0. INTRODUCTION

- Bantu *-be* suffix
  - Widespread in Bantu languages
  - Usually marks past tense, anterior (perfect) aspect, or, occasionally, “present” tense, sometimes with restrictions (Nurse and Philpsson 2006)
- Proto-Bantu *-id* (Goethrie 1970), or homorganic *-d-e* (Vredz 1980)
  - Probably a marker of anterior (perfect) aspect
  - Possibly also functioned as a general past tense marker (Nurse and Philpsson 2006)
- Totela: /-ITE/
  - Conditioned by vowel and consonant harmony effects, and sometimes undergoes imbrication
  - Extremely productive
  - Some lexical restrictions, particularly among older, more conservative speakers
  - Varying temporal interpretations:

Resultative/Stative:

1. **Nde-li-be*-en**
   - ISG-BE-see ICT:
   - ‘I see’

2. **Nde-li-zim*-en**
   - ISG-BE-STAND.UP ICT:
   - ‘I am standing’

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1 Data for this paper are taken from field notes and recordings from two approximately 2.5-month research trips to Namibia and Zambia in 2006 and 2007. Namibian data reflect the Chana Luhani and the Chins Chilco dialects of Totela, both spoken in the Caprivi Strip. Zambian data come from several Totska-speaking areas of the country’s Western Province. Data are taken from elicitation interviews in which speakers produce, give judgments for, and discuss the semantics of the -be suffix, from narratives and other recorded texts, including conversations, and from my field notes of attested uses of the suffix in everyday speech.

Many thanks to the communities of Likemwe, Samiisi, and Malowe in Zambia, and of Makosi and Kachanian in Namibia, without whose astounding hospitality, enthusiasm, and patience this investigation would not have been possible. Particular thanks go to my wonderful consultants and research partners Michael Sillo, Veronika Khamakwa, Clement Tubaiwage, Tekelo Kachelo, Sambhi Agatha Nasamu, Kelly Murale, and Namusaka Imwana.

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Thera Crane

**When Relevance Trumps Time:**

The Information-Structural Role of a Bantu Anterior in Totela

Thera Crane

University of California, Berkeley

thera@berkeley.edu

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Thera Crane

IS and the Anterior in Totela

Chronos 8: 5 Oct 2008

3 Gloses used:

<table>
<thead>
<tr>
<th></th>
<th>Class 1</th>
<th>NLAG</th>
<th>Negative marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPL</td>
<td>1st person plural</td>
<td>NT</td>
<td>Namibian Totela</td>
</tr>
<tr>
<td>SG</td>
<td>3rd person singular</td>
<td>PASS</td>
<td>Passive</td>
</tr>
<tr>
<td>2a</td>
<td>Noun Class 2a</td>
<td>PERF</td>
<td>Perfective</td>
</tr>
<tr>
<td>APPL</td>
<td>Applicative</td>
<td>PREHOLD</td>
<td>Preverbal past</td>
</tr>
<tr>
<td>ASP</td>
<td>Aspectual marker</td>
<td>PST</td>
<td>Past</td>
</tr>
<tr>
<td>DEM</td>
<td>Demonstrative</td>
<td>REFL</td>
<td>Reflexive</td>
</tr>
<tr>
<td>PN</td>
<td>Final Vowel</td>
<td>SOBV</td>
<td>Subjunctive mood</td>
</tr>
<tr>
<td>INF</td>
<td>Infinitive</td>
<td>V</td>
<td>Verb</td>
</tr>
<tr>
<td>IPV</td>
<td>Imperfective</td>
<td>ZT</td>
<td>Zambian Totela</td>
</tr>
</tbody>
</table>

Morphemes have been separated for glossing purposes and do not necessarily represent final phonological form.
2. SOME PRELIMINARIES

2.1 LANGUAGE BACKGROUND: TOTELA

- Bantu language spoken in Zambia’s Western Province and in Caprivi Strip in Namibia
- Graphite K,41
- Endangered (14,000 speakers in 1971 (Gordon 2005); number rapidly diminishing)
- Closely related to Subiya, Tonga, Ilu, and other languages of the area

Map 1: Zambia Language Map
(Map 2: Namibia Language Map)

2.2 TERMINOLOGY

- ANTERIOR: Depicts “a past action with current relevance” (Rose et al. 2002:8; see also Bybee et al. 1994:54, 318).
  - Cross-linguistically attested category; generally periphrastic (e.g. Dahl 1985)
  - Temporal component (past)
  - Pragmatic component (current relevance)
- RELEVANCE (Roberts 1996)
  - Cooperative conversation: a mutual effort to answer “the Big Question”, i.e. What is the way things are?
    - In practice: evaluating a set of propositions that constitute the “immediate question under discussion”, or discourse topic
  - An utterance is RELEVANT if it leads to evaluation of some or all of these propositions

3. ACCOUNTING FOR -IN’s TEMPORAL BEHAVIOR

3.1 CLAIM:

- Synchronously, -IN has two functions:
  - Depicts a state associated with the subject
  - Depicts the subject’s state as relevant in the discourse; this relevance is presupposed rather than asserted (cf. Pomer 2003 for the English perfect)
- Relevance, rather than temporal pastness, is the primary feature of -IN: the situation depicted in the verb – the cause of the relevant state – is thus free to be interpreted as
  - Concurrent with topic time (progressive), or
  - Prior to the topic time (past, with resultant state semantics)

3.2 -IN’s STATIVIZING FUNCTION

3.2.1. EVIDENCE FOR STATIVITY

- Resultative sense of inchoative verbs:

(6) Ndi-li-AM-ere
1SG-Be-STAND UP-ITE
‘I am standing’

(7) a. Ka-tu-hwal-ito (ZT)
IPV-PST-1pl-be.sick-ITE
‘We were sick’

b. *Twa-ka-hwal-ito (ZT)
1pl.PFV-PST-PREHOD-be.sick-ITE
‘We were sick’

- Incompatible with perfective morphology:

(8) a. ndi-li-kwepa
1SG-Be-have(ITE-GRAB) 1SG-ASP-barthe-FV
‘I am bathing’

b. ndi-li-samthi
1SG-Be-have(ITE) 1SG-ASP-perfection
‘I am bathed’

- Contrast with progressive:

(9) a. tu-li-kwezi
1SG-BE-have(ITE) 2s-ASP-REFL-hide-FV
‘We are (in the process) of hiding (ourselves)’

b. tu-li-li-bik-ito (ZT)
2s-REFL-barthe-ITE
‘We are hidden’

- Stativity is an inherent property of certain lexical items or verb constellations
- The progressive is an aspect, i.e. a grammatical temporal relation imposed by speakers on verbs of various sorts.
- However, statives, like progressives and resultatives, refer to one “stable” situation (Smith 1997:84):²
  - Statives by virtue of inherent lexical properties,
  - Progressives and resultatives because one part of a verb constellation’s event structure is presented as stable and ongoing.

Claim #1: -it picks out one subinterval of one constellation’s event structure, and presents it as a stable (and relevant) condition; a state of affairs that
  - is ongoing with respect to the topic time (TT)
  - may be expected to continue beyond TT unless other conditions arise to change it

Claim #2: because progressives, resultatives, and statives all describe “stable”, ongoing situations, all of these functions are available to -it

3.3 Evidence for -it’s Relevance Presupposition

- Distribution:
  - Very frequent with verbs depicting temporary states
  - Far less frequent with verbs like -ba (‘read’) and -bda (‘write’)
  - Common with, e.g. passive -ita (*write-ITP-PASS-ITP), with a resultative stative reading:

(10) Ta-chi-ndl-a-g-w-a mwimbuka
NEG-7-write-ITP-PASS-ITP in-books
‘It’s not written in books’ (given as an explanation for Totela’s low prestige)


² 3PL (Bantu noun class 2) is used with singular referents to indicate respect.
4. Predicting Temporal Interpretations of *-its

- One-state predicates: *-its generally picks the state for which the predicate holds (that which is most relevant for explaining the condition of the grammatical subject) → a progressive reading:

  (17) One-state predicate: -sua 'dance'

<table>
<thead>
<tr>
<th>Event Structure (à la Klein 1994):</th>
<th>+ ++ [ + + + ] + +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretime</td>
<td>Situation Time</td>
</tr>
<tr>
<td><em>not yet dancing</em></td>
<td><em>in process of dancing</em></td>
</tr>
<tr>
<td>Postime</td>
<td><em>no longer dancing</em></td>
</tr>
<tr>
<td>Affected Subinterval:</td>
<td>RELEVANT STATE</td>
</tr>
</tbody>
</table>

- Two-state predicates: the speaker chooses the state to represent as most relevant

  * In the absence of context → the state that affects the subject most – generally the target state (36), but sometimes also the source state (37)

(18) Two-state content: -sua ‘become happy’

| Event Structure (à la Klein 1994): | - - - - - - - - | + [ + + ] + + |
|-----------------------------------|-----------------|
| Pretime                          | Time of Source State |
| *in process of becoming happy*   | *in state of being happy* |
| Postime                          | Time of Target State (and Postime of Source State) |
| *no longer happy*                | *in state of being happy* |
| Relevant Subinterval:            | RELEVANT STATE   |

*its Interpretation: RELEVANT STATE

- Verbs with tangible results or natural endpoints that tend to have a progressive reading:
  - *-luka (‘cook’) → the agent is more affected while busy cooking than once the food is prepared*
  - *-juyu (‘kill’) → again, agent is more affected during the event than after*

- Verbs that tend to have resultative readings:
  - *-ya (‘eat’) and -srayu (‘drink’) → can be used as reasons for not accepting further food or drink*
  - *-dali (‘drink’) → can be used, e.g. if a speaker has worked long and collected enough wood that she can have a fire for many days*

(20) -chah (inkanu) ‘collect (firewood)’

<table>
<thead>
<tr>
<th>Event Structure (à la Klein 1994):</th>
<th>+ + + + + + + +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretime</td>
<td>Situation Time</td>
</tr>
<tr>
<td><em>not yet collecting wood</em></td>
<td><em>in process of collecting wood</em></td>
</tr>
<tr>
<td>Relevant Subinterval:</td>
<td>RELEVANT STATE</td>
</tr>
</tbody>
</table>

*-its Interpretation: CAUSE STATE

5 At least for older speakers, this verb is marginally acceptable at best with *-its, but uniformly received a present interpretation
4.1.1. PREDICTING TEMPORAL INTERPRETATIONS: NOT JUST TELICITY…

- Logical hypothesis: the temporal interpretation of *-it* is based on telicity.

  - Telic predicates => resultative reading
  - Atelic predicates => progressive reading

- What is telicity?
  - Aristotle (discussed in Binnick 1991): Some verb meanings entail an “end” or “result”
  - Garey (1957) (first use of “telic”): Natural culmination is telicity’s essential characteristic
  - Ebert (1993:190): “The term ‘telic’ should be reserved for verbs that designate events developing towards an inherent final transformation.”
  - Smith (1997:42): Telicity crucially involves a change of state
  - Filip (2004): Telicity depends on the “quantitative property of countability”
  - Egg (1993): One can’t lump predicates like *eat two cookies* with predicates like *die*.

- *-it*, which in addition to being bounded also entails an actual change of state, can be classified as truly “telic”.

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"Boundedness indicates that the validity of a predicate is temporally limited" (Egg 1995:324); Egg names the class of predicates that are bounded but not telic “interrogatives”.

"Formally, these predicates are characterized by an operator that denotes a change from the validity of a state or process predicate to the validity of its contrary" (Egg 1995:325).
5. Historical Development

5.1 Historical development of Bantu *-its

- Proto-Bantu likely marked...
  - TENSE in the pre-stem position
  - ASPECT post stem (Nurse and Philippson 2006:81)
- This split relaxed, and, in many languages anterior *-its
  - General past marker (majority of languages)
  - Present tense marker (less commonly)
- Voelz (1980): *-its (might be reconstructable as the grammaticalization of a verb *-it+ meaning ‘finish’ and a perfective suffix
- Bybee et al. (1994): pathway of anteriors from ‘finish’:

\[ \text{‘finish’} \rightarrow \text{perfective / simple past} \]
\[ \text{derivative / perfective} \]

(from Bybee et al. 1994: 105)

- If -its comes ‘finish’, and it developed from a Proto-Bantu anterior, its development has taken a somewhat unexpected deviation from Bybee et al.’s crosslinguistic findings:

\[ \text{‘finish’} \rightarrow [\ldots] \rightarrow \text{anterior} \rightarrow \text{resultative / general stativizer} \rightarrow \text{stative} \rightarrow \text{progressive} \]
Possible pathway of pragmatic extension:

(28) Speaker use of *-le with various meanings and verb types

<table>
<thead>
<tr>
<th>Zambian Speakers: Conservative</th>
<th>Zambian Speakers: Less Conservative</th>
<th>Namibian Speakers: Conservative</th>
<th>Namibian Speakers: Less Conservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>-le as resultive, esp. with inchoative verbs (e.g. become-buy, hilda, become-fall)</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>-le as present tenses (e.g. huna, find)</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>-le as progressive with motion/path verbs (e.g. walk, come)</td>
<td>generally accepted, used more commonly with certain lexemes</td>
<td>generally accepted, used more commonly with certain lexemes</td>
<td>but sometimes preferred with certain lexemes*</td>
</tr>
<tr>
<td>-le as progressive with other verbs (e.g. dance, carve)</td>
<td>rare (but not unattested)</td>
<td>accepted but less commonly used</td>
<td>used, but often somewhat marked</td>
</tr>
</tbody>
</table>

Possible explanation:

⇒ As a marker of anterior, *-le historically had functions including past temporal reference and a presupposition of relevance

⇒ As the relevance function increased in prominence, *-le may have come to mark resultatives, which denote "a state that was brought about by some action in the past" (Bybee et al. 1994:63), highlighting the state rather than the situation that caused it.

⇒ Once relevance had become *-le's salient feature, the temporal restriction could be removed entirely, allowing for its interpretation as resultative, stative, or progressive.

Another possibility:

⇒ The reconstruction of a Proto-Bantu 'anterior', with the functions described above, might be reconsidered.

* For example, *-le occurs often in verbs describing path such as come and past but less often with walk (-toma, which also means simply 'go') and run which imply not only a path but also a manner of motion.

* The distribution appears to be similar to that described in footnote 6; use of *-le for manner of motion verbs may be more common than in Zambia, but the corpora examined do not show this conclusively.

5.2 THE -le (AND THE -*) ANTERIOR IN BANTU

⇒ Bantu anterior (/*-le/ and pre-stem /-a-/) become

⇒ perfectives (expected)

⇒ presents (general - unexpected)

⇒ progressives (unexpected)

⇒ immediate futures (unexpected)

⇒ Nurse and Philippson (2006: 159):

An anterior involves two situations, a previous situation and a later or present state or situation, chronologically ordered, in which the present situation is the result of the previous situation, or in which the previous situation is somehow still relevant to the current one. Remove the present meaning component and the result is a past tense. […] On the other hand, remove the past requirement and what remains is a present.

⇒ However: the "present" component of anterior aspect has a relevance (or result state) component as well - it is not merely marking present time.

5.3 OTHER PERFECT/PROGRESSIVE CONNECTIONS

⇒ Ebert (1995)

⇒ Mongolian, Arabic, Seneca, Nepali…

⇒ the reinterpretation of resultatives as progressives is rare, and is attested mostly in Asia

⇒ Japanese: *-ni

6. CONCLUSION

⇒ Totela *-le cannot be satisfactorily analyzed as an anterior, resultative, or perfective marker

⇒ Temporal interpretations of *-le can be unified under its analysis as an information-structuring marker that presupposes relevance to the discourse topic.

⇒ *-le acts as a general statorizer that picks out the event structure subinterval most relevant to the discourse world.

⇒ Information structure and other extra-temporal functions may be crucial components of many categories traditionally labeled as aspectual, and that so-called aspect markers should be examined with this in mind.

⇒ Historical development of *-le suggests either

⇒ a multi-component theory of aspectual marking, in which expression of relevance, rather than event time, can become the primary function, or

⇒ a refined analysis of the role of so-called "anteriors" in historical Bantu.

⇒ *-le's disparate temporal functions have correlates in other languages; reexamination of such phenomena with modality and information structure in mind may prove fruitful.
7. **APPENDIX B: **

**-im in Totela**

7.1 **-im and (Resultant) States**

- Telic/inchoative predicates: resultative reading

(29) a. ndi-la-tab-a *(ZT)*
   1SG-ASP-become.happy-FV
   'I’ll be (come) happy'  

b. ndi-li-tab-im *(ZT)*
   1SG-BE-become.happy-ITI
   'I’m happy'

(30) a. ba-la-nun-a *(ZT)*
   3PL-ASP-become.fat-FV
   'they’ll get fat'

b. ba-li-nun-im *(ZT)*
   3PL-BE-become.fat-ITI
   'they’re fat'

(31) a. tu-la-izib-an-a *(rule to filana)* *(ZT)*
   1PL-ASP-come.to know-RECIPI-FV
   'we will get to know each other'

b. tu-li-izib-ane *(ZT)*
   1PL-BE-come.to know-RECIPI-ITI
   'we know each other'

(32) ka-ba-se-at-wa-4 omantu eenke *(ZT)*
   IPFV.PST-3PL-marry-ITI-PASS-ITI 1.person 1.one
   'they were married to one [the same] person'

(33) Ndi-li-yak-im *(afowii n-omudonga)* *(ZT)*
   1SG-be-build ITI near with 3-river
   'I am built [i.e., my house is located] near the river'

- Other situations – not always canonically ‘telic’, but with resultant states: resultative reading

(34) Ndi-li-samb-tem *(ZT)*
   1SG-BE-bathe-ITI
   'I am bathed’ (I have just now bathed and am likely still to be wet.)

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* The -im marker in Zambian Totela, related to a disjunctive marker in Tonga, has general present, near future, and progressive meanings. A detailed study of its semantics and distribution is in progress. -im, used with -a, likely comes from a defective verb -a, ‘be’. 
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Traf dha-se-N/a (a

(42) bantuwa ba-lahu:-a ha-nsi, ehibungu icho chi-uluk-ikg ku-uluu (NT)
2a.hyena 2a-run-FV 16-earth 7.kite(raptor) 7.DIE 7-FLY-FFE 17-10. sky

The hyenas are running on the ground, while that kite is flying in the sky.

* Other activity predicates:

(43) a. ndi-la-neng-a (ZT)
    ISG-ASP-dance-FV
    'I dance/am dancing/will dance (near future)'

b. ndi-li-neng-sse (ZT)
    ISG-BE-dance-FFE
    'I am dancing'

(44) ndi-fon-sse (NT)
    ISG-telephone(V)-FFE
    'I'm on the phone/making a phone call'

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