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#### **FOREWORD**

The editors of this volume, Cory Sheedy, Ilana Mezhevich, Erica Thrift, David Thormoset, and Michael Dobrovolsky are pleased to present the twenty-third issue of the *Calgary Working Papers in Linguistics* published by the department of linguistics at the University of Calgary. The papers contained in this volume represent works in progress and as such should not be considered in any way final or definitive.

This issue of CWPL includes papers from both graduate students and professors in the Department of Linguistics, as well as two guest submissions from a Ph.D. student (and University of Calgary M.A. graduate) at the University of Amsterdam and two Ph.D. students at Utrecht University. The articles in this journal discuss a range of topics

from the fields of syntax and phonology.

The first paper, by Olga Borik and Patrick Brandt, investigates experiencers and goals with respect to unaccusatives in German and Russian. Michael Dobrovolsky's paper discusses phonological blends in Malay and argues for a syllable-template approach. Erica Thrift examines the distribution of and constraints on topic drop in Dutch. Ilana Mezhevich's submission discusses issues of definiteness and undefiniteness in Russian.

We wish to express our sincere gratitude to Linda Toth for her assistance in this project. We would also like to thank the University of Calgary Department of Linguistics and Graduate Students' Association for providing the necessary funding to produce this volume. A final word of thanks is owed to each of our contributors for their submissions to CWPL, Volume 23.

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#### CALL FOR PAPERS

Calgary Working Papers in Linguistics is an annual journal which includes papers by faculty and students in Linguistics and related disciplines, both at the University of Calgary and elsewhere.

The editors would like to encourage all readers to submit papers for future publication. The deadline for submission of papers is August 31, 2061 in order to meet an autumn publication date. The editors would like contributions on 3 1/2" Micro Floppy Disks (preferably formatted for Microsoft Word for Macintosh version 5 or higher). We further request that the submissions follow the Style Sheet provided at the end of the journal. All submissions should be camera-ready. Page numbers should not be included on the front of the papers, but should be lightly printed on the back of the pages in pencil. Authors should submit their papers to the address listed below. The editors reserve the right to return papers for revisions if they do not conform to the Style Sheet as outlined at the end of the journal. Appearance of papers in this volume does not preclude their publication in another form elsewhere.

Any correspondence should be sent to the address below:

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#### **Experiencers and Goals in German Unaccusatives**

Olga Borik and Patrick Brandt UiL OTS-Utrecht University

#### 1.0 Introduction

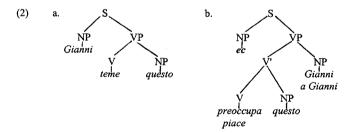
So-called 'Psychological Predicates' have proven particularly problematic for a mapping from lexical argument structure to positions in syntactic structure if one adopts the view that:

- (I) this mapping should be uniform.1
- (II) the inventory of 'thematic roles' should be kept to a minimum.

Thus, it looks as if the mapping principles in the following examples are reversed, the semantic roles of the respective arguments being the same:

- (1) a. Max-EXP fears/likes/hates thunders-THEME
  - b. Thunders-THEME frighten/worry/appeal to Max-EXP

Belletti and Rizzi (1988:293) suggest that the class of psychological predicates can be analyzed along two very different structures; while verbs patterning with temere 'to fear' are analyzed as transitives and verbs patterning with preoccupare 'to worry' and piacere 'to appeal to' are both analyzed as UNACCUSATIVE. Pesetsky (1995:19ff) has shown that an unaccusative analysis for verbs belonging to the preoccupare class is wrong; these verbs do not behave like unaccusatives (e.g., by taking 'have' as their perfective auxiliary as well as showing verbal passives). For verbs patterning with piacere, Pesetsky (1995) and Reinhart (1996) note that an UNACCUSATIVE analysis may well be right.



<sup>&</sup>lt;sup>1</sup> Under the assumption that some version of the UTAH (Baker 1987) is correct.

In light of assumptions (I) and (II), above, it would be odd to have a structure of its own for a subclass of verbs (the *piacere* class) taken to provide an EXPERIENCER as well as a THEME role, thereby being semantically indistinguishable from verbs behaving very differently (syntactically).<sup>2</sup> Drawing heavily on data from German, it is argued, here, that the EXPERIENCER role in truly UNACCUSATIVE structures may well correspond to a LOCATIVE (SOURCE or GOAL) role. Therefore, the verbs of this class have a truly different thematic structure from the other EXPERIENCER verbs, thus avoiding problems with the uniformity of linking from the beginning. Obviously, roles like SOURCE or GOAL are independently needed so that there is no need to enlarge the inventory of roles for this particular class of verbs.

The structure of this paper is as follows: Section 2 will show that German has a class of verbs corresponding to the *piacere* class. These are truly UNACCUSATIVE and support an analysis along the lines of Belletti and Rizzi. In Section 3, we argue that, for these verbs, the EXPERIENCER role is better viewed as a LOCATIVE (SOURCE or GOAL) role, providing evidence that some verbs which behave exactly the same as one another cannot be labelled as an EXPERIENCER in any sense. Rather, the pertinent expressions behave as if they are a SOURCE or a GOAL in crucial aspects. Section 4 examines the status of focussed nominal expressions (henceforth, DPs) compared to their prepositional counterparts. These, being clearly locative, pattern with the DPs and, thus, strengthen the idea that, in fact, the 'non-subject' expression in UNACCUSATIVE-EXP. constructions has a LOCATIVE role. Section 5 then talks about some speculations about how this connects to the issue of acquisition.

#### 2.0 Unaccusative EXPERIENCER verbs

The class of EXPERIENCER predicates that survived Pesetsky's (1995) critique and may be analyzable along the lines of Belletti and Rizzi's (1988) unaccusative structure contains verbs corresponding to 'to appeal to', 'to elude', and 'to occur' in English. These verbs truly behave like unaccusatives across languages; they take 'be' as their perfect auxiliary and resist passivization, they disallow 'by'-phrases and AGENT oriented adverbials. Also typical of unaccusatives, they allow participle-noun constructions (cf. Pesetsky (1995) and Belletti & Rizzi's (1988)).

For German, verbs that behave the same according to all these criteria fall into two intuitively different subclasses. It will be shown that, from a structural point, they actually form only one class. The members of the first 'subclass' have an EXPERIENCER role:

<sup>&</sup>lt;sup>2</sup> In fact, Pesetsky (1995) moves toward a finer-grained semantic distinction between the respective roles for verbs belonging to the *preoccupare* class. This moves away from the conceptually attractive idea that that minor semantic distinctions play no role in the mapping from thematic to syntactic structures and are, therefore, irrelevant.

(3)	a.	erscheinen	'to appear'
	b.	auffallen	'to strike'
	c.	widerfahren	'to occur'
	d.	behagen	'to be pleasant'
	e.	glücken	'to be crowned by success'
	f.	einleuchten	'to be enlightening'

Secondly, verbs that behave exactly the same but do not necessarily involve a psychological state:

- (4) a. entkommen, entgehen 'to flee/getaway'
  - b. entwischen, entfliehen 'to escape'
  - c. entgegenkommen 'to come towards'
  - d. gegenübertreten 'to approach with a sense of opposition'

For both subclasses, judgements with respect to the above criteria for unaccusativity are very sharp:<sup>3</sup>

#### AUX-SELECTION

(5) Peter ist Maria erschienen/aufgefallen .../entkommen/entgangen ...
Peter is-PERF Mary appeared/struck .../ escaped/got away
'Peter has appeared to Mary/was noticed/escaped/gotten away.'

#### \*VERBAL PASSIVE<sup>4</sup>

(6) \*Peter wurde Maria erschienen/aufgefallen .../entkommen/entgangen ...

Peter is-PASS Mary appeared struck escaped got away

#### \*BY-PHRASE, \*AGENT-ORIENTED ADVERBIAL<sup>5</sup>

(7) Peter erschien/fiel ... auf/entkam/entging Maria \*von Gott/\*absichtlich. Peter appeared/struck/ escaped/got away Mary by God/intentionally

<sup>3</sup> We would like to thank Patrick Brandt's family for helping us collect the verbs presented here and for providing grammaticality judgements under and in the light of the Christmas tree.

<sup>&</sup>lt;sup>4</sup> It should be noted that resistance with respect to passivization should really be due to the lack of an external argument (AGENT), since ACCUSATIVE-assignment cannot be a prerequisite for passivization in German (a language allowing impersonal adjectives).

<sup>&</sup>lt;sup>5</sup> By-phrases headed by the preposition *durch* in German cannot be taken to licence external arguments. What they licence is an instrumental role in passive structures (King 1988).

Strikingly, the alleged EXPERIENCER role in these constructions is always marked with DATIVE Case. Also, we are not aware of any German verb patterning with those investigated here that doesn't mark the non-subject argument with DATIVE Case. The idea that immediately comes to mind is that a certain morphological Case is associated with a particular semantic interpretation of an argument (i.e., with a particular theta-role). German DATIVE is generally taken to be an 'inherent' (lexically determined and theta-related) Case. The role that is typically associated with DATIVE Case it that of GOAL. Under the assumption that morphological Case is an important device for the identification of arguments (cf. Neelman & Weerman (1998)), the idea that the EXPERIENCER role may actually be goal-like does not seem too far-fetched.

Inherent' Case-marking on the EXPERIENCER-DP also supports the type of analysis suggested by Belletti and Rizzi. If one makes the natural assumption that, in order to be inherently/idiosyncratically Case-marked, a DP must be situated within a certain local domain of the Case-assigner (m-command on Belletti and Rizzi's execution). This explains why the EXPERIENCER argument does not 'externalize' (i.e., become the grammatical object). If it did, it could not be identified as the argument carrying the role corresponding to the inherent Case. For Germanic languages, it seems to be generally true that DPs marked for DATIVE cannot become grammatical subjects.

At first sight, this sounds plausible for Germanic languages, at least. In German, for instance, salient Case-Marking of the arguments of psych-predicates (those that are not unaccusatives (i.e. belong to the *preoccupare* or *temere* class) select NOM for a subject (EXPERIENCER) and ACC for an object (THEME). When it comes to the *piacere*-type, however, the DATIVE Case emerges. If one says that DATIVE is the *right* Case for a GOAL argument, then one gets a very *neat* picture, indeed.

The same seems to be true for a language like Russian. Just as in German, in most cases, psych-verbs have a NOMINATIVE subject and an ACCUSATIVE object.

<sup>&</sup>lt;sup>6</sup> This point is strongly made at the end of Belletti and Rizzi's paper, as well. The DATIVE NP being satisfied with respect to both Case and Theta requirements, has no reason to move to the subject position and, in fact, cannot move since it would become uninterpretable.

Baker (1996) proposes, for Bantu Languages that, in general, expressions carrying something like a GOAL-role do not externalize, although on different grounds.

This is certainly the case with Obj-EXP verbs in the sense of Pesetsky (1995) With Subj-EXP verbs, the argument occupying the subject position (an EXPERIENCER) bears NOMINATIVE Case while the THEME argument is usually marked with a Case other than ACCUSATIVE or is realized as a PP.

- (8) On pojavilsja na prieme
  he-NOM appear-PST-SG.MASC on reception
  'He appeared at the reception.'
- (9) U menja pojavilas' ideja at me-GEN appear-PAST.SG.FEM idea-NOM 'I've got an idea.'

It can be shown in a number of tests that this verb is unaccusative. For instance, in negative clauses, a direct internal argument can switch its Case from ACCUSATIVE to GENITIVE.9

- (10) Nikakih znamenitostej na prieme ne pojavilos
  no-GEN famous.people-GEN on reception not appear-PAST.SG.NEUT
  'No famous people appeared at the reception.'
- (11) Nikakih novyh idej u menja ne pojavilos no-GEN new-GEN idea-GEN at me-GEN not appear-PAST.SG.NEUT 'I have got no new ideas.'

Note then that in (9) a PP argument looks like an EXPERIENCER. However, this is a very strange and non-standard way of 'encoding' experiencers. Normally, experiencers are either NOMINATIVE (in a subject position) or ACCUSATIVE (in an object position). This is the case with the *preoccupare*-class of psych verbs (i.e., those that are not unaccusatives). One would have to say that *pojavit'sja* in Russian is an UNACCUSATIVE verb that takes a THEME and GOAL and this would suffice to account for its different syntactic behaviour.

While Russian *pojavit'sja* keeps the locative preposition, there is a strong tendency in German to use DATIVE case with animate arguments, structural differences, however, being at best minimal (cf. §4.0). Note that in other cases, Russian and German use DATIVE more or less similarly.

In terms of mapping principles, just one thing would actually have to be said: GOALS cannot be generated in subject position while experiencers can (see also Reinhart 1996, Baker 1996). Further elaboration of this idea would largely depend on a specific syntactic structure that is assumed for UNACCUSATIVE psych verbs, as well as on the Case theory adopted.

<sup>&</sup>lt;sup>9</sup> Russian is a negative concord language therefore, the double negation. The negative element *nikakoj*, however, does not seem to have any influence on Case-marking.

<sup>(</sup>i) Nikkakieidei ne rihodat v golovu no-NOM idea-NOM.PL not come-PRES.3PL in head-ACC

3.0 Is the EXPERIENCER really the GOAL?

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Obviously, the DPs in some constructions (the second class in §2.0) do not qualify as an EXPERIENCER - one would at least expect an argument carrying the EXPERIENCER role to be able to be in some 'psychological state'. In a feature-based approach like Reinhart 1996, it should be positively marked for the feature 'mental'. This is certainly not the case for the following examples:

(12) Max entkam / entging der Volkszählung / dem Knast.

Max escaped /escaped the census-DAT the prison-DAT 'Max escaped the census/prison.'

Note that these constructions fulfill all the above criteria for unaccusatives and behave the same in all relevant respects.

Now, if the non-subject role in UNACCUSATIVE constructions does not necessarily have to be EXPERIENCER, why should it be something like GOAL? Problematically, there are no clear criteria for what counts as a GOAL. But there are indications that the EXPERIENCER-role in the constructions under investigation belongs to the domain of location rather than to that of intentionality and causation:

As indicated above, DATIVE case is somehow 'prototypical' of locative roles.<sup>10</sup>

Furthermore, diachronic research gives some plausibility to the idea that DATIVE Case may in the end be nothing but the offshoot of LOCATIVE prepositions (Paul 1957, Kurylowicz 1964, Hall 1992, see also below).

 The alleged EXPERIENCER argument shows a high degree of syntactic optionality, which is untypical of 'psychological' participants but highly typical of LOCATIVE arguments.

<sup>&</sup>lt;sup>10</sup> One of the many interesting features of Tsez, a language spoken in the west of Daghestan, Russia, is the richness of its Case system, which is mostly due to the number of locative cases that can be expressed. The fact that is of particular interest for us is that the marking of the DATIVE and ALLATIVE (expressing motion to(wards) something) is absolutely identical. Basically, the ALLATIVE forms are built by attaching a dative suffix -r to a noun-stem which has been already marked by one of the 'orientational' suffixes (like 'on', 'under', 'at', etc). DATIVE is also used for marking EXPERIENCERS, indirect objects and, more generally, external arguments that are not intentional/volitional. One may wonder, however, how plausible it is to say that in an example like the following, the DATIVE NP is actually a GOAL:

<sup>(</sup>ii) aho-r mesi b-esu-s shepherd-DAT calf-ABS III.be-found-PAST-WITN 'The shepherd came across the calf.'

- (13) Peter entkam/ erschien/fiel auf.
  Peter got away/ appeared/caught attention.
  'Peter got away/appeared/was noticed.'
- (14) \*The weather worried/amused/annoyed.

What is implicitly understood here is a LOCATIVE rather than an experiencing argument (suggesting that the argument 'suppressing' operation here is saturation rather than reduction, cf. Reinhart 1996). Thus, the emphasized constituents in the following examples are certainly not EXPERIENCERS (taking 'mentality'/animacy' to be a necessary condition for experience), but rather something like 'containers':

- (15) Peter erschien auf der Bühne Peter appeared on the stage 'Peter appeared on the stage.'
- (16) Peter entfloh (aus) dem Käfig
  Peter escaped (from) the cage
  'Peter escaped out of the cage.'
- While the EXPERIENCER in constructions with temere or preoccupare verbs may serve as the 'subject' of secondary predicates, it cannot in UNACCUSATIVE piacereconstructions.
- (17) Peter; mag Maria [(nur) betrunken / mit geschlossenen Augen];
  Peter likes Mary (only) drunk / with eyes closed.
  'Peter only likes Mary when drunk/with his eyes closed.'
- (18) Die Sonne ärgerte Maria; [nackt / in einem schwarzen Kleid]; the sun annoyed Mary; [naked / in a black dress]; 'The sun annoyed Mary naked/in a black dress.'
- (19) ?\*Die Antwort entwischte Maria; [müde / in einem black-out]; the answer escaped Mary; [tired / in a black-out]; 'The answer escaped Mary when she was tired/blacked-out.'

It is not all clear how this contrast should be accounted for. Adopting Williams' (1980) account c-command condition on predication, one could argue that the particular structural realization of the EXPERIENCER-argument blocks the argument from c-commanding the secondary predicate. One way of executing this would lie in

assuming that in fact an empty preposition blocks the argument from c-commanding the predicate. Although we will not go into this any further here, the parallel behaviour of prepositional phrases and DATIVE DPs suggests that this line of thought may be worth exploiting (see §4.0 below). 11

As Levin and Rappoport suggest, the class of UNACCUSATIVE verbs may be
definable by two features, at least one of which has to be positively marked (or
present), namely 'directionality' and/or 'external cause'. Now, if the alleged
EXPERIENCER in UNACCUSATIVE structures were a GOAL, directionality would
trivially follow, since something like it is implied by a GOAL.

#### 4.0 EXPERIENCERS and locative PPs

Notably, in the majority of cases, a clearly LOCATIVE PP can fill the position of the DATIVE NP in the constructions under consideration:

- (20) Peter entkam aus dem Knast.

  Peter escaped from the prison-DAT

  'Peter escaped from prison.'
- (21) Peter entging bei der Volkszählung.
  Peter got away at the census-DAT
  'Peter escaped the census.'
- (22) Peter erschien bei Maria.
  Peter appeared at Mary-DAT
  'Peter appeared at Mary's.'
- (23) Der Sprung glückte bei dem Österreicher. the jump lucked at the Austrian-DAT 'The Austrian successfully made the jump.'

<sup>&</sup>lt;sup>11</sup> Along these lines, Neeleman and Weerman (1998:152) account for the contrast between the following examples:

<sup>(</sup>iii) John, met Mary, nudeii.

<sup>(</sup>iv) John, met [with Mary,] nude, oj.

Neeleman and Weerman further argue that predication into a PP may be odd due to a semantic incompatibility. Reasoning that (GOAL) PPs denote paths with INDIVIDUAL-LEVEL (permanent) properties (cf. Kratzer 1988), they are assumed to be incompatible with secondary predicates which generally have to be STAGE-LEVEL (i.e., denoting temporary properties (cf. \*John met Mary intelligent.)).

(24) Die Währungsunion glückte in Europa. the monetary-union lucked in Europe-DAT 'The monetary union succeeded in Europe.'

Clearly, there are differences in meaning between Der Engel erschien bei Maria 'The angel appeared by Mary-DAT.' and Der Engel erschien Maria 'The angel appeared Mary-DAT.' Roughly, it seems to us, this difference is one between a 'physical' and 'psychological' space. As argued recently, by Aristar (to appear), there is a crosslinguistic pattern linking the locative with inanimacy and the DATIVE with animacy. In 'localist' theories (see various references from Gruber, Jackendoff and Verkuyl), roles like SOURCE, GOAL and THEME ('object moving') are taken to be basic. These may be abstractly interpreted, also, via a process of mapping from 'physical' to more abstract domains (cf. also Chomsky 1991:28).

It is tempting to argue that the impossibility of 'spatial' prepositions in 'psychological' contexts is due to some incompatibility of the two respective domains. <sup>12</sup>

Coming back from this speculation to the original facts, the close relationship between inherently (DATIVE) Case-Marked DPs and LOCATIVE PPs (Baker 1996:29) is strongly supported by their respective syntactic properties. In English, for example, the DATIVE NP and the nominal part of the LOCATIVE PP can be wh-extracted, suggesting similar licensing conditions:

- (25) Where did he escape from t? -- The prison.
- (26) What did he escape t? -- The prison.

In German, the subject and LOCATIVE PP can survive deletion of the (minimal) VP:

(27) Peter entkam aus dem Knast und Klaus aus dem Büro. Peter escaped from the prison-DAT and Klaus from the office-DAT 'Peter escaped from prison and Klaus the office.'

<sup>12</sup> Consider the following pair:

<sup>(</sup>v) He stuffed his cupboard with shirts/shirts into his cupboard.

<sup>(</sup>vi) He stuffed his head with silly ideas/\*silly ideas into his head.

A possible explanation for the ungrammaticality of the LOCATIVE realization of (vi) could be that ideas, being abstract, cannot be linked to the path expressed by the preposition. Similar reasoning could apply to examples like:

<sup>(</sup>vii) He gave the girl a kiss.

<sup>(</sup>viii) He gave a kiss to the girl.

(28) Peter erschien auf der Bühne und Klaus auf dem Dach.
Peter appeared on the stage-DAT and Klaus on the roof-DAT
'Peter appeared on the stage and Klaus on the roof.'

The same is true of the subject and the DATIVE DP, suggesting similar structural positions of LOCATIVE prepositional phrases and DATIVE 'experiencing' arguments:

- (29) Peter entkam dem Knast und Klaus dem Büro.
  Peter escaped the prison-DAT and Klaus the office-DAT
  'Peter escaped prison and Klaus the office.'
- (30) Peter erschien Maria und Klaus Olga.

  Peter appeared Maria-DAT and Klaus Olga-DAT
  'Peter appeared to Maria and Klaus to Olga.'

More tellingly, subject and PP and subject and DP can be conjoined.

- (31) Peter entkam aus dem Knast und Klaus seiner Frau. Peter escaped from the prison-DAT and Klaus his wife-DAT 'Peter escaped prison and Klaus his wife.'
- (32) Der Engel erschien Maria und der Esel in der Scheune.
  the angel appeared Mary-DAT and the mule-DAT in the barn
  'The angel appeared to Mary and the mule in the barn.'

Strangely enough, DATIVE NPs and LOCATIVE PPs can be coordinated on their own, suggesting that they are actually of the same category.

- (33) Peter entkam den Wärtern und aus dem Knast.

  Peter escaped the guards-DAT and from the prison-DAT

  'Peter escaped the guards and from the prison.'
- (34) Der Engel erschien Maria und in der Scheune.
  the angel appeared Mary-DAT and in the barn
  'The angel appeared Mary and in the barn.'

It is also true of both LOCATIVE PPs and DATIVE DPs that a manner (or some other) adverbial may appear between them and the verb. Thus, the following sentences are equally fine without intonational force:

- (35) ... weil er Maria mit Zauberkraft erschien.
  ... since he Mary-DAT with magic appeared
  '... since he magically appeared to Mary.'
- (36) ... weil er mit Zauberkraft Maria erschien.
  ... since he with magic Maria-DAT appeared
  '... since he magically appeared to Mary.'
- (37) ... weil er mit Zauberkraft aus dem Knast entkam.
  ... since he with magic from the prison-DAT escaped
  '... since he magically escaped from the prison.'
- (38) ... weil er aus dem Knast mit Zauberkraft entkam.
  ... since he from the prison-DAT with magic escaped
  '... since he magically escaped from the prison.'

Quite plausibly then, dative NPs of UNACCUSATIVE constructions and LOCATIVE PPs in these same constructions depend on the same licensing conditions and possibly occupy the same structural positions. As the examples with coordination indicate, they may even be categorically very similar or the same.<sup>13</sup>

#### 5.0 A note on acquisition

Given that there are three different syntactic structures for 'experiencing' predicates, the question arises as to how the child acquires the class under discussion here. Assuming that spatial orientation and its linguistic encoding is basic, one could argue that the child somehow gets a grip on UNACCUSATIVE 'movement'-verbs (the subclass dealt with in §2.0) and then exploits the very same structures when he/she learns to deal with abstract psychological concepts. A detailed answer to the question how it differentiates between the at least three classes of 'experiencing' predicates is beyond the scope of this paper. Speaking in terms of theta-roles, all that has to be learned is that certain verbs take just a THEME and GOAL-argument. In a feature-based approach, one will want to make use of something like a directionality-feature.

<sup>&</sup>lt;sup>13</sup> It follows from Neeleman and Weerman's analysis of morphological case that DPs inherently Casemarked should actually behave like PPs. Though this is an attractive and maybe also adequate outcome, its explanation would take us too far afield here. The same is true of an APPLICATIVE analysis of the constructions under consideration. The fact that the verbs corresponding to unaccusatives with dative objects are morphologically complex mostly, the simplex forms being quite generally intransitive, makes this look like a line worth pursuing.

#### 6.0 Conclusions

It has been argued that Belletti and Rizzi's UNACCUSATIVE analysis is correct for a certain group of verbs they label the *piacere* class. On the grounds of the syntactic equivalence between German 'experiencing' and 'nonexperiencing' predicates showing UNACCUSATIVE behaviour and marking the non-subject DP with DATIVE case, it has been proposed to label the EXPERIENCER with a GOAL-role rather, the latter being interpreted psychologically in abstract contexts.

A comparison of German DATIVE DPs and LOCATIVE PPs in UNACCUSATIVE structures has shown that the two are almost indistinguishable, from the point of view of grammar. This coincides nicely with (the speculative) proposals that DATIVE and LOCATIVE Case are structurally closely linked.

If this line of reasoning is correct, certain problems associated with psychological predicates disappear for the verbs investigated in this paper:

- The non-subject argument in UNACCUSATIVE structures does not externalize
  because it is not necessarily 'mental' or 'animate' (a problem for approaches
  relying on thematic hierarchies determined by determined by features, such as
  Reinhart (1996)). The non-subject argument actually cannot externalize because
  it is satisfied with respect to both Case- and theta-requirements in its base
  position.
- For the class of verbs under investigation, no UTAH-problems arise since the thematic roles are truly different (as compared to the temere-class).
- There is no need to move to finer-grained semantics or a proliferation of thematic roles for the class of verbs under investigation. GOALS are part of the inventory anyway and can hardly be done without.

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# Malay Blends - CV or Syllable Template? Michael Dobrovolsky University of Calgary

Abstract

This paper compares CV- and syllable-template processes in the derivation of Malay blends and concludes that the syllable-template approach, relying as it does on constituent copying, allows for a naturalness in the derivation of the forms than a more arbitrary CV-template approach.

#### 1.0 Introduction

The subject of this paper is the structure and representation of blends in modern Malay. In the first part of the paper, I present a survey of blend forms that I have collected from a number of consultants, and present their phonological structure taxonomically. In part 2, I will consider the formal question of whether these structures are best represented as derived from a CV-template or through a syllable-template process.

#### 2.0 Data and Taxonomy

2.1 The phenomenon

Blends in Malay, like blends in English and other languages, are abbreviated forms of compounds or short phrases typically used in colloquial speech or journalese.<sup>2</sup> I will refer to the elements from which the blends are derived as 'bases' whether they are or compounds or phrases, and to their constituents as 'base words'.

Blends, like other instances of derivational stem modification, are phonologically systematic. In English, for example, one blend type is (allegedly) derived by deleting the rhyme of the initial syllable of the first base word and the onset of the second base word, and juxtaposing the remainder, as in (1).

a. 
$$\begin{array}{ccc}
 & O & R & O & O \\
 & A & A & A & A \\
 & S & S & A & A \\
 & S & S & S & A & A \\
 & S & S & S & S & S \\
 & S & S & S & S & S \\
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<sup>&</sup>lt;sup>1</sup>Malay (Malayu) is a language of the Malayo-Polynesian family, spoken by about 11 million people in Malaysia, Indonesia, and Singapore. Consultants for this study were from Singapore and the following locations in Malaysia: Kuantan, Kuala Lumpur, Miri, Penang, Seremban, Sepoh. Many thanks to all of them for their enthusiasm and patient cooperation. Transcription is based on the written standard: ξ represents a reduced, schwa-like vowel; ng represents the phoneme /η /, χ the glide [ j ], and written j the affricate [dʒ]. An earlier version of this paper was presented at the CLA 1990 meetings in Victoria, BC. <sup>2</sup>Some of these forms eventually gain currency in the written language, but this issue will not be dealt with here.



c. m(otor) (h)otel

d. scr(ape) (sp)onge =  $Scrunge^{TM}$  (scrubber sponge made by CowBrand) (NB change in spelling to capture semantics of 'grunge')

In Malay, as in English or Russian, blends come in various phonological flavors; they are not all derived by a single process. Example (2) provides a sample of some of the blend types found in Malay (copied material is underlined; other changes are double underlined).

(2)	BLEND	BASE	
a.	mě nlu	<u>m</u> ë <u>n</u> teri <u>lu</u> ar minister outside	'minister of external affairs'
	pulada	<u>pu</u> sat <u>la</u> tihan <u>da</u> rat center training land (forces)	'army training camp'
	tadika	<u>ta</u> man <u>di</u> dikan <u>ka</u> nak-kanak garden rearing infants	'kindergarten'
b.	andartu	<u>an</u> ak <u>dara tu</u> a child virgin old	'female bachelor'
	cĕ rpen	<u>cĕ_r</u> ita <u>pen</u> dek story short	'short story'
c.	kugiran	kumpulan gitar rancak group guitar lively	'rock band'
	pě lita	<u>pë_m</u> bangunan <u>li</u> ma <u>ta</u> hun development 5 year	'five-year plan'
d.	berdikari	<u>ber</u> diri <u>di</u> -atas <u>ka</u> ki sendi <u>ri</u> standing on-top foot self	'be self reliant'
	maun	<u>ma</u> kan da <u>un</u> eat leaves	'herbivore'
e.	unitama	universeti utara malaysia university north Malaysia	'U. of North Malaysia'

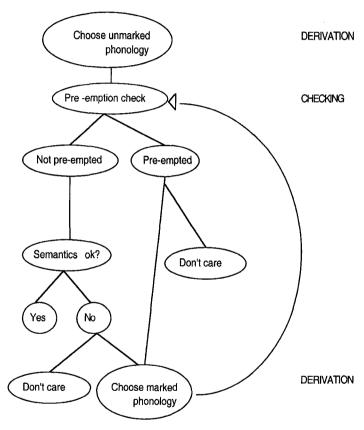
I will refer to syllables in this initial discussion. A Malay syllable has the canonical form  $(C) \ V \ (C)$ , where the coda C = N, r, l, s, h.

In (1) a., the initial syllable of each base word is copied; in (1) b., the initial syllable of each word base is copied, along with the onset of at least one of the following syllables; in (1) c., initial syllables of the word base are again copied, but the coda C of at least one syllable is removed; (1) d. shows that copying is not restricted to initial syllables; and (1) e. shows that copying is not restricted to single syllables or even to the first syllables or the word base.<sup>3</sup>

Blends are not always subject to simple or totally straightforward phonological derivation because their phonological shape must interact with semantic factors. They must be considered by native speakers to be not only phonologically acceptable forms, but also semantically transparent enough to be satisfying as a representation of the base words, or their intent, or, at the very least, as a trigger of the base word phonology. Figure (3) sums up these requirements in flow chart form. For now, I use the term 'unmarked' to mean that syllables are selected without further adjustment, and 'marked' to mean that material is added to or deleted from syllables.

<sup>&</sup>lt;sup>3</sup>This variety in blend types is not surprising when blends are contrasted with another stem-changing process, reduplication. Reduplicative forms show considerable cross-linguistic variety. Recent work such as Alderete, Beckman, et al (1999) suggests that one determinant of this variety is 'the emergence of the unmarked' (TETU) in reduplicative affixes. I will suggest that something akin to TETU also occurs in Malay blending, even though the ultimate goal of the process is to produce something quite different from a reduplicated form.

#### (3) Deriving a blend



Initially, unmarked phonology is employed, which utilizes fundamental constituents of base words and requires no further phonological adjustment. Derivations are checked against existing forms. In some cases, a match may be desired for various purposes (attention getting, puns, etc.). Non-preempted forms are also checked for phonosemantic appropriateness. Forms may be non-preemptive but resemble taboo forms or other forms

inappropriate to the desired result. Alternatively, forms may resemble other forms in a way desired by the innovator. Rejected forms must be rederived; this requires a more marked phonological option. Once a marked option is derived, the checking procedure begins again. Further rejection of the derivation requires increasingly marked options until an acceptable form is reached.

Bat-El 1996 and Kubozono 1990 also argue that blends refer to 'grammatical structures and constraints.' This view stands in contrast to that of Bauer 1988, who claims that blends are created with 'no apparent principles.' It will be apparent that this paper reaches the same conclusions as Bat-El and Kubozono, though arriving at them from a different angle.

#### 2.2 Existing Blends in Malay

Malay shows greater variety of blend processes that given in (2). Example (4) presents the full range of this variation ranged in a branching diagram representing the logical possibilities implied in the data collected to date. The presentation illustrates blend types according to phonological simplicity.

#### (4) Malay Blends on separate page(s)

Those forms that consist of juxtaposed word-initial syllables are considered (for now) to be maximally unmarked.<sup>4</sup> The converging branches beneath UM 1 and 2 mean that multiple syllables from both the initial and second words of the base phrase have been employed.

By 'marked', it is meant throughout that syllables are adjusted in some way, either by having 'weight' in the form of a segment or segments added or deleted. This adjustment can take place internally (to syllables not at the final word-margin), or finally, when a word final syllable is closed by capturing the onset of the following syllable prior to deletion of the remainder of the base word. Forms can be made up of initial syllable(s) combined with non-initial syllable(s) and the same marking options can be found (in theory) in either type of form.

The major right branch of the diagram represents forms in which more than one syllable has been employed from a base word or words. Again, the UM forms are those which employ initial syllables, and the numbers '1' and '2 ...' mean that the multiple syllables are taken from either the first or succeeding words in the base phrase. The converging branches beneath UM 1 and 2 mean that multiple syllables form both the initial and second words of the base phrase. Blends are also formed by combining initial and non-initial syllable(s) of the base phrase, and these combinations may be of initial and internal syllables of base words or of initial and final syllable(s) of base words. Here again, 'unmarked' and 'marked' mean 'adjusted' in the manners described above.

As can be seen from the total number of forms indicated by number beneath each terminal branch, not every possible phonological option is exploited. In single syllable forms, blends composed of word initial syllables predominate, even though many of these are marked. The marking, however, is predominantly weight-adding, and this weight adding entails the capturing of a [sonorant] onset from a second syllable, whether internally or finally. In order not to assign any definite theoretical status to it at this time, I shall refer to this process as glomming. No instance of obstruent glomming has come to my attention to

<sup>&</sup>lt;sup>4</sup> Malay syllables are essentially (C)V(C<sub>SOII</sub>) in structure, where the optional closing sonorant may be /m n ng s h/. I am assuming here a framework in which coda consonants in borrowings are considered to belong to a separate submodule. Evidence for maintaining this approach, even to time-honored borrowing, stems largely from the fact that, in colloquial speech, borrowings are still subject to nativization.

date. Adjustment by removal also involves sonorants or, in one case, the nonsonorant phoneme (/j/) in a borrowed word.

Blends composed of single syllable initials+internal noninitials do not show any purely UM examples (consultants assure me they exist, but are hard to bring to mind). The combining of initial(s) and the final syllable of the last word in the base phrase is more prevalent.

Blends formed from multiple syllables show a similar patterning. Unmarked forms made with the initial syllable(s) of base words predominate; there are a few instances of weight adjustment internally and finally. There is only one example of initial(s) + noninitial(s) combining, and that is a multiple initial + a single final syllable, unmarked.

Overall, observe that (a) the first syllable of the first base word is <u>always</u> used, (b) unmarked forms slightly predominate, and (c) marking is more frequently found in blends composed of single syllables; this marking virtually always involves sonorant glomming. I will comment in more detail on this on Part II.

#### 2.3 Forced Neologisms

As a check on the productivity of observed blend types, consultants were asked to create new blends, either on the basis of base phrases they invented themselves or on the basis of existing base phrases. Two consultants were also asked to create neologisms from a group of base phrases I selected for certain phonological characteristics (open first syllable with presence or absence of sonorant in the onset of second syllable of initial base word, etc.). As no difference was observed in the structure of blends based on novel base phrases or existing base phrases, the two types are lumped together below. All neologisms are preceded by a raised exclamation mark.

#### (5) Some Forced Neologisms

a.	! ajan	<u>a</u> yam <u>jan</u> tan fowl male	'rooster'
	! balita	<u>ba</u> yi <u>li</u> ma <u>ta</u> hun baby five year	'5-year-old baby'
	! cambu	<u>cam</u> pak <u>bu</u> ah throw fruit	'throwing fruit'
b.	! antě rtu	anak teruna tua child young old	'old bachelor'
	! orbo	orang boros person plunging	'reckless spender'
	! kesor	<u>k</u> ě rě ta <u>sor</u> ong car(t) push	'push cart'
c.	! maun	majlis undangan council legislative (NB: pre-empted by most consultants due to	'legislative council' maun 'herbivore'

	<sup>!</sup> okab	orang <u>ka</u> ya <u>ba</u> ru man WH rich	'rich man' (parvenu)
d.	! pĕ rtama	pë rsatuan pë <u>ta</u> ni <sup>2</sup> <u>ma</u> laysia association farmers Malaysia	'Malaysian farmers' assoc.'
e.	! akat	anak ang <u>kat</u> child adopt	'adopted child'
	! aki	<u>a</u> nak laki-la <u>ki</u> child male	'boy'
	! balah	batu belah rock split	'split rock'

Here, in (5) a., the initial syllable of each base word is copied; in (5) b., the initial syllable of each word base is copied, along with at least one onset of a following syllable; in (5) c., initial syllables of the word base are again copied, but the coda C of at least one syllable is removed; (5) d. shows that copying is not restricted to initial syllables; and (5) e. shows blend forms composed of the initial syllable of the first base word and the final syllable of the second base word.

The forced neologisms I elicited are not all produced with the same strategies as existing forms. The strategy of choice is to combine the initial syllable of the first base word with the final syllable of the last in an unmarked manner. Nonetheless, the same broad range of strategies is encountered, suggesting that the production of neologisms is no different from the derivations that produced the existing blends. Perhaps because speakers had less time to reflect on their choices, more unmarked forms are encountered among the neologisms.

#### 3.0 Theory

Viewed in light of recent developments in phonological theory, a question that arises with respect to these blends in whether they are best represented as CV-template derived in the spirit of Marantz 1982 and later Clements 1985, or as syllable template derived following Steriade 1988. I employ the latter as a jumping-off place for the analysis. McCarthy and Prince's Satisfaction Condition (1986) also dovetails with the Malay material. I will not attempt an Optimality Theory analysis in the spirit of Bat-El 1996.

#### 3.1 CV-template derivation

Steriade claims that data from non-reduplicative morphological processes demonstrates that CV-templates are not necessary in reduplication. She notes that segmental changes occur independently of reduplication (in non-reduplicative morphological derivation such as blending, for example) and so are not template-based.

It follows from this claim that templates are unnecessary in non-reduplicative morphological derivation as well. I will first show that a CV-template approach in this particular type of non-reduplicative morphology is initially workable and revealing, though it is ultimately not as appropriate as a syllable-template approach.

Suppose initially that the template is  $CV(C_{[son]})$ . Forms like menlu and pulada (2a) are those in which the full template option is employed. Since there is no second C to match up with the template, we may claim, as an initial explanation, that either a CVC or CV sequence will automatically be selected by the matching procedure. In such forms as kugiran and

pelita (2c), the sonorant consonant option is simply not selected and thus the syllable coda does not appear in the blend. Finally, by employing a full  $CV(C_{[son]})$  template, both glomming and segment removal acquire a straightforward representation. Marked blends with internal or final glommed segments are those for which the full  $CV(C_{[son]})$  option has been selected, as represented in (6).

As noted above, marked blends displaying apparent segment (coda) removal from a syllable are represented as those which are formed with the CV option, as in (7), where the final element is formed with the full  $\text{CVC}_{[son]}$  option. Choice of the CV option automatically eliminates those segments that do not show up in the derived form.

However, in taking this approach, we are left with an interesting formal problem: we have no way to decide whether in forms like (7) a CVC template was selected that simply did not match up with the available melodic sequence, or whether a CV template was selected in order to make a perfect match initially. Fortunately, there is a way out of this formal difficulty.

Since the maximal template encountered appears to be CVC<sub>[son]</sub> (extended words aside for the moment), we could propose that all sequences are copied in this form, as illustrated in (8) (in (8)b., a non-native nonsonorant coda is exceptionally allowed in a borrowing; such forms are occasionally found).

While forms with initial vowels and closed syllables are captured with the maximal  $CVC_{[son]}$  template, forms like *pulada* and *Intekma* are initially derived incorrectly as \*puslatdan and \*Intekmar, respectively. It follows that the adjustment to preferred forms is made through systematic removal of certain segments. As I show in the following section, this option is on the right track.

Finally, forms like ce reka (from ce reta rekaan), which apparently show multiple syllables, are derived by stringing together CV templates until the desired degree of

phonosemantic transparency is achieved (the dot marks a template boundary).

The CV-template approach has the merit of providing a unified formal representation of both glomming and segment removal, since both fall out of template selection. In this sense, it contradicts one of Steriade's arguments for abandoning the template approach in reduplication. Segmental changes are unrelated to the copying process. However, there are two strong arguments against the use of a CV template to derive these forms in Malay.

- (a) In the CV-template approach outlined here, C<sub>[son]</sub> must be specified as such, since no reference to syllable structure is made; in a syllabic approach, the coda syllable in native vocabulary is redundantly [son].
- (b) The stringing together of multiple templates such as illustrated in (9) becomes too arbitrary when it is used to derive forms that noncontroversially employ the initial syllable of the first base word and the final syllable of the second base word, as in (5e), or an internal syllable, such as in (2e).

The next section therefore considers a syllabic approach to this process.

#### 3.2 Syllable-template derivation

A syllable-template approach permits us as an initial step to make a maximally simple statement of the derivation of unmarked classes of Malay blends, as in (10).

a. Copy the initial and 2nd. (3rd, etc., final or various combinations thereof) syllable of each base word. Discard the remainder of the base (Stray Erasure).
 b. Join the copied syllables L-R.

There remains the problem of representing marked forms. To do this, we must decide what the theoretical status of glomming is.

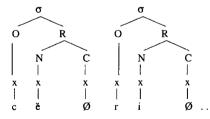
#### GLOMMING: CONSIDERATIONS

Stated most blatantly, a sonorant onset from a noninitial syllable is optionally captured by the preceding syllable before the remainder of the form is discarded (11).

In the material I have collected, there are eight examples of glomming in the existing blends, and ten in the neologisms. None show the glomming of an obstruent. (In only one instance is an obstruent coda present in a form, this from the borrowed form <u>Teknoloji</u>).

Glomming may be treated as a variety of slot-filling parallel to a theory of compensatory lengthening like Kay & Lowenstamm (1986), that claims that an empty position is filled automatically by the spreading of features (segments). It is given in their theory that all syllable positions are obligatory represented by x's, though not always filled. Applying this approach to Malay blends, glomming is represented as the filling of empty coda slot material by the R-L spreading of a permissible [sonorant] segment (or root node).

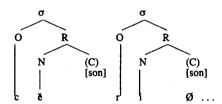
#### (12) <u>cĕ rita pendek</u> 'short story'



However, for K&L, CL is obligatory and automatic. In Malay, glomming in blend formation appears to be optional.

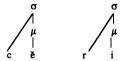
By the same token, we might well claim that glomming is an argument against x-theory. Malay codas are optional, and when present, are redundantly [sonorant]; this constraining allows only sonorants to fill (optionally) the optional coda position, as in (13). If a coda is optionally chosen for phonosemantic ends, it can only be a sonorant, and the added unfilled coda position will trigger glomming.

#### (13) <u>cě rita pendek</u> 'short story'

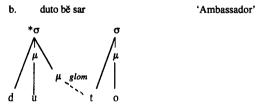


The fact that obstruents do not (or rarely) become codas may well be represented in terms of their phonological weight. A mora account of glomming may thus be revealing. In a mora account, we may consider obstruents (language-specifically) weightless. Since they add no weight, their presence in codas is permissible. Resyllabification is thus confined to weightless elements, as in (14a) versus (14b), since obstruent codas will be assigned weight by position.

### (14) a. <u>cĕ\_rita pendek</u> 'short story'



but



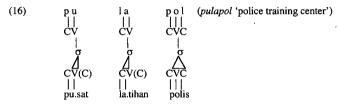
What certainly emerges from all these speculations is that the unit of structure in question is the syllable, and not just a CV sequence. Codas are filled by coda-licensed material and nothing else. This phenomenon would be inexplicable if only sequences of segments were

being gathered together until some satisfactory level of phonosemantic transparency was reached.

#### USING A SYLLABLE TEMPLATE

In the options illustrated from (11) to (14), some form of overt adjustment or capturing of the coda was required. Let us further consider the possibility that only a single syllable template is employed, one that represents the use of a sonorant coda as a selectional option, as in (15).

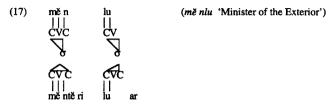
In this approach, copied CV syllables do not fill the template requirements, but there is no penalty in the form of adjustment. The optional coda C is simply not selected.



This approach not only captures the fact that CV syllables are transferred as such but allows sonorants to be optionally glommed from a succeeding syllable, as the final blend syllable pol ilustrates. This approach looks strikingly like what was proposed in the CV-template approach above, but of course it rests on the syllable template as the point of origin for copying. This difference is crucial, as it accounts for the presence of the optional coda.

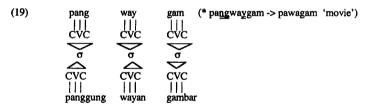
But if we have come this far, there is no reason not to take the next logical stem and assume that a maximal syllable is *obligatorily* copied, and that all cases of blend internal CV syllables that derive from CVC base syllables are formed through a process of adjustment. Indeed, it is just this notion of 'satisfaction' of template requirements that is formalized by McCarthy and Prince as the Satisfaction Condition.

The first implication that devolves from this approach is that forms with existing CV syllables will still be copied as such as long as the onset of the following syllable is not a sonorant consonant, as in the second syllable of (17), while CVC syllables will be fully copied, as in the first syllable of (17).



The second implication is that forms that show sonorant consonant onsets following a CV syllable will be maximally copied, as in (18) and (19) below. In some cases, as in (18), this will result in a correct output.

In other cases, this results in an output that requires further adjustment (removal), as in (19).<sup>5</sup>



Thus, the revised claim is that it is glomming that is an automatic consequence of the syllable structure and not a marked option, while consonant removal is the marked option. 'Unmarked', in other words, will mean all those blends that contain maximal CVC syllables, whether they are 'original' or created through capture of a former onset by the syllable template. In order to justify this approach a closer look must be taken at segment removal.

#### 4.0 Segment Removal

While glomming may be determined by syllable template requirements, segment removal at least of consonantal segments - appears to be a process of a different order.<sup>6</sup> In word

<sup>&</sup>lt;sup>5</sup> In many cases, removal is optional and takes place in order to ensure a good phonosemantic result; the existence of alternative forms of the blends supports this claim. However, they may be cases in which removal is triggered or at least encouraged by bad coda-onset interfaces or other phonological conditions.

internal position in existing blends, segment removal from the coda - always of a [son], of course, occurs in four out of six possible environments, and in neologisms, it occurs in 3 out of 3 possible environments.

In word final position, removal occurs in zero out of six possible environments in existing blends and in neologisms, there is no final coda removal in 30 out of 30 possible cases. In other words, every 'naturally occurring' final closed syllable is left in place.

cases. In other words, every 'naturally occurring' final closed syllable is left in place.

There appears to be a general factor operating in some cases. Internal coda removal in existing blends occurs in forms that are ultimately composed entirely of CV syllables. It appears that in these forms segment removal is a word-level phonological strategy that leads to the desired regularity or euphony of a word consisting of CV syllables. Among neologisms, three out of three word-internal codas are removed, though each circumstance here is unique. In one case, the non-native coda element /j/ is removed; in another, an /m/ that would assimilate to /n/ due to a following /k/ in the blend thus distorting the reading of the new form is deleted; in a third case, preserving the coda would result in an impermissible /m m/ sequence.

Thus, a variety of factors accounts for internal coda removal: phonosemantic needs, word level euphony, perhaps even syllable contact (see below). But final coda removal is rare. Recall that the onset and nucleus of base word initial are employed in all of these forms with but a single instance of onset removal; to this observation we can also add that final syllables are overwhelmingly preserved when they are used. It would appear that speakers consider initial and final syllables to be crucial to a word's phonological identity. Removal of internal codas does not appear to be dependant on any single factor, and is this

a typically marked process.

It is the case that with one exception, those nasal segments that are glommed are homorganic with the onset C of the following (blend) syllable. Formally stated, it may be the case that the glomming of onset nasals and the maintenance of coda nasals is licensed by proper homoganicity (P. Shaw, personal communication). This in turn leads to the observation that codas are governed by following onsets in the manner suggested by Kaye (1987). However, the fact that glomming may also occur in order to create a blend final segment in a position where licensing through homorganicity is irrelevant somewhat lessens the force of this observation (though it could be argued that glomming that results a blend final segment occurs for a different reason than word internal glomming, namely, to signal word closure in these new forms). Furthermore, much remains to be worked out concerning the stage of representation of the forms when blending takes place. Since nasals routinely assimilate to following obstruents in Malay, these nasal might well be represented archiphonemically before the derivation of the blends, and only assimilate after syllable sequencing has occurred. This would of course account for the appearance of government and licensing. What little data I have that bears on this question is significant. When asked to form a new blend from the phrase anak angkat 'adopted child', one consultant produced ankat. A second consultant, however, initially produced ankat and then rejected it, saying that 'it would sound the same as angkat'. The second subject was thus aware that the glommed n would assimilate to the following onset and produce a form that was no

<sup>&</sup>lt;sup>6</sup> Vowel removal is not found word internally. Word final vowel removal of course results in a C final blend. There is only one case of this in existing blends; this occurs in the blend perwanit < perajurit wanita 'female soldier'. It would appear that here the final vowel is removed in order to keep the blend flavor of the form. Interestingly, an alternate form of perajurit wanita is peranita, in which the second word is shortened of by removal not of the final V but of the initial C of the second base word. Again, the blend flavor is maintained.

different phonetically from the second word of the base phrase. This suggests that licensing before the fact is not the issue, but rather licensing after the fact via (optional, but generally applied) assimilation may be formally what is going on.

#### 5.0 On full constituent copying

In the procedure of deriving Malay blends presented here, constituent copying appears to complicate a procedure which might be more easily stated as 'choose either a CV or a CVC syllable, depending on the desired output'. But by deriving these forms with the maximal syllable template, a phonologically legitimate stage in a possible output is automatically selected, and then can be rejected in favor of a reduced output on various grounds.

There is other evidence that constituent copying (though not necessarily full constituent copying) is part of blend derivation. Consider again the English forms cited as examples in (c) smog, brunch, motel, scrunge. I originally stated that syllable constituents (here, onsets) were copied from the first word and replaced the deleted onset of the second word. Steriade's proposal for handling reduplication is that constituents are inserted into existing constituents and then various adjustments are made in order to achieve the desired syllable shape. If this is the case, the English blend types cited above would be derived as follows.

(20)	sm (oke)	->	*smfog	->	smog
	br(eakfast)	->	*brlunch	->	brunch
	m(otor)	->	*mhotel	<del>-</del> >	motel
•	scr(ape)	->	*scrsponge	->	sponge

This contention is supported by blends that result when an onset is inserted into an existing onset and the combination does not result in a violation of permissible onset structure, as in (21). Deletion may occur optionally, but the fact that the first and second onsets may coexist implies insertion of one constituent into the existing constituent.

(21)	' sp(am)	->	Splog/Spog	'Spam log'
	st(icky)	->	strice/stice	'sticky rice'
	Sc(ottish)	->	Scwok/Scok	'Scottish wok'

Applying this convention to Malay blends, we continue to assume that the syllable is fully copied and concatenated with other copied syllable constituents. Assimilation of nasals appears to occur after this step. Once this assimilation has taken place, the forms are vetted for appropriateness along various lines. Only then does consonant (or, rarely, vowel) removal take place, resulting in both a phonologically permissible and phonosemantically appropriate or desired output.

Of course, one must be careful not to confuse what may be individual speaker strategies with formal representations designed to capture maximum generality, make predictions, and reveal universal linguistic processes. Nonetheless, linguistically native speaker input may serve as a diagnostic instrument if handled with care by the participants in the study.

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# Locative Inversion, Definiteness, and Free Word Order in Russian Ilana Mezhevich University of Calgary

#### 1.0 Introduction

In this paper, I examine Russian data in terms of definiteness versus indefiniteness and locative inversion. The latter is investigated in Bresnan (1994). She presents an analysis of locative inversion in English and Chichewa and discusses the restrictions on locative inversion in these languages. In particular, she shows that, in English, locative inversion is permitted with many intransitive verbs and passivized transitive verbs (taking into account the by-phrase restriction), but is disallowed with transitive verbs.

This generalization applies to Russian verbs as well. Interestingly enough, locative inversion in Russian seems to work in the same way as in English. Given the fact that Russian has free word order, violation of the restrictions stated by Bresnan does not result in strict ungrammaticality but the resultant structures are definitely marginal, marked, or require a special context.

However, locative inversion in Russian seems to have a special function (interpretation). Since Russian does not have a formal article, word order is used to convey the notion of definiteness versus indefiniteness. The hypothesis is that, in Russian, the NP position is tied to definiteness: NPs in preverbal position are usually interpreted as definite while NPs in postverbal position are usually interpreted as indefinite. This approach has been already proposed in the literature dealing with languages that have relatively free word order (Kramsky 1972, Revzina 1979, Nikolaeva 1979). Kramsky suggests that "[t]he free word order in Slavic languages makes possible the full use of functional sentence perspective for the aims of expressing the opposition determination vs. indetermination" (1972:191). I assume, following Kramsky (1972), that "the category of determinedness vs. indeterminedness, which is most frequently expressed just by non-formal means, the article in the usual sense of the word being absent in them" (1972:19).

The notion of definiteness, however, requires clarification. As a starting point I adopt the definition proposed by Kramsky (1972:30): "By the term "determinedness" we understand the fact that nouns are classified according to whether the content expressed by the noun is clear and identifiable in a concrete way or not". This definition is vague and, therefore not very helpful. In the course of this paper, I will attempt to achieve a more precise formulation of definiteness.

The structure of this paper is as follows: first, I present Bresnan's analysis of locative inversion in English and apply it to Russian examples. Second, I

<sup>&</sup>lt;sup>1</sup> Kramsky (1972) proposes the term "determinedness" vs. "indeterminedness". In this paper I use the term "definiteness" vs. "indefiniteness" to refer to the same phenomenon.

analyze the two types of Russian NPs - inherently definite and inherently indefinite - with respect to locative inversion with intransitive and transitive verbs. I adopt Milsark's (1974) distinction between weak and strong quantifiers. as presented in Diesing (1992). According to his analysis, the inherently definite NPs include strong quantifiers (e.g. every, all, most), personal pronouns, demonstratives, and proper names. The inherently indefinite NPs include weak quantifiers (e.g. some, few, many) and numerals. If the hypothesis stated in the previous paragraph is correct, we expect that inherently definite NPs will occur mostly in preverbal position while inherently indefinite NPs will occur mostly in postverbal position. Indeed, the data below show the systematic correlation between the position of a NP in the sentence and its definite versus indefinite interpretation. However, I also present examples, which do not to fall into this pattern. Finally, I present data from Czech (another Slavic language with free word order), again provided by Kramsky (1972). The position of a NP in the sentence is only one of three factors that determine interpretation of this NP as definite or indefinite. Two other crucial factors are stress and context.

# 2.0 Locative inversion in English (Bresnan 1994)

According to Bresnan, "locative inversion in English involves the preposing of a locative phrase before the verb and the postposing of the subject NP after the verb". Examples (1)-(3) from Bresnan's paper illustrate this point:

<sup>&</sup>lt;sup>2</sup> Bresnan points out, following Emonds 1976, Green 1976, 1980, Bolinger 1971, 1977, and Birner 1992, that English also allows inversions of nonlocative phrases, "which are restricted to the verb be" (75):

<sup>(4)</sup> a. Especially worrisome to public health experts is the growing number of TB cases. (Adapted from Birner 1992:66-7)

b. Criticized often for drunkenness is John Smith. (Birner 1992:62)

The restriction to be in English is arguable. Emonds (1976:34ff) claims that inversions of participles and adjectives are restricted to be but inversions of prepositional phrases are not. However, this claim is falsified, in particular, by the example Bresnan adopts from Birner (1992:58) repeated here as (5a) (75):

<sup>(5)</sup> a. Coiled on the floor lay a one-hundred-and-fifty-foot length of braided nylon climbing rope three-eighths of an inch thick.

This sentence illustrates VP preposing. However, as Bresnan (1994:76) observes, the VP itself contains a participle with a locative/directional complement. If we omit the locative PP the sentence becomes ungrammatical but the participle omission does not affect its grammaticality. Besides, Bresnan points out that "the verbs that allow such phrasal inversions, like come, sit, stand, and lie select locative complements". For example, the verbs in (6) do not select specifically locative complements (Bresnan shows that, in fact, some of them reject locative complements: \*Three women seemed in the yard):

<sup>(6)</sup> a. \*Gathered pointlessly in the yard seemed three women.

b. \*Busy at the lathes kept three women.

But if replace the verbs in (6) by verbs, which select locative complements, the sentences become grammatical:

<sup>(7)</sup> a. Gathered pointlessly in the yard stood three women.

b. Busy at the lathes sat three women.

- (1) a. A lamp was in the corner.
  - b. In the corner was a lamp.
- (2) a. My friend Rose was sitting among the guests.
  - b. Among the guests was sitting my friend Rose.
- (3) a. The tax collector came back to the village.
  - b. Back to the village came the tax collector.

Bresnan uses the term locative to refer to "a broad range of spatial locations, paths, or directions, and their extensions to some temporal and abstract locative domains" (75). As Bresnan shows, not all verbs can undergo locative inversion. She observes a number of constraints on inverting verbs in English.

## 2.1 Transitivity restriction

Bresnan observes that in English locative inversion cannot apply to transitive verbs. Her examples (10) and (11), repeated here as (4) and (5) illustrate this point:

- (4) a. My friend Rose seated my mother among the guests of honor.
  - b. \*Among the guests of honor seated my mother my friend Rose.
  - c. \*Among the guests of honor seated my friend Rose my mother.
- (5) a. A lucky hiker can find the reclusive lyrebird in this rainforest.
  - b. \*In this rainforest can find the reclusive lyrebird a lucky hiker.
  - c. \* In this rainforest can find a lucky hiker the reclusive lyrebird

## 2.2 Split intransitivity

Bresnan shows that locative inversion in English is allowed with intransitive verbs, however, it is not allowed with ALL intransitive verbs (Postal 1977:147). Intransitives split as to whether they allow it (Levin 1985). Bresnan's examples (13) and (17) are repeated here as (6) and (7):

- (6) a. Among the guests was sitting my friend Rose.
  - b. \* Among the guests was knitting my friend Rose.
- (7) a. On the corner was standing a woman.
  - b. \* On the corner was drinking a woman.

These data show that English has (at least) two types of inversion: locative inversion, which preposes non-PP locative/directional constituents (as in (5)) and inversion of nonlocative constituents, which is generally restricted to be. For the purposes of her study, Bresnan excludes the examples like (4).

Bresnan's explanation for these facts will follow directly, in the end of the section 2.3.

# 2.3 Passivized transitive verbs and the by-phrase restriction<sup>3</sup>

Bresnan shows that locative inversion is possible with passivized transitive verbs. However, there is a restriction against the expression of the *by*-phrase. The examples below illustrate this point (Bresnan's examples (18), (19) and (21)):

- (8) a. My mother was seated among the guests of honor.
  - b. Among the guests of honor was seated my mother.
- (9) a. The reclusive lyrebird can be found in this rainforest.
  - b. In this rainforest can be found the reclusive lyrebird.
- (10) a.?? Among the guests of honor was seated my mother by my friend Rose. b.?? In this rainforest can be found the reclusive lyrebird by a lucky hiker.

Bresnan (1994) proposes that these restrictions on locative inversion fall under the following generalization: "Locative inversion can occur just in case the subject can be predicated as the argument of which the location, change of location or direction expressed by the locative argument is predicated" (80). Thus, the intransitive verbs be, sit and come satisfy this requirement: they have a theme subject of which location, change of location or direction is predicated. This explains the fact that not all intransitive verbs can undergo locative inversion: the intransitive verbs like knit or drink do not predicate locations of their subjects. If a locative phrase occurs with these verbs, it is either an adjunct describing the location of the entire event or a locative predicated of a nonsubject argument (82). In both cases they do not satisfy Bresnan's generalization. Transitive verbs like seat or find predicate locations of their object arguments. However, when these verbs are passivized, the theme argument becomes a subject and locative inversion can apply. But when the by-phrase is introduced, a more prominent role than the theme is syntactically expressed and locative inversion cannot apply to these sentences (80).4

<sup>&</sup>lt;sup>3</sup> Bresnan's analysis of locative inversion with passive verbs shows that not all passives allow locative inversion in English. When the passive subject is an applied beneficiary or instrument argument, locative inversion is ungrammatical. However, these examples are difficult to find. One way English can create such passive subjects is through preposition incorporation into the verb (Bresnan 1982:79): He needs to be spoken to. For the purposes of my paper I restrict my comparative analysis to the four restrictions I have introduced so far.

<sup>&</sup>lt;sup>4</sup> Bresnan assumes a ranking of argument roles descending from agent to theme to locative and the ranking is represented by the left-to-right order of roles in an argument structure. The generalization can then be interpreted as stating that a theme subject must be the highest-ranked of the roles syntactically expressed, since there is none to its left in the argument structure. If a more

# 3.0 Locative inversion in Russian

In this section, I apply Bresnan's generalization to the Russian verbs. I show that Russian and English exhibit certain similarities with respect to locative inversion with intransitive, transitive and passivized transitive verbs. Following Bresnan, I consider the sentence where a locative phrase in the postverbal position appears to be associated with the basic structure. Bresnan does not state this explicitly. However, it follows from her analysis that locative inversion is an instance of movement, since as a result of locative inversion a locative phrase moves to the preverbal position. In order to prepose a locative phrase before the verb, we have to assume that it was originally generated in the postverbal position. This implies the presence of a basic structure and a derived structure. Depending on the type of the verb that the basic structure contains – intransitive, transitive or passivized transitive – locative inversion is allowed or not.

The following examples illustrate locative inversion in Russian:

- (11) a. Lampa bila v uglu. lamp-Nom was in corner 'The lamp was in the corner'
  - b. V uglu bila lampa.
     in corner was lamp-Nom
     'In the corner was a lamp'
- (12) a. Moya podruga Roza sidela sredi gostei. my friend Rose-Nom was sitting among guests 'My friend Rose was sitting among the guests'
  - b. Sredi gostei sidela moya podruga Roza.
     among guests was sitting my friend Rose-Nom
     'Among the guests was sitting my friend Rose'

These examples show that locative inversion in Russian and English has the same properties. It involves the preposing of a locative phrase before the verb and the postposing of the subject NP after the verb. Moreover, the restrictions on transitive verbs and expression of the by-phrase with passivized transitive verbs outlined above hold in Russian as well.

# 3.1 Transitivity restriction

The following examples (13) and (14) demonstrate the transitivity restriction on locative inversion in Russian. The (a) sentences represent the basic structure,

prominent role than the theme is syntactically expressed, this generalization cannot be satisfied because the theme is no longer the leftmost in the argument structure (81).

while the (b) sentences represent the derived structure. The derived sentences are not as strictly ungrammatical as in English but they are definitely marked.

- (13) a. Moya podruga Roza posadila moyu mat' sredi pochetnih gostei. my friend Rose-Nom. seated my mother-Acc. among guests of honor. 'My friend Rose seated my mother among the guests of honor'
  - b. ? Sredi pochetnih gostei posadila moyu mat' moya podruga Roza. among guests of honor seated-fem my mother-Acc. my friend Rose-Nom.
    - 'Among the guests of honor seated my mother my friend Rose'
  - c.?? Sredi pochetnih gostei posadila moya podruga Roza moyu mat'. among guests of honor seated-fem. my friend Rose-Nom. my mother-Acc.
    - 'Among the guests of honor seated my friend Rose my mother'
- (14) a. Maria postavila tarelku na stol.

  Maria-Nom. put-fem. plate-Acc. on table.

  'Maria put a plate on the table'
  - b. ? Na stol postavila tarelku Maria. on table put-fem. plate-Acc. Maria-Nom. 'On the table put a plate Maria'
  - c.?? Na stol postavila Maria tarelku. on table put-fem. Maria-Nom. plate-Acc. 'On the table put Maria a plate'

I expect that the judgements regarding the examples marked (?/??) can vary from speaker to speaker. More than that, I am aware of the fact that, in Russian, the contexts in which these sentences sound natural can be easily constructed. However, what is crucial here is a contrast between the basic structure and the structure which has undergone locative inversion. The basic structure does not seem to require any particular context.

## 3.2 Split intransitivity

As we have seen from Bresnan's analysis not all intransitive verbs in English can be inverted. However, her analysis cannot be straightforwardly extended to the Russian examples. First I present the examples which seem to obey this restriction:

- (15) a. Sredi pochetnih gostei sidela moya podruga Roza. among guests of honor was sitting my friend Rose-Nom. 'Among the guests of honor was sitting my friend Rose'
  - b.?? Sredi pochetnih gostei vyazala moya podruga Roza. among guests of honor was knitting my friend Rose-Nom. 'Among the guests of honor was knitting my friend Rose'
- (16) a. Na ugłu stoyala devushka. on corner was standing young girl-Nom. 'On the corner was standing a girl'
  - b.?? Na uglu pila devushka. on corner was drinking young girl-Nom. 'On the corner was drinking a young girl'

Recall Bresnan's (1994:82) account for these facts: such noninverting intransitives like knit or drink do not predicate locations of their subjects. If a locative phrase occurs with these verbs, it is either an adjunct describing the location of the entire event or a locative predicated of a nonsubjects argument. In both cases they do not satisfy Bresnan's generalization. However, it seems that the Russian examples above sound odd because among the guests of honor is not a prototypical place to knit, and on the corner is not a prototypical place to drink. If we replace these locative phrases by more appropriate expressions, sometimes locative inversion becomes possible:

- (17) a. Moya podruga Roza vyazala na terrase. my. friend Rose-Nom. was knitting on terrace 'My friend Rose was knitting on the terrace'
  - Na terrase vyazala moya podruga Roza.
     on terrace was knitting my friend Rose-Nom.
     'On the terrace was knitting my friend Rose'

In this case the locative phrase is predicated of the entire event but the sentence, nevertheless, is grammatical. However, I must admit that, although (18b) is better than (16b), it is worse than (17b):

(18) a. Devushka pila za stolikom v kafe.
young girl-Nom was drinking at table in café
'The young girl was drinking (sitting) at the table in a café'

b. ? Za stolikom v kafe pila devushka.
 at table in café was drinking young girl-Nom
 'At the table in a café was drinking a young girl'

# 3.3 Passivized transitive verbs and the by-phrase restriction

With respect to passivized verbs and the by-phrase restriction, locative inversion in Russian behaves similarly to its English counterpart. Sentences which contain a passivized transitive verb but do not contain the by-phrase (NP in Instrumental case, the Russian counterpart of the English by-phrase) are better with respect to locative inversion than those in which the by-phrase is expressed.<sup>5</sup>

- (19) a. Moya mat' byla posazhena sredi pochetnih gostei. my mother-*Nom.* was seated among guests of honor. 'My mother was seated among the guests of honor'
  - b. (?)Sredi pochetnih gostei byla posazhena moya mat'.
    among guests of honor was seated my mother-Nom.
    'Among the guests of honor was seated my mother'
  - c.?? Sredi pochetnih gostei byla posazhena moya mat' moei podrugoi Rozoi. among guests of honor was seated my mother-Nom. my friend Roze-Instr.
    - 'Among the guests of honor was seated my mother by my friend Rose'
- (20) a. Tarelka byla postavlena na stol. plate-Nom. was put on table 'The plate was put on the table'
  - b. (?)Na stol byla postavlena tarelka.
    on table was put plate-Nom.
    'On the table was put a plate'
  - c.?? Na stol byla postavlena tarelka Mariei.
    on table was put plate-Nom. Maria-Instr.
    'On the table was placed a plate by Maria'

<sup>&</sup>lt;sup>5</sup> The (b) sentences are less natural in Russian than their counterparts in English. This probably is due to the fact that Russian has quite a restrictive use of the passive; not all the verbs in Russian can be passivized. In many cases where English would use a passive sentence, Russian uses a sentence which contains an active verb with plural marker without expressing the subject, especially if this subject is unknown or irrelevant:

<sup>(</sup>i) Iz gorodskogo sada ubrali vse statui. from municipal garden (they)removed-pl all statues-Acc All the statues were removed from the municipal garden. But the (c) examples are definitely worse.

To summarize, locative inversion in English and Russian seems to exhibit the same properties. The crucial point is that Russian has free word order but nonetheless seems to obey the restrictions that hold for English. This suggests that "free word order" does not mean that one can move anything anywhere and the resultant structure will always be grammatical.

# 4.0 Locative inversion and inherently definite versus inherently indefinite NPs in Russian

As I have proposed in the Introduction, locative inversion in Russian seems to have a special function (interpretation). Russian seems to use word order, and locative inversion in particular, to express the opposition of definiteness versus indefiniteness. One way to check whether this hypothesis is correct is to apply locative inversion to sentences which contain inherently definite and inherently indefinite NPs. If the hypothesis is right, inherently definite NPs will "refuse" to move to the postverbal position while inherently indefinite NPs will boligatorily invert. Diesing (1992:59) describes the distinction between weak and strong quantifiers proposed by Milsark (1974). According to Milsark, weak quantifiers include determiners like a, some, a few, many, and numerals, while strong quantifiers include determiners like the, every, all, and most. Milsark observes that weak determiners can appear with a subject NP in there-insertion contexts, while strong determiners cannot. Example (4) provided by Diesing is repeated here as (21):

- (21) a. There is/are a/some/a few/many/three fly (flies) in my soup.
  - b. \* There is/are the/every/all/most fly (flies) in my soup.

Diesing calls this "the definiteness effect". These examples show that weak determiners are indefinite, while strong determiners are definite.

#### 4.1 Intransitive verbs

If the prediction made by the hypothesis above is correct, inherently definite NPs should tend to appear in the preverbal position. When locative inversion applies and these NPs move to the postverbal position the resultant sentences, even though still acceptable, seem to require a special context.

- (22) a. Ona/moya podruga zhivet v Ierusalime. she/my friend-Nom. lives in Jerusalem 'She/my friend lives in Jerusalem'
  - Etot mal'chik zhivet v sosedney kvartire.
     this boy-Nom lives in neighbor's apartment
     'This boy lives next door'

- c. Maria priehala v Moskvu. Maria-Nom arrived in Moscow 'Maria arrived in Moscow'
- d. Kazhdiy shkol'nik/vse shkol'niki/bol'shinstvo shkol'nikov edet/ut letom v derevnu.
   every schoolchild/all schoolchildren/most schoolchildren go-sg/pl in summer to village
   'Every schoolchild/all schoolchildren/most schoolchildren go to a village in summer'
- (23) a.?? V Ierusalime zhivet ona/moya podruga. in Jerusalem lives she/my friend-Nom 'In Jerusalem lives she/my friend'
  - b.?? V sosedney kvartire zhivet etot mal'chik. in neighbor's apartment lives this boy-Nom 'Next door lives this boy'
  - c.?? V Moskvu priehala Maria. in Moscow arrived Maria-Nom 'In Moscow arrived Maria'
  - d.? V derevnu edet/ut letom kazhdiy shkol'nik/vse shkol'niki/bol'shinstvo shkol'nikov to village go-sg/pl in summer every schoolchild/all schoolchildren/most schoolchildren 'To village go in summer every schoolchild/all schoolchildren/most schoolchildren'

The sentences in (23) are grammatical, however they seem to require a specific context. Normally, a native speaker would not use them in a situation when she needs simply to state the fact that somebody lives in Jerusalem or goes to a village. However, inherently indefinite NPs behave differently:

- (24) a. V zooparke zhivut neskol'ko/mnogo/pyat' drakonov in zoo live-pl some/many/five dragons-gen.

  'There are some/many/five dragons in the Zoo'
  - b. ? Neskol'ko/mnogo/pyat' drakonov zhivut v zooparke. Some/ many/five dragons-gen. live-pl. in zoo. 'Some/ many/five dragons live in the Zoo'

- (25) a. V Norvegii byl/shel/lezhal sneg. in Norway was/went/lay snow-Nom. 'There was snow in Norway/It was snowing in Norway/Snow lay in Norway'
  - b. ? Sneg byl/shel/lezhal v Norvegii. snow-Nom. was/went/lay in Norway 'There was snow in Norway/It was snowing in Norway/Snow lay in Norway'
- (26) a. Na uglu stoyala devochka. on corner was standing girl-Nom. 'On the corner was standing a girl'
  - Devochka stoyala na uglu.
     girl-Nom. was standing on corner
     'The girl was standing on the corner<sup>6</sup>'

In (24a) the sentence represents the basic structure. This sentence would normally be used by a speaker to state the fact that there are (certain number of) dragons in the Zoo. But, when locative inversion applies and an inherently indefinite NP moves to the preverbal position, like in (b), the sentence sounds odd if uttered without an appropriate context, for example:

(27) a. Ya znau, chto drakoni suschestvuyut - neskol'ko/mnogo/pyat' drakonov zhivut v zooparke.

I know that dragons exist - some/ many/five dragonsgen. live-pl. in zoo

'I know that dragons exist - some/many/five dragons live in the Zoo'

Example (25) deserves special comments. I consider *snow* to be inherently indefinite. For example, this noun cannot appear with a number of strong quantifiers or with possessive pronouns, though it can appear with demonstrative pronouns and with the strong quantifier *all*:

- (28) a. \* Kazhdiy sneg/\*moy sneg/?bol'shinstvo snega 'every snow/my snow/most snow'
  - b. Etot sneg/ves' sneg 'this snow/all snow'

<sup>&</sup>lt;sup>6</sup> I translate NPs inside the prepositional phrase as definite, for the sake of consistency. Here, I focus on the subject and object NPs so, for the purposes of this paper, this is not crucial.

Thus, the most natural position of *snow* is after the verb. The (b) example is marked. It is perfectly grammatical but a native speaker would not use it in case she simply needs to state the fact that it was snowing in Norway. This sentence seems to be more appropriate as an answer to a question like "Where was it snowing last year?". Notice also that in Russian, nouns, which denote states of nature – *snow*, *rain*, *wind*, *cold*, etc. – usually follow the verb. This is also true about nouns like *winter*, *morning*, etc:

- (29) a. Shel dozhd'/Dul veter/Bilo holodno. went rain/blew wind/was cold 'It was raining/It was windy/ It was cold'
  - b. \* Dozhd' shel/?veter dul/?holodno bilo rain went/blew wind/cold was 'It was raining/It was windy/ It was cold'
- (30) a. Prishla zima/nastupilo utro came winter/came morning 'Winter arrived/Morning came'
  - b. ? Zima prishla/?Utro nastupilo winter came/morning came 'Winter arrived/Morning came'

Example (26) contains a NP which is neither inherently definite nor indefinite. Such NPs can usually appear with both, inherently definite and inherently indefinite determiners. Since, in this case, the NP is not preceded by any determiner, one possible way to indicate whether this is a girl or the girl is through word order. Thus, the (a) sentence seems to be more appropriate in a situation where this NP is introduced for the first time and the most natural interpretation would be indefinite -a girl. Meanwhile, the (b) sentence presupposes that a listener is already familiar with the NP and here the most natural interpretation would be definite -a the girl.

So far, the data introduced above are consistent with the hypothesis that the position of NP in Russian is tied to definiteness. Additional support for this analysis comes from Burzio's theory of unaccusativity (1986). Intransitive verbs, which take a locative phrase as a complement, are usually unaccusatives – like the verbs in (22) – (27). According to the theory of unaccusativity, such verbs assign

<sup>&</sup>lt;sup>7</sup> The only exception is (22d), which is translated into English as go. However, I am not sure about its status in Russian. This is an activity verb whose literary translation would be something like go by train or car or using any other means of transportation. This verb can be used with inanimate subjects like train, car, bicycle, etc. But it cannot be used with all animate subjects: for example, the sentence sobakamladenetz edet v derevnu "the dog/baby goes to a village" sounds odd.

only one θ-role to their only argument – direct object, which originates in the post-verbal position. Since Russian does not require the subject position to be filled the direct object does not move to the preverbal position, but stays in its original place. When a locative phrase comes into play it occupies the free, preverbal position. However, when there is a necessity to indicate the definiteness or such such a NP, one of the options available to a language without articles is to use word order. Given the assumption that Russian NPs which appear preverbally, receive a definite interpretation, we have the following situation: if a NP is inherently indefinite (the examples in (22) – (25)) the preposing of such NPs before the verb results in a marked sentence, which requires a special context. If an NP is neutral with respect to definiteness, that is, has neither definiteness nor indefiniteness inherent to it (the example in (26)) but can receive both definite and indefinite interpretation depending on the circumstances, locative inversion is optional and does not seem to affect the grammaticality of the sentence.

Russian, however, provides serious counterexamples to this hypothesis. For instance, there are unaccusative verbs, which prefer to have their argument on the subject position:

- (31) a. Babuska spit. grandma-Nom sleep 'The grandma is sleeping'
  - b. ? Spit babushka.sleep grandma-Nom'A grandma is sleeping'
- (32) a. Reka zamerzla. river-Nom froze 'The river froze'
  - b. ? Zamerzla reka. froze river-Nom 'A river froze'
- (33) a. Voda vskipela. water-Nom boiled 'The water boiled'

Certainly, we are able to understand what it means, but there is a more natural way to convey this meaning: The dog/baby is taken to a village. Thus, on the one hand this verb can be used with inanimate subjects but on the other hand it entails certain degree of consciousness/volition. I cannot say that its only argument is pure object.

- b. ? Vskipela voda. boiled water-Nom 'Water boiled'
- (34) a. Morozhenoe rastayalo. ice-cream-Nom melted 'The ice-cream melted'
  - Rastayalo morozhenoe.
     melted ice-cream-Nom
     'Ice-cream melted'

In examples (31) - (34), the arguments of the verbs are underlying objects. At this stage I have nothing to say about example (31). This sentence contains a concrete noun, not preceded by any element which would indicate its definiteness vs. indefiniteness. So, there is no reason why, being an object of the verb spat' (sleep), it cannot stay in the postverbal position. But I propose a possible explanation from the area of compositional semantics for the examples (32) -(34). Our knowledge of the world suggests that talking about the events denoted by these sentences a speaker usually means a particular river or certain amount of water in a particular pan, rather than all possible sources of water in the world. The same is true about the ice-cream; we understand that a speaker's utterance refers to a particular unit of ice-cream, rather than ice-cream in general. But this explanation is quite vague. One can argue, for example, that any act of speech presupposes the speaker's acquaintance with the object of speech (grandma, river, water, ice-cream, in our case). It is clear that, in order to account for these facts we need, at least, a much more elaborate theory of definiteness which is obviously beyond the scope of this paper.

Another type of examples is founded in Nikolaeva (1979). She presents the examples of Russian from Pospelov (1970), who considers four options:

- (35) a. Poezd **prishel**. train-Nom arrived 'The train arrived'
  - b. **Poezd** prishel. train-Nom arrived 'A train arrived'
- (36) a. Prishel **poezd**. arrived train 'A train arrived'

b. Prishel poezd.
 arrived train
 'The train arrived'

Notice, that the word that appears in **bold** is supposed to be stressed: (38a) is a notification of arrival; (38b) informs that the train arrived and not what we were waiting for; (39a) simply states the fact that a train arrived – not any special train; (39b) announces that the train that we are waiting for has eventually arrived. Nikolaeva cites these examples to support the claim that in Russian, depending on the meaning of the sentence, the heavy stress falls on the "assertive elements", while reduced stress falls on the "presuppositive elements". This distinction helps to identify or differentiate NPs in the text (121). Notice, however, that the position of NP also matters: Nikolaeva points out that Pospelov emphasizes the indefiniteness of the NP in the examples (38b) and (39a) – a NP is interpreted as indefinite when it is stressed. When a NP is stressed it becomes even more indefinite when locative inversion applies – that is, when this NP is moved to the postverbal position (122). Thus, in Russian, the stress also plays the crucial role in indicating definiteness versus indefiniteness.

## 4.2 Transitive verbs

Transitive verbs pose a problem for the hypothesis that, in Russian, the NP position is tied to definiteness. The major difficulty for this analysis stems from the fact that transitive verbs have two arguments. This means that both argument positions – subject and object – are occupied. So, in the case of two definite or two indefinite NPs, it is not clear how definiteness versus indefiniteness can be indicated using the word order. There are four options available: <a href="definite">definite</a>, <indefinite, indefinite.
Consider these four variants in Russian:

(37) a. Roza razbila kakuu-to vazu. (definite – proper name; indefinite – weak quantifier)

Rose-Nom. broke a/some vase-Acc.

'Rose broke a vase'

b. ?? Kakuu-to vasu razbila Roza.
 a/some vase-Acc. broke Rose-Nom.

'Rose broke a vase'

According to Nikolaeva (1979), the familiar, definite elements in theory are connected to those which linguistics of that time called "presuppositive elements" while the new – with "assertive elements".

<sup>&</sup>lt;sup>9</sup> Notice, that Pospelov (1970) refers to the degree of definiteness. Apparently in Russian a NP can be more or less definite depending on what means are applied to indicate it. Under this view the most definite interpretation a NP receives when it is (a) appears in the preverbal position; (b) is unstressed; (c) is put in a definite context.

- (38) a. Eto okno razbil kakoi-to shkol'nik. (definite demonstrative pronoun; indefinite weak quantifier) this window-Acc. broke a/some schoolchild-Nom.

  'This window was broken by a schoolchild'
  - b. ? Kakoi-to shkol'nik razbil eto okno a/some schoolchild-Nom. broke this window-Acc.
     'A schoolchild broke this window'
- (39) a. Etot shkol'nik razbil eto okno. (def.—demonstr. pronouns) this schoolchild-Nom. broke this window-Acc.

  'This schoolchild broke this window'
  - b. ?? Eto okno razbil etot shkol'nik this window-Acc. broke this schoolchild-Nom. 'This window was broken by this child'
- (40) a. Kakoi-to shkol'nik razbil kakuu-to vazu. (indef.—weak quantifiers) a/some schoolchild-Nom. broke a/some vase-Acc.

  'A schoolchild broke a vase'
  - b. ?? Kakuu-to vazu razbil kakoi-to shkol'nik a/some vase-Acc. broke a/some schoolchild-Nom. 'A vase was broken by a schoolchild'

Example (37a) does not seem to provide any difficulties. A proper name, which is inherently definite, appears in the preverbal position, while a noun vazu preceded by a weak quantifier occupies the postverbal position. The example in (37b) is a marked sentence. It is appropriate in a situation when there are several vases were broken and one of them (we do not which one) was broken by Rose. Again, (38a) is consistent with my hypothesis: a noun okno, preceded by a demonstrative pronoun eto, appears in the preverbal position while a noun shkol'nik, preceded by a weak quantifier kakoi-to, appears in the postverbal position. However, (38b), even though less natural then (38a), sounds better than (37b). This leads to the idea of a hierarchy of weak and strong determiners. In fact, Diesing presents Ioup's (1975) discussion of the factors that determine relative quantifier scope. Ioup notes that the various quantifiers differ in relative scope preferences. She presents this in the form of hierarchy. The leftmost elements in the hierarchy show the greatest preference for wider scope, and the rightmost elements show the greatest preferences for narrower scope:

Ioup's hierarchy (1975:64): each > every > all > most > many > several > some > a few

According to this hierarchy, determiners differ in their degree of definiteness versus indefiniteness. Let us assume this property of determiners to be universal. If, in Russian, proper names occupy the leftmost position, while demonstrative pronouns *etot/tot* (this/that) occupy the next position to the right, we can explain why (38b) is better than (37b). Since proper names are "more definite" than demonstrative pronouns, their appearance in the postverbal position is less natural.

However, when we have both the preverbal and postverbal positions occupied by NPs, which have the same degree of definiteness, the SVO word order seems to be preferred. In (39) both NPs are definite – they are both preceded by the same demonstrative pronoun and consequently have the same degree of definiteness. In this case, inversion results in a sentence which requires a particular context. It could be appropriate in the case where the conversation is about the window and we are eager to find out who has broken it. The same is true about (40); here, both NPs possess the same degree of indefiniteness. Example (40a) represents the basic structure whereas the inverted sentence in (40b) is marked.

## 5 The Czech data

Here, I present the examples from Czech provided by Kramsky (1972). His examples seem to support the hypothesis that the NP position is tied to definiteness. However, when he discusses examples based on transitive verbs, the same problem arises. Whether a NP in the preverbal position should be interpreted as definite or indefinite cannot be concluded from the word order alone.

- (41) a. Kniha je na stole. book-Nom. is on table The book is on the table.
  - Na stole je kniha.
     on table is book-Nom.
     On the table [there] is a book-Nom.
- (42) a. Mlada divka rozbila vazu. young girl-Nom. broke vase-Acc. The young girl broke a vase.
  - b. Vazu rozbila mlada divka vase-Acc. broken young girl-Nom. The vase was broken by a young girl.

Kramsky points out that "though in the first case the expression mlada divka is the theme, it is not quite certain whether it implies determinedness or indeterminedness. Here, the preceding context will be decisive; if the young girl is already spoken of in a preceding sentence then, in (24), a certain young girl is concerned and we should translate the sentence in English as The young girl broke a vase. In this case the word vazu (a vase-ACC) implies indeterminedness. In the second sentence, however, the word vazu explicitly implies determinedness as it is a theme whereas the expression mlada divka belongs to the rheme and implies indeterminedness" (44).

Kramsky concludes that these examples show that, in Czech, there is a certain relation between the category of definiteness versus indefiniteness and the functional sentence perspective unless the influence of context appears. He assumes the similar relation in other languages which do not have a formal article but have free word order.

#### 6 Conclusion

The data above suggest that there is a certain relation between the position of a NP and its interpretation as definite or indefinite. This means that the original hypothesis stated in the beginning of the paper is not completely wrong. Languages which do not possess a formal article but have free word order use free word order to indicate definiteness or indefiniteness. However, as the Russian data show, stress also can be used to convey this notion - the familiar elements. which have been already introduced, are usually unstressed whereas the new, unfamiliar elements are usually stressed. Furthermore, as we saw from the Czech examples, context appears to play an important role in the NP interpretation as definite versus indefinite. Thus, there are three major ways being discussed so far to indicate the definiteness or indefiniteness of a NP. It is not clear, however, how these ways relate to each other. Whether the three of them can be applied arbitrarily to any structure, whether they have certain distribution and whether there are any restrictions on application of any or all of them are questions for further research. Particularly, as I have already mentioned, in order to draw a more precise picture of how definiteness and indefiniteness works in languages without determiners we need a more elaborate theory of definiteness itself.

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## 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.

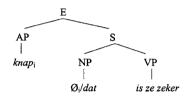
  I thought that she tomorrow home works
  'I thought that she's working at home tomorrow.'

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. clever that is she definitely 'She is definitely clever.' Knap<sub>i</sub>, Ø<sub>i</sub> is ze zeker. clever is she definitely

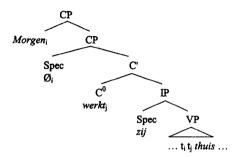


Under current analyses, SpecCP is filled with a null topic operator (Hoekstra & Zwart 1994, Weerman 1989, Zwart 1997) while C<sup>0</sup> is the landing site for the verb. Rather than having a constituent move into SpecCP position, a null variable moves. This variable is generated in the base position of the topicalized constituent. 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). 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<sub>i</sub> werkt zij thuis t<sub>i</sub>.
tomorrow works she home
'She's working at home tomorrow.'

<sup>&</sup>lt;sup>1</sup> 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

<sup>&</sup>lt;sup>2</sup> 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 (Anagnostopolou 1997, van Haasten, Smits & Vat 1983, Zaenen 1997).<sup>3,4</sup>

- (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 Haaften, 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

<sup>&</sup>lt;sup>3</sup> 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<sup>0</sup>.

<sup>&</sup>lt;sup>4</sup> Regular pronouns and reflexives cannot appear with the d-word in operator position (taken from Zwart 1997: 249 (9)).

<sup>(</sup>i) Hem (??die) ken ik niet. him that one know I not 'Him, I don't know.'

<sup>(</sup>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.<sup>5</sup>

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

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Die ken ik niet. → [CP die ken [IP ik niet ti tj]] that know I not 'I don't know him.'
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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.

\* 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.'

<sup>&</sup>lt;sup>5</sup> 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.<sup>6</sup> 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.

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

<sup>&</sup>lt;sup>6</sup> 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.

<sup>(</sup>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.'

<sup>(</sup>iv) Heb je deze grammatica bestudeerd? have you this grammar studied 'Did you study this grammar?'

<sup>(</sup>v) De mensen die aan de betoging hebben deelgenomen, the people who to the march have taken-part moeten toch wel erg militeubewust 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)

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

Table 1. D-Pronouns in Dutch

OTHER D-PRONOUNS					
daar	'there'				
dan	'then'				
toen	'when'				
zo	'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.<sup>8</sup>

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). These features include gender and number. Demonstrative pronouns in Dutch are used to replace third person constituents, never first and second person pronouns.

<sup>&</sup>lt;sup>7</sup> 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.

<sup>&</sup>lt;sup>8</sup> 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.

 <sup>(</sup>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 ...

<sup>\*</sup> Die vraag is alleen hoelang ...
that question is only how-long

<sup>&</sup>lt;sup>9</sup> 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

<sup>10</sup> 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	Wea
NOM.	1Psg	ik	'k	ACC.	1Psg	mij `	me
	2Psg	jij	je		2Psg	jou	je
	3Psg	hij	'ie		3Psg	hem	'm
		zij	ze			haar	'n
	1Ppl	wij	we			het	't
	2Ppl	jullie	-		1Ppl	ons	-
	3Ppl	zij	ze		2Ppl	jullie	
					3Ppl	hen/hun	ze

'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. 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

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. <sup>12</sup> 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.

<sup>&</sup>lt;sup>12</sup> 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.<sup>13</sup>
  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.'

<sup>13</sup> The grammaticality coding throughout this paper is as follows: no marking: considered grammatical in over 80% of judgements by informants

<sup>\*:</sup> considered ungrammatical in over 80% of judgements from informants

<sup>?:</sup> grammatical in over 60% of judgements

<sup>\*?:</sup> 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.'

 $<sup>^{14}</sup>$  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? has Jan you helped '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).'
- (21) Heeft Jan jullie geholpen? has Jan you-PL helped 'Did Jan help you?'
  - 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?'
- (23) Heeft Jan ons geholpen? has Jan us helped 'Did Jan help us?'
- Ja, JIJ heeft Jan geholpen. \* Ja, je heeft Jan geholpen. yes you has Jan helped 'Yes, Jan has helped you.'
- 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).'
- \* 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 seen 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 julllie 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?'

Jou 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.<sup>15</sup>

(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?'

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.

<sup>16</sup> 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 futher 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.

<sup>13</sup> 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.

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.<sup>17</sup>

(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.'

<sup>&</sup>lt;sup>17</sup> 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,

Constituent	Topicalization	D-Pronoun	Drop-able
1P subject <sup>18</sup>	<b>/</b>	T	
2P subject	7	Ĭ	
3P subject (animate)	<b>✓</b>	<b>V</b>	(4)
3P subject (inanimate)	<b>√</b>	<b>V</b>	<b>✓</b>
1P direct object			
2P direct object			
3P direct object	1	<b>*</b>	1
1P indirect object			
2P indirect object			
3P indirect object	<b>✓</b>	<b>✓</b>	(4)
argument PP <sub>loc</sub>	1	<b>V</b>	1
argument PPother	<b>/</b>		
adjunct PP	✓	<b>V</b>	
object of PP	✓	<b>✓</b>	<b>✓</b>

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 (book) 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.'

<sup>&</sup>lt;sup>18</sup> 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 is 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.<sup>19</sup> All have phi features which should be borne by the topic operator.

<sup>&</sup>lt;sup>19</sup> 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 dpronoun. 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. Delike 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.

<sup>&</sup>lt;sup>20</sup> 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.<sup>21</sup> 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 ...'

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 is 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 have 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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# Thoughts du jour (for Linguists)

"Every time a man puts a new idea across, he finds ten men who thought of it before he did--but they only thought of it."
-- Anonymous

"Few things are harder to put up with than the anoyance of a good example."
-- Mark Twain

"It is better to be able neither to read nor write than to be able to do nothing else."
-- William Hazlitt, On the Ignorance of the Learned.

"I am not absent-minded. It is the presence of the mind that makes me unaware of everything else."

-- G. K. Chesterton

"Man is a slow, sloppy and brilliant thinker; the machine is fast, accurate and stupid."

-- William M. Kelly

"Examinations are formidable, even to the best-prepared, for the greatest fool may ask more than the wisest man can answer."

-- Charles Caleb Colton

"Man has such a predilection for systems and abstract deductions that he is ready to distort the truth intentionally, he is ready to deny the evidence of his senses in order to justify his logic."

-- Dostoyevsky, Notes from the Underground

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- 3.4 Section headings are required. Main headings should be in **bold typeface** and <u>underlined</u> but not all-caps: e.g. <u>Introduction</u>. Section sub-headings are optional, but no more than one level of sub-headings should be used. Sub-headings should not be all-caps but should be in **bold typeface**, e.g. <u>Sentence Types</u>. There should not be any spaces between section headings and text.
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#### 4 Text Conventions

3

4.1 Linguistic forms cited within a sentence in the text should be set apart from the text. Recommended conventions are as follows:

Forms cited in phonetic transcription should be enclosed between square brackets.

Forms cited in phonemic transcription should be between slant lines. Other cited forms (e.g. underlying forms) should be underlined. Authors may specify other transcriptional devices such as vertical lines, curly brackets, obliques, etc.

- 4.2 Glosses of linguistic forms should be enclosed between single quotation marks, which are not otherwise used: e.g. /amihkw/ 'beaver'. Double quotation marks should be used only for short quotations, reported conversation and the like.
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- 4.4 Sets of examples or example sentences should be numbered serially with Arabic numerals closed in parentheses. If several such examples are grouped together, the entire group is identified by an Arabic numeral, and the individual sentences by lower case letters:
  - (1) a. John loves Mary.b. Mary is loved by John.

Rules set off from the text should be similarly numbered:

(2) C --> [-voice]/\_\_\_#

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- 5.3 Column heads should be short, so as to stand clearly above the columns.

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- 6.1 Footnotes should be located at the bottom of the page. They should be typed beginning with a raised number with double spacing between each note.
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  - ... the extended linkage3 which is ...

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- ... as evidenced in Gothic.3
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... it has been suggested (Johnson 1959:32) that ...

... Johnson (1959:32) has suggested that ...

If the author's name is part of a parenthetical comment, the parentheses are omitted from the numbers:

... some have suggested (Johnson 1959:32; Smith 1963) that ...

If more than one work by the same author is cited in a parenthetical comment with references to more than one author, separate multiple works by the same author with commas and separate autors with a semi-colon:

... some have suggested (Johnson 1959:32, 1972, 1983; Smith 1963) that ...

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Chomsky, Noam & Halle, Morris. 1968. The sound pattern of English. New York: Harper and Row.

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