

## R-state-var-compat2<sup>11,40</sup>

$\forall i:\text{Id}, ds:x:\text{Id} \text{ fp} \rightarrow \text{Type}, da:k:\text{Knd} \text{ fp} \rightarrow \text{Type}, x, y:\text{Id}, T_1, T_2:\text{Type}, ks_1, ks_2:(\text{Knd List}),$   
 $tr_1:(k:\{k:\text{Knd} \mid (k \in ks_1)\}) \rightarrow \text{State}(ds) \rightarrow \text{Valtype}(da;k) \rightarrow T_1 \rightarrow T_1,$   
 $tr_2:(k:\{k:\text{Knd} \mid (k \in ks_2)\}) \rightarrow \text{State}(ds) \rightarrow \text{Valtype}(da;k) \rightarrow T_2 \rightarrow T_2.$   
 $(\neg(x = y))$   
 $\Rightarrow ds \parallel x : T_1$   
 $\Rightarrow ds \parallel y : T_2$   
 $\Rightarrow \text{R-state-var}(i;ds;da;x;T_1;ks_1;tr_1) \parallel \text{R-state-var}(i;ds;da;y;T_2;ks_2;tr_2)$