

$A \xrightarrow{f} B$ と $C \xrightarrow{g} D$ が与えられたとき、

$$\begin{array}{ccc}
 \text{prod}(\text{exp}(B, C), B) & \xleftarrow{\text{prod}(\mathbf{I}, f)} & \text{prod}(\text{exp}(B, C), A) & & \text{prod}(\text{exp}(A, D), A) \\
 \downarrow \text{ev} & & & & \downarrow \text{ev} \\
 C & \xrightarrow{g} & & & D
 \end{array}$$

から

$$\begin{array}{ccc}
 \text{prod}(\text{exp}(B, C), A) & \xrightarrow{\text{prod}(\text{curry}(g \circ \text{ev} \circ \text{prod}(\mathbf{I}, f)), \mathbf{I})} & \text{prod}(\text{exp}(A, D), A) \\
 & \searrow \text{goevoprod}(\mathbf{I}, f) & \downarrow \text{ev} \\
 & & D
 \end{array}$$

したがって、

$$\text{exp}(f, g) = \text{curry}(g \circ \text{ev} \circ \text{prod}(\mathbf{I}, f))$$