In this squib, I present two paradoxes from bivalent coordination in German. I have to delegate possible solutions to further research.

**Paradox I**

In German, coordinate structures joined by the bivalent coordinator *entweder-oder*‘either-or’ permit CP-coordination:

(1) \[\text{Entweder hat Hans gesungen}] oder \[\text{Peter hat getanzt}\]

\[\text{either has } H. \text{ sung} \text{ or } P. \text{ has danced}\]

‘Either John sang or Peter danced’

Both conjuncts in (1) are verb second clauses. It follows that *entweder* is located in SpecCP of the first conjunct. At the same time, *entweder* is part of the complex disjunction operator, and should therefore be parsed in a position that c-commands the CP (e.g. as head of a BooleanP, which in turn takes the CP as a complement; Munn 1993). These two conflicting requirements lead to a first phrase structure paradox.

Constructions involving *weder-noch* generalize the observation made above to both conjuncts. In verb second clauses joined by *weder-noch*‘neither-nor’, *weder* as well as *noch* have to remain inside their respective clauses. (2) contrasts with (3), where *noch* is located external to the second CP:

(2) \[\text{Weder hat Peter das Theorem verstanden}] \[\text{noch konnte Maria dem Beweis folgen}\]

\[\text{neither has } P. \text{ the theorem understood} \text{ nor could } M. \text{ the proof follow}\]

‘Neither has Peter understood the theorem, nor could Mary follow the proof’

(3) \[\text{Weder hat Peter das Theorem verstanden}] \[\text{noch Maria konnte dem Beweis folgen}\]

\[\text{neither has } P. \text{ the theorem understood} \text{ nor } M. \text{ could the proof follow}\]
Paradox II

The second paradox arises from the interpretive properties of the *weder-noch* construction, and consists in the observation that there is contradictory evidence as to the scope domain of the negative operator which is encoded in *weder*. Note to begin with that *weder* can be ‘immersed’ in the first conjunct, such that it comes to lie to the right of the subject:

(4) \[ CP \text{ Peter hat } \text{weder} \text{ das Theorem verstanden] [CP noch konnte Maria dem} 
\] 
P. has neither the theorem understood nor could M. the
Beweis folgen] 
proof follow

“Neither has Peter understood the theorem, nor could Mary follow the proof”

Now, low *weder* does not license NPIs to its left (see (6)), indicating that the scope of negation is limited to the surface position of *weder*:

(5) \[ CP \text{Weder hat auch nur einer das Theorem verstanden] 
\] 
neither has even one (person) the theorem understood
[CP noch konnte jemand dem Beweis folgen]
nor could somebody the proof follow

“Neither has even a single person understood the theorem, nor could somebody follow the proof”

(6) "\[ CP \text{Auch nur einer hat weder das Theorem verstanden] 
\] 
even one (person) has neither the theorem understood
[CP noch konnte jemand dem Beweis folgen]
nor could somebody the proof follow

At the same time, however, the negative portion of *neither* has to take scope over the whole disjunction, in order to ensure that *weder A noch B* is assigned the correct interpretation given in (7a):

(7) a. \[ \neg[A \lor B] 
\] 
b. \[ \neg A \lor \neg B \]

The alternative representations according to which negation takes narrow scope w.r.t. both disjuncts, as in (7b), yields the wrong truth conditions (assuming that the meaning of *noch* is ‘not or’).

References