$$\begin{array}{c|c}
\mathbf{C}_1 & \xrightarrow{J_1} & \mathbf{D}_1 \\
\hline
\mathbf{Cat} & \mathbf{Cat} & \mathbf{Cat} & \mathbf{G} \\
\hline
\mathbf{C}_2 & \xrightarrow{\mathbf{f}} & \mathbf{D}_2
\end{array}$$