

Something Empirical about Focus

Bernhard Fisseni
bfi@ikp.uni-bonn.de

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1. Focī

A little discouragement

The category focus is notoriously obscure.

VON STECHOW (1991)

1.1. Motivation

(1)

(2)

(3)

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- (1) **Frank** is reading a book.
- (2) Frank is reading a **book**.
- (3) Frank is **reading** a book.

1.1. Motivation

(1) **Frank** is reading a book.

Who is reading [a book]?

(2) Frank is reading a **book**.

What is Frank reading?

(3) Frank is **reading** a book.

What does Frank do with a book?

1.1. Motivation

(1) **Frank** is reading a book. *Who is reading [a book]?*

(2) Frank is reading a **book**. *What is Frank reading?*

(3) Frank is **reading** a book. *What does Frank do with a book?*

Does Frank still use his books to support his furniture?

1.1. Motivation

- (1) **Frank** is reading a book. *Who is reading [a book]?*
- (2) Frank is reading a **book**. *What is Frank reading?*
- (3) Frank is **reading** a book. *What does Frank do with a book?*

Does Frank still use his books to support his furniture?

Observation: What answers a question is specially accentuated.

1.2. Kinds of Focī

Phonetic Focī are specially accentuated.

(Morpho-)Syntactic Focī must be placed somewhere in a sentence.

Semantic Focī are special constituents of sentences which associate with certain operators and contribute to the denotation of an expression.

Pragmatic Focī can be modelled as answers to background questions and give rise to context-dependent conclusions (implicatures). Usually they are new in the discourse or for at least one discourse participant.

1.3. Overview of the Terminology

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ψ Subjekt	ψ Prädikat	
Theme	Rheme	
Topic	Comment	
Topic proper	Topic[Rest]	Focus
Ground		Focus
Link	Tail	Focus
Ground		Focus
Background	Focus-Phrase	Focus

(H. Paul)

(Daneš)

(z.B. REINHART (1982))

(Prague School, Hajičová)

(formal Semantics)

(Vallduví)

(formal Semantics)

(late Krifka)

1.4. Syntax: Where to put a focus

(Vallduví, Hajičová, É. Kiss).

- (4) a. Trueman è **morto**.
- b. È morto **Johnson**.

1.5. Semantics: Association

1.5.1. Examples

- (5) Frank only **reads** books on focī.
- (6) Frank only reads **books** on focī.
- (7) Frank only reads books on **focī**.

1.5. Semantics: Association

1.5.1. Examples

- (5) Frank only **reads** books on focī.
- (6) Frank only reads **books** on focī.
- (7) Frank only reads books on **focī**.

We should of course not focus solely on *only* alone but always also look at even other focus operators.

- (8) Frank **even only** reads **books** on focī.
- (9) Frank **even only** reads **books** on **focī**.
- (10) Franz **even only** reads **books** on **focī**.

Here, semantic and phonological focī do not really fit together any more!

1.6. Scalar Implicatures

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Quantity

(GRICE (1968))

1. Make your contribution to the conversation as informative as necessary.
2. Do not make your contribution to the conversation more informative than necessary.

Quality

1. Do not say what you believe to be false.
2. Do not say that for which you lack adequate evidence.

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[Semantic] Focus theories treat these cases similarly to semantic focī.

2. Empirical Investigations on Focus Constructions

Fundamental Question Which of the effects we observe with 'focus constructions' are really due to focus constructions and which of them are caused by context?

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Second Fundamental Problem If you’ve grown used to a certain reading of a construction, it is fairly difficult to find a new one, even and especially if you are a linguist.

Really Fundamental Problem The empirical foundations of focus theories are shaky.

2.1. *Second Occurrence Focī*

2.1.1. Experiment

Hypothesis Generally, precisely pragmatic focī bear focus accents; semantic focī only bear a focus accent if they are also pragmatic focī. Focus accents do not directly semantically disambiguate sentences.

Method In the experiment, 12 test persons were offered recordings of short dialogues which only differed in the accentuation of the last answer. Test persons rated the dialogues for naturality and understandability.

SCHMITZ ET AL. (2001)

2.1.2. The Text

- (14)
- a. Wen hat Peter heute gefüttert?
Whom did Peter feed today?
 - b. Peter hat heute [nur Mimi] gefüttert.
Today, Peter only fed Mimi.
 - c. Wer hat sonst noch nur Mimi gefüttert?
Who else only fed Mimi?
 - d. Anne hat nur Mimi gefüttert.
Anne only fed Mimi.

pragmatic focus — semantic focus

The following words were accentuated:

1. *Anne*
2. *Anne and Mimi*
3. *Mimi*
4. *gefüttert*
5. *Mimmi and gefüttert*

2.1.3. Variables

independent variables: Accentuation of the words *Anne, Mimi, ge-*
füttert

dependent variable: Judgment of naturalness and understandability.

2.1.4. Result

Accentuation of constituents that were not focused was rated bad. Dialogues in which only the pragmatic focus was stressed were rated better than those where also or only the semantic focus was accentuated.

2.1.5. Result of the Series of Experiments

The hypothesis was supported by one of three experiments, by the others it was not falsified.

Test subjects avoid constructions with multiple focus.

2.2. Can Focī be Assigned to Contexts?

- two-stage experiment
- focus utterances in picture stories

First Stage How does accentuation work when reading aloud?

Second Stage Do test subjects agree which utterance fits which story?

2.2.1. Variables

First Stage

independent variable 'controlled' context that should focus certain foci

dependent variable Accentuation of 'interesting' words

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independent variable 'controlled' context that should focus certain foci

dependent variable Accentuation of 'interesting' words

Second Stage

independent variable Story fits utterance

1. story read — story viewed
2. intonation fits — does not fit sentence

dependent variable Judgment of appropriateness

2.2.2. Result

No statistically significant result.

First Step Accentuation often did not fulfill expectations

Second Step Focus accentuation did not seem to influence appropriateness ratings.

3. Experiments

3.1. Considerations when Designing Experiments

test of acceptance Test persons accept a lot.

production experiment test persons refuse to say what we want.

testing interpretation — if possible non-linguistically — seems to be the method of choice.

3.2. Exhaustivity

Well-known Claim: Foc \bar{i} are interpreted exhaustively.

It's all the fault of GRICE (1968) and his maxims.

3.2.1. Typical Examples Quoted by Linguists

- (15) a. Who of the IKP staff had a beer together yesterday?
b. Bernhard and Bernhard.
- (16) a. Who had a beer together yesterday?
b. Some people of the IKP staff and some participants of the ILLC day from Amsterdam.
c. Bernhard and Bernhard.

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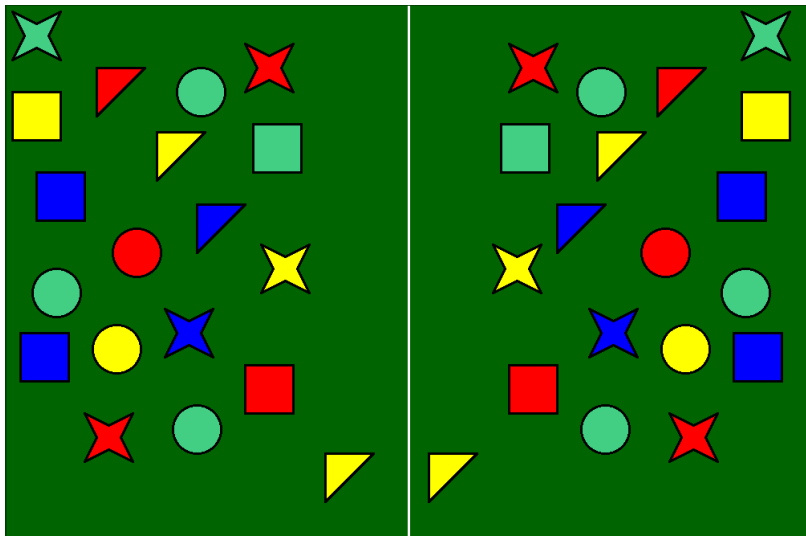
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Aspects of mention-some answers

- relevance
- competence of the speaker — epistemic force

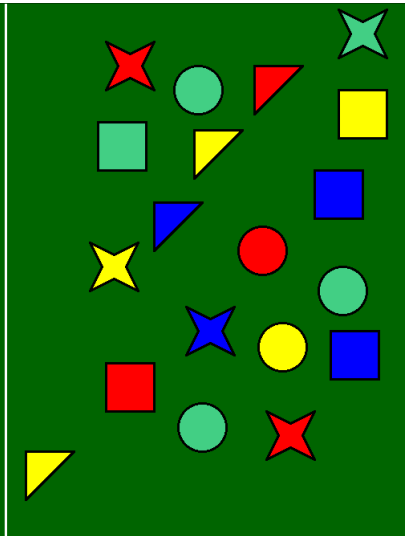
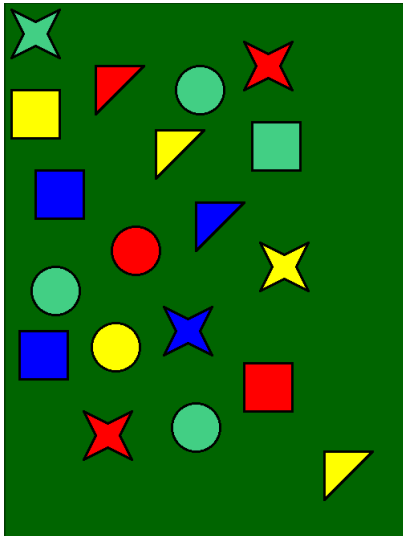
Should we really generally assume exhaustivity?

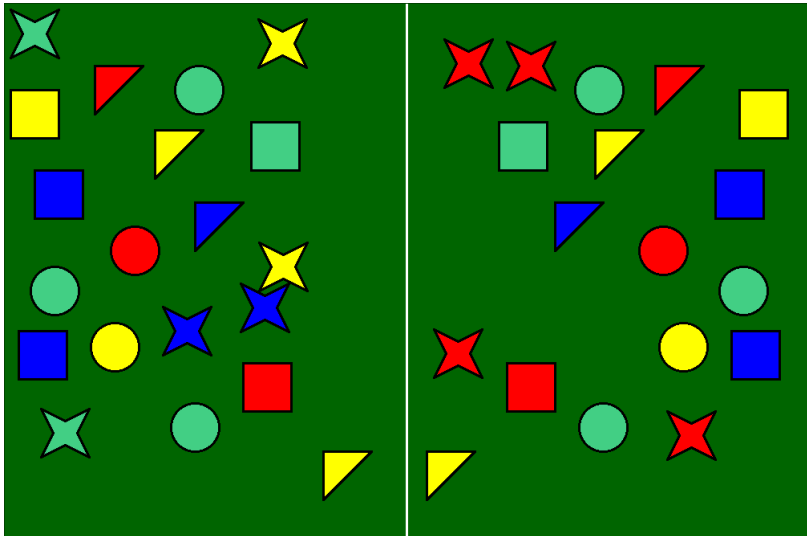
3.2.2. Scenario



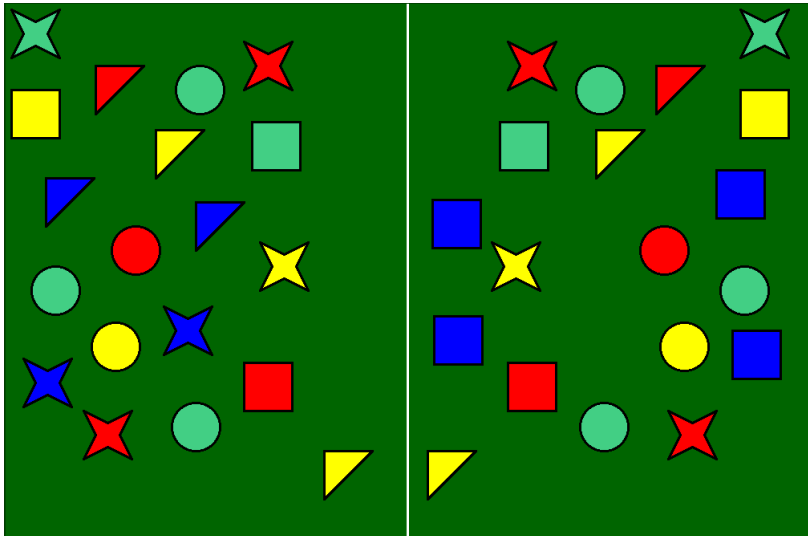
3.2.3. Stimuli

- (17)
- a. Die Sterne, die **rot** sind, befinden sich rechts.
 - b. Die blauen **Quadrate** befinden sich rechts.
 - c. Rechts befinden sich die gelben **Kreise**.
 - d. Rechts befinden sich die Quadrate, die **rot** sind.
- (18)
- a. The stars that are **red** are on the right.
 - b. The blue **squares** are on the right.
 - c. The yellow **circles** are on the right.
 - d. The squares that are **red** are on bright.

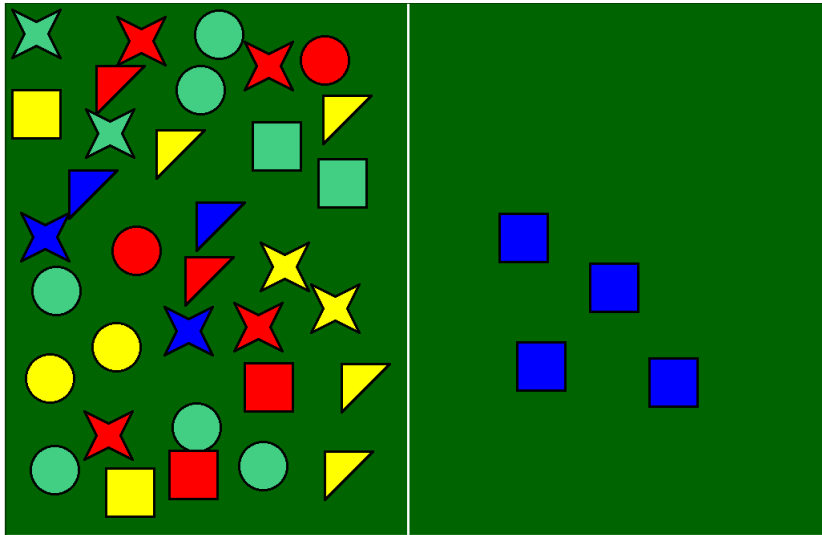




Die Sterne, die **rot** sind, befinden sich rechts.
The stars that are **red** are on the right.



Die blauen **Quadrate** befinden sich rechts.
The blue **squares** are on the right.



Die [blauen **Quadrate**] befinden sich rechts.
The [blue **squares**] are on the right.

3.2.4. Variables

independent variables

- Placement of the focus: preverbally or postverbally
- medium: written text or (synthesised) speech

dependent variable Exhaustivation of $\text{foc}\bar{i}$, to be 'measured' by placement of the figures

- Is any focus interpreted exhaustively?
- Does focus projection occur?

3.3. Exclusivity under Con-/Disjunction

3.3.1. Typical Examples Quoted by Linguists

- (19) a. How many people had what menu in the mensa yesterday?
b. 400 people had menu 1, 600 menu 2 and 80 had salad.

3.3. Exclusivity under Con-/Disjunction

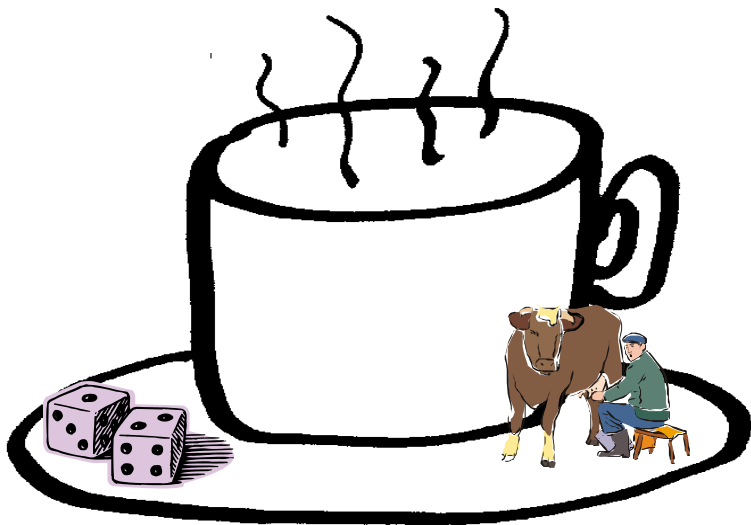
3.3.1. Typical Examples Quoted by Linguists

- (19) a. How many people had what menu in the mensa yesterday?
b. 400 people had menu 1, 600 menu 2 and 80 had salad.

3.3.2. Dubious Examples?

- (20) a. How many people had what side-dishes with menu 2 in the mensa yesterday?
b. 310 had chips, 280 potatoes, 400 salad and 190 vegetables.

3.3.3. Scenario



3.3.3. Scenario



3.3.4. Stimuli

- (21)
- a. Wie haben denn in der Pause die Leute ihren Kaffee getrunken?
 - b. Zwei Leute hatten **Milch** und drei hatten **Zucker**.
 - c. Vier Leute hatten **Milch** und vier hatten **Zucker**.
- (22)
- a. How did people drink their coffee in the break?
 - b. Two had **milk** and three had **sugar**.
 - c. Four had **milk** and four had **sugar**.



Zwei Leute hatten **Milch** und drei hatten **Zucker**.
Two had **milk** and three had **sugar**.



Vier Leute hatten **Milch** und vier hatten **Zucker**.
Four had **milk** and four had **sugar**.

3.3.5. Variables

independent variables

- compatibility (constantly: yes)
- More cups than items mentioned. (varies)

dependent variables exclusivity of focī in the conjunct

- Do test subjects assign milk and sugar to different 'people' if possible? →
- How do they react if it's not possible? →

Hypothesis

- Inclusive interpretation is (more) acceptable if there are fewer cups than items mentioned.

3.4. Topic/Focus: Sum Reading

3.4.1. Scenario

I suffer from the Really Dangerous Spot Disease. This means that spots appear on my skin and stay forever. Spots that appear on Monday are yellow, Tuesday's spots are red and spots appearing on Wednesday are blue.







3.4.2. Data

- (23) On Monday, one spot appeared, on Tuesday two spots appeared, on Wednesday four spots appeared. Thus, I've got seven spots now.



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- (24) On Monday, one spot had appeared, on Tuesday three spots had appeared, on Wednesday seven spots had appeared.



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- (25) On Monday, I had one spot, on Tuesday I had three, on Wednesday I had seven. Thus, I've got seven spots now.



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- (25) On Monday, I had one spot, on Tuesday I had three, on Wednesday I had seven. Thus, I've got seven spots now.



- (26) On Monday, I had one **new** spot, on Tuesday I had two **new** spots, on Wednesday I had four **new** spots.



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- (25) On Monday, I had one spot, on Tuesday I had three, on Wednesday I had seven. Thus, I've got seven spots now.



- (26) On Monday, I had one **new** spot, on Tuesday I had two **new** spots, on Wednesday I had four **new** spots.



- (27) By Monday, one spot had appeared, by Tuesday three spots had appeared, by Wednesday seven spots had appeared.



3.4.3. Possible Variables

Do we consider the whole period of time or only moments?

- the kind of verb used (state/action)
- tense
- adverbial phrase indicating time
- NP: is incompatibility indicated?

Conclusion

- Focus constructions are interesting.
- Empirical testing of hypotheses concerning focus constructions is desirable.
- It is not trivial.
- We'll still try.
- Feedback is appreciated!

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