

| | | |
|---|---------------------------------|---|
| John | likes | Mary |
| $S/(S \backslash NP)$ | $(S \backslash NP_{3s})/NP$ | $(S \backslash NP) \backslash ((S \backslash NP)/NP)$ |
| $: \lambda p.p \text{ john}'$ | $: \lambda x \lambda y.like'xy$ | $: \lambda p.p \text{ mary}'$ |
| $S \backslash NP : \lambda y.like'mary'y$ | | |
| $S : like'mary'john'$ | | |

$$\frac{\frac{\text{John}}{S/(S\backslash NP)} \quad \frac{\text{likes}}{(S\backslash NP_{3s})/NP} \quad \frac{\text{Mary}}{S\backslash (S/NP)}}{\frac{\lambda p.p \text{ john}' : \lambda x \lambda y. \text{like}'xy : \lambda p.p \text{ mary}'}{S/NP : \lambda x. \text{like}'x \text{ john}'}} \xrightarrow{\text{B}} S : \text{like}' \text{mary}' \text{ john}' \xrightarrow{>}$$

$$\frac{\text{dismiss} \quad \text{-ed}}{VP_{\text{inf}}/NP: \lambda x \lambda y. \text{dismiss}' xy \ (S \backslash NP_{\text{agr}}) \parallel VP_{\text{inf}}: \lambda p \lambda y. \text{past}'(Py)} \\ (S \backslash NP_{\text{agr}})/NP: \lambda x \lambda y. \text{past}'(\text{dismiss}' xy) \quad \text{<B}_x$$

Mary $\frac{\text{musn't} \quad \text{have} \quad \text{been} \quad \text{being} \quad \text{arrest} \quad \text{-ed}}{(S_{\text{pres}} \setminus NP) \parallel_{\diamond} VP_{1\text{sg-pl}} \parallel_{\diamond} VP_{1\text{sg-pl}} \parallel_{\diamond} VP_{\text{en}} \parallel_{\diamond} VP_{\text{en,ing}} \parallel_{\diamond} VP_{\text{ing}} \parallel_{\diamond} VP_{\text{pass,ing}} \parallel_{\diamond} VP_{\text{pass}} \parallel_{\diamond} VP_{\text{inf}} \parallel_{\diamond} NP \parallel_{\diamond} VP_{\text{pass}} \parallel_{\diamond} (VP_{\text{inf}} \setminus NP)}$

Example above using `\begin{ccg}{n}{data}{derivations}\end{ccg}`. This environment puts in the first lines itself. Based on `\cgex`. No gloss line on top.

| | | | | | | |
|------|---|--|---|---|------------------------------------|--|
| Mary | musn't | have | been | being | arrest | -ed |
| | $(S_{\text{pres}} \backslash NP) //_{\diamond} VP_{1\text{sg-pl}}$ | $VP_{1\text{sg-pl}} //_{\diamond} VP_{\text{en}}$ | $VP_{\text{en,ing}} //_{\diamond} VP_{\text{ing}}$ | $VP_{\text{pass,ing}} //_{\diamond} VP_{\text{pass}}$ | $VP_{\text{inf}} //_{\diamond} NP$ | $VP_{\text{pass}} // (VP_{\text{inf}} / NP)$ |
| | $(S_{\text{pres}} \backslash NP) //_{\diamond} VP_{\text{en}} \rightarrow \mathbf{B}$ | | | | $VP_{\text{pass}} \leftarrow$ | |
| | | $(S_{\text{pres}} \backslash NP) //_{\diamond} VP_{\text{ing}} \rightarrow \mathbf{B}$ | | | | |
| | | | $(S_{\text{pres}} \backslash NP) //_{\diamond} VP_{\text{pass}} \rightarrow \mathbf{B}$ | | | |
| | | | | $S_{\text{pres}} \backslash NP \rightarrow$ | | |

Another example, to show glossing in the beginning and the end.

It uses `\begin{ccgg}{n}{data}{gloss}{derivations}\end{ccgg}`.

| | | |
|--|--|-------|
| ver-dir | -t | -ti. |
| give-caus | -caus | -past |
| $VP_{\text{inf}} \backslash NP_{\text{dat}} \backslash NP_{\text{dat}} \backslash NP_{\text{acc}}$ | $(S \backslash NP_{\text{nom}} \backslash NP_{\text{case}}) \parallel VP_{\text{inf}}$ | |
| $: \lambda x \lambda y \lambda z. \text{give}'_{yxz}$ | $: \lambda p \lambda x \lambda y. \text{cause}'(px)y$ | |
| $< \mathbf{B}^3$ | | |
| $S \backslash NP_{\text{nom}} \backslash NP_{\text{dat}} \backslash NP_{\text{dat}} \backslash NP_{\text{dat}} \backslash NP_{\text{acc}}$ | | |
| $: \lambda x_1 \lambda x_2 \lambda x_3 \lambda x_4 \lambda x_5. \text{cause}'(\text{cause}'(\text{give}'_{x_1 x_2 x_3})x_4)x_5$ | | |
| ‘made to let give’, from Turkish | | |