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The Aspectual Complexity of the Simple Past in English. A Comparison with French and Danish

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Throughout his work, Niels Davidsen-Nielsen has consistently shown how fruitful and productive the comparative study of English and Danish can be, e.g. in his 1990 book *Tense and Mood in English. A Comparison with Danish*. In our contribution to this festschrift, we will take the same approach and discuss a topic from the comparative study of tense in English, French, and Danish.

We want to investigate some problems connected with the semantics of the English simple past, which sometimes is ambiguous and sometimes is not, as far as the distinction between telic and atelic interpretation is concerned.¹ In this connection we have found it useful to compare the English simple past with French passé simple and imparfait, which are consistently unambiguous in this respect, and the Danish simple past, which with most verbs² is consistently ambiguous in the same respect.

1. Making time go by

There is a clear distinction between the interpretations of English sentences with the simple past, e.g. *smiled*, and the past progressive, e.g. *was smiling*, cf. the following examples:³

- (1) Marianne looked at Niels. He smiled.
- (2) Marianne looked at Niels. He was smiling.

The two predicates *smiled* and *was smiling* are both instances of past tense, that is, they both describe an eventuality which precedes the point of utterance, but coincides with the point of reference in a Reichenbachian analysis (Reichenbach 1947: 290, S. Vikner 1985, Davidsen-Nielsen 1990: 59ff). Nevertheless, the two predicates have different interpretations. The most prominent interpretation of (1) is the one which sees it as describing an episode where Niels starts smiling when or

¹We would like to thank Robin Cooper for bringing these problems to our attention, Roger Schwarzschild and Rex Sprouse for helpful comments and discussion, and Irène Baron and Anthony Hull for native speaker judgments.

²The qualification alludes to the verb pairs *vareblive* and *have/få* to which we return in section 3.2.1 below.

³These examples are adapted from Kamp & Reyle 1993: 547, cf. also Ogihara 1990: 11.

after Marianne starts looking at him. The description in (2), on the other hand, suggests that Niels is already smiling when Marianne starts looking at him. Thus, in (1) we get the impression that the *smiled*-sentence is moving the narrative time forward, whereas no such moving of the time takes place with the *was-smiling* sentence in (2). This effect comes about because *smiled* in (1) introduces a new reference point which follows the reference point of *looked at*, whereas in (2) *was smiling* takes over the reference point of *looked at* (see e.g. C. Vikner 1986: 82f).

In French a similar effect is obtained by means of the *passé simple*⁴ and the *imparfait* respectively, so that (3) and (4) below are equivalent to (1) and (2) respectively:

- (3) Marianne regarda Niels. Il sourit.
'Marianne looked at Niels. He smiled (*passé simple*).'
- (4) Marianne regarda Niels. Il souriait.
'Marianne looked at Niels. He smiled (*imparfait*).'

In Danish, however, the situation is different. Danish, like German and most other Germanic languages, has only one past form corresponding to the two forms in English and in French. So if we try to reconstruct examples (1) - (4) in Danish we get the following example:

- (5) Marianne så på Niels. Han smilede.
'Marianne looked at Niels. He smiled (*simple past*).'

In (5) the sentence *Han smilede* is ambiguous between the two readings in (1) and (2) (and (3) and (4)).⁵

Thus we are faced with the following problem: Why does the time move in (1) and (3), but not in (2) and (4), and why may (5) be interpreted either way? In other words, why does *smiled* (and *sourit*) introduce a new reference point, while *was smiling* (and *souriait*) does not?

In the following we will try to answer these questions. In section 2 we first give a short description of processes, states and events. Then, in section 3, we discuss the aspectual properties of the English simple past, and in section 4 the problem of whether a progressive sentence describes a process or a state. Finally, in section 5, we consider the use of the English simple present.

2. Processes, states and events

The notion of a process will be a major issue in our discussion. Therefore, we start with a brief sketch of our conception of processes.

We follow a view which has gained general recognition in the literature on tense and aspect and which has it that one can distinguish four main types of eventualities (or situations). The four types have been described by Vendler (1967), who calls them states, activities, accomplishments and achievements. Partly following Bach (1981: 61), we will use the following designations, which appear to us to be more intuitively transparent: states, processes, complex events and atomic events.

Here follow some sample sentences which in their most natural readings are interpreted as descriptions of different types of eventualities, i.e. as belonging to different aspectual classes. States: *She was intelligent*, *She had a bicycle*. Complex events: *She wrote a novel*, *She mowed the lawn*. Atomic events: *She began to sing*, *She found a ten-pound note*. It is much more difficult to give straightforward examples of sentences describing processes, because the very sample sentences in English constitute part of our problem. Vendler's exemplification of the notion of a process (activity) goes like this: "running, walking, swimming, pushing or pulling something, and the like are almost unambiguous cases of activity" (Vendler 1967: 107). That is, he presents no complete process-describing sentences. If we have recourse to other languages, the exemplification is somewhat easier. Thus, in their most prominent reading French *Elle nageait dans la piscine*, German *Sie schwamm im Schwimmbecken herum* and Danish *Hun svømmede rundt i bassinet* (which all translate as "She was swimming around in the pool"), are taken to be process descriptions.

Let us now have a closer look at processes.⁶ Processes are like events in certain respects, and like states in others.

Processes and events are alike in that they are dynamic eventualities, i.e. in an event and in a process some kind of change necessarily occurs. An atomic event consists only of one such change from one state to another. Complex events and processes consist of series of subevents. States, on the other hand, are incompatible with any kind of change. Complex events and processes may contain gaps, at least if the gaps do not exceed some pragmatically determined maximum length. In the process of writing a novel, for instance, it is normal that from time to time the author is busy doing something else than tapping at a keyboard, and yet we would still say that he or she is engaged in the process of writing a novel. Such gaps are impossible with states. Cf. Dowty 1979: 139, Gabbay & Moravcsik 1980: 64f.

⁴The use of the *passé simple* in modern French is limited to literary style. In everyday language it has been replaced by the present perfect. This means that the French present perfect has become ambiguous between a perfect sense and a past sense, which is why we prefer to retain the unambiguous *passé simple* in our examples.

⁵An unambiguous rendering of *He was smiling* can be obtained in Danish with expressions like *Han sad og smilede* ('He sat and smiled'), *Han stod og smilede* ('He stood and smiled'), etc.

⁶The following short description is partly similar to points of view put forth, for instance, in Vendler 1967, Mourelatos 1978: 424ff, Platzack 1979: 67-121, Bach 1981: 67ff, Krifka 1989: 173ff, Smith 1991: 44f, Kamp & Reyle 1993: 563ff, but it also differs from these in some respects, most notably with regard to the issue of starting points (cf. also C. Vikner 1986: 70f; 1994: 144ff).

Processes and states, which we will comprise under the designation atelic eventualities, are alike in that they are homogeneous, i.e. any part of an atelic eventuality is of the same sort as the whole. Probably related to this, atelic eventualities do not include an initial or a final endpoint.⁷ As a matter of fact, most eventualities must have started at some time and have stopped or will stop at some other time, but the beginning and the end of an atelic eventuality are in themselves atomic events and do not constitute parts of the atelic eventuality itself. When one describes an eventuality as atelic, e.g. with a process description like *Elle nageait dans la piscine*, this description abstracts away from the beginning and the end of the swimming process. This process is described as going on, the beginning and the end of it are, so to speak, invisible in the process description, i.e. for such a sentence to be a true description of the eventuality *E* going on or holding at a certain time *t* it must be the case that *E* started before *t* and will continue for some time after *t*.

Thus we can illustrate the internal structure of the four eventualities informally as shown in figure 1:

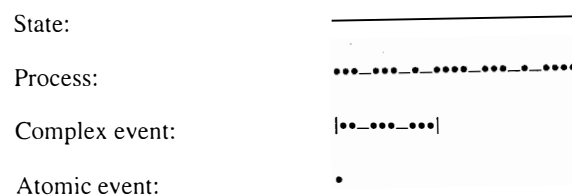


Figure 1: Eventuality structures.

In narrative texts event descriptions have the effect of making narrative time move forward by introducing a new reference point following the preceding one. Atelic descriptions, on the other hand, do not have this effect, they describe eventualities which hold at the time of the current reference point, i.e. the reference point of the preceding eventuality description (cf. for instance Kamp & Rohrer 1983, Cooper 1986: 32ff, Dowty 1986: 37f, Krifka 1989: 174, Parsons 1990: 214). That is why in a narrative discourse like the following, the second sentence (a state description) does not move narrative time forward:

- (6) Marianne looked at Niels. He was fast asleep.

Whereas time does move, when the second sentence is an event description:

- (7) Marianne looked at Niels. He stopped talking.

⁷For a somewhat different view of the endpoint property, see Smith 1986: 100f; 1991: 37 and 45.

It is well-known that expressions containing verbs that lexically denote a certain kind of eventuality for several reasons may be involved in aspectual shifts resulting in their denoting a different eventuality (cf. for instance Mourelatos 1978: 419 and Dowty 1979: 60ff). Most important for our purpose is the aspectual shift whereby a process description is changed into an event description. This may come about either by making visible and picking out the beginning of the process (the so-called inceptive use) or by including both the beginning and the end of the process into the description (cf. C. Vikner 1986: 92 and Smith 1991: 48f).

3. Simple past: states, events or processes

3.1. Compositionality of aspect

The aspect of a sentence is built up compositionally of contributions from various parts of the sentence. The lexical aspect of the verb is only one of these, along with e.g. the semantics of complements and adverbials. One of these contributors may be a morphological tense-aspect element in the verbal inflection. In French, for instance, the two past tenses, the *passé simple* and the *imparfait*, may be conceived of as aspectual functions which ascribe a certain aspect to a sentence such that a sentence in the *passé simple* always describes a telic (or perfective) eventuality, and a sentence in the *imparfait* an atelic (or imperfective) eventuality (C. Vikner 1986: 89ff, see also Kamp 1981: 45ff and Kamp & Rohrer 1983). This theory, together with the above mentioned principle of the movement of narrative time, gives an explanation of the two French examples (3) and (4). The possible interpretations of the Danish example (5) may be explained by assuming that the Danish simple past is aspectually neutral, i.e. it does not contribute to the aspectual composition. This would permit the second sentence in (5) to be interpreted either as an event description or as a process description.⁸ Now, it is tempting to assume that English is like French here, i.e. that the English simple past behaves like the French *passé simple*, and the English past progressive like the French *imparfait*.⁹ However, this assumption does not stand up to a closer scrutiny, as will be clear from the following.

We would like to propose the alternative hypothesis that the English progressive is an aspectual function which always gives process descriptions, whereas the English simple past is aspectually neutral apart from the fact that it cannot describe processes. This hypothesis, together with the principle of the movement of narrative time, accounts for the English examples (1) and (2).

⁸Actually, in (5) the first sentence too may be interpreted either as an event description or as a process description, so that (5) exhibits a fourway ambiguity much like the one discussed in connection with (8) below.

⁹As a matter of fact, Dowty (1986: 60) considers the possibility of ascribing identical semantics to the French *imparfait* and the English progressive.

Our view of aspect in English, French and Danish can thus be illustrated as follows:¹⁰

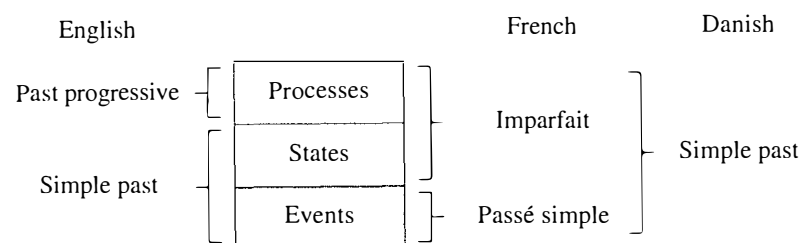


Figure 2: Aspects in the past tense in English, French and Danish.

There is no doubt that the progressive gives atelic descriptions. On the other hand, it is an open question whether these are state descriptions or process descriptions. There is no consensus in the literature on aspect on this point. We will return to the progressive problem below in section 4. In the remaining part of the present section we will have a closer look at the English simple past.

3.2. Simple past and states

If, contrary to our hypothesis, the English simple past were an aspectual function of the same kind as the French *passé simple*, all sentences in the simple past should describe events. This is not the case. Simple past sentences may very well describe states. This is seen both in connection with underlying (or lexical) state descriptions, and in connection with generic sentences.

3.2.1. Underlying state descriptions

If the underlying expression is a state description, the simple past sentence is ambiguous between a state description and an event description. This is clear in an example like (8):

- (8) They were married. They had a baby.

Here we have two sentences with underlying state predicates: *be married* and *have a baby*. In combination with the simple past, each of these predicates has two

readings, which give rise to four different interpretations of (8). In French, the aspectual difference between the *passé simple* and the *imparfait* has the effect that each of the four interpretations is expressed differently. The same is true in Danish, where the difference is marked lexically by means of the opposition between the state verb *være* ('be') and the event verb *blive* ('be, become'), on the one hand, and on the other hand between the state verb *have* ('have') and the event verb *få* ('have, get') (see e.g. S. Vikner 1988: 12f). The Danish and French data are shown in (9):¹¹

- (9a) French: Ils étaient mariés. Ils avaient un bébé.
 Danish: De var gift. De havde en baby.
 'They were man and wife. They were parents.'
- (9b) French: Ils étaient mariés. Ils eurent un bébé.
 Danish: De var gift. De fik en baby.
 'They were man and wife. They became parents.'
- (9c) French: Ils furent mariés. Ils avaient un bébé.
 Danish: De blev gift. De havde en baby.
 'They became man and wife. They were parents.'
- (9d) French: Ils furent mariés. Ils eurent un bébé.
 Danish: De blev gift. De fik en baby.
 'They became man and wife. They became parents.'

Similarly, if we insert a simple past sentence with an underlying state description in (1), the result will also be ambiguous:

- (10) Marianne looked at Niels. He was confused.

This last sentence may mean either 'He was already in a state of confusion', and in this case time does not move, or 'He was thrown into a state of confusion', and then time does move with the occurrence of the new event.

3.2.2. Generic sentences

Another case where sentences in the simple past may describe states are generic sentences, which are discussed in detail in Krifka et al. 1995.

Generic or characterizing sentences are sentences which express generalizations,

¹¹The sentence *Ils furent mariés* in the two last French examples can only be interpreted as an agentless passive, cf. e.g. *Ils furent mariés par un pasteur danois* ('They were married by a Danish priest'). The natural way of rendering the most salient event interpretation of *They were married* in French would be by means of the sentence *Ils se marièrent* ('They married (*passé simple*)'). This does not affect our main point here, however.

¹⁰Here, as everywhere else in this paper, we have to omit any discussion of the use of the past and the present perfect.

thereby abstracting away from particular events and facts. The generalization is often of a dispositional or habitual character, as in the example:

- (11) He smokes a cigar after dinner.

Adverbs like *usually*, *typically*, *always*, *often*, *every morning* etc. enforce a generic reading (cf. Krifka et al. 1995: 3, 7). It is generally agreed that generic sentences express a property and therefore are always aspectually stative (cf. Vendler 1967: 108f, Krifka et al. 1995: 17, Chierchia 1995: 207, Carlson 1995: 232).

It is interesting for our problem that the progressive is excluded in generic sentences (Krifka et al. 1995: 12), whereas the simple past has a "natural generic interpretation" (Chierchia 1995: 197). The following are examples of generic sentences in the simple past:

- (12a) He (usually) smoked a cigar after dinner.
 (12b) When Marianne looked at Niels, he was (always) confused.
 (12c) In 1989 he played tennis.

The last example is adapted from Krifka et al. 1995: 36. Because generic sentences are state descriptions, one would use the imparfait in French in examples like those in (12). Looked at in isolation, an English sentence in the simple past is often ambiguous between a generic and an episodic reading (i.e. a reading referring to a specific situation), whereas the use of the past tenses in French avoids this ambiguity, cf. (13):

- | | |
|------------------------------------|---------------------|
| (13a) She got up at 6 o'clock. | Generic or episodic |
| (13b) Elle se levait à six heures. | Generic |
| (13c) Elle se leva à six heures. | Episodic |

3.3. Simple past and events

What we tried to argue above, was that the simple past can describe states. According to our hypothesis, the only other possibility for the simple past is to describe an event (complex or atomic). That the simple past can describe events in sentences with verbs which are lexically stative was shown in (8) and (10) above.

With underlying event descriptions, there is no doubt that the event reading is preserved in simple past sentences, cf. the examples in (14):

- (14a) She wrote a novel.
 (14b) She mowed the lawn.
 (14c) She began to sing.
 (14d) She found a ten-pound note.

What happens then when an underlying process expression is combined with the simple past? In this case we think that a process interpretation is excluded and that the process expression is transformed into an event sentence. This may take place in one of two ways. Either the sentence is interpreted as describing the onset of the process, this is the so-called inceptive or ingressive meaning, where the result is an atomic event description, or the process is seen as a completed whole with beginning and end, i.e. we get a complex event description.

An example of the first possibility is given in (15):

- (15) Mary ran at 2:30.

which normally will be interpreted as "Mary started to run at 2:30". This example along with its interpretation is taken from Vlach 1981: 276.

The second possibility, where the process description is transformed into a complex event description with beginning and end may be illustrated as in:¹²

- (16a) Mary slept badly last night.
 (16b) Peter ate sweets all afternoon.

Thus we see that a situation may be described or viewed in two different ways, just as one and the same item may be described or viewed either as a mass (e.g. *some wood*) or as an individual (e.g. *a board*, *a piece of wood*).

Not all process expressions can be straightforwardly transformed into event descriptions. Often there are pragmatic/conceptual difficulties connected with imposing an event interpretation on a process expression. This is why sentences with process verbs in the simple past such as *She walked* often sound strange when seen in isolation, cf. Kamp and Reyle 1993: 563f and Sandström 1993: 188.

3.4. Simple past and processes

In our opinion, the process reading with simple past sentences is not available. Underlying state or event expressions cannot be transformed into process descriptions by combination with the simple past, and underlying process expressions when combined with the simple past are uniformly interpreted as event descriptions. Presumably the fact that the progressive unambiguously denotes a process, as argued in section 4 below, somehow blocks a process reading of simple past sentences.¹³

¹²See also Pustejovsky (1995: 65f), who characterizes *slept* as "an individuated event".

¹³This description is true only of colloquial English. In literary texts it is possible to describe processes by means of the simple past, cf. the following passage from Aldous Huxley: *Brave New World*, Penguin Books, 1955, p. 20f:

"And in effect the sultry darkness into which the students now followed him was visible and crimson (...) among the rubies *moved* the dim red spectres of men and women with purple eyes and all the symptoms of lupus. The hum and rattle of machinery faintly *stirred* the air."

According to our informants, there is no semantic difference in such contexts between the simple past and the past progressive, and the use of the simple past has a distinctly literary flavour.

The unavailability of a process reading of the simple past with process verbs can be shown by contexts with *already*. The French equivalent of *already*, *déjà*, may normally only be combined with the imparfait, not with the passé simple (Togeby 1982: 347f). In other words, *déjà* forces the sentence to take on an atelic reading and only admits event readings under particular circumstances. In English, the event reading with *already* seems completely excluded, cf. the following examples where process verbs in the simple past are impossible:

(17a) When he came home, she was already sleeping.

(17b) *When he came home, she already slept.

The fact that sentences such as *He smiled – She ran – She swam – It rained* describe events and not processes has given rise to some curious effects in the literature on tense and aspect. This is most conspicuous in works by Anglophone linguists, and among them especially in the works of those who take the progressive to denote a state. This is not so surprising, because if *was smiling* is taken to describe a state, how do you describe the smile-process? A natural conclusion is that this is done by means of *smiled*. This results in many extraordinary statements about processes.

Often sentences in the simple past which in our view clearly must describe events are used as examples of process descriptions. In some cases with the inceptive reading:

(18) Max ran when I arrived. (Vlach 1981: 273)

In other cases denoting a complete delimited eventuality, i.e. a complex event, sometimes even combined with a delimiting adverbial or complement:

(19a) John pushed the cart for hours. (Mourelatos 1978: 426)

(19b) John ran (for an hour). (Bach 1981: 67)

(19c) Mary walked to her house yesterday. (Pustejovsky 1995: 13)

Note that the French equivalents of the examples in (18) and (19) would use the passé simple, as shown in (20):

(20a) Max courut quand j'arrivai.

(20b) John poussa le chariot pendant des heures.

(20c) John courut (pendant une heure).

(20d) Mary rentra à pied hier.

Most surprising, however, is the treatment of processes in Parsons (1990). Parsons uses the sentence *Mary ran* as a prototypical example (p. 21, cf. also p. 183). He furthermore admits to some uncertainty about the process notion: "I see a fairly clear distinction between events and states, and I see less clarity (along with less importance) about how processes fit in" (p. 34). In his definitive explanation of the

difference between processes and events (p. 183f), he arrives at the conclusion that processes are a particular type of events, and he ascribes to them a culmination, which is in our opinion precisely a crucial defining property of events in contradistinction to processes. See also note 14 on p. 306, where he attributes to processes some properties that non-Anglophone linguists normally consider typical of events: "The past tense sentence must be made true by a process that has already culminated, and the usage principle that when we use a process sentence we implicitly limit our quantifiers to maximal processes yields the implication that no other process of the same kind is still going on." In other places he describes processes in a completely uncontroversial way, e.g. "Processes ... are like states in apparently having no natural finishing points" (note 26 p. 21), "a process is a spread-out homogeneous thing" (p. 317). It is our guess that these unusual suggestions have their roots in the interpretation of sentences like *Mary ran* as process descriptions.

To sum up: We think that with a process verb in the simple past, a process reading is excluded. This means that there are the possibilities generic state or event. The generic state reading is often impeded or ruled out for pragmatic reasons, so that only the event reading emerges, and this is exactly what happens in the example in (1).

4. Progressive: states or processes

The linguists who work on aspect are divided into two camps over the denotation of the English progressive. In one camp the progressive sentences are taken to describe processes, in the other to describe states. The process camp includes Vendler (1967), Mourelatos (1978), Dowty (1979: 163ff; 1986: 44) and Krifka (1989). In the state camp we find people like Vlach (1981), Bach (1981), Kamp & Reyle (1993: 508), Sandström (1993), Parsons (1990) and Cooper et al. (1996: 336ff). Even though it looks as if the state view is the more popular these days, we join the process camp, as will be apparent from the previous discussion.

The state view seems to be based on Vlach 1981. Vlach's argumentation builds on the observation that if we compare the three sentences in (21):

(21a) Max was here when I arrived.

(21b) Max was running when I arrived.

(21c) Max ran when I arrived.

then (21a) and (21b) have an aspectual property in common, in that (21a) indicates that "Max must have been here for some period preceding and extending up to the time of my arrival", and similarly (21b) indicates that "Max was running for some period preceding and extending up to the time of my arrival" (Vlach 1981: 273f). As (21a) describes a state, Vlach concludes that this must be the case for (21b) too, and that is why he turns the property referred to into the defining property of statives in

contradistinction to processes. In (21c), on the other hand, Vlach takes *Max ran* to describe a process which “took place at the time of or slightly after my arrival, not before” (Vlach 1981: 273). We believe that this reasoning is flawed. The aspectual property of an expression φ that when we have φ *when* ψ , the φ describes an eventuality that has started before the eventuality described by ψ occurs (cf. (21a) and (21b)), is common to atelic eventualities (i.e. states *and* processes). It is not a property that can be used for telling state descriptions apart from process descriptions. Therefore it cannot serve as an argument for including progressive sentences among state descriptions. In addition to this, the property which Vlach describes in connection with (21c) is a property that is typical of events, not of processes, cf. also Krifka (1989: 174f).

However, even if we give up Vlach’s definition of states and let his defining property define processes too (which we think it should), this does not entail that a progressive sentence must denote a process, only that it may. We have three reasons for taking progressive sentences to describe processes and not states. First, we are impressed by the observation in Krifka (1989: 31f) that state predicates select a generic (kind-referring) interpretation of mass and plural terms, cf.:

- (22a) Dogs bark.
(22b) Cats hate dogs.

By contrast, dynamic predicates select an object referring interpretation, as in (23), where the reference is necessarily to some specific dogs in a specific situation:

- (23) Dogs are barking.

Second, the eventualities described by progressive sentences admit of gaps. For instance, it is possible to say (24a) pointing to a chair which is empty because John for a moment has left his seat, but such a situation cannot be described by means of (24b), which conveys a state description. (24c) on the other hand gives a habitual reading, i.e. a generic state description.

- (24a) John is sitting there.
(24b) John is in that chair.
(24c) John sits there.

Now, as we showed in section 2, it is precisely a typical property of dynamic eventualities, as opposed to states, that they admit of gaps. Citing an example similar to (24a), Vlach (1981: 280) also notes this peculiarity of progressive sentences, though without drawing the conclusions drawn here.

Third, as Smith (1991: 37) points out: “In contrast with Activities, the event closest in temporal properties, states lack shifts or variation; this difference is reflected in the difference between *The child is asleep*, *The child is sleeping*.” One might add that there is even a sharp contrast between progressive sentences and

state sentences with respect to adverbial modification possibilities, as shown in (25a-b):

- (25a) The child is sleeping fitfully.
(25b) *The child is asleep fitfully.

Sandström (1993: 83f) suggests that only state expressions can appear as complements to epistemic modals, observing that examples like (26a) and (26b) have an epistemic reading, whereas (26c) can express only obligation, not epistemic necessity:

- (26a) He must have left.
(26b) He must be leaving.
(26c) He must leave.

If this reasoning is sound, it constitutes a serious argument in favour of the state reading of progressive sentences. However, we do not think that Sandström is right here. Epistemic modals are not restricted to taking state expressions as complements. Thus the following example with *must* plus the event verb *come* clearly has the epistemic reading ‘it is necessarily the case that ...’:

- (27) He must come soon.

Admittedly, it is difficult not to connect an obligation reading with (26c). But imagine a diplomatic party with two spies waiting impatiently for the ambassador to leave the party. Knowing that the ambassador has an important appointment in a few minutes, one of the spies could utter (28) to the other, thus using *must leave* with an epistemic reading.

- (28) He must leave soon.

Similarly, the following examples with *may* and an event expression, (29a), and a process verb, (29b), both can express epistemic possibility (as well as deontic permission):

- (29a) He may come at any moment.
(29b) He may work.

Thus we do not agree with Sandström when she says that only state expressions may occur as complements of epistemic modals, and therefore the wellformedness of (26b) does not present a problem for our analysis of progressive sentences as denoting processes.

By analysing progressive sentences as denoting processes rather than states, we also avoid postulating the existence of a particular kind of state with a surprising amount of properties in common with processes, cf. e.g. Parsons 1990: 171, 234: “the “In-Progress” state”, or Cooper et al. 1996: 338: “a state which temporally includes (or is equivalent to) some process of the appropriate type”.

We would like to end this discussion of the progressive by addressing the difficulty of combining state expressions with the progressive. Vlach claims that his hypothesis gives an explanation for this difficulty:

(30) *He is knowing the answer.

Vlach's position is that the progressive is an aspectual function taking a process expression as input and yielding a state description as output. This may be illustrated by the following formula:

(31) $\text{Progr}(E_{\text{Proc}}) = E_{\text{State}}$

In Vlach's (1981: 274) words: "The function of the progressive operator is to make stative sentences, and, therefore, there is no reason for the progressive to apply to sentences that are already stative". We do not find this particularly convincing. In French, nothing prevents the use of the imparfait in sentences that "are already" atelic.

We think, on the other hand, that the progressive is an aspectual function taking an expression of any aspectual type as input and yielding a process description as output:

(32) $\text{Progr}(E_x) = E_{\text{Proc}}$

Our hypothesis says that the progressive imposes a process reading on an underlying expression of whatever aspectual type. If this hypothesis is correct, then the explanation of the unacceptability of examples like (30) is that it is not all kind of state descriptions which may be transformed into process descriptions, and that in a case like (30) it is difficult to imagine a process interpretation of *know the answer*. In certain cases, however, it *is* possible to change a state expression into a process sentence in the progressive, cf. for instance (33):

(33a) He is silly.

(33b) He is being silly.

(33b) means something like "he is acting in a silly way". Here it is not difficult to imagine a dynamic sequence (i.e. a process) corresponding to such a description.

5. The simple present

Above, we have argued that, irrespective of the underlying aspect, simple past sentences in English always describe either a state or an event.

If we now take a look at sentences in the simple present¹⁴, it turns out that the

picture is very much the same here. However, there is one fundamental difference to be noted between past and present tense sentences. It stems from the conceptual impossibility of describing an event as occurring at the present moment (cf. Kamp & Reyle 1993: 536f). This impossibility is found not only in English, but in other languages as well.

Thus for instance, consider the two Danish sentences in (34), which differ only in that (34a) is in the simple past (*vaskede* 'washed'), and (34b) in the simple present (*vasker* 'washes').

(34a) Hun vaskede bilen.

'She washed/was washing the car'

(34b) Hun vasker bilen.

'She washes/is washing the car'

It is striking that whereas the simple past sentence in (34a) has three interpretations, as an event, as a process, and as a (generic) state, the simple present sentence in (34b) lacks the event interpretation and has only the two last interpretations.

Bearing this general constraint in mind, it is to be expected that if the characteristics of the English simple past carry over to the simple present, this last tense should be restricted to describing states to the exclusion of events, and as a matter of fact that is exactly the case. Thus the sentences in (35) have only a habitual or dispositional reading (see e.g. Davidsen-Nielsen 1990: 114f), i.e. they describe generic states: As with the English simple past a process reading is excluded, and as in other languages an event reading is impossible because an event cannot be co-temporal with the time of utterance.

(35a) She washes the car.

(35b) She walks.

It is also remarkable that (36) has only a state reading and does not present the four-way ambiguity seen with the corresponding simple past example, cf. (8) and (9) above.

(36) They are married. They have a baby.

This is not the whole truth about the English simple present however. We have had to leave out any discussion of other uses, e.g. the performative use or the particular narrative use of the simple present, the so-called historical present (and its derivative, the so-called reportive use¹⁵), where the simple present functions as a stylistic substitute for the simple past. In this use, the simple present takes over the characteristics of the simple past, most notably the ability to describe events (but

¹⁴For relevant discussion of the English simple present, see for instance Dowty 1979: 135, 167, 189f, Bach 1981: 68f, 75ff, Davidsen-Nielsen 1990: 113ff, 126, Kamp & Reyle 1993: 538.

¹⁵Cooper (1986: 26ff) gives a different account of the reportive reading.

still excluding processes). In this connection it is interesting that Cooper (1986: 29) notes that *John runs* with a reportive reading tends to mean *John begins to run*. This is completely parallel to the cases with the inceptive use of the simple past discussed in connection with (15) above.

In French, the aspectual difference between the passé simple and the imparfait is not found in the present tense, which has only one form, as in Danish. In these two languages, the sole present tense form therefore is aspectually neutral.

Marking the events as somewhat marginal in this connection, the aspects in the present tense in the three languages can be illustrated as follows:

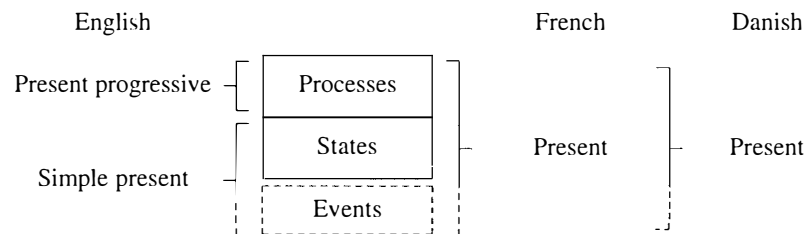


Figure 3: Aspects in the present tense in English, French and Danish.

6. Conclusion

In this paper we have presented arguments in favour of two hypotheses. First that in colloquial English the simple tenses cannot denote processes, but are neutral with respect to states and events. Second that the English progressive denotes processes. The two hypotheses are closely interconnected, because we suspect that it is due to the monopolization of the processes by the progressive that the simple tenses have been ousted from this domain.

The tense forms in French and Danish behave differently from the English ones (as summarized in figures 2 and 3). This means that when translating between the three languages, especially when translating from Danish into English or French, it is necessary to determine the kind of eventuality described by a given sentence (i.e. the aspect of the sentence) in order to choose the correct verb form in the target language. This aspectual determination may involve a number of different factors, such as lexical information and morphological and syntactic form not only of the verb but also of quantifiers, of complements, of modifying adverbials, etc.

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