

The marking of future uncertainty in Nata

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Introduction

Background

Nata is an E-group Bantu language spoken by approximately 6000 people in Northern Tanzania

- No previous studies of semantic phenomena in this language

Problem

A curious asymmetry in the marking that verbs receive in strong epistemic modal contexts (indicating certainty) and weak epistemic modal contexts (indicating uncertainty) across temporal-aspectual orientations with respect to tone position and a homorganic nasal prefix *N-*.

- Future-oriented sentences:** verbs receive *N-* and high tone on the third syllable from the left edge of the word under strong modal force; under weak modal force (introduced by *hamwe* “maybe”), *N-* is absent and high tone lies on the second syllable from the left edge.

(1a) Omwíito naakoβína taβóori
 o-mu-íito N-aa-ko-βín-a taβóori
 ppf-C1-1sgPoss.brother ?-SM1-PROG-dance-fv tomorrow
 ‘My brother will dance tomorrow.’

(1b) Hamwe omwíito aakóβína taβóori
 hamwe o-mu-íito aa-kó-βín-a taβóori
 maybe ppf-C1-1sgPoss.brother SM1-PROG-dance-fv tomorrow
 ‘Maybe my brother will dance tomorrow.’

- Non-future oriented sentences:** verb marking is identical under both modal forces; no distinction between strong and weak modal force on the verb, as shown in Table 1:

Table 1: Verbal marking and modal force contrasts

Tense/aspect	Strong modal force	Weak modal force
Futurate -ko- ~ -ku- ~ -yo- ~ -yu-	N-σ σ σ σ	hamwe + Ø-σ σ σ σ
Present Progressive -ko- ~ -ku- ~ -yo- ~ -yu-	N-σ σ σ σ	hamwe + N-σ σ σ σ
Near past -ire	N-σ σ σ σ	hamwe + N-σ σ σ σ
Remote past a-...-ire	N-σ σ σ σ	hamwe + N-σ σ σ σ
Narrative past -ka-	Ø-σ σ σ σ	hamwe + Ø-σ σ σ σ
Immediate past -ire	Ø-σ σ σ σ	#
Incipient -aká-	Ø-σ σ σ σ	#

Research Questions

How is modal force marked in Nata?

- What is the relationship between *N-* and the position of verbal tone?
- What is the semantic contribution of the tone position?
- What is the semantic contribution of the *N-* prefix?

N- and tone position are independent

N- and tone position both vary in futurate verbs. Which is marking modal force?

- Near past forms show that it is possible to have tone on a position other than 3rd σ from L edge when *N-* is present:

(2a) nááywiire N-áá-yu-iiire ?-SM1-fall-PFV ‘He fell.’
 (2b) Hamwe nááywiire hamwe N-áá-yu-iiire maybe ?-SM1-fall-PFV ‘Maybe he fell.’

- Narrative past forms, which never take *N-*, show that it is possible to have tone on a position other than 2nd σ from L edge when *N-* is absent.

(3a) Akaywá mwaaká a-ka-yu-á mwaaká SM1-NAR-fall-fv last.year ‘He fell last year.’
 (3b) Hamwe akaywá mwaaká hamwe a-ka-yu-á mwaaká maybe SM1-NAR-fall-fv last.year ‘Maybe he fell last year.’

***N-* and tone position are independent of each other; it is tone position that marks epistemic modal force.**

High tone on 2nd σ = weak modal force (applies at the phrasal level, as adverb is also affected)

Distribution of *N-*

Table 2: Distribution of *N-*

Environment	<i>N-</i>	Example
Negation	*	o-mu-íito t-aa-ko-βín-a taβóori ppf-C1-1sgPoss.brother NEG-SM1-PROG-dance-fv tomorrow ‘My brother will not dance tomorrow.’
Subjunctive	*	nee-yu-sáβ-a o-mu-íito a-βín-é taβóori 1SG-PROG-pray-fv ppf-C1-1sgPoss.brother SM1-dance-SBJV tomorrow ‘I pray that my brother will dance tomorrow.’
If-clause	*	[ariβá o-mu-íito aa-ko-βín-a reβéere] if ppf-C1-1sgPoss.brother SM1-PROG-dance-fv now t-aa-ku-β-á ari mo-o-juure NEG-SM1-PROG-be-fv is C18-ppf-school ‘If my brother is dancing now, he is not at school.’
Complement clause of attitude verb (ie. “pray”)	*	nee-yu-sáβ-a [o-mu-íito a-βín-é taβóori] 1SG-PROG-pray-fv ppf-C1-1sgPoss.brother SM1-dance-SBJV tomorrow ‘I pray that my brother will dance tomorrow.’
Content (wh-) question	*	ne-ké Inga a-a-kor-ire itjɔ́ COP-wh Inga SM1-PST-buy-PFV yesterday ‘What did Inga buy yesterday?’
Polar (y/n) question		o-mu-íito N-aa-βín-ire itjɔ́ ppf-C1-1sgPoss.brother ?-SM1-dance-PFV yesterday ‘Did my brother dance yesterday?’

Hypothesis 1: *N-* is a focus marker

- A nasal focus marker has been proposed for other Bantu languages (including Ikoma, closely related to Nata) (Higgins 2011).
- Nata seems to have a nasal focus marker related to the copula (Brown 2013).
 - Problem: (1a) and (1b) were elicited in identical contexts; difficult to explain why one would be focussed but not the other.

Hypothesis 2: *N-* is a realis/assertion marker

- N-* is incompatible with negation, subjunctive, if-clauses, complement clauses of attitude verbs such as “pray”, (certain types of) questions, and future-oriented sentences (with weak epistemic modal force).

- These are all plausible environments for irrealis! (Palmer 2001).

- Problems: the attitude verb “hope”, unlike “pray”, takes the *N-* prefix

ηkina [omwíito naakoβína taβóori]
 ni-kin-a o-mu-íito N-aa-ko-βín-a taβóori
 1sgSM-hope-fv ppf-C1-1sgPoss.brother ?-SM1-PROG-dance-fv tomorrow
 ‘I hope (that) my brother will dance tomorrow.’

- Difficult to explain why “pray” would take irrealis while “hope” would take realis/assertion marking; complements of attitude verbs are non-assertions.

- Absence of *N-* from immediate past is not predicted for realis/assertion marker

- Immediate past requires that the result state still hold and the speaker have evidence of the event - it is realized and actual

Hypothesis 3: absence of *N-* indicates that the situation does not currently hold

- Environments where *N-* is absent are contexts where the situation does not actually hold

- Absence of *N-* is equivalent to a “super irrealis”

- When *N-* is present, situation can either hold or not (eg. non-future temporal orientations, polar questions)

- Problems: as with Hypothesis 2, this analysis does not explain the immediate past data, nor the presence of *N-* in the complement of “hope”.

Conclusions

Weak modal force is marked by a tonal morpheme (H on second syllable from left edge), and only in future contexts.

The tonal morpheme is independent of the nasal pattern.

The nasal prefix *N-* cannot be satisfactorily called an assertion or realis marker. Further investigation is needed to determine its function.

References and Acknowledgements

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a place of mind

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