

Word Order in Double Object Constructions: A Diachronic Study of Dutch

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Outline

- Research Problem & Question
- Background information
- Data collection & description
- Analysis
- Conclusion
- Literature

Project

Language Dynamics in the Dutch Golden Age: Intra-Author Variation¹

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<https://languagedynamics.wp.hum.uu.nl/>

Bigger Aim

Linguistic variation in EMD – Transformative period

- Range of variation
- Variation within author: dialect, regional language, standard language

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1. Aim

RESEARCH QUESTION: How did Dutch develop from double object constructions with a free word order (Middle Dutch) to double object constructions with a strict word order (Modern Dutch)?

- Word order variation in Double Object Constructions (DOCs)
 - Word order variation between direct and indirect object (DO and IO)
 - Word order variation between objects and verb
 - (Morphological) Case
 - Kiparsky (1997) & Neeleman & Weerman (1999, 2009)
 - McFadden (2004) & Haeberli (2004)
 - Particle Verbs
 - Den Dikken (2012) vs. McFadden (2004)
 - Pretorius (2017), Wurmbrand (2000)
 - DPs versus pronouns
 - Vikner (2006) & Broekhuis (2008)
- Early Modern Dutch (1550-1700)
 - Middle Dutch & Modern Dutch
 - Transitional phase
 - D.V. Coornhert (1522-1590)

➔ In this talk I will show that the word order is dependent on verb class:

- In DOCs with particle verbs a relative free word order is found
- In DOCs with non-particle verbs the word order is fixed

Therefore, verb class is the main discriminator. In the literature two approaches are discussed, an approach that unifies the analysis of all ditransitive verbs (Den Dikken 2012) and an approach that suggests two distinct analyses for the two groups of verbs (McFadden 2004). I will show that we have to assume two distinct analyses, based on the literature on particle verbs (Pretorius 2017, Wurmbrand 2000).

2. Background

Word order in double object constructions:

- Middle Dutch (1) → the relative order of the objects, and the objects and verb is freer
- Modern Dutch (2) → S-V-IO-DO for matrix clauses
→ C-S-IO-DO-V for subordinate clauses

- (1) a. Van dane **sende hi bode den broeder** omme vrede. [1271]
 from there sent he message the brother for peace
From there he sent a message for peace to the brother.
- b. **Ghi** cont **goede ghichten gheuen uwen kindren**. [around 1325]
 you can good gifts give your children
You can give your children good gifts.
- c. So beual hi dat **men Iosephe din lichame gaue**. [around 1325]
 thus ordered he that one Joseph the body give.indative
Thus he ordered that one should give Joseph the body.
- (2) a. Vanaf daar **stuurde zij een berichtje *(aan) haar zus**.
 a.' Vanaf daar **stuurde zij haar zus een berichtje**.
 from there send she her sister a message
From there she send her sister a message
- b. **Jij** moet **leuke cadeautjes geven *(aan) jouw kinderen**.
 b.' **Jij** moet **jouw kinderen leuke cadeautjes geven**.
 you must your children nice gifts give
You must give your children nice gifts
- c. Aldus beval zij dat **men (aan) de boer een hark** moet **geven**.
 thus ordered she that one to the farmer a rake have.to give
Thus she ordered that one has to give the farmer a rake

3. Data collection & description

Two datasets:

- (1) Dataset 1 consists of 251 DOCs with nominal and pronominal objects, found in a corpus of Coornhert's work (240.000 words)². This data is compiled by an automatic search for the frequent ditransitive verbs *beloven* 'promise', *benemen* 'steal', *geven* 'give', *togen* 'show', *tonen* 'show', *verklaren* 'explain', *verkopen* 'sell' and *zeggen* 'tell'.
- (2) Dataset 2 consists of 161 DOCs with nominal and pronominal objects, zooming in manually on Coornhert's *Zedekunst dat is wellevenskunste* (140.000 words).

² *De dolinge van Ulysse* (1561, 90.000 words 145 points), *Ofde siele, dan of de wille zondight, ondersoeck* (1563, 4.000 words, 1 data point), *Tsamensprekinghe, waar in bewesen wort dat hy niet goet en wil worden die quaat blijft* (1568, 6.000 words, 12 data points) and *Zedenkunst dat is wellevenskunste* (1585, 140.000 words, 92 data points).

The data is stored in Excel worksheets, with the following information:

- Verb and verb group
- Subject
- Direct object (DO) and indirect object (IO)
- Clause type
- Word order
- Category of each argument: DPs, pronouns, CPs/IPs and relative clauses.³

Dataset 1 contains 250 DOCs with only pronominal and nominal objects. In 206 of the 250 sentences the two objects are adjacent (82.4 %).

Form objects	DO-IO order		IO-DO order	
DO DP; IO DP	5/50	10%	45/50	90%
DO pronoun; IO pronoun	1/12	8.3%	11/12	91.7%
DO DP; IO pronoun	0/108	0%	108/108	100%
DO pronoun; IO DP	36/36	100%	0/36	0%

Table 1: Distribution DOCs in first dataset, objects adjacent

This data shows clear patterns. In the cases of two DPs, two pronouns and a nominal DO and a pronominal IO, the word order is almost exclusively IO-DO. The exceptions to this rule are scarcely found.

➔ **GENERALIZATION A:** The base word order in DOCs is IO-DO.

However, if the DO is a pronoun and the IO is a DP, the found word order is DO-IO.

➔ **GENERALIZATION B:** In DOCs pronouns precede DPs, and DPs follow pronouns.

In the remaining 44/250 clauses the objects are non-adjacent:

- 29 cases of object topicalization (first position in matrix clause or RC) (11.6%), see (3)
- 8 cases of nominal postverbal objects (in matrix and subordinate clauses) (3.2%):
 - 7 cases with DO, see (8)
 - 1 case with IO, see (1b)
- 7 cases of pronominal objects adjacently preceding the subject (2.8%), see (4)

³ Some pronouns have a double role: they function as an argument of the verb, and also as the head of a RC. Since the pronoun cannot be separated from the RC, I have analyzed these pronouns as a (head of a) RC.

- (3) Dit en beneemt de milde niemanden, maar **velen gheeft hy zyn gheld** of have
 this NEG take the mild noone but many gives he his money or belongings
The mild one doesn't take this from anyone, he rather gives his money or belongings to many
- (4) Zo **hem elk edel hert den behoeftigen betoont**
 so him each noble heart the needy shows
Such that each noble heart shows him the needy (ones)

Note: the exceptions in Table 1 and the cases of postverbal objects (all marked green) are found exclusively with the verb *geven* 'to give'. However, *geven* makes up 168 of the 251 found DOCs (66.9%) in dataset 1. All exceptions with two DO DPs are found in *Zedekunst*.

Note: Dataset 1 is restricted to 8 frequent ditransitive verbs. To extend this set, Dataset 2 is assembled by manually searching for DOCs in a part of the corpus, i.e. *Zedenkunst*.

Dataset 2 contains 161 DOCs with only pronominal and nominal objects. These DOCs are found with 49 different ditransitive verbs.⁴ In 122 clauses the objects are adjacent (75.8%).

Form objects	DO-IO order	IO-DO order
DO DP; IO DP	11/42 32.6%	31/42 67.4%
DO pronoun; IO pronoun	2/9 22.2%	7/9 87.8%
DO DP; IO pronoun	1/48 5.6%	47/48 94.4%
DO pronoun; IO DP	19/23 82.6%	4/23 17.4%

Table 2: Distribution DOCs in second dataset, objects adjacent

In the remaining 39 clauses, the objects are non-adjacent:

- 20 cases of object topicalization (first position in matrix clause or RC) (12.4%)
- 16 cases of nominal postverbal objects (in matrix and subordinate clauses) (9.9%):
 - 12 cases with DO
 - 4 cases with IO
- 3 cases of pronominal objects adjacently preceding subjects (1.9%)

⁴ The new verbs are: *aanbieden* 'offer', *aandoen* 'do (to)', *aanerven* 'inherit', *aanraden* 'recommend', *afeisen* 'demand (of)', *afnemen* 'take (of)', *beloven* 'promise', *benemen* 'take', *beroven* 'steal', *bevelen* 'order', *bewijzen* 'prove', *brengen* 'take', *dreigen* 'threaten', *dwingen* 'coerce', *gebieden* 'dictate', *gunnen* 'award'/'allow', *leren* 'learn', *leveren* 'deliver', *meedelen* 'announce', *misgunnen* 'begrudge', *onderwerpen* 'subject', *onderwijzen* 'teach', *onthouden* 'withhold', *onttrekken* 'subtract', *opofferen* 'offer (to)', *schenken* 'give', *toebrengen* 'inflict', *toe-eigenen* 'appropriate', *toeschrijven* 'ascribe', *toevertrouwen* 'entrust', *toezeggen* 'promise', *toezenden* 'send (to)', *verbieden* 'forbid', *verlenen* 'grant', *verstrekken* 'provide', *vertrouwen* 'trust', *voorwerpen* 'object' [lit. throw (something) in front of (someone)], *vragen* 'ask', *weigeren* 'refuse', *wensen* 'wish', *zeggen* 'say'.

No generalizations can be drawn from this dataset. Generalizations A & B generally hold, although more exceptions are found in dataset 2, compared to dataset 1.

Diving into the exceptions as marked in green, I have found that all verbs in these DOCs are particle verbs (with the exception of the before mentioned *geven* 'to give' and the similar *schenken* 'to give'):

- $DO_{DP}-IO_{DP}$: *geven* (5x), *schenken*, *metdeylen*, *ontrecken*, *toeschikken*, *toebetrouwen*, *toeschryven*, see (5)
- $DO_{pron}-IO_{pron}$: *verlenen* (2x)
- $DO_{DP}-DO_{pron}$: *toezenden*, see (6)
- $IO_{DP}-DO_{pron}$: *onderwyzen* (2x), *metdeylen*, *onthouden*, see (7)
- Postverbal object: *geven* (6x) *opofferen*, *toeschicken*, *toeschryven* (2x), *verstrecken*, (2x), *onderwyzen*, *metdelen*, *toebetrouwen* (2x), see (8)

- (5) *zy ontreckt den gheknouden smakelyken bete huer hongherighe maghe* ende gheeft
 she PRT.subtracts the chewed tasteful bite her hungry stomach and give
die tgheliefde kindeken
 that the.loved child.DIM

She withholds the chewed and tasty bite from her stomach and gives it to the loved child

- (6) Ende dat *God alle zulck lyden ons* tot straffe ende beteringhe *toezendt*
 and that God all such people us as punishment and improvent PRT.send
And that God sends all such people to us as a punishment and to [help us] improve ourselves.

- (7) Want *deze*, ziende iemanden noodlyck behoeven 'tghene by hem overvloedigh is
 because this seeing somebody urgently require what by him plentiful is,
den behoeftighen 'tzelve ter noodurft vrolycken *metdeylt*.

the needy.one that for necessity happily PRT.shares

Because, when this person notices somebody who urgently needs something that he has plenty of, he will happily share it with the one in need.

- (8) *Eens menschen kind* doende zyn vaders wille *betrouwt hem toe verzorhinghe*
 a human child doing his father's wish trust him PRT handling
zyns noodurfts.

his necessities

A human child who is obedient to his father, trusts him to take care of his needs

Distribution of particle verbs:

- Particle verbs make up 36 of the 161 sentences.
- The particles are *met-*, *onder-*, *ont-*, *op-*, *toe-* and *ver-*. All of these are P-particles (i.e. full or weak form of adpositions) are part of the verb.⁵
- In 19/36 clauses the objects are adjacent (52.8%):

Form objects	DO-IO order	IO-DO order
DO DP; IO DP	5/7 71.4%	2/7 28.6%
DO pronoun; IO pronoun	2/3 66.7%	1/3 33.3%
DO DP; IO pronoun	1/4 25%	3/4 75%
DO pronoun; IO DP	1/5 20%	4/5 80%

Table 3: Distribution DOCs with particle verbs, adjacent objects

- In the remaining 17/36 clauses, the objects are non-adjacent:
 - 7 cases of object topicalization (first position in matrix clause or RC) (19.4%)
 - 10 cases of nominal postverbal objects (in matrix and sub clauses) (27.8%):
 - 7 cases with DO
 - 3 cases with IO

➔ **GENERALIZATION C:** DOCs with particle verbs have a relative free word order: adjacently both IO-DO and DO-IO are found, as are postverbal IOs and DOs.

From the data points with one nominal object and one pronominal object, it shows that Generalization B does not hold for DOCs with particle verbs. The word order IO_{DP}-DO_{PRON} is attested frequently (4/5); the word order DO_{DP}-IO_{PRON} is also attested, albeit once out of four.

➔ **GENERALIZATION D:** In DOCs with particle verbs pronouns do not necessarily precede DPs, and DPs do not necessarily follow pronouns.

The other found word order, pronominal objects directly preceding subjects, does not relate to particle or non-particle verbs. This order is available for weak object pronouns.

⁵ In Modern Dutch *ont-* and *ver-* are analyzed as prefixes. However, in EMD these should be analyzed as particles. The prefix *ont-* corresponds with the, in EMD productive, adposition *ont* '(un)to' (also: *on*, *onte*, *unt*, *unte*). The particle *ver-* in the discussed verbs corresponds to the adposition *voor* 'for': *vorstrecken* and *-lenen* are found in addition to *verstrecken* and *-lenen* (Historical Dutch Dictionaries Online).

The attested distribution shows a division in DOCs between particle and non-particle verbs. Free word order is only found in DOCs with particle verbs, while DOCs with non-particle verbs have a strict word order.

- 36 of the 161 data points in Dataset 2 are DOCs with particle verbs. These DOCs have a relative free word order: all word orders are found with all object patterns.
- 125 of the 161 data points in Dataset 2 are DOCs with non-particle verbs. These DOCs all follow the established word order for non-particle verbs as stated in generalizations A & B, with the exception of the DOC with *geven* and *schenken*.

4. Towards an analysis

- ➔ **GENERALIZATION A:** The word order in DOCs with non-particle verbs is IO-DO, with the exception of Generalization B.
- ➔ **GENERALIZATION B:** In DOCs with non-particle verbs pronouns precede DPs, and DPs follow pronouns.
- ➔ **GENERALIZATION C:** DOCs with particle verbs have a relative free word order: adjacently both IO-DO and DO-IO are found, as are postverbal DOs and IOs.
- ➔ **GENERALIZATION D:** In DOCs with particle verbs pronouns do not always precede DPs, and DPs do not always follow pronouns.

Sketch of the analysis:

- The word order in DOCs with non-particle verbs is fixed. The surface order is IO-DO, except for the $DO_{\text{PRON}}-IO_{\text{DP}}$ order (Generalization B). In DOCs with non-particle verbs postverbal objects do not occur.
 - This data can be explained in a structure with a base order IO-DO, with obligatory pronoun shift, as is found in Germanic languages such as Modern Dutch, German, Danish and Icelandic.
- For particle verbs the word order is not fixed, as stated in Generalization C. Furthermore, object shift is not obligatory (Generalization D) and postverbal objects (DOs and IOs) are found.
 - A large part of the data is accounted for, if we assume the base order DO-IO, in which the IO can move freely, and object shift is not obligatory.
- The division between particle and non-particle verbs does not hold for the verbs *geven* and *schenken*, both of which can deviate from generalization A, but seem to follow generalization B.

In the literature two different analyses for two groups of DOCs are discussed:

Den Dikken (2012)

- Modern Dutch
- DOCs with particle verbs are analyzed on par with other DOCs (even though DOCs with particle verbs have a freer word order). This analysis also holds for DOCs with PPs as IOs.
- The two objects form a Small Clause (SC) with a DO subject and an IO predicate, which makes the base order DO-IO.
- The IO is a PP and that the P of the IO can be null (a 'bare' PP). A bare PP must be licensed in one of the following ways:
 - i. Movement within the SC (predicate inversion), see (9a)
 - ii. Movement out of the SC (scrambling), see (9b)
 - iii. A particle verb, see (10)

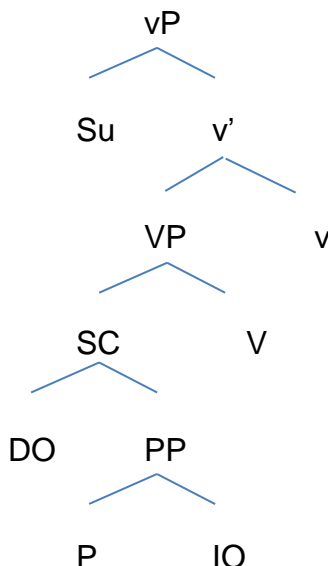
(9) a. [CP dat Jan dan zeker [VP [SC [PP \emptyset [DP Marie]]_{IO-1} [het boek]_{DO} t₁] zal aanbieden]]
 that Jan then certainly Marie the book shall offer
...that Jan will certainly offer Marie the book.

b. [CP dat Jan [PP \emptyset [DP Marie]]_{IO-1} dan zeker [VP [SC t₁ [het boek]_{DO} t₁] zal aanbieden]]

c. *[CP dat Jan [het boek]_{DO-2} dan zeker [VP [SC [PP \emptyset [DP Marie]]_{IO-1} t₂ t₁] zal aanbieden]]

(10) Jan zal het boeket de Koningin aanbieden/*geven
 Jan shall the bouquet the Queen offer/give
Jan shall offer the Queen the bouquet.

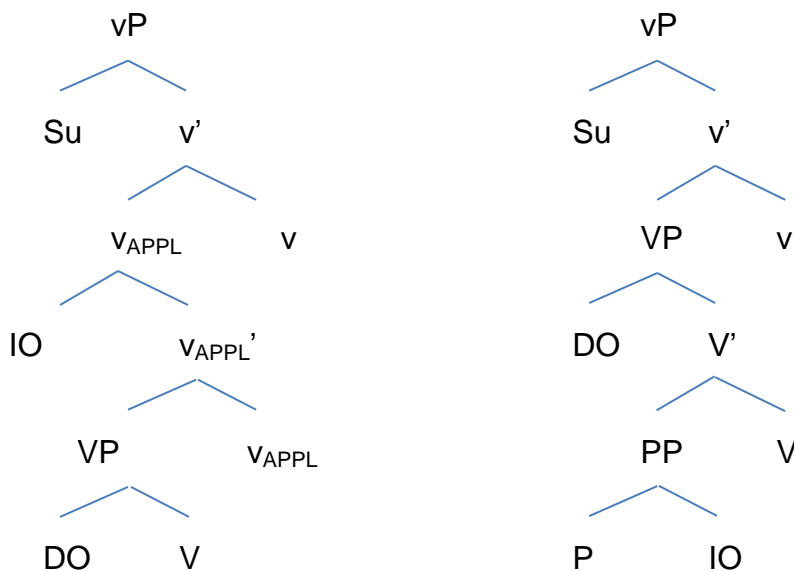
(11) Den Dikken's (2012) analysis for DOCs:



McFadden (2004)

- Modern German
- DOCs are divided into two groups, each group with a different base-generated word order.
 - The first group has the base order IO-DO, which includes ‘regular’ particle and non-particle verbs.
 - The second group has the base order DO-IO, and consists of constructions in which the IO is directional or locative.

(12) McFadden’s (2004) analyses for ‘regular’ DOCs (left) and directional DOCs (right):



- In DOCs with ‘regular’ ditransitive verbs, the IO is merged in V_{APPL}. McFadden (2004) relates the selection of the subject to the selection of the indirect object.
- In DOCs with locative IOs, the position of the direct object remains the same, the IO is realized lower in the tree, and is (in) a PP.

Note: a group of verbs has the option between the two underlying word orders. This group includes the verb *geben*, the German equivalent of the (Early Modern) Dutch *geven*.

5. Analysis of DOCs in Coornhert's work

Neither of the analyses can straightforwardly be applied to the data from Coornhert, since neither analysis assumes a syntactic structure for the particle. Furthermore, the range of variation between the two DOCs in EMD is larger than in Modern Dutch and Modern German.

- For Modern German, McFadden has shown that both groups have a base generated order, but the word order in both groups is free: IO-DO and DO-IO are possible for both groups. Postverbal objects are absent in both groups.
- For Modern Dutch, Den Dikken has shown that the word order for non-particle verb DOCs is fixed, while the word order for particle verb DOCs is relatively free. However, postverbal objects are absent for both DOCs.

The literature on particle verbs is roughly divided in two camps (see Pretorius (2017:259-266) & Wurmbrand (2000) for discussion). One group analyzes particle verbs as a complex predicate V^0 , while the other group analyzes the particle as its own syntactic head in a SC with the associated object. Wurmbrand (2000) argues for the validity of both analyses:

- The complex predicate analysis holds for idiomatic/non-transparent particle verbs.
- The SC analysis holds for compositional/transparent particle verbs.
 - o Particle verbs with a compositional derived meaning cannot be analyzed as complex predicate verbs, since it is widely assumed that only words (X^0 categories) can occur with an idiomatic interpretation.
 - o The separability of the verb and the particle under syntactic operations shows that the verb can be targeted, to the exclusion of the particle. Therefore, the particle must be a projecting head. In the complex predicate approach, excorporation or a similar special operation needs to be assumed, which is constrained to particles.

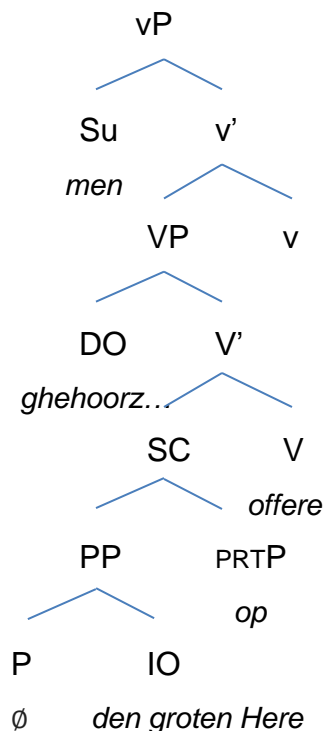
For my data, the meaning of the particle verbs is compositionally derived, albeit the case that not all particle verbs are separable.⁶ The particles all have the form of productive adpositions, and the meaning of the particle verb is compositional, since it can be determined from the meanings of its parts. For head final languages, such as Dutch, German, Afrikaans and EMD, the SC approach can be represented as follows:

(13) [_{VP} Su [_{VP} DO [[_{SC} IO PRTP] V]] v]

(14) datmen den groten Here ghehoorzaamheyd opoffere
 that.one the great Lord obedience PRT.offer
That everyone will offer obedience to the great Lord.

⁶ I assume that in these particle verbs an obligatory movement of the syntactic particle head to the verb occurs.

(15) Analysis for DOCs with particle verbs in Coornhert



In the analysis of the attested data, the IO will be analyzed as a PP, instead of a DP, following Den Dikken (2012) and McFadden (2004). I will assume that PPs can move more freely than a DP, and therefore this analysis of the IO suits the attested data, in which it can precede the DO, and it can occur postverbal.

One problem this analysis does not account for, is the attested postverbal DO that only occurs with particle verbs and with *geven*. One option is an extraposition movement. However, for now, I will assume that the SC and the verb can move over the DO, since the movement of the DO is highly restricted otherwise.

For non-particle verbs we can either assume the same underlying order (DO-IO) and a similar structure, or a distinct structure, with the underlying word order IO-DO.

Den Dikken (2012) proposes a uniform analysis, however, this does not hold for EMD. If the underlying order for non-particle verbs is DO-IO as well, we must assume obligatory pronoun shift for non-particle verbs, non-obligatory pronoun shift for particle verbs. The approach proves difficult for analyzing pronouns:

- If you expect IO pronouns to behave the same as DPs, they move mandatorily upwards for licensing in non-particle verb DOCs. From this licensing position they should not be able to move up again, because of freezing effects. However we do find IO pronouns preceding subjects.

- If you expect IO pronouns to be freer, you would expect that they do not mandatorily move upwards for licensing in non-particle verb DOCs. They do not need licensing, since they are freer. In particle verb DOCs we have found pronouns remaining low, so we know pronoun shift is not obligatory. However, in non-particle DOCs we never find low (IO) pronouns.

Furthermore, the findings of McFadden for Modern German indicate that there must be two different underlying structures. He has shown that two groups of verbs have a different base order, while both word orders are possible for each verb, one unmarked, one marked. McFadden has shown for a group of verbs, including *geben*, that these verbs have both orders as an unmarked order.

Therefore, I will assume a distinct structure for each group. For non-particle verbs I will assume an analysis in line of McFadden's (2004) analysis for regular verb DOCs.

6. Conclusion

In this talk I have shown that:

- the distinction in verb class is the main discriminator for word order in DOCs.
- EMD, like German, has three different groups of DOC verbs: particle verbs, non-particle verbs and a third, middle group that is exemplified by *geven*.
- in particle verb DOCs the relative word order of two adjacent objects is free, for all combinations of objects (pronominal and nominal). In these DOCs, objects can also occur postverbal.
- non-particle verb DOCs have a strict word order. Two generalizations can fully describe the data: the word order is IO-DO, with the addition of obligatory pronoun shift.
- the two verb groups must have a distinct underlying structure.

Further Research:

- The historical development of word order in non-particle verbs.
- The influence of information structure and morphological case on free word order.

7. Literature

Primary

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