Graded Tenses in Complement Clauses: Evidence that Future is Not a Tense

Seth Cable • University of Massachusetts Amherst

Main Claim
Behavior of so-called ‘graded tenses’ in complement clauses provides novel evidence that:

- PAST is a temporal anaphor, directly referring to a temporal interval
- FUT is different, a temporal operator that shifts the temporal evaluation index


Background 1: Graded Tenses
In some languages, the tense system does not merely indicate whether an event/state holds in past/future, but how far into past/future the event/state holds (Comrie 1985, Cable 2013).

(1) Portion of Graded Tense System of Gikuyu

b. ‘Near Past’ Mwangi nišaraini. Mwangi danced (yesterday).
d. ‘Current Future’ Mwangi inikaiina. Mwangi will dance (today).
e. ‘Remote Future’ Mwangi inikaiina. Mwangi will dance (after today).

Background 2: Embedded Tenses
When the complement to a verb of speech/thought is tensed, there are two logically possible evaluation times for the embedded tense:

-Time of the matrix speech act (i.e., now)
-Time of the reported speech act (i.e., ‘temporal center’ of embedded proposition)

(2) Dave said he was dancing.

a. Backshifted Reading: Dave said ‘I was dancing’.
   saying < now, dancing < saying [Eval. Point = Reported Speech Act]
   b. Simultaneous Reading: Dave said ‘I am dancing’.
   saying < now, dancing < now [Eval. Point = Matrix Speech Act]

Note: This is probably not the right story for simultaneous readings in English (Abusch 1997), but it may be right for Hebrew (Ogihara & Sharvit 2013).

Central Phenomenon:
Interactions b/w Matrix and Embedded Graded Tense

Question:
What are the available evaluation times for graded tenses embedded under other graded tenses?

(3)

a. Past Under Past = Matrix
   If matrix is past, then graded past in complement must be interpreted w.r.t. matrix UT.

b. Past Under Future = Matrix or Reported
   If matrix is future, then graded past in complement can be interpreted w.r.t. matrix or reported UT.

c. Future Under Anything = Reported
   Graded future in compl. can always be interpreted w.r.t. reported UT.

Evidence for (3a): Past Under Past = Matrix

In context (4a), only (4b) with embedded Past NPST (NPST) is possible.

(4) a. Context: Yesterday, Mwangi said “I danced today.”
   b. Mwangi arangitiri ati nišaraini.
   Mwangi said (yesterday) that he danced (yesterday).
   c. Mwangi arangitiri ati nišaraini.
   Mwangi said (yesterday) that he danced (yesterday).

To be true in (4a), embedded NPST (4b) must be interpreted w.r.t. matrix UT.

To be true in (4a), embedded CPST (4c) must be interpreted w.r.t. reported UT.

Impossibility of (4b) in (4c) cannot be interpreted w.r.t. reported UT.

See handout for more data like this from Gikuyu, Shona, and S.B. Inuktitut.


In context (5a), both (5b) with embedded NPST and (5c) with embedded CPST are acceptable.

(5) a. Context: Tomorrow, Mwangi will say “I danced yesterday.”
   b. Mwangi nišakaiina ati nišaraini.
   Mwangi will say (tomorrow) that he danced (yesterday).
   c. Mwangi nišakaiina ati nišaraini.
   Mwangi will say (tomorrow) that he danced (yesterday).

To be true in (5a), embedded NPST (5b) must be interpreted w.r.t. reported UT.

To be true in (5a), embedded CPST (5c) must be interpreted w.r.t. matrix UT.

Possibility of (5b) & (5c) = Both evaluation points are possible.

See handout for more data like this from Gikuyu, Shona, and S.B. Inuktitut.

Evidence for (3c): Future Under Anything = Reported

In context (6a), sentence (6b) with embedded Remote Future (RFUT) is acceptable.

(6) a. Context: Yesterday, Mwangi said “I will dance tomorrow.”
   b. Mwangi arangitiri ati nišaraini.
   Mwangi said (yesterday) that he would dance (tomorrow).

To be true in (6a), embedded RFUT (6b) must be interpreted w.r.t. reported UT.

See handout for more data like this from Gikuyu and S.B. Inuktitut.

The Analysis

Observation: All the contexts tested (thus far) support a ‘temporal de re’ reading for the sentence. (See handout for why)

Proposal: If context supports a ‘temporal de re’ reading, then a ‘temporal de re’ parse is obligatory. (Oversimplified statement; see handout for precise statement)

Capturing Generalization (3a):
In ‘Past-Under-Past’ sentences, embedded past must be interpreted w.r.t. matrix UT.

(10) LF Structure of (4b)/(4c):

\[
\text{Res Movement of Tense:}
\]

\[
\text{In 'Past-Under-Past' sentences, embedded past must be interpreted w.r.t. matrix UT.}
\]

Capturing Generalization (3b):
In ‘Past-Under-Fut’ sentences, embedded past can scope below or above matrix FUT

(11) Possible LFs for (5b)/(5c):

\[
\text{Capturing Generalization (3c):}
\]

Since embedded FUT does not refer directly to a time, there is no ‘temporal de re’ reading to be forced.

Thus, embedded FUT can stay low, and its eval. point is the reported UT.

Capturing Generalization (3c):
Since embedded FUT does not refer directly to a time, there is no ‘temporal de re’ reading to be forced.

Thus, embedded FUT can stay low, and its eval. point is the reported UT.

Some Outstanding Challenges

- Do we really need ‘res-movement’ for this analysis to work? (No: Maier 2009)
- What about ‘matrix UT’ readings of embedded future? (marginal in Gikuyu / OK in S.B. Inuktitut)
- Should we really be predicting all these ‘de re’ truth-conditions?