

contrast to count nouns as in (63b):

- (63) a. a pound of flour, a pound of peas, a pound of cashews, ...  
b. # three cubic metres of table, a pint of saucepan, ...

Some mass nouns denote a substance made up of individuals, or **aggregate substance**, as in (64a). A few of these nouns have corresponding vague plurals which refer to the same (or similar) material, as in (64b):

- (64) a. corn (consists of kernels); rice (consists of grains), hair (cf. French plural *cheveux*), ...  
b. gravel/pebbles; poetry/poems; cattle/cows

Natural aggregates also appear among eventualities with predicates such as *hammer* and *pound* which denote a vague plurality of blows forming a process.

The three kinds of parallelism are summarized in (65):

(65)

	count + number	mass + measure	aggregate + measure
nominal	three cups	a litre of milk	a bucket of pebbles
verbal	paint the wall three times	sleep for three hours	pound the herbs for two minutes

## 8.7 Closing comment

Aspectual distinctions among event predicates first came to the attention of philosophers because of the different ways verbal aspect and tense are interpreted in combination with different types of predicate. For example, as we have seen (Section 8.2.6) the progressive aspect changes the interpretation and *aktionsart* of some achievements to denote a process leading up to the actual event, but not the event itself (e.g., *Jones was dying* (prelude process) *for months and finally died* (achievement) *before Christmas*). The progressive does not have this effect with any other type of predicate. Differences also appear with tense forms – for example, the simple present tense (*She wears red*, *He walks to work*) has a habitual interpretation with most predicates, but has a ‘right now’ interpretation with some states (*I smell smoke*, *Do you hear that?*). The task of giving a consistent formal analysis for tenses and morphological aspects was greatly complicated by these and other *aktionsart* effects. Consequently, the aspectual classification of events or event predicates has been of considerable interest in the formal analysis of tense and aspect, as we shall see in Chapter 9.

However, the aspectual classes themselves resist precise logical analysis and there is no generally adopted way of representing all the characteristics of event classes in logic-based semantic representations. It is likely that the four classes presented here are not theoretically essential, and are mainly convenient shorthand for easily identifiable combinations of aspectual characteristics. The classifying features of telic vs. atelic, bounded vs. unbounded, durative vs. non-durative, and static vs. dynamic are the essential notions.

## EXERCISES

### Aktionsart classification



(1) \*

Using the linguistic tests in Section 8.2, try to classify the bracketed predicates in the sentences below as reporting accomplishments, achievements, states, processes or semelfactive events, and decide whether the events are singular or plural. Give the feature values for the predicates ( $\pm$ telic,  $\pm$ durative,  $\pm$ dynamic,  $\pm$ bounded).

- The door [creaked open].
- Sam [got the joke] about three minutes later.
- Jerry [is a great talker].
- Elsa [chewed her way through half a goat].
- Liam [picked at his food].
- The cheese [was rancid].
- James [read some of his strange poems].
- A soft light [shone on the hills].

(2) \*\*

Follow the instructions for Exercise (1) – this time you need to identify the relevant part of the sentence as the basic predicate.

- Max drew his pistol.
- Donald heated the solution.
- Donald heated the solution to 70 degrees.
- Donald heated the solution for five minutes.
- Tim doodled on the tablecloth listlessly.
- A strange mushroom appeared on the lawn.
- Strange mushrooms appeared on the lawn overnight.
- Liam talked himself into a rage over the building consent.

(3) \*\*

Follow the instructions for Exercise (2).

- A shabby warehouse complex came into view.
- Anna was cracking nuts.
- Anna cracked nuts with a hammer.
- Anna cracked the nuts with a hammer.

- e. Macbeth became king.
- f. Jones won the election.
- g. People moved away.
- h. The sun set.

(4) \*\*\* (recommended for discussion)

The predicates in the sentences below express a change in the state of the entity denoted by the subject. These predicates constitute a particular type in *aktionsart* terms. Apply the tests for *aktionsarten* to the sentences, and identify the characteristics of predicates like *cool* and *increase*.

- a. The solution cooled.
- b. The price of gold increased.

**For adverbials**

(5) \*\* (recommended for discussion)

Consider the *for* adverbials in the examples below. What interval does the adverbial modify, and what kind of eventuality occupies the interval? Some of the sentences cannot be given a sensible reading (judgments are not shown). Which are the anomalous sentences, and why is the *for* adverbial anomalous?

- a. Jones found his keys for ten minutes.
- b. Jones discovered new recipes for years.
- c. Jones discovered the joy of cooking for years.
- d. Jones thumped the TV for hours.
- e. Jones walked to the corner for several hours.
- f. Jones photographed the view for years.
- g. Jones solved the mystery for weeks.
- h. Jones turned the corner for 30 seconds.

**Time adverbials**

(6) \*\*\*

**Preamble:**

Some time adverbials can be analysed as a kind of universal quantification. The force of the quantification is that an atelic event occupies every part of the stated interval, for example:

*Jones slept for three hours.* [.....three-hour interval = I.....]

Suppose the whole time interval is made of time-points or intervals represented by *t* variables. The way the event occupies the interval can be expressed as:

$$\forall t(\text{IN}(t, I) \rightarrow \text{SLEEP}(j) \text{ at } t)$$

Other time adverbials with telic predicates express an existential quantification:

*Jones arrived on Monday.* [.....Monday = I.....]

Jones' arrival doesn't occupy the whole of Monday, but occurs at some point within it. This can be analysed as:

$$\exists t(\text{IN}(t, I) \ \& \ \text{ARRIVE}(j) \text{ at } t)$$

**To Do:** Pair the adverbials listed below with the test predicates in the sentences (a)–(c) – what type is each adverbial? Follow the examples in the preamble to give representations for the sentences (a)–(c) modified by the adverbials.

*for a week, on Monday, since three o'clock, last week, until midnight, during the film, in May, all day, at night.*

- a. The radiator rumbled / The radiator will rumble.
- b. The radiator broke down / The radiator will break down.
- c. The radiator exploded / The radiator will explode.

**FURTHER READING**

The main texts in the development of the current *aktionsart* classes are Ryle (1949: Chapter 5), Kenny (1963: Chapter 8) and Vendler (1967: Chapter 4). Ryle discusses the non-agentive quality of achievements, which he calls 'lucky' achievements. Kenny develops tests for a three-way division among states, activities and events, and Vendler proposes the four main classes (and their names) reviewed here. All these texts are accessible.

Van Voorst (1992) discusses the aspectual classification of psychological verbs according to the standard tests, with a wide range of data.

Jackendoff (1991) develops an analysis of the conceptual structure components which underlie boundedness and plurality in the concepts of both matter and events (cf. Section 8.6 'Nominal and Verbal Aspect'). The discussion is clear with numerous examples.