Analyzing progressives in Norwegian

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In this paper, the Norwegian progressive forms are examined by way of a corpus study, including both a monolingual corpus and a Norwegian–English parallel corpus. The corpora reveal patterns and properties of Norwegian progressives that are novel compared to those of a well-studied aspectual system like that in English. The study shows that the progressives should be grouped into two subgroups, according to their combinatorial and semantic properties. The array of properties that is brought out by the examination of the monolingual and parallel corpora is accounted for in a formal semantic frame, based on works by Dowty (1979) and Krifka (1992, 1998), and also drawing on insights from, among others, Rothstein (1999, 2004).

Keywords contrastive, corpora, Norwegian, progressives, prospective forms, pseudocoordination, semantics

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1. INTRODUCTION

This paper draws out the meaning of Norwegian progressives as revealed by a monolingual and a contrastive corpus study. The corpus study brings out interesting patterns and properties of the Norwegian progressives compared to well-studied aspectual systems, such as the system of English. One part of the study is thus to describe the meaning and extension of the Norwegian forms by contrasting them with a well-studied aspectual form like the English progressive. Building on these descriptions as well as on important theoretical work that has been done in the field, I analyze the Norwegian forms in a formal semantic framework. The analyses are designed to reflect both the special properties of the Norwegian forms and the properties that are comparable with more well-studied aspectual forms in other languages.

The paper is organized in the following way. In section 2 the forms and meanings of the Norwegian progressives are presented with a small set of examples drawn from the monolingual corpus. The progressives are grouped into two categories, according to their established formal and semantic properties.[1] A wider array of examples of the Norwegian progressives is given in section 3, where the results of the parallel corpus study are laid out, elucidating additional information about the meaning of the progressives. The interaction of the progressive forms and the simple verb form in Norwegian is examined in section 4. The principal results from the corpus studies,

along with the established knowledge of the progressives, form the basis for the formal semantic analyses of the Norwegian progressives, presented in section 5.

2. SINGLING OUT THE NORWEGIAN PROGRESSIVES

As Sæbø (2004) points out, even typical facts can be overlooked when the semanticist is not required to consider a random set of linguistic data. Analyses may in such cases be based on atypical facts and fail to generalize to typical facts. Text corpora are a type of linguistic data which minimizes the risk of getting a biased selection, and thereby maximizes the chances of basing the analyses on typical facts. As held by, among others, Dyvik (1997), searching for facts in semantics consists in finding the meaning of TYPES of forms, not tokens. A particular utterance, uttered in a certain context is a linguistic token. Finding types amounts to viewing the linguistic expression isolated from a specific context.

Thus, when searching for the meaning of the progressives in Norwegian, corpora come in as an aid in two ways. On the one hand, corpora reduce the risk of overlooking typical uses and meaning facets of the forms; on the other hand, corpora make it possible to abstract information from tokens to get information about types, i.e. to find the meaning characteristics that persist throughout all token examples and that form patterns. In the following, I describe the progressive forms studied here, pseudocoordination and the prospec forms, and briefly comment on the corpora used and how I have gone about finding and extracting the forms in the corpora. I consequently sketch the patterns of meaning that emerged in my corpus studies.

The Norwegian Reference Grammar (Faarlund, Lie & Vannebo 1997) divides the Norwegian progressive forms into several types according to differences in aspectual meaning. Here, I delimit the investigation to two groups. One group consists of a variety of forms often called 'pseudo-coordination' (e.g. Johannessen 1998) due to their apparent coordinated structure (with the conjunction *og*). They nevertheless have some syntactic properties that are atypical of normal coordination. For instance, for pseudocoordination it is possible to extract syntactic material asymmetrically, i.e. extract from one conjunct but not the other. This and other properties of coordination are discussed in general by Ross (1967) and in particular with regard to pseudocoordination in Norwegian by Johnsen (1988). See also Tonne (2001) for examples that illustrate these pseudo-coordinating properties of the pseudocoordination.

Pseudocoordination is held to have a process meaning, that is, it describes a situation as extended in time without any delimitation, where the agent is in the midst of the described situation. When it comes to conditions on the use of the pseudocoordination, one can say that there are tendencies in the way they are used. For example, the subject referent must be such that it can serve as the subject of posture verbs like *ligge* 'lie' and *sitte* 'sit'. Furthermore, the forms are less frequent

in formal than in colloquial contexts. See Tonne (1999) and Digranes (2000) for a discussion on how these distributional facts fit with the relatively low degree of grammaticalization of these forms.

A mixed method was used for the extraction of pseudocoordinations from the monolingual Oslo Corpus and the HiT-Corpus, partly automatic and partly manual. I restricted the automatic search to the relevant verbs describing posture or movement, in all their temporal forms, followed by the conjunction *og* and any verb. On the other hand, I allowed for intervening material, up to five words, between the first verb and the conjunction. I manually sorted out the generated results. See the list of sources at the end of this article for further details about the corpora, and also see Tonne (2001) for more methodological details.

Examples of pseudocoordination are given in the a-sentences in (1) and (2) below. The b-sentences show their simple verb counterparts, which have an ambiguous interpretation with regard to aspect, as reflected in the English translations:

(1) a. Barna   satt   og   leste.
       the.children sit.PST   and   read
       'The children were reading.'

    b. Barna leste.
       'The children read/were reading.'

(2) a. Ungene dreiv   og   samla   sammen   papir   og   treull . . .
       the.kids drive.PST and collect.PST together paper and wood-wool
       'The boys were gathering up the paper and string . . .'

    b. Ungene samla sammen papir og treull . . .
       'The boys were gathering up/gathered up paper and string . . .'

(3) below is a further example from the corpus, showing the use of the pesudocoordination as a background type of information, a typical use of an imperfective form:

(3) a. De tre   satt   og   drakk   kaffe da   skjelvet   fikk   huset   til
       the three sit.PST and drink.PST coffee when the.quake get.PST the.house to
       å   rase   sammen.
       INF slide.PST together

    'The three of them were drinking coffee when the quake made the house fall down.'

The pseudocoordination always makes a sentence unambiguously imperfective. This is attested later in the paper, in a note on example (23) and in the discussion of example (25), where the forms are put through (im)perfective tests.

The forms of the other group of progressives, that I here call the PROSPEC GROUP, do not include the conjunction *og*. Examples of these forms are shown in (4)–(6).

(4) a. Han   holdt   på   å   dø.
         he   HOLDT PÅ   INF   die
         'He was dying/was about to die.'
     b. Han døde.
         'He died.'

(5) a. Han var i ferd   med   å   frakte materialene
         he   was I FERD MED   INF carry the.materials-the
         opp   til   balkongen . . .
         up   to   the.balcony
         'He ≈ was carrying/≈was about to carry the material up to the balcony . . .'
     b. Han fraktet materialene opp til balkongen . . .
         'He carried the material up to the balcony . . .'

(6) a. Disse var   på   vei   til   å   bli   blant byens verste forbrytere.
         these were PÅ VEI TIL INF become among town's worst criminals
         'These were about to become some of the worst criminals in town.'
     b. Disse ble blant byens verste forbrytere.
         'These became some of the worst criminals in town.'

The main word of each periphrastic progressive form in this group is a word that, when used in other contexts, describes continuity (the verb *hold* 'hold', see example (4) above), movement (the noun *ferd* 'journey', see example (5)) or path (the noun *vei* 'way', see example (6)). The examples include also prepositions (*på* 'on', *med* 'with' and *til* 'to') and an infinitival structure that carries the main lexical content of the sentence.

The prospec forms were, like the pseudocoordination, searched for in the Oslo Corpus and the HiT-Corpus. With these prospec forms, the automatic search allowed for no intervening material between the first verb and the preposition.[2] The corpus extraction of the prospec forms shows that the collection of the forms ((*være*) *i ferd med å . . .*, (*være*) *på vei til å . . .*, *holde på å . . .*) has a frequency of 0.25 per 1000 words in corpora of mixed genres (newspapers and literary fiction).

In the literature, members of the prospec group are described as having two types of imperfective meanings (see e.g. Faarlund et al. 1997). According to this view, one interpretation is that the subject referent is in the midst of a situation (similar to the meaning of an English progressive accomplishment), and the other interpretation is that the subject referent is oriented towards a point of change of state that is described by the infinitival structure. In the latter case, they have what is called in this paper a PROSPECTIVE reading, that is, the subject referent 'looks' ahead towards a point.

However, my investigation shows that a process reading is excluded in combinations with achievement verbs. The explanation for this is that achievements do not have a lexically specified process, as discussed in e.g. Rothstein (2004). If one nevertheless distinguishes two types of readings of the prospec forms, then one must exclude the possibility for one of those readings to occur with achievement

verbs. However, I claim that, not only achievements, but even accomplishments only have one reading in a prospec combination. I claim that the important information carried by these forms is that there is an orientation towards the (end) point, and that they are VAGUE with regard to whether the event described is prior to the starting point of the accomplishment event or not. Both the progressive and the 'be about to'-translations of (5a) are therefore considered approximate only, as indicated there. On the one hand, the English progressive accomplishment specifically picks out a period between the starting point and the end point of the accomplishment event, not prior to the starting point. On the other hand, the 'be about to'-form is complementary in meaning to the progressive in these cases, since it specifically picks out a period prior to the starting point of the accomplishment event. Since the Norwegian form is vague with regard to picking out a period prior to or after the starting point of the accomplishment event, it covers the meaning of both of the English translations. The distributional pattern, described below, supports such a vagueness view. Since the prospec forms are vague with regard to how they pick out a period, before or after the start of the accomplishment event, the assumed two readings (of e.g. Faarlund et al.) lie within the same, prospective, meaning. In this paper, such a shared, prospective meaning is specified in the analysis in section 5.

One of the consequenses of the necessary orientation point in a prospec combination is the impossibility of combining a prospec form with a stative predicate. The lack of a point towards which it can orient makes the result impossible to interpret, as seen in (7):

(7) #Nicolas var i ferd med å kunne fransk.
     Nicolas was I FERD MED INF know French

An important pattern that emerges from the facts of the corpus study of all the Norwegian progressive forms is only implicitly indicated by the examples and in the discussion so far. On the one hand the pseudocoordinations, exemplified in (1)–(3) above, combine almost exclusively with atelic predicates. The atelic predicates are mostly activities, like those we see in the examples (1)–(3), but there are also combinations with various types of statives, like the one we see in (8):[3]

(8) Jeg satt som sagt og var fascinert av det yrende vinduslivet.
    I sit.PST as said and be.PST fascinated by the teeming the.window.life
(8′) As I mentioned, I was observing with fascination the teeming life in my window.

Those few combinations with telic predicates that are found are accomplishments, which in the specific cases are aspectually ambiguous, i.e., they may be interpreted as either telic or atelic (see discussion of (18) and (29) below).

On the other hand, the prospec forms, exemplified in (4)–(6) above, almost exclusively combine with telic predicates, i.e. accomplishments and achievements. I found that the degree to which the pattern holds is overwhelming; more than 95% of the pseudocoordinations occur with atelic predicates, and

more than 95% of the prospec forms extracted are combinations with telic predicates.[4]

As we saw in (7), the prospec forms are not well-formed with statives, and such combinations are not attested in the corpus. As mentioned, only a few instances of combinations with activities are found. Interestingly, the few activities found are of two particular types. One type is ambiguous between an activity and accomplishment reading (e.g. *modne* 'ripen', *utvide* 'expand'), and the other particular activity type is ambiguous between activities and ingressives, i.e. a kind of change of state into an activity (e.g. *le* 'laugh', *smile* 'smile'). See also Santos (1996) and what she calls 'acquisitions'. One common feature of these 'activities' is that they have a point towards which the prospec forms may orient. These 'activities' will be discussed again in the Norwegian–English contrastive discussion in section 3, and will be followed up in the discussion and analysis in section 5.

To sum up the discussion so far, it is found that the corpus study reported from here confirms the widely held view about divergence in imperfective meanings between the two groups of progressives in Norwegian, the pseudocoordination and the prospec forms. One new insight drawn from my study is that such a difference in meaning corresponds closely to the difference in distribution. These distributional facts are correlated with differences in meaning between the two groups, namely a process meaning and a prospective meaning. It is possible to tease apart these two progressive meaning facets due to the progressives' difference in combinatorial possibilities. These correspondences between meaning and distribution will be exploited in the semantic analyses proposed in section 5. First, for a contrastive view, we now turn to the parallel corpus study.

3. CONTRASTING THE NORWEGIAN PROGRESSIVES

In addition to the monolingual study described above, I have undertaken a Norwegian–English contrastive study by investigating a parallel corpus (see details about the parallel corpora at the end of the paper). The study consists of Norwegian original texts, with extractions of pseudocoordination and prospec forms, compared with their English authentic translations, and English original texts, with extractions of progressives, compared to their Norwegian authentic translations. Also, the translations were examined in their own right, e.g. looking at the instances of pseudocoordination and prospec forms in the Norwegian translated text, to see what their origins were in the original English text.

3.1 *The pseudo group and the English progressive*

The contrastive study shows an overlap between pseudocoordination and the progressive in English. For the Norwegian–English translation direction, I used an

excerpt from *Teskjekjerringa* ('Mrs. Pepperpot'), a text of 2646 words. Ten cases of pseudocoordination are found in the Norwegian original (i.e. 3.8 per 1000 words). They are translated by the English progressive in five of the cases (50%), and two are translated by a non-finite *ing*-clause. One instance of pseudocoordination is not translated, one is translated by two simple-tensed verbs, and one is translated by a copula and a noun. Twenty-three progressives are found in the English translation (i.e. 8.7 per 1000 words). (2), repeated here, is an example of a translation pair where the pseudocoordination is translated with a progressive in English:

(2)   Ungene   dreiv   og   samla   sammen papir og   treull . . .
      the.kids   drive.PST and collect.PST together paper and wood-wool
(2′)   The boys were gathering up the paper and string and cardboard boxes . . .

With five instances out of ten of the pseudocoordinations being translated with the progressive in English, a high degree of overlap between the two forms is indicated from this small parallel corpus.

In the translations from English to Norwegian, however, the picture is different. In the original English *Winnie-the-Pooh* text (of 20000 words) the progressive occurs in 153 sentences. This means 7.5 occurrences of the progressive per 1000 words.[5] Forty occurrences of pseudocoordination are found in the Norwegian translation of *Winnie-the-Pooh*. Thus, the Norwegian translation contains a good deal of pseudocoordination, with 2.0 occurrences per 1000 words. Still, the translation is not extreme compared to Norwegian original texts of the same genre (children's literature), as was seen from the numbers for *Teskjekjerringa*. The 40 cases of pseudocoordination in the translation of *Winnie-the-Pooh* stem from a progressive occurring in the original 16 times, a gerund occurring 12 times, simple tenses occurring 10 times and twice from a copula construction. In seven of the 10 instances where the pseudocoordination stemmed from a simple tense, there was information about posture or location in the original sentence. Pseudocoordination is found as a translation of the progressive only in 10% of the cases (16 out of 153). In the vast amount of cases where the English progressive is not translated by a Norwegian pseudocoordination, the translator has chosen a simple verb form in Norwegian. An example is seen in (9):

(9)   . . . all the streams of the forest were tinkling happily
(9′)   alle   bekker   klukket   og   lo
      all   streams   gurgled   and   laughed

The study furthermore shows that many of the English progressives serve as translations of simple verb forms in the Norwegian original, like we see in (10):

(10) Kjerringa . . . gikk   langsomt hjemover   med kørja på armen . . .
      the.woman   walked slowly   home.wards with basket on the.arm
(10′) Mrs. Pepperpot . . . was walking slowly home with her basket on her arm . . .

A detailed study of the concordances of the English original texts with Norwegian translations shows that several of the pseudocoordinations stem from a locative or postural expression in the English original, like in (11):

(11)   Piglet was lying on his back, sleeping peacefully.

(11′)   Nøff   lå   på   ryggen   og   sov   trygt.
        Nøff   lie.PST   on   the.back   and   sleep.PST   safely

In general, one can observe how the specific meaning of the Norwegian pseudocoordination restricts the contexts in which it is used. When going from a progressive to the posture-sensitive pseudocoordination, information about posture and position, if not included in the English original, must be added. If it is difficult to deduce such posture information from the context, pseudocoordination is not chosen in the translation. The relatively specific posture or locative meaning of pseudocoordination restricts its distribution compared to the English progressive, but gives it a match in other types of locative constructions like (11) above. The progressive in English, which has no restrictions with regard to information about location or posture, and no restriction connected to colloquial context, is therefore more frequent than the Norwegian pseudocoordination.

3.2 The prospec group and the English progressive

The difference in frequency between the Norwegian prospec forms and the English progressive is also rather great. In the ENCP-corpus that was used here (see the list of sources), there were 2570 occurrences of the English progressive, compared with 170 occurrences of the Norwegian prospec forms. The restricted distribution of the prospec forms is partly due to their limited Aktionsart-combinatorial possibilities, as revealed in the monolingual study (and partly due to the fact that the Norwegian simple verb form has a wide distribution, see section 4). The prospec forms never combine with statives, and usually do not combine with activities. As mentioned in section 2, the activity combinations found in the corpus are either like the 'ripen'-type, which are possible to interpret as accomplishments, or they are of an activity type that is interpreted as a kind of ingressive, i.e., the 'acquisitions', with the starting point of the activity serving as the point towards which the prospec sentence is oriented. The first sentence in (12) below is an example from the (monolingual) Oslo corpus. The sentence describes a period prior to the start of the activity:

(12)   Også   jeg   var   i ferd   med å   danse.   Jeg   kjente   den   gamle
        also   I   was   I FERD MED INF   dance   I   felt   the   old
        lengselen   i   meg.
        the longing   in   me
        'I was about to dance, too. I felt the old longing inside.'

For an activity verb like *dance* with a progressive in English, we therefore do not get a direct translation into a Norwegian sentence with a prospec form, illustrated in (13):

(13) He was dancing $\neq$ Han   var   i   ferd   med   å   danse.
                                 he   *was*   *I*   *FERD*   *MED*   INF   *dance*

Interestingly, the 'be about to'-form in English is an accurate translation for these prospec (ingressive-)activities, since the 'be about to'-form also picks out a period prior to the starting point of the activity. See Rothstein (2004) for an analysis of the English progressive, where she discusses the similarities and differences between the progressive and 'be about to'. Contrary to the combinations with accomplishments, these prospec activity combinations do not have an end point that can serve as the important point of orientation for the prospec form. The starting point, then, must take over this function for these predicates.

As we saw with the pseudo group, the prospective forms find an English progressive match much more often than the other way round. Only 2.2% of the 1370 English progressives in the corpus have a Norwegian prospective correspondence in the authentic translations. On the other hand, the Norwegian prospec forms found in the corpus correspond to an English progressive in 30–40% of the cases, varying somewhat from form to form. For *i ferd med å ...* , for instance, there were 30 occurrences in the Norwegian original, and 14 of those were translated into an English progressive. The corresponding figures for *holde på å ...* are 33 and 12. Again, as for the correspondence between the English progressive and the Norwegian pseudocoordination, the wide use of the English progressive and its corresponding high frequency makes it a good translation choice for the relatively few prospec forms used in the corpus. And again, the restricted use of the prospec forms in general in Norwegian reduces their chance of being chosen as translations for the English progressive.

The English progressives that are combined with accomplishments (e.g. *He was eating an apple*) have an interpretation where the subject referent is in the midst of the accomplishment event. As I have argued, the Norwegian counterpart with a prospec form has a prospective interpretation. The orientation towards a point in such a prospective interpretation means that the described period is prior to the end point, i.e. possibly within the accomplishment event itself. The vagueness mentioned earlier with regard to the understanding of these prospective-accomplishment combinations refers to whether there is a possibility that the period described is prior also to the starting point of the accomplishment event. Thus, the aspectual meaning of the Norwegian prospec-accomplishments is a superset of that of the English progressive-accomplishements, exhibiting partial overlap for precisely the period of the event beginning with its initiation and extending through its duration to just before the culmination:

(14) He was eating an apple. ⊂ Han var i ferd   med å   spise et eple.
            he *was* *I FERD MED* INF *eat* *a apple*

When the progressive in English is combined with an achievement (e.g. *He was reaching the top*), the interpretation of the English sentence is prospective, and a Norwegian prospec form suits perfectly as a translation:

(15) He was reaching the top = Han var   i ferd   med å nå   toppen.
            he *was* *I FERD MED* INF *reach the.top*

An example of this from the corpus is found in (16):

(16) But now I daren't, because my conscience is killing me.
 Men nå   våger jeg ikke det, fordi samvittigheten   min holder   på
 but now dare   I   not that because.the.conscience mine HOLDER PÅ
 å   ta   livet   av meg.
 INF *take the.life of me*

This study of the correlation between the Norwegian forms and the English progressive partly confirms and partly complements other contrastive investigations. For example, Nordset (1996) investigates the Norwegian translation equivalents of the English progressive. However, some of the generalizations I find in my study are not recognized by her. She shows that 54.9% of the 'double-verb' constructions (i.e. all the progressive forms) are combinations with activity predicates, 32.4% are combinations with accomplishments and 11.3% are combinations with achievements. The generalization is missed that the pseudocoordinations and the prospec forms are close to having a complementary distribution with regard to the Aktionsart of the main predicate.

Since the simple verb form is more frequent in Norwegian than in English, its role is correspondingly different (viz. 'grammaticalization of zero', Bybee 1994). Since the role of the simple verb form is important also for the interpretation of the progressive forms in Norwegian, in the next section I take a closer look at the role of the simple verb form and how it interacts with the progressive forms.

4. THE SIMPLE VERB FORM AND ITS INTERACTION WITH THE PROGRESSIVE

In English the verbal suffix -*ed* in the simple verb form means past. Often, like with *entered*, it also has perfective meaning, but at other times, like with the verb *lived*, it does not, it rather has an imperfective meaning (see e.g. Boogaart 1999). The simple verb form is used for both perfective and imperfective meaning in Norwegian, too. But the simple verb in Norwegian can have an imperfective meaning even with non-stative verbs, for instance *lese* 'read'. Imperfectivity by way of pseudocoordination was expressed with this verb in the Norwegian sentence (1a), and imperfectivity by

way of a simple form was shown in (1b) (as one of its aspectual interpretations), and is also seen in the small discourse in (17):

(17) Barna   leste da   jeg   kom inn.
     the.children read when   I   came in
     'The children read/were reading when I entered.'

When the context does not explicitly say otherwise, the first part of (17) conveys imperfective meaning. This property contrasts with that of the English simple form. *The children read* has (unambiguous) perfective meaning, and needs an immediate context which matches this reading. *Barna leste*, in (17), may also have perfective meaning in Norwegian. Given the right context, (17) can mean that the children started to read when I entered, i.e. have an ingressive type of meaning. The pseudocoordination variant (1a) with an added 'when I came in'-clause, however, is excluded from having such an ingressive type of meaning. Hence, the Norwegian sentence (17) with a simple verb form is ambiguous with regard to aspectuality, whereas the pseudocoordination counterpart is unambiguously imperfective.

It is not only sentences with simple verbs denoting activities that are ambiguous in Norwegian. *Barna leste en bok* in (18) below is an accomplishment (i.e. telic) due to the direct object (compare with (17)), but an interpretation similar to that of (17) is still possible:

(18) Barna   leste   en bok   da   jeg   kom   inn.
     the children   read   a   book when I   came in
     'The children read/were reading a book when I entered.'

The English translation reflects the ambiguity of the Norwegian sentence (18); it may mean that the children were already reading a book when I entered, or it may mean that they started to read a book when I entered, depending on the context. In contrast, the English simple verb counterpart to (18) has only the latter, perfective, interpretation.

We see that the lack of imperfectivity/progressive-marking in a sentence has different implications in English and Norwegian. In different ways in the two languages, the grammatical marking of the verb interacts with other parts of the sentence, like the lexical semantics of the verb and the arguments. Depending on the nature of this interaction, we get a final aspectuality interpretation of the sentence.

From this we see that an important function of the progressive forms in Norwegian is to disambiguate aspectually ambiguous predicates, selecting the imperfective reading. With the 'extreme' Aktionsarten, the aspectuality of a simple verb version is clear, that is, a Norwegian simple verb achievement sentence is unambiguously perfective, and a Norwegian simple verb stative sentence is unambiguously imperfective. However, around the telic/atelic borderline, i.e. the border between accomplishments and activities, the aspectuality is ambiguous. By

invoking a progressive marker, the aspectual interpretation of such an utterance becomes unambiguously imperfective.

5. THE NORWEGIAN PROGRESSIVES ANALYZED

The Norwegian progressives are analyzed in this section. The analyses – the analysis of the pseudo forms and the analysis of the prospec forms – are designed to both reflect their combinatorial restrictions, their specific meaning and how they are similar to and how they are different from the English progressive. That is, I try to explain the facts set out in this paper so far. I summarize them here.

The facts from the monolingual study:

- The Norwegian progressive forms have an imperfective meaning.
- Pseudocoordination combines with atelic predicates.
- Prospec forms combine with telic predicates.
- Atelic combinations get a process interpretation.
- Telic combinations get a prospective interpretation.

The facts from the contrastive study which concern the meaning link between the English progressive and the Norwegian forms:

- For the English progressive to be translated into a Norwegian pseudocoordination, the sentence should preferably be an activity sentence and include information about place or posture.
- When pseudocoordination is used in Norwegian (original or translation), it corresponds felicitously to the English progressive.
- An English progressive achievement has the same interpretation (i.e. prospective) as the corresponding Norwegian prospec achievement.
- The aspectual meaning of the Norwegian prospec-accomplishments is a superset of that of the English progressive-accomplishements.
- An English progressive activity does not have the same interpretation as the corresponding Norwegian prospec activity, i.e. the English progressive activity has a process interpretation, whereas the Norwegian prospec activity has a prospective (with respect to the starting point of the activity) interpretation.

The analyses that are to explain these facts are based on traditional insights in the treatment of progressives, in particular the much-studied English progressive. Dowty (1979) is still the analysis to which every model-theoretic theory of the English progressive relates. I briefly present Dowty's analysis below, and then show how to adapt that analysis to cover the Norwegian forms, with help from, among others, Krifka (1998).

5.1 The traditional analysis of the English progressive

Dowty (1979) launched his analysis of the progressive as a solution to the problem that he called 'the imperfective paradox':

> [T]he problem is to give an account of how [*John was drawing a circle*] entails that John was engaged in a bringing-a-circle-into-existence activity but does not entail that he brought a circle into existence. This is the 'imperfective paradox'. (Dowty 1979:133)

Dowty (1979) defines the progressive in relation to an interval, and claims that the progressive is a modal operator. It is a modal operator, he argues, because it is wrong to assume that a sentence is true in an interval in the actual world. Rather, one can only assume that the sentence is true in an interval in certain possible worlds. *Mary was crossing the street*, for example, can be true at an interval I, even if *Mary crossed the street* is not true at any interval I' in our world. If, for example, a truck ran her down before she managed to cross the street, *Mary crossed the street* is not true at I'. The relevant possible worlds are what Dowty calls 'inertia worlds', which are exactly like this world up to and including I, and thereafter possibly different from this world in that the events evolve in their NORMAL, expected way. Mary's crossing of the street would then, according to this, have continued until she had reached the other side of the street, in all inertia worlds. Dowty's definition of the progressive is as follows:

> [PROGØ] is true at $\langle I,w \rangle$ iff for some interval I' such that $I \subset I'$ and I is not a final subinterval for I', and for all w', such that $w' \in \mathrm{Inr}(\langle I,w \rangle)$, Ø is true at $\langle I',w' \rangle$. (Dowty 1979:149)

I will not go into a discussion of inertia worlds here, but refer briefly to Landman (1992). Landman (1992) proposes an analysis based on Dowty's work, but with a different approach regarding which possible worlds are relevant. He also introduces events into the analysis of the progressive. In the following, I come back to the event based approaches to the progressive.

5.2 Analyzing the pseudocoordination

Dowty's modal component is only intended for accomplishment-combinations. For the pseudocoordination, as opposed to the English progressive, one can state the truth conditions in purely extensional terms, since the pseudocoordination is restricted to combine only with statives and activities. Also, naturally, the lexical meaning of a posture verb is not included in the specifications of the English progressive. Below, I look into the semantic specifications for pseudocoordination, following from its lexical properties. First I analyze the *drive*-pseudocoordination type, which is less restricted lexically, and therefore is more similar to the English progressive.

The pseudocoordination type with the verb *drive* (original meanings, intransitive 'drift' and transitive 'run (something)') were exemplified in (2a) above. A further example is (19) from Lødrup (2002).

(19) Det   drev   og kom   ned noe   hele tiden, yr,
    it   *drift.PST and come.PST*   *down something whole the.time drizzle*
    småregn, sludd og   snøbyger.
    little.rain sleet and   snow.showers

    'Something kept coming down all the time; drizzle, rain, sleet and snow.'

We see from (2a) and (19) that the *drive*-pseudocoordination is not restricted with regard to location or posture. On the other hand, this type of pseudocoordination is similar to the other pseudocoordinations in primarily combining with atelic predicates and making a sentence unambiguously imperfective. One possible analysis of this type of pseudocoordination is not to regard *drive* as lexical, but rather treat it more like the English progressive, i.e. as an imperfectivizing operator. To account for the preference of atelic combinations, a restriction is put on the form to the effect that it can only combine with predicates that are interpreted as imperfective (i.e. statives and most often activities, and accomplishments only if an imperfective reading is possible). Since this imperfectivizing operator, the *drive*-pseudocoordination, requires an imperfective or ambiguous predicate as input, one can specify that the pseudocoordination sentence entails the argument sentence (*P* in (21) below), and leave out the modal component for Dowty's analysis of the English progressive. (20) illustrates that the pseudocoordination sentence entails the corresponding simple verb sentence:

(20) a. Johan drev og snakket.   →   b. Johan snakket.
       'Johan was talking.'   'Johan was talking/Johan talked.'

(20) holds because of the aspectual similarities between the a. and the b. sentences: the a. sentence is always imperfective, and the b. sentence always has the option of an imperfective interpretation, as is indicated in the English translation. To ensure that the second conjunct verb of the pseudocoordination is interpreted as imperfective, it can be specified that this second conjunct verb holds for each subeventuality[6] of the eventuality of the pseudocoordination sentence (and by entailment then holds for every subeventuality of the argument sentence/simple sentence). According to these requirements, the translation of the form is as in (21).

(21) pseudo_*drive** $= \lambda P \lambda s \ \forall s' \ [s' \sqsubseteq_s s \rightarrow P(s')]$

(21) says that the *drive* pseudocoordination denotes a function from predicates *P* such that (upon existential closure) for each *P* (argument sentence) there is an eventuality, *s*, and *P* holds of all subeventualities, *s'*, of *s*. The analysis of the pseudocoordination with *drive* accounts for the fact that the form has a disambiguating effect on its argument sentence (the simple verb sentence variant). That is, for an aspectually

ambiguous sentence like an activity sentence, the *drive og* ... operator forces the imperfective interpretation possibility, and excludes the perfective.

We now go on to analyze the more lexically restricted pseudocoordination variant, i.e. the pseudocoordination with a posture verb (e.g. *sitte* 'sit'). This variant also almost exclusively combines with imperfective predicates. It contrasts with the *drive*-pseudocoordination in having a clear lexical meaning of the first conjunct verb:

(22) Ikke sitt og hvil på apparatene, slipp andre til.
  not sit.IMP and rest.IMP on the.machines let others to
  'Do not sit resting on the machines, let others use them.'

  (A sign at the training center at Oslo University)

(23) Sofie satt og gjorde lekser da hun kom hjem.
  Sophie sit.PST and do.PST homework when she came home

(23′) Sophie was doing her homework when she came home.

  (Jostein Gaarder, *Sofies verden* ('Sophie's world'), from ENPC)

Importantly, (23) is unambiguously interpreted such that Sophie was already doing her homework when she (her mother, say) came home. So, *Sofie* and *hun* cannot be coreferential in (23). *Sofie satt og gjorde lekser* is thus unambiguously imperfective.

The distributional facts, i.e. the fact that the second conjunct verb has the possibility of an imperfective interpretation, and that it often is an activity or stative, must be covered by the analysis of this type of pseudocoordination, too. For the *drive*-pseudocoordination, the restriction that the subinterval property should hold for the second conjunct verb followed by entailment. This is not a possibility for the posture verb pseudocoordinations, since the posture verb imposes special restrictions on its own. The subinterval property restriction on the second conjunct verb must be stated explicitly.

To Dowty, the subinterval property is the defining criterion for statives and activities. In my analysis I use this defining criterion, in combination with the fact that posture verbs like *sitte* 'sit', etc. are unambiguously stative in Norwegian.[7] They are therefore assumed to have the subinterval property. What is needed in the specification of this type of pseudocoordination, then, is to exploit the unambiguous imperfectivity of the posture verb, and have its subinterval property spread onto the second conjunct verb phrase (the function τ is a trace-function mapping events to their run times (see Krifka 1992:35):[8]

(24) pseudo* $= \lambda P \lambda Q_{\{sitte, stå, ligge, \ldots\}} \lambda s[[Q(s) \wedge P(s)] \wedge \forall s'[[s' \sqsubseteq_s s \wedge Q(s')] \rightarrow \exists s'' [s'' \sqsubseteq_s s \wedge P(s'') \wedge \tau(s') = \tau(s'')]]]]$

In (24), the subinterval property of the posture verb must find a mapping in the second conjunct verb phrase. Thus, the subinterval property, and hence imperfectivity, of the second conjunct verb phrase is required for the combination of the conjuncts to be felicitous. With both conjuncts imperfective, the whole sentence

comes out imperfective. The same holds here as for the *drive*-pseudocoordination: unambiguously perfective sentences are not felicitous with the pseudocoordination. An example is when one tries to make a combination with an achievement sentence:[9]

(25) #Bomben   lå   og   eksploderte.
    the.bomb lie.PST and explode.PST

Ambiguous sentences are disambiguated to imperfective. This holds for combinations with activities (like in (26)) and accomplishments (like in (27)):

(26) De   sitter på kjøkkenet og drikker   kaffe   og spiser kaker . . .
    they sit.PRS in the.kitchen and drink.PRS coffee and eat   cakes

    'They sit in the kitchen drinking coffee and eating cakes . . .' (the HiT-Corpus)

(27) Der sto   kjerringa   på kjøkkenet og pynta   bløtkaka . . .
    there stand.PST the.woman on the.kitchen and decorate.PST the.cake
    'There was the woman in the kitchen decorating the cake . . .'

                                    (Alf Prøysen, *Teskjekjerringa* ('Mrs. Pepperpot'))

Unambiguously imperfective sentences keep their imperfectivity. This holds for stative combinations:

(28) . . . mulighetene lå   der   og   ventet på sin   besøkelsestid.
    the.possibilities lie.PST there and wait.PST on their visit.time
    '. . . the possibilities were awaiting their time.'   (the HiT-Corpus)

Having dealt with the pseudocoordinations, i.e. having specified their semantics, we now turn to the analysis of the prospec forms.

5.3 Analyzing the prospec forms

My point of departure for analyzing the prospec forms is the pattern of distribution that has emerged in the corpus studies reported in sections 2 and 3. The main point concerning the distribution of these forms is that they predominately combine with telic predicates. Related to this is the observation that sentences with the prospec forms describe an eventuality which occurs prior to the telic point of the main verb eventuality.[10] This way of viewing the interpretation of the prospec forms collapses the two readings mentioned in the beginning of the article, namely the process and the prospective reading. I presently discuss this collapse into one reading.

For achievement sentences, which make up the biggest group of sentences that combine with the prospec forms, the end point (the telic point) is relatively clear. The starting point of achievements, however, has been subject to controversy. Vendler (1967) and Dowty (1979) differ in how they define achievements. Vendler considers punctual telic predicates to be achievements, whereas for Dowty, the criteria are that the predicate is telic and does not entail a causative process. Dowty argues that

the duration referred to by the predicate is hard to discern; the predicate is often vague about when the event starts, hence often vague about whether the predicate is punctual or durative. In the extension of Dowty's view of achievements, I hold that a prospective sentence is vague about whether the period referred to is actually within the main verb process or whether it is prior to it. That is, prospec sentences are not AMBIGUOUS between a process and a prospective reading, they are VAGUE. The analysis of these prospec forms should therefore not disambiguate a sentence in one direction or the other; it should leave the issue vague.

The limiting cases of combinations with the prospec forms, namely the few activity sentences, also give valuable information about how to analyze the prospec forms. I have mentioned these activities earlier in this paper, in sections 2 and 3, and discuss them again here in further detail. There are two types of activities worth distinguishing in connection with the progressives in Norwegian that may shed light on the distribution of the prospective progressive type across Aktionsarten. The distinction is between what has been called in the literature the DIFFERENTIATED type and the MUTATIVE type. Differentiated predicates (Tenny 1987) are those that describe an activity that is inherently heterogeneous (Dowty 1979). They may describe a movement or change, but NOT a movement or change with regard to only one direction or one property. Predicates of this type are *danse* 'dance', *vakle* 'stagger', *tulle* 'fool about' and the like. An example with such a verb in combination with v*ære i ferd med å . . .* was seen in (12) above, with *danse* and the prospec form *i ferd med å . . .* combined.

When the prospec forms combine with differentiated activities as in (12), the preferred reading is prospective, i.e. oriented towards a point. The prospec form seems to re-interpret the activity sentence as an ingressive, and then the interpretation is that the eventuality referred to by the prospec sentence occurs prior to the eventuality described by the main verb.

On the other hand, the mutative predicates (similar to the 'mutative' verbs of e.g. Fabricius-Hansen 1986, and also similar to the 'degree achievements' of Dowty 1979, Kratzer 1994 and Hay, Kennedy & Levin 1999) are more likely to get a process-kind of imperfective interpretation. They are directional, their movement or change goes in one direction only, and they are directed towards a point. The reason why they are regarded as activities and not accomplishments or achievements[11] is that the end point is not expressed lexically. Sometimes the end point can be inferred from the context, imposing an accomplishment or achievement interpretation onto the sentence. Verbs of this kind are *avta* 'decrease', *synke* 'sink' and *dempe* 'lessen', *redusere* 'reduce'. An example with *være i ferd med å . . .* is seen here:

(29) Myhre er i ferd med å utvide det kunstneriske repertoaret sitt.
    Myhre is I FERD MED INF expand the artistic   the.repertoire his
    'Myhre is expanding his artistic repertoire.'   (the HiT-Corpus)

In the same vein, Norwegian verbs like *råtne* 'rot', *modne* 'ripen', *smelte* 'melt', *utvide* 'expand' and the like are aspectually ambiguous when used in their simple form. They may have an imperfective meaning like 'rot a little', 'ripen somewhat', 'melt a bit' and 'expand somewhat', or they may have a perfective meaning and describe a total rotting, ripening, melting or expansion. Here, too, the context may give an indication of which interpretation to choose. These ambiguous verbs may be called activity verbs when they give an imperfective meaning, and accomplishment or achievement verbs when they give a perfective meaning. Most often, the few 'activity' sentences with which the prospec forms do combine turn out to be of the mutative, ambiguous, type. The mutative/degree-achievement activities are more prone, it seems, to have a perfective interpretation when used in their simple form, compared to the differentiated activities, like *chuckle* (see Dowty 1979:170f.) and *dance*, which often get an imperfective interpretation when used in their simple form. The analysis of the prospec forms is developed to include the interpretation of the prospec forms also when combined with activity sentences.

We have seen that the prospec forms contrast with the English progressive and the Norwegian pseudocoordination with regard to the distribution pattern and hence interpretation. A different analysis must therefore be formulated. I turn to Krifka (1998) to look for tools for an analysis of the prospec forms.

5.4 The prospec forms in terms of Krifka (1998) and beyond

Krifka (1998) defines perfective[12] predicates by way of initial and final event parts in the way seen in (30) (somewhat simplified and with somewhat adapted notation here; see Krifka (1998:207) for further details).

(30) $\forall P$ [PERFECTIVE(P) $\leftrightarrow$ $\forall e, e'$ [P(e) $\wedge$ P(e') $\wedge$ e' $\sqsubseteq$ e $\rightarrow$ INI(e', e) $\wedge$ FIN(e', e)]]

He defines the final and initial part(s) of an event in the following way:

(31) $\forall e, e'$ [FIN(e', e) $\leftrightarrow$ e' $\sqsubseteq$ e $\wedge$ ¬∃ e'' [e'' $\sqsubseteq$ e $\wedge$ e' $\ll$ e'']]
(32) $\forall e, e'$ [INI(e', e) $\leftrightarrow$ e' $\sqsubseteq$ e $\wedge$ ¬∃ e'' [e'' $\sqsubseteq$ e $\wedge$ e'' $\ll$ e']]

The prospec forms refer to an eventuality prior to a point expressed by the sentence with which they combine. They are not defined for stative predicates, and first and foremost for telic predicates. I first look at the first of these properties, the prospectivity in relation to an end point. This can be illustrated by way of the following example:

(33) Hun var i ferd   med å   bli   gal.
    she was I FERD MED INF become mad
    'She was about to go mad.'

The prospec form picks out a phase prior to an end point. To illustrate with example (33), I use Moens' (1987) model, where the end point I allude to above is called the culmination (CULM.) of the predicate. The predicate may also have a preparatory phase (PREP.PHASE) and a consequent state (CONSEQ.). These are parts of the event described by the main verb phrase (*bli gal* 'become mad') in sentence (33). In (34), the shaded part (////) is the part picked out by a prospec form like *i ferd med å . . .*:

(34)

CULM.

| PREP.PHASE | CONSEQ. |

become   be mad
mad

//////////////////
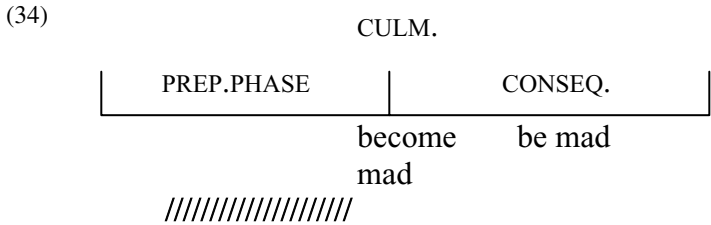
The following formulates the prospective property, making use of Krifka's notion of final event parts:[13]

(35) prospec* =

$\lambda P \lambda s [\exists w, e_1, e_2 [w \approx v \wedge s \sqsubseteq_e e_1 \wedge \neg FIN(s, e_1) \wedge P_w(e_2) \wedge FIN(e_2, e_1) \wedge \forall f$
$[[f \sqsubseteq e_2 \wedge P_w(f)] \rightarrow FIN(f, e_2)]]]$

That is, for a predicate *P* the prospec yields a set of eventualities, *s*, which are such that there is a *w*, e_1 and e_2, such that *w* is similar to our world *v*, *s* is a part of e_1, but not a final part of e_1. *P* holds of e_2 in *w*, and e_2 is a final part of e_1. Compared to the perfectivity definition in (30), the last statement in (35) requires only that an event of which *P* holds is a final part of e_2, not also the initial part. In fact, (35) does not explicitly say that *P* is telic, but it effectively restricts *P* to telic predicates except for the case of an (differentiated) activity predicate where e_2 is instantiated by a 'minimal' part of an activity event. A minimal part for the activity predicate *waltz*, for example, is made up by the few steps in the waltzing activity which are just those needed to recognize the activity as a waltzing activity (see Dowty's 1979 discussion of activities as holding for all subintervals of an interval, provided the subintervals are of a certain size). For such minimal events (e_2), for every *f* that is a (non-proper) part of e_2 and for which *P* holds (in *w*), *f* is a final part of e_2. In these cases, *f* is a final part of e_2 because *f* must be the same as e_2. Because e_2 does not have proper parts that count as instances of the *P* event, there cannot be other *f* events that end before the end of *f*.

I illustrate again by way of the Moens model. For a sentence like *Jeg var i ferd med å danse* 'I was about to dance', like the one we saw in (12), the prospec form picks out a phase prior to the start of the dancing:

(36)

CULM.

PREP.PHASE		CONSEQ.

prepare to start to   dance
dance dance

/////////////

For these differentiated activity predicates, the event referred to by the prospective sentence lies prior to the initial minimal part of the activity event, e_2. On this analysis the 'prospective' reading (prior to the initial minimal part) of activity combinations emerges as rather different from the 'prospective' reading (prior to the final point and sometimes – accidentally – the initial point) of accomplishment combinations. This analysis therefore does not exclude activity predicates like *danse* 'dance' (differentiated type) or *avta* 'decrease' (mutative type) but gives them a prospective reading or a process reading, depending on whether there is an understood set terminal point (more likely in the case of the mutative activities) or not (the differentiated activities). The mutative type of activities is therefore likely to be treated like accomplishments or achievements in this analysis. The analysis does, however, exclude statives from combining with the prospec forms felicitously. Statives, in contrast with activities, hold at every moment of an interval, no matter how small the moment (see Dowty 1986a). Therefore, if P holds of an event(uality) e_2 (or s_2, say), no matter how small e_2 is, there are (proper) subeventualities (f) of e_2 for which P also holds. These may or may not be final parts of e_2. The last condition in the specification is therefore not satisfied for statives.

The eventualities referred to in (35) are parts of an event e_1 which (potentially) leads up to a terminal point for an event e_2 which is a P, but the prospective does not require that one knows the beginning of e_2. Hence, the position that I have advocated, that there is a vagueness of event start for achievements and accomplishments, is reflected in the definition of the prospec forms. In this definition, then, the process and the prospective readings are collapsed into one, reflecting vagueness, not ambiguity.

6. CONCLUSION

The main goal of the paper is to give semantic descriptions and analyses of the Norwegian progressives, which to a certain extent have been anonymous in the grammatical descriptions and analyses of the Norwegian verbal system. As they emerge from their relative anonymity, the Norwegian progressives reveal patterns and properties that are novel in relation to more grammaticalized and well-studied aspectual systems, such as the system of English. These results throw new light on the phenomenology and theory of aspectuality as known primarily from studies

of English in a formal semantic framework. The similarity between prospective achievements in Norwegian and progressive achievements in English may support and extend theories of the English progressive. The pervasiveness of 'ambiguous aspect' with the simple verb form and the progressives' division of labor correlated with different meaning facets are both distinct properties of an aspectual system like the Norwegian.

The division of labor among the progressive forms is found in terms of what Aktionsart they combine with. The 'pseudo group', consisting of various instantiations of pseudocoordination (e.g. *sitte og spise* literally 'sit and eat', *drive og jobbe* 'be working'), preferably combine with atelic predicates (statives and activities), mostly activities. Since the pseudocoordination preferably combines with atelic predicates, one would expect its aspectual impact to be limited; after all, activities are often interpreted as imperfective. However, it turns out that there is a risk of a perfective interpretation even for activities if the pseudocoordination is absent. So the pseudocoordination does have a disambiguating function, selecting the imperfective reading. On the other hand, the 'prospec group', where various prospec forms are found, e.g. *være i ferd med å krysse elva* 'be about to cross the river', mostly combine with telic predicates (accomplishments and achievements). These telic predicates are to a strikingly great extent achievements. In Norwegian, simple verb achievements are interpreted unambiguously as perfective. The prospec forms can therefore be seen to imperfectivize otherwise perfective sentences or disambiguate aspectually ambiguous sentences (like accomplishments or activities) in the imperfective direction.

The nature of the imperfective interpretation is different in the two groups, the pseudocoordination and the prospec forms. The differences in meaning are connected to their combinatorial restrictions. The pseudocoordination consistently conveys a 'process interpretation' (in the midst of the main verb event) while the prospec forms may appear to allow both a process interpretation and a 'prospective interpretation' (just prior to the main verb event). However, careful consideration of the prospec forms shows that there is no clear borderline between the two interpretations. The dichotomy should, rather, be regarded as a matter of vagueness with regard to the start of the event. The common denominator is a prospective interpretation with regard to the end, or culmination, of the main verb event.

ACKNOWLEDGEMENTS

SOURCES/CORPORA USED

English–Norwegian Parallel Corpus (ENPC) (1999): Department of British and American Studies, University of Oslo. Used for the contrastive study. The texts were extracts of 10000–15000 words each. The relevant part of the corpus contains 30 original text extracts in each language and their translations.

HiT-Corpus (1998): Monolingual Norwegian corpus. Developed at the University of Bergen, Norway. Newspaper texts automatically downloaded from the Internet. The size of the corpus was approximately 20 million words.

Milne, A. A. (1989): Selected parts of *Winnie-the-Pooh* (London: Methuen, first published 1926). extract of approx. 20,000 words. Used for the contrastive study. The pseudocoordinations found in the Norwegian translation of the excerpt from *Winnie-the-Pooh* ('Ole Brumm'). The translation of the text consists of 19,838 words. 40 occurrences of pseuodocoordination were found.

Oslo Corpus (1998): Monolingual Norwegian corpus. Developed at the Department of Linguistics, the Faculty of Arts, University of Oslo. At the time (1998), the corpus included 18.5 million words gathered from newspapers and literature (fiction).

Prøysen, Alf (1960): *Teskjekjerringa på nye eventyr* (Oslo: Tiden). Excerpt of 2646 words. With translation ('Mrs. Pepperpot'; translator Marianne Helweg, published by Hutchinson and Co.). Used for the contrastive study. Pseudocoordinations in the extracted text from *Teskjekjerringa* ('Mrs. Pepperpot'): 10 pseudocoordinations were found in the extract.

NOTES

1. Progressive meaning is here seen as archetypal imperfectivity (see e.g. Bertinetto & Delfitto 2000). Imperfectivity, in its turn, may be described as viewing an event as partial, as opposed to viewing it as a whole. See section 5 for a formal definition of perfectivity (or telicity as Krifka 1998 calls it). Progressive forms, i.e. the forms selected for the study, have progressive meaning and are periphrastic in form.
2. The only kind of material that can intrude is a sentence adverbial like *ikke* 'not' and *nesten* 'almost', giving the construction a clear change in meaning, not included in this study.
3. Authentic translations of Norwegian sentences are given as a separate example immediately following the original, indicated by the same example number followed by a prime symbol, as in (8) and (8′) here.
4. One test of all the variants of pseudocoordination showed that out of 177 instances in a variety of texts (fiction, newspaper, transcribed spoken language) only nine were telic. In a separate search through the tagged Oslo Corpus, I searched only for *sitte* as a posture verb. Here I found only three telic instances, out of a total of 264 pseudocoordinations. As for the prospec forms, the pattern of distribution was found by manually checking 200 randomly picked occurrences from the approximately 4500 hits from the automatic search

through the HiT-Corpus (21 million words, newspaper texts). Out of these 200 instances, only six atelic sentences were found.

5. For a comparison, Biber et al. (1999) find about six progressives per 1000 words in their fiction texts.

6. I follow here the practice of making use of events, states and eventualities as opposed to intervals in the way Dowty does (see e.g. Rothstein 1998). 'Eventuality' is a cover term for states and events (Bach 1986). *s* is a variable over eventualities.

7. The change of state variant of *sitte* is *sette + REFL*.

8. If one does not want to assume that a sitting and an eating, say, are one and the same eventuality (*s* in (24)), one could separate them by way of the sum operator, $s = s_1 \oplus s_2$ (Krifka, p.c.), which gives:

$$\text{pseudo}^* = \lambda P \lambda Q_{\{sitte, stå, ligge \ldots\}} \lambda s[Q(s) \wedge P(s) \wedge$$
$$s = s_1 \oplus s_2 \wedge \forall s' [[s' \sqsubseteq_s s_1 \wedge Q(s')] \rightarrow \exists s'' [P(s'') \wedge \tau(s') = \tau(s'')]]]]$$

9. The only interpretation possible (if at all) is a repetitive reading, i.e. that the bomb exploded again and again.

10. This point is given a variety of names in the literature: 'change of state' (Dowty 1979), 'culmination' (Moens 1987, Rothstein 1999), 'target state' (Kratzer 1994).

11. Achievement understood in the Dowty (1979) sense, i.e. non-causal change of state, not necessarily punctual.

12. His telicity is what I have called perfectivity in this paper.

13. In addition, something like a strict-movement-relation requirement as discussed by Rothstein (1999) could probably be stated for these forms, to ensure that the phase picked out by the prospec forms is related in the appropriate way to the main verb event. Rothstein (2004) also discusses why some progressive achievements are infelicitous, like #*Jane was noticing the plane*, whereas many progressive achievements are not. The same conditions seem to hold for the Norwegian prospec forms.

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