

(Un-)restricting Tense in Awing (Grassfields Bantu)

BACKGROUND: In the theoretical literature on tense, a commonly-held assumption is that the past and the present are in some sense more “definite” than the future. This is reflected in formal approaches by analyzing past and present tenses as pronouns or pronominal features, and future as a quantificational evaluation time shifter (possibly with a modal meaning component). A classic analysis along these lines for the English past tense (1-a) and the future morpheme *woll* (1-b) was developed by Partee (1973) and Abusch (1997), and formalized as in (1) by Heim (1994).

- (1) a. $[[\text{PAST}_i]]^{g,c}$ is defined only if $g(i) < t_c$, in which case $[[\text{PAST}_i]]^{g,c} = g(i)$.
 b. $[[\text{WOLL}]](P)(t)(w) = 1$ iff $\exists t' > t: P(t')(w) = 1$

Under an alternative approach that treats past and future as mirror images of each other, both tenses are quantifiers and a contextual restriction is introduced in order to capture definite readings of (past) tenses. Such an approach is taken, i.a., in von Stechow (2009), where the past operator gets the lexical entry in (2) (contextual restriction underlined).

- (2) $[[\text{PAST}]] = \lambda C. \lambda t. \lambda P_{\langle i,t \rangle}. (\exists t') [C(t') \ \& \ t' < s^* \ \& \ P(t')]$

DATA: The temporal system of Awing is interesting in that it looks strikingly symmetrical, thus lending support to the second kind of approach. In the past and in the future, Awing makes a distinction between near (\approx hodiernal) and remote (\approx pre-/post-hodiernal) times, as illustrated in (3) and (4). Following convention, we use the glosses P1 and F1 for near past and future, and P2 and F2 for remote past and future, respectively.

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| (3) | Context: Where did Aghetse go? | (4) | Context: Where will Aghetse go? |
| | a. Aghetse a pe' nghɛnə Douala
Aghetse SM P1 go Douala
“Aghetse went to Douala (today).” | | a. Aghetse a yî nghɛnə məteenó
Aghetse SM F1 go market
“Aghetse will go to the market (today).” |
| | b. Aghetse a nə ghɛnə Douala
Aghetse SM P2 go Douala
“Aghetse went to Douala (yesterday or earlier).” | | b. Aghetse a yó nghɛnə məteenó
Aghetse SM F2 go market
“Aghetse will go to the market (tomorrow or later).” |

Both the past and the future markers in Awing show behavior that is suggestive of a quantificational semantics. For instance, all the markers illustrated above are infelicitous in *before*-clauses, which, according to Sharvit (2014), is expected if a (past) tense is quantificational in meaning, but unexpected if it is pronominal.

- (5) Context: Did Alombah and Neh meet each other at the party yesterday?

- a. Alombah a **nə** féɾə zá' Neh a (***pe'/*nə**) yíó.
 Alombah SM P2 leave before Neh SM P1/P2 arrives
 “Alombah left before Neh arrived.”

- (6) Context: Will Neh and Alombah see each other at the party tomorrow?

- a. Alombah a **yó** yíó zá' Neh a (***yî/*yó**) pəənə afoonə
 Alombah SM F2 come before Neh SM F1/F2 return farm
 “Alombah will come before Neh returns from the farm”

Interestingly, Awing has additional forms, both in the past (P3) and in the future (F3), which are realized by a combination of P2/F2 and the morpheme *ndá'a/lá'a*, and which differ from P2 and F2 in that they cannot refer to a contextually given reference time:

- (7) Context: What did Aghetse do last year on women’s day? (8) Context: What will Aghetse do next year on women’s day?
- a. a **nə** nghɛnə Douala she P2 go Douala “She went to Douala.” a. a **yɔ** nghɛnə Douala she F2 go Douala “She will go to Douala.”
- b. #a **nəndá’a** ghɛnə Douala she P3 go Douala Intended: “She went to Douala.” b. #a **yólá’a** nghɛnə Douala she F3 go Douala Intended: “She will go to Douala.”

Crucially, the P3 and F3 forms convey speaker ignorance with respect to the time that is being talked about. Therefore, the follow-up question of speaker B (“When?”) is appropriate in (9) with the P2/F2 forms, but not in (10) with P3/F3.

- (9) A: məngiə məkárə **nə/yó** (n)yiə alá’ə
woman white P2/F2 come village
“A white lady came/will come to the village.”
B: ə-ghákə? (“When?”)
- (10) A: məngiə məkárə **nəndá’a/ yólá’a** (n)yiə alá’ə
woman white P3/ F3 come village
“A white lady came/will come to the village.”
B: #ə-ghákə? (# “When?”)

ANALYSIS: We propose a symmetrical analysis of the past and the future along the lines of (2), modulo additional remoteness restrictions, for Awing. For instance, the remote past (P2) morpheme *nə* and the remote future (F2) morpheme *yó* get the semantics in (11-a) and (11-b), respectively.

- (11) a. $[[nə]]^{g,c} = \lambda C.\lambda t.\lambda P_{\langle i,t \rangle}.\exists t' [C(t') \ \& \ t' \text{ is at least one day before } t \ \& \ P(t')]$
b. $[[yó]]^{g,c} = \lambda C.\lambda t.\lambda P_{\langle i,t \rangle}.\exists t' [C(t') \ \& \ t' \text{ is at least one day after } t \ \& \ P(t')]$

To account for the empirical difference between the forms in (11) and the P3/F3 forms, we propose that the function of the morpheme *ndá’a/lá’a* is similar to that of German *irgend-* according to Kratzer & Shimoyama (2002), i.e. it is a domain widener. In other words, the effect of *ndá’a/lá’a* is that the set of times that is quantified over by the tense operator cannot be contextually restricted. Hence, when *ndá’a/lá’a* is added to the past markers in (11), the value of the context variable must be the set of all time intervals. Consequently, P3 and F3 cannot refer to a contextually established reference time ((7-b), (8-b)), and when a speaker uses these forms, she explicitly conveys that she does not have a specific time in mind (10). Crucially, the contrast between “indefinite” (in the sense of unrestricted) and “definite” (i.e. possibly restricted by context and thus potentially referential) tense is the same in the past and the future in Awing. Hence, if our analysis of the Awing data is on the right track, we can conclude that at least in this language the semantics of past and future markers are perfect mirror images of each other.

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