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Discourse related readings of scalar particles

Sigrid Beck, Universität Tübingen

1. Introduction

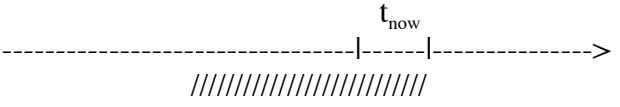
- **plot**: investigate sentences with *still* and its German counterpart *noch* that instead of a regular temporal interpretation (relating to what has happened) have a discourse related interpretation (relating to what has been said).

- a simple example of **temporal** *still*:

(1) It is still raining. (*temporal*)

(2) (i) Assertion: It is raining.
(ii) Presupposition: It rained at the relevant preceding time.
(iii) Implicature: It might stop raining./It will stop raining.

(3) 'rain' is true of the utterance time, & 'rain' was true of an earlier abutting time interval.



- **discourse related** *noch*/*still* is not about timeline of eventualities:

(4) a. context: Thilo is coming home from the supermarket. He lists a few things he has bought.
b. Sigrid: Was hast Du **noch** gekauft?
what have you still bought
'What **else** have you bought?'
c. Thilo: Ich hab **noch** Schokolade gekauft. (*order of mention*)
I have still chocolate bought
'I have **also** bought chocolate.'

(5) I am still your mother. (*reaffirmative*)

(6) Ich schäle noch einen Apfel. (*additive*)
I peel still an apple
'I will peel another apple.'

- **idea**: discourse related *noch*/*still* scopes above speech act operators.

(7) [ForceP *noch*/*still* [ForceP ASSERT [$_{IP}$ I am your mother]]]

(8) a. Frankly, your shirt and tie don't match. (Krifka (2014))
b. [ForceP *frankly* [ForceP ASSERT [$_{IP}$ your shirt and tie don't match]]]

- **question**: when is this possible?

(9) a. # What have you still bought?
b. # I have still bought chocolate.

- **roadmap**:

- section 2: basic temporal *noch*/*still*
- section 3: discourse related *noch*/*still* - intuition and idea
- section 4: sketch of a framework, basic analyses
- section 5: further questions

2. Basic temporal *noch*/*still*

- **the particle**:

(10) $[[noch/still_{<}]] = \lambda t^*.\lambda t.\lambda P_{<i,t>}: t^* \propto t \ \& \ P(t^*).P(t)$ (type <i,<i,<<i,t>,t>>>)

The scale S is temporal order "<" (type <<i,<i,t>>).

(11) (i) Assertion: P(t) - P is true of t
(ii) PSP: $t^* \propto t$ & P(t*) - the relevant other time t* left-abuts (immediately precedes) t and P is true of t*
(iii) Scalar alternatives: {P(t') | t'∈Alt(t)}
"What times t' is P true of?"

- the intuition:

(12) Tim is still asleep.

(13) Es regnet noch.
It is still raining.

(14) (i) Assertion: It is raining.
(ii) Presupposition: It rained at the relevant preceding time.
(iii) Implicature: It might stop raining./It will stop raining.

(15) 'rain' is true of the utterance time, and 'rain' was true of an earlier abutting time interval.

- truth conditional semantics (components (i) and (ii)):

(16) $[_{TP}$ PRES $[\lambda t[\phi$ [still$_{<}$ t* t] $[_{AspP}$ ipf $[_{VP}$ λe rain e]]]

(17) [[AspP]] = $\lambda t.\exists e[t \subseteq \tau(e) \ \& \ rain(e)]$
time intervals included in the run time of a rain event

(18) Assume that PRES is simply t_{now}. Simplified structure:
$[\phi \ [still_{<} \ t^* \ t_{now}] \ [_{AspP} \ ipf \ [_{VP} \ \lambda e \ rain \ e]]]$

(19) [[(18)]] is only defined if $t^* \propto t_{now}$ & $\exists e[t^* \subseteq \tau(e) \ \& \ rain(e)]$
i.e. (18) presupposes that there was rain at a time immediately before now. Then:
$[[(18)]] = 1$ iff $\exists e[t_{now} \subseteq \tau(e) \ \& \ rain(e)]$
i.e. (18) asserts that it is raining.

- the future ((component (iii)):

(20) Scalar alternatives:
a. $[[\phi]]_{Alt} = \{\exists e[t' \subseteq \tau(e) \ \& \ rain(e)] \mid t' \in Alt(t)\}$ Alt-trigger: time variable
"when is it raining?"
b. $\{\exists e[t' \subseteq \tau(e) \ \& \ rain(e)] \mid t_{now} < t' \}$ pragm. 'open' alternatives
"when after now is it raining?"

(21) a. Who passed?
b. # I know that either everyone passed or everyone failed. Who passed?

(22) Appropriateness condition on the use of a question:

Let Q <s,<<s,t>,t>> be a Hamblin question intension. Q is only appropriate in w if
$\exists w'[R(w,w') \ \& \ \exists p[Q(w)(p) \ \& \ p(w')]] \ \& \ \exists w'[R(w,w') \ \& \ \exists p[Q(w)(p) \ \& \ \neg p(w')]]$

It is possible that there is a true (Hamblin) answer and it is possible that there is a false answer (it is not certain that there is no true answer and it is not certain that there are true answers only).

(23) Appropriateness condition on *noch/still* alternatives:
It is possible that there is a time after now at which it is raining &
it is possible there is a time after now at which it is not raining.
'It might stop raining.'

(24) a. ? John is still dead. .
'John is dead and he's been dead for some time.' (i) + (ii)
"What later times is he dead?' (iii)
b. ? 11 was still a prime number.

(25) $[[EXH \ \phi]] = 1$ iff $[[\phi]]=1 \ \& \ \forall q[q \in [[\phi]]_{Alt} \ \& \ \neg([[\phi]] \Rightarrow q) \rightarrow \neg q]$
"all alternatives that are not entailed are false."
(see e.g. Krifka (1995), Chierchia, Fox & Spector (2011))

(26) $[EXH \ [\phi \ [still_{<} \ t^* \ t_{now}] \ [_{AspP} \ ipf \ [_{VP} \ rain \ e]]]]$

(27) Scalar implicature:
$\forall q[q \in \{\exists e[t' \subseteq \tau(e) \,\&\, rain(e)] \mid t' \in Alt(t_{now})\} \,\&\, \neg([[\phi]] \Rightarrow q) \rightarrow \neg q]$
$= \forall t'[t_{now} < t' \rightarrow \neg \exists e[t' \subseteq \tau(e) \,\&\, rain(e)]]$
"it doesn't rain after now./It will stop raining."

(28) a. It is still raining, and it looks like it will continue to rain. cancellable
b. Es regnet immer noch. no scalar impl.
it rains always still
'It is raining STILL.'

- *noch* modifying subconstituents:

(29) Lydia ist noch am Vormittag abgereist.
Lydia is still in the morning left
% 'Lydia left still in the morning.'

(30) a. Noch am Vormittag ist Lydia abgereist.
still in the morning is Lydia left
'It was still morning when Lydia left.'
b. # Noch ist Lydia am Vormittag abgereist.
still is Lydia in the morning left
'Lydia still left in the morning.'
c. # Noch ist Lydia abgereist.
still is Lydia left
'Lydia still left.'

(31) $[_{TP}$ PAST $[$ $[\lambda t$ $[still_<$ t* t [in the morning]]] $[_{AspP}$ pf $[_{VP}$ Lydia leave]]]]

$[[AspP]] = \lambda t.\exists e[\tau(e) \subseteq t \,\&\, leave(e)(L)]$
$[[$ in the morning $]] = \lambda t.$ morning(t)
$[[\lambda t$ $[still_<$ t* t [in the morning]] $]] = \lambda t{:}t^* \propto t \,\&\,$ morning(t*).morning(t)
$[[$ $[\lambda t$ $[still_<$ t* t [in the morning]]] $[_{AspP}$ pf $[_{VP}$ Lydia leave]]] $]] =$
$\lambda t{:}t^* \propto t \,\&\,$ morning(t*).morning(t) $\&\, \exists e[\tau(e) \subseteq t \,\&\, leave(e)(L)]$
$[[PAST]] = t_{topic}$

[[TP]] is defined only if $t^* \propto t_{topic}$ & morning(t*).
Then, it is true iff morning(t_{topic}) & $\exists e[\tau(e) \subseteq t_{topic}$ & leave(e)(L)]

alternatives: { morning(t') | t'∈Alt(t) } "What (later) times are in the morning?"

(32) (i) Assertion: Lydia left before noon.
(ii) PSP: a relevant earlier time is also before noon. (weak)
(iii) scalar implicature (local): later times are not before noon.

- other scales:

(33) Durham is still in England. (*marginal - path*)

(34) $[[noch/still_{<}]] = \lambda l^*.\lambda l.\lambda P_{<l,t>}: l^* \propto l \ \& \ P(l^*).P(l)$ <l,<l,<<l,t>,t>>>

The scale < is a path with the precedence relation between locations on the path (type <<l,<l,t>>).

(35) a. [ϕ [still$_{<}$ l* place(Durham)] [λl [l is in England]]]

b. [[(35a)]] is only defined if l*∝ place(Durham) & l* is in England.
i.e. (35a) presupposes a place just before Durham on the given path is in England.
Then, [[(35a)]] = 1 iff Durham's location is in England.

(36) Scalar alternatives:

a. $[[\phi]]_{Alt}$ = {l' is in England | l' a location on the path} Alt-trigger: place
"what places on the path are in England?"

b. {l' is in England | place(Durham) <l' } 'open' alternatives
"what place after Durham on the path is in England?"

(37) a. [EXH [ϕ[still$_{<}$ l* place(Durham)] [λl [l is in England]]]]

b. Scalar implicature:
∀l'[place(Durham)<l' -> l' is not in England]
"You leave England after Durham."

(38) a. 400.- Euros are still tax free. (*marginal - degree*)

b. The Honda is still a compact car.

(39) $[[noch/still_{<}]] = \lambda x^*.\lambda x.\lambda P_{<x,t>}: x^* < x \ \& \ P(x^*).P(x)$ <e,<e,<<e,t>,t>>>

The scale < is a degree scale (type <d,<d,t>>) (e.g. Size, Amount,...).

(40) a. [ϕ [still$_{<}$ x* [400,-]] [λx [x is tax free]]

b. (i) Assertion: 400,- is tax free.
(ii) PSP: a sum below 400 is tax free.
(iii) Scalar implicature: sums above 400,- are not tax free.

(41) $[[noch/still]] = \lambda S.\lambda x^*.\lambda x.\lambda P_{<x,t>}: x^* \propto x \ \& \ P(x^*).P(x)$

- interim summary:

- one lexical entry for *noch/still*
- presuppositional scalar particle that triggers alternatives
- interpretive variability via adjunction site and nature of scale

3. Discourse related *noch*/*still*

3.1. Order of mention *noch*

- some data:

(42) a. context: Thilo is coming home from the supermarket. He lists a few things he has bought.
b. Sigrid: Was hast Du **noch** gekauft?
what have you still bought
'What **else** have you bought?'
c. Thilo: Ich hab **noch** Schokolade gekauft.
I have still chocolate bought
'I have **also** bought chocolate.'

(43) a. context: describing a room.
b. Auf dieser Seite ist **noch** die Tür.
on this side is still the door
'**Then**, there is the door on this side.'

(44) a. context: Thilo has been trying to fix a paper jam in the printer for some time. I hover somewhat helplessly, trying to make suggestions. At one point, I say:
b. In der Bedienungsanleitung ist **noch** diese Skizze, auf Seite 3.
in the manual is still this drawing, on page 3
There is **also** this drawing in the manual, on page 3.

- **idea**: use of *noch* is justified because other relevant propositions have been stated before. I.e. this type of use of *noch* is order of mention sensitive.

- **order of mention**: e.g. Klein (2001): *again* in (45) is justified not by a sequence of eventualities ("n was a prime number at an earlier time"), but by what has been said before ("that n is a prime number was mentioned before").

(45) context: a list of numbers.
(5 is a prime number, 4 can be divided by 2, 7 is a prime number,)
11 is a prime number again.

- **proposal**: (44b) addresses the question under discussion (QUD) "how can we fix the printer?". *Noch* indicates that another answer to this question has been given earlier. I.e. *noch*'s contribution concerns the sequence of speech acts in the discourse. Its core meaning is stable, but it scopes above a speech act operator.

(46) $[[\text{noch}_{<}\ p^*\ [\text{there is this drawing}]]\ [\lambda q\ \text{ANSWER}(q)(\text{How can we fix the printer?})]]$

(47) (i) "there is this drawing" contributes an answer to the question "How can we fix ...?"
(ii) a preceding proposition p* contributes an answer to "How can we fix ...?"
(iii) {p contributes an answer to "How can we fix ...?" | p∈Alt("there is this drawing")}

(48) a. context: Thilo has just discovered a paper jam in the printer.
b. Thilo: Ooops. How can we fix this?
c. Sigrid: # In der Bedienungsanleitung ist **noch** diese Skizze, auf Seite 3.
in the manual is still this drawing, on page 3
There is **also** this drawing in the manual, on page 3.

3.2. Reaffirmative *noch*/*still*

- some data:

(49) Ich bin immer noch Deine Mutter.
I am always still your mother.
'I am still your mother.' (usable in a relationship debate)

(50) 11 is still a prime number. (re-affirming prime number status)

- intuition:

(51) (i) Assertion: 11 is a prime number.
(ii) PSP: that 11 is a prime is "in the context".

(52) My commitment to "I am your mother" continues.

- **proposal**: *still* scopes over Krifka's (2014) ASSERT. ASSERT(p): the speaker is liable for the truth of p at the time of utterance.

(53) [still [ASSERT [I am your mother]]]]

(54) (i) I am liable for the truth of "I am your mother" at t.
(ii) At a preceding time t* I have been liable for the truth of "I am your mother".
(iii) {I am liable for the truth of "I am your mother" at t' | t'∈Alt(t) }

- Krifka (2014) on asserting a proposition that is not a new assertion: increase salience of existing commitments and/or reinforce commitment to assertion. Suggestion: this is marked explicitly by *noch*/*still* in the reaffirmative use.

3.3. Additive *noch* (Umbach (2009))

- some data:

(55) a. Hans trank **noch** einen SCHNAPS. (*further-to*)
Hans drank still a schnaps
'Hans had a schnaps **before**...
b. Hans trank **NOCH** einen Schnaps. (*additive*)
Hans drrank still a schnaps
'Hans had **another** schnaps.'

(56) Bruckner trank **noch** drei Bier. (Klein 2007/2015)
Bruckner drank still three beer
'Bruckner had three **more** beers.'

(57) Ich schäle **noch** einen Apfel.
I peel still an apple
'I will peel (**yet**) **another** apple.'

- **constituency***: Noch* forms a constituent with the NP, i.e. modifies a subconstituent:

(58) a. Hans had a schnaps.
b. What did he do then?
c. Noch einen Schnaps hat er getrunken.
still a schnaps has he drunk
'He had another schnaps.'

(59) [[noch$_{<}$ x* x [einen Apfel]] [1[ich schäle t1]]] <e,<e,<<e,t>,t>>>

(60) (i) There is an x such that x is an apple and I peel x.
(ii) For some x* such that x* is an apple: x*<x.

- **proposal**: following Umbach (2009), the scale is order of mention. The order of mention relation < holds between type <e> expressions "x*<x" (not propositions). We can make sense of this if the context includes not just propositions but also discourse referents, as in dynamic semantics (Heim (1982), Kamp (1981)). Order of mention can be defined on both.

(61) "x*<x":
< is order of mention
Hence (59) is appropriate in a context in which apples were mentioned.

(62) a. Zwei Enten sind vorbei geschwommen.
two ducks are by swum
'Two ducks swam by.'
b. NOCH eine Ente ist vorbei geFLOgen.
still a duck is by flewn
'Then another duck flew by.'

4. Embedded speech acts

4.1. Sketch of a framework (Krifka (2014), Sauerland & Yatsushiro (2015))

- speech act operator in head of ForceP at LF:

(63) [ForceP [Force' [Force ASSERT] [$_{IP}$ .....]]]

- assumptions (inspired by but simplified from Krifka (2014)): the speech act operator changes the semantic type from propositional to functions from contexts to contexts. Let <c> be the type of contexts.

IP:	<s,t>
head of ForceP:	<<s,t>,<c,c>>
	ASSERT
	also ANSWER, orders, declarations, ...

A context c consists of $<c_{sp}, c_h, c_t, C_w...>$. This is the utterance situation (with speaker, hearer, utterance time etc. and C_w the set of worlds compatible with the assumptions of the participants (the common ground)).

(64) ASSERT(p)(c) = ιc': $c'=<c_{sp}, c_h, c_t, C_w \cap \{w: c_{sp}$ is liable in w for the truth of p in w at $c_t\}>$

(65) a. 11 is a prime number.
b. [ForceP [Force' [Force ASSERT] [$_{IP}$ 11 is a prime number]]]

(66) λc. ASSERT([λw. 11 is a prime number in w])(c) type <c,c>

(67) $\lambda c.\iota c': c'=<c_{sp}, c_h, c_t, C_w \cap \{w: c_{sp}$ is liable in w for the truth of $[\lambda w'.11 \text{ is a prime}_{w'}]$ in w at $c_t\}>$

(68) Assume that we keep speaker, hearer etc. constant.
Simplified presentation: output context c' as <s,t>.
$\lambda c.\lambda w.w \in C_w$ & c_{sp} is liable in w for the truth of $[\lambda w'.$ 11 is a prime number$_{w'}$] in w at c_t

- why put the speech act operator in the LF? Shouldn't this be the pragmatic step?

4.2. Examples of embedded speech acts

- certain expressions can type shift to types useable above the speech act operator. This leads to embedded speech acts. Krifka (various works) collects quite a few examples of embedded illocutionary acts, e.g.:

(69) a. What did **everyone** buy?
For each x, tell me what x bought.
b. I hereby baptize **everyone** (*most of you) John.
For each x, I declare that x's name is John.
c. Mary **told** John that his shirt and tie didn't match.
Mary made an assertion with the content that his shirt and tie didn't match.
d. **Everyone** leave!
For each x, I order x to leave.

(70) a. I baptize everyone John.
b. [ForceP everyone$_x$ [Force' DECL [$_{IP}$ I baptize x John]]]

(71) a. Everyone leave!
b. [ForceP everyone$_x$ [Force' IMP [$_{IP}$ x leave]]]

- **adverb** modifying an assertion:

(72) **Frankly**, your shirt and tie don't match.
"Your shirt and tie don't match, and making this assertion is frank."

(73) [ForceP frankly [ForceP ASSERT [$_{IP}$ your shirt and tie don't match]]]

(74) [[frankly]] = λR.λc.λw:frank(R(c)(w)).R(c)(w) <<c,c>,<c,c>>

(75) Mary told John frankly that his shirt and tie didn't match.
[[frankly]] = λR.λe:frank(R(e)).R(e) <<v,t>,<v,t>>

- Sauerland & Yatsushiro (2015) on Remind-me readings of *again* in questions:

(76) What was your name **again**? (*remind me*)
"Bring it about that I know again what your name is."
"You must make it once more known what your name is."

(77) [ForceP IMP [again [ForceP CG [$_{CP}$ what was your name?]]]]

(78) a. IMP(p)(c)(w):
∀w' [w' ∈C_w & c_h obeys in w' the requests made by c_{sp} in w -> p(w')]
b. CG(Q)(c)(w):
c_h makes known in w the answer to Q in w

(79) again: <<c,c>,<c,c>>

4.3. Back to our examples

- reaffirmative *noch*/*still*:

(80) 11 is still a prime number.

(81) a. [λc [ForceP still c* c [ForceP ASSERT [$_{IP}$ 11 is a prime number]]]] <c,c>
b. λc. ASSERT(11 is a prime number)(c*) & c*∝c. ASSERT(11 is a prime number)(c)

(82) (81) is only defined if c_{sp} is liable for the truth of '11 is a prime number' at c^*_t and $c^*_t \propto c_t$.
Then (81) is true if c_{sp} is liable for the truth of '11 is a prime number' at c_t.
c*∝c iff $c^*_t \propto c_t$

(10) [[*noch*/*still* $_<$]] = λt*.λt. λ$P_{<i,t>}$:t*∝ t & P(t*).P(t) (type <i,<i,<<i,t>,t>>>)

(83) reaffirmative *noch*/*still* is discourse level temporal *noch*/*still*:
[[*noch*/*still* $_<$]] = λc*.λc. λ$P_{<c,c>}$λw:c*∝ c & P(c*)(w).P(c)(w) type <c,<c,<<c,c>,c>>>

- order of mention *noch*:

(84) a. context: Thilo is coming home from the supermarket. He lists a few things he has bought.
b. Sigrid: Was hast Du **noch** gekauft?
what have you still bought
'What **else** have you bought?'
c. Thilo: Ich hab **noch** Schokolade gekauft.
I have still chocolate bought
'I have **also** bought chocolate.'

(85) [ForceP [still$_<$ p* [I have bought chocolate]] [λq. [ForceP ANSWER(Q)(q)]]]

(86) a. QUD Q: what did you buy?
b. ANSWER(Q)(p): p is offered as an answer to Q
b'. ANSWER(Q)(p)(c)(w) is only defined if p∈Q or there is a q: p=>q and q∈Q. Then:
ANSWER(Q)(p)(c)(w) = 1 iff w∈C_w & c_{sp} is liable in w for the truth of p in w at c_t.
c. scale <: p<q iff p was mentioned before q,
i.e. if ANSWER(Q)(p)(c*) and ANSWER(Q)(q)(c) and c*<c

(87) [[(85)]] is only defined if there is a p*: p* is offered in answer to the QUD and p* was uttered before 'I have bougth chocolate' ; i.e. p*<I have bought chocolate

(88) order of mention *noch*:
[[*noch* $_<$]] = λp*.λp.λR.λc.λw:p*<p & R(p*)(c)(w).R(p)(c)(w)

- additive *noch*:

(89) Ich schäle **noch** einen Apfel.
I peel still an apple
'I will peel (**yet**) **another** apple.'

If < is order of mention then should the LF really be (90)?

(90) [[noch$_<$ x* x [einen Apfel]] [1 [ASSERT [ich schäle t1]]]]

- left for another occasion.

- summary:

- speech act operator in head of ForceP at LF
- changes semantic type to <c,...
- certain expressions can type shift to types above the speech act operator.
- *noch*/*still* on the reaffirmative, order of mention and possibly additive readings is among those expressions.

5. Further questions

- When can an expression scope over a speech act operator?
- What determines the behaviour of adverbs/adverbials?
  - Which adverbs can scope over a speech act operator?
  - When can they do so?

- some observed possibilities:

(91) Frankly, your shirt and tie don't match.

(92) [ForceP **frankly** [ForceP ASSERT [$_{IP}$ your shirt and tie don't match]]]

(93) a. Wie war noch/wieder Ihr Name?
how was still/again your name
'What was your name again?'
b. Bring it about that I once more know your name.

(94) a. [ForceP IMP [**again/wieder/noch** [ForceP CG [what is your name?]]]]
b. All acceptable worlds are such that you do something which causes the answer to 'what is your name?' to be once more/still known.

(95) Ich bin immer noch Deine Mutter.
I am always still your mother
'I am still your mother.'

(96) [ForceP **noch/still** [ForceP ASSERT [$_{IP}$ I am your mother]]]]

- some impossibilities:

- Other adverbs/particles with a similar type of meaning resist such uses:

(97) a. Frankly, I admire Sue.
My assertion that I admire Sue is frank.
b. # **Reluctantly**, I admire Sue.
My assertion that I admire Sue is reluctant (e.g. I'm forced to admit it).

(98) # What is your name, **too**? (Sauerland & Yatsushiro (2015))
(not licensed e.g. by someone else announcing their name)

(99) a. # Wie war **fast** Ihr Name?
how was almost your name
What was **almost** your name?
b. Bring it about that I almost know your name = Give me a hint.

⇒ The shift to a type that can scope over a speech act operator is not freely available.

- near synonymous adverbs/adverbials resist parallel uses:

(100) a. # Wie war erneut Ihr Name?
how was anew your name
'What was your name again?'
b. # Wie war zum zweiten Mal Ihr Name?
how was for the second time your name
'What was your name for the second time?'

(101) *[ForceP IMP [**erneut/for the 2nd time** [ForceP CG [what is your name?]]]]

⇒ There are lexical constraints (akin to the Visibility Parameter for adverbs?).

- English *still* is not exactly like German *noch*:

(102) a. # I have still bought chocolate.
b. * [ForceP **still** [ForceP ANSWER [$_{IP}$ I have bought chocolate]]]]

(103) a. # What was still your name?
b. * [ForceP IMP [**still** [ForceP CG [what is your name?]]]]

⇒ Which operator is scoped over matters (given that English *still* can scope over a speech act operator in other cases (the 'mother' example)).

- There are scope constraints:

(104) a. Welche Sprache kann er nochmal sprechen? (Sauerland & Yatsushiro)
which language can he again speak
'Which language does he speak again?' (*remind me*)
b. # Welche Sprache kann fast keiner nochmal sprechen?
which language can almost no one again speak
'Which language does almost no one speak again?' (**remind me*)
c. Welche Sprache kann nochmal fast keiner sprechen?
which language can again almost no one speak
'Which language does almost no one speak again?' (*remind me*)

⇒ The quantifier *almost no one* prevents *again* from scoping over the speech act operator.

(105) a. Ich bin immer noch Deine Mutter. (*reaffirmative*)
I am always still your mother
'I am still your mother.'
b. # Niemand hier ist immer noch Deine Mutter. (**reaffirmative*)
nobody here is always still your mother
'Nobody here is still your mother.'
c. Es ist immer noch niemand hier Deine Mutter. (*reaffirmative*)
it is always still nobody here your mother
'Still, nobody here is your mother.'

⇒ scope constraints similarly govern the availability of reaffirmative *noch*.

- **Preliminary conclusion:** There is some semantic composition above the speech act operator - in particular some adverbs can be interpreted there. We do not at the moment have a theory of when this is and isn't possible. An analysis would need to have a lexical and a scope component.

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