Addendum

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In this addendum we discuss two multiple fronting examples from page 136 of Müller (in preparation) *German Sentence Structure: An Analysis with Special Consideration of So-Called Multiple Fronting*, Language Science Press [https://hpsg.hu-berlin.de/ stefan/Pub/], and show how they can be accounted for.

Sentence 12a

First, consider a standard word order without non-local dependencies:

(1) Ich **glaube** nicht, [*dass* er der Maria einen Ring je schenken **wird**].
I.NOM believe.1SG.PRS not COMP he.NOM the.DAT Maria a.ACC ring ever give.INF will.3SG.PRS
'I don't think he'll ever give a ring to Maria.'

Lexically, the verb *glauben* 'believe' takes a complementizer clause as an argument, as shown below.

(2)
$$\begin{bmatrix} \textit{word} \\ \text{FORM} \quad \langle \textit{glauben} \rangle \\ \text{SYN} \quad \left[\text{VAL} \quad \left\langle \text{NP}, \left[\text{MRKG} \quad \textit{that} \right] \right\rangle \right] \end{bmatrix}$$

The analysis of this sentence involves a V2 main clause with a verb final subordinate clause:

(3)
$$\begin{bmatrix} \textit{simple-main-decl-cl} \\ \text{DTRS} \left\langle \left[\langle \textit{ich} \rangle \right], \left[\langle \textit{glaube} \rangle \right], \left[\langle \textit{nicht} \rangle \right], \begin{bmatrix} \textit{complementizer-cl} \\ \text{MTR} \mid \text{SYN} \mid \text{MRKG} \; \textit{that} \\ \text{DTRS} \left\langle \left[\langle \textit{dass} \rangle \right], \begin{bmatrix} \textit{subord-decl-cl} \\ \text{MTR} \mid \text{SYN} \mid \text{LIN-MRKG} \; \textit{vf} \\ \text{DTRS} \left\langle \boxed{1}\left[\langle \textit{er} \rangle \right], \boxed{3}\left[\langle \textit{d., Maria} \rangle \right], \boxed{2}\left[\langle \textit{ein., Ring} \rangle \right], \left[\langle \textit{je} \rangle \right], \left[\begin{matrix} \langle \textit{sch., wird} \rangle \\ \text{SYN} \mid \text{VAL} \langle \boxed{1},\boxed{2},\boxed{3} \rangle \end{matrix} \right] \right\rangle \end{bmatrix} \right\rangle \end{bmatrix} \right\rangle \end{bmatrix}$$

Now consider the marked counterpart below, which exhibits two additional phenomena: (i) Two arguments are extracted from the subordinate clause, and (ii) The main clause has V3 word order.

(4) [Der Maria] [einen Ring] **glaube** ich nicht, *dass* er je schenken **wird**.
the.DAT Maria a.ACC ring believe.1SG.PRS I.NOM not COMP he.NOM ever give.INF will.3SG.PRS
'A ring to Maria, I don't think he'll ever give.'

A new clause type – not discussed in Wetta (2014) – can be defined from these constructions – both of which are in Wetta (2014) and are combined in the standard way as described therein. This new clause handles V3 with the *simple-disc-prom-cxt* and it handles the extraction with the *filler-single-pred-cxt*.

(5) *filler-simple-disc-prom-main-decl-cl* $\Rightarrow$ *simple-disc-prom-cxt* $\wedge$ *filler-single-pred-cxt* $\wedge$ *decl-cl*

In addition, the *filler-single-pred-cxt* would need to be modified slightly to handle two gapped arguments. Currently the construction only handles a single filler, but this construction can be changed to handle a list of gapped elements:

(6) FILLER-SINGLE-PREDICATE CONSTRUCTION ($\uparrow$*predicate-cxt*)

a. $$\text{V'}\begin{bmatrix}\text{VAL} & \langle\rangle \\ \text{GAP} & \langle\rangle\end{bmatrix} \rightarrow \left\{ \text{V}\left[\text{VAL} \quad \left\langle \text{X}_1, \ldots, \text{X}_n, \boxed{1}\text{V}\begin{bmatrix}\text{VAL} & \langle\rangle \\ \text{GAP} & \left\langle \text{F}_1, \ldots, \text{F}_n \right\rangle\end{bmatrix} \right\rangle\right], \text{X}_1, \ldots, \text{X}_n, \text{F}_1, \ldots, \text{F}_n, \boxed{1}\text{V} \right\}$$

b. $$\textit{filler-s-p-cxt} \Rightarrow \begin{bmatrix} \text{MTR} & \begin{bmatrix} \text{SYN} & \begin{bmatrix}\text{CAT} & Y \\ \text{VAL} & \langle\rangle \\ \text{GAP} & \langle\rangle\end{bmatrix}\end{bmatrix} \\ \text{DTRS} & \left\langle H \right\rangle \bigcirc L_1 \bigcirc L_2 \bigcirc \left\langle \text{C} \right\rangle \\ \text{HD-DTR} & H: \begin{bmatrix} \text{SYN} & \begin{bmatrix}\text{CAT} & Y: \begin{bmatrix}\text{VF} & \textit{fin}\end{bmatrix} \\ \text{VAL} & L_1 \oplus C: \left\langle \begin{bmatrix}\textit{clause} \\ \text{SYN} \quad \begin{bmatrix}\text{GAP} & L_2\end{bmatrix}\end{bmatrix} \right\rangle\end{bmatrix}\end{bmatrix}\end{bmatrix}$$

Finally, the sentence would then have the following analysis:

(7)

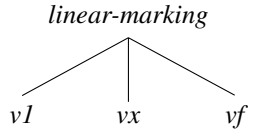
$$\left[\textit{filler-simple-disc-prom-main-decl-cl}\right.$$
$$\text{DTRS}\left\langle \boxed{3}\left[\begin{array}{l}\langle \textit{d., Maria}\rangle\\ \text{PROM}\ +\end{array}\right], \boxed{2}\left[\begin{array}{l}\langle \textit{ein., Ring}\rangle\\ \text{PROM}\ +\end{array}\right], [\langle \textit{glaube}\rangle], [\langle \textit{ich}\rangle], [\langle \textit{nicht}\rangle],\right.$$
$$\left[\begin{array}{l}\textit{complementizer-cl}\\ \text{MTR}\mid\text{SYN}\mid\text{MRKG}\ \textit{that}\\ \text{DTRS}\left\langle [\langle \textit{dass}\rangle], \left[\begin{array}{l}\textit{subord-decl-cl}\\ \text{MTR}\mid\text{SYN}\mid\text{LIN-MRKG}\ \textit{vf}\\ \text{DTRS}\left\langle \boxed{1}[\langle \textit{er}\rangle], [\langle \textit{je}\rangle], \left[\begin{array}{l}\langle \textit{sch., wird}\rangle\\ \text{SYN}\left[\begin{array}{l}\text{VAL}\langle \boxed{1},\boxed{2},\boxed{3}\rangle\\ \text{GAP}\langle \boxed{2},\boxed{3}\rangle\end{array}\right]\end{array}\right]\right\rangle\end{array}\right]\right\rangle\end{array}\right]\right\rangle\right]$$

Sentence12b

There is no non-local extraction in this sentence, rather, there simply is V3 word order in the subordinate clause:

(8) Ich **glaube**, [Kindern] [Bonbons] **gibt** man besser nicht.
I.NOM believe.1SG.PRS children.DAT bonbons give.3SG.PRS one better not
'I think it's best not to give candy to children.'

First, to better accommodate V3, one can update the linear marking hierarchy to abstract away from V2. Let us then call this new and more general construction VX. The VX construction simply requires the verb to not be initial or final. In total we have three mutually exclusive options: v1 (i.e. verb-initial), vf (verb-final), vx (verb elsewhere).



Finally, we now allow the verb *glauben* to take an argument with VX word order:

(9)
$$\left[\begin{array}{ll}\textit{word} & \\ \text{FORM} & \langle \textit{glauben}\rangle \\ \text{SYN} & \left[\text{VAL}\ \left\langle \text{NP, VP}\left[\text{MTR}\mid\text{SYN}\mid\text{LIN-MRKG}\ \textit{vx}\right]\right\rangle\right]\end{array}\right]$$

An analysis of the sentence is shown below.

(10)

$$\left[\begin{array}{l} \textit{simple-main-decl-cl} \\ \text{DTRS}\left\langle \left[\left\langle \textit{ich} \right\rangle\right], \left[\left\langle \textit{glaube} \right\rangle\right], \left[\begin{array}{l} \textit{simple-disc-prom-main-dec-cl} \\ \text{MTR} \mid \text{SYN} \mid \text{LIN-MRKG } \textit{vx} \\ \text{DTRS}\left\langle \boxed{3}\left[\left\langle \textit{Kindern} \right\rangle\right]_{\text{PROM}\ +}, \boxed{2}\left[\left\langle \textit{Bonbons} \right\rangle\right]_{\text{PROM}\ +}, \left[\begin{array}{l} \left\langle \textit{gibt} \right\rangle \\ \text{SYN} \mid \text{VAL}\left\langle \boxed{1},\boxed{2},\boxed{3} \right\rangle \end{array}\right], \boxed{1}\left[\left\langle \textit{man} \right\rangle\right], \left[\left\langle \textit{besser} \right\rangle\right], \left[\left\langle \textit{nicht} \right\rangle\right] \right\rangle \end{array}\right] \right\rangle \end{array}\right]$$