

weak-antecedent-conditional^{11,40}

$$\begin{aligned}
& \forall es:\text{ES}, P_1, Q_1, P_2, Q_2:(\text{E} \rightarrow \mathbb{P}), dcd_P_1:(e:\text{E} \rightarrow \text{Dec}(P_1(e))), f:(\{e:\text{E} \mid P_1(e)\} \rightarrow \{e:\text{E} \mid Q_1(e)\}), \\
& \quad g:(\{e:\text{E} \mid P_2(e)\} \rightarrow \{e:\text{E} \mid Q_2(e)\}). \\
& (Q_1 \leftarrow==f== P_1 \ \& \ Q_2 \leftarrow==g== P_2) \\
& \Rightarrow \lambda e.(Q_1(e) \vee (Q_2(e) \leftarrow==[P_1? \ f : \ g]== \lambda e.(P_1(e) \vee (P_2(e)))
\end{aligned}$$