

Interactions of particles, adjectival resultatives and benefactive double object constructions in Norwegian

Mai Tungseth

In this paper, I take a closer look at a set of observations concerning word order and co-occurrence restrictions on verb-particle constructions, benefactive double object constructions and resultative constructions in Norwegian. While a particle can co-occur with both a beneficiary DP and a resultative AP, beneficiary DPs and resultatives cannot co-occur at all. I give an analysis in terms of the system proposed in Ramchand (2006), where I argue that the co-occurrence restrictions follow from the syntactic structure assumed together with independent properties of adjectival resultative constructions and verb-particle constructions.

Keywords argument structure, beneficiary, double object constructions, Norwegian, particle, word order

*Mai Tungseth, NORMS, Lunds Universitet, Språk- och Literaturcentrum,
P.O. Box 201, SE-221 00 Lund, Sweden.
E-mail: mai.tungseth@hum.uit.no*

1. INTRODUCTION

Tenny's (1994) SINGLE DELIMITING CONSTRAINT (henceforth: SDC) states that 'the event described by a verb may only have one measuring-out and be delimited only once' (Tenny 1994:79), and places aspectual restrictions on which kind of event participants can occur in a single event. Typically, elements like particles and resultative phrases act as delimiters by providing the event with an endpoint, as in the sentences in (1):¹

- (1) a. Jens kastet hunden ut.
Jens threw dog.the out
'Jens threw the dog out.'
- b. Marit malte døra rød.
Marit painted door.the red
'Marit painted the door red.'

It is PRAGMATICALLY possible to imagine events with more than one endpoint; for instance an event of freezing in which two things get frozen simultaneously, or

an event of driving towards two different goals, as shown by the sentences in (2). However, this cannot be done using one single verb, in one and the same event, as witnessed by the ungrammaticality of (3) (from Tenny 1994, her (156) and (158), p. 80):

- (2) a. John froze the milk and the apple juice.
 b. Mary drove to California and Mexico.
- (3) a. *John froze the milk the apple juice.
 b. *Mary drove to California to Mexico.

Likewise two resultative phrases or two particles can also not co-occur, as the examples in (4) show (Tenny's (159)).² This is also in accordance with the SDC.

- (4) a. Martha wiped the table dry clean.
 b. *The sun dried the grass up out.

From the SDC, we can also make the prediction that since resultatives and particles should not be able to co-occur, since they both provide an endpoint to the event. However, this prediction is not borne out, as the sentences in (5) show:

- (5) a. They painted the barn up red.
 b. He polished the brass up bright.
 c. De malte ferdig låven rød.
 they painted finished barn.the red
 'They painted the barn (completely) red.'

I assume that *ferdig* is a particle, although not a prepositional one. *Ferdig* demonstrates two of the important properties of particles, namely (i) the fact that it adds a final point to the event, and (ii) the fact that it can either precede or follow the object, as (6) shows:

- (6) a. De malte **ferdig** låven.
they painted finished barn.the
 'They finished painting the barn.'
 b. De malte låven **ferdig**.
they painted barn.the finished
 'They finished painting the barn.'

Given the restriction to one delimiter per event placed by the SDC, the grammaticality of the sentences in (5) is surprising. Still, examples of this type are relatively widespread in both English and Norwegian, and must receive a principled explanation. In this paper, I take a look at data of the type in (5), which at first seem to pose a challenge to the one-delimiter-per-event restriction as described by the SDC.

I will give an analysis in terms of a decompositional model of the verb phrase like the one proposed by Ramchand (2006), and the observed co-occurrence restrictions will be argued to follow from the type of syntactic structure that I will assume, in addition to independent properties of resultatives and verb-particle constructions. While I will argue, following the general intuition underlying Tenny's original proposal, that it is true that a single event can have only one endpoint denoting projection or ResP, these patterns can only be adequately captured by understanding the different positions of elements that build up ResPs in a particular language.³

2. BACKGROUND: THE INTERPLAY BETWEEN STRUCTURE AND INTERPRETATION

Classical generative grammar treats structure and interpretation as belonging to two independent linguistic modules. According to this view, the syntactic structure is first built up on the basis of argument structure information associated with the individual lexical entries, before the finished structure is sent off to the interpretive module which assigns it a relevant interpretation.

However, it is well documented that lexical behaviour is systematic and general, and that it is possible to arrive at argument structure generalizations that are valid for large classes of elements, verbs in particular. This has inspired researchers working within Constructionist models of language to argue that most of what has hitherto been treated as properties of individual lexical items, and as such as listed in the lexicon, should instead be treated as a property of the syntactic structure which is built up. This reduces the amount of work put on the lexicon by voiding it of much of its argument structure information, and the burden of explanation is shifted onto the syntactic structures themselves (cf. e.g. Travis 1992; Hale & Keyser 2002; Borer 2003, 2005; Ramchand 2006). This type of work is not so much a rejection of the classical modular view of structure and interpretation, but rather an extension which seeks to lessen the burden put on the lexicon.

As already mentioned, I assume a model like the one developed in Ramchand (2006) and previous work. On this type of approach, semantic interpretation is an essential property of the syntactic structures themselves, so in that respect, structures can be said to be 'meaningful'.⁴ Syntactic structures are built up freely, and participants in an event are interpreted in relation to functional heads in the structure, where each head is associated with specific semantic content.

The verb phrase (in Ramchand's terms THE FIRST PHASE) decomposes into maximally three subevents, viz. an Initiation/Cause (Init) subevent, a Process (Proc) and a Result (Res) subevent, where the Proc subevent is obligatory and counts as the core of the verbal predication. Each subevent introduces and licenses different types of event participants; the Init projection introduces different types of external

arguments, the Proc head introduces a participant which is interpreted as the participant undergoing the process, and the Res head introduces a Resultee/holder of result state. A participant can also be linked to more than one of these positions simultaneously, which results in the possibility of complex participant ‘roles’.

Following work by Ramchand & Svenonius (2002) and Ramchand (2006), I assume that particles and adjectival resultative phrases, being endpoint-denoting expressions, are both licensed in relation to the Res head. For beneficiary DPs, I argue in Tungseth (2006) that they are introduced as the internal argument of an empty preposition, which in turn appears in the complement of an empty verbal predicate. This is inspired by work by for instance Freeze (1992), Kayne (1993), and den Dikken (1995), where the possession relation, as represented by main verb *have* in English, for example, can be seen to decompose into a prepositional plus a verbal component. This complex is in turn embedded under the Res head. For arguments and details, I refer the reader to Tungseth (2006).

3. THE PARADOX: PARTICLES, RESULTATIVES AND BENEFICIARIES

Since particles, resultatives and beneficiary DPs are all licensed in relation to the Res head, it is possible to make a prediction, namely that examples in which a particle or resultative phrase co-occurs with a beneficiary DP should not exist. However, such cases DO exist, and are in fact even relatively widespread in Norwegian, as well as in English. This contradicts the claim put forth in den Dikken (1995), who argues that particles are excluded from appearing in double object constructions in the Mainland Scandinavian Languages. Consider the Norwegian examples in (7):⁵

- (7) a. Legen skrev henne ut en resept på hostesaft.
doctor.the wrote her out a prescription on cough.mixture
 ‘The doctor wrote her out a prescription for cough mixture.’
- b. Bonden tegnet oss opp et detaljert kart over området.
farmer.the drew us up a detailed map over area.the
 ‘The farmer drew us up a detailed map of the area.’
- c. Skal jeg varme deg opp litt suppe?
shall I heat you up little soup
 ‘Do you want me to heat you up some soup?’

On the other hand, resultative APs CANNOT co-occur with a beneficiary DP, as shown by the examples in (8). This indicates that verb-particle constructions and resultatives, although similar in many respects, should not be analyzed in exactly the same way. In addition, resultatives and beneficiaries do not combine with the same classes of predicates. Beneficiaries can only appear with predicates that are

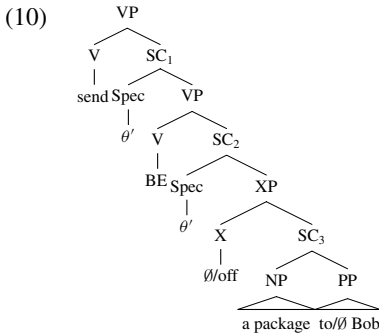
consistent with a creation/obtaining interpretation, and where the direct object only comes into existence upon completion of the event. Resultatives, on the other hand, combine with a completely different type of predicates, namely those, whose internal argument can be described as undergoing change in course of the event, hence already exists prior to the event. Hence, the examples in (8) may be out for independent reasons.

- (8) a. *Jens bakte meg kaken brent.
Jens baked me cake.the burnt
 ‘Jens baked me the cake burnt.’
- b. *Hun malte ham et bilde nydelig.
she painted him a picture beautiful
 ‘She painted him a picture beautiful.’
- c. *Han blandet meg en drink sterk.
he mixed me a drink strong
 ‘He mixed me a drink strong.’

Collins & Thráinsson (1996) give examples of the type in (9), which show that Icelandic also allows a particle in combination with a recipient object. Observe here, that in contrast to Norwegian and English, Icelandic also permits the word order where the particle follows the direct object. At present, I don’t have a good explanation for this, but it is most likely related to the availability of different positions for the direct object (cf. also (29a) below, with a pronominal direct object).

- (9) a. Í gær hafa þeir sent stráku­num peningana upp.
yesterday have they sent the boys.DAT the money.ACC up
 ‘Yesterday they have sent the money up to the boys’.
- b. (?)Í gær hafa þeir sent stráku­num upp peningana.
yesterday have they sent the boys.DAT up the money.ACC
 ‘Yesterday they have sent the boys up the money’.
- c. Kenarinn setti nemendunum þetta kvæði fyrir.
the.teacher set students.DAT this poem.ACC for
 ‘The teacher assigned this poem to the students.’
- d. Kenarinn setti nemendunum fyrir þetta kvæði.
the.teacher set students.DAT for this poem.ACC
 ‘The teacher assigned this poem to the students.’

While den Dikken’s analysis has no trouble in accounting for the instances where the particle precedes the direct object, it is unable to account for the grammaticality of the examples in (9a) and (9c), where the particle follows the direct object. This is unexpected if the particle heads its own dedicated projection in a position syntactically higher than the one in which the direct object is introduced. Den Dikken’s structure can be schematically represented as in (10) (den Dikken’s (63), p. 141):



Recall the observation made above that in ordinary verb-particle constructions in Norwegian and English, the particle can either precede or follow the direct object (cf. (11a)). However, when a particle co-occurs with a beneficiary DP or a resultative AP, it obligatorily precedes the object, as witnessed by the rest of the examples in (11) ((11d) is adapted from Emonds & Whitney 2006):⁶

- (11) a. Han brøt {av} en rose {av}.
he broke off a rose off
 'He broke off a rose.'
- b. Han brøt meg {av} en rose *{av}.
he broke me off a rose off
 'He broke me off a rose.'
- c. De malte låven {ferdig} rød *{ferdig}.
they painted barn.the finished red finished
 'They painted the barn up red.'
- d. Bill fixed John {up} a drink *{up} at the party.

The emerging picture is as follows: According to the SDC, an event as described by a single sentence can contain only one delimiting expression, where particles and resultatives are typical examples of delimiters. Assuming a Ramchandian decompositional model of the verb phrase where the endpoint is licensed by a functional head Res, we predict that particles, resultative predicates and beneficiary DPs should never co-occur, since they all require licensing by the Res head. However, this is not what we observe. On the contrary, particles can co-occur with BOTH resultative phrases AND beneficiary DPs. The ungrammaticality of examples where a beneficiary DP and a resultative predicate co-occur (cf. (8) above) is related to properties of the predicate and its participants. Because beneficiaries and resultatives combine with the exact opposite classes of predicates, we never expect them to be able to co-occur in the first place.

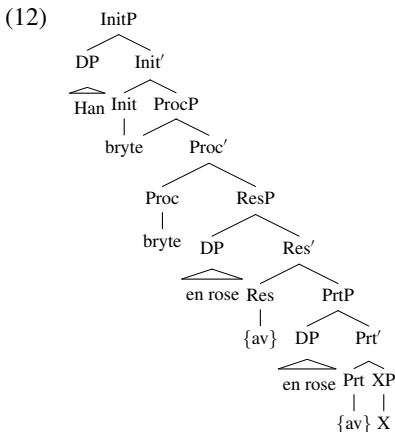
In the remainder of this paper, I will argue that all of these observations follow directly from the type of structure which I assume, in combination with independent properties of verb-particle, resultative and beneficiary double object constructions. While it is true that particles, resultatives and beneficiary DPs are all interpreted in relation to the Res head, they also differ in important respects.

4. ANALYSIS

In order to set the scene for the discussion of the co-occurrence restrictions on particles, resultatives and beneficiary DPs, I start this section by giving an overview of the types of analyses which I assume for the different types of constructions. Then I go on to present the analysis which I propose for cases in which a particle co-occurs with a beneficiary or a resultative, and I will also discuss the incompatibility of resultative APs with beneficiary DPs. I will furthermore discuss the observation that when a particle co-occurs with a (non-pronominal) beneficiary DP, the particle obligatorily precedes the direct object.

4.1 Verb-particle constructions

Ramchand & Svenonius (2002) argue convincingly for an analysis of verb-particle constructions according to which the particle heads a small clause-type structure where the internal argument of the preposition remains implicit. The PP projected by the particle then appears in the complement to the Res head, and the word order in which the particle precedes the direct object results when the particle moved, via head movement, from its base position P and into the Res head. The relevant structure for a sentence like (11a) above is given in (12), where ‘XP’ simply signals that the Ground argument of the particle is implicit.



According to Ramchand & Svenonius (2002), the particle can either remain in its base position or it can shift into the Res head, resulting in the order where it precedes the object. Ramchand (2006) builds on and expands the analysis in Ramchand & Svenonius (2002), but argues that the particle OBLIGATORILY moves to Res, the variation in word order instead stemming from differences in the spell out positions for the direct object. However, in the following, I will adopt the original proposal of Ramchand & Svenonius (2002), and assume that the particle can remain in its base position.

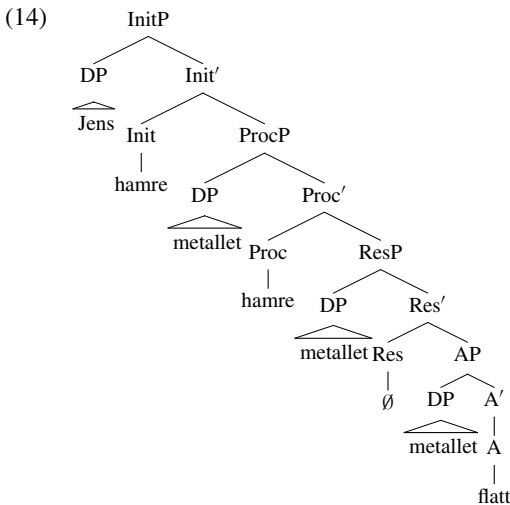
A verb like *bryte*, ‘break’ introduces a final point, which is the state of being broken and hence identifies the Res head. However, this raises the question of what happens if a verb of this type (independently Res-identifying) combines with a particle. This is perfectly grammatical, as shown by examples like (11a) above. In addition, the particle can either follow or precede the object, where the latter order results when the particle moves to Res. The sentences in (13) give more examples of the same type (from Ramchand 2006:120):

- (13) a. John broke {up} the party {up}.
 b. John broke {off} the handle {off}.

Ramchand proposes a way of solving this puzzle, arguing that in cases like (13b), for example, ‘the handle’ does not really become ‘broken’, but it becomes ‘off’. So it seems that what is identifying the content of the Res head here, is not the verb, but the particle. Ramchand explains this in terms of a principle of *Underassociation*, whereby a lexical item can choose to underassociate one of its category features, provided there is something else in the structure which is able to identify the feature. Thus, I will assume that the content of Res is actually identified by the particle in this case, and not by the verb, which has underassociated its [Res] category feature.

4.2 Resultative constructions

The structure which I will assume for an AP resultative like *Jens hamret metallet flatt* ‘Jens hammered the metal flat’, where the direct object is selected by the verb is shown in (14) (cf. Ramchand 2006):



The resultative AP is here licensed in the complement to a null Res head, and the direct object, *metallet* ‘the metal’, is interpreted simultaneously as the participant undergoing the change associated with the process, and as the holder of the result state of becoming flat.⁷

While particles are endowed with a [Res] feature, and can move to the Res head to license it, resultative APs lack this feature, and must remain in the low position. The order where the resultative AP precedes the direct object is ungrammatical.

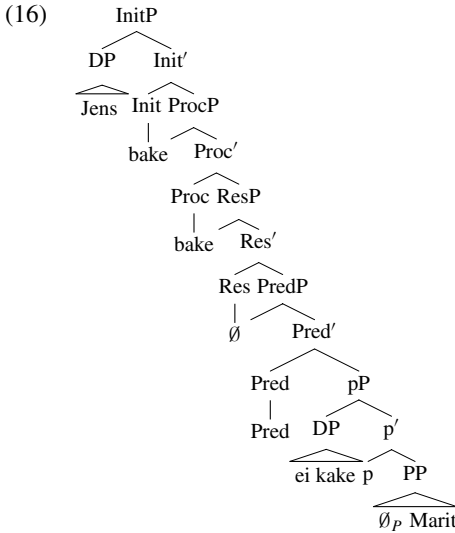
4.3 Benefactive double object constructions

Drawing on their similarities in syntactic behaviour to double object constructions with ditransitive verbs, Tungseth (2006) argues that sentences like the ones in (15) should be given an analysis similar to that of other double object constructions.

- (15) a. Jens strikkes Marit et skjerf.
Jens knitted Marit a scarf
 ‘Jens knitted Marit a scarf.’
- b. Vi bygget barna en snøborg.
we built children.the a snow.fortress
 ‘We built the children a snow fortress.’
- c. Hun sydde søsteren sin en brudekjole.
she sewed sisters.the REFL a bridal.dress
 ‘She sewed her sister a bridal dress.’

In benefactive double object constructions with verbs of creation, there is always a possession relation between the created object and the added beneficiary DP, which I argue is structurally present.⁸

I analyze this possession relation in terms of an empty-headed PP which is embedded under an abstract verbal predicate, whose existence is motivated by the observation that in many languages, the possession relation can be seen to decompose into two parts morphologically (cf. Freeze 1992, Kayne 1993, den Dikken 1995, etc.). The resulting word order is then derived via the application of a movement operation similar to predicate inversion. For the purposes of this paper, I propose a structure like the one in (16), which is a simplified version of the structure proposed in Tungseth (2006); the base structure for a benefactive double object construction like *Jens bakte Marit ei kake* ‘Jens baked Mary a cake’ is shown in (16):



I assume a split PP model (cf. e.g. van Riemsdijk 1990, Rooryck 1996, Svenonius 2003), where the beneficiary DP is introduced as the complement to a null preposition with possessional content (\emptyset_P), and the direct object is introduced by a functional head p . This pP in turn appears in the complement to an abstract verbal predicate Pred.

The final structure is derived in the following fashion. First, the empty preposition with possessional content moves to Pred via head movement, and incorporates to form a complex with possessional content, which we can represent as HAVE. Then, the beneficiary noun phrase moves into the specifier of PredP, driven by an EPP-feature on Pred. Subsequently, the beneficiary DP moves to Spec ResP, driven by an EPP-feature on Res. With respect to case, I assume that the beneficiary DP gets case from the \emptyset_P preposition, while the direct object gets case from the matrix verb.

4.4 The analysis: structures and explanations

Having sketched the different types of structures that I assume for verb-particle constructions, AP resultatives and benefactive double object constructions, we're ready to move on to the actual analysis. Contrary to the predictions made on the basis of the SDC, we have seen that particles can co-occur both with beneficiary DPs and with resultative APs, but that these last two cannot be combined.

4.4.1 Beneficiaries and resultative APs cannot co-occur

The impossibility of having a resultative AP combine with a beneficiary DP actually follows directly from the types of structures that I assume for these constructions. Remember that both a resultative AP and a beneficiary noun phrase depend on the

Res head for their licensing (cf. (14)–(16) above). Resultative APs are embedded in the complement of this Res head, while in the structure proposed for benefactive double object constructions, the Res head embeds an abstract verbal predicate Pred as its complement, which in turn takes a possessional empty-headed PP complement. The beneficiary DP is introduced as the internal argument of the null preposition, and finally ends up in the specifier of ResP, where it is interpreted as a holder of the result state, simultaneously as it is interpreted as a possessor of the direct object. Hence, since they both require licensing by the Res head, the incompatibility of a resultative AP with a beneficiary DP follows.

Above, I speculated about the reasons for this incompatibility, arguing that beneficiaries and resultatives combine with completely different types of predicates. Beneficiaries can only appear with predicates that can be interpreted as events of creation or obtaining where the direct object is the result of the creation event. Resultative APs, on the other hand, CANNOT combine with this class of predicates, but can only appear if there is a participant present which is interpreted as undergoing the change defined by the predicate. Generally, resultatives seem incompatible exactly with that class of predicates which permit the addition of a beneficiary DP. There is also a limited number of verbs which are compatible with two different interpretations: one as creation verbs, the other as change-of-state verbs. The sentences in (17) and (18) show some examples of this. In (17), the verb *male* ‘paint’ is used as a creation verb, and, as (17b) shows, a beneficiary DP, *henne* ‘her’, can be added. In (18), on the other hand, the verb is used in its ordinary transitive change-of-state use, and adding a beneficiary is impossible, as witnessed by the ungrammaticality of (18b).

- (17) a. Jens malte et bilde.
Jens painted a picture
 ‘Jens painted a picture.’
 b. Jens malte henne et bilde.
Jens painted her a picture
 ‘Jens painted her a picture.’
- (18) a. Jens malte en vegg.
Jens painted a wall
 ‘Jens painted a wall.’
 b. *Jens malte henne en vegg.
Jens painted her a wall
 ‘Jens painted her a wall.’

Hence, it seems that the explanation of the incompatibility of a beneficiary with a resultative AP has two sources; first, they are expected not to co-occur since they both require licensing by the Res head. Secondly, the incompatibility is also predicted by the fact that they combine with completely different classes of predicates.

4.4.2 Beneficiaries co-occurring with particles

As we have seen, there are instances in which a beneficiary DP co-occurs with a particle. According to den Dikken (1995), such cases are non-existent in Mainland Scandinavian, but in Norwegian, such examples are in fact quite acceptable, contrary to den Dikken's claim.⁹ Some examples were given in (7) above, and three more are in (19)

- (19) a. Kan du bryte meg av en bit sjokolade?
can you break me off a piece chocolate
 'Could you break me off a piece of chocolate?'
- b. Han gravde oss ut ei snøhule.
he dug us out a snow.cave
 'He dug out a cave in the snow for us.'
- c. Jeg skal klippe deg ut et hjerte av gullpapir.
I shall cut you out a heart of gold.paper
 'I will cut out a heart of gold paper for you.'

As already mentioned, when a beneficiary DP is present, the particle can only occur in the position preceding the object, which calls for an explanation.

- (20) a. Han brøt meg av en langstilket rose.
he broke me off a longstemmed rose
 'He broke me off a longstemmed rose.'
- b. *Han brøt meg en langstilket rose av.
he broke me a longstemmed rose off
 'He broke me off a longstemmed rose.'
- c. Legen skrev meg ut en resept.
doctor.the wrote me out a prescription
 'The doctor wrote me out a prescription.'
- d. *Legen skrev meg en resept ut.
doctor.the wrote me a prescription out
 'The doctor wrote me out a prescription.'

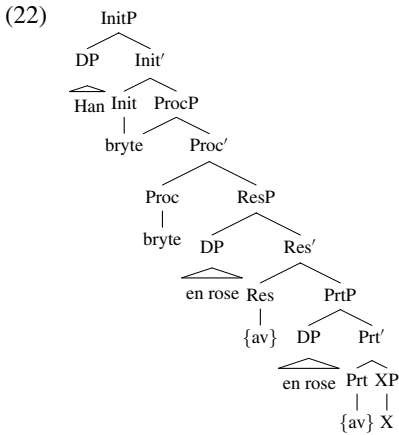
In some cases, the particle is optional, as in (21a), but it can also be obligatorily present, as in (21b):

- (21) a. Han gravde oss (ut) ei snøhule.
he dug us out a snow.cave
 'He dug us (out) a cave in the snow.'
- b. Han brøt meg *(av) en langstilket rose.
he broke me off a longstemmed rose
 'He broke me *(off) a longstemmed rose.'

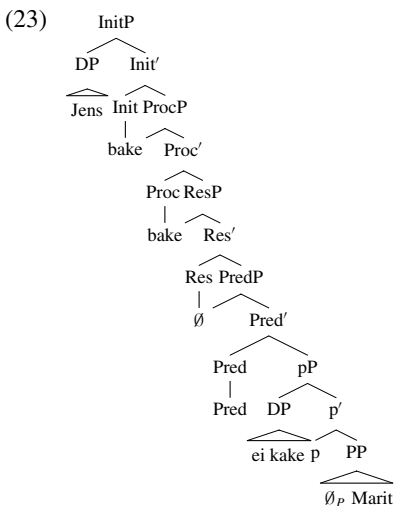
In examples like those in (19), we have a relation of possession between the beneficiary participant and the direct object. And, as I have already argued, the

possession relation decomposes structurally into an abstract verbal predicate plus a prepositional component.

We have observed that once a beneficiary DP is present, the particle obligatorily precedes the direct object (cf. (20)). On the surface this looks unexpected, given the analysis that I adopt for verb-particle constructions sketched in section 4.1 above. According to this analysis, the word order where the particle precedes the direct object arises when the particle moves via head movement from its base position and into the Res head. The base structure for verb-particle constructions is given in (22) (repeated from (12)):



In this structure, there are two available positions for the particle. However, it seems that whenever a beneficiary DP is present, the particle obligatorily moves to Res, which must find an explanation. Consider again the structure which I assume for double object constructions, repeated from (16):



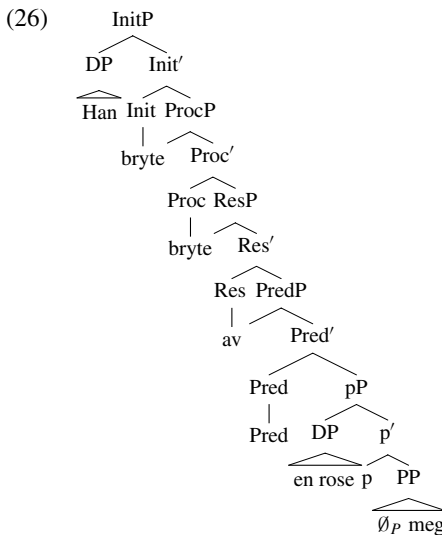
Here, since the complement to the Res head is occupied by the the predicational structure which introduces the beneficiary DP, the only available position for the particle is the Res head. Ramchand (2006) argues that particles are able to independently license Res. I hence assume that they can be merged directly in this position, without having to move there from a base position. She presents two types of arguments in support of this claim. First, particles can appear in a position where they disrupt the verb–object adjacency. Other elements, for instance adverbs or resultative APs cannot do this, as the sentences in (24) show (Ramchand’s (47), p. 119).

- (24) a. *John painted red the barn.
 b. *John threw quickly the ball.
 c. John threw out the dog.

An even more compelling piece of evidence is their ability to create telic predications even in contexts where a locative PP would fail to do so (Ramchand’s (48), p. 119):

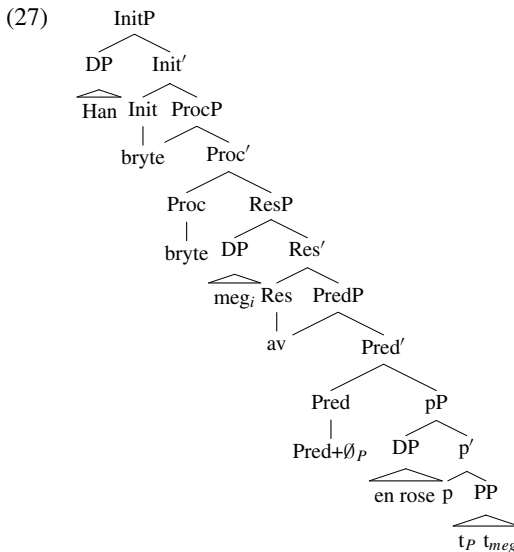
- (25) a. I opened the door and Mary danced in. (telic/atelic)
 b. Mary danced in the room. (atelic only)

Therefore, I will assume that because of their special property to define an endpoint, particles can be merged directly in the Res head, which is the case when they co-occur with a beneficiary DP. The structure of a sentence like *Han brøt meg av en rose* ‘He broke me off a rose’ (= (11b) above) will thus look like that in (26):



In this structure, the particle is merged directly in Res, which is possible because it bears a [Res] feature, and is able to independently license Res. The verb *bryte* ‘break’

is one which presumably identifies Res itself in the normal case, but since there is something present in the structure which is able to do this, the verb underassociates its category feature. The beneficiary DP *meg* 'me' is introduced in the complement to the null preposition, and the direct object is introduced by a functional projection *p*. The resulting word order is derived via movement; first the empty preposition moves by head movement and adjoins to Pred, forming a complex head \emptyset +Pred, with an interpretation close to that of main verb HAVE. Then, the indirect object moves to the specifier of PredP, triggered by an EPP-feature on Pred, and from that position into Spec ResP, also triggered by an EPP-feature on Res. The final structure looks like that in (27):



This structure is interpreted as an event of breaking, where the beneficiary DP *meg* is simultaneously a possessor of the rose, but also the holder of the result state in which the rose is 'off'.

It will be recalled from the discussion above that with verbs like *bryte*, the particle can either be optional, as in examples such as *legen skrev meg (ut) en resept* 'The doctor wrote me out a prescription'. But the particle can also be obligatorily present, for instance with verbs like *bryte*, where a sentence like *Han brøt meg en rose* 'He broke me a rose' is ungrammatical (cf. (21)). *Break* is one of the verbs which obligatorily gives a final point, but in the presence of other material which can identify Res, the verb can choose to underassociate its Res feature. If *bryte* itself identifies the endpoint, there is no place in the structure for the complex predicational structure which licenses the beneficiary participant, which crucially depends on Res (either null or filled by a particle) for its licensing.

However, *skrive* ‘write’ does not introduce a final point, and here no underassociation occurs. I tentatively assume that both of these types of structures can be given a similar analysis in terms of the particle being merged directly in the Res head. The observation that when a beneficiary is present the particle becomes obligatory with verbs like *bryte* ‘break’ can also be seen to follow from considerations having to do with the nature of Res head, but this is a mere speculation at this point.

4.4.3 Resultative APs and particles

Instances in which we have a resultative AP co-occurring with a particle are limited in distribution, but not non-existent, and they need an explanation. (28) shows some examples (repeated from (5) above):

- (28) a. They painted the barn up red.
 b. He polished the brass up bright.
 c. *They painted up the barn red.
 d. *They polished up the brass bright.
 e. De malte ferdig låven rød.
they painted finished barn.the red
 ‘They painted the barn (completely) red.’
 f. *De malte låven ferdig rød.
they painted barn.the finished red
 ‘They painted the barn (completely) red.’

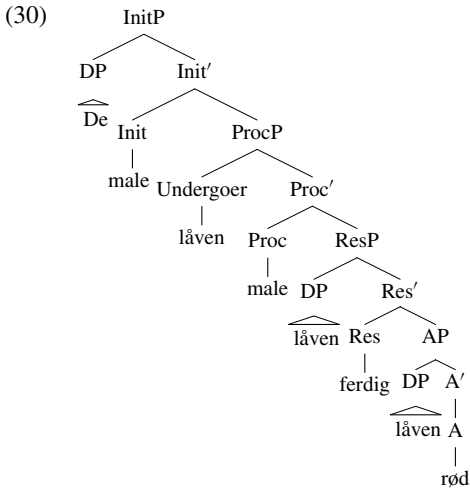
Looking more closely at these examples, we see that in English, the particle obligatorily follows the object (cf. (28a) vs. (28c)), while in Norwegian, the particle follows the object (cf. (28e) vs. (28f)). However, with pronominal objects, the pronoun precedes the particle, due to object shift of the pronoun:

- (29) a. Han malte den ferdig rød.
he painted it finished red
 ‘He painted it (completely) red.’
 b. *Han malte ferdig den rød.
he painted finished it red
 ‘He painted it (completely) red.’

In both cases I assume that the particle is merged in the Res head; the word order differences that we observe are the result of different positions of the object in the two cases. Somehow, in the presence of a particle, a full noun phrase object must remain low in the structure, while a pronominal object must move to a higher position in the visible syntax. Also, the examples of particles combining with a resultative AP seem to be restricted almost exclusively to cases with the Norwegian complete

particle *ferdig* ‘finished’ and its English equivalent *up*, which I have no explanation for at present.

The structure which I assume for a sentence like (28e) is the one in (30):



Here, *låven* ‘the barn’ is interpreted as both the participant undergoing the change and the holder of the resultant state, and, consequently, it is associated with the specifiers of both ProcP and ResP.¹⁰

5. Summary and conclusions

In this paper, I took as my starting point Tenny’s Single Delimiting Constraint which states that a single event as described by a verb can only contain one delimiter. Assuming the interpretation of delimitedness to stem from the Res head, we predict that particles, beneficiary DPs and resultative predicates do not co-occur.

However, this prediction turns out to be too strong. Particles and beneficiary DPs co-occur quite happily, particles and resultatives can marginally do so, while beneficiary DPs and resultatives cannot co-occur at all, which probably follows from the fact that they combine with different natural classes of predicates. Beneficiary DPs can only appear with verbs whose direct object is interpreted as an effected object, i.e. as a participant who comes into existence in the course of the process, for instance, *a cake* in the sentence *John baked a cake*. Resultatives, on the other hand, require the presence of a participant who is interpreted as an undergoer, for instance, *the table* in a sentence like *Jonh wiped the table*, and cannot combine at all with creation predicates.

In cases where a particle co-occurs with a beneficiary DP, the only available order is one where the particle appears in the position preceding the object, where

this order is to be treated as head movement into the Res head, as in Ramchand & Svenonius (2002). For such a case, I assume that the particle, in virtue of bearing a [Res] feature, is merged directly in the Res head.

This fact also explains the possibility of a beneficiary DP co-occurring with a particle, where the complex predicational structure licensing the beneficiary DP appears in the complement to the ResP whose head is filled by the particle. The analysis was seen to carry over to cases where a particle can co-occur with a resultative phrase. Again, the particle is merged directly in the Res head, while the resultative AP appears as the complement to Res.

ACKNOWLEDGEMENTS

Earlier versions of this paper were presented at The Workshop on Telicity and Perfectivity at the University of Cambridge, 3 September 2005, and also at the NORMS Thematic Meeting on Particles, Tromsø, 12–13 May 2007. I thank the participants at those events for feedback and comments. Thanks also to Christer Platzack for comments and discussion, and to an anonymous reviewer for valuable feedback.

NOTES

1. It could possibly be argued that in these cases, it is the verb itself which provides the endpoint and that the particle or the result predicate only adds further content to this endpoint. For the verb *male*, 'paint', I assume that the verb does not specify a final point, but that telicity arises as a result of the properties of its bounded noun phrase object.
2. For the sake of simplicity, I concentrate only on adjectival resultatives in this paper.
3. By this I do not, essentially, mean that the presence of ResP is the only way in which telic/endpoint interpretations can arise. The notion of an endpoint can also, for instance, stem from the properties of bounded spatial PP, or from the properties of certain types of direct objects which 'measure out' the event. Folli & Harley (2006) has shown that telicity effects can arise even if the spatial PP itself is NOT bounded; it need only provide a 'threshold' value.
4. By 'meaningful', I do not mean meaningful in the Construction Grammar sense of the word, where complete chunks of structure are associated with meaning and stored in the lexicon (cf. Goldberg 1995 and subsequent work). I deviate from the Construction Grammar view by assuming that although structures are associated with meaning, what is stored in the lexicon is not complete syntactic units. Rather, what is stored, is bits of lexical information which can be associated with different syntactic positions. The interpretation is then derived from the structure which is built up.
5. Observe that, for some reason, whether or not sentences with an added beneficiary participant are acceptable seems to depend on form beneficiaries expressed by: full DPs are not as readily accepted by informants as (light) pronouns, and reflexive pronouns are accepted most easily. At present, I have no good explanation for this peculiarity.
6. The exception, of course, being cases where we have a pronominal direct object, which obligatorily undergoes object shift to a position preceding the particle.
7. However, not all resultatives are introduced by this null Res head; Ramchand (2006) gives examples like *John wiped the table clean*, where the resultative AP is merged directly in the

- complement to ProcP, and telicity arises because of the adjective being closed scale, which gives rise to a bounded path by a principle of Homomorphic Unity (cf. Ramchand & Tungseth 2006).
8. An anonymous reviewer poses the question of whether beneficiaries should be treated as event-related or entity-related. In Tungseth (2006), I conclude that beneficiaries combining with verbs of creation are best treated as possessors, hence as entity-related. I base my conclusion, among other things, on the non-cancellability of the possession entailments in instances like *#I baked Max a cake but gave it to the dog* and also on the impossibility in English and Norwegian to have a pure beneficiary combining with a predicate which does not refer to an act of creation. However, for German, I argue that the situation is quite different. Here, examples like *Er öffnete ihr die Tür* 'He opened her the door' are perfectly fine. In addition to beneficiaries/possessors of the English type, German also permits event-related beneficiaries and maleficiaries, which I argue could be analyzed as a type of experiencers, and where the notion of possession is a purely pragmatic effect. While the distinction between entity- and event-related beneficiaries is a very interesting one, discussing it in more detail requires more space than what is justified in this paper.
 9. However, Christer Platzack informs me that in Swedish, examples with a particle co-occurring with a beneficiary DP or a resultative AP are always ungrammatical. I have no explanation for this at the present.
 10. This movement is not identical to the obligatory object shift that light pronouns undergo, which is, presumably, a shift to a position outside of the first phase.

REFERENCES

- Borer, Hagit. 2003. Exo-skeletal vs. endo-skeletal explanations. In John Moore & Maria Polinsky (eds.), *The Nature of Explanation in Linguistic Theory* (CSLI Lecture Notes no. 162). Chicago: University of Chicago Press, 31–67.
- Borer, Hagit. 2005. *Structuring Sense*, vol. 2: *The Normal Course of Events*. New York: Oxford University Press.
- Collins, Chris & Höskuldur Thráinsson. 1996. VP-internal structure and object shift in Icelandic. *Linguistic Inquiry* 27.3, 391–444.
- den Dikken, Marcel. 1995. *Particles: On the Syntax of Verb-particle, Triadic, and Causative Constructions*. New York: Oxford University Press.
- Emonds, Joseph & Rosemarie Whitney. 2006. Double object constructions. In Martin Everaert & Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax* (vol. II). Oxford: Blackwell, 73–144.
- Folli, Raffaella & Heidi Harley. 2006. On the licensing of causatives of directed motion: waltzing Matilda all over. *Studia Linguistica* 60.2, 121–155.
- Freeze, Ray. 1992. Existentials and other locatives. *Language* 68.3, 553–595.
- Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
- Hale, Ken & Samuel Jay Keyser. 2002. *Prolegomenon to a Theory of Argument Structure* (Linguistic Inquiry Monograph 39). Cambridge, MA: MIT Press.
- Kayne, Richard S. 1993. Toward a modular theory of auxiliary selection. *Studia Linguistica* 47.1, 3–31.
- Ramchand, Gillian. 2006. Verb meaning and the lexicon: a First Phase syntax. Ms., University of Tromsø. [Revised version forthcoming as *Verb Meaning and the Lexicon: A First Phase Syntax*, Cambridge: Cambridge University Press, 2008; available at <http://ling.auf.net/lingbuzz> (5 August 2007).]

- Ramchand, Gillian & Peter Svenonius. 2002. The lexical syntax and lexical semantics of the verb-particle construction. In Line Mikkelsen & Christopher Potts (eds.), *Proceedings of WCCFL 21*. Somerville, MA: Cascadilla Press, 387–400.
- Ramchand, Gillian & Mai Tungseth. 2006. Aspect and verbal prepositions. *Nordlyd* 33.2, 149–175. [Special issue on Adpositions, edited by Peter Svenonius & Marina Pantcheva; available at www.ub.uit.no/munin/nordlyd/ (5 August 2007).]
- Rooryck, Johan. 1996. Prepositions and minimalist case marking. In Höskuldur Thráinsson, Samuel David Epstein & Steve Peter (eds.), *Studies in Comparative Germanic Syntax* (vol. II). Dordrecht: Kluwer, 226–256.
- Svenonius, Peter. 2003. Limits on P: filling in holes vs. falling in holes. *Nordlyd* 31.2, 431–445. [*Proceedings of the 19th Scandinavian Conference of Linguistics*; available at www.ub.uit.no/munin/nordlyd/ (5 August 2007).]
- Tenny, Carol. 1994. *Aspectual Roles and the Syntax–Semantics Interface*. Dordrecht: Kluwer.
- Travis, Lisa deMena. 1992. Inner aspect and the structure of VP. *Cahiers Linguistique de l'UQAM* 1, 130–146.
- Tungseth, Mai. 2006. *Verbal Prepositions in Norwegian: Paths, Places and Possession*. Ph.D. thesis, University of Tromsø.
- van Riemsdijk, Henk. 1990. Functional prepositions. In Harm Pinkster & Inge Gene (eds.), *Unity in Diversity*. Dordrecht: Foris, 229–241.