

Aspectual Classes of Verb Phrases

Current understanding of verb meanings (from Predicate Logic): verbs combine with their arguments to yield the truth conditions of a sentence.

With such an understanding of verbs, we can classify verb meanings according to the number of arguments that the verb demands:

- one-place verbal predicates (*sleep, cough*) denote sets of individuals,
- two-place verbal predicates (*know, learn*) denote sets of ordered pairs of individuals
- three-place verbal predicates (*give, show*) denote sets of ordered triplets of individuals

Question: aren't there important differences between the meanings of (for example) *know* and *learn*?

I know French.
 ↑
 2-place V

vs. *I learned French.*
 ↑
 2-place V

'to know French' ≈ to be in a certain mental state / possess a certain mental capacity

'to learn French' ≈ to effect a certain change in one's mental states / acquire certain mental capacities

We could say that whereas *know (French)* describes a static situation, *learn (French)* describes a dynamic one. In fact, this semantic difference between *know* and *learn* seems to have grammatical repercussions: compare *I am learning French* to **I am knowing French* and *Hey you, learn French!* to **Hey you, know French!*

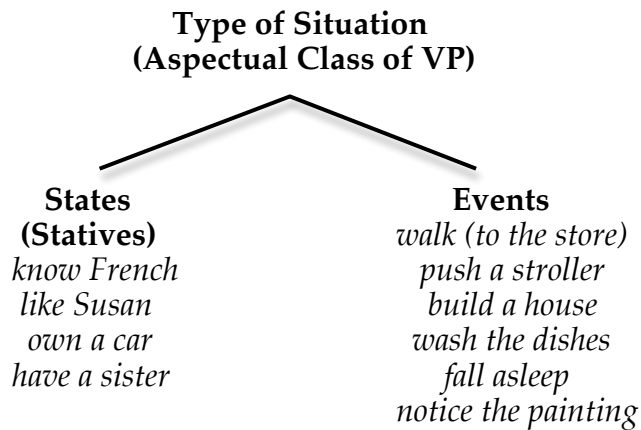
Alternative (complementary) understanding of verb meanings: verbs (or more precisely, verb phrases) describe different types of situations.

Such an understanding of verb phrases allows us to classify verb phrase meanings according to the type of situation that the verb phrase describes. In particular, we can construct a classification according to **the situation's aspect**, which pertains to the internal structure or "shape" of the situation. A VP's **aspectual class** (or, its **aktionsart** (Gr., 'action+sort')) is then determined by the internal structure of the situation that it describes.

The rest of this handout reviews the four major aspectual classes of VPs, along with tests for distinguishing members of different aspectual classes.

States vs. Events

The most basic distinction amongst situations is between states and events:



States: (i) are homogeneous / static (no internal changes or phases), (ii) are said to “hold” over a period of time, and (iii) have no inherent endpoint / culmination—they can continue indefinitely.

“Stative” VPs describe states. For instance, the VP *have a sister* is stative: one moment of having a sister need not be any different from another moment of having a sister (no internal changes or phases).

Events: (i) are heterogeneous / dynamic (contain internal changes or phases), (ii) are said to “happen”, either over a period of time or at a particular moment in time, and (iii) may have an inherent endpoint / culmination (but not necessarily).

“Eventive” VPs describe events. For instance, the VP *walk to the store* is eventive: one moment of walking to the store is different from another moment of walking to the store (different location, center of gravity, etc.; the event necessarily involves internal changes).

Tests for distinguishing stative from eventive VPs

A. Stative VPs are incompatible with the progressive (*be ...-ing*).

- (1) a. John is walking to the store.
 b. *John is owning a car.

B. Stative VPs cannot be used in commands (“imperatives”).

- (2) a. Hey you, push the stroller!
 b. *Hey you, have a sister!

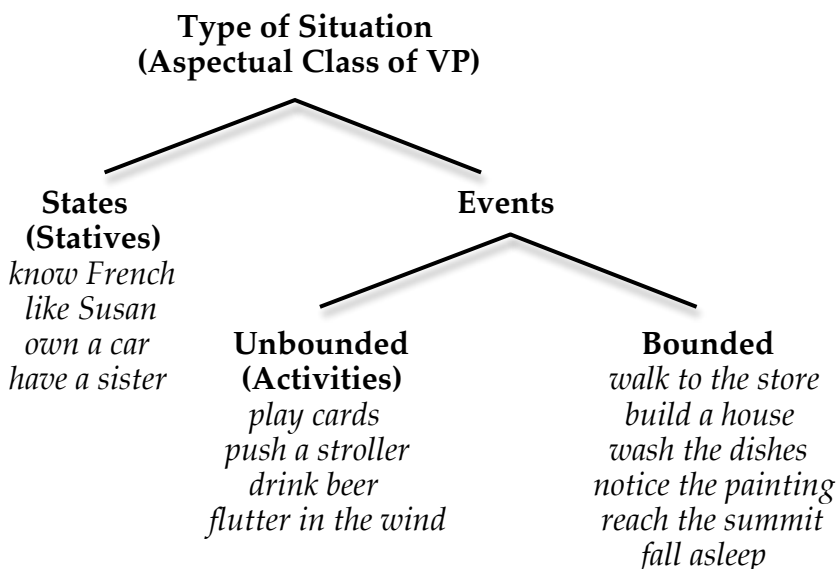
C. Eventive VPs in the simple present tense receive a habitual/repetitive interpretation. Stative VPs in the simple present tense are interpreted as holding at the present moment.

- (3) a. George washes the dishes.
b. George likes Susan.

(3a) involves more than one event of washing the dishes, but (3b) does not involve more than one occasion of liking Susan. Note also that while (3a) doesn't describe an event happening at the present moment, (3b) does describe a state that holds at the present moment.

Bounded vs. Unbounded Events

Amongst events, we can distinguish between bounded vs. unbounded events:



Bounded Events: have an inherent endpoint/culmination, past which the same event cannot continue—the endpoint/culmination “finishes” the event.

The VP *walk to the store* describes a bounded event: an event of walking to the store is finished upon one's arrival at the store. Even if one continues to walk, this later walking is not part of the same walking-to-the-store event (the arrival at the store constitutes an inherent endpoint/culmination).

Unbounded Events: have no inherent endpoint/culmination—the same event can continue over an indefinite period of time (arbitrary termination).

“Activity” VPs describe unbounded events. For instance, the VP *play cards* is an activity: an event of playing cards can continue indefinitely, until the players decide that the event is finished (arbitrary, rather than inherent, endpoint).

(Note: bounded/unbounded events are often referred to as “telic” / “atelic” events, from *telos* (Greek) ‘purpose, end, goal’.)

Tests for distinguishing activity VPs from VPs that describe bounded events

A. Activity VPs cannot occur with *in*+time adverbial PPs.

- (4) a. Alex walked to the store in ten minutes.
b. *Alex pushed a stroller in ten minutes.

B. Activity VPs cannot occur in the *take*+time construction.

- (5) a. It took me ten minutes to fall asleep.
b. *It took me ten minutes to play baseball.

Question: Why do we classify verb phrases, instead of simple verbs?

Compare the verb phrases *walk to the store* and *walk*:

- (6) a. Alex walked to the store in ten minutes.
b. *Alex walked in ten minutes.

(6) demonstrates that the VP *walk to the store* describes a bounded event, while *walk* is an activity VP (describes an unbounded event).

Similarly, compare the verb phrases *wash all of the dishes* and *wash dishes*:

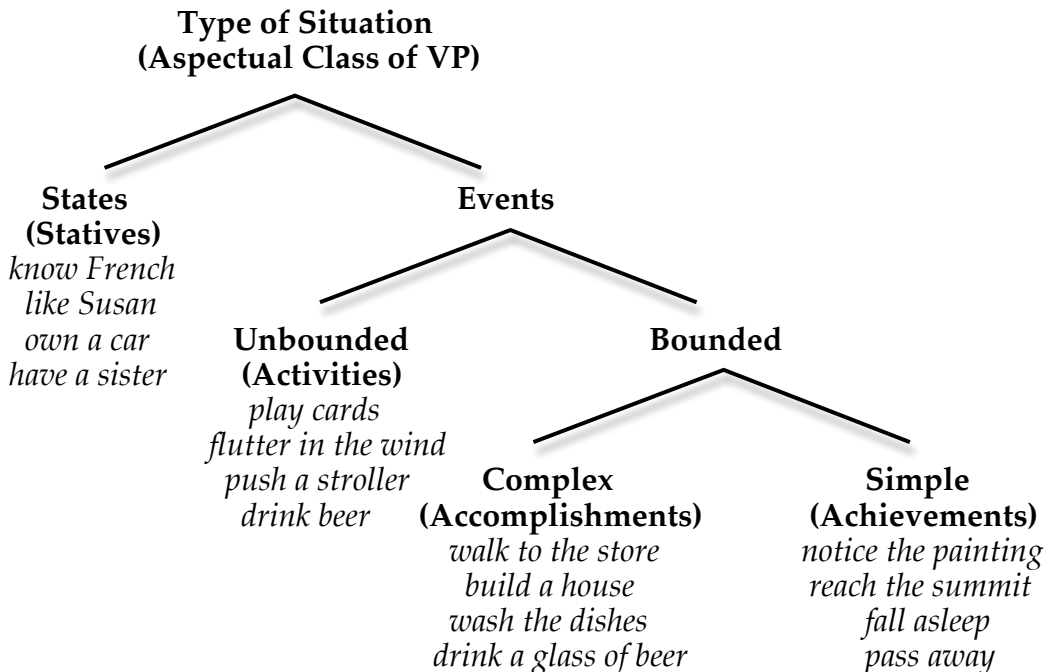
- (7) a. It took me ten minutes to wash all of the dishes.
b. *It took me ten minutes to wash dishes.

(7) demonstrates that the VP *wash all of the dishes* describes a bounded event, while *wash dishes* is an activity VP (describes an unbounded event).

These contrasts show that membership in an aspectual class is determined in part by the verb (e.g., eventive *walk* vs. stative *know*), but also by other parts of the verb phrase, such as direct objects (*all of the dishes* vs. *dishes*). So, aspectual classification must occur at the VP-level, not simply at the V-level.

Complex vs. Simple Bounded Events

Amongst bounded events, we can further distinguish complex bounded vs. simple bounded events:



Complex Bounded Events: have a two-part structure, consisting of a process which happens over a period of time, leading up to an endpoint/culmination.

“Accomplishment” VPs describe complex bounded events. For instance, the VP *build a house* is an accomplishment: an event of building a house consists of construction work that culminates in a completed house (complex bounded events = process + culmination).

Simple Bounded Events: have no inherent process that precedes the endpoint/culmination. Rather, they correspond to the transition point between two states, or to the onset of a new state, both of which are idealized to occur at a particular moment in time.

“Achievement” VPs describe simple bounded events. For instance, the event of passing away corresponds to the transition point between the state of being alive and the state of being dead.

Tests for distinguishing accomplishment VPs from achievement VPs

A. Achievement VPs cannot occur with the verbs *finish* or *stop*.

- (8) a. The workers finished building the house.
b. *Alex finished noticing the painting.

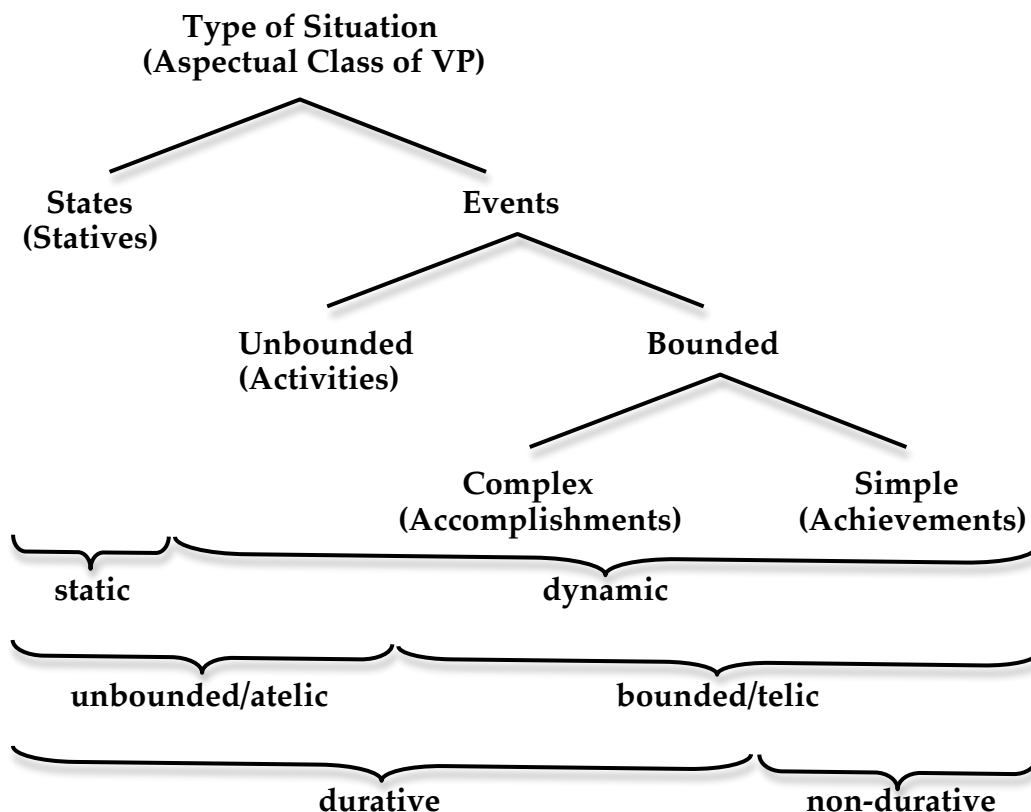
- (9) a. Elisa stopped washing the dishes.
b. *Elisa stopped passing away.

B. Accomplishment VPs are ambiguous when modified by *almost*, while achievement VPs are unambiguous.

- (10) a. I almost walked to the store.
b. I almost fell asleep.

(10a) allows for two interpretations: (i) I came close to starting to walk to the store, but ultimately I didn't begin, and (ii) I did begin to walk to the store, but I didn't quite get there. But there is only one interpretation for (10b): I came close to falling asleep, but ultimately I didn't.

Some cross-cutting distinctions amongst our different aspectual classes:



Determining the Aspectual Class of a VP

What is the aspectual class of the VP *learn French*?

- is the VP stative or eventive?

I am learning French. eventive

- is the VP an activity, or does it describe a bounded event?

It took me several years to learn French. describes bounded event

- is the VP an achievement or an accomplishment?

Elisa stopped learning French. accomplishment

The VP *learn French* is an accomplishment: an event of learning French consists of an educational process that culminates in proficiency with the language.

What is the aspectual class of the VP *ride my bike around*?

- is the VP stative or eventive?

I am riding my bike around. eventive

- is the VP an activity, or does it describe a bounded event?

*It took me ten minutes to ride my bike around. activity

*I rode my bike around in ten minutes. activity

The VP *ride my bike around* is an activity: the same event of riding one's bike around can continue over an indefinite period of time (no inherent endpoint).

What is the aspectual class of the VP *need a car*?

- is the VP stative or eventive?

*I am needing a car. stative

*Need a car! stative

John needs a car. (not habitual/repetitive) stative

The VP *need a car* is stative: one moment of needing a car need not differ from another moment of needing a car (no internal changes/phases).