## Inference System $\mathcal{G}$

### Superposition right:

$$\frac{\Gamma' \to \quad l \approx r \qquad \Gamma \to \quad s \approx t}{\Gamma', \Gamma \to \quad s[r]_p \approx t}$$

where: $s|_p = l$,
$l > r$, and $l \approx r$ is strictly maximal in $\Gamma' \to l \approx r$
$s > t$, and $s \approx t$ is strictly maximal in $\Gamma \to s \approx t$,
nothing is selected in both premises.

### Superposition left:

$$\frac{\Gamma' \to \quad l \approx r \qquad \Gamma, \quad s \approx t \to \Delta}{\Gamma', \Gamma, \quad s[r]_p \approx t \to \Delta}$$

where: $s|_p = l$,
$l > r$, and $l \approx r$ is strictly maximal in $\Gamma' \to l \approx r$
$s > t$ and either $s \approx t$ is selected or $s \approx t$ is maximal in $\Gamma, s \approx t \to \Delta$,
nothing is selected in the left premise.

### Equality Resolution:

$$\frac{\Gamma, s \approx s \to \Delta}{\Gamma \to \Delta}$$

where
$s \approx s$ is either selected or maximal in $\Gamma, s \approx s \to \Delta$