$$(f \mathbin{\overset{\circ}{,}} g) \colon \quad \mathbf{A}^{\mathrm{op}} \times \mathbf{C} \xrightarrow{\quad}_{\mathbf{Pos}} \mathbf{Bool},$$

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