$$r_a(x_0) \xrightarrow{\qquad \qquad } r_1(x_0) \cdot w_1(x_1) \cdot c_1 \xrightarrow{\qquad } r_b(x_1) \cdot c_b$$
 
$$r_b(y_0) \xrightarrow{\qquad \qquad } r_2(y_0) \cdot w_2(y_2) \cdot c_2 \xrightarrow{\qquad } r_a(y_2) \cdot c_a$$