Chapter 3

John's car repaired. Variation in the position of past participles in the verbal cluster in Dutch

Sjef Barbiers
University of Leiden

Hans Bennis
Meertens Institute; University of Amsterdam

Lotte Dros-Hendriks
Meertens Institute

Although sentence final verbal clusters in dialects of Dutch demonstrate a large amount of variation in the order of verbs, we argue that this is only apparently so. We take each dialect to allow just one order of verbs in three-verb clusters with a past participle. In the north of the Dutch language area, the order is descending (V3-V2-V1) and the rest of the dialects show an ascending order (V1-V2-V3). The large amount of apparent counterexamples will be explained by independently motivated, interfering properties. First, participles might be V-type or A-type. Only V-type participles occur in V-positions in the verbal cluster. Secondly, non-verbal elements (such as A-type participles) may interrupt a verbal cluster. We will show that the distribution of the different orders in dialects of Dutch strongly supports such a restrictive approach. We thus take this to be an argument that a structural approach to dialectology is required to gain insight in the properties of the formation of verbal clusters in Dutch.

1 Introduction[1]

In a famous article from 1954, Weinreich poses the question: is a structural dialectology possible? In this article we answer that question positively with the discussion

---

[1] We have presented parts of this paper at conferences in Amsterdam, Utrecht and Gent. We thank the audiences for their useful comments. We also like to thank Erik Tjong-Kim-Sang for his assistance with Map 2.

of a construction in which a structuralist approach will provide insights in the properties of dialects themselves; moreover, such an approach to dialects will lead us to answers to more general questions with respect to the organization of the syntactic system as a whole. We will concentrate our discussion on the phenomenon of participle placement in verbal clusters. We will demonstrate that a structural dialectological approach will provide us with a new perspective on the syntax of past participles. Consequently, it is not only the case that structural dialectology is possible, it turns out that structural dialectology is necessary to understand the grammar of Dutch.

In a recent paper (Barbiers, Bennis & Dros-Hendriks submitted) we argue that verbal clusters in varieties of Dutch show either a strictly descending or ascending order of verbs. Northern dialects (Friesland, Groningen) have a descending order, whereas the other varieties of Dutch, both in the Netherlands and Flanders only allow ascending orders. Let us illustrate this with the following sentence from the Syntactic Atlas of the Dutch Dialects (SAND; Barbiers et al. (2008)).

(1) John weet dat hij voor drie uur de wagen moet hebben gemaakt.
    John knows that he before three o'clock the car must$_1$ have$_2$ made$_3$

The verbs at the end of this sentence appear in the ascending order: the hierarchically highest verb comes first and the lowest comes last. We argue that this order is the only available order of verbs in Dutch varieties, except in the northern ones. The northern varieties have a descending order, as demonstrated in (2).

(2) John weet dat hij voor drie uur de wagen gemaakt hebben moet.
   John knows that he before three o'clock the car made$_3$ have$_2$ must$_1$

The problem with this perspective is that linguistic reality does not appear to support our theoretically motivated, structurally based hypothesis. It seems to be the case that a structural approach and a dialectological approach diverge. This is shown on the map of these sentences in Map 1.

Looking at the distribution of orders in the verbal cluster we draw the conclusions given in (3).

(3) i.   V2-V1-V3 is absent;
     ii. V2-V3-V1 is absent as well;
     iii. V1-V3-V2 is the dominant order in the Belgian part of the language area;
     iv. V3-V2-V1 is the typical order in the northern part of the language area;
     v.   V1-V2-V3 is restricted to the Netherlands part of the language area. It is never the only order in a particular location;
     vi. V3-V1-V2 is found in the whole language area except Friesland. It is the most frequent order and often occurs as the only order in specific dialects.

There is a large gap between our hypothesis and the distribution of orders that are found on Map 1. In 139 instances (91x V1-V2-V3 and 48x V3-V2-V1), the facts support our theory. However, in 349 instances (163x V1-V3-V2 and 186x V3-V1-V2)
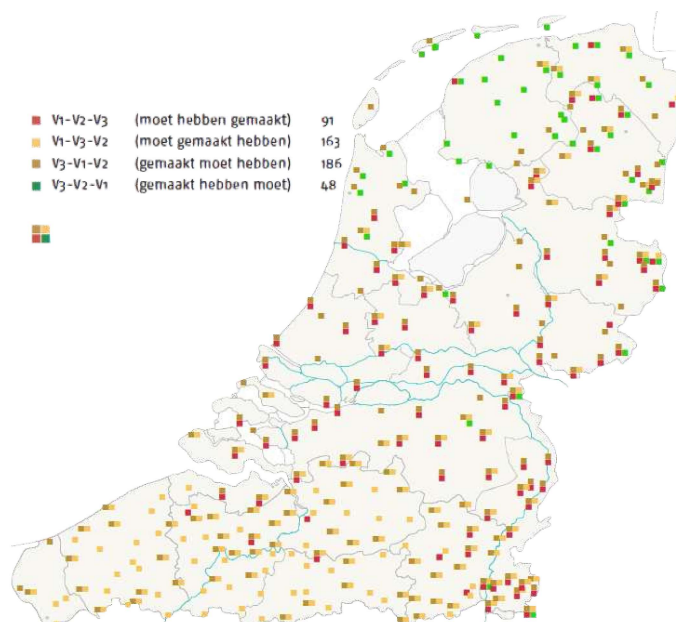
Map 1: SAND-II map 17b.

our hypothesis is not corroborated. It implies that 72% of the data contradict our theory. Nevertheless we will argue in the remainder of this paper that our ascending/descending hypothesis is supported by the data and that the hypothesis provides new insights into the theory of verbal clustering.

2 The categorial status of past participles

We know that participles are ambiguous with respect to their categorial status. They show up in verbal or adjectival contexts. Participles appear in attributive position in noun phrases, in contrast to infinitival verbs. The noun phrase *de verslagen vijand* 'the beaten enemy' is perfectly fine, but the noun phrase *de verslaan vijand* 'the beat enemy' is strongly ungrammatical.[2] In some cases there is an interpretative difference between adjectival and verbal participles (Kraak & Klooster 1968). A participle such as *geopend* can be interpreted as 'open' or 'has been opened'. In a verb cluster as in (4a, [V2-V1]), the participle indeed allows both meanings of *geopend*. However, in the other order (4b, [V1-V2]) the participle can only be interpreted as verbal, with

---

[2] Similarly, participles do appear in adverbial position, as in *de vijand zat verslagen op de grond* 'the enemy sat on the ground beaten', but infinitives do not. As opposed to bare infinitives, to-infinitives do occur in attributive positions in Dutch, as in *de te bellen kandidaten* 'lit. the to call candidates, the candidates that need to/can be called' showing that the presence of the infinitival marker te 'to' may correspond to a categorial difference (cf. van Riemsdijk 1982; Bennis 1990).

the interpretation 'has been opened'.

(4) a. John zag dat de deur geopend$_2$ is$_1$.
         John saw that the door opened   is
         'John saw that the door has been opened / is open.'

     b. John zag dat de deur is$_1$ geopend$_2$.
         John saw that the door is   opened
         'John saw that the door has been opened / *is open.'

     c. de geopende deur
         the opened   door
         'the door that has been opened / the open door'

Participles in attributive position within nominal phrases allow both interpretations, as is demonstrated in (4c). Apparently the adjectival position of the participle in (4c) allows a verbal, passive interpretation ('has been opened') and an adjectival, stative ('open') interpretation.[3] We thus conclude that there are two types of past participles: A-type participles that show up in adjectival position and allow both a verbal and an adjectival interpretation, and V-type participles that are exclusively verbal, both in position and in interpretation.

The fact that only the passive interpretation is available in (4b) can now be accounted for by assuming that the participle in (4b) is a V-type participle rather than an A-type one, thereby excluding the stative interpretation ('open'). Given that both interpretations are available in (4a), we conclude that the participle in cluster-initial position is an A-type participle, just as the participle in (4c). The difference in interpretation between (4a) and (4b) is thus related to a categorial difference. In (4a) the participle is or may be an A-type, whereas it has to be a V-type in (4b). This is supported by restrictions on modification, e.g. the durative adverbial *de hele dag* 'the whole day' is possible with the A-type variant of (4a) but not easily with the V-type variant in (4b).[4]

If we analyse participles as being ambiguous between a V-type and an A-type, we are in a position to provide an answer to the fact that V3-V1-V2 occurs frequently in the Dutch language area although this particular cluster is theoretically predicted not to occur. Non-verbal elements generally appear to the left of the verb in Dutch clauses since Dutch shows an OV-order. Given their (partly) non-verbal properties, we take A-type participles to be non-verbal, and thus to occur to the left of a verbal cluster, just as other non-verbal elements.

The occurrence of a participle in front of the auxiliary verb is possible in the whole language area in two verb constructions (*participle*-V; cf. SAND-II, map 16). Apparently, A-type status of the participle is a common phenomenon in Dutch dialects. This would then lead us to expect that the order *participle*-V1-V2 will show up in the whole language area as well. This is indeed the case with the exception of the

---

[3] This stative interpretation is known in the literature as a target state. Cf. Koeneman, Lekakou & Barbiers (2011) for recent discussion, diagnostics and references.

[4] More precisely, there is coercion such that *de hele dag* in (4b) has a repetitive, not a durative interpretation, as expected.

northern part of the language area. Moreover, it can be observed on Map 1 that the order V1-V2-V3 is accompanied by a participle-initial order in all locations.[5] In order to have both interpretive possibilities for the participle, the initial position must be available. As we have seen, the V-type status reduces the interpretive possibilities of the participle. Consequently, clusters with a participle in a cluster-final, verbal position are expected to constitute a subset of clusters with participles in a non-verbal position.

We thus analyse the V3-V1-V2 order in this construction as an instance of the *participle$_A$*-V1-V2 order, and this order is consequently no longer a problem for the theory. If the participle is a V-type, it will show up in the V1-V2-V3 order as the rightmost element. We thus have eliminated the problem of V3-V1-V2 orders as counterexamples to our hypothesis. There are no V3-V1-V2 clusters. In those cases the ascending V1-V2 cluster is preceded by an A-type participle.

If we now turn to the geographical distribution of these sentences, we observe that a participle can have an A-type status in the whole language area. It is rather the question where it may show up as V-type in the order V1-V2-V3. It is clear that there exists a strong preference for A-type participles in the Belgian part of the language area, whereas the Dutch part shows an ambiguity in categorial status. For the northern area it is difficult to determine what the status of the participle is. In the order *participle*-V2-V1 the participle can be A-type, as is a possibility in the rest of the language area, but it may also be V-type since the northern part of the language area has a descending strategy in verbal clusters.

3 Cluster interruption

We are now in a position to turn to the verb cluster order V1-V3-V2. We have argued that participles in Dutch are ambiguous in having a V-type or A-type status. We argued that a V-type participle would give rise to the order V1-V2-*participle$_{V3}$* in (5a), whereas an A-type participle would be ordered to the left of the verbs, and thus leads to the order *participle$_A$*-V1-V2 as in (5b). The northern order is *participle*-V2-V1 in (5c). However, the order V1-*participle*-V2 in (5d) occurs quite often (n = 163) as well, especially in the southern part of the language area (see map 1).

(5) a. ...dat John de wagen voor drie uur *moet hebben gemaakt.* [V1-V2-pcp] (V-type)

  b. ...dat John de wagen voor drie uur *gemaakt moet hebben.* [pcp-V1-V2] (A-type)

  c. ...dat John de wagen voor drie uur *gemaakt hebben moet.* [pcp-V2-V1] (V-type or A-type in northern varieties)

  d. ...dat John de wagen voor drie uur *moet gemaakt hebben.* [V1-pcp-V2]
    '...that John the car before three o'clock must have made.'

---

[5] V3-V2-V1 in the north, V3-V1-V2 in the rest of the language area. These orders can be analyzed as occurrences of A-type participles.

Given the fact that the participle can be A-type or V-type, there are two ways to analyse the occurrence of the order V1-*participle*-V2 in (5d). If the participle would be V-type, we face a problem for our approach since we predict the order V1-V3-V2 not to occur since it involves a non-uniform order, i.e. not a strictly ascending or descending order. Alternatively, we may take the participle to be of the A-type and argue that A-type participles may show up in a cluster in between two verbs. In order to further support our order hypothesis, it will be clear that we will take the latter approach.

The fact that verb clusters can be interrupted by non-verbal material has received a lot of attention in the literature. Varieties of Dutch differ with respect to the amount and the nature of the material they allow to appear within a verb cluster. Most varieties allow verb particles to appear in the cluster, as is shown in (6). These particles may be prepositional, adjectival or adverbial in nature.

(6) a. Ik vind dat John Marie *moet OP bellen.*   [part = P]
       I find that John Marie must up call
       'I think that John should call Mary.'

    b. Ik vind dat John die mug   *moet DOOD slaan.*   [part = Adj]
       I find that John that mosquito must dead   beat
       'I think that John should kill that mosquito.'

    c. Ik vind dat John die valse hond *moet WEG jagen.*   [part = Adv]
       I find that John that mean dog   must away chase
       'I think that John should chase away that mean dog.'

The capitalized elements are generally called *verb particles*. This label is just a way to describe a class of elements that together with the main verb constitute a complex verb, or rather a verbal predicate. There is no evidence for a syntactic category of the type Particle. There is no compelling evidence to consider particles as verbal prefixes either. Particles can be separated from the main verb in verb-cluster constructions (7a) and must be separated in clauses with Verb Second (7b). Moreover, they appear outside verbal inflection, as in the case of participles in which the particle shows up in front of the inflectional prefix *ge-* (7c).

(7) a. Ik vind dat John Marie *OP moet bellen.*
       I find that John Marie up must call

    b. John belt Marie *OP.*   (*John *OP*belt Marie)
       John calls Mary up

    c. Ik vind dat John Marie *moet hebben OPgebeld.*   (**ge*OP*beld)
       I find that John Marie must have   called

The literature on Dutch particles is vast. The analyses can roughly be divided into lexical approaches in which verb and particle are part of a lexical verb (a.o. Neeleman & Weerman 1993; Neeleman 1994), syntactic approaches in which particles are generated as separate items in the VP (a.o. Hoekstra, Lansu & Westerduin 1987; Bennis 1991;

den Dikken 1995), and hybrid proposals in which the particle-verb combination constitutes a syntactically complex word (Booij 2002; Blom 2005). All three approaches have theoretical and empirical problems. We will not enter into a detailed discussion of particles in this article. We just establish that this type of particle may easily be incorporated in a verb cluster in all Dutch dialects. This is also evident from the SAND (SAND II, maps 31a/b).

In this paper we will not discuss the properties of cluster formation either (see Barbiers, Bennis & Dros-Hendriks (submitted) for an elaborate discussion of this issue in terms of the structure building process Merge). The crucial fact is that non-verbal material of the particle-type may appear in between verbs within a verb cluster. In that respect these cases are in our view structurally similar to the occurrence of participles of the A-type within the verb cluster.

Not only particles and participles may appear in verb clusters. A whole range of other phrases show up in verb clusters in dialects of Dutch as well. A number of cases is given below.

(8) a. Ik vind dat John *moet **brood** eten.*   [bare noun / object]
    I find that John must bread eat
    'I think that John should eat bread.'

  b. Ik vind dat John *moet **klein** schrijven.*   [VP-adverb]
    I find that John must small write
    'I think that John should write small.'

  c. Ik vind dat John *moet **boeken** lezen.*   [plural noun / object]
    I find that John must books   read
    'I think that John should read books.'

  d. Ik vind dat John *moet **een auto** wassen.*   [indefinite object]
    I find that John must a   car wash
    'I think that John should clean a car.'

  e. Ik vind dat John *moet **op tafel** staan.*   [prepositional phrase]
    I find that John must on table stand
    'I think that John should stand on the table.'

  f. Ik vind dat John *moet **de meisjes** zoenen.*   [definite object]
    I find that John must the girls kiss
    'I think that John should kiss the girls.'

If interruption occurs, it is always optional. In the whole language area, all the sentences in (8) are perfectly fine in the order in which the interrupter precedes the cluster. It is clear that cluster interruption by non-verbal material of the construction types in (8) is basically confined to the Flemish area (West- and East-Flanders and the province of Flemish Brabant). We find some cases in which a bare noun occurs in the cluster-medial position in the Netherlands, but for reasons we do not yet understand, the remainder of constructions is geographically very much restricted to the southern part of the language area. However, the fact that the cluster interruption in (8) is predominantly a southern phenomenon ties in with the fact that we

have observed above that cluster interruption by type-A participles is the dominant order in verb clusters with participles in southern varieties of Dutch as well, as was evident from Map 1.

On the other hand, we have shown that cluster interruption is a general phenomenon of Dutch verb clusters given that particles are found within the verbal cluster in most varieties of Dutch and that interruption of A-type participles is quite often found in the Netherlands as well. It is striking that the possibilities to allow interruption slowly increase geographically in moving to the southwest (West-Flanders) of the language area. This is shown on Map 2.
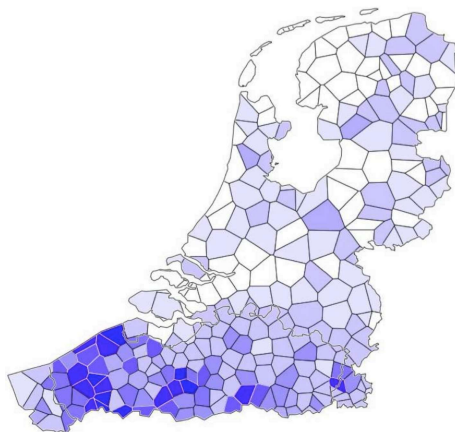
Map 2: Cluster interruption - synthesis (= SAND-II map 30b + particles + participles).

On map 2, the color is getting darker the more interruption types (maximum is 8) a particular area accepts. The map shows that cluster interruption is increasing from north (the Frisian area) to south-west (the West-Flemish area).

From these data we conclude that interruption of a verb cluster is a possibility in almost all varieties of Dutch with the exception of the northern dialects. The extent to which interruption occurs is determined by two tendencies:

1) the more predicative the non-verbal element is, the more readily it appears as part of the verb cluster;

2) going in the direction of the southwest of the language area the preference for inclusion of non-verbal parts within the verb cluster increases.

The first tendency implies that non-predicative elements such as subjects, clitics, and sentence adverbials are generally not acceptable within verbal clusters and this is indeed the case. These tendencies do not seem to be determined by structural principles because (i) all descending varieties do allow cluster interruption in principle, (ii) there are no clear geographic borders between dialects that allow interruption and those that do not.

4 Conclusion

From the discussion above, we can conclude that the hypothesis that Dutch dialects have either a descending (northern varieties) or an ascending (rest of the language area) order in the verb cluster is supported notwithstanding superficial evidence to the contrary. The apparent counterexamples are due to two independent factors: participles can be either A-type or V-type, and non-verbal predicative constituents may interrupt the verbal cluster. The fact that the V2-V1-V3 order and the V2-V3-V1 order are lacking in the construction under discussion is further support for a structural analysis of the phenomenon of cluster formation. These orders are not ascending/descending and there are no independent structural factors that interfere. We have thus formulated a very restrictive theory which makes quite precise predictions on the occurrence of different orders and the geographic correlations between different instantiations of occurring orders. We have provided a clear example of structural dialectology. We thus answer Weinreich's question positively.

References

Barbiers, Sjef, Hans Bennis & Lotte Dros-Hendriks. Submitted. Merging verb cluster variation.

Barbiers, Sjef, Johan van der Auwera, Hans Bennis, Eefje Boef, Gunther de Vogelaer & Margreet van der Ham. 2008. *The syntactic atlas of the Dutch dialects*. Vol. 2. Amsterdam University Press.

Bennis, Hans. 1990. TI: a note on *modal passives*. In J. Mascaro & M. Nesport (eds.), *Grammar in progress*, 33–40. Foris Publication.

Bennis, Hans. 1991. Theoretische aspecten van partikelvooropplaatsing II. *TABU* 21.

Blom, Corrien. 2005. *Complex predicates in Dutch: synchrony and diachrony*. LOT Utrecht.

Booij, Geert Evert. 2002. Constructional idioms, morphology, and the Dutch lexicon. *Journal of Germanic linguistics* 14(04). 301–329.

den Dikken, Marcel. 1995. *Particles: on the syntax of verb-particle, triadic, and causative constructions*. Oxford University Press.

Hoekstra, Teun, Monic Lansu & Marion Westerduin. 1987. Complexe verba. *Glot* 10. 61–78.

Koeneman, Olaf, Marika Lekakou & Sjef Barbiers. 2011. Perfect doubling. *Linguistic Variation* 11(1). 35–75.

Kraak, A. & W. G. Klooster. 1968. *Syntaxis*. Culemborg / Keulen: Stam-Kemperman.

Neeleman, Ad. 1994. *Complex predicates*. Utrecht University (OTS) PhD thesis.

Neeleman, Ad & Fred Weerman. 1993. The balance between syntax and morphology: Dutch particles and resultatives. *Natural Language & Linguistic Theory* 11(3). 433–475.

van Riemsdijk, Henk. 1982. A note on case absorption. *Wiener Linguistische Gazette* 28-29. 72–83.

Weinreich, Uriel. 1954. Is a structural dialectology possible? *Word* 10(2-3). 388–400.