

# On the Relevance of Aspect for Middle Formation

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## 1. Middle Formation

With 'Middle Formation' I refer to the process where a verb is presented without its usual agent, without an object, and with a subject that appears to be responsible for the action described without actually being the agent of the verb. Examples are given in (1):

- (1) This book reads well.  
Dit boek leest lekker.

## 2. Restrictions on Middle Formation

Not all verbs undergo Middle Formation:

- (2) \*This solution finds easily.  
\*Deze oplossing vindt gemakkelijk.  
  
\*This theory knows easily.  
\*Deze theorie kent gemakkelijk.

What are the restrictions on Middle Formation?

According to Fagan (1992), basically two restrictions are valid. First, the verb must belong to one of the two aspectual classes *activity* and *accomplishment* (cf. Vendler 1967). Second, the subject must be responsible for the action denoted by the verb.

The second restriction narrows down the set of possible sentences allowed by the first restriction. It explains the different behavior of verbs like *buy* and *sell*:

- (3) This book sells/\*buys well.  
Dit boek verkoopt/\*koopt goed.

Both *buy* and *sell* are accomplishment verbs (although they can also be activity verbs, if the activity denoted has a generic character), and should be expected to undergo Middle Formation equally well. The difference between *buy* and *sell* apparently is a function of the responsibility of the surface subject: a book can be responsible for a selling rate, but not (directly) for a buying rate (Van Oosten 1986, Fagan 1992).

I wish to ignore the factor of responsibility in this squib. Here I am only interested in the first restriction on Middle Formation, the aspectual nature of the verb.

## 3. Aspectual Classes

Since Vendler (1967), verbs are standardly divided into four aspectual classes:

(4) Aspectual classes	Criterion	Examples
state	no time scale	<i>know, have, believe</i>
activity	time scale, no inherent end point	<i>run, walk, push</i>
achievement	time scale, inherent end point, does not hold of intermediate stages	<i>recognize, find, win</i>
accomplishment	time scale, inherent end point, also holds of intermediate stages	<i>build, write, sell</i>

The criterion 'holds of intermediate stages' serves to distinguish achievements and accomplishments, but applies to activities as well. The action denoted by an activity verb holds of intermediate stages on the time scale, but crucially not of the end point of the time scale. An activity, therefore, can be characterized as an accomplishment without an endpoint. Activities are complementary with achievements, but not with accomplishments.

#### 4. The Compositional Nature of the Aspects

It has been recognized that verbs are often difficult to classify according to their aspectual nature. Mulder (1992:50) presents the following example:

- (5) a. John ate soup  
 b. John ate a bowl of soup

The verb *eat* in (5) implies a time scale along which the action progresses, singling out the aspectual classes **activity** and **accomplishment**. In (5a), there is no inherent endpoint, so that the relevant aspectual class would be **activity**, whereas in (5b), there is, pointing to the aspectual class of **accomplishment**. Apparently, the nature of the direct object (a mass noun vs. a fixed quantity) is responsible for the aspectual classification of the verb.

Since an accomplishment is an activity with an endpoint, we can say that whenever a complement provides an endpoint, the aspectual nature of the verb changes. This also implies that when the complement is absent, an accomplishment verb is turned into an activity verb, as in *John eats*.

A similar shift may apparently appear between achievements and accomplishments:

- (6) a. John found the solution  
 b. John is finding solutions to all our remaining problems

In (6a), *find* is a typical **achievement** verb, but in (5b), the progressive suggests **accomplishment** status. Again, the nature of the complement (a single solution or a string of solutions) appears to make the intermediate stages relevant or irrelevant.

We do not, however, expect verbs to shift as easily between activities and achievements, as no simple subtraction or addition will turn either into the other.

The compositional nature of the aspects makes it difficult to ascribe restrictions on Middle Formation to the aspectual status of the verb.

## 5. The Aspectual Features of Middle Constructions

The verb in middle constructions appears to belong invariably to the **activity** class. Consider (7), listed by Fagan (1992:68) as an example of a middle construction formed on the basis of an accomplishment verb.

(7) This book reads well

Accomplishments and activities can be distinguished by the following test. If the action is interrupted, the action denoted by an activity verb will still hold of the stages on the time scale leading up to the moment of interruption. This is not the case with accomplishments. The examples in (5) illustrate this:

- (8) a. John stopped eating soup  
b. John stopped eating a bowl of soup

(8a) entails that John did in fact eat soup before he stopped, but (8b) does not likewise entail that John ate a bowl of soup before he stopped.

Consider now (9), based on (7):

(9) This book stopped reading well

(9) entails that the book did in fact read well before it stopped. *Read*, therefore, must be classified as an activity verb in (7).

This leads to the conclusion that the action described by the middle verb applies to a series of stages on a time scale, without expressing anything about the end point of the action. The verb can be said to describe a **generic** action.

## 6. Aspectual Restrictions on Middle Formation

The aspectual restrictions on Middle Formation can now be understood.

Activity verbs are suitable for Middle Formation, because the middle verb is an activity verb.

Accomplishment verbs are suitable for Middle Formation, because accomplishment verbs can be turned into activity verbs by 'subtraction' of the endpoint of the action.

Achievement verbs are not suitable for Middle Formation, because achievement verbs can never be turned into activity verbs. The same is true for state verbs.

## 7. Why Must the Middle Verb be an Activity Verb?

I would like to propose that middle verbs must be activity verbs because the very nature of the middle construction involves predication over a verb. In (7), *well* does not predicate over the subject, but over the verb:

(7) This book reads well

What (7) means is, roughly, the paraphrase in (10):

(10) This book makes the reading good

The insight that the adverb modifies the predicate is not new (cf. Fagan 1992:41), but it finds striking confirmation in a little studied middle construction from Dutch:

(11) Dit boek leest als een trein  
this book reads like a train

In (11), *als een trein* 'like a train' means 'very fast'. The sentence does not, however, convey the meaning that the book is very fast, but that the reading is very fast:

(12) This book makes the reading like a train (very fast)

The obligatory presence of the adverb appears to be a defining characteristic of middle constructions (ignoring for the time being sentences like *This book won't sell*). Another defining characteristic appears to be the obligatory absence of a complement of the verb. This is most striking in middles based on double object constructions (invariably yielding ungrammatical sentences):

(13) \* This book gives strangers well  
\* Strangers give this book well

The pair in (14) shows that this has nothing to do with the nature of the verb:

(14) a. Bedridden children teach well  
b. \* Bedridden children teach math well

The obligatory presence of the adverb and the obligatory absence of any other complement to the verb suggest that the adverb is in fact the complement of the verb, predicating over it in a direct sisterhood configuration.

(15) VP  
V Adv

As a result, the verb in middle constructions is without a complement that could bound the action denoted by the verb (cf. Tenny 1987). Consequently, the accomplishment (or achievement) reading is not available, and the verb comes out as an activity verb.

## Conclusion

If we are right, aspect does not impose any restrictions on Middle Formation. Rather, the nature of the middle construction, involving predication over a verb, requires the absence of a complement to the verb, forcing the activity reading of the verb.

A remaining question is why the verb in middle constructions cannot be a state. This, I submit, is due to the circumstance that state verbs do not hold of stages on a time scale, thereby making generic predication over the verb impossible.

## References

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