

Tense, aspect, mode, evidentiality

(based on material by Manfred Krifka)

Tense

- Grammaticalized reference to time
- Possible expressions
 - a) Temporal adverbials
 - b) Quantification over times
 - c) Tense inflection of the verb

For a long time, I always went to bed early.

-----a----- ----b--- ---c-- ---a--

We will focus on:

- Tense of the verb
- Obligatory expressions of time

Tense in English

- Three main tenses
 - Present tense (reference to the present): *Ann is here.* (inflectional)
 - Past tense (reference to past): *Ann went.* (inflectional)
 - Future tense (reference to future, with auxiliary): *Ann will go.* (periphrastic)
- Further forms of tense:
 - Present perfect: *Ann has gone.*
 - Past perfect: *Ann had gone.*
 - Future perfect: *Ann will have gone.*

Classical theory according to Reichenbach

Speech/utterance time S, event time E, reference time R,

Temporal order $a < b$: "a is before b"

Present tense: $S=E=R$	-----S,E,R----->
Past tense: $E=R < S$	-----E,R-----S----->
Future: $S < E=R$	-----S-----E,R----->
present perfect: $E < R=S$	-----E-----R,S----->
Past perfect: $E < R < S$	---S---R-----S----->
Future perfect: $S < E < R$	-----S-----E---R--->

Tense typologically: languages without tense

There are languages that do not mark tense, i.e. that have no grammaticalized reference to time

Example: Indonesian.

Air itu dingin.

water this cold.

‘The water was cold/is cold//will be cold.’

Example: Chinese.

Zhangsan shi` xue'sheng

‘Zhangsam is a student / was a student / will be a student sein’

Reference to time can be expressed, if necessary, with other means (like temporal adverbials)

Tense systems with past tense, marking of temporal distance

Several languages express in their tense system the temporal distance between event time and speech time

An extreme example: Yagua (South America):

proximat1	several hours ago	<i>ray-jiya-yásiyi</i> 1SG-go-PROX 1 'I went (this morning)'
proximat2	ca. one day ago	<i>ray-yunnúúy-jay-níí</i> 1SG-see-PROX2-3SG 'I saw him (yesterday)'
preterite1	until ca. one month ago	<i>sa-díí-siy-maa</i> 3SG-die-PRT1-PERF 'He died (max. 1 month ago)'
preterite2	until 1 or 2 years ago	<i>sa-dííy-tíy-maa</i> 3SG-die-PRT2-PERF 'He died (max. 2 years ago)'
preterite3	distant, legendary past	<i>ray-rupay-jada</i> 1SG-born-PRT3 'I was born (long time ago)'

distinction today (hodiernal)/ before today occurs frequently
marking of temporal distance in German with adverbials: eben, einst

Present, past and marking of temporal distance

- [WALS map](#)
- clear areal effects:
 - no past tense in South East Asia, Western Africa, New Guinea, parts of America
 - marking of temporal distance in Africa, New Guinea, South America

Future

In German future need not be expressed:

Morgen wird es kalt sein / Morgen ist es kalt.

*Gestern war es kalt. / *Gestern ist es kalt.*

Contrast to English, French:

*Il fera froid demain. / *Il fait froid demain.*

There are languages without future marking, for instance Finnish:

Tänaan on kylmää. / Huomenna on kylmää.

'It is cold today.' / 'It will be cold tomorrow.'

Future is frequently expressed periphrastically, with predicates, that originally mean:

obligation ('must', cf. English 'shall'), intention ('will'), movement ('go', 'come'),

Future tense is frequently indistinguishable of modal operators:

Es klingelt. Das wird der Postbote sein. -- epistemic modality

Various categories of future in English:

The ship leaves tomorrow. (planned event: usage of present)

The ship is going to leave. (immediate future: be going to)

The ship will leave. (general future)

Areal distribution of future marking

- [WALS map](#)
- almost all languages have some device of future marking
- map only shows inflectional future marking
- areal clusters, but no clear large scale tendencies

Aspect: perfective and imperfective

The category of aspect refers to the internal temporal constitution of an event (as opposed to its location in time as a whole). It is frequently distinguished between:

- perfective: presentation of a situation as a whole, without reference to its parts; completed action
- imperfective: presentation of a situation as an ongoing process

English marks this distinction for non-stative predicates in the past:

imperfective:

*When Ann came in, Peter **was preparing** dinner.*

perfective or imperfective:

Peter usually prepared dinner when Ann came home from work.

Many languages make a central grammatical distinction that is expressed at the verb, for instance Czech:

Když Ana přišla domu, Petr vařil večere.

Petr uvařil večere.

Areal distribution of aspect systems

- [WALS map](#)
- „In a band across southern Eurasia from Europe (excluding most of the northern part) to China (but excluding the Dravidian part of South Asia and all of Southeast Asia), there is fairly consistent marking of perfectivity/imperfectivity. One may see this area as extending into Africa down to the Equator. [...] Northern Europe outside the Slavic area has very little perfectivity/imperfectivity marking.“ (from WALS)

Aspect: perfective, imperfective, progressive

Distinction perfective/imperfective in French;

test with 'perhaps still':

- a. *A six heures, Jean écrivit une lettre; *peut-être qu'il écrit encore.*
- b. *A six heures, Jean a écrit une lettre; *peut-être qu'il écrit encore.*
- c. *A six heures, Jean écrivait une lettre; peut-être qu'il écrit encore.*

'At six, Jean was writing a letter; perhaps he is still writing it.'

(a) Passé simple, (b) Passé composé: perfective

(c): Imparfait: imperfective

Imperfective form is also used with stative verbs that do not refer to events.:

Jean aimait Marie. 'Jean loves Marie.'

This distinguishes the general imperfective from from the so-called progressive forms, like the English progressive:

- a. *At six, John was writing a letter, and perhaps he is still writing.*
- b. *At six, John wrote a letter, *and perhaps he is still writing.*

but:

- c. **John is loving Mary.*

Next to imparfait, French also has a progressive form:

Jean est en train de écrire une lettre.

'Jean is writing a letter.'

Perfective and Completive

Further distinction between two versions of perfective:

- regular perfective:
Action as a whole, as complete
- completive:
patient-object is totally affected, therefore the action is complete, has found its natural end („telic“)

Examples: Chinese, Japanese, here: Hindi

mae ne aaj apnaa kek khaayaa (aur baakii kal khaauugaa)

I ERG today my cake eat.PERF and rest tomorrow eat.FUT

‘I ate my cake today, and I will eat the rest tomorrow.’

mae ne kek khaa liyaa, (jo bacaa hae wo raam khaayegaa.)

I ERG cake ate take-PERF what remains is what Ram eat.FUT

‘I ate the cake, and Ram will eat the rest.’

Perfective and completive

Perfective in slavic languages as completive (Dahl 1985):

Imperfective for unbounded, cumulative objects:

A: I visited my brother. B What was he doing?

A: *On pisal pis'ma.*

'He wrote.IMPERF letters.'

B: What did your brother do yesterday after dinner?

A: *On pisal pis'ma.*

'He wrote.IMPERF letters.' -- unbounded object, atelic.

B: What did your brother do yesterday after dinner?

A: *On napisal pis'mo.*

'He wrote.PERF a letter.' -- bounded object, telic.

Imperfective for description of the manner of an action:

B: Did your brother finish the letter quickly?

A: *On pisal pis'mo medlenno.*

'He wrote.IMPERF the letter slowly.'

When referring to the result itself: perfective

On napisal pis'mo bystro 'He wrote.PERF the letter fast'

with the meaning: the result was achieved fast

Perfective/imperfective and habitual

Habitual: expresses a habitual action

Peter walks to school

The Neandertals lived in caves.

The Inuit use to live in fur huts during the summer.

How is Habitual expressed aspectually?

- with the imperfective, because it is a description of an event.
- with the perfective, if each instance the action that occurs repeatedly is complete.

Kdý chlapec dostane peníze, koupí vždy dárek pro dívku.

'After the boy got the money, he always bought PERF a gift for the girl.'

Interaction: perfective and tense

Tense and aspect are different categories:

- tense: localization of the event in relation to speech time;
- aspect: perspective on the event

There is, however, considerable interaction between these categories:

- completedness and present tense are frequently incompatible;
future interpretation of perfective present in Slavic languages (here: Czech):

Pavel kupoval noviny. 'Pavel just bought a newspaper' (imp.)

Pavel koupil noviny. 'Pavel bought a newspaper' (perf.)

Pavel kupuye noviny. 'Pavel is buying a newspaper (right now)' (imp.)

Pavel koupí noviny. 'Pavel will buy a newspaper.'

Pavel bude kupovat noviny. 'Pavel will be buying a newspaper' (imp. present tense)

- distinction imperfective/perfective only in past tense

- for instance French imparfait / passe simple, composé,

- for instance Arabic:

kataba 'he wrote.PERF'

yaktubu 'he writes.IMPERF'

ka:na yaktubu 'wrote.IMPERF'

Perfectives that are restricted to past tense are also called **aorist**.

Perfect

Difficult to generally characterize the tense perfect in general

Frequent usages:

- relation to result of an action
- indication that an event of a certain type has already happened in the past (experiential perfect)

Example: English.

My aunt Martha has arrived. (resultative)

I have eaten snails. (experiential)

The common denominator is that it can be assumed that due to the described event (like eating snails), the state of a person has changed.

lifetime effects:

#Einstein has visited Princeton.

Princeton was visited by Einstein.

Development of the perfect

perfect forms can develop from:

- resultative constructions that are formed with the verb 'be'

German: *Der Zug ist angekommen.*

Finnish: *Juna on saapunut.* 'The train has arrived'

- possessive constructions, frequently with the verb 'have':

German: *Ich habe zwei Briefe geschrieben.*

- Constructions with words like 'already', 'finish'

Yoruba: *Ó ti ka iwe na.*

3SG PERF read book the

'He has read the book'

ti: 'already'

Swahili: *A-mesha-pata chumba.*

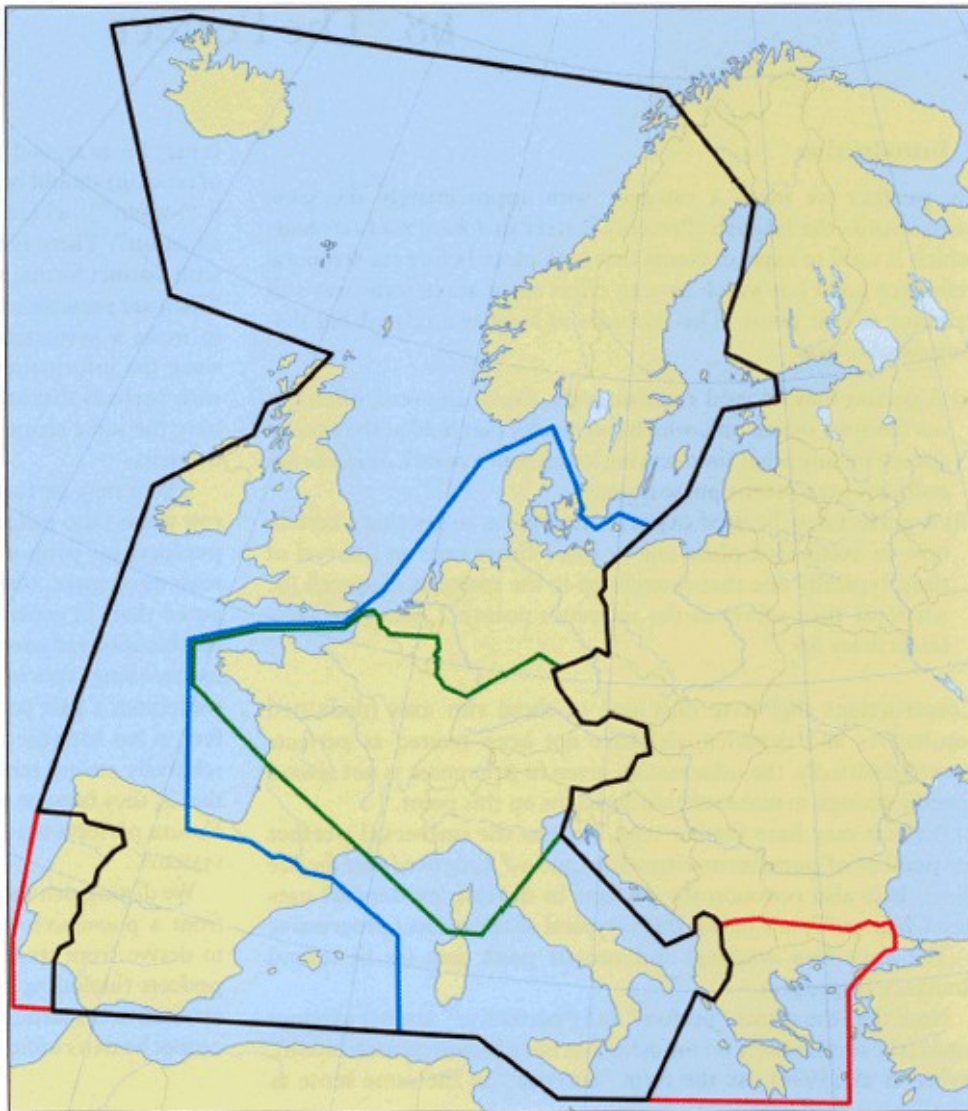
3SG-PERF-get room

'He has gotten a room.'

mesha < *mekwisha* 'beendet'

Areal distribution of different types of perfect

- [WALS map](#)
- European 'have'-perfect: regional developments since the middle ages



Present-day boundaries of the area where 'have' perfects (perfects based on a transitive possessive construction) and constructions derived from them occur

Peripheral area where less typical 'have' perfects are found

Area of division of labour between 'have' perfects and 'be' perfects

Area where a 'have' perfect has developed into a past or a perfective

Modality

Like tense, modality has the effect that the truth conditions of a sentence are not directly evaluated at the utterance situation

- tense: evaluation at other times
- modality: evaluation at other circumstances („possible worlds“)

Important sub-types of modality:

- deontic: related to laws or norms

Peter must/should be home at 8. **strong**: under all circumstances; necessary

Peter may/is allowed to go home. **weak**: under some circumstances, possible

- epistemic: related to the knowledge of the speaker:

The bell rings, this must/may be the postman.

The bell rings, this is perhaps/probably/certainly the postman.

- buletic, related to wishes and desires

Peter wants ice cream.

- dynamic, related to abilities

Peter can speak French.

Expressions of modality

In English modality is expressed by auxiliaries, adverbs or periphrastic constructions:

You must do this.

You will probably do this.

You have to do this.

Modal verbs frequently have reduced morpho-syntactic properties:

Peter sing-s. / Peter can sing.

These types of marking can be found in many languages

particle: Chukchi, Paleosiberian:

Mecanka mat-ra-jalyet-γ?a

enough 1PL-FUT-move.camp 'We may leave the camp.'

Adverbial: Slovene.

Lahkó me pokličete.

easy me call-up.IND.PFV.PRES.2PL 'You can call me up.'

Expressions of modality

In many languages, modal distinctions are also expressed in verbal morphology;

Example: Lavukaleve, Papua, Solomon islands:

Ngai a-vo-nen?

1SG-come-POSS 'May I come?'

Expression via serial verbs; example: Taba, Austronesian, Halmahera:

N-pe n-ahan.

3SG-do 3SG-be.able 'He can do it.'

Expression via copula constructions: Korean

Halapeci-nun wuncenha-si-l swu iss-usi-ta.

grandfather-TOP drive-SUBJ.HON-PRES way be-SUBJ.HON-DECL

'My grandfather can drive.'

Expression of modality can develop into future marking: English, Swahili

John will go.

John a-ta-kwenda.

John 3SG-FUT-go, where *ta* < *taka*, 'want'

Areal distribution of situational (non-epistemic) modality

- [WALS map](#)

Epistemic modality

Epistemic modality: related to speaker knowledge

Epistemic modality always has wide scope over other kinds of modalities:

It is possible that Peter has to be at the office at 8.

Probably Peter has to be at the office at 8.

Peter certainly has to be at the office at 8.

Perhaps Peter wants to go home early today.

Expression of epistemic modality via verbal inflection: Saami, Uralic:

Bode-zan.

come-POS.PRES.1SG 'Perhaps I will come.'

Areal distribution: marking of epistemic modality

- [WALS map](#)

Overlap between epistemic and non-epistemic modality

Development of epistemic modality markers from deontic ones:

Peter must be in the office.

Peter can be in the office.

deontic > epistemic

Only epistemic: *Peter could be in the office*

Overlap between epistemic and non-epistemic modality is frequently attested:

Example: Greenlandic

inna-jaa-ssa-atit.

to.bed.go-early-NEC-IND.2SG

'You must go to bed early.'

Københavni-mii-ssa-aq.

Copenhagen-in.be-NEC-IND.3SG

'She must be in Copenhagen.'

Areal distribution

- [WALS map](#)
- overlap is especially frequent in Europe

Evidentiality

This category expresses the kind of evidence (strength, source) for the truth of a proposition.

Source of evidence may be named explicitly:

According to Eva, Peter went to Munich.

Certain subordinating constructions have an evidential meaning:

Wohin glaubt Eva dass Peter gefahren ist?

**Wohin bedauert Eva dass Peter gefahren ist?*

Further evidentiality markers in German:

Particle and sentence adverbs

Peter ist wohl / sicherlich nach München gefahren.

Verbal constructions:

Peter soll den Mount Everest bestiegen haben. (general assumption)

Peter will den Mount Everest bestiegen haben. (according to Peter)

Konjunktiv I:

Man berichtet, Peter habe den Mount Everest bestiegen. Er habe dafür nur eine Woche gebraucht.

Evidentiality

Evidentiality is a category that is frequently expressed by verbal inflection.

Direct evidentiality: evidence from own perceptual experience.

- visual: Fasu, Papua

a-pe-re

VIS-come-VIS 'I see it coming.'

- auditory: Koasati, Muskogean

nipó-k aksóhka-ha

meat-SUBJ burn-AUD 'It sounds like the meat is burning'

Indirect evidentiality: not related to immediate perceptual evidence

- inferential: Khalkha, Mongolisch:

ter irsen biz

he come INF 'He must have come.'

- quotative: Lezgian, Nakh-Daghestan:

Qe sobranie ze-da-ida.

today meeting be-FUT-QUOT 'They say that there will be a meeting today.'

- own observation yes/no: Turkish

Ahmed gel-di.

Ahmed gel-mi#.

Ahmed come-PRT.DIREVD Ahmed come-PRT.INDIREVD

Evidentiality

Evidentiality marking in one language: Pirahã, South America:

<i>-hiai</i>	hearsay
<i>-xáagahá</i>	observed
<i>-sibiga</i>	inferential
<i>-sog</i>	desired
<i>-áti</i>	uncertain
<i>-háí</i>	quite certain
<i>-há</i>	certain

Geographical distribution

- Semantic distinctions of evidentiality
- Coding of evidentiality