TEMPORAL REMOTENESS MARKERS IN A TENSELESS LANGUAGE

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OUTLINE

- The changing face of temporal remoteness markers
- Yucatec as a tenseless language
- Yucatec temporal remoteness markers
- Analysis
- Summary

THE CHANGING FACE OF TEMPORAL REMOTENESS MARKERS (TRMS)

the early take on TRMs

"'Temporal distance' involves, by definition, a measurement of the distance between two points or intervals in time; this implies that for this dimension to be relevant, at least two such time points should be involved in the interpretation of a sentence. Given the Reichenbachian points S, R and E, there are the following possibilities: In the unmarked case, R coincides with either S or E. In those cases, which constitute the overwhelming majority in any text, the only possible distance to measure will be between S and E, that is, 'distant' will mean 'distant from the time of speech'" (Dahl 1985: 120, emphasis *JB*)



the early take on TRMs (cont.)

(1,1) Temporal remoteness distinctions in ChiBemba (Givón 1972)

- a. ba<u>àléé</u>bomba
 'They were working (before yesterday).'
- b. ba<u>áléé</u>bomba
 'They were working (yesterday).'
- c. baàcíláábomba

'They were working (earlier today).'

d. baábomba

'They've just worked (a little while ago).' (Cable 2013: 220)



the early take on TRMs (cont.)

"If R is separate, however, we will have two intervals to measure: on one hand, the distance S-R, on the other, the distance R-E. In principle, both these might be relevant in a TMA system. The tendency, however, seems rather to be for remoteness distinctions to be neutralized in such contexts; many languages do not even have a separate category which like the English Pluperfect is used for events that take place before an R which in turn precedes S. I also have relatively little information concerning these cases - being conceptually more complex, they are rather hard to elicit reliable information about - and shall just note one fairly clear example of a minimal pair differing in the distance between a past R and a preceding E." (Dahl 1985: 120-121, emphasis JB)



- the one example of an anaphoric TRM distinction Dahl (1985: 121) and Comrie (1985: 86) cite
 - Sesotho (Southern Bantu, Lesotho and South Africa)
- (1.2) Ha letsatsi le-likela re-ne re-**tsoa** tloha Maseru when sun PRV-disappear we-PAST we-**IMMP** leave Maseru 'At sunset, we **had just left** Maseru.'
- (1.3) Ha letsatsi le-likela re-ne re-tloh-ile Maseru when sun PRV-disappear we-PAST we-leave-**RECP** Maseru 'At sunset, we **had left** Maseru.' Morolong (1978: 77; glosses *JB*)



- new perspectives: the break with Reichenbach toward an integrated theory of tense and viewpoint aspect
 - following Kamp & Reyle (1993), Klein (1994), Kratzer (1998), inter alia, much contemporary theorizing assumes that
 - tense constrains the topic time t_{TOP} of an utterance vis-a-vis an evaluation time
 - which may be utterance time t_U or some reference time t_R(cf. Bohnemeyer 2014)
 - the relation between t_{TOP} and the event time τ(e)
 is constrained, not by tense, but by viewpoint aspect
 - how do TRMs fit into this model?

- new perspectives: Klecha & Bochnak (2016)
 - purely anaphoric TRMs in Luganda (NE Bantu, Uganda) in 'iterated' constructions
- (1,4) Context: A and B are talking about a party they went to a few days ago.
 - A: Nalabye Kato kabaga. 1SG.see.INT K at.party 'I saw Kato at the party.'
 - B: Wabadde wayogera naye?
 2SG.COP.INT 2SG.talk.DIST him
 'Had you talked to him (before that time)?'
 - B': #Wali wayogedde naye? 2SG.COP.DIST 2SG.talk.INT him Intended: 'Had you talked to him (before that time)?'



Figure 1.4. *Klecha & Bochnak's schematic representation of the semantics of iterated TRM*

- new perspectives: Klecha & Bochnak (2016) (cont.)
 - analysis: Luganda TRMs simply encode an anteriority relation between two time intervals plus their distance

Luganda Inventory of Temporal Remoteness Morphemes

- a. $[[\text{REC.P}]] = \lambda t \lambda u \lambda w [t < u \& \text{close}(t, u) \succ s(\text{close})]$
- b. $\llbracket INT.P \rrbracket = \lambda t \lambda u \lambda w [t < u \& far(t, u) \prec s(far)]$
- c. $\llbracket \text{DIST.P} \rrbracket = \lambda t \lambda u \lambda w [t < u]$

I don't really get why they don't say distance (t,u) > s(close) or < s(far)

The way they do it seems confusing

- REC.P, INT.P, DIST.P 'recent', 'intermediate', 'distant past'
- $t t_{TOP}$

(1.5)

- apparently, K&B assume that in the iterated construction, the AUX's t_{TOP} is the main verb's t_R
- u evaluation time = t_U or t_R
- close, far measure functions
- s positive standard function (Kennedy 2007)

new perspectives: Cable (2013)

• Gĩkũyũ (NE Bantu, Kenya) TRMs constrain $\Delta(\tau(e), t_U)$, not $\Delta(t_{TOP}, t_U)$ - they are not tenses in the Kleinian (etc.) sense

(1.6)

The graded tenses of Gĩkũyũ (Mugane 1997)

a. 'Current Past':

Mwangi nĩe**kũ**inaga.

'Mwangi was dancing (within the day).'

b. 'Near Past':

Mwangi nĩa**ra**inaga.

'Mwangi was dancing (within last few days).'

c. 'Remote Past':

Mwangi nī**ā**inaga.

'Mwangi was dancing (prior to 'Near Past').'

d. 'Current Future':

Mwangi nĩe**kũ**ina.

'Mwangi will dance (within the day).'

e. 'Remote Future':

Mwangi nĩakaina.

'Mwangi will dance (tomorrow or later).' (Cable 2013: 221)

new perspectives: Cable (2013) (cont.)

the evidence for this analysis comes from the structure of distance categorization in this system

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Generalization regarding the 'Remote Past'

REMP is used when a speaker does not know whether an event occurred on the day of the utterance, 'recently', or some time prior to that.

Generalization regarding the 'Near Past'

NRP is used when a speaker does not know whether an event occurred on the day of the utterance or at an earlier 'recent' time, *but does know that it occurred 'recently'*.

Generalization regarding the 'Remote Future'

REMF is used (in interrogatives) when a speaker does not know whether an event will occur on the day of the utterance or some time after that.

The TRM Specificity Principle

Speakers must use the most specific TRM consistent with their knowledge. If the use of a particular TRM α is 'licit' in some context, then the speaker *cannot* use any TRM weaker than α . (Cable 2013: 245-247)

- new perspectives: Cable (2013) (cont.)
 - rejecting a Gricean analysis, Cable instead proposes that Gĩkũyũ TRMs denote partial identity functions on events
- $[[CUR]]^{g,t} = [\lambda e : T(e) \ \infty \ day \ surrounding \ t . e]$ (1.7)a.
 - IMPST(t): b.

A function from temporal intervals to temporal intervals. Maps interval t to an interval [t'...t''], where t', t'' < t, and both lie within the day surrounding t.

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Illustration:
IMPST('12 PM; 5/31/12') = ['11 AM; 5/31/12' ... '11:30 AM; 5/31/12']
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REC(t): С.

e.

f.

A function from temporal intervals to temporal intervals. Maps interval t to an interval [t'...t''], where t' < t and lies before the day surrounding t, and t" is the endpoint of the day surrounding t.

```
Illustration:
        REC('12 PM; 5/31/12') = ['3 PM; 5/27/12' ... '11:59 PM; 5/31/12']
   [[IMM]]^{g, t} = [\lambda e : T(e) \otimes IMPST(t) . e]
d.
    [[NRP]]^{g, t} = [\lambda e : T(e) \otimes REC(t) . e]
    [[REM]]^{g, t} = [\lambda e : e]
                                                                (Cable 2013: 253-254)
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- new perspectives: Cable (2013) (cont.)
 - as such, they introduce presuppositions the content of which is defined by the partial identity functions
 - e.g., the feature CUR encoded by both the 'current future' and 'current past' TRMs has the meaning

(1.8) [[CUR]]^{g,t} = [$\lambda e : \tau(e) \propto \text{day surrounding } t_U \cdot e$]

- this presupposes the existence of a suitable event since the meaning of the TRM is undefined otherwise
- however, Cable argues that these presuppositions do not project and thus cannot be tested

- new perspectives: Cable (2013) (cont.)
 - Cable uses this presuppositional semantics to generate the observed usage extensions of the TRMs
 - by invoking the Maximize Presupposition maxim of Heim (1991)

"**Maximize Presupposition:** Among a set of alternatives, use the felicitous sentence with the strongest presupposition." (Chemla 2008)

(1.9) a. #A weight of our tent is under 4lb (Heim 1991)

- b. #I talked to a father of the victim (Hawkins 1991)
- c. #Every candidate should send his book (# if some candidates wrote multiple books) (Sauerland 2008)

- and now: Yucatec
 - formalizing an analysis
 informally sketched in Bohnemeyer (1998: 328-342)
 - Yucatec TRMs constrain $\Delta(\tau(e), t_{TOP})$
 - so their behavior combines features of the TRMs of Gĩkũyũ and Luganda
 - they are purely anaphoric, like the TRMs of Luganda
 - they directly access τ(e), like the TRMs of Gĩkũyũ
 on Cable's analysis
 - however, unlike the Gĩkũyũ TRMs, they relate $\tau(e)$ to t_{TOP} , not to t_U or some other evaluation time t_R

- and now: Yucatec (cont.)
 - Yucatec has been argued to be a profoundly tenseless language (Bohnemeyer 1998, 2009)
 - the occurrence of TRMs in such a language further emphasizes their non-tense-like character
 - however, Yucatec does distinguish future-oriented TRMs and past-oriented TRMs
 - which still raises questions
 for a profoundly tenseless analysis

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YUCATEC AS A TENSELESS LANGUAGE

- two functional categories expressing temporality in Yucatec clauses
 - preverbal aspect-mood (AM) markers and status suffixes
 - every finite verbal projection has exactly one of each
 - > the AM marker selects for a particular status category in its lexicon entry
- (2.1) Morphologically bound AM markers

a. K-in=xok-ik le=periyòodiko=o'
 Imperfective IMPF-A1SG=read-INC(B3SG) DEF=newspaper=D2
 'I (used to) read the paper'
 b. T-in=xok-ah le=periyòodiko=o'
 Perfective PRV-A1SG=read-CMP(B3SG) DEF=newspaper=D2
 'I read the paper'

 the remaining 13 or so AM markers are stative predicates (not auxiliaries or light verbs) synopsis of the system: the aspectual AM markers

Table 2.1. The aspectual AM markers

Subset	Marker	Category label in Bohnemeyer 2009	Meaning	Status category selected	
Aspectual	t-/h-	Perfective	Perfective aspect	CMP	
	<i>k</i> -	Imperfective	Imperfective aspect; habitual/generic reference	INC	
	táan	Progressive	Imperfective aspect		
	ts'o'k	Terminative	Perfect aspect		
	mukah/mikah /bikah	Prospective	Prospective aspect	INC /SUBJ	

synopsis of the system: the modal AM markers

Table 2.2. The modal AM markers

Subset	Marker	Category label in Bohnemeyer 2009	Meaning	Status category governed
Modal	yan	Obligative	Social obligations; plans; scheduled events; future time reference to naturally occurring events	INC
	k'a'náan /k'abéet	Necessitive	Deontic necessity	
	táak	Desiderative	Desires and bodily needs	
	he′ =e′	Assurative	Commitments, promises, agreement, assurances	
	óolak	Penative	Proximity of realization in counterfactual worlds	SUBJ

... and today's protagonists: the TRMs

Table 2.3. The TRMs

Subset	Marker	Category label in Bohnemeyer 2009	Meaning	Status category governed	
Degree of remoteness	bîin	Remote future	Presupposition: $t_{top} < \tau(e)$; at-issue content: $\Delta(t_{topr}, \tau(e))$ is great by contextual standards	SUBJ	
	ta'itak	Proximate future	Presupposition: $t_{top} < \tau(e)$; at-issue content: $\Delta(t_{topr}, \tau(e))$ is small by contextual standards	INC	
	táantik =e′	Immediate past	Presupposition: $\tau(e)$ < t_{top} ; at-issue content: $\Delta(t_{top}, \tau(e))$ is very small by contextual standards		
	sáam	Recent past	Presupposition: $\tau(e)$ < t_{top} ; at-issue content: $\Delta(t_{top}, \tau(e))$ is small by contextual standards	SUBJ	
	úuch	Remote past	Presupposition: $\tau(e)$ < t_{top} ; at-issue content: $\Delta(t_{top}, \tau(e))$ is large by contextual standards		

- testing for deictic tense: is a clause formed with a given marker compatible with present, past, and future topic times?
 - e.g., the perfect-like 'terminative' aspect marker ts'o'k
 - with a past topic time, like a pluperfect:
- (2.2) K-u=k'uch-ul-o'b=e', IMPF-A.3=arrive-INC=TOP

ts'o'k	u=kim-il	le=chàampal=e'.
TERM	A.3=die-INC	DEF=small:child=D3

'(By the time) they arrived, the baby **had** already died.'

- with a future topic time, like a future perfect:
- (2.3) Sáamal óok-a'n+k'ìin=e' tomorrow enter-RES+sun=TOP

ts'o'k u=bèet-ik le=túus+bèel=o'TERM A.3=do-INC(B.3.S) DEF=send+way:REL=D2

'By tomorrow at dusk (the boy) **will have done** the errand.' (Andrade 1955: 135-136)

- all Yucatec clauses are freely compatible with topic times in the past, present, and future of utterance time
 - with one exception: the perfective aspect marker t-/h-

perfective aspect excludes FTR in matrix clauses

(2.4) #**T**-in=ts'on-ah le=kèeh sáamal=o', **PRV-**A1SG=shoot-CMP(B3SG) DEF=deer tomorrow=D2 intended: 'I will shoot the deer tomorrow'

it does, however, occur w/ FTR in conditional protases

(2.5) Wáah **t-**in=ts'on-ah le=kèeh sáamal=o', ALT **PRV-**A1SG=shoot-CMP(B3SG) DEF=deer tomorrow=D2

- he' in=tàas-ik=e'!
- ASS A1SG=come:CAUS-INC(B3SG)=D3

'If I shoot the deer tomorrow, I agree to bring it!'

- the use of the perfective in conditional protases does not convey counterfactuality
 - for this meaning, subjunctive mood is used
- (2.6) [I'm not allowed to vote in the upcoming local election, since I'm not a Mexican Citizen.]

Pero wáah káabèey-lakin=bóotare',butALTSRlike.this-INCH.SUBJ(B3SG)A1SG=votehi'n=bóotar-t-ikPablo=e'.Pablo=e'.ASS:A1SG=vote-APP-INC(B3SG)Pablo=D3Pablo=D3

'But if I were able to vote, I'd definitely vote (for) Pablo.'

the (complex) basic facts of future time reference in Yucatec

Table 2.4. Finite clauses and future topic times in Yucatec

Syntactic environment	Matrix	Conditional	Other finite
Aspectual reference	clauses	protases	subordinate
			clauses
Stative (lexical state	A: Unconstrained		
predicates; non-perfective			
aspect)			
Eventive = perfective	B: Future t _{top}	C:	D: Future ttop requires
	excluded	Unconstrained	irrealis marking

The color schema of this presentation is a riot

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YUCATEC TEMPORAL REMOTENESS MARKERS

- like Luganda TRMs, Yucatec TRMs are anaphoric, not deictic
- like Gĩkũyũ TRMs on Cable's analysis, they directly access $\tau(e)$
- however, unlike the Gĩkũyũ TRMs, they relate $\tau(e)$ to t_{TOP} , not to t_U or some other evaluation time t_R
 - In the following examples, t_{TOP} is introduced by topicalized subordinate clauses marked in blue

- remote past marker úuch with a future t_{TOP}
- (3.1) [Context: Jorge, visiting the speaker's village, is about to return to the United States. It is known that he plans to visit again the following year. Jorge knows that the speaker plans to build a house and has asked when it will be completed. Response:]
 Chéen ka'=sùunak-ech t-u=láak' ha'b=e', SR:IRR REP=turn\ATP:SUBJ-B2SG PREP-A3=other year=TOP
 úuch in=mèet-Ø le=nah=o'

REMP A1SG=do:APP-**SUBJ**(B3SG) DEF=house=D2

'When you return next year, it will be long ago that I built the house.'



remote future marker bíin with a past t_{TOP}

(3.2) [Context: Jorge has just returned to Pedro's village. It has been two years since his last visit. He learns that Pedro has built a house and asks whether it's new. Response:]

Káa=h-tàal-echway h-ts'o'kka'=p'éelha'b=e',CON=PRV-come-B2SG here PRV-end(B3SG) two=CL.IN year=D3

bíin in=mèet-∅ le=nah=o' REMF A1SG=do:APP-SUBJ(B3SG) DEF=house=D2

'When you came here two years ago, it was going to be a long time before I would build the house.'

(4/4 speakers consulted: it was only a vague idea at the time)

Figure 3.2. *Diagramming the analysis of (3.2)*



immediate past marker táantik ...=e' with a future t_{TOP}

(3.3) [Context: Jorge, visiting the speaker's village, is about to return to the United States. It is known that he plans to visit again the following year. Jorge knows that the speaker plans to build a house and has asked when it will be completed. Response:]

Chéen ka'=sùunak-echt-u=láak'ha'b=e',SR:IRR REP=turn\ATP:SUBJ-B2SG PREP-A3=other year=TOP

táantikin=mèet-ikle=nah=o'IMMPA1SG=do:APP-INC(B3SG) DEF=house=D2

'When you return next year, I will have just build the house.'

(4/4 speakers consulted: SPKR plans to finish the house b4 July, the month Jorge usually visits)

Figure 3.3. Diagramming the analysis of (3.3)



- constraining τ(e) vis-à-vis t_{TOP}, Yucatec TRMs behave like viewpoint aspect markers, not like tenses
 - more specifically, since they involve τ(e) < t_{TOP} or t_{TOP} < τ(e), they behave like non-perfective aspects
- support for this analysis
 - Yucatec TRMs do not occur in the main line of narratives, only in the background (examples???)
 - Yucatec TRMs can be paraphrases using prospective aspect for futureoriented TRMs and perfect ('terminative') for past-oriented TRMs
 - Yucatec TRMs are incompatible with $\tau(e)$ adverbials and cannot be used in questions about $\tau(e)$, just like the English (present) perfect
 - and the Yucatec 'terminative', i.e., perfect (Bohnemeyer 2009)

blah

Add examples showing speakers' paraphrases

- incompatibility with event time specifications
- (3.x) [Context: It has been established that B mailed a certain letter a while ago. A wishes to know when exactly this happened:] ADD MORE EXAMPLES
 - A: ^{??}Ba'x k'íin **sáam/úuch** a=tùucht-eh? what sun(B3SG) **RECP/REMP** A2=send-SUBJ(B3SG) [Intended: 'When (lit. what day) did you send it?'] lit. 'At what day was it recent/long ago that you sent it?'
 - B: ^{??}Lúunes-ak **sáam/úuch** in=tùucht-eh Monday-CAL **RECP/REMP** A1SG=send-SUBJ(B3SG) [Intended: 'Last Monday (was when) I sent it.'] lit. 'It was last Monday that it was recent/long ago that I sent it'

- the Yucatec TRMs are stative predicates that quantify the distance between two times
 - by characterizing it as great or small relative to contextual standards
- they do not actually encode an ordering relation $R(\tau(e), t_{TOP})$
 - i.e., they do not distinguish among $\tau(e) < t_{TOP}, t_{TOP} < \tau(e)$, and $\tau(e) \propto t_{TOP}$
- this distinction is instead contributed by the construction that combines the TRM with the verbal core
 - including the status suffix

examples of REMP úuch and RECP sáam as lexical stative predicate neutral wrt. temporal orientation

Add these from Bohnemeyer (1998)!

- Yucatec TRMs treat only $\Delta(\tau(e), t_{TOP})$ as at-issue content
 - the ordering relation $R(\tau(e), t_{TOP})$ is projective
- (3.X)
 a. Ma' sáam sùunak le=kòombi=o';...
 NEG(B3SG) RECP turn\ATP:SUBJ(B3SG) DEF=van=D2
 'It's not a while ago that the *collectivo* returned;...'
 - b. ...inw=a'l-ik=e', h-ts'o'k mèedyaòora.
 A1SG=say-INC(B3SG)=TOP PRV-end(B3SG) half hour
 '...I think it was half an hour ago.'
 - c. ^{??}...tuméen ma' sùunak=i'.
 CAUSE NEG(3SG) turn\ATP:SUBJ(B3SG)=D4
 '...because it hasn't returned yet.'

ADD MORE EXAMPLES ILLUSTRATING THIS BEHAVIOR!

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ANALYSIS

- combine Klecha & Bochnak-style scalar distance semantics
 - with Cable-style partial identity functions over events that generate the observed ordering presuppositions
- (4.1) [[REMP]]^{g,t} = $\lambda \tau \lambda t \lambda w [\lambda e : \tau(e) < t_{TOP} . e$ & $\Delta(\tau(e), t_{TOP}) > s(recent)]$

NOT QUITE THERE YET

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SUMMARY

blah



THANKS!