

Q-R-glues-conditional2^{11,40}

$\forall es:ES, Q_1, Q_2, R:(E \rightarrow E \rightarrow \mathbb{P}), A, B:\text{Type}, Ia_1, Ia_2:\text{AbsInterface}(A), Ib_1,$
 $Ib_2:\text{AbsInterface}(B), f:(E([Ia_1?Ia_2]) \rightarrow B), g_1:(E(Ib_1) \rightarrow E), g_2:(E(Ib_2) \rightarrow E).$
 $Ia_1 \cap Ia_2 = 0$
 $\Rightarrow Ib_1 \cap Ib_2 = 0$
 $\Rightarrow g_1 \text{ glues } Ia_1:Q_1 \dashv\vdash f \rightarrow Ib_1:R$
 $\Rightarrow g_2 \text{ glues } Ia_2:Q_2 \dashv\vdash f \rightarrow Ib_2:R$
 $\Rightarrow [\{Ib_1\}? \ g_1 : g_2] \text{ glues } [Ia_1?Ia_2]:Q_1|\{Ia_1\} \vee Q_2|\{Ia_2\} \dashv\vdash f \rightarrow [Ib_1?Ib_2]:R$