$$\llbracket \mathsf{T} \rrbracket = \mathcal{P}(\mathsf{Val}) = \mathsf{Type}$$
$$\llbracket \mathsf{E} \rrbracket = \llbracket \mathsf{R} \rrbracket = \mathcal{P}(\mathsf{Exp} \times \mathbb{N} \times \mathsf{Type}) = \mathsf{Eff}$$

$$\mathrm{Obs} = \{ e \mid \exists v.\, e \to^* v \}$$

$$\mathcal{E}\llbracket \tau/\rho \rrbracket_\eta = \{ t \mid \forall K \in \mathcal{K}\llbracket \tau/\rho \rrbracket_\eta.\, K[t] \in \mathrm{Obs} \}$$
$$\mathcal{K}\llbracket \tau/\rho \rrbracket_\eta = \{ K \mid \forall v \in \llbracket \tau \rrbracket_\eta.\, K[v] \in \mathrm{Obs} \wedge \forall s \in \mathcal{S}\llbracket \tau/\rho \rrbracket_\eta.\, K[s] \in \mathrm{Obs} \}$$
$$\mathcal{S}\llbracket \tau/\rho \rrbracket_\eta = \{ K[\mathsf{do}\, v] \mid \exists n, \mu.\, (v, n, \mu) \in \llbracket \rho \rrbracket_\eta \wedge n\text{-free}(K) \wedge \forall e \in \mu.\, K[e] \in \mathcal{E}\llbracket \tau/\rho \rrbracket_\eta \}$$

$$\llbracket \tau_1 \to_\rho \tau_2 \rrbracket_\eta = \{ \lambda x.\, t \mid \forall v \in \llbracket \tau_1 \rrbracket.\, [x \mapsto v] t \in \mathcal{E}\llbracket \tau_2/\rho \rrbracket_\eta \}$$
$$\llbracket \forall \alpha :: \kappa.\, \tau \rrbracket_\eta = \{ v \mid \forall \mu \in \llbracket \kappa \rrbracket.\, v \in \llbracket \tau \rrbracket_{[\alpha \mapsto \mu]\eta} \}$$
$$\llbracket \alpha \rrbracket_\eta = \eta(\alpha)$$

$$\llbracket \tau_1 \Rightarrow \tau_2 \rrbracket_\eta = \{ (v, 0, \llbracket \tau_2 \rrbracket_\eta \mid v \in \llbracket \tau_1 \rrbracket_\eta \}$$
$$\llbracket \forall \alpha :: \kappa.\, \varepsilon \rrbracket_\eta = \{ t \mid \exists \mu \in \llbracket \kappa \rrbracket.\, t \in \llbracket \varepsilon \rrbracket_{[\alpha \mapsto \mu]\eta} \}$$
$$\llbracket \varepsilon \cdot \rho \rrbracket_\eta = \llbracket \varepsilon \rrbracket_\eta \cup \{ (v, n+1, \mu) \mid (v, n, \mu) \in \llbracket \rho \rrbracket_\eta \}$$

$$\mathcal{E}\llbracket \tau/\rho \rrbracket_\eta(X) = \{ t \mid \forall K \in \mathcal{K}\llbracket \tau/\rho \rrbracket_\eta(X).\, K[t] \in \mathrm{Obs} \}$$
$$\mathcal{K}\llbracket \tau/\rho \rrbracket_\eta(X) = \{ K \mid \forall v \in \llbracket \tau \rrbracket_\eta.\, K[v] \in \mathrm{Obs} \wedge \forall s \in \mathcal{S}\llbracket \tau/\rho \rrbracket_\eta(X).\, K[s] \in \mathrm{Obs} \}$$
$$\mathcal{S}\llbracket \tau/\rho \rrbracket_\eta(X) = \{ K[\mathsf{do}\, v] \mid \exists n, \mu.\, (v, n, \mu) \in \llbracket \rho \rrbracket_\eta \wedge n\text{-free}(K) \wedge \forall e \in \mu.\, K[e] \in X \}$$

$$\mathcal{C}\llbracket \tau_1/\rho_1 \rightsquigarrow \tau_2/\rho_2 \rrbracket_\eta = \{ K \mid \forall v \in \llbracket \tau_1 \rrbracket_\eta.\, K[v] \in \mathcal{E}\llbracket \tau_2/\rho_2 \rrbracket_\eta \wedge$$
$$\forall e \in \mathcal{S}\llbracket \tau_1/\rho_1 \rrbracket_\eta.\, K[e] \in \mathcal{E}\llbracket \tau_2/\rho_2 \rrbracket_\eta \}$$