

## **Q-R-glues-composes2<sup>11,40</sup>**

$\forall es:\text{ES}, Qa, Rb, Sc:(E \rightarrow E \rightarrow \mathbb{P}), A, B, C:\text{Type}, Ia:\text{AbsInterface}(A), Ib:\text{AbsInterface}(B), Ic:\text{AbsInterface}(C), f_1:(E(Ia) \rightarrow B), f_2:(B \rightarrow C), g_1:(E(Ib) \rightarrow E), g_2:(E(Ic) \rightarrow E).$   
 $(g_1 \text{ glues } Ia:Qa \dashrightarrow f_1 \rightarrow Ib:Rb \text{ & } g_2 \text{ glues } Ib:Rb \dashrightarrow \lambda e.f_2(Ib(e)) \rightarrow Ic:Sc)$   
 $\Rightarrow g_1 \circ g_2 \text{ glues } Ia:Qa \dashrightarrow f_2 \circ f_1 \rightarrow Ic:Sc$