

Telicity and DP argument-adjunct asymmetries in Ndebele

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1. Introduction

Ndebele (Nguni, Zimbabwe) has a highly inflected verbal domain, with obligatory subject agreement and potential object agreement (OM).

(1) Verbal Template for Ndebele (see also Sibanda 2004)

pre-pronominal prefixes	Subject agreement (S)	Tense	Object agreement (OM)	Verb $\sqrt{\quad}$	Derivational suffixes	Aspect 'FV'
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We focus on the present and recent past tenses in (2) and (3), respectively:

(2) Present Tense:

- a. u- \emptyset -(*ku)-dl-a *(uku-dla).
1S-TNS-OM15-eat-ASP 15-food
'S/he eats (the) food.'
- b. u-ya-(ku)-dl-a (uku-dla)
1S-TNS-OM15-eat-ASP 15-food
'S/he is eating / eats (the) food.'

- tense is either marked by **ya-** or is unmarked, while the final vowel, which we take to be an aspectual marker, is uniformly realized as **-a**. These markers interact with object marking (OM) and presence of a DP object, as follows:
- [_T \emptyset -] requires an overt DP object and cannot occur with OM
 - [_T ya-] allows for optional DP object, as well as optional OM

(3) Recent past:

- a. u-Kuthula u- \emptyset -(*si)-dl-é *(isi-tshwala).
1a-Kuthula 1S-TNS-OM7-eat-ASP 7-polenta
'Kuthula ate (the) polenta.'
- b. u-Kuthula u- \emptyset -(si)-dl-ile (isi-tshwala).
1a-Kuthula 1S-TNS-OM7-eat-ASP 7-polenta
'Kuthula ate (the) polenta.'

- tense is unmarked but there are two distinct aspectual markers, **-é** and **-ile**, which interact with object marking (OM) and presence of DP object, as follows:
- [_{Asp} -é] requires overt DP object and cannot occur with OM
 - [_{Asp} -ile] allows for optional DP object, as well as optional OM

- At least the following **questions** emerge:
 - what factors condition the distinct tense/aspect markers?
 - what is the status of the DP object (i.e. argument versus adjunct)?
 - what conditions the presence of the OM?

Proposals:

- [_{Asp} -é] and [_T Ø-] (i.e., the ‘short’ forms) are linked to a phasal vP which checks ACC Case, while [_{Asp} -ile] and [_T ya-] (i.e., the ‘long’ forms) are associated with a non-phasal vP, with no ACC;
- DP objects are arguments with [_{Asp} -é] and [_T Ø-], but adjuncts with [_{Asp} -ile] and [_T ya-];
- OM, verbal morphology and DP status interact with telicity

2. ‘Long’ versus ‘short’ forms

❖ the DP related to the object theta-role is an argument with ‘short’ forms but an adjunct with ‘long’ forms

2.1 QP objects:

Jelinek (1984) argues that in languages with OM, OM counts as the argument and the associated DP is an adjunct. See also Baker (1996) for Mohawk.

Note that quantifiers cannot be merged as adjuncts as they need to bind a variable in argument position (Rizzi 1986, Cinque 1990). Hence absence of quantifiers in Mohawk.

Interestingly, in Ndebele, the ‘short’ forms (i.e., [_{Asp} -é] and [_T Ø-]) allow for QPs but the ‘long’ forms (i.e., [_{Asp} -ile] and [_T ya-]) exclude them. See (4)-(5).

- (4) a. u-Ø/ya-dl-a uku-dla.
 1S-TNS-eat-ASP 15-food
 ‘S/he eats (the) food.’
- b. u-Ø/*ya-dl-a yinqe uku-dla
 1S-TNS-eat-ASP any 15-food
 ‘She eats any food.’

- (5) a. u-Phita u-Ø-khab-é/ile in-ja.
 1a-Peter 1S-TNS-kick-ASP 9-dog
 ‘Peter kicked a/the dog.’
- b. u-Phita u-Ø-khab-é/*ile **yinqe in-ja.**
 1a-Peter 1S-TNS-kick-ASP any 9-dog
 ‘Peter kicked any dog.’

2.2 Optionality:

- the ‘short’ forms require an overt DP object, the ‘long’ forms do not. See (6)-(7).

- (6) a. u-Ø-dl-a *(uku-dla).
 1S-TNS-eat-ASP 15-food
 ‘S/he eats (the) food.’
- b. u-Kuthula u-Ø-dl-é *(isi-tshwala).
 1a-Kuthula 1S-TNS-eat-ASP 7-polenta
 ‘Kuthula ate (the) polenta.’
- (7) a. u-ya-dl-a (uku-dla).
 1S-TNS-eat-ASP 15-food
 ‘S/he eats (the) food.’
- b. u-Phita u-Ø-khab-ile (in-ja).
 1a-Peter 1S-TNS-kick-ASP 9-dog
 ‘Peter kicked a/the dog.’

2.3 Adjacency:

- the ‘short’ forms require adjacency with the object DP, the ‘long’ forms do not. See (8)-(9).

- (8) a. u-Kuthula u-Ø-dl-é **uku-dla** em-kulw-ini.
 1a-Kuthula 1S-TNS-eat-ASP 15-food 3-kitchen-LOC
 ‘Kuthula ate food in the kitchen.’
- b. *u-Kuthula u-dl-é e-m-kulw-ini **uku-dla.**
- (9) a. u-ya-ku-dl-a **uku-dla** em-kulw-ini.
 1S-TNS-15OM-eat-ASP 15-food 3-kitchen-LOC
 ‘S/he is eating the food in the kitchen.’
- b. u-ya-ku-dl-a emkulwini **uku-dla**

2.4 Object marking (OM):

➤ OM only with ‘long’ forms:

- (10) a. u-Phita u-Ø-yi-khab-ile/-*è in-ja.
 1a-Peter 1S-TNS-9OM-kick-ASP 9-dog
 ‘Peter kicked the dog.’
- b. u-ya/-*Ø-ku-dl-a uku-dla
 1S-TNS-15OM-eat-ASP 15-food
 ‘S/he is eating/eats the food.’

→ OM can only associate with adjuncts; see also (11)

- (11) *u-Phita u-Ø-yi-khab-a yinqe in-ja.
 1a-Peter 1S-TNS-9OM-kick-ASP any 9-dog
 ‘Peter kicks any dog.’

➤ OM is optional

- (12) a. u-Phita u-(yi)-khab-ile in-ja esedlula
 1a-Peter 1S-TNS-9OM-kick-ASP 9-dog in passing
 ‘Peter kicked (the) dog in passing.’
- b. u-ya-(ku)-dl-a uku-dla
 1S-TNS-15OM-eat-ASP 15-food
 ‘S/he is eating/eats (the) food.’

→ there are DP adjuncts in the absence of OM

→ given optionality, we expect semantic effects:

✓ OM forces Topic-related readings on DP object (i.e., specificity/definiteness)

- (13) a. u-Ø-dl-ile uku-dla u-Kuthula.
 1S-TNS-15OM-eat-ASP 15-food 1a-Kuthula
 ‘Kuthula ate **some** food.’
- b. u-ku-dl-ile uku-dla u-Kuthula.
 1S-TNS-15OM-eat-ASP 15-food 1a-Kuthula
 ‘Kuthula ate **the** food.’

❖ argument-adjunct asymmetries are linked to ‘long’ versus ‘short’ forms and not simply to the presence of agreement markers.

- That agreement itself is not indicative of adjunct status (as in Jelinek 1984) is further supported by the subject agreement:
 - preverbal subjects are arguments but postverbal subjects are adjuncts, despite agreement in both instances. See (14).

- (14) a. im-bodlela / yinqe m-bodlela i-Ø-f-ile.
 9-bottle / any 9-bottle 9S-TNS-break-ASP
- b. i-Ø-f-ile imbodlela / * yinqe m-bodlela.
 9S-TNS-break-ASP 9-bottle / any 9-bottle
 ‘The bottle /any bottle broke.’

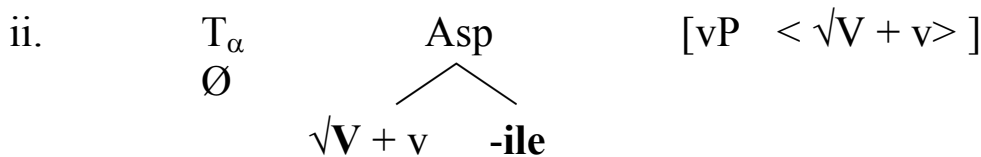
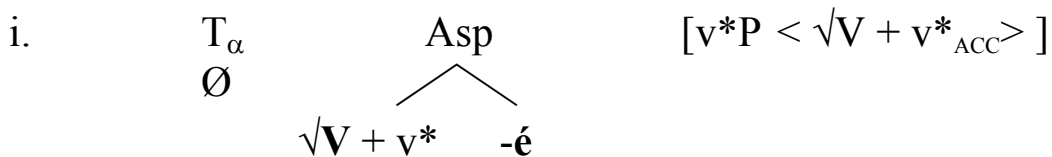
- However, VP-internal subjects may occupy their base-generated argumental position, but only in the presence of the ‘short’ form.
- In this case, there is no agreement with T but an expletive is inserted in the A-related Spec,TP position.

- (15) ku-f-é yinqe m-bodlela
 EXPL-break-ASP any 9-bottle
 ‘Any bottle broke.’

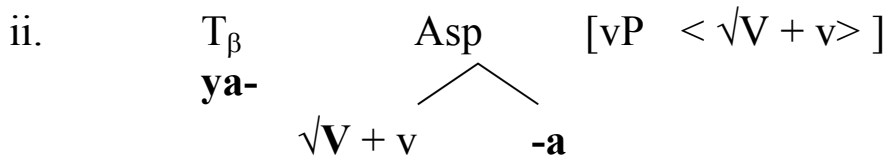
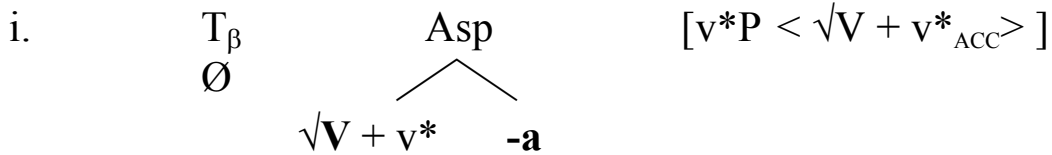
3. Analysis

The \sqrt{V} undergoes head movement up to the aspectual domain. This is illustrated in (16) for the recent past (T_α) and present (T_β) tenses, with pronounced morphemes in bold.

- (16) a. **Recent past:**



b. Present Tense:



→ the ‘short’ forms require an argument and accept the presence of a quantifier, while the ‘long’ forms occur with adjuncts

❖ $[_{Asp} -\acute{e}]$ and $[_T \emptyset-]$ are linked to a phasal domain (i.e., v^*P) which checks ACC Case (Chomsky 2005), while $[_{Asp} -ile]$ and $[_T ya-]$ are associated to a non-phasal domain (i.e., vP), with no Case properties.

→ when the verb’s thematic properties are satisfied via an adjunct, the associated nominal is a semantic but not a syntactic argument (see Chung and Ladusaw 2003).

→ in the absence of a phasal domain, the associated nominal lacks Case. The well-formedness of these structures reinforces an adjunction analysis, where the nominal is a predicate modifier which restricts the denotation akin to adverbials (see de Hoop 1996).

→ argument-adjunct asymmetries are cross-linguistically often associated with the interpretation of predicates as telic or atelic:

- for example, *eat* is interpreted as telic when selecting a DP, as in *He ate an apple*, and atelic when selecting a PP, as in *He ate at an apple*.
- in Finnish there is a Case split (Accusative versus Partitive, Kiparsky 1998) mirroring telicity
- antipassives in ergative languages turn the direct object into an oblique and simultaneously render the predicate atelic from telic (Ritter and Rosen 2000, Greenlandic Eskimo).

→ we follow Borer (1994) in assuming that telicity (or boundedness) effects are due to the presence of an Event Measure (EM). The EM is assigned its delimiter role in the specifier of an event functional projection (FP), which also assigns ACC.

4. Notes on Telicity

→ for Ndebele, the prediction is that for verbs involved in telicity alternations the phasal-related forms (i.e., the ‘short’ forms) but not the non-phasal forms (i.e., the ‘long’ forms) receive a telic interpretation

- (17) a. u-**ya**/***Ø**-dl-a
1S-TNS-eat-ASP
‘S/he is eating.’ (**atelic**)
- b. u-***ya**/**Ø**-dl-a uku-dla
1S-TNS-eat-ASP 1S-food
‘S/he eats food.’ (**telic**)
- (18) **TELIC** √hamb ‘walk’
- a. U-***ya**/**Ø**-hamb-a esi-ya esi-ful-eni.
1S-TNS-walk-ASP 7-toward 7-lake-LOC
‘She is walking to the lake.’
- b. U-**Ø**-hamb-**é**/***ile** esifuleni
1S-TNS-walk-ASP 7-lake-LOC
‘She walked to the lake.’
- c. u-***ya**/**Ø**-hamb-a masinya
1S-TNS-walk-ASP quickly
‘S/he is walking quickly’
- d. u-***ya**/**Ø**-hamba-hamb-a esi-vande-ni
1S-TNS-walk-walk-ASP 7-garden-LOC
‘He’s walking (the entire distance of) the garden.’
- (19) **ATELIC** √hamb ‘walk’
- a. u-**ya**/***Ø**-hamb-a
1S-TNS-walk-ASP
‘S/he is walking.’
- b. u-**Ø**-hamb-***é**/**ile**
1S-TNS-walk-ASP
‘She walked.’
- c. u- **ya**/***Ø**-hamba-hamba
1S-TNS-walk-walk-ASP
‘He’s walking around.’

- d. ngi-Ø-hamb-*é/ile ekuseni
 1p.S-TNS-walk-ASP morning
 ‘I walked this morning.’

- the 'short' forms require event measures (EMs), while the 'long' forms rule them out.
- EMs ensure telicity readings
- potential EMs: DP objects and non-temporal (i.e., VP) adverbials (also Kratzer 2002)

Note that the **APPLICATIVE** morpheme, which introduces an additional argument acting as an EM in the structure, also requires the 'short' form:

(20) ‘S/he eats in the kitchen’:

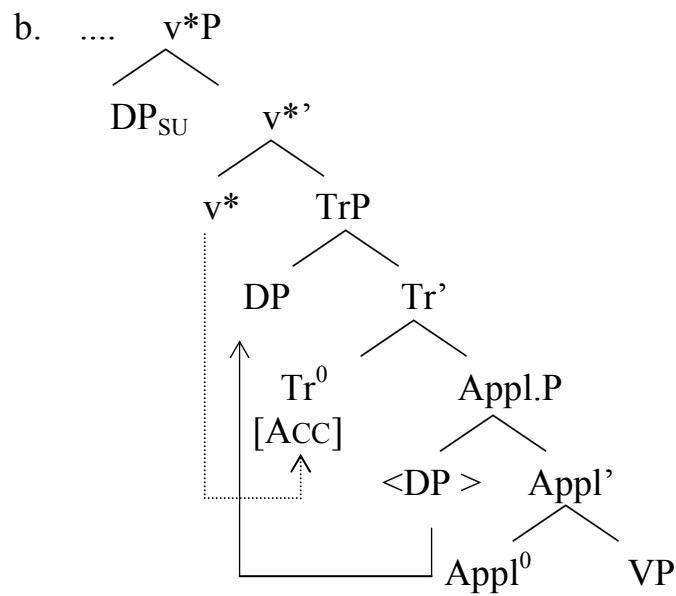
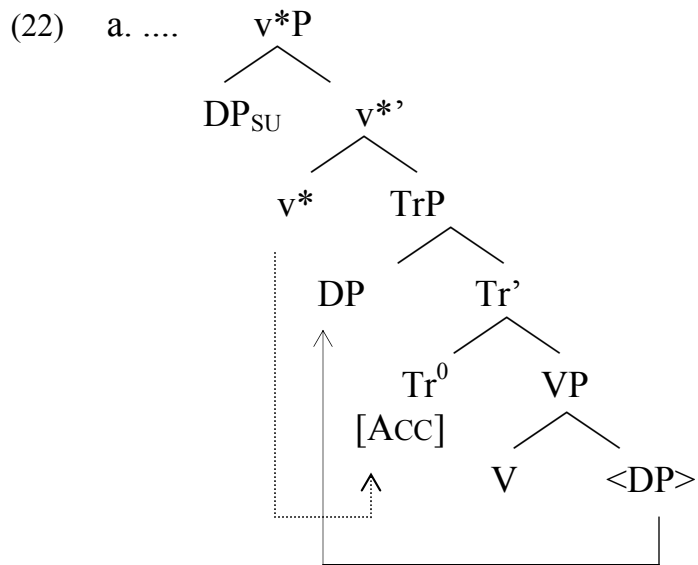
- a. u-ya/*Ø-dl-a em-kulw-ini.
 1S-TNS-eat-ASP 3-kitchen-LOC
- b. u-*ya/Ø-dl-el-a em-kulw-ini.
 1S-TNS-eat-APPL-ASP 3-kitchen-LOC

→ locative can only be adjacent to the verb (i.e., an argument) in the presence of APPL

- (21) a. u-Kuthula u-Ø-dl-é (*em-kulw-ini) uku-dla emkulwini
 1a-Kuthula 1S-TNS-eat-ASP 3-kitchen-LOC 15-food 3-kitchen-LOC
- b. u-Kuthula u-Ø-dl-el-é emkulwini uku-dla
 1a-Kuthula 1S-TNS-eat-APPL-ASP 3-kitchen-LOC 15-food
 ‘Kuthula ate his food in the kitchen.’

→ assuming EMs occupy the specifier of FP (e.g. TrP of Bowers 2002), a proxy of a phasal vP, ACC Case checking is also guaranteed.

For illustration, we provide the structure in (22a) to represent the situation where the direct object serves as the Event Measure (e.g., 17b). The structure in (22b) illustrates the situation where the applicative is the Event Measure (e.g., 20b):



5. Conclusions

- ✓ argument-adjunct asymmetries are linked to ‘long’ versus ‘short’ forms and not simply to the presence of agreement markers.
- ✓ [_{Asp} -é] and [_T Ø-] are linked to a phasal domain (i.e., v*P) which checks ACC Case, while [_{Asp} -ile] and [_T ya-] are associated with a non-phasal domain (i.e., vP), with no Case properties
- ✓ the 'short' forms require event measures (EMs) and ensure telicity readings

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