

$$D := \downarrow 1 \uparrow$$

5: e.g.,...

$$\dot{w}, z \in \Sigma^*$$
$$R ::= \perp \mid T$$
$$\langle G, D, e, S, w \cdot z / R \rangle$$
$$\langle G, \downarrow, E, E, w, \delta/B \rangle \triangleright \text{NOT } \langle G, \uparrow, E, E, w, \delta/T \rangle$$
 ~~$\langle G, \perp, a, E, W, z/B \rangle \rightarrow \langle G, \perp$~~
$$\langle G, \downarrow, a, E, w.a_3/B \rangle \triangleright \langle G, \uparrow, a, E, w.a_3/T \rangle$$
$$\langle G, \beta, \alpha, E, w, b \rangle / B \rangle \triangleright \langle G, \beta, \alpha, E, w, b \rangle / L$$
$$\langle G, b, a, E, w, \lambda \rangle \vdash \langle G, a, a, E, w, \lambda \rangle$$
$$\langle G, \downarrow, e_1, e_2, E, \omega \cdot \beta / B \rangle \triangleright \langle G, \downarrow, e_1, e_2, E, \omega \cdot \beta / B \rangle$$
$$\langle G, \uparrow, e_1, e_2 E, w, \beta / \perp \rangle \triangleright \langle G, \downarrow, e_2, e_1 E, w, \beta / \perp \rangle$$
$$\langle G, \uparrow, e_1, e_2 \in E, w.z. / I \rangle \triangleright \langle G, \uparrow, e_1 / e_2, E, w.z. / T \rangle$$
$$\langle G, \downarrow, x, E, \omega \cdot \beta / B \rangle \triangleright \langle G, \downarrow, G(x), E, \omega \cdot \beta / B \rangle$$
$$\langle G, \downarrow, e^*, E, w. \downarrow B \rangle \triangleright \langle G, \downarrow, e, *E, w. \downarrow B \rangle$$
$$\langle G, \uparrow, c, E, w, g/T \rangle \triangleright \langle G, \uparrow, c, E, w, g/\overline{T} \rangle$$
$$\langle G, f, e, *E, w.z/1 \rangle \triangleright \langle G, f, e*, E, w.z/(\mathbb{T}) \rangle$$
$$\langle G, \downarrow, !e, E, \omega, \beta(B) \rangle \quad \langle G, \downarrow, e, !E, \omega, \beta(B) \rangle$$
$$\langle G, \uparrow, !e, !E, \omega \cdot \delta / \perp \rangle \triangleright \langle G, \uparrow, !e, \omega \cdot \delta / \top \rangle$$

não tem como
saber se é DJ
ou não.

~~Gib E,~~
$$\langle G, \downarrow e, E, w \| z \| B \rangle \triangleright \langle G, \uparrow e, E, w \| z \| T \rangle \quad \langle G, \uparrow e, !E, w \| x \| z \| T \rangle \triangleright \langle G, \uparrow !e, w \| x \| z \| T \rangle$$
$$\langle G, \downarrow a, E, \omega | \beta \rangle_B \triangleright \langle G, \uparrow a, E, \omega | \alpha \rangle_{\Gamma} \quad \omega | \alpha | \beta$$
$$\langle G, \vdash a, E, w \mid b_3 \rangle \triangleright \langle G, \vdash a, E, w \mid b_3 \mid \perp \rangle$$
$$\langle G, \downarrow a, E, \omega \mid \lambda \rangle \triangleright \langle G, \uparrow a, E, \omega \mid \lambda / \perp \rangle$$
$$\langle G, \downarrow e_1, e_2, w \parallel \beta \rangle \neq \langle G, \downarrow e_1, / e_2 E, w \parallel \beta \rangle$$
$$\langle G, \{e_1, e_2\} E, \omega | x | 3 \rangle \triangleright \langle G, \{e_1, e_2\} E, \omega x | 1 \rangle$$
$$\langle G, \uparrow e_1, e_2 \in E, w \| \beta / L \rangle \triangleright \langle G, \uparrow e_2, e_1 \in E, w \| \beta / B \rangle$$
$$\langle G, \uparrow c_2, c_1/E, \omega_{\mathbb{H}^3/T} \rangle \triangleright \langle G, \uparrow c_1/c_2, E, \omega_{\mathbb{H}^3/T} \rangle$$
$$\langle G, \uparrow c_2, c_1/E, w \| \beta / 1 \rangle \vdash \langle G, \uparrow c_1/c_2, E, w \| \beta / 1 \rangle$$

~~Gett, e, e,~~

$$\langle G, \uparrow, e, !E, \omega_{||\beta/\perp} \rangle \triangleright \langle G, \uparrow !e, E, \omega_{||\beta/\perp} \rangle$$
 $\langle G, \uparrow e, !$