

$wrh(x) :- move(x,y), \neg wrh(y).$
 $lose(x) :- pos(x), \neg wrh(x). \quad (I)$

The diagram illustrates a transition between two states across a vertical line.
 On the left side (labeled $\neg wrh$ and $lose$ in red), there are three red boxes: the top one contains $\{k, n, j, e\}$, the middle one contains k, n, j, e , and the bottom one contains k, n, j .
 On the right side (labeled wrh in green), there are three green boxes: the top one contains c, d, a, b, i , the middle one contains a, b , and the bottom one contains a, b, i .
 Blue arrows labeled 'move' and 'lose' indicate transitions from the left state to the right state.

Jan 11-10:07

$lose(x) :- pos(x), \neg wrh(x)$

$\Rightarrow P \leftarrow \neg Q$
 $\text{FOL} \Rightarrow P \vee Q ?$
 $\text{FOL} \Rightarrow Q \leftarrow \neg P$

$\left. \begin{array}{l} P \leftarrow \neg Q \\ P \vee Q ? \\ Q \leftarrow \neg P \end{array} \right\} LP \neq$

Jan 11-10:33

Grundanz von P (wds move)

→ was repl/instanzen deren $\text{move}(\dots)$ erfind
ist (EDB)

P Grund

$\text{wh}(a) :- \text{move}(a, f), \text{turn}(f).$
 $\text{wh}(a) :- \text{move}(a, b), \text{turn}(b).$
 $\text{wh}(b) :- \text{move}(b, k), \text{turn}(k).$
 $\text{wh}(b) :- \text{move}(b, c), \text{turn}(c).$
 \vdots
 a
 c
 e
 keine Regel mit $\text{wh}(\underline{f})$ im head

Sele 0:
 alle good-
 ohne
 falsch
 (alle moves
 falsch!)

$\mathcal{I}_0 \rightarrow$ Regel anwenden \rightarrow lalet nicht sagb, oder
 Falsch $\text{move}(\dots)$ aus EDB

$\mathcal{I}_1 = \text{EDB}$

Jan 11-10:51

$\mathcal{I}_1 = \text{EDB}$, alle $\text{wh}(\dots)$ falsch

$\text{wh}(a) :- \text{move}(a, f), \text{turn}(f) \checkmark$
 $\text{wh}(a) :- \text{move}(a, b), \text{turn}(b) \checkmark$
 $\text{wh}(b) :- \text{move}(b, k), \text{turn}(k) \checkmark$
 $\text{wh}(b) :- \text{move}(b, c), \text{turn}(c) \checkmark$
 \vdots
 a
 c
 e
 keine Regel mit $\text{wh}(\underline{f})$ im head

$\Rightarrow \mathcal{I}_2 = \{ \text{wh}(a), \text{wh}(b), \dots$
 alle x sodass eine $\text{move}(x, y) \exists \} \vee \text{EDB}$
 also: $\text{wh}(f)$ nicht (k, h, j and other)

Jan 11-10:53

mit \mathcal{X}_2 (f, k, y, j mit wh)

$wh(a) := move(a, f), \neg turn(f) \checkmark$

~~$wh(a) := move(a, b), \neg turn(b)$~~

$wh(b) := move(b, k), \neg turn(k) \checkmark$

~~$wh(b) := move(b, c), \neg turn(c)$~~

~~$wh(c) := move(c, a), \neg turn(a)$~~

Keine Regelstufe mit $wh(f)$ im head

$wh(b) \in \mathcal{X}_2$
 $wh(c) \in \mathcal{X}_2$
 $wh(a) \in \mathcal{X}_2$

einige Regel zu $wh(e)$

$\Rightarrow \mathcal{X}_3 = \{ wh(a), wh(b) \}, f, \dots$ nicht
 $\rightarrow wh(e)$ auch nicht!

\mathcal{X}_4
 \mathcal{X}_5
 $\mathcal{X}_6 = \mathcal{X}_4$
 $\mathcal{X}_7 = \mathcal{X}_5$ fertig

Jan 11-10:54

$P = P(a) := P(a).$

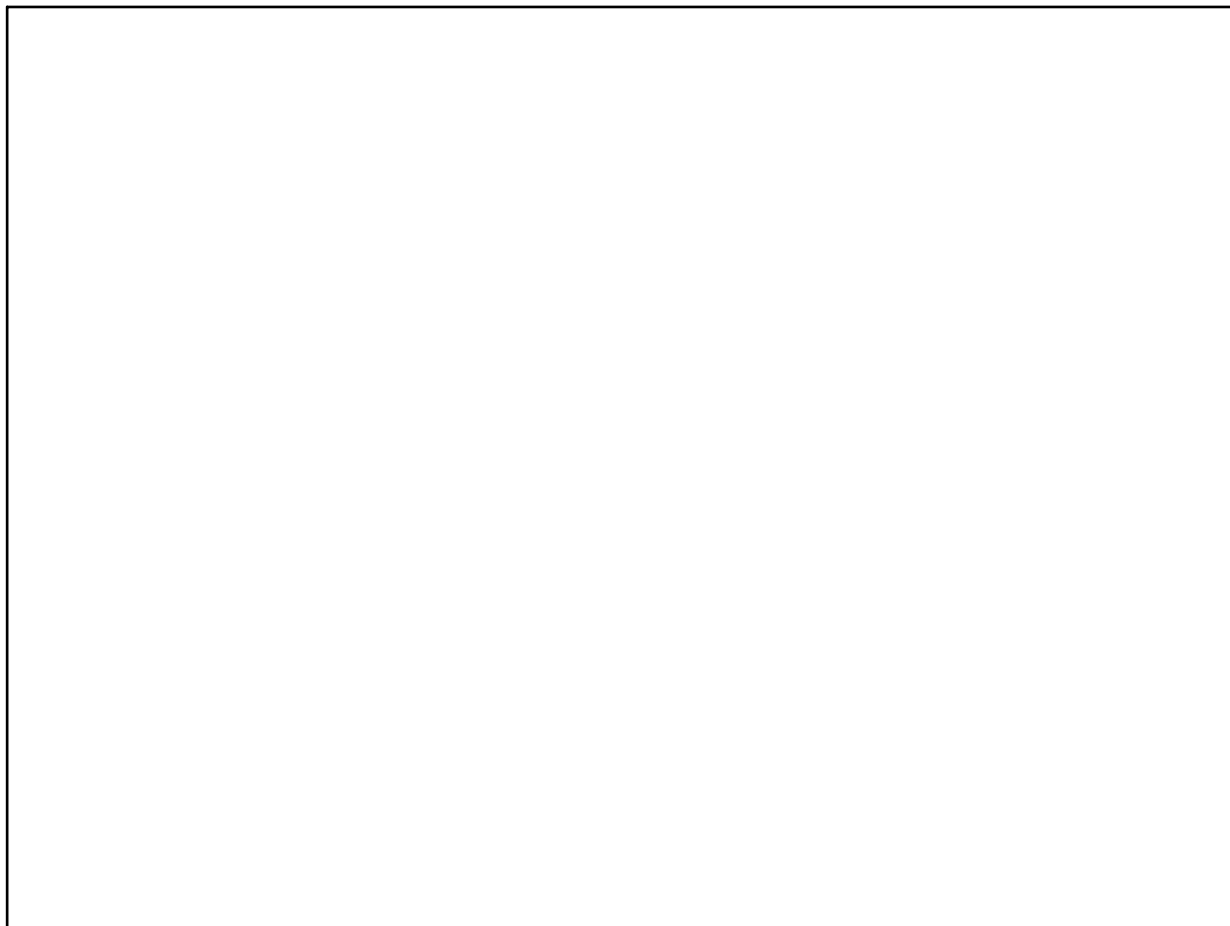
$\mathcal{X} = \{ P(a) \}$

$p_{\mathcal{X}} = P$

$\bar{T}p_{\mathcal{X}}(\mathcal{X}) = \mathcal{X}$

$\bar{T}p_{\mathcal{X}}(\emptyset) = \emptyset \rightarrow \mathcal{X}$ ist kein Peletesmodell von P

Jan 11-11:00



Jan 11-11:09