

$$(q, w) \vdash_{M_I}^* (p, \lambda)$$

$$\Downarrow$$

$$(q, va) \vdash_{M_I}^* (r_1, a) \vdash_{M_I} (r_2, \lambda) \vdash_{M_I}^* (p, \lambda)$$

$$\begin{array}{c}
 \underbrace{(q, v) \vdash_{M_I}^* (r_1, \lambda)}_{\substack{\text{(H.I.) } \Downarrow |v| = k \\ (\Lambda(q), v) \vdash_{M_D}^* (R_1, \lambda) \\ \text{amb } R_1 \subseteq \mathcal{P}(k) \\ \text{tal que } r_1 \in R_1}} \quad \underbrace{\quad}_{\substack{r_2 \in \Delta(r_1, a) \\ \Downarrow \text{constrecció de } \delta \\ \Lambda(r_2) \subseteq \delta(R_1, a)}} \quad \underbrace{p \in \Lambda(r_2)}_{\substack{\Downarrow \\ p \in \delta(R_1, a) \\ \Downarrow \\ (R_1, a) \vdash_{M_D} (P, \lambda) \\ \text{per algun } P \subseteq \mathcal{P}(k) \\ \text{tal que } p \in P}} \\
 \Downarrow \\
 (\Lambda(q), va) \vdash_{M_D}^* (R_1, a) \quad \quad \quad \underbrace{\quad}_{\substack{\Downarrow \\ (\Lambda(q), va) \vdash_{M_D}^* (R_1, a) \vdash_{M_D} (P, \lambda)}}
 \end{array}$$