

$$\begin{array}{ccccc}
T_1 & \xleftarrow{r_1} & R & \xrightarrow{r_2} & T_2 \\
c_1 \downarrow & & \downarrow r & & \downarrow c_2 \\
F(T_1) & \xleftarrow{F r_1} & F(R) & \xrightarrow{F r_2} & F(T_2)
\end{array}$$