Basics of temporal semantics

- a non-exhaustive survey of in-depth studies
  - ignoring the usual suspects (English, French, German, Italian, Russian...)
  - plus the pioneering typological work by Dahl 1985 (covering 64 languages based on
    ignoring the usual suspects (English, French, German, Italian, Russian...)
    responses to an extensive questionnaire) and follow-ups

- framework: Klein’s (1992, 1994, etc.) aspect theory
  - a dynamic model of what a discourse is “about”
    - it is possible to some extent to model the meanings of
      utterances in a discourse as contributing to a question
      - an implicit or explicit question
    - Roberts 1996, Simons et al 2010: question under discussion (QUD)
    - only propositions that contribute to the QUD are at issue
    - all other propositions are presupposed or backgrounded
  - limits: non-constative/representative speech acts; directives other than questions

Master Class: Elicitation and Documentation of Tense & Aspect

Overview

- basics of temporal semantics
- studying temporal semantics in the field
- tenselessness
- tenselessness and the future
- summary

Basics of temporal semantics (cont.)

- an emerging picture consistent with the findings and Klein 1994 plus revisions in Bohnemeyer 2014
  - across languages, the contextual interpretation of finite eventuality descriptions involves determining
    - the values of 3+ variables:
      - situation time \( t_{\text{sit}} \) - the runtime of the described eventuality (traditionally, \( t(e) \))
      - utterance time \( t_{\text{u}} \) - the time of utterance/processing
        - more generally, the time of the deictic center
      - topic time \( t_{\text{top}} \) - the time the utterance makes an assertion or asks a question about
      - reference times \( t_{r1}, t_{r2}, t_{r3}, \ldots \) - times given in context that may constrain \( t_{\text{top}} \)
        - reference time variables may be present in the semantics of the utterance due to, e.g., true relative tenses

Basics of temporal semantics (cont.)

- framework: Klein’s aspect theory (cont.)
  - every (finite) clause is interpreted with respect to the topic time \( t_{\text{top}} \)
    - \( t_{\text{top}} \) is established by the QUD
    - \( t_{\text{top}} \) constrains the time for which a proposition is asserted or questioned, etc.
    - \( t_{\text{top}} \) is related to
      - the run time \( t(r) \) of the described situation \( s \)
        - by viewpoint aspect
        - utterance time \( t_{\text{u}} \) by tense

Basics of temporal semantics (cont.)
• where languages vary
  – the lexicalization of eventuality descriptors
    • that introduce entailments about realization conditions
  – the grammaticalization of *aktionsart* operators
    • that map descriptors to eventuality/situation classes
  – the grammaticalization of functional categories
    of viewpoint aspect and tense
  – the grammaticalization of constructions of adverbial
    modification, temporal subordination, etc.
  – the conflation of other meanings
    in such functional categories and constructions
    • especially mood, modality, evidentiality

• Bohnemeyer 2014 vs. Klein 1994
  – Klein 1994: no need to distinguish b/w viewpoint aspect
    and relative/anaphoric tense (or b/w \( t_{top} \) and \( t_f \))
  – Bohnemeyer 2014: empirical evidence for aspectually
    neutral anaphoric tenses in Japanese, Korean, Kituba
    • and for tenseless aspect markers in Yucatec and Kalaallisut

• how the values of the variables are determined
  – \( t_f \) is always present as part of the deictic center
  – all values may in principle be specified or constrained by
    adverbials, temporal clauses, etc.
  – \( t_{vis} \) may be constrained vis-à-vis \( t_{top} \)
    by aspect markers and pragmatic inferences
  – \( t_{top} \) may be constrained vis-à-vis \( t_f / t_t \)
    by tense markers and pragmatic inferences

• universal, as far as we know
  – the concept of time
    • although spatial metaphors for time are language-specific
      and may influence reasoning about time
      – e.g., Bohnemeyer 2010; Boroditsky, Fuhrman, & McCormick 2010;
        Boroditsky & Gaby 2010
    – the pragmatic inferences involved
      in determining the values of the four variables

• strengths of this approach
  – unified account of tense and viewpoint aspect
    in terms of the same set of primitives \( t_f, t_{vis}, t_{top} \)
  – straightforward adaptation
to temporal semantics in tenseless languages
  • all natural language utterances are about topic times, or more
genervally, about topic situations (Austin 1950; Kratzer 2014)
  • these are always understood as temporally related to the
    described situation and the utterance situation
    – and/or situations described in context
  • therefore, every utterance has temporal and aspectual
    interpretations
    – whether these are constrained by its morphosyntactic form or not
• the role of functional categories
  – the relations $R(t_{top}, t_{top})$, $R(t_{top}, t_r)$, $R(t_{top}, t_j)$ may be constrained by functional categories
  – the grammaticalization of such categories varies across languages

(1.2) Als ich Wolfgang’s Büro betrat, when (NOM) Wolfgang:GEN.SG office:ACC.SG enter:PRT3SG
   schrieb er einen Brief wrote:PRT3SG he:NOM indef:ACC.M letter:ACC.SG
‘When I entered Wolfgang’s office, he wrote / was writing a letter’

(1.3) Taro-va [terebi mi-ta ato-de] benkyoo-suru
     Taro-TOP TV-ACC watch:ANT after:LOC study:NONPST
‘Taro will study after watching TV.’
(Ogihara 1999: 329)

(1.4) Taro-va kinoo hon-o yon-da
     Taro-TOP yesterday book:ACC read:ANT
‘Taro (had) read the book yesterday.’
NOT: ‘As of yesterday, Taro had read the book.’
(Ogihara 1999: 330)

• Standard German
  – $R(t_{top}, t_j)$ is constrained in terms of
    • an obligatory distinction $b/w t_{top} < t_j$ and $\neg(t_{top} < t_j)$
    • an optionally marked distinction $b/w t_{top} < t_j$ and $t_{top} \subseteq t_j$
  – $R(t_{top}, t_{top})$ is constrained in terms of
    • a distinction $b/w t_{top} < t_{top}$ and $\neg(t_{top} < t_{top})$
    • a distinction $b/w t_{top} \subseteq t_{top}$ and $\neg(t_{top} \subseteq t_{top})$ expressed through
      weakly grammaticalized, colloquial constructions
      – or lexical periphrases
    • optional lexical periphrases for $t_{top} < t_{top}$

• Japanese
  – $R(t_{top}, t_j)$ is constrained
    • in terms of an obligatory distinction
      between $t_{top} \subseteq t_j$ and $t_{top} \not\subseteq t_j$
      – or between event reference and reference to a ‘related state’;
      cf. Nishiyama & Koenig 2010
  – $R(t_{top}, t_j)$ is constrained in terms of an obligatory(?)
    distinction $b/w t_{top} < t_j$ and $\neg(t_{top} < t_j)$
    • cf. Ogihara 1996
  – $R(t_{top}, t_j)$ is not grammatically constrained
    – in conversation, $t_j = t_{top}$ by stereotype implicature

• Yucatec
  – in main clauses
    • if $t_{top} \subseteq t_j$, then $t_j / t_{top} < t_{top}$ requires marking of modality or
doctor of distance $b/w t_j / t_{top}$ and $t_{top}$
    • if $\neg(t_{top} \subseteq t_j)$, no grammatical constraints obtain
      on either $R(t_{top}, t_j)$ or $R(t_{top}, t_j)$
  – in certain finite subordinate clauses,
    $t_j / t_{top} < t_{top}$ requires irrealis mood marking
  – $R(t_{top}, t_{top})$ is heavily constrained
    • $t_{top} < t_{top}$, $t_{top} < t_{top}$, $t_{top} \subseteq t_{top}$
      all require separate forms

Basics of temporal semantics (cont.)
Basics of temporal semantics (cont.)

(1.5) Ts’ok in=meet-ik le=nah=no’
TERM A1SG=do:APP-INC(B3SG) DET=house=D2
‘I (will) have/had built the house’

(1.6) Táan in=méet-ik le=nah=no’
PROG A1SG=do:APP-INC(B3SG) DET=house=D2
‘I am/was/will be building the house’

• the role of pragmatics
  – R(t₁ﺿ, t₂ﺿ), R(t₂ﺿ, t₃), and R(t₃ﺿ, t₄)
    are partially complementary
  – if one is specified or constrained, the others may be
    inferred via Gricean implicatures

• Standard German
  – telicity-based viewpoint implicatures
    • telic descriptions trigger stereotype implicatures
      to t₂ﺿ \subseteq t₁ﺿ
    • atelic descriptions trigger scalar implicatures to t₂ﺿ \subset t₁ﺿ
      – cf. Bohnemeyer & Swift 2004
  – viewpoint-based tense implicatures
    with non-past tense forms
    • t₁ﺿ \subseteq t₂ﺿ \rightarrow (t₁ﺿ < t₂ضار) ∨ (t₁ﺿ \subset t₂ضار)
    • t₂ضار \subset t₄ضار \rightarrow t₄ضار \subset t₂ضار
      – cf. Ehrich 1992; Leiss 1992

• Yucatec
  – in conversation, t₄ضار \subset tₑ urlString by stereotype implicature
  – in narratives, t₂ﺿ is inferred to be the tₑ urlString of a suitable
    clause in preceding discourse
  – resulting in temporal anaphora interpretations;
    cf. Bohnemeyer 2010
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Studying temporal semantics in the field

- (field) semantics and semantic acquisition
  - the researcher’s position is not unlike that of a child acquiring semantic/pragmatic competence

(2.1) Linguistic elicitation is the collection of responses to verbal or nonverbal stimuli designed to study the respondents’ linguistic competence and/or their practices of language use.

<table>
<thead>
<tr>
<th>Table 2. Linguistic elicitation techniques – from stimulus via task to response</th>
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<tbody>
<tr>
<td>response</td>
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<td>target L utterance</td>
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Table 1. Approaches to linguistic data collection

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</table>

Studying temporal semantics in the field (cont'd)

- linguistic data collection involves maximally three components
  - a stimulus, a task, and a response
  - linguistic representation
  - elicitation

an elicitation tool for temporal semantics: Dahl’s (1985) tense-aspect-mood questionnaire

- this instantiates a combination of
  - type II (contact L utterance -> target L utterance)
  - type III (linguistic representation -> target L utterance)

- background: the problem with translation

- insufficient control
  - over how the speaker construes the stimulus
    - e.g., is the speaker and consultant different in their competence in the contact language or use different varieties of it?
    - or due to differences between speaker and researcher in inferences as a result of differences in cultural knowledge
  - the risk that the speaker attempts to translate not just the meaning but the form of the stimulus
    - by trying to find one-to-one equivalents of particular words or constructions

Studying temporal semantics in the field (cont’d)

- field semantics
  - from a social/behavioral-science perspective
  - studying semantic behavior is no different from studying any other aspect of human behavior
  - there are no epistemological differences between studying meaning in the researcher’s native language
  - and in any other language
  - the researcher’s own intuitions are never sufficient evidence in support of any semantic analysis
    - that is supposed to generalize to the speech community

Figure 4. An elaborate update of Brown’s (1958) ‘Original Word Game’

Figure 5. Compositions of linguistic data collection
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Studying temporal semantics in the field (cont’d)

- analysis
  - the following remarks hold for the temporal-semantic analysis of natural language utterances
    - regardless of whether these were recorded as part of spontaneous conversations, staged discourses, or elicitation
  - assumptions
    - you are interested in the semantics of a putative tense-aspect-mood marker of the morphological form X_{TAM}
    - the database your analysis draws on consists of utterances that contain X_{TAM} and utterances that do not contain X_{TAM}
    - for each of these utterances, you potentially have information of the following types
      - co-occurring expressions in the same clause/sentence that constrain the temporal reference of the clause/sentence (e.g., adverbials)
      - contextual information that constrains the temporal reference of the sentence/clause (as in (3.5))

Studying temporal semantics in the field (cont’d)

- examples
  - a future tense marker ought to be compatible only with situations in the future of utterance time (absolute tense)
  - or in the future of some reference time (relative tense)
  - consequently, (2.2) is semantically anomalous and the response in (2.4) is infelicitous (or discourse-semantically anomalous = incoherent)
  - consequently, (2.4) is contradictory

Studying temporal semantics in the field (cont’d)

- complications en route from extension to sense
  - polysemy:
    - a given TAM marker may have multiple related senses
    - e.g., the (will + INF) construction of English has an inferential evidential interpretation
    - under which it is compatible with non-past adverbials
  - pragmatic meanings: implicatures and presuppositions
    - these may make the extension of an expression appear narrower
    - e.g., the simple past of dynamic VPs in English usually appears to convey perfective aspect – but is this merely an implicature?
  - As a number of you may know, Dad wrote but never fully finished a book when he retired.
  - I ate a sandwich the other day, but I didn’t finish it.
    - http://twitter.com/kentise/status/124345717586298664

Studying temporal semantics in the field (cont’d)

- the basic idea
  - the extensional meaning of X_{TAM} can be characterized in terms of the set of situations/possible worlds X_{TAM} is compatible with
    - in the theoretical framework introduced in the beginning, these are in particular the topic situations
      - i.e., the situations the utterance may be about
    - from this, the intensional + sense meaning of X_{TAM} can be inferred as a shared property of those situations/worlds
  - the contextization aspect makes Dahl’s questionnaire a combination of Types II and III

Studying temporal semantics in the field (cont’d)

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Tenselessness

- Yucatec as a tenseless language: profile
  - spoken by 759,000 people in the Mexican states of Campeche, Quintana Roo, and Yucatán
  - and approximately 5,000 people in the Cayo District of Belize

- polysynthetic
- syntactic relations tend to have morphological reflexes
- a single content word may – and frequently does – constitute a clause
- in combination with the necessary function words and inflections
- mostly head-initial, and in particular verb-initial
- but topicalizations and focus constructions are extremely prominent in discourse

---

Tenselessness (cont’d)

- preverbal aspect-mood (AM) markers

  - every “verb core” combines with exactly one AM marker
  - except for certain dependent verbal cores; e.g., true complements
  - every AM marker governs a particular category
  - it’s not clear that the combinations are always compositional

- the perfective and imperfective AM markers are prefixes
  - the imperfective is used primarily for habitual/generic reference
  - the perfectives combine perfective and resultative viewpoints.

- perfective
  - ‘I read the paper’

- the remaining 13 or so AM markers are stative predicates (not auxiliaries or light verbs)

---

Tenselessness (cont’d)

- aspect-mood marking and status inflection

  - status: an inflectional category of Mayan languages (Kaufman 1990)
  - conflating semantic distinctions of viewpoint aspect, assertive-non-assertive or realis-realis modality
  - and illocution
  - five subcategories in Yucatec: incomplete, completive, subjunctive, imperative, and extra-focal
  - every verb form must be semantically marked for exactly one of these five subcategories
  - in all syntactic environments – there is no finiteness contrast!
  - only verbs are status-marked
  - stative predicates – nouns, adjectives, and derived stative – are incompatible with status inflection
  - status selection is strictly governed by syntax
  - triggers include the preverbal aspect-mood markers, complementation, sentence type, focus constructions, ...

---

Tenselessness (cont’d)

- Metrical AM predicates

  - Immediate
    - stative: ‘I had/had/have’ to read the paper’
    - perfective: ‘I will/have/had/have’ to read the paper’
  - •

- other loci of aspectual and modal information

  - special AM systems with fewer distinctions and distinct realization
    - under negation; in focus, relativization, and Wh-constructions
  - subordinators and connectives
    - e.g., the reveals subordinator këén; the perfective connective këño
  - adverbials and particles
Tenselessness (cont'd)

- **tenselessness**
  - deictic tense
    - nothing in the morphosyntactic form of a Yucatec clause restricts its \( t_o \) vs \( t_i \)
      
      \( \text{e.g.,} \) "terminative" AM \( t_o / k \) with past \( t_i \) and future \( t_i \) time reference
      
      \( (3.5) \)
      
      `k-un-k'ich-ul-h\'o=\'e\'l,  
      IMPF.A.3=arrive-INC-TOP  
      \( t_o / k \)  
      u=kìm-iI  
      le=cháampal=\'e\'.
      
      TERM  
      A.3=do-INC. DET=small.child=O3  
      `by the time' they arrived, the baby had already died.'
      
    - Samaal \( ñ\'o=k'\n=t\'\n\)=e  
      tomorrow enter-RES+sun=TOP  
      \( t_o / k \)  
      u=\'bëet-k  
      le=\'tùss+\'bëel=\'e\'.
      
      TERM  
      A.3=do-INC(B.3.5)  
      DET=and.way=REL=O2  
      'by tomorrow at dusk (the boy) will have done the errand.'
      
      (Andrade 1955: 135-136)

- **anaphoric tense**
  - anaphoric/relative tense analyses are defeated by demonstrating non-tense-like behavior
    - \( \text{e.g.,} \) co-presence of anaphoric tense semantics in aspectual/modal markers is unattested and thus implausible by Occam's Razor
    - as for the 'metrical tenser' / 'degrees of remoteness' markers, \( (3.8) \) shows that the remote future marker does not entail realization
      
      \( (3.8) \)
      
      `Bíin \( \text{in}=\text{mëet}=\)\'  
      le=\text{nah}=\'e\',
      REMF  
      A1SG=do-APP-SUBJ(B3SG)  
      DEF=house=D2  
      ba'x=\'e\',  
      ma' in=\'ohel
      what=TOP  
      NEG A1SG=knowledge(B3SG)
      wàäh yan  
      u=\'bëy=\'tal
      ALT  
      OBL  
      A3=thus-INCH-INC
      `it will be a long time before I build the house, but I don't know whether it will be possible.'

Tenselessness (cont'd)

- Bohnemeyer (1998, 2002, 2009) argues that the degrees of remoteness markers express predicates such as 'be a long time'
  - the relation between \( t_o \) and \( t_i \) is on this analysis not actually expressed, but presupposed
  - support for this analysis comes from the behavior of the markers under negation
    
    \( (3.10) \)
    
    `Ma' \( \text{sìam} \) \( \text{sìunak} \)  
    le=këmbi=\'o\'=\',
    NEG  
    REC  
    turn\( \text{ATP-SUBJ(B3SG)} \)  
    DEF=way=O2
    'it's not a while ago that the bus returned;…'
    
    a.  
    \( \text{…in\'=a=li-}\)\'ke\',  
    h\(=\text{ti=}\o'\)k \( \text{mëedya òora} \).
    A1SG=say-INC(B3SG)=TOP  
    PRV-end(B3SG)  
    half  
    hour  
    `I think it was half an hour ago.'
    
    b.  
    \( \text{…tùmëe=ma' sùunakni} \).
    CAUSE  
    NEG  
    turn\( \text{ATP-SUBJ(B3SG)}=\)\d4
    `…because it hasn't returned yet.'

Tenselessness (cont'd)

- this holds even for the metrical AM markers
  - these cardinally quantify over the temporal distance b/w and some reference point given in context
    
    \( (3.7) \)
    
    `Kàa=\text{h-t\'a=ich} \)  
    way  
    h\(=\text{ti=}\o'\)k  
    kà=\'e\'l  
    \( \text{ha=\'e'o}=\)\',
    CON=PRV-come-B2SG  
    here  
    PRV-end(B3SG)  
    two\( \)=CL.IN  
    year=O3
    A1SG  
    in=\text{mëet}=\'  
    le=\text{nah}=\'e\',
    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'

- the only exception is the perfective AM marker
  - see below!

Tenselessness (cont'd)

- \( (3.9) \) shows that the remote future marker is incompatible with event time adverbials
    
    \( (3.9) \)
    
    `Bíin \( \text{in}=\text{mëet}=\)\'  
    le=\text{nah}=\'e\',
    REMF  
    A1SG=do-APP-SUBJ(B3SG)  
    DEF=house
    te=\'\text{an}yo  
    k=\text{u=t\'a=ich}=\'e\',
    PREP\(=\)\text{year}
    IMPF.A.3=come=O2
    intended: 'i will build the house next year.'

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Tenselessness and the future

- now: future time reference (FTR) in 4 superficially (and mostly profoundly) tenseless languages
  - Kalaallisut (Greenlandic; Bittner 2005)
  - St’át’imcets (or Lillooet; Northern Interior Salish; British Columbia; Matthewson 2006)
  - Paraguayan Guarani (Tupi-Guarani; Paraguay; Tonhauser 2011)

Tenselessness and the future (cont’d)

- speakers choose from among numerous options for FTR that satisfy the MCC
  - in matrix clauses, the prospective, obligative, desiderative, nccessiative, and remote future markers are used – all of these are compatible with absolute past time reference

  (4.3) Káa-h táal-ech way h t’a’o kà-a’o’el h’a’b-e’, CON=PRV-come:B2SG here PRV-end(B3SG) two=CL.IN year=D3
  - 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’

Tenselessness and the future (cont’d)

- how to explain the constraint barring the perfective marker from FTR?

  (4.6) Modal Commitment Constraint: The realization of events in the (deictic or anaphoric) future cannot be asserted, denied, questioned, or presupposed as fact. Assertions and questions regarding the future realization of events require specification of a modal attitude on the part of the speaker.

  (4.7) Event Realization: A predicate P is realized by event e at time t, if and only if at least the run time of a subevent e’ of e that also falls in the denotation of P is included in t.

Tenselessness and the future (cont’d)

- in suppporadate clauses, irreals marking is used for FTR
  - but also for habitual and generic reference

  (4.4) Future-time reference
  - Le-kàarta kìen a=t’si’bi-f 0 bìey=e’, DET=letter [3MR,IR] A2=write:APP-SUBJ(B3SG) thus=O2
  - hay p’o’el tìlimpo k=a=túkk-el kúumà=k-tìli how many=CL.IN time IMPF=THINK-INC(B3SG) A|T|ake time=INCH-INC
  - ‘The letter you are going to write thus, how much time do you think it will take?’

  (4.5) Habitual/generic reference
  - Le-kìen kà-ts’u’-f tàas-ik kà’nasah=n=TOP, DET=3MR,IR A1PL=put:APP-SUBJ(B3SG) so.then PNSY=O1
  - u=k’a’a=k’a’, kà’nasah=n=TOP
  - ‘So then the (one) we put here, as for its name, (it is) ka’nal pàach na’ah’

Tenselessness and the future (cont’d)

- complications
  - the terminative AM marker, an expression of perfect aspect, is compatible with FTR even though it entails realization

  (4.8) Sáamal döök’=ka’ni=‰ow-e’
  - tomorrow enter=RES+run=TOP
  - ts’o’k u=k’a’a-k’él ti=túus+ts’biel=e’, DEF=enter.way:REF=O2
  - ‘By tomorrow at dusk (the boy) will have done the errand.’
  - [Andrade 1995: 135-136]

  - the progressive AM marker is compatible with FTR even though it entails realization with atelic predicates

Elicitation and Documentation
of Tense & Aspect

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Elicitation and Documentation of Tense & Aspect

Tenselessness and the future (cont’d)

- non-verbal predications are compatible with FTR
  (4.9) Chèen ka’=siunak-ech t-un’laak’ ha’b=et’,
  SK:IRR REP=turn(ATP:SUBJ=3SG) PREP-A3+other
  tūmben lennahro’
  new(B3SG) DEF=house=O2
  ‘(When you return next (lit. the other) year,) the house will be new’

- I have long suspected
  that these three exceptions share an underlying cause
  intuitively, it is only in perfective clauses
  that realization is actually “at issue”
  – and only perfective clauses introduce new reference points/topic times
  into the discourse
  – another possibility: the MCC applies to dynamic predications,
  but not to stative ones – including progressives and perfects

Tenselessness and the future (cont’d)

- St’a’t’imcets
  – matrix clauses that contain no overt tense marker
  are incompatible with FTR
  (4.11) Tàyt-kan ihkúnsa / # nàtcw / # zánucwem
  hungry-15G.SUB now one.day.away next.year
  ‘I am hungry now’, not ‘I will be hungry tomorrow/next year’
  (4.12) K’ac-an’-ìhkan i-nàtcw-as
  dry-DIR-15G.SUB when.PAST one.day.away 3CONJ
  / # nàtcw / # zánucwem
  one.day.away next.year
  ‘I dried it yesterday’, not ‘I will dry it tomorrow/next year’
  (Matthewson 2006: 677)

- however, as in Yucatec (and to some extent in English),
  conditional antecedents can have FTR w/o marking
  (4.13) Lh-7ats’èn-acw s-Laura
  HYP-see-DIR-25G.CONJ NOM-Laura one.day.away
  next.year
  ‘I am hungry now’, not ‘I will be hungry tomorrow/next year’
  (4.14) K’ac-an’-ìhkan i-nàtcw-as
  dry-DIR-15G.SUB when.PAST one.day.away 3CONJ
  / # nàtcw / # zánucwem
  one.day.away next.year
  ‘I dried it yesterday’, not ‘I will dry it tomorrow/next year’
  (Matthewson 2006: 677)

Tenselessness and the future (cont’d)

- kelh does not occur in non-FTR irrealis contexts,
  but does occur with relative FTR
  – i.e., it appears to be a relative/anaphoric future tense marker
  (4.15) Cu7’ qwatstàs ta napilt-à
  PROSP leave DET priest-DET
  ‘The priest is going to leave’ (Matthewson 2006: 678)
  – the most common marker w/ FTR is kelh
  (4.16) Tàyt-kan kelh
  hungry-15G.SUB FUT
  ‘I will be hungry’ (not: ‘I am/was hungry’)
  (Matthewson 2006: 677)

- and why doesn’t the MCC hold for all languages?
  • consider again German
  (4.10) Floyd gibt
  Floyd(NOM) give:3SGNONPAST
  gerade/morgen einen Vortrag
  right.then/tomorrow INDEF(ACC.SG.M) talk(ACC)
  ‘Floyd is giving a talk right now/will give a talk tomorrow’
  • typological hypothesis: tense-prominent vs. (aspect/mood-
  prominent languages (cf. Bhat 1999)
  – tense-prominent languages grammaticalize tense constraints on
  resulting in real-irrealis systems
  – mood-prominent languages grammaticalize tense constraints on
  these are functionally complementary notions
  – and why doesn’t these hold for all languages?

- there is a variety of options for expressing FTR
  • including the prospective aspect marker cuz’
  (4.17) Zwát-en-as s-Julianne [k-wa-s kukwip7 kelh
  know-DIR-JERG NOM-Julianne DET-IMP-Poss chief put
  ta skūra7-s-a] i kwis-as.
  DET child-Poss-DET when.PAST fail-3CONJ
  [Context: Mike Leech is currently chief of T’il’q’et. His
  (deceased) mother was called Julianne.]
  ‘Julianne knew where he was born that her child would
  become chief.’ (Matthewson 2006: 689)
Tenselessness and the future (cont’d)

– Matthewson’s (2006) analysis
  • Stát’imcets has a phonologically empty non-future tense
  • in matrix clauses, kelh picks up either a present or a past reference time from this non-future marker
     – returning an absolute future interpretation in the former case
     – and a future-in-the-past in the latter

– my take
  • Stát’imcets is clearly not a tenseless language
    – it has an optional relative future tense, expressed by kelh
  • however, it strikes me odd to have a zero-marked expression
    – and yet combines with the latter rather than to receive its interpretation pragmatically through the contrast
  • in addition, Matthewson is forced to assume, implausibly, that cur’ (4.15) expresses the same relative future meaning as kelh
    – in addition to expressing prospective aspect
  • this, however, should generate prospective-in-the-future interpretations, contrary to fact
    – the same problem arises with the other expressions that are compatible with FTR
  • an alternative: since the zero-marked form seems to entail realization, the MCC can account for the no-FTR constraint

Tenselessness and the future (cont’d)

• Paraguayan Guaraní
  – once again, morphologically zero-marked forms are incompatible with FTR in matrix clauses

(4.18) a. Kuehe a-jahú.
    yesterday A1SG-bathe
    ‘Yesterday I bathed/ was bathing.’

b. Ko’aga a-jahu.
    now A1SG-bathe
    ‘I am bathing right now.’

c. #Ko’óro a-jahú.
    tomorrow A1SG-bathe
    Intended: ‘Tomorrow I am going to bathe.’
    (Tonhauser 2011: 260)

– Tonhauser rejects a Matthewson-style analysis of the zero-marked forms
  • since the zero-marked forms are compatible with FTR in certain embedded contexts

(4.20) [Context: Malena’s wedding is tomorrow. She invited Paloma to sing at the wedding but doesn’t know whether she’ll come.
    Juan says:]
    I-katu o-purahei ko’óro
    B3-possible A3-sing tomorrow
    ‘It’s possible that she will sing tomorrow.’
    (Tonhauser 2011: 275)

– Tonhauser instead opts for a tenseless analysis of Guaraní
  – but why do zero-marked forms in matrix clauses exclude FTR?
    • to account for this, Tonhauser adopts a version of the ‘Prospectivity Thesis’ Bitner (2005) formulated for Kalaallisut

*PROSPECTIVITY THESIS
Kalaallisut translations of future auxiliaries comprise three related classes:
A. prospective stateless making (current) attitude states to do or prospects,
B. prospective inchoatives evoking (realized) starts of expected processes,
C. prospective matrix moods marking the speech act as a request or wish.”
(Bitner 2005: 354)

– Tonhauser calls this the event-time option
  • all FTR in Kalaallisut and Paraguayan Guaraní involves future event times, but present (or past) topic times
Tenselessness and the future (cont’d)

– the MCC and the event-time option (a.k.a. Prospective Thesis) – a comparison
  • these two principles are closely related
  • the MCC, like the event-time option, restricts FTR to non-future topic times
  • however, the MCC does so only when realization is at issue
    – i.e., in perfective clauses
  • where realization is not at issue – especially with stative predications – Yucatec freely allows future topic times

(4.21)

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– in contrast, Kalaallisut and Guarani seem to disallow future

Master Class: Elicitation and Documentation of Tense & Aspect

Overview

• basics of temporal semantics
• studying temporal semantics in the field
• tenselessness
• tenselessness and the future

• summary

Summary

• Klein’s (1994) unified theory of tense and viewpoint aspect
  – natural-language utterances make claims, ask questions, etc., about topic times
  – tenses constrain the topic time of the utterance vis-à-vis its utterance time
  – viewpoint aspects constrain the topic time vis-à-vis the runtime of the described eventuality
• Bohnemeyer’s (2014) additions
  – relative/anaphoric tenses are distinct from viewpoint aspects
  – they constrain topic time vis-à-vis a reference time, which may or may not be utterance time

Summary (cont’d)

• the empirical basis of field semantics
  – field semanticists have to infer senses/intensions from observed extensions
    • since they aren’t mind readers
  – to achieve this they manipulate real or imagined situations and observe how this affects
    • native speakers’ intuitions about the applicability of certain expressions in reference to these situations
• the core phenomena of semantics and pragmatics...
  • entailment, contradiction, ambiguity, anomaly, implicature, presupposition, and speech act meanings
  • can be explored in the field directly or indirectly
    • on the basis of native speaker intuitions for conditions of successful reference – or truth conditions

Summary (cont’d)

• Dahl’s (1985) Tense-Mood-Aspect Questionnaire
  – a powerful tool for the rapid elicitation of rich data on the semantics of tense-aspect systems
• analyzing data on tense-aspect systems
  – the elicited utterances featuring a given tense-aspect marker instantiate its extensional meaning
    • at least as long as they can be assumed to be accurate representations of the stimuli
  – the intensional/sense meaning can be inferred from the extensional data as features shared by all elements
    • once possible effects of semantic transfer (polysemy) and pragmatic meaning components are accounted for

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Summary (cont’d)

• tenselessness
  – in tenseless languages, the topic time of an utterance is not constrained vis-à-vis its utterance time
  – by any aspect of its morphosyntactic form
    – i.e., in particular, not by inflection/functional categories
  – among fieldworking semanticists, the existence of profoundly tenseless languages is now uncontroversial
  – this holds even for researchers working in mainstream Generative Grammar

References


* Summary (cont’d)

• tenselessness and future time reference
  – tenseless languages often grammaticalize a distinction between reference to factual and non-factual situations
  – future time reference will be treated wholly or in part as non-factual in such languages
  – there appear to be at least two different ways of realizing this
    – the Yucatecan strategy: freely allow statements about future topics
    – unless they involve event realization as at-issue content
      in which case they must be flagged by mood or modality
    – the Guarani and Kalaallisut strategy: ban future time topics altogether
      instead talk about future events exclusively by relating them to present or past topics via aspectual, modal, or mood markers

References (cont.)


References (cont.)


