



TENSE AND ASPECT

PLIN0020 ADVANCED
SEMANTIC THEORY

TENSE AND ASPECT IN ENGLISH

English has three types of **tense**:

- (1) a. *It will rain tomorrow.*
- b. *It rains a lot.*
- c. *It rained yesterday.*

Future
Present
Past

and three types of **aspect**:

- (2) a. *It will rain/rains/rained.*
- b. *It will be/is/was raining.*
- c. *It will have/has/had rained.*

Simple
Progressive
Perfect

TENSE

TENSED VS. TENSELESS LANGUAGES

English obligatorily marks tense on a verb or auxiliary.

- (3) a. **It rain/rains/will rain yesterday.*
b. **It rain/rained tomorrow.*

Not so in Mandarin Chinese.

- (4) $t\bar{a}$ $\left\{ \begin{array}{ll} \textit{zu\acute{o}ti\bar{a}n} & \text{(yesterday)} \\ \textit{j\bar{i}nti\bar{a}n} & \text{(today)} \\ \textit{m\bar{i}ngti\bar{a}n} & \text{(tomorrow)} \end{array} \right\} \textit{hu\bar{i}l\acute{a}i.}$
he $\left. \vphantom{\left\{ \begin{array}{ll} \textit{zu\acute{o}ti\bar{a}n} & \text{(yesterday)} \\ \textit{j\bar{i}nti\bar{a}n} & \text{(today)} \\ \textit{m\bar{i}ngti\bar{a}n} & \text{(tomorrow)} \end{array} \right\}} \right\} \textit{come.back}$

(Liu 2015)

Similarly, Cantonese, Hawaiian, Státimcets, etc.

'SIMPLE PRESENT'

In English Stative predicates in Simple Present express states that hold at the time of utterance.

- (5) a. *Paul likes apples.*
b. *Paul is happy.*
c. *19 is a prime number.*

Eventive predicates in Simple Present express one of two things:

- (6) a. *The train arrives at 3 pm.* **Scheduled Future**
b. *Paul smokes.* **Habitual**

⇒ Simple Present is not always semantically simply present

Compare (6) to Simple Past or Simple Future.

PAST VS. NON-PAST

Japanese is a language with two tense categories, past vs. non-past (but also infinitival, gerundive, conditionals, etc.).

- (7) a. $\left\{ \begin{array}{l} \textit{ima} \quad (\text{now}) \\ \textit{ashita} \quad (\text{tomorrow}) \end{array} \right\} \textit{ie-ni} \quad \textit{kaer-e-ru}.$
house-to return-can-NPST

'It is/will be possible to go home now/tomorrow.'

- b. $\textit{kinoo} \quad \textit{ie-ni} \quad \textit{kaer-e-ta}.$
yesterday house-to return-can-PAST

'It was possible to go home yesterday.'

Other languages with past vs. non-past: Finnish, Korean, etc.

MORE PASTS

- à kè tán'ń* 'he bargained yesterday'
à lè tán'ń 'he bargained some days ago'
à lè lá?ń'tán 'he bargained a long time ago'

(Bamileke-Dschang, Comrie 1985: 11)

- twákôma* we tied up earlier today (hodiernal)
tukomíle we tied up yesterday (hesternal)
túkakôma we tied up before yesterday (remote)

(Haya, Comrie 1985: 90)

- jásiy* within a few hours
-jáy one day ago
-siy within a few weeks
-tíy within a few months
-jadá distant or legendary past

(Yagua, Comrie 1985: 99)

Possible project: semantic vs. morphological markedness

NON-PAST INTERPRETATIONS OF PAST

Affective connotation (Norwegian, Comrie 1985: 20)

- (8) *detta smakte godt*
'This tastes (lit. tasted) good!'

'Remind me' reading (German, Comrie 1985: 20)

- (9) *Wer bekam die Gulaschsuppe?*
'Who receives (lit. received) the goulash soup?'

Near future (Russian, Comrie 1985: 20)

- (10) *Ja pošel.*
'I'm leaving (lit. left).'

Imperatives (Russian, Japanese)

Possible project: Investigate how your language uses past tense in 'non-canonical' ways.

FUTURE IN ENGLISH

There's a theoretical debate as to whether Future is a tense category at all in English and other languages.

English treats the future marker *will* on a par with modal auxiliaries like *may, must, can, shall*, etc.

Note that these have 'past forms': *would, might, could, should*, etc.

In addition to *will*, Modern English also has:

- ▶ *be going to*
- ▶ Progressive for Near Future

Note that similar variation isn't found in Present or Past.

FUTURE IN OTHER LANGUAGE

In Romance languages, future is a suffix, but is attached to the infinitival form of the verb, unlike other tense markers.

German can but don't need to mark future, e.g. *Ich gehe morgen* vs. *Ich werde morgen gehen* (also Finnish).

Hua is said to be a language that only distinguishes future vs. non-future.

Possible project: Ways of expressing future

EMBEDDED TENSE AND SEQUENCE OF TENSE

ABSOLUTE TENSE

Unembedded tenses are interpreted relative to the time of utterance (*absolute tenses*).

- (11) a. *John is sick.* (now)
b. *John was sick.* (before now)
c. *John will be sick.* (after now)

No language seems to have an absolute tense category that is relative to some absolute time, e.g. the birth of Jesus.

Embedded tenses are not always absolute.

SEQUENCE OF TENSE

English is a *Sequence of Tense (SoT)* language: simultaneity is expressed by matching tense.

- (12) a. *John believed that Mary was pregnant.*
b. *John believed that Mary is pregnant.*

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Japanese, Russian, Hebrew, etc. are non-SoT languages. What corresponds to (12b) expresses simultaneity.

- (13) *John-wa [Mary-ga ninshinshitei-ru to] omot-ta.*
John-top [Mary-nom be.pregnant-PRES C] think-PAST

RELATIVE TENSE

Japanese embedded tenses receive 'relative interpretations': they are evaluated with respect to the embedding tense.

- (14) a. *John-wa* [*Mary-ga ninshinshitei-ru to*] *omot-ta*.
John-top [Mary-nom be.pregnant-PRES C] think-PAST
Present of the Past = simultaneous
- b. *John-wa* [*Mary-ga ninshinshitei-ta to*] *omot-ta*.
John-top [Mary-nom be.pregnant-PAST C] think-PAST
Past of the Past

Past-under-past in English is ambiguous between simultaneous and Past-of-the-Past. Past Perfect is unambiguously Past-of-the-Past.

- (15) a. *John thought that Mary was pregnant.*
b. *John thought that Mary had been pregnant.*

SLAVIC

Polish is non-SOT, like Japanese:

- (16) a. *Ania powiedziała ze Marcin jest chory.*
Ania said that Marcin is.PRES sick
'Anna said that Marcin was sick.'
- b. *Ania powiedziała ze Marcin był chory.*
Ania said that Marcin was.PAST sick
'Anna said that Marcin had been sick.'

(Sharvit 2014: 263)

In *before*-clauses, it's like English (Pres ungrammatical).

- (17) *Ania przysia na przyjęcie zanim Marcin przysedi.*
Ania came to party before Marcin came.PAST
'Ania came before Marcin came.'
- (Sharvit 2014: 263)

In Japanese it has to be Present.

RELATIVE FUTURE IN ENGLISH

With respect to future, English tenses work like Japanese.

- (18) a. *John will say that he is happy.*
b. *John will say that he was happy.*

- ▶ (18a) can be now, or the same time as the future saying time.
- ▶ (18b) is anytime before the future saying time.

Possible project: Describe how tense marking is interpreted in different embedding contexts, and compare it to English.

CONDITIONALS

English tense in *if*-clauses is a little funny.

Will is completely banned (unless it has a modal meaning).
'Present' is used instead.

- (19) a. **If it will rain tomorrow, I will bring an umbrella.*
b. *If it rains tomorrow, I will bring an umbrella.*

NB: (19a) is grammatical in some languages, e.g. Russian.

Past can have past meaning, but it can also mean
'counterfactual' (also marked in the consequent).

- (20) a. *If she called Paul this morning, he will call us soon.*
b. *If she called Paul tomorrow, he would be upset.*

⇒ Present doesn't always mean present and past doesn't
always mean past!

ASPECT

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English has three types of **tense**:

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and three types of **aspect**:

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b. *It will be/is/was raining.*
c. *It will have/has/had rained.*

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Progressive
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PROGRESSIVE

English Progressive is obligatory for ongoing events.

- (23) a. *Paul smokes.* b. *Paul is smoking.*

In French, Dutch, German, Hungarian, Armenian, etc. the simple form can express the progressive meaning.

Progressive is compatible with stative predicates as long as eventive readings are available ('aspectual coercion').

- (24) a. *He is being silly.*
 b. *He is liking it.*
 c.??*He's knowing French.*

Cf. *He lives in London* vs. *He is living in London.*

PERFECT

What Perfect means in English is a matter of debate.

There seem to be several readings for Present Perfect.

- (25) a. *John has been sick.* Continuous state
b. *John has left.* Continuous result state?
c. *John has been to Rome.* Experiential

Cf.

- (26) a?? *John F. Kennedy has been assassinated!*
b. *Boris Johnson has been assassinated!*

'PRESENT PERFECT PUZZLE'

Puzzle: Present Perfect is bad with certain temporal adverbials.

- (27) a. **Paul has left at 3 pm.*
b. **Paul has been sick last week.*
cf. *Paul has just left, Paul has been sick lately.*
c. **Paul has enjoyed the last party.*

Past Perfect is fine.

- (28) a. *Paul had left at 3 pm.*
b. *Paul had been sick the previous week.*
c. *Paul had enjoyed the previous party.*

Infinitival Perfect too:

- (29) a. *Paul seems to have left at 3 pm.*
b. *Paul seems to have been sick last week.*
c. *Paul seems to have enjoyed the last party.*

FRENCH

French has more aspectual categories in the past tense than in the present tense.

(30) a. *Il a bu.*

he has drunk.

'He drank'

Passé Composé

b. *Il buvait*

he drank

'He was drinking'

Imparfait

Simple Past (Passé Simple) in French (e.g. *but* 'drank') is obsolete.

GRAMMATICAL ASPECT/VIEWPOINT ASPECT

The term *aspect* is often used for two different ideas.

Viewpoint aspect: different ways of locating the eventuality with respect to tense.

(31) a. *Il a bu.*
he has drunk.

'He drank'

Passé Composé

b. *Il buvait*
he drank

'He was drinking'

Imparfait

Roughly: Passé Composé places the entire event within the time under question, while Imparfait describes it as an ongoing event during the time under question.

INNER ASPECT/LEXICAL ASPECT/AKTIONSART

Lexical aspect/Aktionsart: the structure of the eventuality being described.

Vendler Classes

- ▶ *States*: uniform, lasts for some time
e.g. *know, be happy*
- ▶ *Activities*: non-uniform, no endpoint
e.g. *run, cry*
- ▶ *Achievements*: with endpoint, instantaneous
e.g. *reach the summit, notice me*
- ▶ *Accomplishments*: with endpoint, temporal extension
e.g. *build the house*

Certain linguistic phenomena are sensitive to these classes.

PROGRESSIVES AND AKTIONSPORTEN

States are incompatible with progressives. Coersion to non-states makes them acceptable.

(32) ??*Paul is knowing the truth.*

Activities turn into states (or Near Future).

(33) *Paul is running/crying/dancing.*

Achievements only have Near Future readings.

(34) *Paul is reaching the summit.*

Accomplishments can have Near Future readings, or describe on-going events.

(35) *Paul is building the house.*

TEMPORAL ADVERBIALS

For-adverbials are not good with events with endpoints.

- (36) a. *Paul was asleep for 3 hours.*
b. *Paul danced for 3 hours.*
c.??*Paul reached the summit for 3 hours.*
d.??*Paul built the house for 3 hours.*

In-adverbials are only good with events with endpoints.

- (37) a.??*Paul was asleep in 3 hours.*
b.??*Paul danced in 3 hours.*
c. *Paul reached the summit in 3 hours.*
d. *Paul built the house in 3 hours.*

But coercion might allow you to use the expression in a non-canonical way:

- (38) *Paul cleaned the flat for/in 3 hours.*

AKTIONSPORTEN AND COMPOSITION

In English Aktionsarten are determined at the VP-level.

- | | | |
|------|---------------------------------|----------------|
| (39) | a. <i>Paul ran.</i> | Activity |
| | b. <i>Paul ran to the park.</i> | Accomplishment |
| (40) | a. <i>Paul ate a chocolate.</i> | Accomplishment |
| | b. <i>Paul ate chocolate.</i> | Activity |
| (41) | a. <i>Paul ran.</i> | Activity |
| | b. <i>Paul didn't run.</i> | State |

In Slavic, each verb has a fixed Aktionsart. Perfectives generally have an endpoint, imperfectives don't.

ENGLISH: SIMPLE

Simple Past in English doesn't overtly mark Viewpoint Aspect or Aktionsart.

- (42)
- | | | |
|----|------------------------------|------------------------|
| a. | <i>Paul lived in France.</i> | imperfective, state |
| b. | <i>Paul ran in the gym.</i> | imperfective, activity |
| c. | <i>Paul noticed me.</i> | perfective, achiev. |
| d. | <i>Paul built the house.</i> | perfective, accompl. |

Progressive turns perfectives into imperfectives.

SLAVIC

Russian has **perfective** vs. **imperfective** forms of verbs.

(43) a. *Ja* *pročital* *knigu.*

me.NOM PERF.read.PAST book.ACC

'I finished reading a/the book.'

perfective

b. *Ja* *čital* *knigu.*

me.NOM IMPERF.read.PAST book.ACC

'I was reading a/the book.'

imperfective

SLAVIC

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- b. *Ja* *čital* *knigu.*
me.NOM IMPERF.read.PAST book.ACC
'I was reading a/the book.' **imperfective**

In the 'Present', the perfective expresses Future, the imperfective expresses an ongoing event.

- (44) a. *Ja* *pročitaju* *knigu.*
me.NOM PERF.read.PRES book.ACC
'I will finish reading a/the book.' **perfective**
- b. *Ja* *čitaju* *knigu.*
me.NOM IMPERF.read.PRES book.ACC
'I am reading a/the book.' **imperfective**

MARKEDNESS

Perfectives in Slavic generally describe events with a natural endpoint (telic), and imperfectives don't (atelic).

In Slavic, imperfective seems to be semantically unmarked:

- (45) a. *Ne pročitaj knigu.*
not PERF.read.IMP book.ACC
'Don't read a/the book.' **perfective**
- b. *Ne čitaj knigu.*
Not IMPERF.read.IMP book.ACC
'Don't read a/the book.' **imperfective**

Possible project: Markedness in the aspectual domain

REFERENCES

Survey articles

- ▶ Ogihara (2007) Tense and aspect in truth-conditional semantics. *Lingua*, 117.
- ▶ Ogihara & Sharvit (2012) Embedded tenses. In *The Oxford Handbook of Tense and Aspect*.
- ▶ Verkuyl (2011) Tense, aspect, and temporal representation. In *Handbook of Logic and Language*.
- ▶ Rothstein (2016) Aspect. In *The Cambridge Handbook of Formal Semantics*.

Other references

- ▶ Comrie (1985) *Tense*. CUP.
- ▶ Liu (2015) Tense and aspect in Mandarin Chinese. In *The Oxford Handbook of Chinese Linguistics*.
- ▶ Sharvit (2014) On the universal principles of tense embedding: The lesson from *before*. *Journal of Semantics*, 31.