Example

Let $N = \{\rightarrow a \approx b, \quad \rightarrow f(x) \approx g(x)\}$,

a ground substitution $\gamma = \{x \mapsto a\}$,

ordering: $a \succ b, \quad f(a) \succ g(a)$.

$N\gamma = \{\rightarrow a \approx b, \quad \rightarrow f(a) \approx g(a)\}$

the ground Superposition Right inference:

$$\frac{\rightarrow a \approx b \qquad \rightarrow f(a) \approx g(a)}{\rightarrow f(b) \approx g(a)}$$

cannot be lifted to the non-ground level.