$$V_{\rho}(v) = \rho(v)$$

$$V_{\rho}(\lambda v.e) = \{(\varepsilon, (\lambda v.e, \rho))\}$$

$$V_{\rho}(e \ e') = V_{\rho}(e) \bowtie V_{\rho}(e')$$

$$V_{\rho}(\mathbf{let} \ v=e \ \mathbf{in} \ e') = V_{\rho}(\lambda v.e') \bowtie V_{\rho}(Y \ (\lambda v.e))$$

$$\text{where} \ Y = \lambda r.(\lambda x.r \ (x \ x)) \ (\lambda x.r \ (x \ x))$$

$$V_{\rho}(\mathbf{share} \ v=e \ \mathbf{in} \ e') = \{(\bar{q} \ \bar{q}', \underline{e}') \mid (\bar{q}, \underline{e}) \in V_{\rho}(e), (\bar{q}', \underline{e}') \in \{(\varepsilon, (\lambda v.e', \rho))\} \bowtie \{(\varepsilon, \underline{e})\}\}$$

$$V_{\rho}(a \prec) = \{(\varepsilon, a \prec)\}$$

$$V_{\rho}(a \prec e^{n}) = \{(\bar{q}^{n}, a \prec e'^{n}) \mid ((\bar{q}_{i}, e'_{i}) \in V_{\rho}(e_{i}))^{i:1..n}\}$$

$$V_{\rho}(\mathbf{dim} \ D \land t^{n}) \ \mathbf{in} \ e) = \{(D.t_{i} \ \bar{q}, e') \mid i \in \{1, ..., n\}, (\bar{q}, e') \in V_{\rho}(\lfloor e \rfloor_{D.i})\}$$