

# How Language Expresses Properties of Situations: Tense, Aspect and Modality

Linguistic 5430  
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## Questions

1. What is the difference between tense and aspect?
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1. What is the conceptual basis of aspect?
1. Is English an aspect language?
1. What is the relationship between grammatical aspect and verbal aspect?
1. What do aspectual markers do?
1. What is the relationship between tense and aspect, on the one hand, and **modality**, on the other?

## 1. What is the difference between tense and aspect?

**A. Tense is a deictic category.** Hans Reichenbach (1949) proposes that tense is not fundamentally a relation between the time of speech and the time of an event or situation, but rather a relation between speech time (S) and **reference time**. Only in the case of **relative tenses** are event time (E) and reference time R split apart:

<b>Present tense:</b>	E,R,S	<i>I'm in Las Vegas.</i>
<b>Past tense:</b>	E, R...S	<i>I was in Las Vegas when I saw him.</i>
<b>Past Perfect:</b>	E...R...S	<i>I had been to Las Vegas when I saw him.</i>
<b>Future Perfect:</b>	S...E...R	<i>I will have been to Las Vegas when I see you next.</i>

**B. Past-perfect tense plays a role in 'backshifting' of tense in reported speech (sequence of tense), at least in some dialects:**

- (1) She said that she preferred white wine. (past tense=present tense)
  - (2) She said that she (had) selected white wine. (past perfect = present tense)
- (1') Elle a dit qu'elle avait préféré le vin blanc au rouge.  
(2') Elle a dit qu'elle préférerait le vin blanc au rouge.

## C. Aspect vs. tense. Pancake/plate analogy

- Tense = location of the speaker
- Reference interval = a plate
- The situation = a pancake
- Aspect = location of the pancake on the plate

- (2) *C'est la petite Cavinet! En remontant, tout à l'heure, je l'ai aperçue qui*  
 It's (pres) the little Cavinet! In coming up (prp), a minute ago, I her have seen  
*se faisait embrasser par le fils Martinez dans le garage à velos!*  
 herself made (imp) kiss (inf) by the son Martinez in the shed for bikes

“It’s the Cavinet girl. While coming upstairs, just a minute ago, I saw her getting kissed (lit. ‘who was making herself kissed’) by the Martinez boy in the bike shed.” (Binet, *Les Bidochon* 3, p. 10)

## 2. What is the relationship between tense and aspect?

A. **The imperfective-perfective distinction exists only in the past tense.**

A. **In English, a reporting interpretation is not available for the simple present tense when the situation is an event:**

- (3) #Look! Harry runs by the house!  
 (4) #They build a new Walgreen’s on that corner.

- A. The present is conceived of as a moment.  
 A. An event cannot be said to hold at a single moment alone.

## 3. What is the conceptual basis of aspect?

A. **The event-state distinction.**

- **Imperfectively described situations** (also known as states) obtain throughout the interval at issue, possibly overflowing the boundaries of that interval.
- **Perfectively described situations** (i.e., events) are bounded insofar as they terminate within the relevant interval. To report the occurrence of an event is to report its cessation.

A. **Direction of inclusion** (Partee 1984). Observation: a state can always be construed as containing the reference times for which it is asserted to hold; events are contained within their reference times:

- (5) Harry turned around. Marge was ecstatic.  
 (6) A water balloon hit the pavement near his feet. He was soaking wet.

## 4. Is English an aspect language?

A. **English appears to lack the event-state distinction.**

*The attempt to transfer the category of ‘aspect’ from Slavonic to Germanic, and from there to Modern English grammar, strikes one as an instance of misdirected ingenuity. (Zandvoort 1962:19)*

English has no morphological expression of the event-state distinction, unlike French and Latin, etc. The progressive cannot be used to translate the French *imparfait*:

(7) *Ils avaient des lacets, les préhistoriques?*

They had (imp) some shoelaces, the prehistorics?

“They had shoelaces, prehistoric people?”

“\*They were having shoelaces, prehistoric people?”

(Binet, *Les Bidochon 2*, p. 30)

A. **But the event-state distinction has grammatical consequences.** The grammatical behaviors can be used as diagnostics for the event-state distinction (some of these are more reliable than others):

- **Test 1. If one can report the situation by means of the simple present tense, then it is a state.** A state with a temporal bound specified is not a state:

#She lives in Boulder **for three years**.

- **Test 2. The *when*-clause test (Vlach 1981):**

When the phone rang, she was asleep.

When the phone rang, she got up.

- **Test 3. Extensibility.**

She liked cats then and she still does.

#She adopted a cat then and she still does.

- **Test 4. Spatial and temporal location.**

Where did you see her?

#Where did you like cats?

At what point did you leave?

?At what point did you like cats?

- **Test 5. Iteration.**

He spoke up four times.

?He preferred red wine four times.

## 5. What is the relationship between grammatical aspect and lexical aspect?

- A. Aspect first comes to the attention of English-speaking linguists through a set of distinctions referred to as AKTIONSPORTEN. Aktionsart is typically defined as 'inherent lexical aspect'.

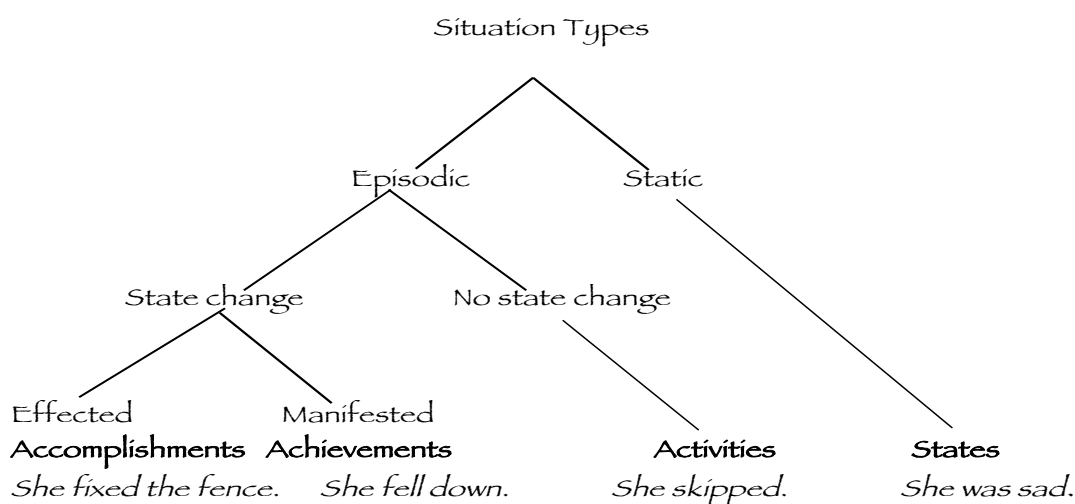


Figure 1. The Aktionsart classes

### States

Verbs of EXISTENCE (*exist, live, remain*); PROPERTY ATTRIBUTION/LOCATION (copula + XP), verbs of PERCEPTION (*see, hear, feel*); POSSESSION (*own, possess*), NEED (*need, want*); EMOTION (*love, prefer*); COGNITION (*remember, understand*); BELIEF (*believe, know, doubt*).

### Activities

Verbs of DIRECTED MOTION (*walk, follow, run*); POSTURE (*sit, stand, lie*); MOTION (*shiver, wiggle*); LIGHT/SOUND EMISSION (*shine, rumble*); CONVERSATION (*argue, speak, discuss, converse*); USE (*eat, read, use, enjoy*); PATTERN EXECUTION (*dance, exercise*); DIRECTED PERCEPTION (*monitor, watch*); COGNITION (*consider, ponder*).

### Achievements

MENTAL EVENTS (*realize, forget*); SEMELFACTIVE EVENTS (*cough, tap, blink*); SOCIO-PHYSICAL TRANSITIONS (*die, collapse, win, lose*); MANIFESTATIONS (*appear, disappear*); boundary crossings (*enter, exit, arrive, depart*); POSTURE CHANGES (*sit down, stand up, lie down, wake up*); ACTION ENGAGEMENT (*start, stop, finish*).

### Accomplishments

Verbs of LOCATION CHANGE (*go, bring, take*); TRANSFER (*teach, give, load, tell*); REMOVAL (*remove, steal, strip*); CREATION (*make, build, create, destroy*); COVERAGE (*do, memorize, learn, saturate, cover*), CAUSATION OF RESULT (*fix, repair, smash*).

#### B. The array of participant roles will influence whether a situation is an event or a state.

- (8) I  $\left\{ \begin{array}{l} *see \\ saw \end{array} \right\}$  a flash.
- (9) I  $\left\{ \begin{array}{l} see \\ saw \end{array} \right\}$  the Flatirons.
- (10) I  $\left\{ \begin{array}{l} *remember \\ remembered \end{array} \right\}$  to put the cat out.
- (11) I  $\left\{ \begin{array}{l} remember \\ remembered \end{array} \right\}$  the time we all went to Vail.

#### C. The type of a nominal complement will determine TELICITY (a notion belonging to a classification of event types).

- (12) They flew over water  $\left\{ \begin{array}{l} *in \\ for \end{array} \right\}$  an hour.
- (13) They sang a song  $\left\{ \begin{array}{l} in \\ *for \end{array} \right\}$  ten minutes.

#### D. Aktionsarten can be represented as causal structures (Dowty, Vendler, Van Valin, Croft) or temporal structures (Talmy, Bickel).

<i>Aktionsart Class</i>	<i>Temporal Representation</i>
State	$\phi$
Homogeneous activity	$\tau \phi \tau$
Heterogeneous activity	$\tau \phi [\tau \phi]^+ \tau$
Achievement	$\tau \phi$
Accomplishment	$\tau \phi [\tau \phi]^+ \tau \phi$

Table 1. Temporal representation (based on Bickel 1997)

<i>Aktionsart Class</i>	<i>Causal Representation</i>
<b>State</b>	[x <STATE> ] e.g., <i>seem</i>
<b>Homogeneous activity</b>	[x HOLD [x <STATE>]] e.g., <i>sleep</i>
<b>Heterogeneous activity</b>	[x REPEAT [x <EVENT>]] e.g., <i>skip</i>
<b>Achievement</b>	[INGR [x <STATE>]] e.g., <i>sink</i>
<b>Accomplishment</b>	BECOME [x <STATE>]] e.g., <i>go home</i>
<b>Active accomplishment</b>	[x REPEAT [x <EVENT>]] & BECOME [x or y <STATE>]] e.g., <i>run to the store</i>
<b>Causative</b>	A CAUSE B, where A and B are Aktionsart representations of any type e.g., <i>scare the children</i>

Table 2. Causal representation (based on Van Valin 2001)

## 6. What do aspectual markers do?

### A. Basic principles.

- **Principle 1.** Aspectual marking encodes speaker viewpoint.

### A theory of aspectual selection (Bickel 1997)

The viewpoint aspects pick a component within the Aktionsart representation of a verb. The components are **phase** ( $\phi$ ) and **endpoint** ( $\tau$ ). An imperfective operator can only pick an imperfective phase. A perfective operator can only pick a perfective phase.

- States must be represented as [ $\tau \phi$ ]: *Il a été président.s*
- How would this theory account for the ambiguity of (32) (p. 76)?
- The following representation is generally proposed for the verb *enter*:

**enter'** (x,y) BECOME **inside'** (x,y) [ $\tau \phi$ ]

- Based upon the meaning of *She was entering the room*, Bickel argues that [ $\tau \phi$ ] cannot be the correct representation for *enter*.
- Instead, he argues for the representation [ $\phi \tau$ ].
- Why?

- **Principle 2.** Grammar provides for shifts of inherent (verbal) aspect.
- **Principle 3.** Aspectual type shifting can either be IMPLICIT or EXPLICIT (De Swart 1998); implicit type shifting involves semantic incompatibility between a grammatical pattern or marker and the verb with which it has been combined.
- **Principle 4.** Aspectually sensitive tenses, as in French, may either **reflect** verbal aspect or (implicitly ) **shift** it:

### B. Reflecting situation aspect

*Ils avaient des lacets, les préhistoriques?*

They had (imp) some shoelaces, the prehistorics?

“They had shoelaces, prehistoric people?”

“\*They were having shoelaces, prehistoric people?”

(Binet, *Les Bidochon 2*, p. 30)

### B. Shifting situation aspect

(14) C’est quand je suis passé devant le magasin! *Il y avait un type qui **faisait** une démonstration* pour aguicher la clientèle.

“It’s when I went past the store. A guy **was doing** (imp) a demonstration to rope in customers.” (Binet, *Les Bidochon 8*, p. 14)

### C. Explicit vs. implicit type-shifting.

- **Implicit.** When there is incompatibility between a grammatical pattern (e.g., the *in*-phrase denoting the time frame within which an event took place) and the verb that has been placed in that pattern, the lexical aspect of the verb shifts in order to accommodate the semantic requirements of the pattern:

(15) She fell asleep in one hour.

(16) She was bored in a minute.

(17) I visited there twice.

(18) I was depressed twice.

(19) *Mais pendant quinze ans j’ai cru que j’étais un superman, moi!*

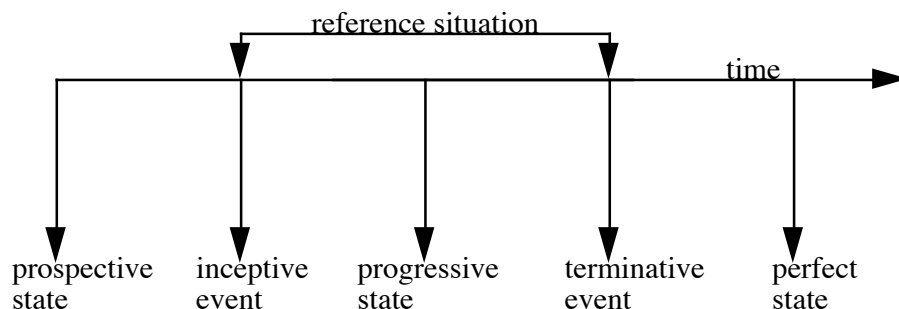
“But for fifteen years I thought (perf) I was a superman!”

(Binet, *Les Bidochon 13*, p. 17).

- **Explicit: phasal aspect.** Phasal aspect is only used for type shifts involving the categories EVENT and STATE. Phasal aspects express a phase of a given REFERENCE SITUATION and are PERIPHRASTIC:

(20) a. He is about to leave.

- b. She is beginning to fix it.
- c. We are playing cards.
- d. She finished running at noon.
- e. They have left.



**Figure 2. Phasal Aspects**

### C. Three aspectual subsystems.

Aspectual Class	Semantic basis	Function	Example of Morphological Realization
<b>Viewpoint Aspect</b>	<b>The event-state distinction</b>	<b>Tense</b>	<b>Perfective tense (as in Latin)</b>
<b>Situation Aspect (Aktionsart)</b>	<b>Set of idealized situations</b>	<b>NA</b>	<b>NA</b>
<b>Phasal Aspect</b>	<b>The event-state distinction</b>	<b>Type shifting</b>	<b>Progressive aspect (as in English)</b>

**Table 3: Three Aspectual Subsystems**

## 7. What is the relationship between tense and aspect, on the one hand, and modality, on the other?

- A. “Modality is a cover term for devices which allow speakers to express varying degrees of commitment to, or belief in, a proposition” (Saeed, p. 125).
- B. Forms which express modal distinctions are a mixed bag: subjunctive mood (*was* vs. *were*), adverbs (*probably*), modal verbs (like *might*), tenses (like the past perfect).
- C. Modal markers can be used to **distance** the author. A contrast from Latin involving subjunctive mood:

(21) *Morari volebat quod lassus erat* (indicative imperfective).  
 ‘He wanted to stop because he was tired (subjunctive imperfective).’

(22) *Morari volebat quod lassus esset*.



‘He wanted to stop because he was tired (or so he said).’

D. Modal forms can be used to express that **something is or was not the case**. Therefore, modal markers show up when people express the wish that things were or had been different. A contrast from Latin:

(23) Utinam adesset! (subjunctive past )

‘Would that he were here!’

(24) Utinam adfuerat! (subjunctive past perfect)

‘ Would that he had been here!’

**Counterfactual conditionals** in English:

(25) **If she were less aggressive**, we’d enjoy her company more.

(26) **If she had been less aggressive**, we would have enjoyed her company more.

- Modal forms can be used to express degrees of **certainty**:

(27) (a) She **might** be home.

(b) She **must** be home.

(c) **Apparently**, she’s home.

- Modal forms can be used to express **degrees of likelihood**:

(28) If there **is** a sudden loss of cabin pressure, oxygen masks will drop from overhead compartment.

(29) If there **were to** be a sudden loss of cabin pressure, oxygen masks would drop from overhead compartment.

- **Degree of likelihood** and **counterfactuality** fall together in the English past tense:

(30) If my students **liked** syntax I’d be overcome with joy.

- Modal forms can even express social distance (timidity):

(31) Excuse me, Ma’am? I **had ordered** a Pepsi?

- Modality also includes **evidentiality**: the coding of one’s source of evidence for an assertion. An example of an evidential form is the English **reportive present**:

(32) I **hear** that she’s difficult to work with.

(33) My mom **tells** me you’re interested in lexicography.

Another example of an evidential distinction is found in the opposition between two past-tense markers in Turkish:

- (34) *Dirseg-im-*            *i*        *vur*    *-du*    *-um*  
 elbow 1SG.poss        OBJ    hit     PST    1SG  
 “I hit my elbow!”
- (35) *Dirseg-im-*            *i*        *vur*    *-mus*   *-um*  
 elbow 1SG.POSS        OBJ    hit     PST    1SG  
 “I must have hit my elbow!”        (inference)  
 “They tell me I hit my elbow.”        (hearsay)