# The Transformation $\underline{\text{trans}}_{\mathcal{P}}$

$$\underline{\text{trans}}_{\mathcal{P}}(M) = M \cup \{A' \mid \{A', \neg B'_1, \ldots, \neg B'_n\} \text{ is ground instance of a clause } \{A, \neg B_1, \ldots, \neg B_n\} \in \mathcal{P} \text{ and } B'_1, \ldots, B'_n \in M\}$$

# Example

$\{$ $\{\text{motherOf}(\text{renate}, \text{susanne})\}$,
$\{\text{married}(\text{gerd}, \text{renate})\}$,
$\{\text{fatherOf}(F, C), \neg\text{married}(F, W), \neg\text{motherOf}(W, C)\}$ $\}$.

$$\begin{aligned}
\underline{\text{trans}}_{\mathcal{P}}(\varnothing) &= \{\text{motherOf}(\text{renate}, \text{susanne}), \text{married}(\text{gerd}, \text{renate})\} \\
\underline{\text{trans}}^2_{\mathcal{P}}(\varnothing) &= \underline{\text{trans}}_{\mathcal{P}}(\varnothing) \cup \{\text{fatherOf}(\text{gerd}, \text{susanne})\}
\end{aligned}$$