

es-knows-knows^{11,40}

$$\begin{aligned}
& \forall poss: (ES\{i\} \rightarrow \mathbb{P}\{i'\}), R: (\text{possible-event}\{i:l\}(poss) \rightarrow \text{possible-event}\{i:l\}(poss) \rightarrow \mathbb{P}\{i'\}). \\
& \text{Trans}(\text{possible-event}\{i:l\} \\
& \quad (poss); a, b. R(a, b)) \\
& \Rightarrow (\forall P: (\text{possible-event}\{i:l\}(poss) \rightarrow \mathbb{P}\{i'\}), e: \text{possible-event}\{i:l\}(poss). \\
& \quad \text{es-knows}\{i:l\} \\
& \quad (poss; R; P; e) \\
& \Rightarrow \text{es-knows}\{i:l\} \\
& \quad (poss; R; (\lambda e. \text{es-knows}\{i:l\}(poss; R; P; e)); e))
\end{aligned}$$