

Another additive particle under stress: German additive *noch*

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German focus particle *noch*: four readings

- | | |
|---|--------------------|
| (1) <i>Es regnet <u>noch</u>.</i>
'It is <u>still</u> raining.' | temporal |
| (2) <i>Osnabrück liegt (gerade) <u>noch</u> in Niedersachsen.</i>
'Osnabrück is <u>still</u> in Lower Saxony.' | marginality |
| (3) a. <i>Otto hat <u>noch</u> einen SCHNAPS getrunken.</i>
'Otto had a schnaps <u>in addition</u> .' | additive |
| b. <i>Otto hat <u>NOCH</u> einen Schnaps getrunken.</i>
'Otto had <u>another</u> schnaps.' | |
| (4) <i>Berta ist <u>noch</u> größer als Adam.</i>
'Berta is <u>still/even</u> taller than Adam.' | comparative |

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Questions

1. What is the difference between additive *noch* and *auch* ('also', 'too')
— what does it mean for *noch* to be "additive"?
2. How to explain the accent on *noch* and the difference in meaning between the unstressed and the stressed variant?
3. How does the additive reading relate to the other readings of *noch*?

The plan:

- additive *noch* vs. *auch* – unstressed / stressed
- semantics for additive *noch* based on ordered sets of alternatives (cf. Krifka 2000 for temporal *noch*)
- [comparative *noch*]

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Auch vs. *noch* — unstressed

- (5) (*Otto hat ein Bier getrunken.*)
'Otto had a beer.'
 - a. *Er hat auch einen Schnaps getrunken.*
 - b. *Er hat noch einen Schnaps getrunken.*
 - c. *Dann hat er noch einen Schnaps getrunken.*
'(Then) he also / in addition had a schnaps.'
- (6) (*Isabelle ist sehr hübsch.*)
'Isabelle is very pretty.'
 - a. *Sie ist auch klug.*
 - b. *# Sie ist noch klug.*
 - c. *Dann ist sie noch klug.*
'(Then) she is also / in addition clever.'
 - d. *Sie ist auch noch klug.* (set aside)
'She is clever also in addition.'

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Additive particles

- associated with focus
- require an "antecedent alternative"
i.e. presuppose that the predication holds for at least one alternative of the expression in focus which has been mentioned before
(Rooth 1992, Krifka 1999, Saebo 2004)
- the antecedent cannot be accommodated, and is subject to more liberal accessibility conditions than regular presuppositions
(Zeevat 2004)

(5a) (*Otto hat ein Bier getrunken.*)
Er hat auch einen SCHNAPS getrunken.

{*Otto-had-a-beer, Otto-had-a-schnaps, ...* }

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"Additive particles under stress"

Krifka (1999) for stressed additive particles

- associated with contrastive topics
- accent on the particle indicates focus
set of alternatives: {affirmation, denial}
- make it possible to "get around the distinctiveness constraint"

(7) a. *What did Peter and Pia eat?* (= 48 in Krifka 1999)

b. **/PEter ate \PAsta and /PIa ate \PAsta.*

b'. *Peter and Pia ate \PAsta.*

b''. */PEter ate \PAsta and /PIa ate pasta, \TOO.*

→ *TOO* makes up for a violation of the Gricean maxim of manner

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Auch – supplement

Generalize Krifka's idea to unstressed *auch* (and regular topics):

- (8) a. *What did Otto drink?*
- b. **Otto hat ein Bier getrunken. Er hat einen Schnaps getrunken.*
'Otto had a beer. He had a schnaps'.
 - b'. *Otto hat ein Bier und einen Schnaps getrunken.*
'Otto had a beer and a schnaps'.
 - b''. *Otto hat ein Bier getrunken. Er hat auch einen Schnaps getrunken.*
'Otto had a beer. He had a schnaps, too'.

→ *Auch* licenses a violation of the maxim of manner
→ Repair strategy: pick up a previous predication and add another element
→ *Auch* sentences give the impression of a supplement

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Noch — enumeration

Additive *noch*

- is scalar (like the other reading of *noch*)
- induces an order: order of mention (instead of time, distance, ...)
→ gives the impression of an enumeration

(9) A: *Gestern auf der Party habe ich Otto getroffen.*

B: *War Paul auch / *noch da?*

B': *Wer war *auch / noch da?*

→ Hypothesis:
auch relates to a (unordered) set of alternatives
noch relates to a (ordered) list of alternatives

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Auch vs. noch — stressed

- (10) a. (*Paul hat einen Schnaps getrunken.*) 'Paul had a schnaps.'
Otto hat AUCH einen Schnaps getrunken. 'Otto had a schnaps, too.'
- b. (*Otto hat einen Schnaps getrunken.*) 'Otto had a schnaps.'
Dann hat er NOCH einen Schnaps getrunken. 'Then he had another schnaps.'

stressed *auch* – associated with a contrastive topic (10a: *Otto*)
– accent indicates focus (affirmation)

stressed *noch* – associated with the adjacent phrase (10b: *einen Schnaps*)

problem 1: – what does the accent indicate?
– why does the associated phrase not carry an accent?

problem 2: – how to distinguish type-identical alternatives?

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Stressed *noch* – how to interpret the accent?

Fery (2006) on stressed *auch*:

- (i) the accent is on *auch* because any other position must be deaccented,
→ accent on *auch* is a makeshift
→ focus is deaccented

- (ii) stressed *auch* just serves as an “accent holder”,
without an additive meaning in these contexts

→ Adopt (i) for stressed *noch*:

- (10b) (*Otto hat einen Schnaps getrunken.*)
Dann hat er NOCH [einen Schnaps]_F getrunken.
'Otto had a schnaps. Then he had another schnaps.'

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Type-identical alternatives

Problem 2: Stressed *noch* relates to type-identical alternatives

- (10b) (*Otto hat einen Schnaps getrunken.*)
Dann hat er NOCH [einen Schnaps]_F getrunken.
'Otto had a schnaps. Then he had another schnaps.'
?? {*Otto-had-a-schnaps*, *Otto-had-a-schnaps*}

Additive *noch* induces an order on alternatives:

→ [*Otto-had-a-schnaps*₁, *Otto-had-a-schnaps*₂]
*Otto-had-a-schnaps*₁ <_{mention} *Otto-had-a-schnaps*₂

- (5d) (... beer...) *Dann hat er noch einen SCHNAPS getrunken.*
Otto-had-a-beer <_{mention} *Otto-had-a-schnaps*

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No referentially identical alternatives

Elements of the ordered list of alternatives employed by *noch* must not be referentially identical

- (11) a. (*Otto hat einen Schnaps getrunken.*) 'Otto had a schnaps.'
Dann hat er noch den CHAMPAGNER getrunken.
'Then he had the champagne in addition.'
- b. * *Dann hat er NOCH den Schnaps getrunken.*
'Then he had NOCH the schnaps.'
- c. *Dann hat er NOCHmal den Schnaps getrunken.*
'Then he had the schnaps again.'

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Ordered alternatives (Krifka 2000)

(1) *Es regnet noch.* 'It is still raining.'

Löbner (1989), König (1991):

Temporal *noch* triggers "past presupposition" (It has been raining before)
 "future implicature" (It will soon stop raining)

Krifka (2000):

Temporal *noch*

- (i) induces an order on the set of alternatives which is aligned to the order of time
- (ii) the focus is the minimal element
 → lower ranked alternatives are excluded;
 minimality restriction accounts for future implicatures

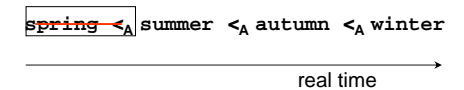
STILL($\langle B, F, \leq_A \rangle$) iff $\langle B, F, \leq_A \rangle$, presupposing: $\forall X \in A [F \leq_A X]$

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Minimality requirement

Temporal *noch*

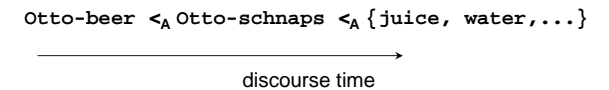
(12) *Es ist noch SOMMER.*
 'It is still summer.'



Future implicature: "It will soon be autumn" – due predictions about the future

Additive *noch*

(5d) (... beer...) *Dann hat er noch einen SCHNAPS getrunken.*



No future implicature,
 due to lack of predictions about future discourse, → no minimality requirement

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Semantics

Additive *noch* (unstressed / stressed)

(13) $[[noch \alpha]]^0 = [[\alpha]]^0$

presupposing $x \leq_A [[\alpha]]^0$,
 where $x \in [[\alpha]]^F$ and has to be bound on update ("antecedent alternative")
 and \leq_A represents the order of alternatives, which is aligned with the
 order of mention

Uniform interpretation for all readings?

- (i) presupposition (past / antecedent)
- (ii) order on the alternative set, aligned with
 - real time
 - prototypicality
 - discourse time
 } → minimality requirement

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Conclusion (1)

1. What is the difference between additive *noch* and *auch* ('also', 'too')

→ in contrast to *auch*, additive *noch* is scalar,
 inducing an order on alternatives

— what does it mean for *noch* to be "additive"?

→ the order on alternatives is aligned to the order of mention
 instead of time

2. How to explain the accent on *noch* and the difference in meaning between
 the unstressed and the stressed variant?

→ accent on *noch* is a makeshift
 – due to deaccenting requirements for all other positions

→ no difference in meaning between the unstressed / stressed variant

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Conclusion (2)

3. How does the additive reading relate to the other readings of *noch*?

- like the temporal and the marginality reading, additive *noch* is scalar inducing an order on alternatives
- the readings of *noch* differ with respect to the order aligned with the order on alternatives

real world orderings facilitates predictions – "future implicatures"
the order of mention does not

"past presupposition"?

easily accommodated in the case of temporal/marginality *noch*
no accommodation in the case of additive *noch*

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Additive or temporal ?

(14) (*Es hat gewittert*)

'There was a thunderstorm'

- a. *und es hat noch geregnet, als ich nach Hause kam.*
'and it was still raining when I came home.'

→ temporal – thunderstorm includes rain

- b. *und es hat noch geregnet. Ich bin klatschnass geworden.*
'and it was raining in addition. I got wet all over.'

→ additive – rain in addition to thunderstorm

What triggers the difference?

(15) (*Es hat den ganzen Tag geregnet, und es regnet NOCH.*)

'It rained all day and it is still raining.'

Accented *noch* need not be additive!

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Comparative *noch*

- (16) a. *Berta ist größer als Adam.* = \Rightarrow Berta ist groß.
- b. (...) *Berta ist NOCH größer als Adam.* \Rightarrow Berta ist groß.
- c. (*Adam ist groß.*)
 Berta ist noch größer als Adam. \Rightarrow Berta ist groß.
- d. (*Adam ist größer als Chris / 180m.*)
 Berta ist noch größer als Adam. \Rightarrow Berta ist groß.

\Rightarrow Berta ist größer als Chris/180m.

'Adam is tall / taller than Chris/180m. Berta is still/also taller than Adam.'

- order on alternatives aligned to scale of height
- presupposed: comparison "*Adam > d*"

(17) *Adam ist größer als Chris.*

- a. *Berta ist AUCH größer als Chris.*
- b. # *Berta ist NOCH größer als Chris.*

'Adam is tall / taller than Chris/180m. Berta is still/also taller than Adam.'

No comparative reading due to presupposition failure

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