

A time-relational framework for the temporal interpretation of noun phrases

Judith Tonhauser

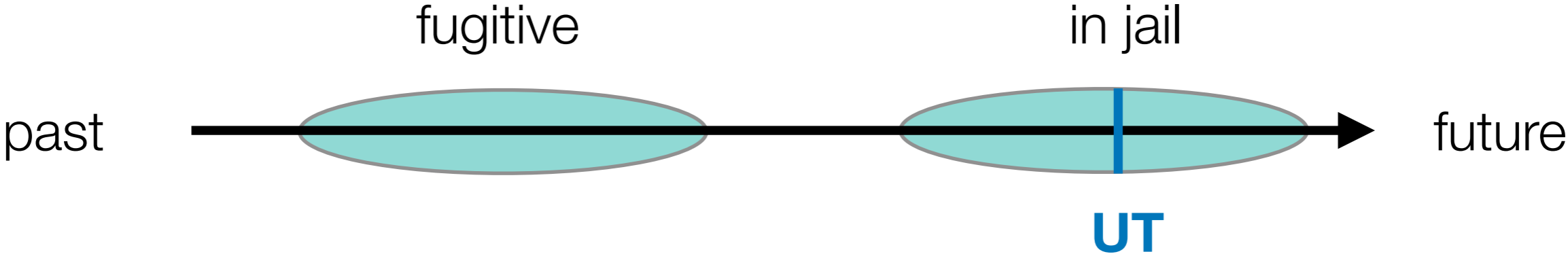
The Ohio State University / University of Stuttgart

Workshop on Tenselessness, University of Lisbon
October 4, 2019

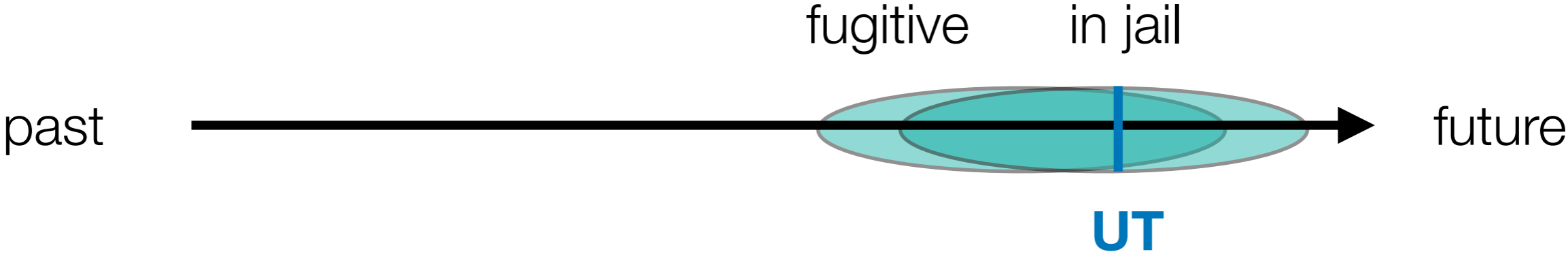
Noun phrases (or DPs) are temporally interpreted

1. The fugitive is now in jail. (adapted from Enç 1981:38)

a. Talking about a person who fled from jail:



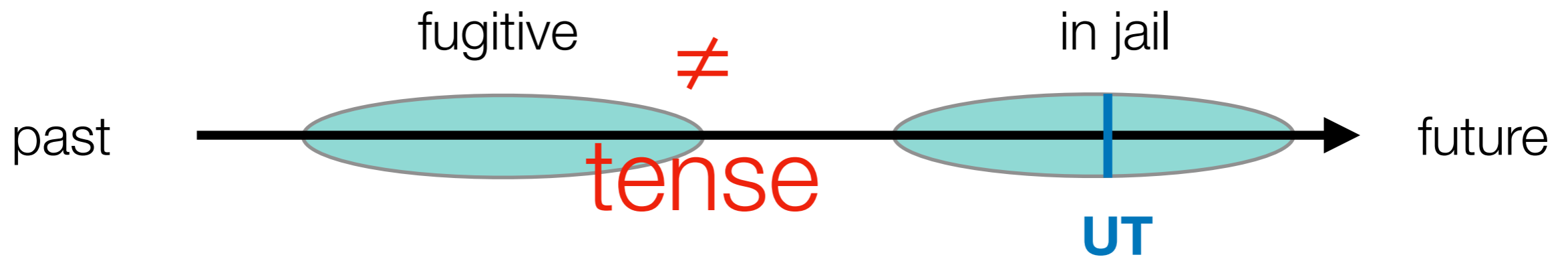
b. Talking about a person who fled from Syria and was jailed:



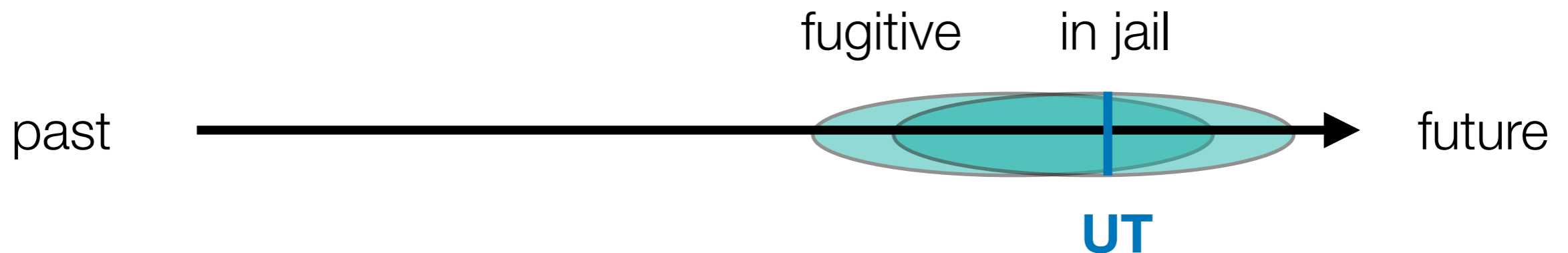
Noun phrases (or DPs) are temporally interpreted

1. The fugitive is now in jail. (adapted from Engç 1981:38)

a. Talking about a person who fled from jail:



b. Talking about a person who fled from Syria and was jailed:



Research on the temporal interpretation of noun phrases

E.g., Enç 1981, 1986; Haude 2004; Keshet 2008, 2010; Lecarme 1996, 2004, 2012; Musan 1995, 1997, 1999; Nordlinger & Sadler 2004, 2008; Thomas 2012, 2014; Tonhauser 2002, 2006, 2007, 2008; Wiltschko 2003.

- A. Which syntactic, semantic and pragmatic factors are involved in the temporal interpretation of noun phrases?
1. a. Many children are here.
 - b. There are many children here. (e.g., Musan 1998, Tonhauser 2002, Keshet 2010)
- B. What are the meanings of nominal TAM markers? Are there nominal tenses, like there are verbal tenses?
2. Kuehe a-hecha mbo'ehára-**kue**. [Paraguayan
yesterday I-see teacher-NOM.TERM Guaraní]
'Yesterday, I saw a **former** teacher.'

Research on the temporal interpretation of noun phrases

E.g., Enç 1981, 1986; Haude 2004; Keshet 2008, 2010; Lecarme 1996, 2004, 2012; Musan 1995, 1997, 1999; Nordlinger & Sadler 2004, 2008; Thomas 2012, 2014; Tonhauser 2002, 2006, 2007, 2008; Wiltschko 2003.

What is not discussed: What is the formal framework within which we can analyze the temporal interpretation of noun phrases? Which times should we assume? Which temporal relations do these times stand in?

Nikolaeva 2015: 101f.: *“we do have rather clear evidence for an independent TAM category in Tundra Nenets possessive NPs, but **whether it is tense**...ultimately depends on whether nominal tense is defined as a category that affects the time at which the NP is true or the time at which the predicate embedded within the NP is true.”*

This talk

1. Motivate a time-relational framework for the temporal interpretation of noun phrases

2. Tenselessness

What is 'nominal tense'? Are there nominal tenses?

Klein's time-relational framework for the finite predication

(Klein 1992, 1994; see also Bohnemeyer 2009, 2014)

1. Investigator eliciting witness testimony:

Investigator: What did you notice when you entered the room?

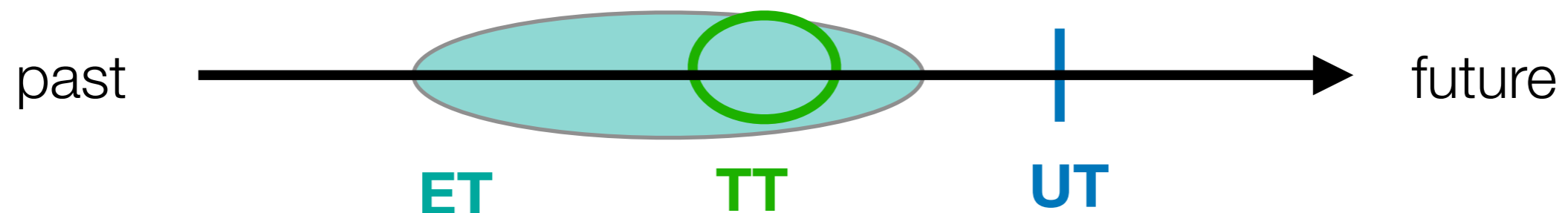
Witness: A man was lying on the floor. (Klein 1994: 39-40)

Which times are assumed?

Utterance time (**UT**): the time at which the witness utters the sentence

Topic time (**TT**): the time at which the witness enters the room

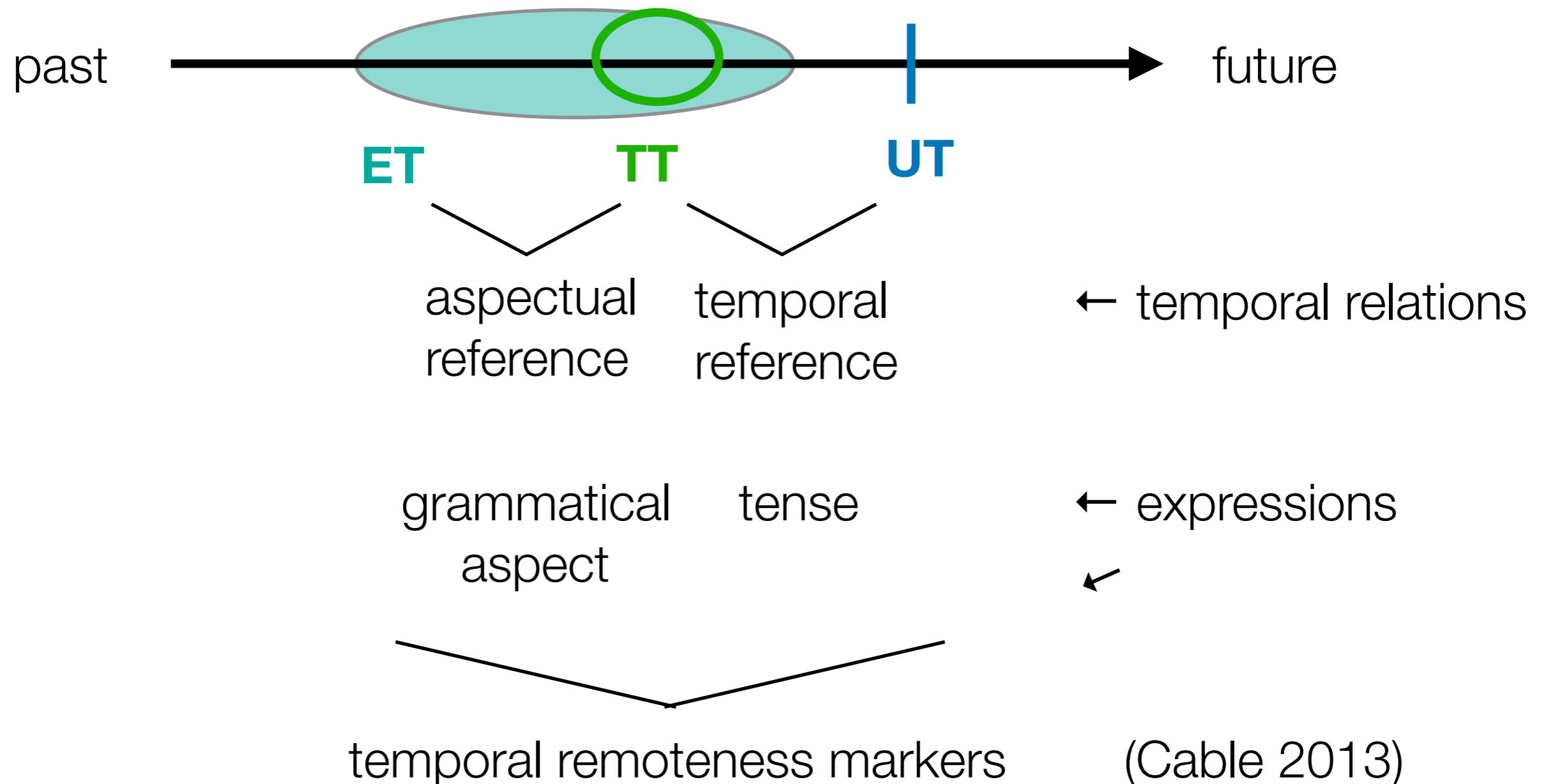
Eventuality Time (**ET**): the time at which the man is lying on the floor



Klein's time-relational framework for the finite predication

(Klein 1992, 1994; see also Bohnemeyer 2009, 2014)

What are dedicated relations between these times?



Properties of the UT, the ET and the TT

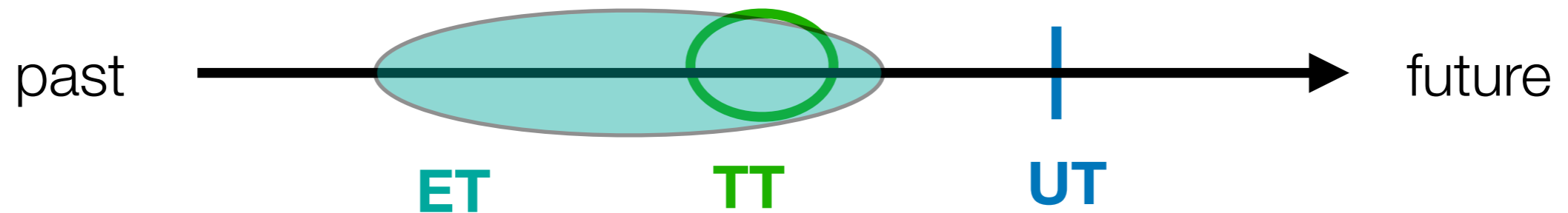
The UT is deictic, i.e., given by the utterance context.

The ET is existentially bound.

1. Investigator eliciting witness testimony:

Investigator: What did you notice when you entered the room?

Witness: A man was lying on the floor. (Klein 1994: 39-40)



There is an ET at which a man was lying on the floor and this time temporally includes the TT, which precedes the UT.

The TT is a temporal anaphor

Partee 1973, 1984 showed that the temporal interpretation of the finite predication involves temporal anaphora.

1. Deictic interpretations

[driving down the turnpike] **I didn't turn off the stove!**

2. Discourse anaphoric interpretations

Sheila had a party last Friday and **Sam got drunk.**

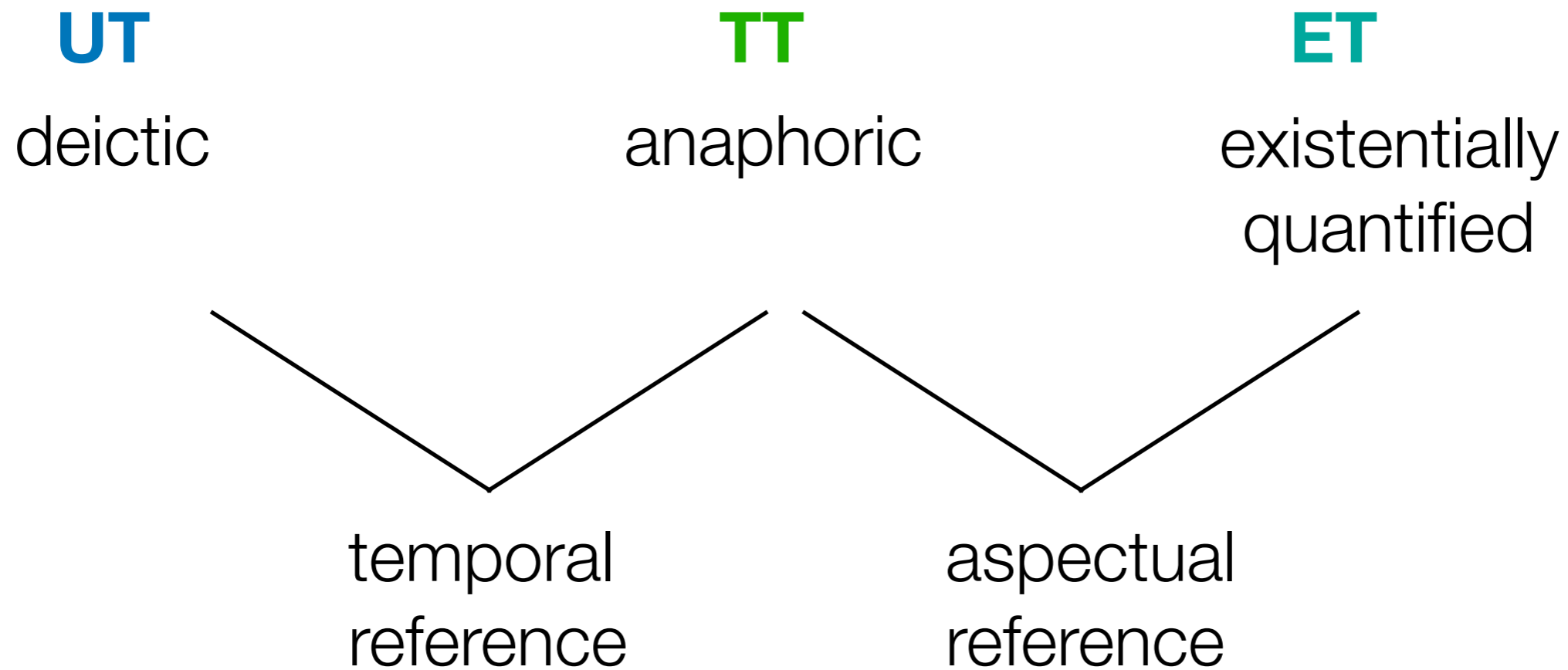
3. Bound interpretations

Whenever Mary telephoned, **Sam was asleep.**

4. Donkey anaphoric interpretations

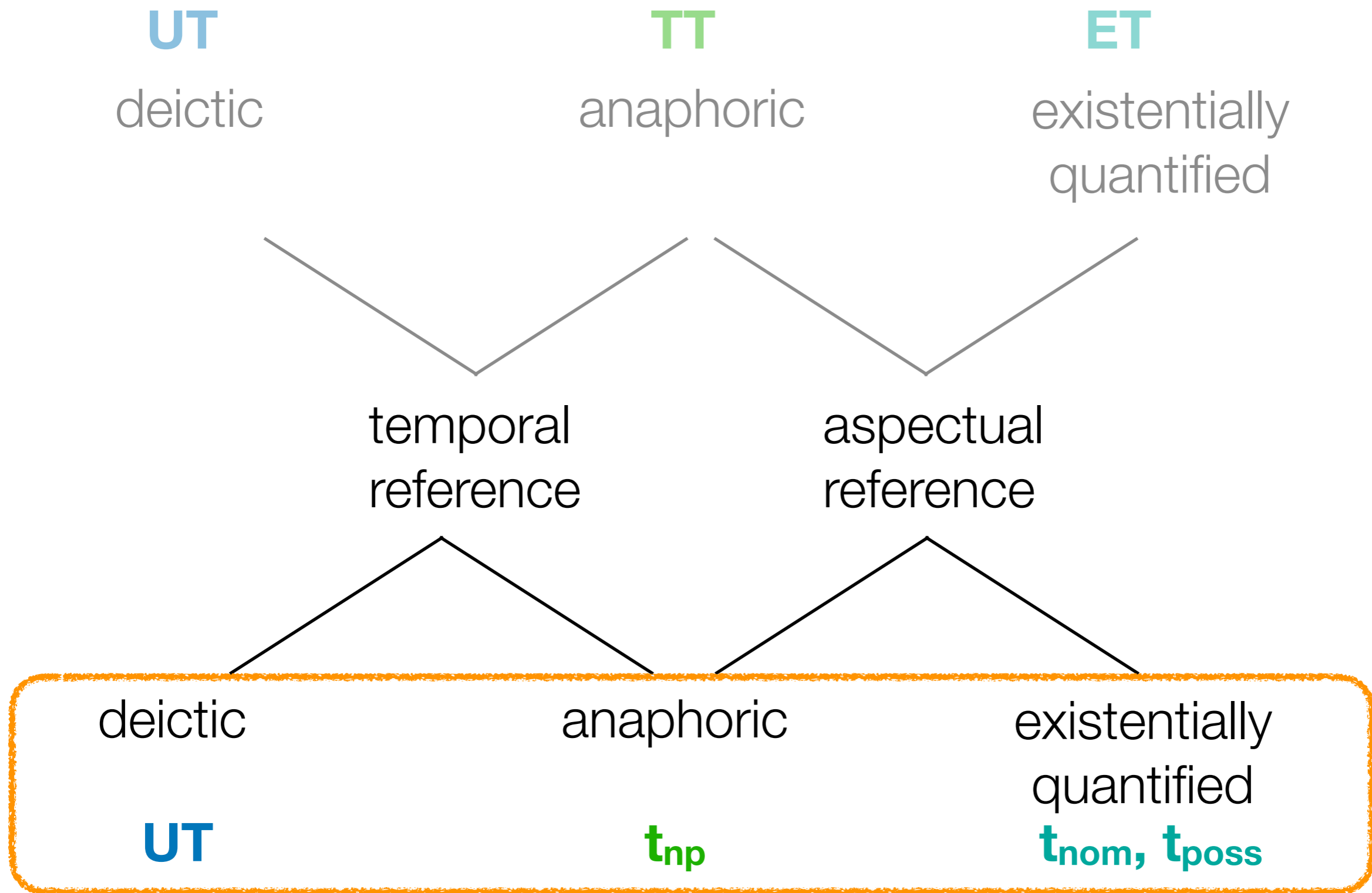
Whenever Mary telephoned on a Friday, **Sam was asleep.**

Klein's time-relational framework for the finite predication



Which times and temporal relations play a role in the temporal interpretation of noun phrases?

Klein's time-relational framework for the finite predication



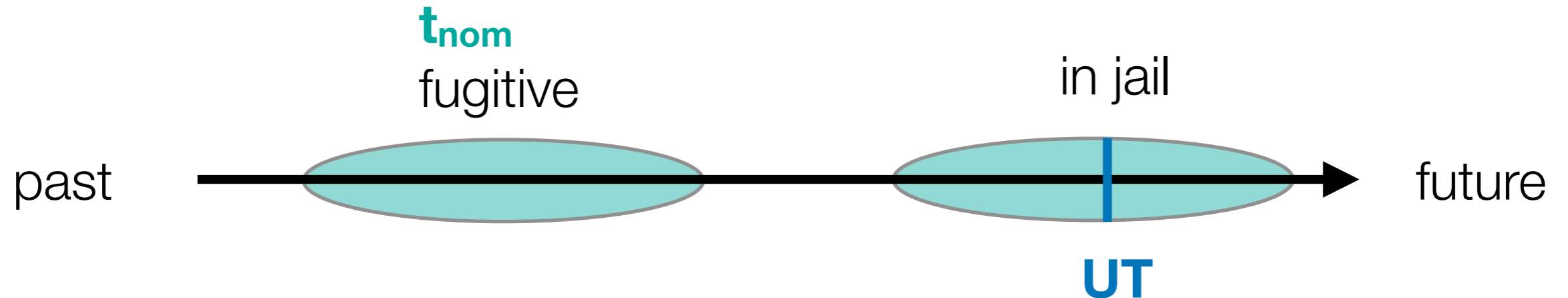
A time-relational framework for noun phrases (Tonhauser 2007, 2008, ms)

Tonhauser 2007, 2008 (*Language*)

Nominal time (t_{nom}): the time at which the nominal property is true of the entity denoted.

[Talking about an individual who fled from jail.]

The fugitive is now in jail.

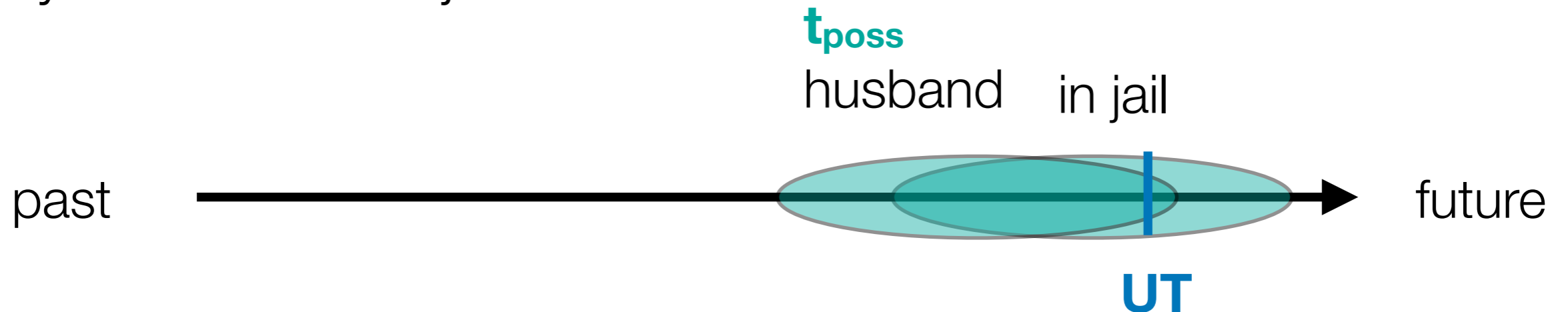


The nominal time is existentially quantified. It corresponds to the ET in the temporal interpretation of the finite predication.

Tonhauser 2007, 2008 (*Language*)

Possession time (t_{poss}): the time at which the possession relation is true of the possessor and possessee.

Claire, on why she can't bring her husband to the party:
My husband is in jail.



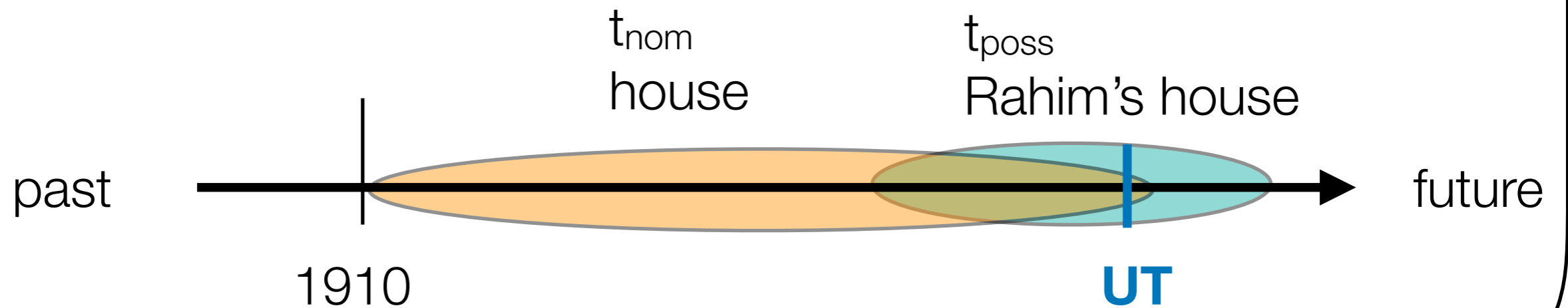
The possession time is also existentially quantified.

The nominal time and the possession time may differ

(see Nikolaeva 2015 for discussion)

Rahim is talking the house he currently owns:

My house was built in 1910.

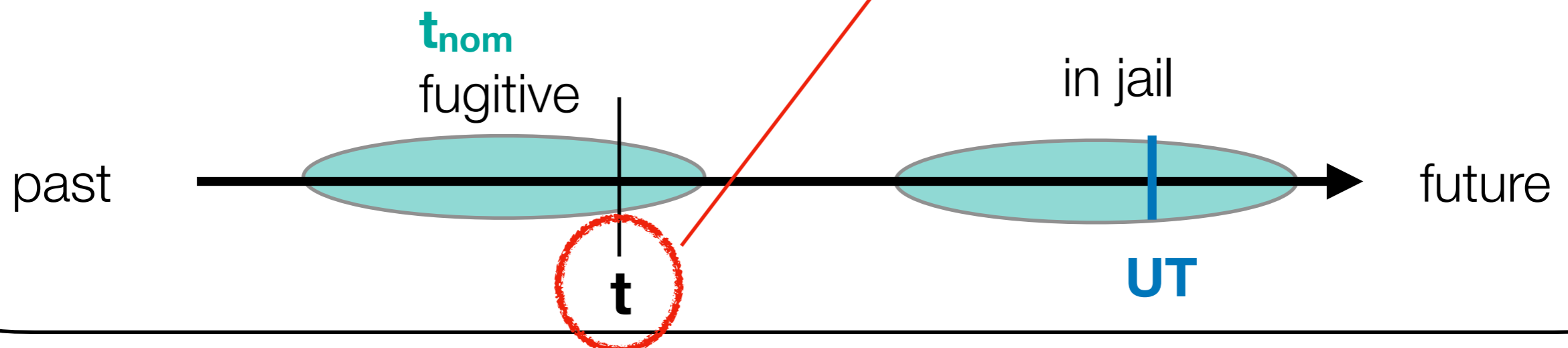


The noun phrase time

Enç (1981, 1986) and Musan (1995, 1999) already assumed an additional time: time at which the predication is interpreted.

- Nouns have temporal arguments: e.g., fugitive'(x,t)
- This temporal argument is the time at which the predication is interpreted, i.e., it is not the nominal time.
- Musan 1999: The temporal argument is included in the interval at which the property is true of the individuals.

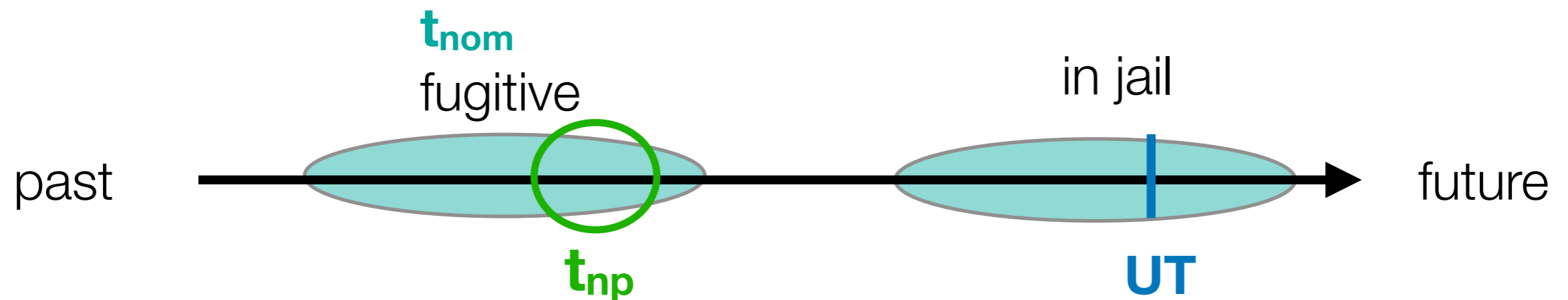
Talking about an person who fled from jail:
The fugitive is now in jail.



Tonhauser 2007, 2008 (*Language*)

Noun phrase time (t_{np}): the time at which the noun phrase is temporally interpreted.

Talking about an person who fled from jail:
The fugitive is now in jail.



Enç took the evaluation time to be contextually constrained;
Musan took it to be constrained by syntax and context.

The noun phrase time is a temporal anaphor.

Anaphoricity in the temporal interpretation of noun phrases

Tonhauser ms

1. Deictic interpretations

When I first met **my fiancé**, I was with my ex-girlfriend.

2. Discourse anaphoric interpretations

In November, Mary sold raffle tickets at her art show. **No visitor** returned the following month to claim their prizes.

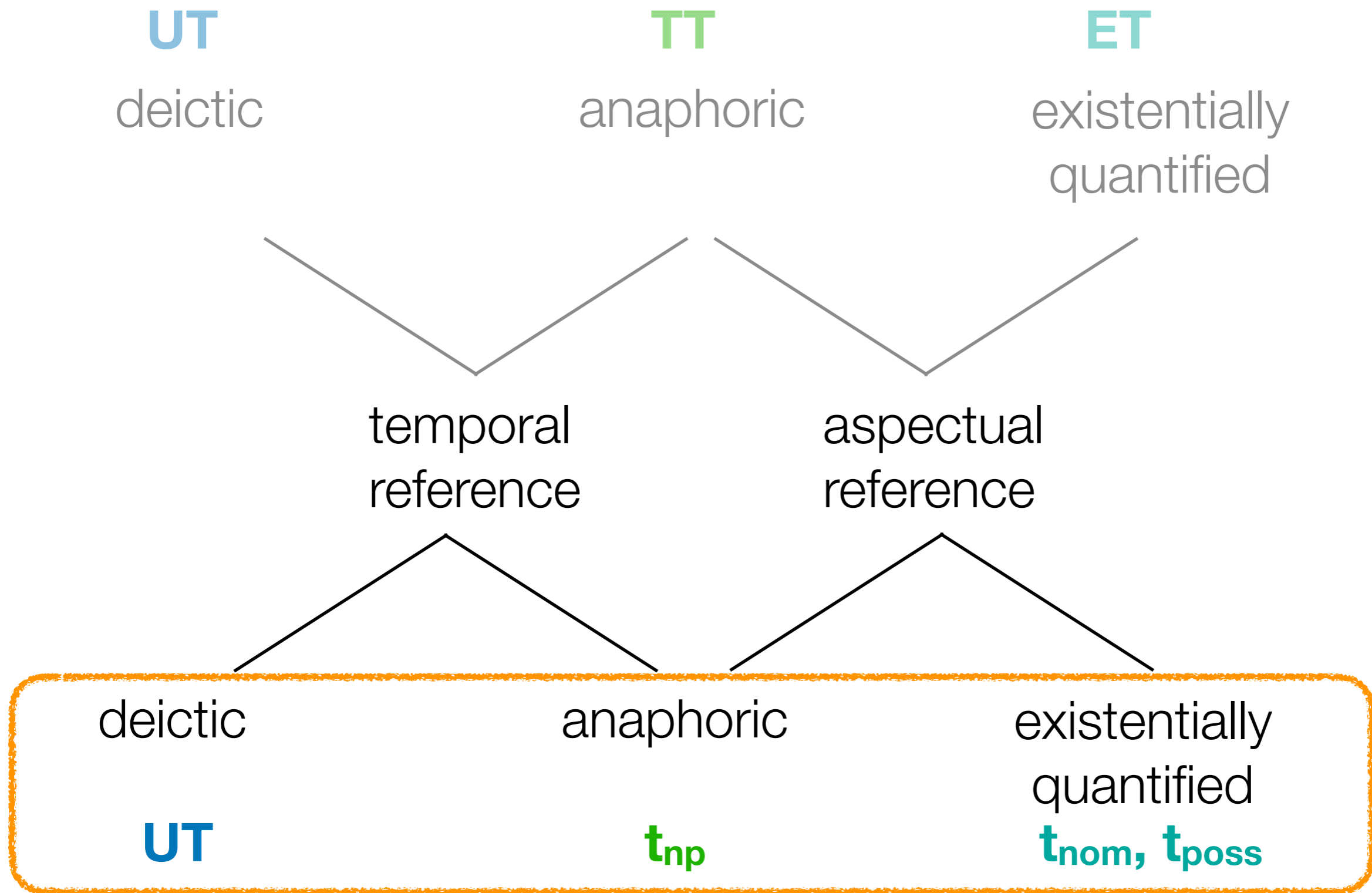
3. Bound interpretations

Last year, whenever Peter hosted a birthday party for a friend, **some guest** sued him the next day.

4. Donkey anaphoric interpretations

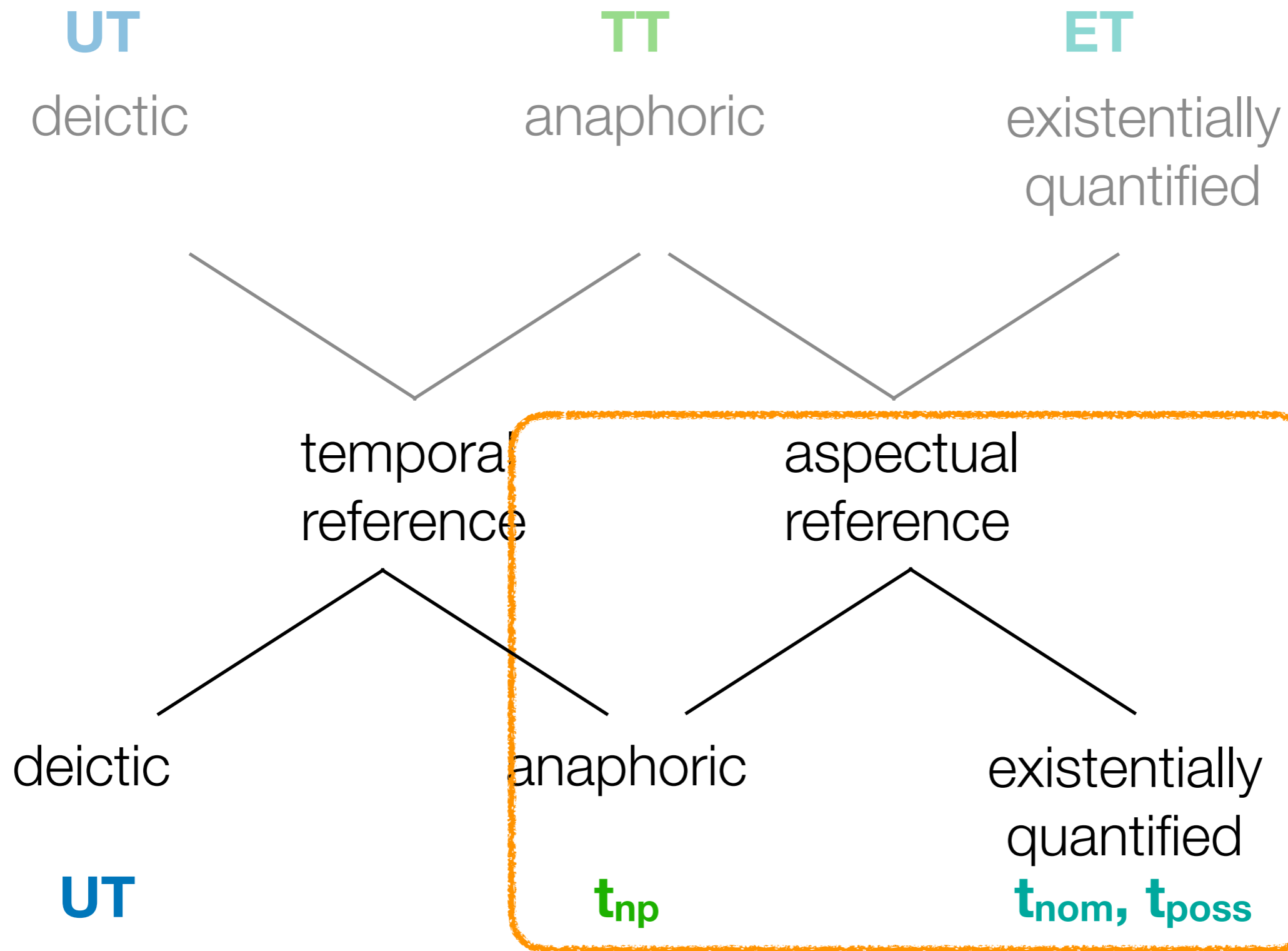
Every policeman who was called to a shooting last year interviewed **an innocent by-stander** first.

Klein's time-relational framework for the finite predication



A time-relational framework for noun phrases (Tonhauser 2007, 2008, ms)

Klein's time-relational framework for the finite predication

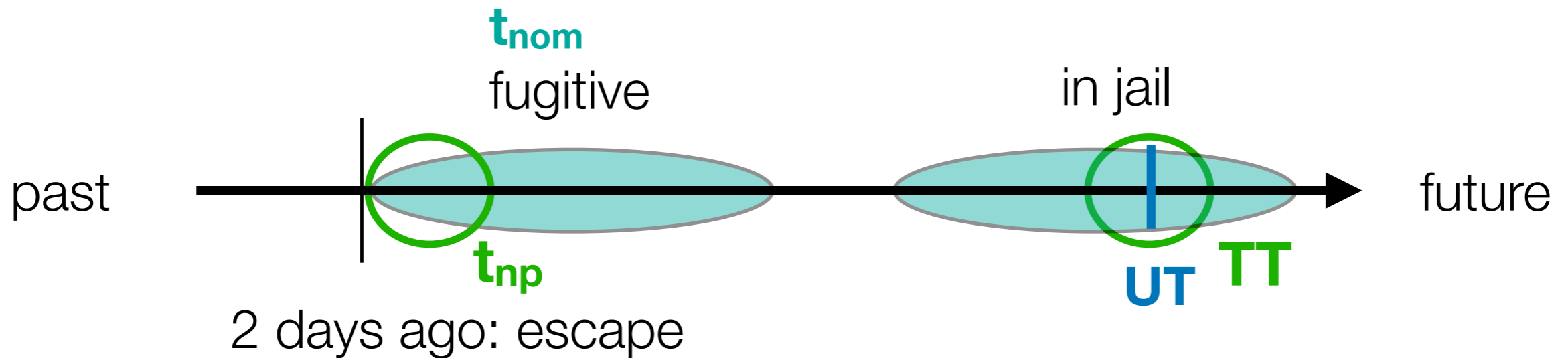


A time-relational framework for noun phrases (Tonhauser 2007, 2008, ms)

Aspectual reference of noun phrases

The noun phrase time and the nominal time coincide when the noun phrase is realized without a nominal aspect marker.

Two days ago, a guy escaped from jail. He was seen all over town, but police were finally able to catch him. **The fugitive** is back in jail now.



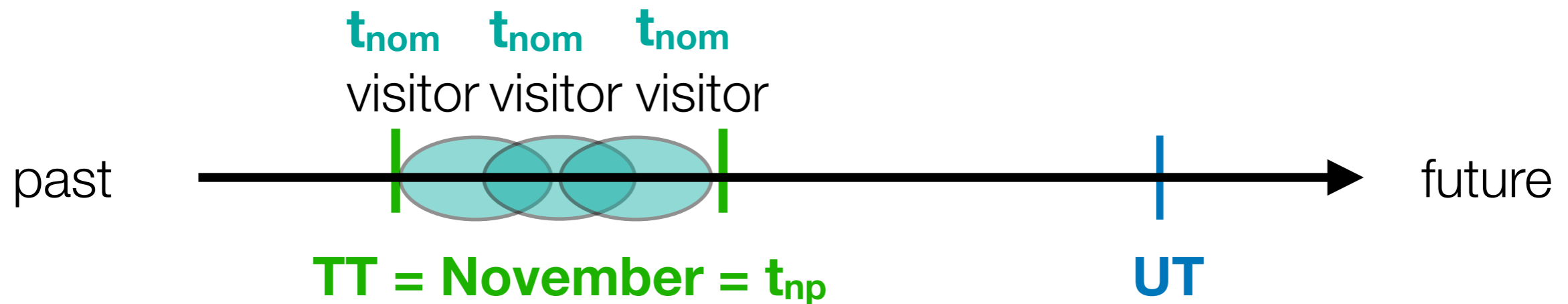
Default: nominal time temporally includes noun phrase time.

Aspectual reference of noun phrases

The default can be overridden by world knowledge.

In November, Mary sold raffle tickets at her art show.

No visitor returned the following month to claim their prizes.



Here, the noun phrase time includes the nominal time.

Aspectual reference of noun phrases

Tonhauser 2006, 2007

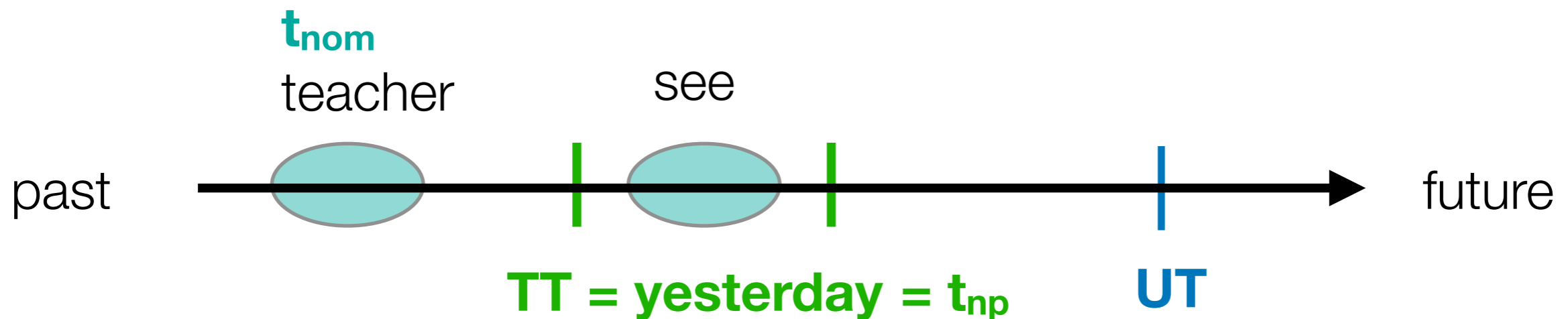
Nominal aspect markers can contribute a temporal precedence relation between the noun phrase time and the nominal time.

Kuehe a-hecha mbo'ehára-**kue**.

[Paraguayan Guaraní]

yesterday I-see teacher-NOM.TERM

'Yesterday, I saw a **former** teacher.'



Nominal time temporally precedes noun phrase time.

Aspectual reference of noun phrases

Tonhauser 2006, 2007

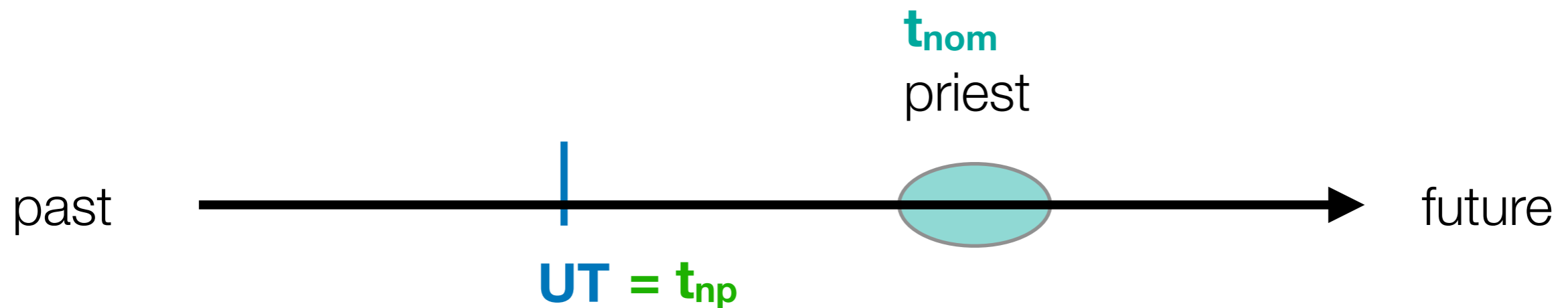
Juan ha'e pa'i-**rã**.

[Paraguayan Guaraní]

Juan 3.pron priest-NOM.PROSP

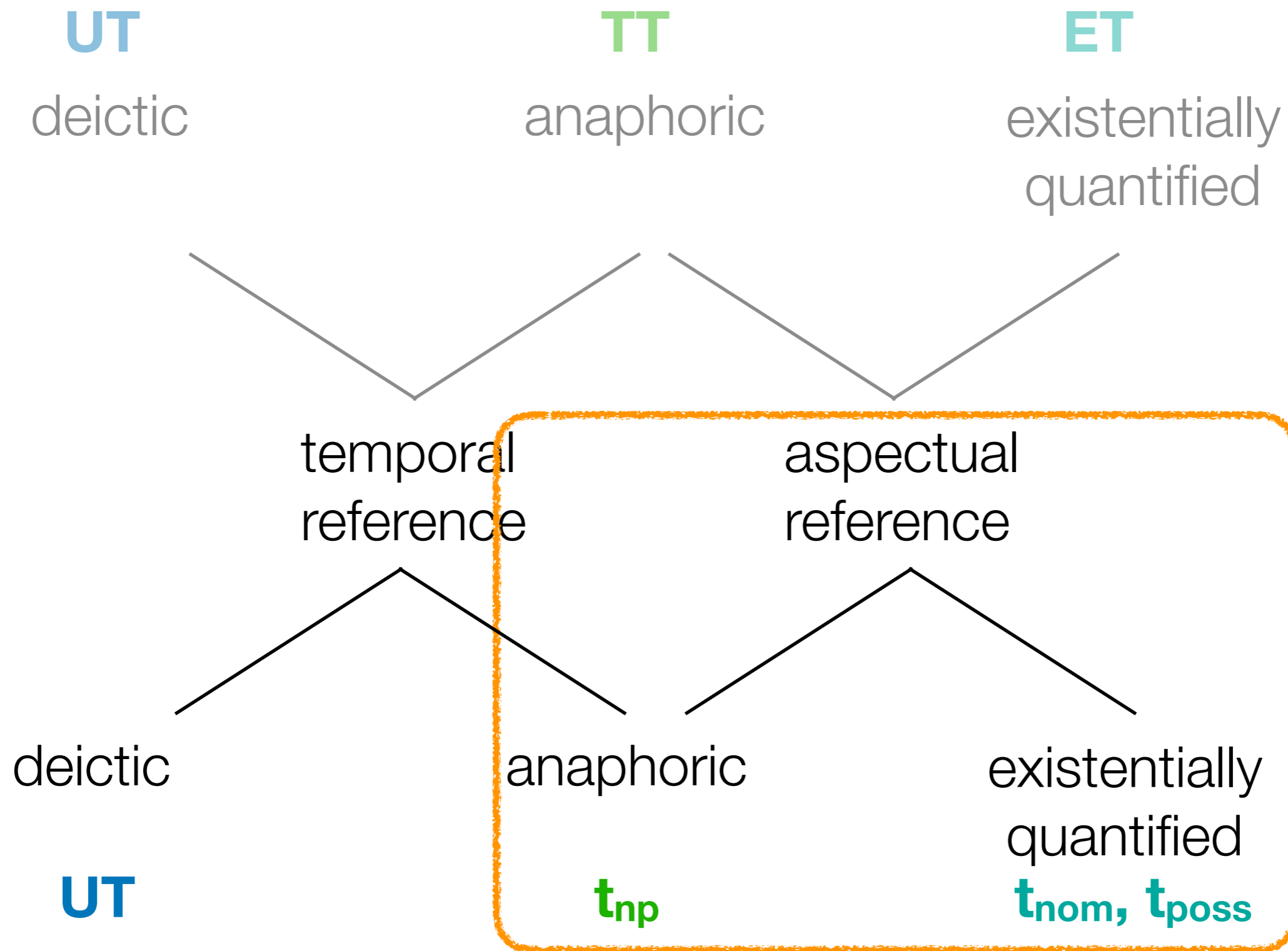
(Tonhauser 2007: 836)

'Juan is a **future** priest.'



Nominal time temporally follows noun phrase time.

Klein's time-relational framework for the finite predication



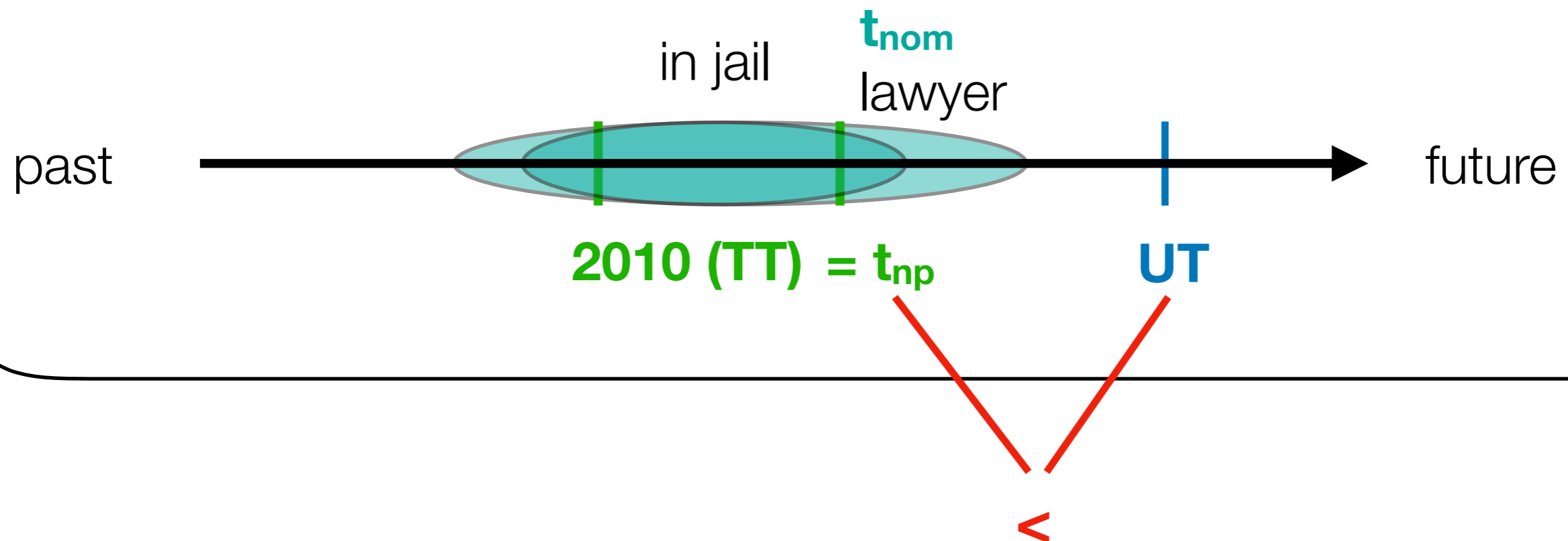
A time-relational framework for noun phrases (Tonhauser 2007, 2008, ms)

Temporal reference of noun phrases

The noun phrase time can be resolved to different times, resulting in different temporal relations to the utterance time.

Past temporal reference: $t_{np} < UT$

In 2010, a lawyer was in jail; he's not a lawyer anymore.

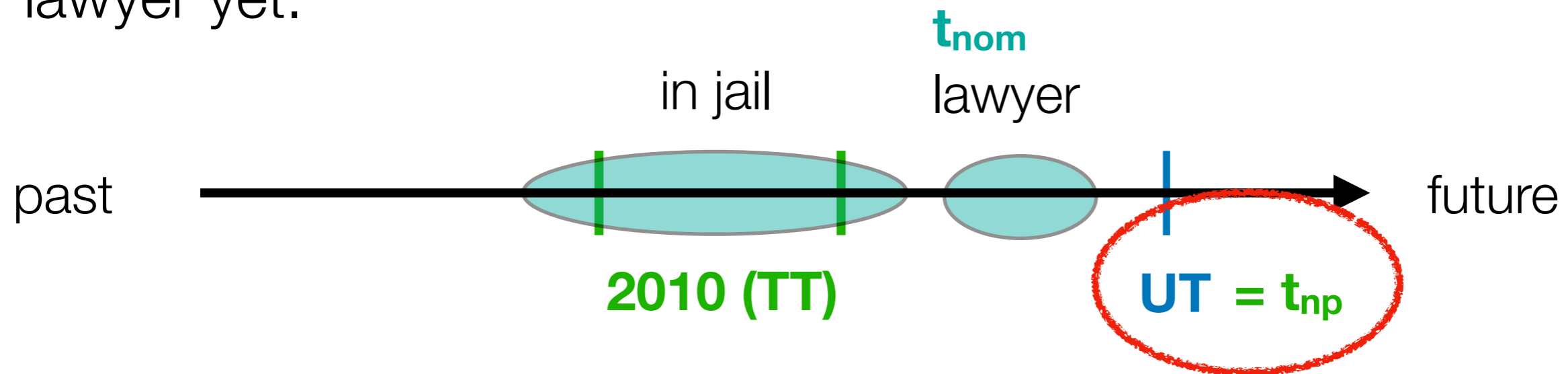


Temporal reference of noun phrases

The noun phrase time can be resolved to different times, resulting in different temporal relations to the utterance time.

Present temporal reference: $t_{np} = UT$

In 2010, **a former lawyer** was in jail; at the time, he wasn't a lawyer yet.

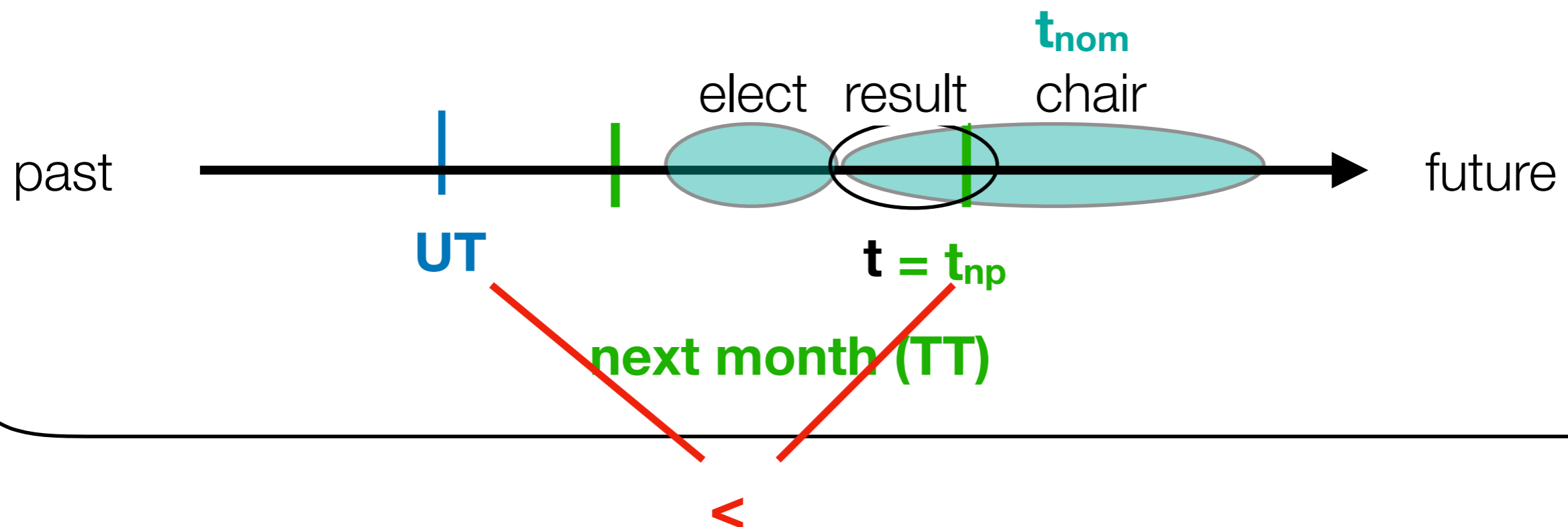


Temporal reference of noun phrases

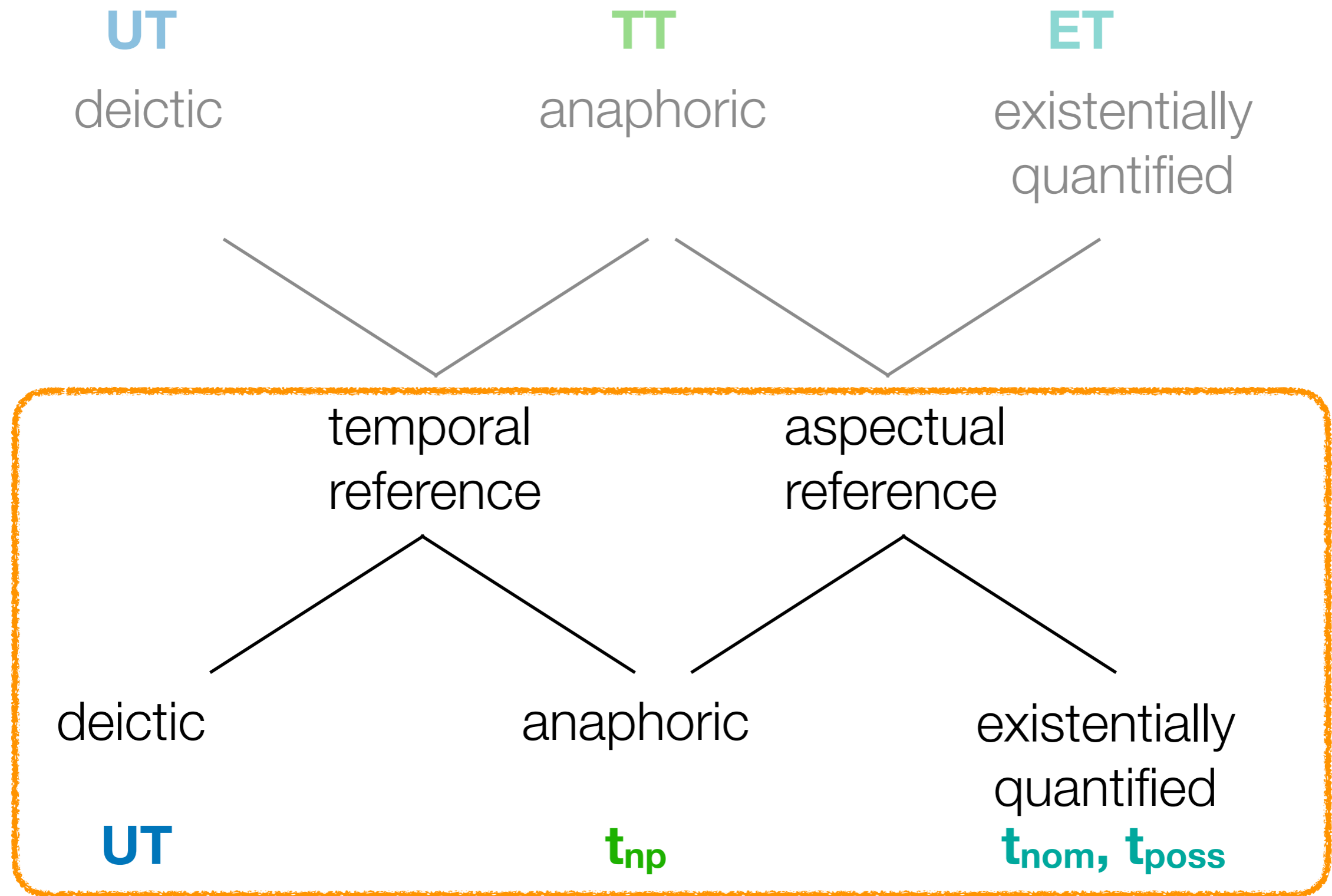
The noun phrase time can be resolved to different times, resulting in different temporal relations to the utterance time.

Future temporal reference: $UT < t_{np}$

Next month, we will elect a new chair. **This chair** will fight for a new building for us. (adapted from Musan 1999: 627)

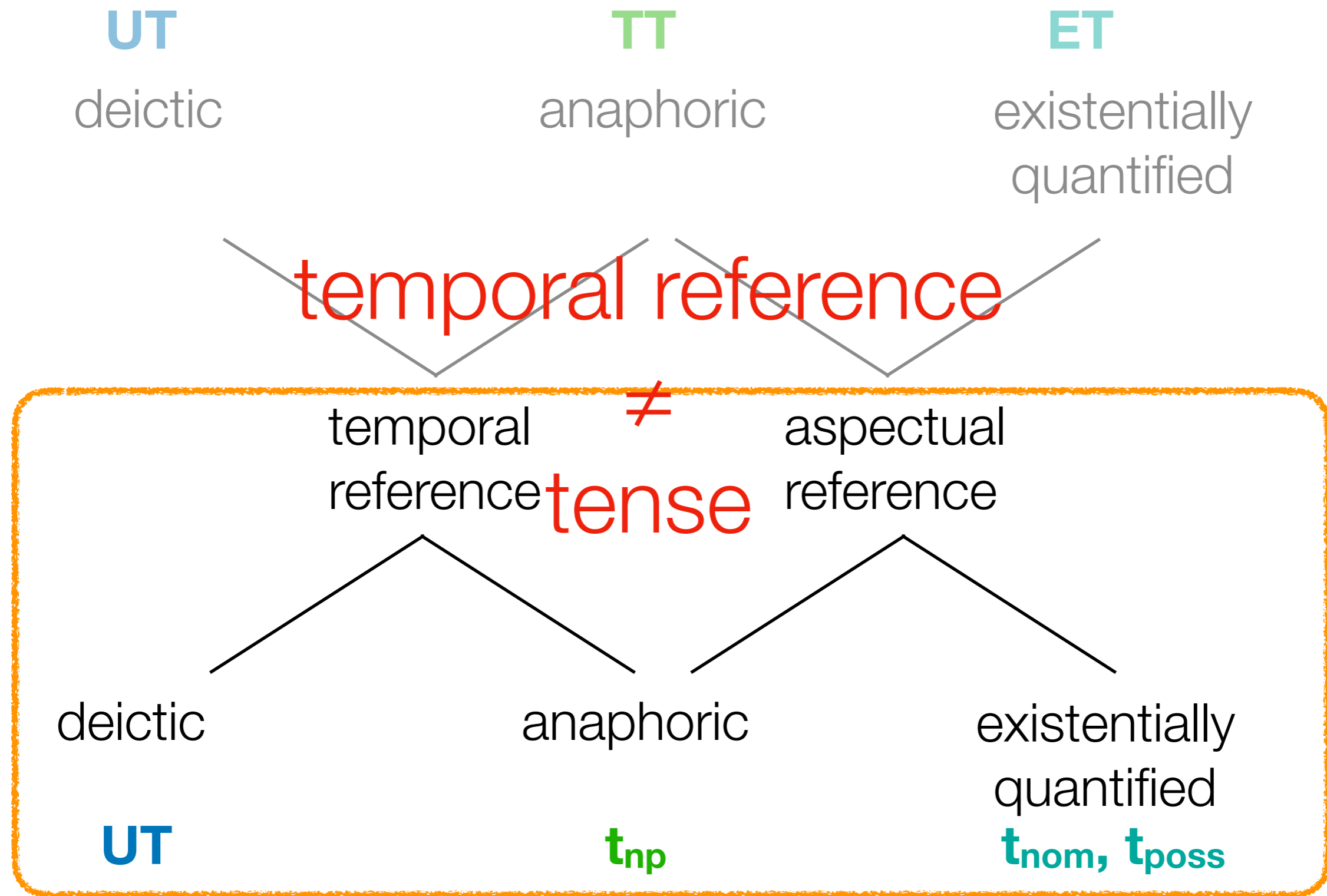


Klein's time-relational framework for the finite predication



A time-relational framework for noun phrases (Tonhauser 2007, 2008, ms)

Klein's time-relational framework for the finite predication



A time-relational framework for noun phrases (Tonhauser 2007, 2008, ms)

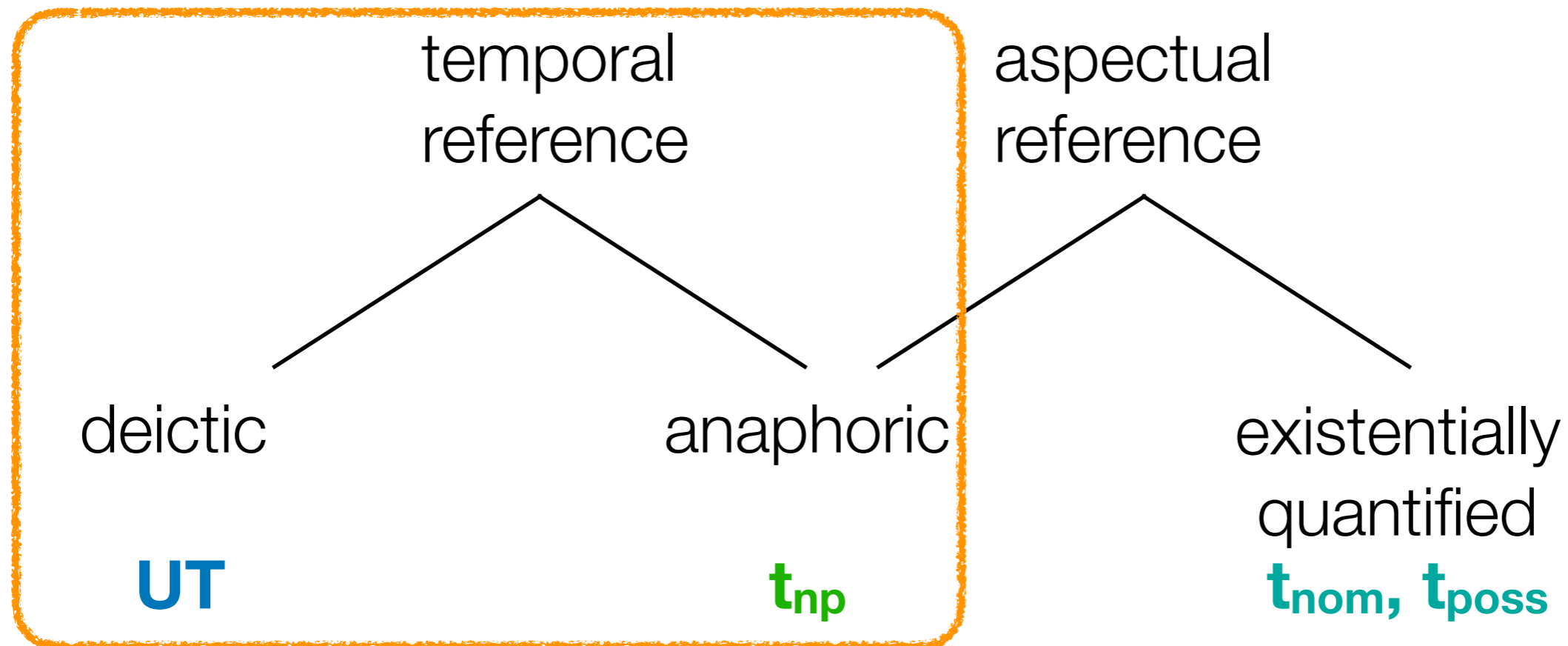
This talk

1. Motivate a time-relational framework for the temporal interpretation of noun phrases

2. Tenselessness

What is nominal tense? Are there nominal tenses?

According to the time-relational framework, noun phrases have temporal reference:



A nominal tense is a grammaticalized expression that temporally locates the noun phrase time relative to the utterance time.

Are there such expressions?

Positions on nominal tense

Inspired my work on
Paraguayan Guaraní!

Nordlinger & Sadler 2004. Nominal tense
in crosslinguistic perspective, *Language*.

- (i) Nouns (or other NP/DP constituents) show a distinction in one or more of the categories of tense, aspect, and mood, where these categories are standardly defined as they would be for verbs (e.g. Crystal 1997).
- (ii) This TAM distinction is productive across the whole word class and not simply restricted to a small subset of forms.⁵
- (iii) The TAM distinction is not restricted to nominals functioning as predicates of verbless clauses but is encoded on arguments and/or adjunct NP/DPs in clauses headed by verbs.
- (iv) The TAM marker is a morphological category of the nominal word class and cannot be treated as a syntactic clitic that merely attaches phonologically to the NP/DP.

p.778

Paraguayan Guaraní *-kue* is taken to be a nominal past tense,
not a nominal aspect.

Responded to in Tonhauser 2007

Paraguayan Guaraní *-kue* is not a nominal tense

(Tonhauser 2007, 2008)

Kuehe a-hecha mbo'ehára-**kue**.
yesterday I-see teacher-NOM.TERM
'Yesterday, I saw a **former** teacher.'

Applying the criteria for nominal tense from Tonhauser 2008:337f

1. *-kue* occurs with noun phrases and its meaning influences the noun phrase it occurs with



2. *-kue* occurs as part of a nominal tense paradigm.



Kuehe a-hecha mbo'ehára-**rã**
yesterday I-see teacher-NOM.PROSP
'Yesterday, I saw a **future** teacher.'

#mbo'ehára-**kue-rã**.
'future former teacher'
✓mbo'ehára-**rã-ngue**.
'former future teacher'

Paraguayan Guaraní *-kue* is not a nominal tense

(Tonhauser 2007, 2008)

3. Past tense does not encode a state change.

Yesterday, Juana **was sick**...and she's still sick.



Juana ha'e **mbo'ehára-kue**. #ha mbo'ehára gueteri.

Juana pron.3 teacher-NOM.TERM and teacher still

'Juana is a former teacher...#and she's still a teacher.'

4. Past tense does not show lexical restrictions.

Juana was sick (state), ran (activity), built a house (accomplishment), noticed a fly (achievement).



apyka-kue

chair-NOM.TERM

'former chair'

#kamby-kue

milk-NOM.TERM

'former milk'

#jagua-kue

dog-NOM.TERM

'former dog'

Paraguayan Guaraní *-kue* is not a nominal tense

(Tonhauser 2007, 2008)

5. Past tense encodes a relation between UT and TT. Does *-kue* encode a relation between UT and t_{np} ?

Ko'erõ a-hechá-ta mbo'ehára-**kue**.

tomorrow I-see-PROSP teacher-NOM.TERM

'Tomorrow, I am going to see a **former** teacher.'



Tonhauser 2007, 2008

Paraguayan Guaraní *-kue* is not a nominal tense, but a nominal aspect: it constrains the aspectual reference of the noun phrase, i.e., the relation between the nominal time and the noun phrase time.

Positions on nominal tense

Nordlinger & Sadler 2008. When is a temporal marker not a tense?, *Language*.

Response to
Tonhauser 2007

“why conclude that because Guaraní nominal temporal markers do not behave like verbal tenses, they necessarily must not be instances of tense, rather than concluding that because our characterizations of tense don’t adequately account for their properties, our notion of tense needs to be reexamined?” p.329

“It is not clear to us why it is necessarily inappropriate to use the term tense for a marker expressing a temporal relationship between t_{np} and $t_{nom/poss}$. Implicit in her argument is the assumption that the term tense is appropriate only for the expression of certain temporal relationships.” p.328

Responded to in Tonhauser 2008

Nominal tense constrains the relation between...

- some time and t_{nom} (e.g., Lecarme 1996, 1999, 2012; Aikhenvald 2003, Wiltschko 2003; Nordlinger & Sadler 2004; Chang 2012)

Paraguayan Guaraní *-kue* **is** a nominal tense

- UT and t_{np} (e.g., Tonhauser 2007, 2008)

Paraguayan Guaraní *-kue* is **not** a nominal tense

- t_{np} and t_{nom} (e.g., Nordlinger & Sadler 2008)

Paraguayan Guaraní *-kue* **is** a nominal tense

- t and t' (e.g., Thomas 2014)

Guillaume Thomas 2014 on Mbya Guaraní *-kue*

Mbya Guaraní is closely related to Paraguayan Guaraní, and spoken in Paraguay, Argentina and Brazil.

A-echa mburuvicha-**kue**.

I-see leader-PST

‘I saw the ex-leader.’

(Thomas 2014:358)

Like Paraguayan Guaraní, Mbya Guaraní also has suffix *-kue* that occurs with verbs, in combination with the relative clause marker *va'e*:

Juan o-mba'eapo va'e-**kue** vaipa.

Juan 3-work REL-PST a.lot

‘Juan worked/was working/had worked/had been working a lot.’

(Thomas 2014:359)

Thomas 2014 on Mbya Guaraní *-kue*

Mbya Guaraní **NPs marked with *-kue*** exhibit the same interpretative properties and lexical restrictions as Paraguayan Guaraní ones.

In both languages, **clauses marked with *-kue*** differ in their interpretative properties from NPs marked with *-kue*.

*“the meaning that Tonhauser proposes for *-kue* is inappropriate for its clausal uses” (p.360)*

Thomas 2014 on Mbya Guaraní *-kue*

Thomas (2014) proposed an analysis of verbal *-kue* as a relative past tense, and extended that analysis to nominal *-kue*.

A-echa mburuvicha-**kue**.

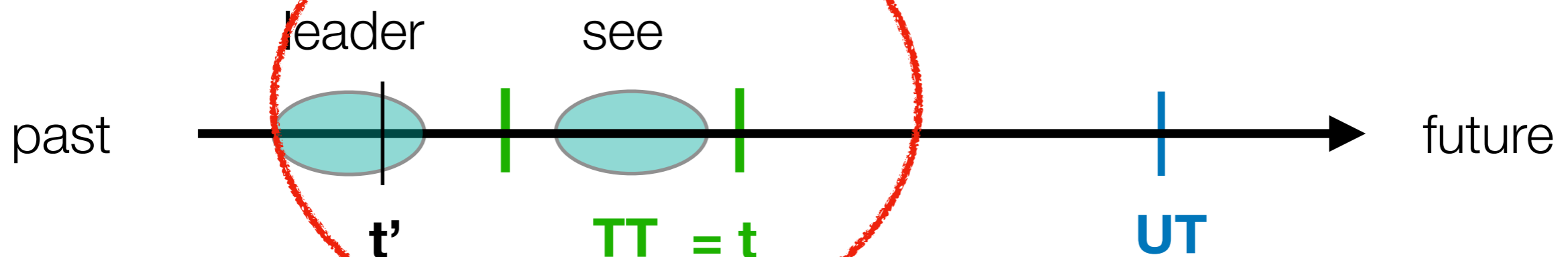
I-see leader-PST

'I saw the ex-leader.'

$t' < t$ is similar, but not quite the same as $t_{\text{nom}} < t_{\text{np}}$

(Thomas 2014:358)

...true iff there is a time t' that precedes a contextually given time t s.t. the property leader is true of the entity at t' .



Thomas 2014 on Mbya Guaraní *-kue*

-kue temporally locates the evaluation time t' before a contextually given time t .

Is *-kue* a terminative aspect or a relative past tense? (section 3.2.2)

Bohnemeyer 2014

- with terminative aspect, temporal adverbs locate TT
- with relative past tense, temporal adverbs locate ET

Thomas shows that, for verbal *-kue*, temporal adverbs locate ET, in support of his analysis of verbal *-kue* as a relative past tense.

But he does not provide relevant examples for nominal *-kue*.

Temporal adverbs and nominal *-kue*

Paraguayan Guaraní (Tonhauser 2007:854)

1. Who is happy?

a. Mbo'ehára ochenta-gua o-vy'a.

teacher eighty-of 3-happy

'Teachers of the eighties are happy.'

Thus, according to Thomas' criterion, Paraguayan Guaraní *-kue* is not a relative past tense.

b. Mbo'ehára-**kue** ochenta-gua o-vy'a.

teacher-NOM.TERM eighty-of 3-happy

'Individuals who in the eighties were former teachers are happy.'

-kue temporally locates t_{np}

Not: 'Teachers of the eighties who are now former

teachers are happy.' *-kue* temporally locates t_{nom}

Nominal tense constrains the relation between...

- some time and t_{nom} (e.g., Lecarme 1996, 1999, 2012; Aikhenvald 2003, Wiltschko 2003; Nordlinger & Sadler 2004; Chang 2012)

Paraguayan Guaraní *-kue* **is** a nominal tense

- UT and t_{np} (e.g., Tonhauser 2007, 2008)

Paraguayan Guaraní *-kue* is **not** a nominal tense

- t_{np} and t_{nom} (e.g., Nordlinger & Sadler 2008)

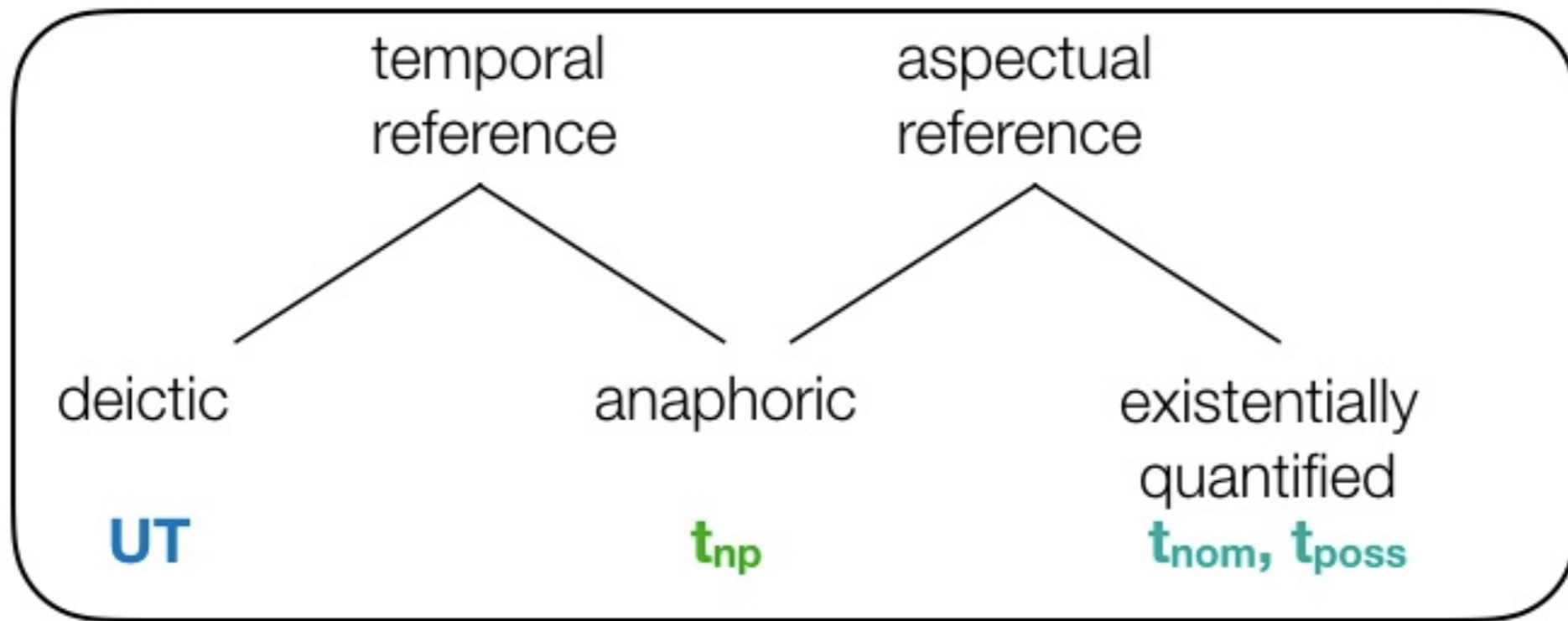
Paraguayan Guaraní *-kue* **is** a nominal tense

- t and t' (e.g., Thomas 2014)

Paraguayan Guaraní *-kue* is **not** a nominal relative tense

Conclusions

A time-relational framework for the temporal interpretation of NPs



In this framework, a nominal tense constrains t_{np} in relation to UT, Paraguayan Guaraní *-kue* is not a nominal tense.

Other theoretical assumptions go hand-in-hand with other definitions of nominal tense and other conclusions about whether particular expressions are nominal tenses.