

# Definiteness Effects as Epiphenomena of Information Structure

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- ▶ Explore two phenomena:
  - ▶ Definiteness effect occurring with partial NPs
  - ▶ Definiteness effect in fronted VPs
- ▶ Explain the definiteness effect in terms of the information structure requirements of these phenomena
  - ▶ Distinguish two types of definite NPs
  - ▶ Relate their discourse requirements to those of partial NPs and fronted VPs



# Phenomenon I: Partial NPs

Müller (1996) and others claim that separating a PP from its NP exhibits a definiteness effect:

- (1) *Über Syntax hat Karl [ein Buch] gelesen.*  
on syntax has Karl the book read  
'Karl read a book on syntax.'
- (2) \* *Über Syntax hat Karl [das Buch] gelesen.*  
on syntax has Karl the book read
- (3) \* *[Das Buch] hat Karl über Syntax gelesen.*  
the book has Karl on syntax read

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(3) \* *[Das Buch] hat Karl über Syntax gelesen.*  
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► Traditionally explained in syntax, by stipulating a restriction on extraction (Fiengo & Higginbotham 1981).

⇒ Our research question: Can this definiteness effect be derived from information structure conditions?

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# Definiteness effect in NP-PP split

## Counter-examples to a syntactic account

Pafel (1993) mentions that a definite NP does not always disallow fronting of an embedded PP:

- (4) *Über Syntax hat Karl nur **dieses**, aber nicht **jenes** Buch  
on syntax has Karl only this but not that book  
gelesen.  
read*

'Karl only read this book on syntax and not that one.'

- (5) *[Nur **dieses** Buch] hat Karl über Syntax gelesen.  
Only this book has Karl on syntax read*

'Karl only read this book on syntax.'

- ⇒ Are these counter-examples systematic?  
Can they be explained?

# Definiteness effect in NP-PP split

## Corpus exploration

A search in a German treebank (Tüba-D/Z, Stegmann et al. 2000) confirms the existence of such counter-examples:

- (6) *[Im Öjendorfer See in Billstedt] hat das Bezirksamt Mitte bereits vor drei Wochen [das Schwimmen und Planschen] verboten.*  
in the Öjendorfer lake in Billstedt has the local office center  
already before three weeks the swimming and  
splashing forbidden
- (7) *[In den einschlägigen Personenlexika der Prominenz] bleibt [die Suche nach ihrem Namen] erfolglos.*  
in the relevant people lexicon of prominent figures  
remains the search for their name without success

# Definiteness effect in NP-PP split

## Corpus exploration (cont.)

- (8) *[Vom 12-jährigen Ungarn Peter Leko] ist [die Äußerung]*  
by 12-year-old Hungarian Peter Leko is the statement  
*überliefert, er sei sich sicher, im Jahr 2000 Weltmeister zu sein.*  
known he be SELF certain in the year 2000 world champion to be
- (9) *Selbst für den französischen Markt haben AC produziert, aber*  
even for the French market have AC produced but  
*auch [von dort] lässt [der finanzielle Rückfluss] bisher zu*  
also from there lets the financial return so far to  
*wünschen übrig.*  
wish remain

# Phenomenon II: Definiteness effect for subjects in fronted non-finite projections

Subjects can sometimes be realized inside a fronted non-finite verbal constituent (Kratzer 1984, Grewendorf 1989, Haider 1990):

- (10) *[Ein Außenseiter gewonnen] hat hier noch nie.*  
a<sub>nom</sub> outsider won has here still never  
'An outsider has never won here yet.'

The phenomenon shows a definiteness effect: Definite subjects appear to be excluded from this construction (Kratzer 1984):

- (11) \* *[Der Außenseiter gewonnen] hat hier noch nie.*  
the outsider won has here still never



# Definiteness effect for subjects in fronted non-finite projections

There are some rarely noted counter-examples:

(12) *[Die Hände gezittert] haben ihm diesmal nicht.*

the hands trembled have him this time not

‘This time his hands didn’t tremble.’ (Höhle 1997, p. 114)

(13) *[Das Telefon geklingelt] hat hier schon lange nicht mehr.*

the phone rang has here yet long not more

‘The phone hasn’t been ringing here in a long time.’

⇒ To address our research question, we explore the information structure requirements of the construction.

# Exploring the information structure requirements

- ▶ Are there specific focus-background requirements for the two constructions?
  - ▶ Partial NPs
  - ▶ Fronted VPs
- ▶ Which types of definite NPs can be distinguished in terms of their information structure properties?
- ▶ Can the information structure requirements of the partial NPs and VPs be related to those of the definite NPs?

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# On the pragmatics of partial NPs

(14) *What happened?*

# *[[Über Mozart hat Sarah ein BUCH ausgeliehen.]]<sub>F</sub>*  
about Mozart has Sarah a book borrowed

(15) *What did Sarah borrow?*

# *[[Über Mozart]]<sub>F</sub> hat Sarah [[ein BUCH]]<sub>F</sub> ausgeliehen.*  
about Mozart has Sarah a book borrowed

(16) *What did Sarah borrow about Mozart?*

*Über Mozart hat Sarah [[ein BUCH]]<sub>F</sub> ausgeliehen.*  
about Mozart has Sarah a book borrowed

- ▶ The acceptability of the NP-PP-split is directly related to its information structure (De Kuthy 2002):
- When the two constituents are separated, they must belong to different parts of the information structure.

# Two classes of definite NPs

- a) Definite NPs with an antecedent in the discourse
  - ▶ discourse old, strongly familiar (Roberts 2003)
  - have to be part of the *background*
  
- b) Definite NPs which are used deictically, endophorically or as a semantic definite
  - ▶ weakly familiar (Roberts 2003)
  - can be in the *focus* of a sentence

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# Partial NPs in Context

## a) Definite NPs with an antecedent

(17) *Yesterday, I saw an interesting book on syntax at Osiander.*

a. *Ich habe mir [das Buch über Syntax] heute [[geKAUFT]]<sub>F</sub>.*

I have me the book on syntax today bought

‘Today, I bought this book on syntax.’

b. # *Über Syntax habe ich mir [das Buch] heute [[geKAUFT]]<sub>F</sub>*

on syntax have I me the book today bought

- ▶ The definite NP has an antecedent in the discourse.
- ▶ The PP cannot be separated from the NP when both are in the background (17b).

# Partial NPs in Context

## b) Definite NPs (without antecedent)

(18) *Was hast Du Dir für Material über Syntax ausgeliehen?*  
*What did you borrow on syntax?*

a. *Ich habe mir*  $\llbracket$ *das BUCH* $\rrbracket_F$  *über Syntax ausgeliehen,*  
I have me the book on syntax borrowed  
 $\llbracket$ *das Du mir letztlich empfohlen hast* $\rrbracket_F$ .  
that you me recently recommended have  
'I borrowed the book on syntax that you recommended.'

b. *Über Syntax habe ich mir*  $\llbracket$ *das Buch, das Du mir*  
on syntax have I me the book which you to me  
*empfohlen hast* $\rrbracket_F$  *ausgeliehen.*  
recommended has borrowed  
'On Syntax I borrowed the book that you recommended.'

- ▶ The focus can include endophoric definite NPs.
- ▶ Such focused definite NP can be separated from a background PP (18b).

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# Partial NPs in Context

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- ▶ The definiteness effect for partial NPs can be explained as a formal pragmatic condition on such partial phrases:
  - ▶ The two parts of an NP-PP split must be realized as different parts of the information structure.
- ▶ The supposed counter-examples to the definiteness effect all involve definite NPs without antecedent
  - ▶ e.g., a deictic NP in Pafel's example (4)
- ▶ The counter-examples for a syntactic account thus are correctly predicted by our information-structure account.

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# On the pragmatics of phenomenon II

The acceptability of fronted non-finite projections including subjects is directly related to their information structure (De Kuthy & Meurers 2003).

(19) *What has never happened here?*

[[*Ein AUSSENSEITER gewonnen*]]<sub>F</sub> *hat hier noch nie.*  
an outsider won has here yet never

(20) *What has never happened to an outsider?*

# [*Ein Außenseiter* [[*GEWONNEN*]]<sub>F</sub>] *hat hier noch nie.*

(21) *Who has never won here?*

# [[*Ein AUSSENSEITER*]]<sub>F</sub> [*gewonnen*] *hat hier noch nie.*

(22) *What's all the excitement about?*

# [[*Ein AUSSENSEITER gewonnen*] *hat hier noch nie*]]<sub>F</sub>

→ Weibelhuth (1990): A fronted verbal constituent must be the focus of the utterance.



The definiteness effect can be explained on the basis of the information structure requirement of the phenomenon:

- ▶ A fronted verbal constituents must be the focus of the utterance.
  - ▶ For verbal projections including the subject to be focused
    - ▶ the focus can project from a focused subject (for certain verbs and under certain conditions)
- The type of definite NPs with antecedents are excluded since they cannot be focus,
- ▶ but the second type of definite NP (without antecedent) is correctly predicted to be possible.

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# The explanation exemplified

Exactly those definite subjects from which focus can project can also be part of the fronted verbal projection:

- (23) *Was ist hier noch nie passiert?*  
*What has never happened here?*

\*  $\llbracket$ Der Außenseiter gewonnen $\rrbracket_F$  hat hier noch nie.  
the outsider won has here still never

- (24) *Wie ist es ihm diesmal ergangen?*  
*How did it go for him this time?*

$\llbracket$ Die Hände gezittert $\rrbracket_F$  haben ihm diesmal nicht.  
the hands trembled have him this time not  
(Höhle 1997, p. 114)

- (25) *Was ist denn hier für eine Aufregung?*  
*What's the matter?*

$\llbracket$ Dem Präsidenten zittern die HÄNDE. $\rrbracket_F$   
the<sub>dat</sub> president tremble the<sub>nom</sub> hands

# Summary

- ▶ We investigated two phenomena in German exhibiting a definiteness effect:
  - ▶ Partial NPs
  - ▶ Subjects as part of a fronted, non-finite verbal projection
- ▶ For both phenomena, we highlighted some often ignored counter examples for a syntactic account restricting the occurrence of definite NPs.
- ▶ We showed that the definiteness effect can be derived from information structure conditions of the two phenomena and definite NPs in general.
  - ▶ The supposed counter-examples are explained as a natural consequence.
- ▶ The analysis sketched here is explicitly worked out in the framework of HPSG.

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