

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

$$\langle a^*, c \rangle \mapsto \bigvee_{b_1 \leq b_2, b_1, b_2 \in \mathbf{B}} f(a^*, b_1) \wedge g(b_2^*, c).$$