$$\begin{array}{c|c}
\mathbf{P}_1 & \xrightarrow{\mathbf{N}} & \mathbf{S}_1 \\
\hline
\mathbf{NRel} & & \mathbf{NSet} & \mathbf{Set} \\
\mathbf{P}_2 & & \mathbf{NRel} & & \mathbf{S}_2
\end{array}$$