

$$(\mathbf{f} \circ \mathbf{g}) : \mathbf{A}^{\text{op}} \times \mathbf{C} \xrightarrow{\text{Pos}} \mathbf{Bool},$$

$$\langle a^*, c \rangle \mapsto \bigvee_{b \in \mathbf{B}} \mathbf{f}(a^*, b) \wedge \mathbf{g}(b^*, c).$$