensing mechanism accounts for aspects of the distribution of augmentless nominals that cannot be attributed to the more general licensing conditions discussed above, and that are not faced by their augmented counterparts.

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[4]Other licensers include negative adverbs, minimizing prepositions, and yes/no questions.

3.2. The vP-internal nature of augmentless nominals

All of the licit augmentless so far have been non-agreeing, in situ objects. We also find cases of postverbal non-agreeing subjects, as in (12) below. The ability of the augmentless nominal to appear in the low subject position suggests that the relevant domain of L includes spec,vP.

(12) a. a-   ku- fik- anga   muntu   b. ngeke ku- fike   muntu
         NEG- 17s- arrive- NEG.PAST 1person   never 17s- arrive 1person
         'Nobody arrived.'   'Nobody will ever arrive.'

Augmentless nominals do face restrictions with respect to agreement, however. In (13), we see that *muntu* in (13a) is in the same domain as the licit augmentless objects in (10) yet is ungrammatical. Grammatical counterparts to (13a) involve either adding an augment to the agreeing subject, as in (13b), or leaving the augmentless subject in nonagreeing, postverbal position, as in (13c).

(13) a. *A- ngi-   sho- ngo   [ukuthi **muntu u-** fik-ile]
         NEG- 1^{st}SG.S- say- NEG.PAST that   1person 1S- arrive-PRF
         'I didn't say that anyone came.'

      b. A- ngi-   sho- ngo   [ukuthi **u**muntu **u-** fik-ile]
         NEG- 1^{st}SG.S- say- NEG.PAST that   1person 1S- arrive-PRF
         'I didn't say that a/the person came.'

      c. A- ngi-   sho- ngo   [ukuthi **ku-** fik-e   **muntu**]
         NEG- 1^{st}SG.S- say- NEG.PAST that   17s- arrive-PRF 1person
         'I didn't say that anyone came.'

The ungrammaticality of (13a) is not predicted by the c-command requirement on augmentless nominal licensing, since the embedded subject is in the scope of negation. Since movement correlates with agreement, the problem for the augmentless subject here could either be the moved position *or* the agreement process (e.g. Buell 2005). However, not all agreement with augmentless nominals is ruled out: augmentless nominals may control subject agreement just in case they further raise to a vP-internal, non-agreeing position.

So far, we have only examined cases in which licit augmentless nominals remain in situ in vP. In (14) below, we see an augmentless nominal engaging in raising-to-object through an agreeing position in the lower clause:

(14) A- ngi-   lindel- i   **muntu a-**pheke   iqanda
      NEG- 1^{st}SG.S- expect- NEG 1person 1SJC-cook 5egg
      'I don't expect anyone to cook an egg.'

While raising to object for augmented nominals, as in (4), is optional, the raised variant is *required* in constructions with augmentless nominals, as shown below in (15): when a complementizer is present, it *must* appear after the augmentless noun.

(15) a. angifuni   **muntu** [ukuthi **a-**   pheke (i)qanda]
         NEG-1^{st}SG.S-want 1person that   1SJC- cook 5egg
         'I don't want anyone to cook an egg.'

      b. *angifuni   [ukuthi **muntu a-**   pheke (i)qanda]
         NEG-1^{st}SG.S-want that   1person 1SJC- cook 5egg
         ('I don't want anyone to cook an egg.')

The distribution of augmentless nominals is schematized in (16) below. In a raising-to-object structure with an augmentless embedded subject, the augmentless nominal can either remain in situ (inside embedded vP) or raise to the matrix vP *through* the position of lower subject agreement, but it cannot appear in the agreeing subject position on the surface:

(16) angifuni ✓**muntu** [$_{CP}$ ukuthi ***muntu** apheke [$_{vP}$ ✓**muntu** iqanda]]   (see (15))

## 3.3. Augmentless nominals within vP

In addition to the restriction that augmentless nominals surface in vP-internal position, augmentless nominals face further restrictions *within* vP. To understand these restrictions, we must first examine the behavior of augmented nominals inside vP as a baseline. Zulu can license up to three arguments in non-agreeing, vP-internal positions, as shown by the triple object structure in (17) and the transitive and ditransitive expletives in (18) below :

(17) uThemba u- fund- is-   ela   uSipho izingane   isiZulu
      1Themba 1s- learn- CAUS- APPL 1Sipho 10children 7Zulu
      'Themba teaches the children Zulu for Sipho.'

(18) a. ku- fund- isa   uSipho isiZulu   b. ku- fund- isa   uSipho izingane   isiZulu
         17s- learn- CAUS 1Sipho 7Zulu   17s- learn- CAUS 1Sipho 10children 7Zulu
         'SIPHO teaches Zulu.'   'SIPHO teaches the children Zulu.'

While the data in (17) and (18) show that Zulu is capable of hosting three nominals inside vP, the licensing structure in (11) contains maximally two licensers, which suggests that the number of augmentless nominals in need of licensing could potentially outstrip the number of available licensers, leading to restrictions on their distribution. In this section I show that we find just such restrictions.

In a transitive construction with an agreeing (vP-external) subject, the single object can be augmentless, licensed by L. In a transitive expletive construction, however, there are two vP-internal arguments and only one licenser, L. In these constructions, maximally one nominal may be augmentless:

(19) a. **SVO with augmentless object**   c. **✓VSO augmentless–augmented**
         umuntu a- ka- phek- i   qanda   a-   ku- phek- anga   muntu **i**qanda
         1person NEG- sm1. cook. neg egg   NEG- s17. cook. NEG.PAST 1person 5egg
         'A/the person didn't cook any egg.'   'NOBODY cooked the/an/any egg.'

      b. ***VSO augmentless–augmentless**   d. ***VSO augmented–augmentless**[5]
         *a-ku-phek-i   muntu qanda   a-   ku- phek- anga   umuntu qanda
         NEG-s17.cook.neg 1person egg   NEG- s17. cook. NEG.PAST 1person 5egg
   (Nobody cooked any egg)

(20)
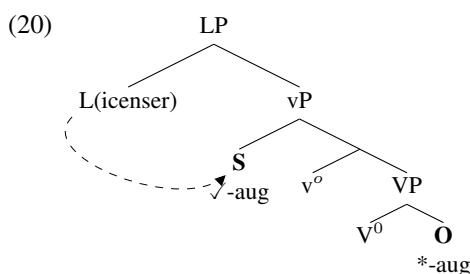
In a double object structure, which contains an Applicative Phrase, two licensing heads are available: L and APPL. When the subject is agreeing (and vP-external), only two nominals appear inside vP: IO and DO. The presence of two licensers thus allows both nominals to be augmentless[6]:

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[5]Inverted subjects under negation have a strong tendency to lose their augments, sometimes even in cases where they clearly do not receive an NPI interpretation (as with proper names). It seems that the ungrammaticality of this sentence, and of (23c) below, may stem from the augmented inverted subject, though I do not delve into why this is so here.

[6]It is also possible to have one augmentless and one augmented nominal, in either order, as expected.

(21) a- ngi- nik- anga muntu lutho
      NEG. 1stSG.S- give. NEG.PAST 1person 13thing
      'I didn't give anyone anything.'

(22)
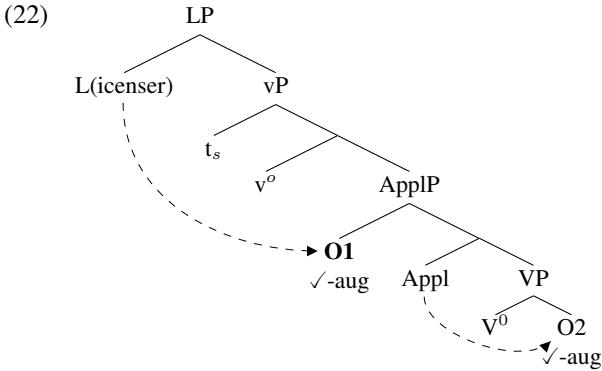
In a ditransitive expletive, there are still two licensers, L and APPL, but now there are three *v*P-internal nominals: S, O1, and O2. In these cases, maximally two augmentless nominals are licensed. In particular, only one out of S and O1 may be augmentless; whether or not O2 is augmentless seems to be irrelevant to grammaticality here. This situation, illustrated in (24), is exactly as predicted by the location of the licensing heads: S and O1 are in the same domain between L and APPL, while O2 is alone below APPL.

(23) a. (?) A- ku- thum- el- anga mama **i**zingane mali
         NEG. s17. send. APPL 1mother 10child 9money

      'MOTHER didn't send the children any money.'

   b. *A- ku- thum- el- anga mama zingane mali

   c. *A- ku- thum- el- anga **u**mama zingane mali

   d. *A- ku- thum- el- anga mama zingane **i**mali

(24)
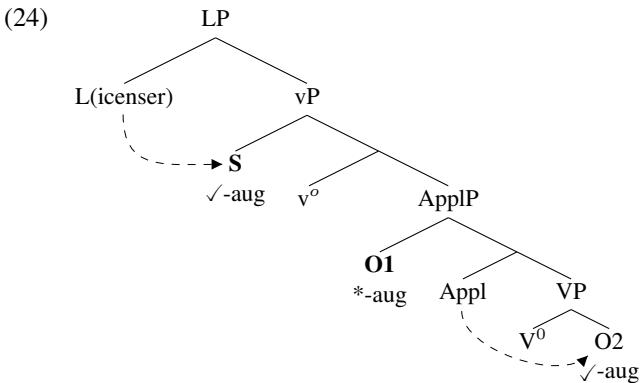
Finally, we saw in (17) that triple object structures are grammatical with augmented nominals. In these cases, two applicative morphemes appear on the verb. However, in the case of augmentless nominals, we find that it is not possible for all three *v*P-internal arguments to be augmentless:

(25) *uSipho a-ka-fundis-el-i muntu bantwana lutho/ zilimi
      1Sipho NEG-1s-teach-APPL-NEG 1person 2children 13thing 8language
      (Sipho doesn't teach any kids anything/any languages for anyone.)

Instead, the pattern in these triple object cases seems to mirror that of the ditransitive expletives in (23): only one out of the two higher arguments may be augmentless, while status of the lower argument appears to have no impact on gramaticality:

(26)   a.   ✓**Augmentless–Augmented–Augmentless**

       uSipho a-ka-fundis-el-i   muntu   **a**bantwana lutho/   zilimi
       1Sipho NEG-1s-teach-APPL-NEG 1person 2children   13thing 8language

       Sipho doesn't teach (any) kids anything/any languages for anyone.[7]

   b.   ✓**Augmented–Augmentless–Augmentless**

       (?) uSipho a-ka-fundis-el-i   **u**muntu/**u**Themba bantwana lutho
         1Sipho NEG-1s-teach-APPL-NEG 1person/1Themba 2children 13thing

       Sipho doesn't teach any kids anything for a person/Themba.

   c.   *****Augmentless–Augmentless–Augmented**

       *uSipho a-ka-fundis-el-i   muntu   bantwana **i**zilimi
       1Sipho   NEG-1s-teach-APPL-NEG 1person 2children 8language

       (Sipho doesn't teach any kids (any) languages for anyone.)

We can understand the pattern in (26) if the licensing heads are identical to those in the ditransitive expletive cases: L is immediately above vP and APPL immediately dominating VP is the second licenser:

(27)
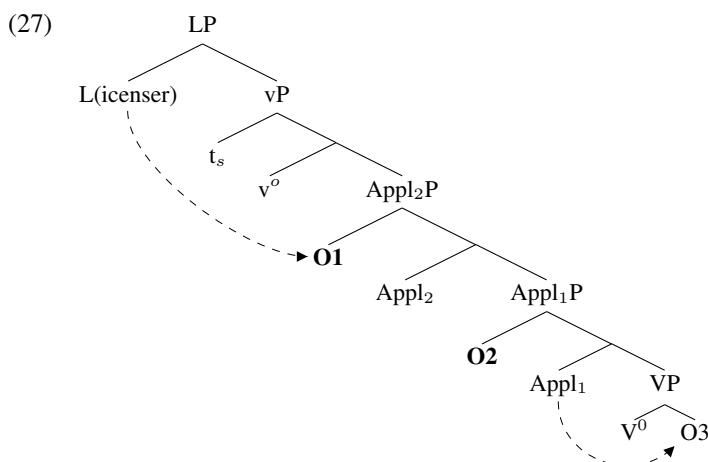
To summarize, we see structural restrictions on augmentless nominals in Zulu that don't apply to augmented nominals: augmentless nominal may only appear inside vP, and only in certain configurations within vP. We can understand this distribution if we posit one structural licenser for augmentless nominals above vP and one that is associated with the (lower) APPL phrase.

4. Discussion and Conclusion

The data presented in this paper suggest that Case, agreement, EPP and information structure cannot simply be reduced to each other in the grammar of Zulu. Optional raising shows that despite the occurrence of agreement, raising does not seem to be motivated by Case-licensing of nominals. In addition, the raising that I argue *is* licensing-driven with augmentless nominals is distinct from agreement: these nominals move from an agreed-with, non licensed position into a non-agreeing, licensed position. Similarly, these patterns show that EPP effects are not driven by Case: without a raised subject, we see expletives fulfilling the EPP, while in obligatory raising-to-object for augmentless nominals, no EPP effect is associated with the licensing position. Finally, recent work on Zulu (Zeller 2008; Cheng and Downing 2009) has suggested that agreement directly marks 'topic' or 'antifocus' on agreeing nominals. From raising-to-object constructions, we see that nouns that undergo agreement and further raise to a non-agreeing position have the information structure status of non-agreeing (vP-internal) nouns.

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[7]Whereas the presence of the augment under negation typically signals a specific/definite reading for the noun, speakers claim that sentences like (26a) can still have an NPI reading for the augmented argument.

There are several issues raised by this analysis that need additional investigation. One is why, emprically, movement out of *v*P appears to bleed licensing of augmentless nominals: constituents that leave *v*P do not count as *v*P-internal for the purposes of licensing. This pattern diverges from standard formulations of Case-licensing, where a Probe probes and licenses a Goal as soon as it is merged and the Goal remains licensed even if it moves further. Another is how to characterize the licensing heads. While in intransitive and transitive structures, we see that only one augmentless noun is licensed, with an applied structure, another augmentless noun (specifically the direct object) becomes possible. If we tie this phenomenon directly to the applicative, we can understand why double object structures license two augmentless nouns while TECs license only one. But not every APPL is a licenser: in triple object structures, still only two augmentless things licensed. Descriptively, the licenser is the APPL that takes a VP complement (not an APPLP complement). I leave these concerns for future research.

I have argued that despite the absence of many classic Case effects in Zulu, the language does have Case licensing of nominals. We see this effect, however, only on a subset of nominals: those without augments. If we compare the behavior of augmentless nominals to their inherently Cased, augmented counterparts, I argue that there is evidence of a nominal licensing system within *v*P, but no evidence of licensing in Spec,TP. While more work is needed to fully understand the nature of the licensing mechanism, this analysis gives a basis for the syntactic restrictions on augmentless nominals and shows the need to treat for Case, Agreement, EPP and information structure as separate components in Zulu.

References

Adams, Nikki. 2008. Object (a)symmetry in Zulu: Object-marking, NPIs, and Wh-word licensing. Paper presented at the annual meeting of the LSA, Chicago.

Alexiadou, Artemis and Elena Anagnostopoulou. 1999. Parameterizing Agr: Word order, V-movement and EPP checking. NLLT 16.491-539.

Alsina, Alex. 2001. Is Case another name for grammatical function? Evidence from object asymmetries. Objects and other subjects: Grammatical functions, functional categories and configurationality, ed. by Davies and Dubinsky. The Netherlands: Kluwer Academic Publishers.

Baker, Mark. 2003. Agreement, dislocation, and partial configurationality. Formal approaches to function in grammar, ed. by Carnie et al. Amsterdam: John Benjamins.

Buell, Leston. 2005. Issues in Zulu morphosyntax. Los Angeles, CA: UCLA dissertation.

Buell, Leston. 2006. The Zulu conjoint/disjoint verb alternation: Focus or constituency? ZAS Papers in Linguistics 43.9-30.

Buell, Leston. 2009. The distribution of the Nguni augment: A review. Ms., Leiden.

Bobaljik, Jonathan. 2008. Where's Phi? Agreement as a Post-Syntactic Operation. Phi-Theory: Phi features across interfaces and module, ed. by Harbour et al. Oxford: Oxford University Press.

Boskovic, Zeljko. 2002. A-movement and the EPP. Syntax 5/3.167-218.

Carstens, Vicki and Michael Diercks. to appear. Parameterizing Case and Activity: Hyperraising in Bantu. Proceedings of NELS 40.

Cheng, Lisa and Laura Downing. 2009. Where's the topic in Zulu? The Linguistic Review 26.207-238.

Chomsky, Noam. 2000. Minimalist Inquiries: The Framework. Step By Step, ed. by Martin et al. Cambridge: MIT Press.

Diercks, Michael. to appear. Parameterizing Case: Evidence from Bantu. Syntax.

Harford Perez, Carolyn. 1985. Aspects of complementation in three Bantu languages. Madison, WI: University of Wisconsin dissertation.

Marantz, Alec. 2000. Case and licensing. Arguments and Case, ed. by Reuland. Amsterdam: John Benjamins.

Mzolo, D. 1968. The Zulu noun without the initial vowel. African Studies 27.195-210.

Ndayiragije, Juvenal. 1999. Checking economy. Linguistic Inquiry 30.399-444.

Von Staden, P.M.S. 1973. The initial vowel of the noun in Zulu. *African Studies* 32, 163-181.

Zeller, Jochen. 2006. Raising out of finite CP in Nguni: The case of fanele. Southern African Linguistics and Applied Language Studies 24/3.255-275.

Zeller, Jochen. 2008. The subject marker in Bantu as an antifocus marker. Stellenbosch Papers in Linguistics 38.221-254.

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