Tense agreement in Ndebele light-verb constructions

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1 Introduction

- Ndebele uses a class of light verbs (LVs) to express adverbial meanings
  (e.g. *qala* 'do first', *phose* 'almost do', *ze* 'finally do', *mane* 'simply do')

- The main, lexical verb appears with **subjunctive mood morphology**[1]

(1) Ngi-qala   ngi-pheke.
     1sg-first.**pres** 1sg-cook.**pres.sbjv**
     'I first cook'

     Present → Present Sbjv

(2) Ngi-qalé   ng-aphéka.
     1sg-first.**pst** 1sg-cook.**pst.sbjv**
     'I first cooked '

     Past → Past Sbjv

- The subjunctive verb co-varies with matrix tense (present subjunctive or past subjunctive)

Examining Ndebele LV-constructions, I argue that:

- Tense agreement is a relation which need not involve T heads

- It is an instance of Infl-agreement – an independently motivated mechanism

- The main constraint that governs tense/Infl-agreement is locality

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PROPOSAL:
Tense agreement in Ndebele is agreement between the subjunctive verb and the closest inflectional head:

$$(\text{Infl}) \ \ldots \ (\text{Infl}) \ \ldots \ \text{Infl} \ \ldots \ V_{light} \ \ldots \ V_{sbjv} \ \ldots$$
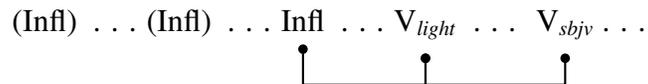
PLAN:

2 Tense agreement in Ndebele and Sequence of Tense

3 Analysis: tense agreement as an instance of Infl-agreement

4 Evidence for locality: intervention by lower Infl

5 Conclusion

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[1] Abbreviatons: FS = final suffix, FUT = future, PRES = present, PST = past, SBJV = subjunctive

2 Tense agreement in Ndebele and Sequence of Tense (SOT)

(3)   a.   Ngi-qala   ngi-pheke.   *Ndebele*
           1sg-first.**pres** 1sg-cook.**pres.sbjv**
           'I first cook'

      b.   Ngi-qalé   ng-aphéka.
           1sg-first.**pst** 1sg-cook.**pst.sbjv**
           'I first cooked'

- *Sequence of Tense*: embedded tense is dependent on matrix tense

(4)   a.   Gianni crede   che Maria sia   incinta.   *Italian* (Giorgi, 2009:7)
           Gianni believe.**pres** that Maria be.**pres.sbjv** pregnant.
           'Gianni believes that Maria is pregnant'

      b.   Gianni credeva   che Maria fosse   incinta.
           Gianni believe.**pst** that Maria be.**pst.sbjv** pregnant.
           'Gianni believed that Maria was pregnant'

⇒Embedded past tense morphology expresses simultaneity, not precedence

	higher tense	lower tense
(5)
| Morphology: | PAST | PAST |
| Semantics: | PAST | PRES/∅ |

Accounts of Sequence of Tense:

- the lower past tense is a semantically deficient T (anaphoric/dependent tense)
  (Picallo, 1984; Abusch, 1997; Giorgi & Pianesi, 1997; Landau, 2004; Giannakidou, 2009; a.o.)

- the semantics–morphology mismatch is due to operations on the lower T (PF/LF feature deletion, agreement with higher T)
  (Comrie, 1986; Enç, 1987; Ogihara, 1989; Giorgi, 2009; a.o.)

→ **A dependency between two Ts**: [*main clause* **T** . . . [*sbjv clause* **T**$_{dep}$ . . .]]

> A CHALLANGE:
> In Ndebele light-verb constructions, the subjunctive complement is smaller than a TP.

(6)   Two types of subjunctive complements in Ndebele
      a.   *Clausal Subjunctive* (CP)
      b.   *Small Subjunctive* (≈VP) (selected by aspectual light verbs)

(7)   Assumed clause structure: [CP [TP [PerfP [AspP [VP   ]]]]]

Small Sbjv

Clausal Sbjv

- CP: only Clausal Subjunctives can be introduced by a complementizer

(8) a. Ngi-m-funa [**ukuthi** a-bale.   ]   *Clausal Subjunctive*
         1sg-1o-want COMP 1-read.sbjv
         I want him to read.

     b. U-qala [(***ukuthi**) a-bale.   ]   *Small Subjunctive*
         1-first (*COMP) 1-read.sbjv
         He first reads.

- TP: only Clausal Subjunctives can have a preverbal subject (in Spec,TP)

(9) a. Ku-fanele [ukuthi **uZodwa** abale.   ]   *Clausal Subjunctive*
         17-must   COMP 1Zodwa 1.read.sbjv
         'Zodwa must read'.

     b. *Ku-qala [**uZodwa** abale.   ]   *Small Subjunctive*
         17-first   1Zodwa 1.read.sbjv
         ('Zodwa first reads')

- PerfP: only Clausal Subjunctives can express Perfect aspect

(10) a. Ngi-m-funa [ukuthi a-be   e-balile.   ]   *Clausal Subjunctive*
         1sg-1o-want COMP 1-aux.sbjv 1-read.**perf**
         I want him to be done reading.

     b. *U-qala [a-be   e-balile.   ]   *Small Subjunctive*
         1-first   1-aux.sbjv 1-read.**perf**

- AspP: only Clausal Subjunctives can express imperfective aspect

(11) a. Ngi-m-funa [ukuthi a-be   e-bala.   ]   *Clausal Subjunctive*
         1sg-1o-want COMP 1-aux.sbjv 1-read.**impf**
         I want him to be reading.

     b. */? U-qala [a-be   e-bala.   ]   *Small Subjunctive*
            1-first   1-aux.sbjv 1-read.**impf**

(12)   Ndebele small subjunctives are selected by aspectual light verbs
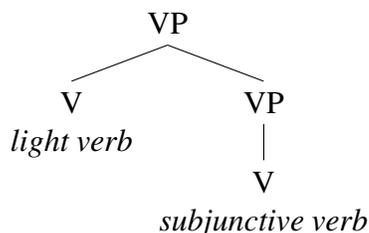
```
                    VP
                   /  \
                  V    VP
              light verb |
                         V
                  subjunctive verb
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⇒ Small Subjunctives do not contain a TP

3

- Tense agreement in the two types of subjunctive complements:

(13)   *Small Subjunctive: tense agreement*

    a. U-qala   a-bale.   *Present → Present Subjunctive*
        1-first.**pres** 1-read.**pres.sbjv**
        He first reads.

    b. U-qalé   w-abala/*a-bale.   *Past → Past Subjunctive*
        1-first.**pst** 1-read.**pst.sbjv**/*1-read.**pres.sbjv**
        He first read.

(14)   *Clausal subjunctive: no tense agreement*

    a. Ngi-m-funa   ukuthi a-bale.   *Present → Present Subjunctive*
        1sg-1o-want.**pres** COMP 1-read.**pres.sbjv**
        I want him to read.

    b. Ngi-a-m-funa   ukuthi a-bale/*w-abala.   *Past → Present Subjunctive*
        1sg-**pst**-1o-want COMP 1-read.**pres.sbjv**/*1-read.**pst.sbjv**
        I wanted him to read.

- Clausal Subjunctive contains a T projection but shows no tense agreement with higher tense

- Small Subjunctive does not contain T but it *does* show tense agreement with higher tense

> WHAT WE NEED:
> an account of tense agreement that does not require making reference to a lower T head

3   Analysis: tense agreement as an instance of Infl-agreement

> PROPOSAL:
> morphological tense agreement in Ndebele Small Subjunctives is not a dependency between Ts,
> but between local heads in the clausal spine

3.1   The mechanism of Infl-valuation

- every verb has an unvalued Infl feature

- every inflectional head (e.g. T, Asp) has a valued Infl feature

- Agreement between Infl-features results in downward valuation (Adger, 2003; Bjorkman, 2011; Wurmbrand, 2011)

(15)   The Infl-inventory in Ndebele
    $[_{T^0}$ Infl:PAST/FUT/PRES[2] $[_{Perf^0}$ Infl:PAST $[_{Asp^0}$ Infl:IMPF $[_{V^0}$ Infl:___]]]]]

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[2] The present tense has actually be argued to be unmarked in Ndebele and modeled as absence of Infl on T (Pietraszko, 2016). This detail is not crucial here and I use [Infl:PRES] for clarity.
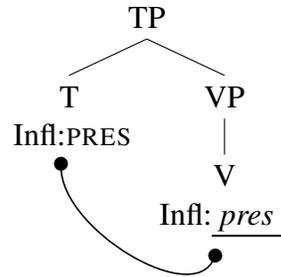
(16)   Simple Past: (17)   Present tense: (18)   Future Tense:
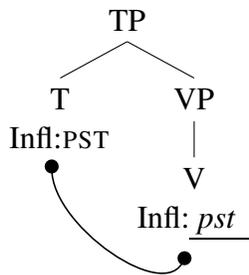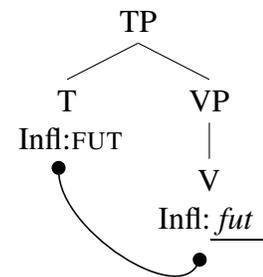
   U-∅-bal-ile.   U-ya-bal-a.   U-za-bal-a.
   1-pst-read-FS.pst   1-pres-read-FS   1-fut-read-FS
   'He read'   'He is reading'   'He will read'

3.2   Infl-agreement in Small Subjunctives

(19)   <u>Non-past → Present Sbjv</u>   (20)   <u>Past → Past Sbjv</u>

a.   Ngi-qala   ngi-pheke.   a.   Ng-á-qala   ng-aphéka.
      1sg-first.**pres** 1sg-cook.**pres.sbjv**   1sg-**Dpst**-first 1sg-cook.**pst.sbjv**
      'I first cook'   'I first cooked (long ago)'

b.   Ngi-za-qala ngi-pheke.   b.   Ngi-qal-é   ng-aphéka.
      1sg-**fut**-first 1sg-cook.**pres.sbjv**   1sg-first-**Rpst** 1sg-cook.**pst.sbjv**
      'I will first cook'   'I first cooked (recently)'

- Both the light verb (V_{light}) and the subjunctive verb (V_{sbjv}) have a [Infl:__]

- An agreement relation can be established between two unvalued features (Pesetsky & Torrego, 2007)
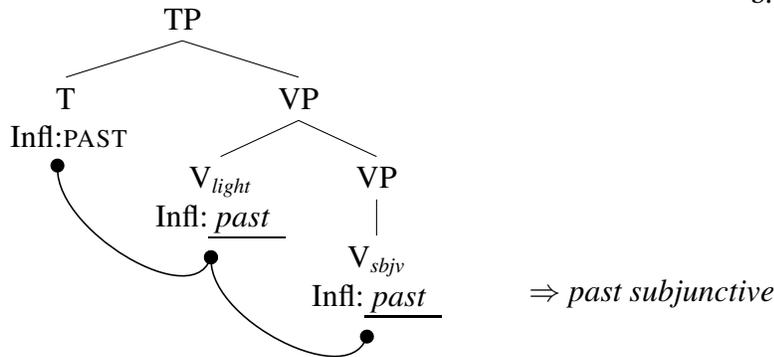
(21)   Present tense ((19)-a):   (22)   Future tense ((19)-b):
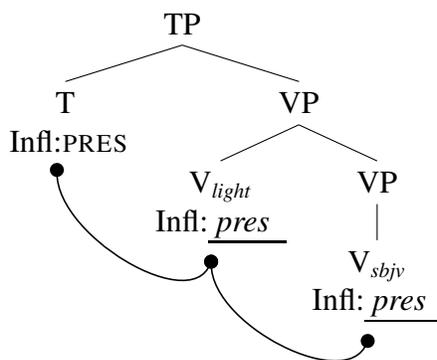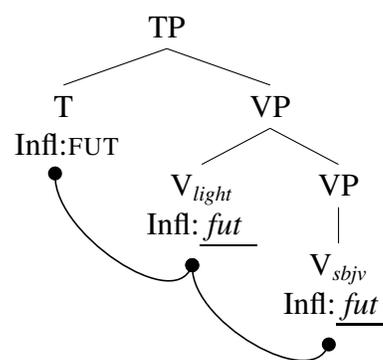
⇒ *present subjunctive*   ⇒ *present subjunctive*

(23) Past tense ([(20)]):

TP
├─ T
│   Infl:PAST
└─ VP
    ├─ V_light
    │   Infl: *past*
    └─ VP
        └─ V_sbjv
            Infl: *past*

$\Rightarrow$ *past subjunctive*

(24) a. [PAST, SBJV] $\leftrightarrow$ *past subjunctive*
      b. [SBJV] $\leftrightarrow$ *unmarked/default subjunctive*

3.3 Independent motivation for Infl-agreement: periphrasis

- Infl-agreement plays a role in verbal periphrasis:

  - If there is more than one valued Infl, the verb will agree with the more local one

  - the higher Infl is supported by an auxiliary   ([Cowper], [2010]; [Bjorkman], [2011])

(25) Past imperfective (Infl:PAST, Infl:IMPF):

TP
├─ T
│   ├─ T
│   │   Infl:PAST
│   └─ V_Aux
└─ AspP
    ├─ Asp
    │   Infl:IMPF
    └─ VP
        └─ V
            Infl: *impf*
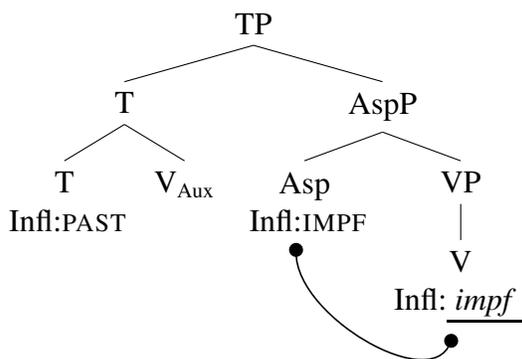
U-∅-be   e-bála
1-**pst**-aux 1-read.**impf**
''He was reading'

(26) Future Perfect (Infl:FUT, Infl:PAST):

TP
├─ T
│   ├─ T
│   │   Infl:FUT
│   └─ V_Aux
└─ PerfP
    ├─ Perf
    │   Infl:PAST
    └─ VP
   └─ V
            Infl: *past*
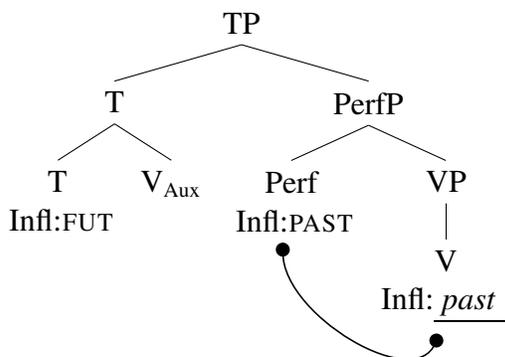
U-za-be   e-bal-ile
1-**fut**-aux 1-read-**pst**
''He will have read'

> INDEPENDENT MOTIVATION FOR INFL-AGREEMENT:
> Together with locality conditions, it determines which inflection is realized on the main verb, and which is supported by an auxiliary.

4 Evidence for locality: intervention by lower Infl

(27)   Tense agreement in Ndebele is an instance of Infl-agreement ⇒Agreement with the closest Infl

Infl . . . Infl . . . V$_{light}$ . . . V$_{sbjv}$ . . .
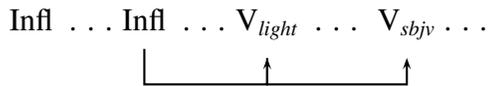
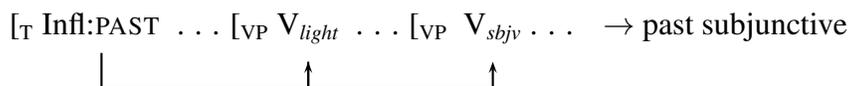### 4.1 Past subjunctive blocked by a local Infl

- In Simple Past, the subjunctive V co-varies with past tense

(28)   U-∅-qalé [w-abala/*a-bale   ]   Past T → past subjunctive
         1-**pst**-first   1-read.**pst.sbjv**/*1-read.**pres.sbjv**
         'He first read'

- In Past Imperfective, the subjunctive V does **not** co-vary with past tense

(29)   U-∅-be   e-qala   [a-bale/*w-abala   ]   Past T → **unmarked** subjunctive
         1-**pst**-aux 1-first.**impf**   1-read.**pres.sbjv**/*1-read.**pst.sbjv**
         'He was reading first'

(30)   a.   Simple Past: Agreement with T

[$_T$ Infl:PAST . . . [$_{VP}$ V$_{light}$ . . . [$_{VP}$ V$_{sbjv}$ . . .   → past subjunctive

b.   Past Imperfective: Agreement with Asp

[$_T$ Infl:PAST . . . [$_{Asp}$ Infl:IMPF . . . [$_{VP}$ V$_{light}$ . . . [$_{VP}$ V$_{sbjv}$ . . .   → unmarked subjunctive
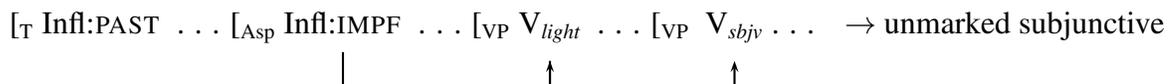
4.2 Unmarked subjunctive blocked by a local Infl

(31)   Ngi-ya-qala [ngi-pheke/*ng-apheka   ]
         1sg-**fut**-first   1sg-cook.**pres.sbjv**/*1sg-cook.**pst.subj**
         I will cook first

- Perfect aspect is a type of past tense
                  (Hoffman, 1966; McCawley, 1971; Klein, 1992; Cinque, 1999; Arregi & Klecha, 2015; a.o.)

(32)   Ngi-za-be   ngi-qal-é   [ng-apheka/*ngi-pheke   ]
         1sg-**fut**-aux 1sg-first-**perf**   1sg-cook.**pst.sbjv**/*1sg-cook.**pres.subj**
         I will have cooked first

(33)   a.   Simple Future: Agreement with T^0

[$_T$ Infl:FUT . . . [$_{VP}$ V$_{light}$ . . . [$_{VP}$ V$_{sbjv}$ . . .   → unmarked subjunctive
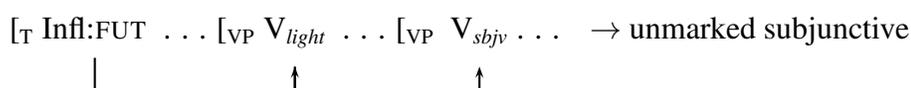
b.   Future Perfect: Agreement with Perf^0

[$_T$ Infl:FUT . . . [$_{Perf}$ Infl:PAST . . . [$_{VP}$ V$_{light}$ . . . [$_{VP}$ V$_{sbjv}$ . . . $\rightarrow$ past subjunctive

- Tense agreement in Ndebele is a relation between the subjunctive V and the closest inflectional category;

- it is **not** a direct relation between the subjunctive V and T

5   Conclusion

- Ndebele light-verb constructions exhibit tense agreement patterns which cannot be accounted for by mechanisms proposed for SOT-type tense agreement

- It is a dependency that need not involve any T heads

  - The lower T is absent in Ndebele Small Subjunctives
  - The higher T does not control agreement on the subjunctive verb in compound tenses

- Tense agreement is an instance of Infl-agreement – an independently motivated mechanism, which

  - does not rely on manipulating T heads
  - and derives the Infl-intervention effects in compound tenses from locality.

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