

VERB MOVEMENT IN DUTCH PRESENT-PARTICIPLE CLAUSES

Jack Hoeksema
University of Groningen

*For Hans den Besten,
without whom Germanic syntax
would be a very different place*

0 Overview

This paper is devoted to the phenomenon of V-to-C movement in early modern Dutch present-participle constructions. After a brief discussion of the general status of participial constructions in Dutch, the various types to be distinguished, and some of the main diachronic developments in this area, evidence is presented for verb movement in participial constructions used as free adjuncts in the early modern period. The significance of the Dutch facts for theories of verb movement are discussed, in particular the question of whether finiteness is a necessary requirement for verb movement.

One striking feature of participial verb movement in Dutch is the fact that it is optional, and not obligatory. A number of factors influencing the variation between V1 and OV order are identified on the basis of a large corpus of examples from the 17th century to the present. My conclusion is that these factors are correlates of register variation and do not directly affect verb placement.

1. Introduction

1.1. The status of participial clauses in Dutch

Present-participle clauses are not a striking feature of present-day Dutch. In early modern Dutch, on the other hand, they appear in great abundance in the written language, under the influence of Latin and French. They were never so prominent in the spoken vernacular, judging from their virtual absence in popular theatre, such as farces, as well as from written texts by semi-literate writers.

The changes between 17th century and late 20th century Dutch in this area are mostly differences in use, rather than grammar, in particular differences in frequency of occurrence and differences in average size. The participial constructions of the 17th century are by and large the same as those of today, but nowadays, as in the Middle Ages, short participial constructions are preferred, while long ones tend to be avoided. The rise in both frequency and size of complex participial constructions in the 16th and 17th centuries was noted in Heemstra (1925). He also noted the increase of participial constructions with verb clusters, which were employed to a greater extent in Dutch than in German. Especially clusters with 'have' or 'be' as the highest verb are common in Dutch and quite rare in all stages of German, although Heemstra noted incidental occurrences in Notker, the Parzifal and elsewhere.

In one respect, early modern Dutch participial clauses show a strictly grammatical difference from contemporary counterparts. As I will show below, early modern Dutch had variation between OV and V1 orders, whereas nowadays, with the exception of some frozen and archaic forms, only OV remains. One of the main goals of this paper is to motivate this claim about word order variation (the existence of a V1 pattern in Dutch participial clauses has not been noted before in the literature on Dutch syntax), and to explore the various factors

which determined the choice of one of the alternatives. In addition, some repercussions of the early Dutch data for theories of verb movement are briefly discussed.

1.2. *Types of present-participle constructions*

A few words are in order regarding the types of present-participle constructions found in Dutch. Present-participle groups in Dutch are no longer used as complements to a verb. They are primarily used as adjuncts, either as free adjuncts modifying the sentence, or as attributive noun modifiers. Complement participial clauses existed in Middle Dutch, but disappeared in early modern Dutch, for reasons that are still murky (but cf. Duinhoven 1997: 259 ff. for some discussion). Until the 19th century, participial constructions could be used as predicates in copular constructions. With some lexical exceptions (e.g. *hij was stervende* 'he was dying'-cf. Geerts et al., 1984: 810 for an overview), this is no longer possible. In this paper, only adjunct participial constructions are considered.

2. Word order in present participle clauses

2.1. *OV versus V1*

Let me now turn to the main topic of this paper, the position of the participle in free adjuncts. There are two main options in early modern Dutch, the most common one being the OV-order which we have seen already in (1), and another order, which I will term the V1-order. The order of elements in V1-participial groups is basically that of other V1-clauses in Dutch, such as yes/no questions, imperatives and certain conditional clauses. Some examples of this type of participial clause are given in (1):

- (1) a. steekende mijn mageren Hals, en slincker arm onder de Deecken uyt
stick-ing my skinny neck and left arm under the blanket out
"extending my skinny neck and left arm from under the blanket"
W.G. van Focquenbroch, *Afrikaense Thalia* [1678], p. 157
- b. konnende een Schilder op die tyd een dikke Kaers bekostigen
can-ing a painter at that time a fat candle afford
"a painter being able in those days to afford a fat candle"
Jacob Campo Weyerman, *Den echo des Weerelds* [1726], p. H3V
- c. willende niemand der representanten d'eerste zijn
want-ing nobody of-the representatives the-first be
"none of the representatives desiring to be the first"
W.H. Teding van Berkhout, *Dagboek van een patriot* [1795], p. 26
- d. zullende wij die met ons gansche hof komen bijwonen
will-ing we that with our whole court come attend
"we going to attend that with our entire court"
Jacob van Lennep, *De roos van Dekama* [1836], p. 278
- e. blijvende het in gebruik bij het Dep. van Oorlog
stay-ing it in use with the Dept. of War
"it remaining in use by the Department of War"
J.A. Feith, *Wandelingen door het oude Groningen* [1908], p. 289

These examples illustrate the following typical properties of V1 structures in Dutch (cf. e.g. Koster 1975, Den Besten 1977):

- only the highest verb in the structure moves to initial position
- subjects (if present) appear to the right of the initial verb
- particle verbs leave their particle behind (cf. 1b)
- V1 does not distinguish between auxiliary and main verbs (unlike e.g. English Subject-Aux inversion)

The literature on early modern Dutch syntax is silent on the V1 nature of these participial clauses. This may have to do with the fact that similar participial clauses, as far as I have been able to ascertain, are not attested in German, nor, for that matter, in English, although Jespersen (1940: 50) notes a few cases where the subject is preceded by the participle. They appear to be the source of the modern prepositions *during*, *pending* and *notwithstanding*.¹ V1 is also frequent with *failing*, as in Jespersen's example (2):

(2) he used to go in search of his daughter, or, failing her, his wife

It appears from Jespersen's discussion that V1-orders in participial constructions are limited to a few fixed cases, and did not at any point form a productive option in the syntax of English. Presumably, they arose in imitation of French, which had V1 as well as SVO participial clauses.² French influence is most likely also the source of the Dutch V1-pattern, which suddenly became fashionable in the Renaissance period. The earliest attestations of V1 are from the 16th century, and appear mainly in legal and other bureaucratic texts. Note in this connection that the Netherlands in this period were unified under the francophone house of Burgundy and French influence on Dutch was especially strong, notably in the registers of written Dutch mentioned above. The word order in (1) is not entirely French, since nonfronted verbs and particles belonging to verb-particle units do not appear before the verbal complements, but after them, in line with the basic OV-character of Dutch.³

Note that alternative analyses, making use of the better-known mechanisms of extraposition and/or Verb Projection Raising (cf. Den Besten and Edmondson 1983), can also explain some of the orders in (1). These potential alternatives, however, do not explain why V1 is especially common in participial clauses, and fail in cases such as (1c) or (1d). Here we have subject pronouns, which never extrapose in Dutch and do not undergo Verb Projection Raising. Moreover, while an alternative account may help to explain the existence of material to the right of the V1 verb, it doesn't explain the absence of any material to the left.⁴

Table 1 shows the decline of the V1 pattern in multiple verb participial clauses. The data are based on a collection of some 4300 examples, taken from prose of all sorts, including novels, diaries, historical, medical and legal texts, and personal and professional letters. Especially for the most recent periods it takes a long time to find a reasonable number of examples, due to the paucity of participial clauses. Table 1 only shows data for multiple verb participial clauses, because my data set did not include single verb participial clauses. In clauses with only one verb, V1 order could, in most cases, be derived by extraposition, and so such clauses, although more frequent, are less valuable due to their structural ambiguity. The main trends to be discerned are the same for simple and complex participial clauses anyway.

*Table 1: Decline of V1 order
in modern Dutch participial clauses*

period	N	% V1
1600-1650	536	26
1650-1700	702	29
1700-1750	737	27
1750-1800	983	29
1800-1850	716	17
1850-1900	397	10
1900-1950	183	5
1950-2000	79	0
total	4333	

2.2 Implications for accounts of verb movement: no finiteness asymmetry

V1 order in participial clauses raises numerous questions. One question is why it is permitted at all. Verb movement of the kind involved in Germanic Verb First and Verb Second structures is associated with finite verbs. Haider and Prinzhorn (1986: 5) have referred to this as the "finiteness asymmetry", one of the major explicanda for a theory of Verb movement in Germanic. Present participles, on the other hand, are not finite in the usual sense of the word, since they lack the features of tense and of subject agreement, in particular, person and number. The conclusion I would draw from this, is that verb movement to the left is more abstract than has been supposed in the past: it need not involve a single morphosyntactic property such as tense or agreement, but may also be triggered by other features, such as those of the participial clause. Movement of present participles is not an unheard-of phenomenon. Rivero (1994) notes that present participles in Modern Greek and Rumanian occur further to the left than regular verbs. In particular, they appear to the left of clitics that are otherwise preverbal. In (3-4), some of Rivero's Greek examples are given to illustrate this claim. (3) shows the object clitic prior to the finite verb, whereas (4) shows the participial form of the same verb preceding the object clitic.

- (3) Dhen tha to éXi teliósi (Modern Greek)
not FUT it has finished
"He will not have finished it"
- (4) éXondas ta dhiavási
having them read
"having read them"

Hazout (1992) notes that verbal gerunds in modern Hebrew are VSO, whereas regular sentences are SVO. Again, we see a leftward shift of the present participle:

- (5) bi- re'ot Dan et Dina (Modern Hebrew)
with seeing Dan OM Dina
"with Dan seeing Dina"

Rizzi (1982) reports on participial clauses in Italian with a V1 order, which he derives by a rule called Aux-to-Comp:

- (6) Avendo Mario accettato di aiutarci
 having Mario accepted to help us
 “Mario having accepted to help us”

In the Italian case, the participles in clauses with V1 order are based on auxiliaries (*have, be* and modals, hence the term Aux-to-COMP), whereas similar structures with main verbs are degraded. Modern French also shows leftward shift of the present participle,⁵ as noted by Pollock (1989), but without a similar restriction to auxiliary verbs; cf. the paradigm in (7):

- (7) a. ne travaillant pas beaucoup (participial clause)
 neg working not much
 "not working much"
 b. *ne pas travaillant beaucoup
 c. ne pas travailler (infinitive)
 d. *ne travailler pas
 e. Je ne travaille pas (finite)
 f. *Je ne pas travaille

The present participle occurs to the left of *pas* in French, unlike the infinitive, but just like the finite verb. Noting this behaviour, Pollock (1989: 408) writes:

"In view of such contrasts, let me indeed suggest that participial clauses in French are finite structures. In English, on the other hand, Tense in gerunds has nonfinite properties."

This suggestion of Pollock's looks ad hoc and circular: if we use movement to the left as a criterion for finiteness, then Haider and Prinzhorn's (1986) asymmetry, referred to above, is rendered vacuous. We would say that participles undergo V1 because they are finite, and we know they are finite because they undergo V1. Let me mention in passing, however, some curious data that might point toward finite status of present participles. First, I found one case of a present participle derived from a past tense form of a verb:

- (8) soudende alsdan de Gordijnen en andere plaetsen met niet eenen mensch voorsien,
 would-ing then the walls and other places with not one person fitted-out
 maar t'eenemael ontbloot moeten blijven
 but entirely denuded must stay
 “in which case the walls would not be manned by a single person, but would have to remain entirely bare”
 Frederik Coyett, *t Verwaerloosde Formosa* [1675], p. 126

Note however, that this is the only example of its kind found in 3000 examples of present-participle constructions. It might well be attributed to error, rather than taken as evidence. Equally unusual, but pointing in the same direction, is the following example where the negative clitic *en*, which is normally only attached to finite verbs (cf. e.g. De Haan and Weerman 1984, BurrIDGE 1993, Hoeksema 1997), combines with a present participle.

- (9) haer niet en cunnende onderrechten van het spoor der voorgereden jaegers
 her not NEG can-ing inform about the trail of-the forgoing hunters
 “being unable to inform her of the trail of the hunters who came earlier”
P.C. Hooft, *Granida*, [1615], p. 17

While the example is suggestive, it is also unique in my material, and if present participles were straightforwardly finite, more examples of this kind ought to be found.⁶

What I want to propose now is compatible with the spirit, if not the letter, of Pollock’s suggestion. There is reason to assume that present-participle endings in Dutch (and French) are in complementary distribution with finite morphology. In particular, it is the case in these languages that finite verbs and present participles must always be the initial (head) member of a chain of auxiliary verbs. Put differently, there are no auxiliary verbs which govern a finite verb or a present participle in Dutch or French. In English, on the other hand, auxiliaries such as *be* may select *-ing* forms of verbs. Since there can be only one initial member of a chain of verbs, present participles and finite verbs cannot cooccur in Dutch or French. Assuming that complementary distribution is indicative of competition for the same slot, I conclude that present participles and finite verbs appear in the same position, let us say T. This is not the same as saying that present participles are finite. Indeed, it is important to stress that they are not, if we want to explain the fact that verb movement for present participles was optional in early Modern Dutch and ungrammatical in contemporary Dutch, while it was and is obligatory for finite verbs in main clauses. In section 2.4., I will further spell out how verb movement in participial constructions can be derived, but before doing so, I first discuss a similar-looking type of V1 order in coördinate structures.

2.3 *Against the finiteness asymmetry: movement of infinitives in coördinate structures*

Dutch, as well as several other Germanic languages, provides some additional evidence against the finiteness asymmetry. In medieval and 17th century Dutch, and nowadays in the northern dialects, there is a special kind of coördination of infinitival verbs, in which the second conjunct shows the effects of verb movement: the verb precedes its complements, even clitic pronouns, which otherwise never appear after a nonfinite verb. In (10a-b), examples from Middle Dutch and early modern Dutch are given, and in (10c), an example from the northern dialect of Groningen.

- (10)a. Dese crude salmen breken ende ziedense in water mit tarwenzemelen.
 this herb shall-one break and boil-it in water with wheat-bran
 "This herb, one must break and boil in water with wheat bran"
***Boec van medicinen in dietsche* [anonymous, ca 1300], p. 178**
- b. ik wou vragen of je dan zo goed niet zou wezen, en komen eens aan de deur?
 I would ask whether you than so good not would be and come once to the door
 "I wanted to ask whether you would then be so kind, as to come to the door"
Justus van Effen, *De Hollandsche Spectator* [1733], p. 29
- c. Doe mos mor gaauw noar hoes tou goan en trekken die om.
 you must but fast to house to go and draw yourself around
 "You better go home fast and change clothes."
Jan Klompsma, ‘Ons Loug’, in *Nieuwsblad van het Noorden* 12-12-1992, p. 14

What triggers the movement in the second conjunct is somewhat unclear, but a few factors appear to be relevant. The second conjunct seems to be semantically subordinated to the first one, and the event described in the second conjunct is always hypothetical or irrealis. Often, the construction expresses a goal or a future event. This construction has received a lot of attention among Frisian syntacticians, where it is known as the *imperativus-pro-infinitivo*. De Haan and Weerman (1986) have argued that the Frisian counterpart of this construction is compatible with the finiteness asymmetry, because in Frisian, the second conjunct has an imperative, rather than an infinitive, as in other northern dialects, and the imperative is arguably finite. However, even for Frisian, the problem remains that the use of the imperative is a quite recent, in fact 20th century innovation, as Hoekstra (1997) has shown. Until then, the infinitive was used, as in other northern Dutch and lower German dialects. The conclusion which Hoekstra draws is that overt morphosyntactic features such as tense or agreement are not necessary to license verb movement. The same conclusion is drawn in Johnson and Vikner (1994) regarding infinitival verb movement in Icelandic control complements. More recently, Han (2000) has argued for movement of infinitives in Middle English control clauses. There is, then, by now abundant evidence for verb movement in infinitival clauses. In the case of V-movement in coordinate structures, it is attractive to suppose that the movement is due to a semantic feature on the conjunct, let us say [irrealis], which acts as an attractor of the verb.⁷

2.4 Deriving the VI order

The literature on verb movement in participial constructions offers two main solutions to the problem of deriving the movement:

- the movement is driven by verbal morphology
- the movement is forced by outside (nonverbal) “attractors”

Rivero (1994) opts for a morphology-driven solution. The participial morpheme is generated as the head of a functional projection. Movement of the verb to the position of the ending is forced by the Stray Affix filter, which forbids endings to remain unattached. This is a split-morphology way of doing things (along the lines of Baker 1988, Halle and Marantz 1993, among others), and one that is not unattractive, because the formation of participial clauses in Dutch is quite regular, indeed strictly agglutinative, and does not show the kind of irregularity which poses a problem for this kind of approach elsewhere. To get the V1 order, the ending could be base-generated in C, and to get the OV order, base-generation of the ending in a lower node (e.g. T) would have to be assumed. As far as I can see, there are no technical problems standing in the way of such a solution, although the idea of inserting the participial ending in different positions to derive different orders does not have great explanatory depth. The same can be said of Minimalist alternatives in terms of “feature checking” (Chomsky 1995). Although I am not aware of any empirical evidence deciding either in favour of, or against either approach, let me, for the sake of concreteness, pick the latter. In a Minimalist framework, one would have to assume that participial clauses either have a weak or a strong C-position. When C is strong, movement is necessary to check (eliminate) the strong feature, but when C is weak, there is no movement. We can think of the variation between strong and weak C as a particular instance of Kroch’s (1994) notion of *doublets*. According to Kroch, the presence of syntactic doublets is a sign that two linguistic systems are in competition (usually as a result of language contact). I return to this idea in section 4 below.

Hazout's (1992) proposal for modern Hebrew belongs to the second type of solution, where movement is triggered not by morphology, but outside attractors. Hazout postulates adjunction of the participle to the prepositional complementizer introducing the Hebrew participial clause. For Dutch, this would have to be movement to an empty operator attracting the participle (similar in effect to the attracting force of the conjunction sign *en* discussed above). This kind of approach might be motivated somewhat by the presence of an overt prepositional complementizer in a number of Dutch participial clauses, namely *als* 'as', cf. (11):

- (11) Ik spreek als hebbende zelf strijd gekend
 I speak as having myself struggle known
 "I speak as one who has known strife himself"
Vincent van Gogh, *Verzamelde brieven*, part 3 [1880], p. 62

We cannot, however, adopt Hazout's proposal for Dutch, because *als* does not force verb movement (V1 is just as optional with overt *als* as it is without this element). Secondly, *als* is better viewed as a precomplementizer, heading a projection higher than and including CP, rather than as an actual complementizer. One clear indication in support of this is that *als* may cooccur with the complementizer *dat* in finite structures, in which case it precedes it:

- (12) Er werd gesuggereerd als dat hij een verrader was.
 there was suggested as that he a traitor was
 "It was suggested he was a traitor"

When *dat* is absent, the finite verb may move into the position of the complementizer, which is still preceded by *als*:

- (13) Er werd gesuggereerd, als zou hij een verrader zijn.
 there was suggested, as would he a traitor be
 "It was suggested that he would be a traitor"

Movement of the participle in (11) can be seen as analogous to the movement of the finite verb in (13): namely as an instance of V-to-C, rather than adjunction to C, a phenomenon otherwise not attested in Dutch for verb movement.⁸

The assumption that participial clauses are full CPs, and not smaller objects such as IPs, AgrPs or VPs, can be motivated independently by examples such as those in (14) below, which have a WH-element in initial position. WH-elements are rare in participial clauses, because a participial clause is never used as a question or as a WH-marked relative clause. In the 17th and 18th century, however, we find a Latinate construction where relative pronouns are used in an anaphoric fashion. Since such relative pronouns always occupy the COMP (or Spec of COMP) position (they never occur *in situ*, unlike wh-pronouns), we have clear evidence for CP-status of the entire participial clause.

- (14)a. 't Welk evenwel niet connende geloven anders als der commysen
 the-which however not canning believe other than of-the commissioners
 en wegers werc te wesen
 and weighers work to be
 "Which being unable to believe to be anything else than the work of the
 commissioners and weighers [...]"
C. Speelman, *Journaal der reis van Joan Cunaeus* [1652], p. 297

- b. welke Japon zy ongevoeliglyk laatende zakken,
 which dress she insensitively letting go-down
 zag ik alle de Deelen van haar Lighaam
 saw I all the parts of her body
 “When she dropped this dress insensitively, I saw all parts of her body”
Jacob Campo Weyerman, *Den echo des weerelds* [1726], p. B4

I have not been able to find any cases of WH-fronting combined with V1 order, but I predict these to be possible as well. The problem is that WH-elements in participial clauses are fairly rare, and so it takes a lot of effort to find relevant cases. If we do find WH-elements together with fronted participles, we would actually have V2, an order that appears to be impossible with non-WH elements in Spec of C.⁹

3. Factors conditioning V1/OV variation

However one is going to account for verb movement in participial clauses, one of the problems that must be kept in mind is its optionality. Optional V1 or V2 is unusual. Yet it cannot be denied that the V1 order of early modern Dutch participial clauses is optional. One and the same author may use both OV and V1 orders in a single paragraph. There do not appear to be grammatical factors making one or the other order obligatory, although there are some factors which affect the choice of order in a statistical way.

3.1. Length

One surprising factor is length. A sample from the *Nederlandsche Historien*, by P.C. Hooft, shows a strong effect of the size of the middle field: in complex V1 participial clauses, the average number of words in the middle field is 5.5, whereas in complex OV-participial clauses, the average length of the middle field is 2.8 words. The data are presented in Table 2, and are statistically significant: a χ^2 test yields a value of 5.7, $p < 0.025$.

Table 2: Effect of length in *Nederlandsche Historien*

	V1	OV
N	45	23
total length of middle fields (in words)	250	64
average length of middle field (in words)	5.5	2.8

In absolute participial clauses from the second half of the 19th century, I found a similar effect of length. This time, however, the length of the middle field did not show a significant correlation with V1 order, but the overall length of the entire participial clause did:

Table 3: Effect of length in absolute participial constructions 1850-1900

	V1	OV
N	17	21
total length of middle fields	106	87
average length of middle field	6.2	4.1
total length of participial clause	219	135
average length of participial clause	12.9	6.4

The difference between the mean length of V1 and OV clauses is significant at the .001 level according to a t-test.

3.2. Lexical preferences

Lexical factors will also have to be considered. Thus the item *zullende*, the present participle of the future auxiliary *zullen*, has a far stronger preference for the V1 order than most other auxiliaries (over 75% of participial clauses with this participle from the 17th, 18th and 19th centuries are V1). Up to 1800, *latende* “letting” shows an almost equally strong preference for V1. It is likely that lexical factors can be derived from a more abstract and general factor, style. V1 orders are most common in formal registers. These are also precisely the registers in which *zullende* is most common. See § 4 for more discussion.

3.3 Syntactic factors

More strictly syntactic is the relationship between V1 and subject licensing. Free adjuncts come in two types: those with and those without subjects. When we consider the presence or absence of a subject, a number of important favouring or disfavouring factors may be identified. Let us first take a look at the data in Table 4:

Table 4: Word Order and Predicate Type - Period 1800-1850

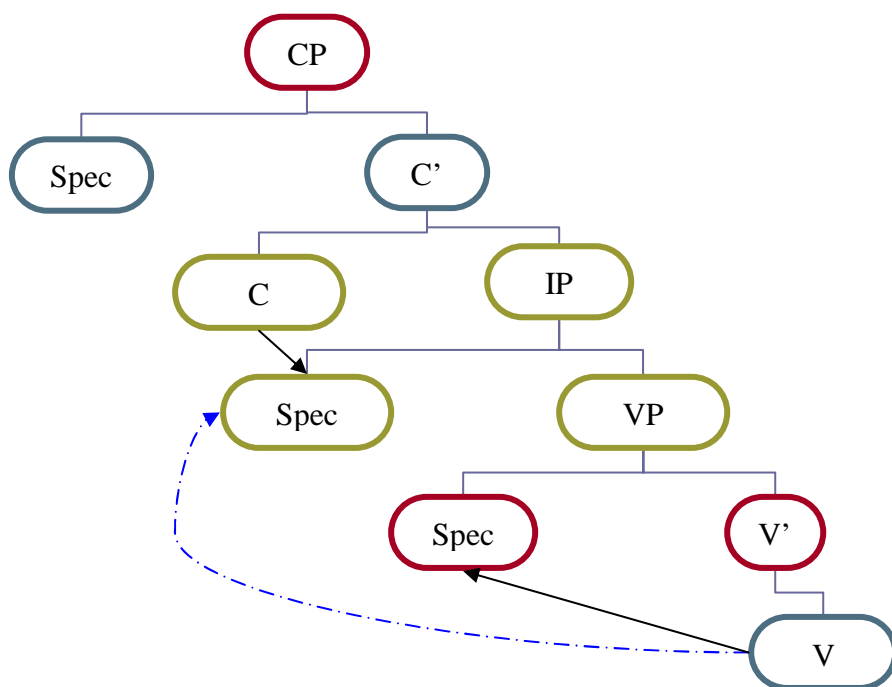
	-subject		+subject	
	V1	OV	V1	OV
unergative	30	414	36	19
unaccusative	8	181	45	77

Table 4 consists of two 2x2 cross-tabulations, one for participial clauses without subjects and one for participial clauses with subjects. Two variables are compared: word order (V1 versus OV) and predicate type, according to Perlmutter’s (1978) unaccusative hypothesis: unergative predicates (transitive verbs and intransitive verbs which select *hebben* ‘have’ in the perfect tense) and unaccusative/passive predicates, which select *zijn* ‘be’. For participial clauses without overt subjects, there is an overall preference for the OV order, whereas participial clauses with an overt subject show a preference for V1 when the predicate is of the accusative type, but a preference for OV when the subject is unaccusative or passive.

Suppose that the subject of an accusative predicate is external to the VP and the subject of a passive or unaccusative predicate internal (Burzio 1986). Then we could say that an overt external subject prefers V1 order, whereas internal subjects prefer OV order. This would

make sense if there were a preference for local licensing of the subject: internal subjects are licensed by verbs in situ, external subjects by verbs in COMP:

- (15) Diagram of local and nonlocal licensing. (Local relations are indicated by a solid arrow, nonlocal ones by a dotted line)



This may seem somewhat reminiscent of theories of verb movement which take subject licensing or case assignment to be the driving force behind verb movement, such as Platzack's (1986) account. Note, however, that we cannot elevate this apparent preference for local licensing to a principle of grammar, since the tendencies we find are not absolute differences. Moreover, the picture is different for other periods. For a fuller overview, refer to Table 5:

Table 5: Word Order and Predicate Type in 50-year periods
(Each period is indicated by its initial year.)

	1600				1650			
	-subj		+subj		-subj		+subj	
	V1	OV	V1	OV	V1	OV	V1	OV
unerg	77	132	8	21	102	207	13	36
unacc	16	123	23	96	25	113	57	131
	1700				1750			
	-subj		+subj		-subj		+subj	
	V1	OV	V1	OV	V1	OV	V1	OV
unerg	57	244	25	45	27	179	38	21
unacc	19	110	43	92	8	92	54	69
	1800				1850			
	-subj		+subj		-subj		+subj	
	V1	OV	V1	OV	V1	OV	V1	OV
unerg	30	414	36	19	8	213	10	4
unacc	8	181	45	77	5	42	7	17
	1900				1950			
	-subj		+subj		-subj		+subj	
	V1	OV	V1	OV	V1	OV	V1	OV
unerg	6	124	0	1	0	56	0	1
unacc	2	28	1	19	0	9	0	12

The preference for V1 among absolute constructions with accusative predicates and OV for absolute constructions with unaccusative predicates, which is highly significant in the first half of the 19th century ($\chi^2 = 12.5$, $p < 0.001$), is also found for the half century preceding and following this period, but more weakly. For the 17th century and especially the early 18th century, however, we do not see this preference.

It is remarkable that there is no overall effect of predicate type on the position of the participial verb. Collapsing data from all periods, we find only slight differences among the various predicate types:

Table 6: Predicate type and word order

Predicate Type	V1	OV	% V1
unaccusative	157	670	19
unergative	91	346	20.8
transitive	448	1632	21.5
passive	253	815	23.7

However, as noted above, when subjects are present, the picture changes considerably:

Table 7: Predicate type and word order in clauses with overt subjects

predicate type	V1	OV	% V1
unaccusative	110	232	32.2
unergative	25	41	37.9
transitive	145	162	47.2
passive	195	449	30.3

When we compare Table 7 to Table 6, we see a general increase in V1 order across all categories, an increase which is strongest for transitive predicates. Unergative predicates appear to pattern with unaccusative predicates, although numbers are small (the difference between unergative and transitive predicates in the table is significant at the .05 level). The general increase of V1 in clauses with subjects could be explained in terms of a factor alluded to above, namely clause size. All other things being equal, clauses with overt subjects are longer than clauses without overt subjects. And if longer clauses have higher percentages of V1 order, this factor could explain the general increase of V1 across all categories. The fact that the increase is stronger for transitive predicates might be due to a threshold effect. If the effect of size on verb position requires a certain minimum length, and given that transitive predicates have one more argument than unergative, unaccusative or (agentless) passives, the threshold would be reached in more cases by transitive predicates than by their unergative counterparts (again with the proviso that all other things be equal). If this explanation is correct, then V1 would not have to be explained in terms of a local licensing requirement for the subject. There is a general ergativity effect on the presence of subjects, as we have seen in Table 6, but this effect is independent of verb position. It is still noticeable in the data for the second half of the 20th century, when the V1 order has become extinct. The effect of subjects on the choice of V1 versus OV in the earlier periods could then be entirely due to the effect of length.

Conclusions

The main conclusions so far of this paper are:

- Dutch participial clauses used to have an optional V1 order
- Germanic verb movement is not restricted to finite verbs
- V1 is (probably) V-to-C
- V1 order interacts with the licensing of overt subjects and predicate type, in particular the Unaccusative/Accusative distinction
- There is an effect of clause length on the choice of V1: V1 clauses tend to be longer than OV clauses

Many questions remain. First of all, what is the nature of the size effect? It is clear that it is extragrammatical. It seems also clear that it does not have a parsing explanation, unlike certain other effects of size on position, such as Heavy-NP shift or Extraposition, where parsing explanations have been proposed and appear to have some measure of explanatory success (cf. e.g. Hawkins 1994). Since my data were restricted to complex verb clauses, V1 actually creates some additional complexity, namely a dependency between a fronted auxiliary verb and its dependent main verb left at the end of the clause. This can be viewed as a type of center-embedding: $V_1 \text{ X } V_2$, which is normally avoided (Miller and Chomsky 1963). It is therefore not likely that parsing factors would favour V1-order in longer clauses. Note also that weight effects appear to be generally restricted to rightward movement of heavy elements; in this case, we have leftward movement of a nonheavy element being facilitated by the heaviness of the clause containing it, an effect not otherwise attested in the literature.

Similarly puzzling are lexical factors, such as the preference of *zullende* for V1 order. Germanic verb movement is not otherwise known to be lexically sensitive.

Instead of viewed clausal length or the lexical identity of the participle as independent variables determining the dependent variable of verb position, it is worthwhile to consider them as covariables of verb position, determined by a more abstract factor, *register*. The OV and V1 orders of Dutch participial clauses are best viewed as the result of the coexistence of two grammatical systems, a Germanic OV system with weak C, and a partially Romance V1 system with strong C. The V1 system is limited to a learned register. Length of participial constructions as well as choice of lexical items, such as *zullende*, are correlates of these registers. I noted above that the demise of V1 order went hand in hand with a considerable reduction in size of participial constructions. It may likewise be noted that *zullende* became obsolete as a head of participial clauses during the same period as V1 order, which is to be expected if they belong to the same moribund register, cf.:

Table 8: Decline of *zullende* and V1 order

Period	% v1	% zullende
1700-1750	27	5
1750-1800	29	3
1800-1850	17	3
1850-1900	10	3
1900-1950	5	1
1950-2000	0	0

The OV and V1 systems were in competition for three centuries. The demise of V1 in the 19th century is part of a general change in the written language during that period, in which many features of written style that were obsolete or nonexistent in the spoken vernacular were discarded, such as the subjunctive mood, the genitive case or the pronoun *gij* “thou”.

Notes

¹ For similar developments from participle to preposition in Dutch, see Komen (1994). One may note equivalences such as French *pendant* = English *during* = Italian *durante* = Dutch *gedurende* = High German *während*, all prepositions originating from a present participle. The parallels are too striking to be considered coincidental.

² Kukenheim (1968: 29) gives examples from the 16th century such as:

- (i) restant seulement une maison, y mist le feu dedans (Rabelais)
remaining only one house, there put the fire in
“As there remained only one house, it was put to fire”
- (ii) attendant la compagnie pour son enterrement (Marg. de Navarre)
waiting the company for his funeral
“while the company was waiting for his funeral”

³ I am following here the traditional analysis of Koster (1975), rather than the more recent SVO analysis advanced in Zwart (1997). The latter is not incompatible with the central claims of this paper, but requires a more abstract analysis, involving more movement of material to derived positions than is traditionally envisaged.

⁴ This, of course, does not mean that participial clauses were not affected by either extraposition or Verb Projection Raising. 17th century data especially often show traces of these processes. In the 18th century, there is a steep drop in Verb Projection Raising (see Hoeksema 1993) and extraposition of DPs, especially non-heavy DPs, while the V1 order in participial clauses remains strong and stable until well into the 19th century.

⁵ Although modern French no longer has V1 orders with an overt subject such as the ones in note 10.

⁶ It should be noted that participles and infinitives may exhibit morphosyntactic properties of finite verbs in some languages, e.g. Old Neapolitan, where they exhibited person marking, as discussed in Vincent (1998). Vincent notes that person marking on participles is rare, perhaps as rare as the past tense-based present participles, or present participles with clitic negation discussed in the text. Presumably, we are dealing with a highly marked phenomenon, the ramifications of which remain unclear.

⁷ Attraction is indirect here, as the verb is not right-adjoined to the conjunction sign, presumably. The idea would be that the conjunction selects a CP with a strong feature in C forcing movement of the verb to C.

⁸ Cliticization of pronouns onto C is well-attested, but clearly distinct from verb movement, which never takes the form of adjunction to an overt complementizer. Rather, common wisdom has it that the presence of overt complementizers blocks movement to C (see Den Besten 1983). More recent work has modified Den Besten’s analysis of V-to-C in various ways (cf. e.g. Santorini 1989, Vikner 1995, Zwart 1993, 1997), but the idea that overt complementizers attract V would still be considered problematic.

⁹ I found 3 cases of what look like V2 orders in participial constructions, including the following one:

- (i) wy sullende ons, gelieftet Godt, aldaer vinden laeten
we shall-ing us, pleases-it God, there find let
“as we are going to be there [lit.: let us be found there], God willing”
Lakenkoopers, 1643, p. 328

However, these cases *could* all be viewed as examples of OV order with Verb Projection Raising, involving multiple intervening elements between the verbs *sullende* and *vinden*. Verb Projection Raising is extremely variable, and some authors allow for far more intervening material, and of much greater diversity, than others. Giving the rarity of plausible V2 orders, I consider it best to treat them as OV structures with Verb Projection Raising.

Sources of examples cited

- Anonymous, around 1300, *Boec van medicinen in dietsche*. Ed. by W.F. Daems, E.J. Brill, Leiden, 1967.
- Frederik Coyett, 1675, *'t Verwaerloosde Formosa*. Ed. by G.C. Molewijk, Walburg Pers, Zutphen, 1991.
- Justus van Effen, 1733, *De Hollandsche Spectator*. Ed. by M.C.A. van der Heijden, *'k Wou zo graag verstandig wezen*, Het Spectrum, Utrecht/Antwerp, 1968.
- Vincent van Gogh, 1880, *Verzamelde brieven*, Vol. 3. Ed. by J. van Gogh-Bonger, 4th ed., Wereldbibliotheek, Amsterdam/Antwerp, 1955.
- Pieter Cornelisz. Hooft, 1615, *Granida*. Ed. by M.C.A. van der Heijden, *De wereld is een speeltoneel*, Het Spectrum, Utrecht/Antwerp, 1973.
- Jan Klompsma 1992, "Ons Loug", in *Nieuwsblad van het Noorden* 12-12-1992.
- Lakenkoopers 1643 = text from N.W. Posthumus, ed., *De nationale organisatie der lakenkoopers tijdens de republiek*, Kemink & Zoon, Utrecht, 1927.
- Cornelis Speelman, *Journaal der reis van den gezant der O.I. Compagnie Joan Cuneus naar Perzië in 1651-1652*. Ed. by A. Hotz, Müller, Amsterdam, 1908.
- W.H. Teding van Berkhout, *Dagboek van een patriot*. Martinus Nijhoff, 's Gravenhage, 1982 [text from 1795-1797].
- Jacob Campo Weyerman, 1726, *Den echo des Weerelds*. Stichting Jacob Campo Weyerman, Amsterdam, 1990.

References

- Baker, Mark, 1988, *Incorporation: A Theory of Grammatical Function Changing*. University of Chicago Press, Chicago.
- den Besten, Hans, 1977, "On the Interaction of Root Transformations and Lexical Deletive Verbs," published in Den Besten (1989).
- den Besten, Hans, 1989, *Studies in West Germanic Syntax*, doctoral dissertation, University of Tilburg.
- den Besten, Hans, and Jerrold A. Edmondson, 1983, "The Verbal Complex in Continental West Germanic," in: Werner Abraham, ed., *On the Formal Syntax of the Westgermania*. John Benjamins, Amsterdam/Philadelphia, 1983, 155-216.
- Burridge, Kate, 1993, *Syntactic Change in Germanic*. John Benjamins, Amsterdam-Philadelphia.
- Burzio, Luigi, 1986, *Italian Syntax*. Reidel, Dordrecht, etc.
- Chomsky, Noam, 1995, *The Minimalist Program*. MIT-Press, Cambridge, Massachusetts.
- Duinhoven, A.M., 1997, *Middelnederlandse syntaxis, synchroon en diachroon*, vol. 2: *De werkwoordgroep*. Martinus Nijhoff, Groningen.
- Geerts, Guido, Walter Haeseryn, J. de Rooij and M.C. van den Toorn, 1984, *Algemene Nederlandse Spraakkunst*. Wolters Noordhoff, Groningen and Wolters, Leuven.
- de Haan, Germen J. and Fred Weerman, 1984, "Taaltypologie, taalverandering en mogelijke grammatica's: het Middelnederlandse *en*," *Tijdschrift voor Nederlandse Taal- en Letterkunde* 100-3, 161-190.
- de Haan, Germen J. and Fred Weerman, 1986, "Finiteness and Verb Fronting in Frisian," in: Haider and Prinzhorn, eds., (1986), 77-110.
- Haider, Hubert, and Martin Prinzhorn, eds., 1986, *Verb Second Phenomena in the Germanic Languages*. Foris, Dordrecht.
- Halle, Morris and Alec Marantz, 1993, "Distributed Morphology and the Pieces of Inflection", in: Kenneth Hale and Samuel Jay Keyser, eds., *Essays in Linguistics in Honor of Sylvain Bromberger*, MIT-Press, Cambridge, Massachusetts, 111-176.

- Han, Chung-hye, 2000, "The evolution of do-support in English imperatives," in: Susan Pintzuk, George Tsoulas, and Anthony Warner, eds., *Diachronic Syntax. Models and Mechanisms*. Oxford University Press, Oxford etc., 275-295.
- Hawkins, John A., 1994, *A performance theory of order and constituency*. Cambridge University Press, Cambridge, etc.
- Hazout, Ilan, 1992, "The Verbal Gerund in Modern Hebrew," *NLLT* 10, 523-553.
- Heemstra, Johannes, 1925, *Über den Gebrauch der attributiven Partizipialkonstruktionen in der niederländischen und hochdeutschen Prosa*. Doctoral dissertation, University of Groningen.
- Hoeksema, Jack, 1993, "Suppression of a word-order pattern in Westgermanic," in: Jaap van Marle, ed., *Historical Linguistics 1991, Papers from the 10th International Conference on Historical Linguistics*, John Benjamins, Amsterdam-Philadelphia, 153-174.
- Hoeksema, Jack, 1997, "Negation and Negative Concord in Middle Dutch," in: Danielle Forget, Paul Hirschbühler, France Martineau and Maria-Luisa Rivero, eds., *Negation and Polarity - Syntax and Semantics*. John Benjamins, Amsterdam/Philadelphia, 139-156.
- Hoekstra, Jarich, 1997, *The Syntax of Infinitives in Frisian*. Doctoral dissertation, University of Groningen.
- Jespersen, Otto, 1940, *A Modern English Grammar on Historical Principles*, Part V, Ejnar Munksgaard, Copenhagen.
- Johnson, Kyle and Sten Vikner, 1994, "The position of the verb in Scandinavian infinitives: in V⁰ or in C⁰ but not in I⁰," *Working Papers in Scandinavian Syntax* 53, 61-84.
- Komen, J.A.M., 1994, *Over de ontwikkeling van absolute constructies*. Buijten & Schipperheijn, Amsterdam.
- Koster, Jan, 1975, "Dutch as an SOV language," *Linguistic Analysis* 1, 111-136.
- Kroch, Anthony S., 1994, "Morphosyntactic Variation". In: K. Beals et al., eds., *Papers from the 30th regional meeting of the Chicago Linguistics Society. Parasession on variation and linguistic theory*. Chicago Linguistics Society, Chicago.
- Kukenheim, Louis, 1968, *Grammaire historique de la langue franHaise. Les syntagmes*. Universitaire Pers, Leiden.
- Lightfoot, David, 1999, *The Development of Language*. Blackwell, Malden and Oxford.
- Miller, George A. and Noam Chomsky, 1963, "Finitary models of language users," in: R.D. Luce, R.R. Bush and E. Galanter, eds., *Handbook of Mathematical Psychology*, Wiley, New York, 419-492.
- Perlmutter, David, 1978, "Impersonal passives and the unaccusative hypothesis," in *BLS* 4, 157-189.
- Platzack, Christer, 1986, "The Position of the Finite Verb in Swedish," in Haider and Prinzhorn, eds., 27-47.
- Pollock, Jean-Yves, 1989, "Verb movement, universal grammar, and the structure of IP," *Linguistic Inquiry* 20-3, 365-424.
- Rivero, Maria Luisa, 1994, "V-Movement in the Languages of the Balkan," *Natural Language and Linguistic Theory* 12, 63-120.
- Rizzi, Luigi, 1982, *Issues in Italian Syntax*. Foris, Dordrecht.
- Santorini, Beatrice, 1989, *The Generalization of the Verb-Second Constraint in the History of Yiddish*. Doctoral dissertation, University of Pennsylvania.
- Verhoog, Pieter H.G. and Leendert Koelmans, 1961, *De reis van Michiel Adriaanszoon de Ruyter in 1664-1665*. Martinus Nijhoff, 's Gravenhage.
- Vikner, Sten, 1995, *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford University Press, Oxford.
- Vincent, Nigel, 1998, "On the grammar of inflected non-finite forms (with special reference to Old Neapolitan)," in Fern Korzen and Michael Herslund, eds., *Clause Combining and Text Structure*, Samsfundlitteratur, Copenhagen, 135-158.
- Zwart, Jan-Wouter, 1993, *Dutch Syntax. A Minimalist Approach*. Dissertation, University of Groningen.
- Zwart, Jan-Wouter, 1997, *Morphosyntax of Verb Movement. A Minimalist Approach to the Syntax of Dutch*. Kluwer, Dordrecht.