

Aspectual properties of the English middle construction

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1 Introduction

The aim of the present paper is to investigate the aspectual properties of middle constructions in English. English middle constructions are non-eventive sentences denoting a property of the grammatical subject. Middle formation seems to have certain similarities with passivization as both processes involve demotion or deletion of the external argument and promotion of the internal argument to the grammatical subject position. However, while the English passive is formed periphrastically by means of the auxiliary *be* (*was cut* in the sentence in (2)), the verb in the middle construction has still the same form as in the active construction¹ (*cuts* in the sentence in (3)). Moreover, unlike the passive, the middle construction requires the presence of a modifying element, such as a manner adverbial (*easily*):

- (1) George cuts this bread (active)
- (2) This bread was cut (passive)
- (3) This bread cuts easily (middle)

It has been noted that aspect is of some importance in middle formation. More specifically, verbs that belong to the aspectual classes of states and achievements do not undergo middle formation in English (e.g. Fagan 1992:68):

- (4) *Ice-cream likes easily (state verb)
- (5) *This contest wins easily (achievement verb)

Most, but not all writers agree that both activity and accomplishment verbs can undergo middle formation (Erteschik-Shir & Rapoport 1997:136-138, Fagan 1992:68, Zwart 1997:3):

- (6) This car drives easily (activity verb)
- (7) This glass doesn't break (accomplishment verb)

While Zwart claims that the middle verb is always an activity verb regardless of whether the corresponding active verb is an activity or accomplishment (1997:3), I argue in this paper that the middle verb can be either an activity or an accomplishment verb. The aim of the paper is thus to investigate the aspectual properties of the middle verb and to examine what determines aspect in middle constructions.

¹ This paper will not discuss the question of whether middle constructions are derived from active constructions or whether the active verb and the corresponding middle verb have the same lexical root but get different interpretations depending on properties of the little *v* that they incorporate into. In some cases, it is nevertheless of interest to contrast the verb found in the middle construction, the *middle verb*, with the active counterpart, the *active verb*.

The paper is structured as follows: In section 2, I give an overview of the aspectual verb classes and discuss the notion of compositionality. In section 3, I discuss possible interpretations of middles and in section 4, I relate the interpretation of middles with their aspectual properties.

2 Aspectual verb classes

According to Vendler (1967) and Dowty (1979), verbs can be divided into different aspectual classes on the basis of their relation to a time scale (see e.g. Mulder 1992:35-37). The four aspectual classes of verbs are: *states*, *activities*, *accomplishments* and *achievements*:

- (8) The boy *knew* the answer (state)
- (9) The boy *cried* (activity)
- (10) Alice *killed* the rabbit (accomplishment)
- (11) Harry *received* a letter (achievement)

State verbs and activity verbs are similar in that they denote states of affairs or actions that are *atelic*. They are, in other words, on-going in time and have no clear beginnings or endpoints². Accomplishment verbs and achievement verbs, on the other hand, denote actions that have a natural completion and these aspects are therefore *telic*. State verbs differ from verbs of the other aspectual classes in that they denote non-dynamic, i.e. stative, states of affairs that do not have an internal temporal structure. Activities, accomplishments and achievements, on the other hand, denote dynamic processes or actions that can be organised along a time scale (Mulder 1992:36). The action denoted by an activity verb holds for an unspecified number of stages on the time scale but does not include a specific endpoint. That is the case with the sentence in (9). The action denoted by an accomplishment verb, on the other hand, includes an endpoint as well as the stages leading up to it. In (10), thus, *the killing* may last for a couple of minutes, but it ends with the death of the rabbit. Finally, the action denoted by an achievement verb is instantaneous. In other words, there are no intermediate stages and the only thing of importance is the endpoint of the action (Mulder 1992:35-37).

However, while the verb, naturally, is of importance for the aspect of the verb phrase, it does not alone determine its aspectual class. Instead, aspect is determined compositionally so that also the complement of the verb, if present, plays a decisive role for the aspectual interpretation (Verkuyl 1972). Consequently, aspect sometimes changes if the type of the complement is changed. The action denoted by a verb can, for instance, be provided with an endpoint, and therefore be interpreted as an accomplishment, if the complement is a *count* noun, as in (12). A *mass* noun, on the other hand, is not in any sense limiting and, therefore, it does not provide the action with an endpoint. The verb phrase in (13), therefore, denotes an activity:

- (12) George drinks a glass of milk (accomplishment)
- (13) George drinks milk (activity)

In achievements, on the other hand, it does not seem to be the complement that provides the action with an endpoint, since an endpoint is implied regardless of whether the complement is a mass or a count noun:

² Both states and activities can last for long or short periods of time, depending on the predicate in question. The interaction between aspect and genericity is a complex issue that will not be further discussed in the present paper (see e.g. the different contributions in Carlson & Pelletier 1995)

- (14) George found milk in the fridge (achievement)
- (15) George found a glass of milk in the fridge (achievement)

One of the questions to discuss in this paper is whether the middle verb is always of the activity class, as claimed by Zwart (1997:3), or whether it can also be of the accomplishment class. It is therefore crucial to have ways to distinguish between these two classes and the tests provided by Dowty (1979) are useful for this purpose. One way to distinguish between activities and accomplishments is to see how they behave in entailment tests, where the presence or absence of an endpoint of the action denoted by the verb is essential. The progressive form (indicating an arbitrary stage on the time scale) of an activity verb entails the perfect form of the same verb, as illustrated in (16). As the progressive form, on the other hand, does not imply an endpoint, an accomplishment verb in the progressive form does not entail the perfect form of the same verb, as illustrated in (17) (Fagan 1992:66):

- (16) George is drinking milk *entails* George has drunk milk (activity)
- (17) George is drinking a glass of milk *does not entail* George has drunk a glass of milk (accomplishment)

In another entailment test, the action denoted by the verb phrase is interrupted. If this action still holds for the stages leading up to the interruption, the verb phrase denotes an activity. If the action denoted by the verb phrase does not hold for the stages leading up to the endpoint, it is an accomplishment (Fagan 1992:69-70):

- (18) George stopped drinking milk *entails* George drank milk (activity)
- (19) George stopped drinking a glass of milk *does not entail* George drank a glass of milk (accomplishment)

There are also other ways to distinguish between activities and accomplishments. For instance, activities can, but accomplishments usually cannot, appear with a *for a certain time* phrase and in the same way accomplishments, but not activities, can appear with an *in a certain time* phrase (e.g. Fagan 1992:69):

- (20) George drank milk for an hour / *in an hour (activity)
- (21) George drank a glass of milk in an hour/ ?for an hour (accomplishment/activity)

When the sentence in (21) appears with the *for an hour* phrase, it does not necessarily mean that *the glass of milk was finished after an hour*. Therefore it denotes an activity, as expected with that type of phrase. Thus, the different tests that can be used to determine the aspectual class of the verb phrase sometimes give different results. Although *read the book* has the entailment pattern of an accomplishment (as in (22)) and is well-formed with *in an hour*, it is equally well-formed with the *for an hour* phrase that is typical of activities (as in (23)):

- (22) George is reading the book *does not entail* George has read the book (accomplishment)
- (23) George read the book for an hour/ in an hour (activity/accomplishment)

The verb phrase *read the book*, thus, is ambiguously an activity or an accomplishment³. In (23) it seems plausible to assume that the adverbial together with the verb and the complement determine the aspect. More specifically, the adverbial disambiguates the aspectual interpretation in (23). As the sentences in (22) and (23) illustrate, it is, in some cases, not enough to use only one of the tests to determine the aspect.

Before discussing the aspectual class of the middle verb, it will be in its place to see how the middle construction is interpreted and how middles relate to time and events.

3 The interpretation of middles

Middles are non-eventive constructions denoting some property of the grammatical subject. However, although middles do not pick out specific events, it is sometimes argued that events are nevertheless of importance in these constructions. Zwart, for example, claims that middles always express generalisations over events, i.e. that the property they denote has been observed in, or will be true for, repeated events (1998:110). Fagan, on the other hand, claims that only a marginal group of middles generalises over events (1992:54-55). Also Rapoport distinguishes between middles that generalise over events and middles that do not. In the former type, the so-called *habitual* middles, the adverbial explicitly refers to a habit, while the adverbial in the latter type, *capacity* middles, does not explicitly express the existence of any events. The property denoted in a capacity middle is thus not based on actual events, but holds regardless of both previous and future events (1999:149-150). In Rapoport's discussion, it is thus the adverbial that determines whether it is a habitual or capacity middle:

(24) This paper reads *daily* (habitual middle)

(25) This paper reads *easily* (capacity middle)

According to Rapoport, only habitual middles entail the existence of an event (1999:149-150). However, I would argue that a construction like the one in (25) ambiguously does or does not involve generalisation over events. Although the adverbial does not explicitly refer to a habit, the construction may still very well be interpreted in that way. Thus, the property of *reading easily* can be attributed to *the paper* because it is the case that *when this paper is being read, the reading is easy*. The property can also, as Fagan and Rapoport claim, be attributed to the subject regardless of events. It thus seems plausible to assume that the middle construction in (25) has two different readings, one that involves generalisations over events (I will refer to this as a *habitual middle* whether or not the adverbial explicitly refers to a habit) and the other one that does not (*capacity middle*). If that observation is correct, many middle constructions are ambiguous in the same way when they appear isolated and without a context.

However, although some middles are ambiguously habitual or capacity middles, others can only be interpreted in one way. The sentence in (24) above, for instance, clearly expresses generalisations over events, while the sentences in (26) and (27) cannot be interpreted in the same way:

(26) This chicken kills easily

(27) This vase breaks easily

³ As the verb in (23) is in the past simple form, the sentence can denote either one single event or express generalisations over events. In this case, however, the reading of interest is the one that refers to one specific event and therefore it can be compared with the sentence in (22) where the verb is in the progressive form.

The sentences in (26) and (27) are not likely to be interpreted as involving more than one possible event respectively. The chicken will only be killed once and the most natural reading in (27) is that the vase will be broken once. Therefore we can hardly talk of generalisations over events in these cases. The middles in (26) and (27) are thus unambiguous capacity middles, while the sentence in (24) is unambiguously a habitual middle.

If middles that do not generalise over events are nevertheless generic statements, they generalise over something else. Fagan claims that all middles generalise over an implied argument, which would normally be an Agent in these constructions (1992:154-155). That seems questionable to me since it is not possible to show that the middle construction contains an implicit Agent and since the interpretation then focuses on an ability of this implied Agent and not on a property of the grammatical subject (which in middles is normally a Theme)⁴. To discuss whether middle constructions instead generalise over the Theme is beyond the scope of the present paper.

What is then the importance of events in middles? Although middles do not refer to specific events, they either denote the possibility of an event, which can be characterised in the way referred to in the construction, or they involve actual previous events, where the property denoted by the construction has been observed. In the next section, we will see how this relation between middles and events has consequences for the aspectual restrictions in middle formation.

4 Middles and aspect

4.1 State verbs in middle constructions

That events are, in fact, of some importance in middle constructions is clear from the fact that verbs that denote states never undergo middle formation in English:

(28) *This language understands easily

(29) *This story believes easily

The inability of state verbs to appear in middle constructions seems to be one of the things that make middle constructions different from other types of non-eventive constructions in English. As illustrated in (30) and (31), state verbs can appear in non-eventive constructions that are not middles:

(30) This language is easy to understand

(31) This story is easy to believe

⁴ The fact that middle constructions are not well-formed with agent-oriented adverbs or other phrases indicating the presence of an implied Agent suggests that the Agent has been deleted (examples modified from Erteschik-Shir & Rapoport 1997:14):

- (i) *This bread cuts (easily) deliberately
- (ii) *This bread cuts (easily) by skilled bakers
- (iii) *This bread cuts (easily) to feed an army

According to Fagan, the fact that the agent sensitive elements above are not possible in the constructions does not show that they do not contain implied Agents. Instead Fagan argues that these elements cannot be added because they focus on the Agent and not on a property of the grammatical subject (1992:156). Nevertheless, Fagan's interpretation of the middle construction focuses on a property of an implied Agent. Thus, *this bread cuts easily* is interpreted (1992:155):

- (iv) People, in general, can cut this bread easily

According to Roberts, middles cannot be formed from state verbs because “middle-formation is a process of stativization” (1987:196). In other words, as middle formation turns an eventive verb into a state, a verb that already denotes a state cannot undergo this process. Similarly, Zwart points out that if middles are generalisations over events, state verbs are necessarily excluded, as they do not denote events (Zwart 1998:121). As noted above, even those middles that do not generalise over events denote how a possible event can be characterised.

Unlike states, verbs belonging to the other aspectual classes can all pick out specific events and should therefore not be excluded from middle formation for that reason. However, it has been noted (e.g. Fagan 1992:68, Zwart 1997:3) that achievement verbs are nevertheless not found in English middle constructions. Possible reasons for that will be discussed in section 4.3. Opinions differ as to whether the middle verb can belong to both the activity class and the accomplishment class. In the next section, I will discuss this issue and examine what determines the aspect in middle constructions.

4.2 Activities and accomplishments in middle constructions

4.2.1 Affectedness

In section 2 I noted that the difference between activities and accomplishments is that verbs of the latter type have an endpoint of the action while verbs of the former type do not. According to Roberts, these two aspectual classes can also be distinguished on the basis of affectedness. While accomplishment verbs always take affected internal arguments, i.e. arguments that have undergone a *change of state* and that correspond to the *Theme* theta-role, activity verbs do not take affected arguments (Roberts 1987: 193, 210-212). Crucially, Roberts claims that the grammatical subject in the middle construction is always an affected argument and therefore only accomplishment verbs undergo middle formation (1987:215). Thus, as the verb phrase in (32) denotes an accomplishment, the complement is an affected argument according to Roberts’ argumentation. As the verb phrase in (34), on the other hand, denotes an activity, the complement is not an affected argument. Although one would expect that only the complement in (32) can become the subject of a middle construction (as in (33)), in fact, also the complement in (34) has this ability (as shown in (35)):

(32) George is reading this short story (accomplishment)

(33) This short story reads quickly

(34) George is reading short stories (activity)

(35) Short stories read quickly

Erteschik-Shir & Rapoport, among others, also present evidence against Roberts’ claim that only accomplishment verbs undergo middle formation in English. As illustrated in (36)-(39), verbs that clearly are activities and that do not take affected arguments may very well undergo middle formation (Erteschik-Shir & Rapoport 1997:136):

(36) Mary drives a fast car (activity)

(37) Fast cars drive easily

(38) John played the piano for hours yesterday (activity)

(39) This piano plays beautifully

As these examples indicate, affectedness is probably not a criterion for the subject in middle constructions, as middles can be formed from verbs that do not take affected arguments at all. Thus, contra Roberts, both Erteschik-Shir & Rapoport (1997:136-138) and Fagan (1992:68-71) argue that both activity and accomplishment verbs undergo middle formation in English. Although they seem to be correct in this claim, they do not consider that aspect in active constructions and in middle constructions might be different. In other words, it is not necessarily the case that a verb in an active construction has the same aspect as the corresponding verb in a middle construction. Zwart claims that the middle verb is always of the activity class, irrespective of whether the corresponding active verb is an activity. Crucially, Zwart argues that the grammatical subject of the middle construction is not a raised complement (1998:110). This claim has certain consequences for the aspect and will be discussed in section 4.2.3.

4.2.2 Entailment tests and previous events

According to Zwart, the middle verb always denotes an activity, regardless of whether the corresponding active verb denotes an activity or an accomplishment (1997:4). This is also reflected in the way Zwart interprets middle constructions. The middle in (40a) is interpreted as in (40b) (1997:4), an interpretation we will have reason to come back to in the next section:

- (40) a. This bread cuts smoothly
b. This bread makes the cutting smooth

To determine the aspect of a middle construction, Fagan examines the aspect of the active counterpart and seems to suggest that it is the same in the middle (1992:68-74). However, according to Zwart, it is not possible to determine the aspect of a middle construction on the basis of the aspect of an active construction. The active verb phrase *read this book* has the entailment pattern of an accomplishment (1998:121):

- (41) I am reading this book *does not entail* I have read this book
(42) I stopped reading this book *does not entail* I have read this book

Although the active verb phrase does not entail the perfect form and is therefore an accomplishment, the middle construction *this book reads slowly*, has the entailment pattern of an activity, according to Zwart (ibid):

- (43) This book reads slowly *entails* This book has read slowly
(44) This book stopped reading slowly *entails* This book read slowly

In the middle construction *this book reads slowly*, slowness is thus attributed to the activity of reading. However, although this is sometimes the case, it does not seem to be sensible to claim that all middle verbs denote activities. In the sentences in (45) and (46), for instance, the verbs denote accomplishments according to the entailment test:

- (45) This chicken kills easily *does not entail* This chicken has killed easily
(46) This vase breaks easily *does not entail* This vase has broken easily

As the middles in (45) and (46) do not entail the existence of previous events, they have entailment patterns typical of accomplishments. However, as capacity middles never entail the existence of an event, this type of test will indicate that they always contain

accomplishment middle verbs. Consequently, the entailments in (43) and (44) are true only when the middles are of the habitual type. When they are capacity middles, there is no entailment, and the verbs would therefore denote accomplishments. That does not seem to be correct as *this book reads slowly* means that the activity of reading is slow, regardless of whether it is a capacity middle or a habitual middle. In fact, entailment tests do not always seem to be reliable ways to determine the aspect of the middle construction. Although habitual middles entail the existence of a previous event, not all of them denote activities, as I show in the next section. In the same way, although capacity middles never entail the existence of an event, that does not mean that the verb in capacity middles is never of the activity class. Instead, the aspect of the middle construction is dependent on the verb together with the subject and the modifying element rather than on the existence or non-existence of previous events.

4.2.2 *Compositionality*

As discussed in section 2, aspect is determined compositionally, i.e. by the verb together with the complement. In middle constructions, the complement has moved out of the VP to the grammatical subject position and the question is whether it has or has not affected the aspect before raising out of the VP. At first glance, the subject, i.e. the raised complement, does not seem to be of importance for aspect in middle constructions in the way the complement is of importance for aspect in active sentences. The sentences in both (48) and (50) are activities although the subject in the former is a mass noun and the subject in latter is a count noun:

(47) John is reading books *entails* John has read books (activity)

(48) Books read slowly (activity)

(49) John is reading this book *does not entail* John has read this book (accomplishment)

(50) This book reads slowly (activity)

However, as was seen in section 2, *read this book* can be either an accomplishment or an activity in its active use. It has the entailment pattern of an accomplishment (as in (49)) but can nevertheless appear with a *for a certain time* phrase, in which case it denotes an activity. The sentence in (50), thus, cannot be taken as evidence for an analysis where the subject of the middle construction has no importance for the aspect of the construction. Instead, as we will see in a moment, the subject is very likely to have an influence on the aspectual interpretation. The nature of the verb and the modifying element also seem to be of importance for aspect in middle constructions.

The question at stake here seems to be whether the adverbial, as Fagan claims “describe[s] how the action of the predicate can be carried out with respect to the entity specified by the subject” (1992:41) or whether it, as claimed by Zwart, only “predicates over the activity itself” and thus not over the predicate in relation to the subject (1998:112)⁵. Evidence in favour of Fagan’s analysis is provided by the following examples:

(51) This book reads slowly (activity)

(52) This book reads in no time (accomplishment)

Zwart’s interpretation of the sentence in (51) would be *this book makes the reading slow*. In his interpretation, thus, it is not necessarily *the reading of this book*, but rather *the reading* in general, that is slow. Zwart argues that the subject of the middle construction is generated in

⁵ The following discussion can also be tied to a more general question of where adverbs are generated.

the external argument position of the verb, where it gets a causative or permissive interpretation (but not an agentive interpretation). The subject is thus not a raised internal argument and instead the adverbial is the complement of the verb (Zwart 1998:110-111). *Read* is one of the verbs that can appear with or without a phonologically overt complement. Appearing without a phonologically overt complement, this verb is nevertheless interpreted as having a generic or unspecified complement. In such a case, the verb phrase denotes an activity and can appear with a *for a certain time* phrase but not with an *in a certain time* phrase (Tenny 1994:43-44):

(53) John read for a long time/*in no time

As the middle in (51) denotes an activity, Zwart's interpretation (where the subject is not a raised complement) is not impossible. However, I would nevertheless argue that a more plausible interpretation is one where the subject is of importance, so that what is slow is *the reading of this book*. Further support for this analysis is provided in the middle in (52). The *in no time* phrase cannot appear with the verb *read* when it appears without a complement, as was illustrated in (53). As the middle in (52) is well-formed, this suggests that the subject is in fact a raised complement and that the adverbial predicates over the verb in relation to this subject. If this analysis is correct, it thus seems to put into question the structure of the middle construction provided by Zwart, as that structure cannot account for the fact that sentences like the one in (52) can be interpreted.

The pair in (51) and (52), thus, differs only with regard to the adverbial that, in the case in (52), yields an accomplishment reading. In this sense, middle constructions seem to be very much like active sentences where the presence of a *for a certain time* phrase or an *in a certain time* phrase results in different aspectual readings. In the same way as an *in a certain time* phrase can be added to some middles, it is sometimes possible to add a *for a certain time* phrase to a middle construction:

(54) This paper reads painlessly for ten minutes

At least in some cases, it is thus possible to determine the aspect of the middle construction by adding a phrase of one of the types above.

The subjects of the middles in (51) and (52) are count nouns but nevertheless, one of the sentences denotes an activity and the other an accomplishment, depending on the modifying element. In the middles in (55)-(57), on the other hand, the modifying elements do not change the aspect of the construction. All of them denote accomplishments:

(55) This chicken kills in no time (accomplishment)

(56) This chicken kills quickly (accomplishment)

(57) This chicken kills easily (accomplishment)

The verb phrase *kill this chicken* always implies a change of state of the complement, thus an accomplishment. To turn this middle into an activity, the subject must be changed into a mass noun, e.g. *chickens*:

(58) Chickens kill easily (activity)

(59) Chickens kill in no time (activity)

As *chickens* is a mass noun, there is no specified endpoint of the killing, and therefore these sentences denote activities. Notably, the nature of the subjects is more important than the

modifying elements in (58) and (59). While the adverbial *in no time* turned the middle in (52) into an accomplishment, the same adverbial fails to do that in (59), precisely because the subject is not a fixed quantity. In this case, it seems plausible to assume that each individual chicken is killed *in no time*, but not necessarily that the event as a whole is carried out *in no time*.

Like *kill*, the verb *lock* is a change of state verb. Unlike *kill* however, *lock* can involve generalisation over events even when the complement is a fixed quantity. Thus, the constructions in (60) and (61) can be either capacity or habitual middles:

- (60) This door locks at the first attempt (accomplishment)
- (61) This door locks in five seconds (accomplishment)

The sentences in (60) and (61) involve changes of state. When they are capacity middles they clearly denote accomplishments. The door is such that it can be locked (go from an unlocked to a locked state) at the first attempt or in five seconds. The question is whether these sentences denote activities or accomplishments when they involve generalisations over events. It seems plausible to assume that they denote accomplishments, in the same way as the active sentence in (62) denotes an accomplishment:

- (62) George drinks a glass of milk for breakfast (accomplishment)

The sentence in (62) can either refer to a single breakfast event where *George is drinking a glass of milk* or it can express generalisations over events. In the latter case, the sentence can, for example, mean: *George normally drinks a glass of milk for breakfast*. The reading that expresses generalisations over events is arguably more prominent than the reading that picks out a specific event, as the latter would normally be indicated with the progressive form. Arguably, the sentence in (62) is an accomplishment even when it expresses generalisations over events. In the same way, the sentences in (60) and (61) denote accomplishments although they entail previous events when they are habitual middles. The same is true for the sentence in (52). It thus seems reasonable to say that the entailment test is not always a good way to determine the aspect in middle constructions, as habitual middles, although they have the entailment pattern of activities, may denote accomplishments and as capacity middles, although they never entail the existence of a previous event, may denote activities.

As we have seen, the aspectual interpretation of the middle construction depends on the verb, the modifying element and the subject, which is arguably a raised complement. Middles that have count noun subjects can, in some cases, denote accomplishments. A mass noun subject, on the other hand, does not provide the action denoted by the verb with an endpoint, which therefore denotes an activity. Also the modifying element seems to be of importance for aspect. More precisely, some types of modifying elements can normally only appear with a certain aspectual reading, e.g. *in a certain time* phrases normally pick out accomplishment readings.

4.3 4.3 Achievement verbs

Although achievement verbs can refer to specific events, in the same way as activities and accomplishments, they are nevertheless not found in English middle constructions. In this sense, achievement verbs are thus similar to state verbs, since neither of these verb types undergoes middle formation but both appear in other types of non-eventive constructions:

- (63) *This answer finds easily
- (64) This answer is easy to find

Fagan observes that middles are only formed from verbs that can appear in the progressive form, which would exclude both states and achievements (1992:71). However, as noted by Zwart, among others, an achievement turns into an accomplishment if it takes place over a stretch of time (1998:120). Thus, typical achievement verbs can sometimes appear in the progressive form and consequently denote accomplishments (examples from Zwart 1997:2, 1998:120):

- (65) John is finding solutions to all our remaining problems
(66) John is winning the race

Although, both *find* and *win* can appear in the progressive form they do not form grammatical middles. A possible explanation might be that middle verbs normally do not appear in the progressive form but are restricted to the simple present tense, which is as expected if middles are generics and the progressive form usually expresses a single specific event (Fagan 1992:148). Thus, if *find* and *win* were found in middle constructions, they would not denote accomplishments but achievements. However, this still only confirms that achievement verbs do not undergo middle formation in English, but not why they are unable to do so.

As discussed above, Zwart claims that the middle verb is always of the activity class. Crucially, an accomplishment can be turned into an activity if the endpoint of the action is taken away. The verb phrase *eat an apple*, for instance, denotes an accomplishment but can be turned into an activity if the complement is changed or taken away: *eat /apples/*. An achievement, on the other hand, can be turned into an accomplishment, but not into an activity because the endpoint of the action is the most central thing in the achievement. Thus, the action can be provided with stages before the endpoint (as in the examples in (65) and (66)) but it cannot be stripped of its endpoint. Therefore, both activity and accomplishment verbs can undergo middle formation in English, but achievement verbs cannot (Zwart 1997:3). However, as seen in the previous section, the middle construction does not always denote an activity but in many cases it denotes an accomplishment. Therefore, Zwart's analysis seems only partly correct. It seems plausible to assume that the stages leading up to an endpoint are of some importance in middles, which would explain why achievement verbs are excluded. On the other hand, the intermediate stages are not likely to be the only things of importance, as some middles clearly focus on the endpoint of the action. The reason for achievement verbs not to undergo middle formation in English is thus a topic that calls for further research.

5 Concluding remarks

In this paper, I have discussed the aspectual properties of middle constructions in English. It was observed that both activity and accomplishment verbs can undergo middle formation but that state and achievement verbs, on the other hand, do not have this ability. State verbs are excluded because they do not refer to events and the middle construction, although it is non-eventive, gives a characteristic of a possible event. While it is not entirely clear why achievement verbs do not undergo middle formation in English, a possible explanation might be that they, as opposed to activities and accomplishments, lack intermediate stages before the endpoint of the action denoted by the verb. However, although the intermediate stages seem to be of much importance in some middles, other middles, nevertheless, focus on the endpoint of the action.

The middle verb either denotes an activity or an accomplishment. Notably, the aspect of the middle verb is not always the same as a corresponding active verb. As middle constructions

do not pick out specific events and the so-called capacity middles do not even imply the existence of an event, it is slightly questionable as to what extent entailment tests can be used to determine the aspect in middle constructions. Even for middles that generalise over events, entailment tests are not always reliable. Instead, an *in a certain time* phrase or a *for a certain time* phrase can sometimes be used to disambiguate the aspectual reading.

Aspect is determined compositionally in both active and middle constructions. In middles, both the subject and the modifying element are of importance for the aspectual interpretation. In this paper, I have thus argued against Zwart's claim that the adverbial modifies the action denoted by the verb alone and not in relation to the surface subject. The examples of middles given above that contain an *in a certain time* phrase seem to indicate that the subject of the middle is in fact a raised internal argument. Zwart's proposal that the subject of the middle construction does not originate as an internal argument of the verb but is generated directly as the external argument of the verb can thus be put into question.

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