

Topicalization and Topic Drop in Dutch

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Abstract

Topic drop is a frequently overlooked phenomenon in Dutch syntax. However, its investigation provides valuable insight into the intricate interaction between syntax and pragmatics. This paper endeavours to bring together the results of a speech corpora study (Jansen 1981) and grammaticality tests to determine the restrictions on the distribution of null arguments in topic position. An earlier analysis (Balkenende 1995) is applied and extended to explain the data presented. The restrictions on topic drop will be shown to fall out from broader constraints on topicalization in Dutch.

1.0 Introduction

Topic drop in Dutch is a syntactic phenomenon often mentioned only as a footnote to verb second movement. Many researchers assume that topic drop occurs with any element or constituent appearing in topic position (Hyams 1994, Weerman 1989). The data demonstrate clearly that this is not the case. Topic drop is a phenomenon exemplifying the necessary interaction of syntax and pragmatics in language. Both play an essential role in licensing null elements Dutch.

Data presented in this paper force earlier assumptions about topic drop in Dutch to be revised. According to previous analyses, topicalization and topic drop are attributable to the existence of a null topic operator, sometimes lexicalized in the form of a demonstrative pronoun (Balkenende 1995, Hoekstra & Zwart 1994). Topicalization is triggered by movement of the topic operator into SpecCP position. The topicalized element is deleted when the null topic operator is carrying its phi features. Elements lacking phi features are not dropped because the null operator does not contain enough information for them to be syntactically identified. This standard analysis accurately predicts cases of clearly grammatical and ungrammatical topic drop. However, in many cases, the grammaticality of various topic drop constructions is not so clear-cut. This paper investigates the omission of arguments from topic position, that is, the deletion of subjects, (in)direct objects, complement prepositional phrases and the objects of prepositions and finds ambiguities with respect to third person constituents.

Within the set of third person elements, a division exists between constituents referring to animate referents and those that denote inanimates. If an element refers to a person, its omission appears to be more restricted. I argue that this unclear status could be a result of the fact that third person animates may be

referred to using either third person personal pronouns or demonstrative pronouns (also referred to as d-pronouns or d-words). In the case of demonstrative pronouns, omission is permitted, whereas if the speaker uses an underlying representation with a personal pronoun, topic drop is illicit. This underlying structural ambiguity leads to different grammaticality judgements across speakers. Future research may show that the choice between a personal and demonstrative pronoun is the result of pragmatics.

The general syntax of topicalization in Dutch is described and discussed before looking at the topic drop data itself. Then, earlier work on topic drop is presented. Jansen (1981) conducts an extensive analysis of speech corpora to determine which elements are most frequently omitted. Balkenende (1995) provides a description of topic drop in Dutch and attempts to account for it within a generative framework. The informant data is presented and compared to the conclusions drawn by Jansen (1981) and Balkenende (1995). A syntactic analysis of topic drop follows, paying particular attention to the ambiguity between personal and demonstrative pronouns. Finally, general conclusions and further research questions are presented.

2.0 Topicalization in Dutch

2.1 The Syntax of Topicalization

A brief overview of the standard analysis of Verb Second (V2) in Dutch syntax is presented here. Dutch, like Swedish and German, is a V2 language. The verb must always appear in the second position of main clauses (1). In subordinate clauses, the verb appears sentence-finally (2).

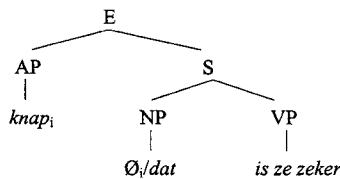
- (1) *Morgen werkt zij thuis.*
tomorrow works she home
'Tomorrow she's working at home.'
- (2) *Ik dacht dat zij morgen thuis werkt.*
I thought that she tomorrow home works
'I thought that she's working at home tomorrow.'

Den Besten (1977 [1983]) argues that Dutch main clauses are derived via a Verb Preposing Rule whereby the verb moves to the complementizer, and another root transformation moving another constituent (subject, object, adverb) into sentence-initial position. The complementizer is subsequently deleted. Later analyses are variants of this initial proposal.

Based on sentences with sentential subjects, Koster (1978a) proposes that topicalization is a type of wh-movement followed by the optional deletion of COMP. The topic moves outside of the main clause through wh-movement,

becoming a satellite element. The satellite element binds the COMP position, allowing the element in COMP to be deleted. According to the satellite hypothesis, the satellite element (i.e., the topic) binds the phonologically null subject position of the main sentence.

- (3) *Knap, dat is ze zeker.* *Knap_i Ø_i is ze zeker.*
clever that is she definitely clever is she definitely
‘She is definitely clever.’

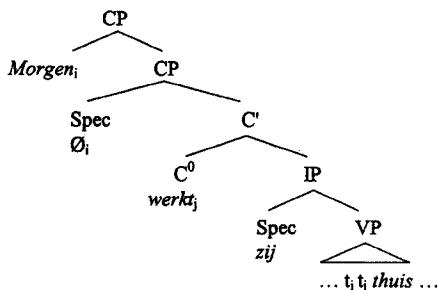


Under current analyses, SpecCP is filled with a null topic operator (Hoekstra & Zwart 1994, Weerman 1989, Zwart 1997) while C^0 is the landing site for the verb. Rather than having a constituent move into SpecCP position, a null variable moves. This variable is generated in the base position of the topicalized constituent.¹ The SpecCP position requires an operator, so the null variable moves into SpecCP position, becoming an operator in the process (Sigurðsson 1989). The topicalized element is bound to the null topic operator, base-generated outside of the CP, and adjoined to the main clause (4).² The null operator contains all the relevant phi features of the topic itself. The type of phrase adjoined is not specified because any lexical category can appear as a topic (i.e., VP, nouns, adverbs, etc.).

- (4) *Morgen Ø_i werkt zij thuis t_i.*
tomorrow works she home
‘She’s working at home tomorrow.’

¹ Several different structures for the left-periphery of the clause are proposed for Dutch and other languages. For example, the topic operator may appear in SpecCP (Weerman 1989) or in SpecTopP (Hoekstra & Zwart 1994, Rizzi 1997). The choice between TopP and CP is irrelevant in the context of this paper. As the standard assumption is CP, I adopt that position for the time being.

² Zwart (1997), for several reasons, argues that subject-initial sentences only project up to IP and not all the way up to CP.



Structures in which the d-pronoun and topic co-occur are referred to as Contrastive Left Dislocation constructions (Anagnostopoulou 1997, van Haften, Smits & Vat 1983, Zaenen 1997).^{3,4}

- (5) *Morgen, dan werkt zij thuis.*
 tomorrow then works she home
 'Tomorrow, then she'll be working at home.'

- (6) *Die man, die ken ik niet.*
 that man that know I not
 'That man, I don't know.'
 (van Haften, Smits & Vat 1983:137(6a))

The simultaneous appearance of a demonstrative pronoun with a topicalized constituent is taken as overt evidence for the position of the null topic operator (Hoekstra & Zwart 1994, Koster 1978a). In other structures, the topic does not appear at the left periphery of the sentence, only the d-word does. Assuming the

³ The structure of CLD constructions is controversial with respect to whether or not they are generated through movement. For the purposes of this paper, I assume that the structure is composed of a satellite element adjoined to the main clause with the d-pronoun as an overt realization of the operator in C'.

⁴ Regular pronouns and reflexives cannot appear with the d-word in operator position (taken from Zwart 1997: 249 (9)).

- (i) *Hem (??die) ken ik niet.*
 him that one know I not
 'Him, I don't know.'
- (ii) *Zichzelf (??die) respecteert hij niet.*
 himself that one respects he not
 'He does not respect himself.'

structure above in (4), these constructions lack the clause-external topic. The d-word appears in SpecCP position.⁵

- (7) *Ken je die man?*
 know you that man
 'Do you know that man?'

Die ken ik niet. → [_{CP} *die_i ken_{tj}* [_{IP} *ik niet t_i t_j*]]
 that know I not
 'I don't know him.'

Topicalization is banned from subordinate clauses. Movement of the verb to second position also prohibited because of the presence of the complementizer (e.g., *dat* 'that') in the head of CP.

- (8) **Ik dacht [_{CP} morgen [_C dat zij thuis werkt.]]*
 I thought tomorrow that she home works
 'I thought she would work at home tomorrow.'

As a result, the V2 phenomenon and topicalization are often viewed as intertwined.

2.2 Topic Drop

In topic drop, neither the satellite element nor d-pronoun is pronounced. Three slightly varying explanations have been proposed to account for this process.

According to Weerman (1989), topicalization is a form of *wh*-movement. Subjects and objects may be phonetically unrealized if they have a discourse referent. Hoekstra and Zwart (1994) argue along similar lines, stating that topics are dropped if they are identifiable through phi features available in the discourse. The presence of phi features is represented by a phi subscript. Neither analysis examines topic drop in depth.

- (9) (*Dat boek*) *ken ik niet.*
 that book know I not
 '(That book), I don't know.'

[[*dat boek_i*] [_{CP} \emptyset_{ϕ_i} *ken* [_{IP} *ik ... t_i niet*]]] No topic drop
 [_{CP} \emptyset_{ϕ_i} *ken* [_{IP} *ik ... t_i niet*]]] Topic drop

⁵ Otherwise, in these sentences, the d-pronoun must move a second time from the Spec of CP to the adjoined position, an unappealing and unmotivated movement.

Balkenende (1995) presents the most detailed discussion and explanation of topic drop. He combines the two previous approaches and proposes that topicalization is the result of wh-movement (as in Weerman 1989) and that topic drop is simply a case of the d-pronoun not being lexically realized (as in Hoekstra & Zwart 1994 and Zwart 1997). The main difference in his approach is that topicalization only occurs with elements which are representable by a d-pronoun. This predicts that constituents not able to co-occur with a d-pronoun (i.e., the topic operator) in SpecCP cannot be dropped from topic position. This analysis makes specific predictions regarding which elements undergo topic drop. Specifically, first and second person pronouns are not expected to be easily omitted. Also, only elements which have some discourse referent will be dropped. D-pronouns require a referent in order to be used, so they can be dropped (§2.3).

Summing up, under all three models, if the topic operator is identifiable by context, or carries the relevant phi features, then the satellite element need not appear and the operator may be phonologically unrealized.

2.3 The D-Words

As stated above, a d-word in SpecCP is analysed as an overt realization of the topic operator.⁶ The demonstrative pronouns are listed below in Tables 1 and 2. Note that only the distal pronouns and the d-pronouns in Table 2 appear sentence-initially.

⁶ Demonstrative pronouns in Dutch have three major functions in traditional grammar including: (a) the replacement of a whole constituent (iii), (b) acting as a determiner (iv) and (c) acting as a relative pronoun (v) (Geerts et al 1984). All of these functions require the presence of a discourse referent.

- (iii) *Ik ben gisteren Arie tegengekomen.*
I am yesterday Arie encountered
'I ran into Arie yesterday.'
Die had ik al in jaren niet meer gezien.
that had I already in years not more seen
'I hadn't seen him in years.'
- (iv) *Heb je deze grammatica bestudeerd?*
have you this grammar studied
'Did you study this grammar?'
- (v) *De mensen die aan de betoging hebben deelgenomen,*
the people who to the march have taken-part
moeten toch wel erg milieubewust zijn.
must rather well very environmentally-conscious be-INF
'The people who took part in the march must have been very environmentally conscious.'
(Geerts et al 1984:216-221)

The d-pronouns under discussion here are of the first type.

HET-WORD (SINGULAR) ⁷	DE-WORD	PLURALS	
<i>dat</i> 'that'	<i>die</i> 'that'	<i>die</i> 'those'	(distal)
<i>dit</i> 'this'	<i>deze</i> 'this'	<i>deze</i> 'these'	(proximal)

Table 1. D-Pronouns in Dutch

OTHER D-PRONOUNS	
<i>daar</i>	'there'
<i>dan</i>	'then'
<i>toen</i>	'when'
<i>zo</i>	'so'

Table 2. D-Adverbials in Dutch

The most important criterion for using a demonstrative pronoun is the presence of a discourse referent (Webber 1991). Without an explicit mention in the discourse or context, the use of a demonstrative is ungrammatical.⁸

Demonstrative pronouns frequently appear in SpecCP in colloquial Dutch. For example, in response to a question such as *Waar zijn mijn boeken?* 'Where are my books?', rather than repeating the entire NP *de boeken* 'the book' the response is often *Die liggen in de kast* 'They are in the cupboard'. D-words replace many constituents besides DPs, including VPs and propositions. When demonstrative pronouns replace a constituent, they retain the phi features of that constituent (if present).⁹ These features include gender and number. Demonstrative pronouns in Dutch are used to replace third person constituents, never first and second person pronouns.

⁷ The *het*-words are words of neuter gender while *de*-words are common gender. The genders collapse when forming the plural. The plural forms take the same demonstrative pronouns, as well as the same definite article, *de*.

⁸ Further evidence for discourse-linking is pointed out by Hoeksema (1999), in the case of obligatorily inverted bare noun predicates, a d-word cannot be used. On the other hand, the use of a definite article is grammatical, indicating the presence of a referent.

(vi) *Vraag is alleen hoelang de vakbonden dit blijven accepteren.*

question is only how-long the unions this continue accept-INF
'Question is, only how long will the unions continue to accept this.'

De vraag is alleen hoelang ...

the question is only how-long ...

* *Die vraag is alleen hoelang ...*

that question is only how-long

⁹ Van Kampen (1997) finds several instances where the d-pronoun, in colloquial Dutch, is not required to reflect the gender and/or number features of the constituent it represents.

- (10) *Wat vind je van mij?*¹⁰
 what find you of me
 'What do you think of me?'

* *Die/jij/je bent een beetje gek.*
 that/you/you are a bit crazy
 'You're a bit crazy.'

- (11) *Wat vind je van Marie?*
 what find you of Marie
 'What do you think of Marie?'

Die/zij/ze is een beetje gek.
 that/she/she is a bit crazy
 'She's a bit crazy.'

Generally speaking, informants preferred to move the d-pronoun to SpecCP rather than leaving it in base-generated position.

- (12) *Wat vind je van Jan?*
 what find you of Jan
 'What do you think of Jan?'

* *Ik vind die gek.*
 I find that crazy
 'I think he's crazy.'

Die vind ik gek.
 that find I crazy

¹⁰ Dutch has two sets of pronouns for subjects and (in)direct objects: strong and weak. The weak pronouns are sometimes referred to as clitics (Zwart 1997:33). In examples where the weak pronoun could be used, it appeared in the examples provided to informants.

	Strong	Weak		Strong	Weak
NOM. 1Psg	<i>ik</i>	<i>'k</i>	ACC. 1Psg	<i>mij</i>	<i>me</i>
2Psg	<i>jij</i>	<i>je</i>	2Psg	<i>jou</i>	<i>je</i>
3Psg	<i>hij</i>	<i>'ie</i>	3Psg	<i>hem</i>	<i>'m</i>
	<i>zij</i>	<i>ze</i>		<i>haar</i>	<i>'r</i>
1Ppl	<i>wij</i>	<i>we</i>		<i>het</i>	<i>'t</i>
2Ppl	<i>jullie</i>	-	1Ppl	<i>ons</i>	-
3Ppl	<i>zij</i>	<i>ze</i>	2Ppl	<i>jullie</i>	-
			3Ppl	<i>hen/hun</i>	<i>ze</i>

'I think he's crazy.'

The informants I worked with preferred to move the pronoun to SpecCP, when it is used to replace a whole constituent, rather than leaving it in base-generated position. However, Jansen (1981) provides examples where the d-pronoun is left in a lower clause position. Summing up, when a speaker uses the demonstrative pronoun, he/she is indicating that the same element as previously mentioned is still under discussion.

2.4 Summary

Dutch is a V2 language with an underlying SOV order. As well as verb movement to the head of CP, a topic operator moves into SpecCP. Verb movement and topicalization appear to be two intertwined processes in Dutch, as shown by the prohibition of topicalization in subordinate clauses. Topicalization only occurs in V2 clauses. Topicalization is activated by the requirement of SpecCP to have an operator. A null variable in the sentence, representing a particular constituent, moves into SpecCP to satisfy this condition. When possible, the null variable/operator bears the phi features of the constituent it replaces. The operator may be lexically realized as a d-pronoun when it represents a discourse-linked constituent.

Topic drop is an optional process occurring only in spoken Dutch. Current theory proposes that the null topic operator must bear the phi features of its constituent. Otherwise, the element is not syntactically identifiable; the prediction is that topic drop is not an option. According to Balkenende (1995), topic drop should only occur with elements representable by d-pronouns. These analyses are applied to the corpora and informant data discussed below.

3.0 Data on Topic Drop in Dutch

3.1 Spoken Dutch and Topic Drop

With the exception of Balkenende (1995), little work has been done in the generative literature on the distribution of topic drop in Dutch. Jansen (1981) conducts a study of several phonological and syntactic processes occurring in spoken Dutch. The data was taken from native speakers who were asked a series of questions. Their responses were transcribed and used as the basis of his discussion. Since the data in his work consists mainly of spontaneous speech, it lends added insight to any similar conclusions drawn from the grammaticality tests used with informants.

According to the data provided in Jansen (1981), topic drop occurs in about 10% of the utterances in which it could potentially occur. Van Kampen (1997) reaches similar conclusions when looking at the speech of an adult Dutch speaker

who is speaking with her daughter. She finds that between 10% and 15% of utterances undergo topic drop.

The types of dropped elements varied in Jansen's study. In principle, all personal pronouns could be dropped. However, some are only dropped in highly specific contexts. First person singular subjects were deleted the most frequently out of all personal pronouns. First person plural subjects and third person subjects followed, in omission rates. Second persons subjects were only dropped on two occasions. Direct and indirect object personal pronouns were never dropped at all. Jansen finds that out of 8317 possible personal pronoun drops, only 86 forms (> 1%) were actually deleted. The second group of constituents Jansen chose to look at were the demonstrative pronouns. These pronouns were deleted with far more frequency than the personal pronouns. Out of the possible 4594 deletions, only 373 were omitted, around 8%. Objects of prepositions can also be deleted from sentence-initial positions, according to Jansen, as long as the preposition has been stranded in the lower part of the clause. These elements were deleted with more frequency than the others mentioned thus far; of a potential 271 deletions, 35 were omitted (13%). Basically, personal pronouns were dropped with the least frequency, while object of prepositions were dropped the most. Jansen (1981) finds an asymmetry between subject and object drop. Three times as many objects (16%) were dropped as subjects (5%).

Balkenende (1995) provides an overview and description of the elements he believes to be delete-able in Dutch topic drop. Among the acceptably dropped constituents are subjects, (in)direct objects, and objects of prepositions.¹¹ He remarks that, in the case of arguments, first and second person pronouns are not as easily dropped as third person pronouns. The following section discusses the grammaticality judgements of native speakers regarding the omission of the aforementioned elements. Most of the generalizations reached in the literature are consistent with the data I collected.

3.2 Informant Data

To determine what Dutch speakers consider grammatical topic drop, I tested several sets of utterances with native speakers. The data presented below is a summary of that research. The data came from a class of thirteen Dutch university

¹¹ In addition to these elements, Balkenende lists sentential arguments, verbal arguments, locative adjuncts and temporal adjuncts as examples of grammatical topic drop. The purpose of this paper, however, is to focus on argument omissions, so the status of these constituents is not investigated here. In the data I collected, the dropping verbal arguments, locative and temporal adjuncts is more problematic than what Balkenende presents. Judgements varied considerably among speakers and according to the specific element omitted. For example, *gisteren* 'yesterday' was more readily dropped than *morgen* 'tomorrow'. However, these constituents could be construed as discourse entities, allowing them to be omitted in the right contexts. Testing temporal adverbs which are less easily interpreted as discourse entities, such as *later* 'later', may clear up this issue.

students, as well as six individuals, all of whom are university-educated native speakers of Dutch. Native speakers were provided a total of at least three utterances to judge. In all cases, the written form of the context question preceded the judgements. The second sentence included the relevant constituent in topic position. For third person constituents, this meant that a d-pronoun was used.¹² This was to emphasize which constituent was considered the ongoing discourse topic. In the final sentence, the topic position was empty. The following is an example from the questionnaire given to the informants:

- (13) *Heb je dit boek in Amsterdam gekocht?*
have you this book in Amsterdam bought
'Did you buy this book in Amsterdam?'

Ja, ik heb dit in Amsterdam gekocht.
yes I have this in Amsterdam bought
'Yes, I bought this in Amsterdam.'

Ja, dit heb ik in Amsterdam gekocht.
yes this have I in Amsterdam bought
'Yes, this, I bought in Amsterdam.'

Ja, heb ik in Amsterdam gekocht.
yes have I in Amsterdam bought
'Yes, I have bought (this) in Amsterdam.'

The sentences were read aloud and the native speaker was asked to mark each answer as good, ungrammatical or unsure.

As the data show, not all topic elements are dropped in Dutch. Few examples were judged as absolutely grammatical or absolutely ungrammatical. Many of the following statements should be taken in terms of tendencies, not absolutes due to inter-speaker variation. That said, most of the results parallel the conclusions drawn in Jansen (1981) and Balkenende (1995). The results from the informant data are discussed in tandem with the conclusions reached by Balkenende and Jansen.

¹² In some instances, informants were provided with two utterances containing the d-pronouns. One in which the d-pronoun had moved to topic position and the other where the d-pronoun remained in base-generated position. This was to determine how strong a preference the speakers would show for moving the d-word into sentence-initial position. The results indicated a strong preference for movement.

SUBJECTS

Balkenende argues that subject drop from topic position is freely available, with the omission of first and second person pronouns being somewhat more restricted. My data indicate, as do the conclusions of Jansen that first and second person subject drop are grammatical only in highly specific cases. Also, third person subject drop is less grammatical in cases where the pronoun refers to an animate subject.

The omission of first and second person subjects is prohibited in general. First person singular subjects may be dropped in 'diary drop'-type contexts.

- (14) *Hoe voel je je?*
how feel you you-CL
'How are you feeling?'

Ik voel me een beetje ziek.
I feel me a bit sick
'I feel a bit sick.'

? *ec voel me een beetje ziek.*¹³
Ø feel me a bit sick
'(I) feel a bit sick.'

- (15) *Wat vind je van mij?*
what find you of me
'What do you think of me?'

Je bent een beetje gek.
you are a bit crazy
'You're a bit crazy.'

* *ec bent een beetje gek.*
Ø are a bit crazy
'(You) are a bit crazy.'

¹³ The grammaticality coding throughout this paper is as follows:
no marking: considered grammatical in over 80% of judgements by informants
*: considered ungrammatical in over 80% of judgements from informants
?: grammatical in over 60% of judgements
*?: ungrammatical in over 60% of judgements

- (16) *Wat gaan jullie vanavond doen?*
what go you-PL tonight do-INF
'What are you going to do tonight?'

Wij gaan naar de film.
we go to the movie
'We're going to the movies.'

* *ec gaan naar de film.*¹⁴
Ø go to the movie
'(We) are going to the movies.'

- (17) *Wat vind je van ons?*
what find you of us
'What do you think of us?'

Jullie zijn een beetje gek.
you-PL are a bit crazy
'You are a bit crazy.'

* *ec zijn een beetje gek.*
Ø are a bit crazy
'(You) are a bit crazy.'

The omission of third person subjects is ambiguous.

- (18) *Wat doet Marie?*
what does Marie
'What is Marie doing?'

Die/zij/ze geeft Jan een boek.
that/she/she gives Jan a book
'Marie gives Jan a book.'

*?*ec geeft Jan een boek.*
Ø gives Jan a book
'(She) gives Jan a book.'

¹⁴ In certain forced contexts, the first person plural pronoun can be dropped. Generally, however, dropping *wij* 'we' results in ungrammaticality.

- (19) *Wat doen de broertjes?*
 what do the brothers
 'What are the brothers doing?'

Die/zij/ze geven Jan een boek.
 that/they/they give Jan a book
 'The brothers give Jan a book.'

? *ec geven Jan een boek.*
 Ø give Jan a book
 '(The brothers) give Jan a book.'

DIRECT OBJECTS

My data indicate that first and second person direct objects never appear in topic position (without focus/contrastive stress), and may never be omitted. This is shown by the ungrammaticality of the weak pronouns in topic position. Koster (1978b) also argues that these elements cannot appear sentence-initially.

Balkenende suggests that all direct objects are easily omitted, although, as with subjects, first and second person direct objects are more difficult to omit. Jansen finds instances where third person direct objects are dropped, but never first or second person pronominal objects.

- (20) *Heeft Jan jou geholpen?* (21) *Heeft Jan jullie geholpen?*
 has Jan you helped has Jan you-PL helped
 'Did Jan help you?' 'Did Jan help you?'

Ja, MIJ heeft Jan geholpen.
 * *Ja, me heeft Jan geholpen.*
 yes me has Jan helped
 'Yes, Jan has helped me.'

* *Ja, ec heeft Jan geholpen.*
 yes Ø has Jan helped
 'Yes, Jan helped (me).'

Ja, ONS heeft Jan geholpen.
 * *Ja, ons heeft Jan geholpen.*
 yes us has Jan helped
 'Yes, Jan has helped us.'

* *Ja, ec heeft Jan geholpen.*
 yes Ø has Jan helped
 'Yes, Jan helped (us).'

- (22) *Heeft Jan mij geholpen?*
has Jan me helped
'Did Jan help me?'
- Ja, JIJ heeft Jan geholpen.*
* *Ja, je heeft Jan geholpen.*
yes you has Jan helped
'Yes, Jan has helped you.'
- * *Ja, ec heeft Jan geholpen.*
yes Ø has Jan helped
'Yes, Jan has helped (you).'
- (23) *Heeft Jan ons geholpen?*
has Jan us helped
'Did Jan help us?'
- Ja, JULLIE heeft Jan geholpen.*
* *Ja, jullie heeft Jan geholpen.*
yes you-PL has Jan helped
'Yes, Jan has helped you.'
- * *Ja, ec heeft Jan geholpen.*
yes Ø has Jan helped
'Yes, Jan has helped (you).'

All native speakers acceptably omit third person inanimate direct objects from topic position.

- (24) *Wat heb jij met dat boek gedaan?*
what have you with that book done
'What have you done with that book?'
- Dat heb ik aan Marie gegeven.*
that have I to Marie given
'That, I have to Marie given.'
- ec heb ik aan Marie gegeven.*
Ø have I to Marie given
'(That book,) I have given to Marie.'
- (25) *Wat heb jij met die boeken gedaan?*
what have you with those books done
'What have you done with those books?'
- Die heb ik aan Marie gegeven.*
those have I to Marie given
'Those (books), I gave to Marie.'
- ec heb ik aan Marie gegeven.*
Ø have I to Marie given
'(Those), I gave to Marie.'

However, omitting third person animate direct objects induced mixed judgements. Third person personal object pronouns, like first and second person pronouns can only be topicalized with contrastive stress (Zwart 1997, Jansen 1981). These elements can also be represented using a d-pronoun. Contrasting with first and second person pronouns, some speakers drop these constituents acceptably.

- (26) *Heb jij Jan gisteren ook gezien?*
 have you Jan yesterday also seen
 'Did you also see Jan yesterday?'

*Ja, die/*hem/*'m heb ik gezien.*
 yes that/him/him have I seen
 'Yes, I saw him.'

? *Ja, ec heb ik gezien.*
 yes Ø have I seen
 'Yes, I saw (him).'

INDIRECT OBJECTS

According to my informants, first and second person indirect objects, like direct objects, cannot be topicalized or dropped. Koster (1978b) also confirms that topicalization of these personal pronouns is prohibited unless they receive contrastive stress.

Jansen reports no tokens where first or second person indirect personal pronouns are deleted. Balkenende argues that indirect objects can, in fact, be deleted, but as with subjects and direct objects, omission of first and second person personal pronouns is more restricted.

- (27) *Wat heeft Jan jou gegeven?*
 what has Jan you given
 'What did Jan give you?'

MIJ heeft Jan een boek gegeven.
 * *Mij heeft Jan een boek gegeven.*
 me has Jan a book given
 'Jan has given me a book.'

* *ec heeft Jan een boek gegeven.*
 Ø has Jan a book given
 'Jan has given (me) a book.'

- (28) *Wat heeft Jan jullie gegeven?*
what has Jan you-PL given
'What has Jan given you?'

ONS heeft Jan een boek gegeven.

- * *Ons heeft Jan een boek gegeven.*
us has Jan a book given
'Jan has given us a book.'

- * *ec heeft Jan een boek gegeven.*
Ø has Jan a book given
'Jan has given (us) a book.'

- (29) *Wat heeft Jan mij gegeven?*
what has Jan me given
'What did Jan give me?'

YOU heeft Jan een boek gegeven.

- * *Jou heeft Jan een boek gegeven.*
you has Jan a book given
'You, Jan gave a book.'

- * *ec heeft Jan een boek gegeven.*
Ø has Jan a book given
'Jan has given (you) a book.'

- (30) *Wat heeft Jan ons gegeven?*
what has Jan us given
'What did Jan give us?'

JULLIE heeft Jan een boek gegeven.

- * *Jullie heeft Jan een boek gegeven.*
you-PL has Jan a book given

- * *ec heeft Jan een boek gegeven.*
Ø has Jan a book given
'Jan has a given (you) a book.'

Unlike Balkenende, omitting third person animate indirect objects induced varying grammaticality judgements when dropped.¹⁵

- (31) *En Marie?*
and Marie
'And Marie?'

*Oh, die/haar heb ik wat geld gegeven om de trein te nemen.*¹⁶
oh that/her have I some money given for the train to take-INF
'Oh, Marie, I gave her some money to take the train.'

? *Oh, ec heb ik wat geld gegeven om de trein te nemen.*
oh Ø have I some money given for the train to take-INF
'Oh, (Marie), I gave her some money to take the train.'

- (32) *En de jongens?*
and the boys?
'And the boys?'

¹⁵ I attempted to elicit judgements from informants for third person inanimate indirect objects with little success. For example, when I used the noun *het uitzendburo* 'the employment agency', my informants found the grammatically 'correct' d-pronoun substitution, *dat* 'that-singular' to be questionable, while *die* 'that-plural' to be acceptable. They could only interpret the sentence as involving the people at the employment agency rather than the agency as an inanimate on its own. Topic drop was judged as ungrammatical.

- (vii) *En wat heb jij het uitzendburo gestuurd?*
and what have you the employment-agency sent
'And what did you send to the employment agency?'

?? *Dat heb ik mijn CV gestuurd.*
that have I my CV sent
'I sent my CV there.'

Die heb ik mijn CV gestuurd.
those have I my CV sent
'I sent them my CV.'

?* *ec Heb ik mijn CV gestuurd.*
Ø have I my CV sent
'I sent (them) my CV.'

Similar judgements were given when I tried to use *de Postbank* (a national bank in the Netherlands) as the indirect object.

¹⁶ Hans den Besten (p.c.) points out that the use of interjections, such as *oh* and *ja*, seem to make this sentence more acceptable when presented to native speakers. This was confirmed when I conducted further tests with some informants. Without the interjection, the sentence is frequently deemed ungrammatical or questionable. I have no explanation for this difference, but suspect that it is related to the flow of discourse.

Oh, die/hun heb ik wat geld gegeven om de trein te nemen.
oh that/them have I some money given for the train to take-INF
'Oh, the boys, I gave them some money to take the train.'

? *Oh, ec heb ik wat geld gegeven om de trein te nemen.*
oh Ø have I some money given for the train to take-INF
'Oh, (the boys), I gave them some money to take the train.'

PREPOSITIONAL PHRASES

The grammaticality of dropping prepositional phrases seems, in part, to depend on their status as an argument or adjunct. Balkenende also points this out in his description of topic drop. In the following examples, the locative prepositional phrase is an argument and is acceptably dropped.

- (33) *Zeeland ken ik helemaal niet.*
Zeeland know I absolutely not
'I don't know Zeeland at all.'

In Zeeland/daar ben ik zelfs nog nooit geweest.
in Zeeland/there am I even still never been
'I've still never been there.'

ec ben ik nog nooit geweest.
Ø am I still never been
'I have never been (there).'

Prepositional complements consisting of the preposition and a d-pronoun cannot be removed from topic position in their entirety.

- (34) *Heb je daarover nog gepraat?*
have you there-over still talked
'Have you talked about that?'

Daarover heb ik nog niet gepraat.
there-about have I still not talked
'I still haven't talked about it.'

* *ec heb ik nog niet gepraat.*
Ø have I still not talked
'I still haven't talked (about it).'

OBJECTS OF PREPOSITIONS

Jansen finds that objects of prepositions were dropped the most frequently from topic position. Balkenende also argues that the object of complement PPs can be dropped easily, as well. The data from the Dutch informants confirms these conclusions. This is only applicable in cases where the preposition has been stranded and only its object has been topicalized.¹⁷

- (35) *Heb je daarover nog gepraat?*
have you there-about still talked
'Did you talk about that?'

Daar wil ik niet over praten.
there want I not about talk-INF
'I don't want to talk about it.'

ec wil ik niet over praten.
Ø want I not about talk-INF
'I don't want to talk (it).'

- (36) *Kun je het met een hamer doen?*
can you it with a hammer do-INF
'Can you do it with a hammer?'

Daar kun je het niet mee doen.
there can you it not with do-INF
'You can do it with it.'

ec kun je het mee doen.
Ø can you it with do-INF
'You can do it with (it).'

- (37) *Driehoeksmeting vind ik erg fijn.*
trigonometry find I really fine
'I thought trigonometry was really nice.'

¹⁷ In topicalization constructions, either the entire PP can be moved to SpecCP, or simply the object of the PP, resulting in the preposition remaining at the end of the sentence, as shown in examples (34) and (35). The object of the preposition is always expressed with the d-pronoun *daar* 'there'.

Daar heb ik erg veel nut van gehad.
there have I really much purpose of had
'I thought it was really worthwhile.'

ec heb ik erg veel nut van gehad.
Ø have I really much purpose of had
'I thought (it) was really worthwhile.'

3.2 Summary

Looking at the data presented above, several general trends emerge. First, a distinction appears to exist between first and second person on the one hand, and third person on the other. Virtually no first and second person constituents may be deleted, regardless of their functional role in the sentence. The exception to this is that first person singular subjects are drop-able in specific contexts. Third person constituents, in contrast, are more freely omitted. Prepositional phrases can also be broken down into subgroups when discussing topic drop. Argument PPs are delete-able while adjunct PPs cannot be omitted without causing ungrammaticality. Objects of prepositions are easily deleted. The delete-ability of an element seems to be related to its ability to topicalize and be replaced by a d-pronoun, as illustrated in the following table.

Table 3. Ability for Various Constituents to Topicalize,
Undergo D-Pronoun Replacement, or Undergo Deletion

Constituent	Topicalization	D-Pronoun	Drop-able
1P subject ¹⁸	✓		
2P subject	✓		
3P subject (animate)	✓	✓	(✓)
3P subject (inanimate)	✓	✓	✓
1P direct object			
2P direct object			
3P direct object	✓	✓	✓
1P indirect object			
2P indirect object			
3P indirect object	✓	✓	(✓)
argument PP _{loc}	✓	✓	✓
argument PP _{other}	✓		
adjunct PP	✓	✓	
object of PP	✓	✓	✓

The syntactic and pragmatic restrictions on topic drop are visible when we look at the types of elements that are deleted. Syntactically, all drop-able elements occur in SpecCP. Constituents not appearing in SpecCP cannot be deleted, even if they meet pragmatic requirements. The example below illustrates that even when the direct object is the topic of discourse, and is replaced by a d-word, it cannot be deleted from its base position.

- (38) *Wat heb jij met dat boek gedaan?*
 what have you with that book done
 'What have you done with that book?'

Ik heb dat (boek) aan Marie gegeven.
 I have that (book) to Marie given
 'I have given that book to Marie.'

* *Ik heb ec aan Marie gegeven.*
 I have Ø to Marie given
 'I have given (that book) to Marie.'

¹⁸ Zwart (1997) proposes that subject-initial clauses in Dutch only project up to IP, not CP. As such, none of the subject pronouns would necessarily be topicalized. However, this proposal is controversial, particularly in how it would account for word order in subordinate clauses. For the purposes of this paper, I assume the standard analysis.

Pragmatically, an element must be highly activated within the discourse to be omitted. This level of activation does not necessarily entail the presence of a linguistic antecedent, but is strongly associated with the discourse. Basically, the dropped element must be recoverable from the discourse. The following example from Hotze Rullmann (p.c.) shows that although an explicit referent may not be present linguistically, it can be dropped and is recoverable.

- (39) *Doet me denken aan die keer dat we zouden gaan zeilen.*
does me think-INF of that time that we would go sail-INF
'(That) reminds me of the time that we were going to go sailing.'

This level of discourse activation seems to be associated with demonstrative pronouns. Those constituents appearing in SpecCP but not able to undergo topic drop have one characteristic in common: they cannot be replaced by a d-pronoun. I now look at how this relationship can be formalized in the syntax and how to account for elements resulting in varied grammaticality judgements in native speakers (i.e., animate third person elements).

4.0 Licensing Topic Drop

Based on the data presented above, Dutch topic drop illustrates an elegant interaction between syntax and pragmatics. All constituents must appear within a certain syntactic configuration to be dropped; that is, in topic position. At the same time, a particular set of discourse requirements must be met. Only elements clearly linked to the discourse are permitted to undergo deletion. Meeting only one of these conditions is not sufficient to induce topic deletion.

Individually, the analyses already proposed for topic drop in Dutch cannot account fully for the data presented here. Weerman (1989) argues that topic drop occurs with subjects and objects when they have a discourse referent and appear in topic position. However, the data indicate that only third person subjects and objects are dropped. Even within that group, ambiguity appears to be an issue.

Hoekstra and Zwart (1994) propose that topic drop occurs when the topic operator carries the phi features of the topic, making the missing constituent syntactically recoverable. Under this analysis, we would expect no asymmetry between the ability to drop first and second person subjects and third person subjects.¹⁹ All have phi features which should be borne by the topic operator.

¹⁹ One possible explanation for this distinction, using the phi feature hypothesis, is that the topic operator cannot bear first/second person phi features. This is somehow counterintuitive. Generally, third person pronouns are analysed as being underspecified, whereas first or second person pronouns have more features or are more specified (Beneviste 1956, Ritter & Harley 1998). Therefore, less information would be 'transmitted' to the topic operator for identification in the

Also, no differences in drop-ability should emerge between animate and inanimate third person constituents. Finally, this analysis reduces the role of the discourse in topic drop. The data show that discourse is on equal footing with any syntactic constraints.

Balkenende's analysis captures the facts of topic drop in Dutch most closely. He argues that all elements are capable of undergoing topicalization, including the d-words. In sentences with topic drop, the d-words are deleted after moving to topic position.

(40) [CP dat [C heeft Jan aan Marie gegeven.]]
that has Jan to Marie given

(41) [CP e [C heeft Jan aan Marie gegeven.]]
(taken from Balkenende 1995:52)

Only words appropriately linked to the discourse will be represented with a d-pronoun. Only d-pronouns are delete-able, giving us the appropriate syntactic and discourse restrictions on topic drop in Dutch. His analysis can be extended to account for much of the data presented here, however becomes problematic when dealing with the ambiguities when dealing with third person elements.

4.1 First and Second Person Pronouns

As previously mentioned, the omission of first and second person elements from sentence-initial position is not permitted. This is directly attributable to the fact that these constituents cannot appear in topic position. As stated previously, topic drop in Dutch is the unification of certain pragmatic and syntactic requirements. The syntactic requirements cannot be met in the case of first and second person constituents, hence topic drop is illicit.

The reason why unstressed first and second person object pronouns cannot appear in topic position is unclear.²⁰ Unlike their third person counterparts, these pronominal entities do not have a fixed discourse referent. They shift constantly during the course of conversation between speakers. Perhaps this explains why they do not undergo topicalization. However, other elements (e.g. sentential adverbs) that do not have fixed discourse referents appear in topic position without difficulty. In the two examples below, the sentential adverbs *misschien* 'maybe' and *waarschijnlijk* 'probably' grammatically appear in topic position.

case of third person constituents. We would expect that third person pronouns to be be more difficult to drop, not less difficult because they lack this added specification.

²⁰ By unstressed, I am referring to the full, unstressed pronouns, not the weak or clitic forms. The weak/clitic pronouns observe certain constraints on their placement, see Zwart 1997 for a full description.

- (42) *Misschien komt Erik Jan later.*
 maybe comes Erik Jan later
 'Maybe Erik Jan will come later.'
- (43) *Waarschijnlijk wil Aniek haar treinkaartje nu kopen.*
 probably wants Aniek her train-ticket-DIM now buy-INF
 'Aniek probably wants to buy her train ticket now.'

With respect to dropping the first person singular subject, I would argue that this is permitted in certain contexts, because it has a fixed referent. For example, during a monologue, or when writing in a diary, the first person does not change but refers consistently to the same speaker. It remains highly activated in the discourse. Hence, it does not need to be realized phonetically.

4.2 Third Person Pronouns

Omission of third person animate constituents seems to be the most ambiguous among native speakers and the most problematic for Balkenende. I would like to suggest that this ambiguity is partly due to the fact that third person animate elements can be represented using either a personal pronoun or d-word.²¹ While a plausible explanation can be found for third person objects, the third person subjects are more difficult to account for.

With third person (in)direct objects, the demonstrative pronoun is the only pronoun permitted to topicalize. Weak personal pronouns (i.e., those not receiving contrastive stress), cannot be topicalized. If a speaker uses the personal pronoun, not the demonstrative, in his or her representation, omission of the element is illicit because it is not in topic position. On the other hand, if the d-word is used and subsequently topicalized, it may be deleted.

- (44) *En Ineke?*
 and Ineke
 'And Ineke?'
- Oh, [CP HAAR/*haar [C heb ik wat geld gegeven...]]*
 oh HER/her have I some money given
 'Oh, I gave her some money ...'
- Oh, [CP die [C heb ik wat geld gegeven...]]*
 oh that have I some money given
 'Oh, I gave her some money ...'

²¹ Other languages where demonstratives are used to represent third person animates include Ainu, Basque, Balochi, Mongolian and Halh (Elizabeth Ritter, p.c.).

The ambiguous judgements are the result of the failure of weak pronouns to move into topic position, for some speakers or in certain contexts.

The omission of third person subjects in Dutch is more problematic. In contrast to the weak third person object pronouns, weak third person subject person pronouns can appear in sentence-initial position. The different pronouns seem to be virtually interchangeable, as shown in the example below, with the third person subject:

- (45) *Wat doet Marie?*
what does Marie
'What is Marie doing?'
- Zij/ze geeft Jan een boek.*
she/she gives Jan a book
'She's giving Jan a book.'
- Die geeft Jan een boek.*
that gives Jan a book
'She gives Jan a book.'

Since third person animate subjects clearly appear in topic position, the fact that native speakers have varying judgements is not easy to explain. I tentatively propose that this may be the result of an underlying syntactic ambiguity, which, in turn, results from a pragmatic decision on the part of the speaker.

The prohibition on topic drop with other personal pronouns was attributable to the fact that many of them could not undergo topicalization. They were not in topic position, and therefore, could not be deleted. I would like to suggest that the third person subjects also may not be topicalized, at least not in the same sense as direct objects or other elements. Interestingly, third person personal pronouns, including subjects, cannot appear in Contrastive Left-Dislocation structures (§2.1, footnote 4). In other words, they cannot occur with a d-pronoun. The d-word is generally assumed to be an overt realization of the topicalization operator, occurring in free variation with its null counterpart.

- (46) * *Zij*, [_{CP} *die* [_C *geeft Bert een boek.*]]
she that gives Bert a book
'She, that gives Bert a book.'

It is possible that the d-word cannot occur because, like the other personal pronouns, the third person subject pronoun has not undergone topicalization, hence there is no topic operator. The fact that dropping third person subjects

causes ambiguous judgements among native speakers is now expected. When a speaker includes the personal pronoun in his/her underlying representation, the subject cannot be dropped because it has not undergone topicalization. If the subject is represented by a d-pronoun, it can be dropped.

The position of the personal pronoun subject in the clause is now left open to question. Is it generated clause-externally? Does it remain in SpecIP? Other elements, such as the sentential adverbs discussed in examples (42-43) also cannot co-occur with a d-pronoun, yet appear sentence-initially, so I do not believe that this poses a significant problem for this analysis.

This is not to say that the personal pronouns bear no relationship to the discourse; in many cases, the discourse determines their interpretation. The use of the personal pronouns seems to be more restricted syntactically. With the exception of subjects, weak or unstressed personal pronouns cannot appear sentence-initially, nor can they undergo appear in CLDs.

The remaining question is how a speaker determines which type of pronoun will be used in his/her representation. One possibility is that the personal pronouns do not engage in the same relationship with the discourse as the demonstrative pronouns. While they refer to an entity, they do not have the deictic quality exhibited by the d-words. As a result, the personal pronouns cannot be dropped. In addition, the syntactic placement of the personal pronouns seems to be more restricted – they cannot appear sentence-initially in many cases. Sentence-initial position is strongly associated with discourse topic in Dutch (Jansen 1981, Zwart 1998). The choice between using a personal pronoun or a demonstrative may be related to how highly activated the speaker feels that the topic is in the discourse. For example, if the speaker feels that the element is 'salient' enough, he/she will use the demonstrative pronoun. Topicalization ensues and topic drop is permitted. Otherwise, the speaker will use the personal pronoun and topic drop will be ungrammatical. Further evidence is required to support this hypothesis, in particular, if any discourse restrictions apply as to the type of pronoun used in a given context. Other languages using demonstrative pronouns for the third person should be looked at to determine if this is crosslinguistically relevant.

5.0 Conclusions & Further Research

As stated at the outset of this paper, the main goal of this research is to investigate the nature of topic drop in Dutch. Very little work has been done on this area previously and, as a result, a generally incorrect assumption was maintained that topic drop was easily accounted for in terms of discourse and/or phi features alone.

Data from native speakers and speech corpora from Jansen (1981) indicated several tendencies. First and second person elements are rarely dropped from

topic position, regardless of their function within the sentence. The behaviour of third person elements proves to be more difficult to capture. Inanimates were dropped without causing ungrammaticality. However, animate third person subjects and objects resulted in ambiguous judgements across speakers.

Many restrictions on topic drop fall out from constraints already present in the grammar. First, only elements moving into topic position can be dropped. Weak object pronouns are excluded from topic drop because they cannot be topicalized properly. This prevents first and second person object pronouns from being dropped. Third person animate object pronouns are ambiguous because they may be represented with a personal pronoun, which cannot be topicalized, or a d-word, which can be topicalized. Third person subject pronouns may also be subject to this restriction, that is, banned from undergoing topicalization. Evidence from CLD constructions indicates that they cannot co-occur with the lexicalized topic operator. Inanimate third person objects can always be dropped; they are consistently substituted with a d-word, and moved to topic position. Second, the element must be tied to the discourse in such a way that it can be represented with a d-word, or demonstrative pronoun. This could be the result of the d-word having a type of deictic function in the discourse, not available to the personal pronouns. This proposal requires further investigation of both the Dutch demonstrative system, and pronominal systems of other languages using demonstratives for the third person. This investigation of topic drop in Dutch raises more questions about the relationship between discourse and grammar than it set out to answer, although topic drop is an important example of the interaction between form and function.

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