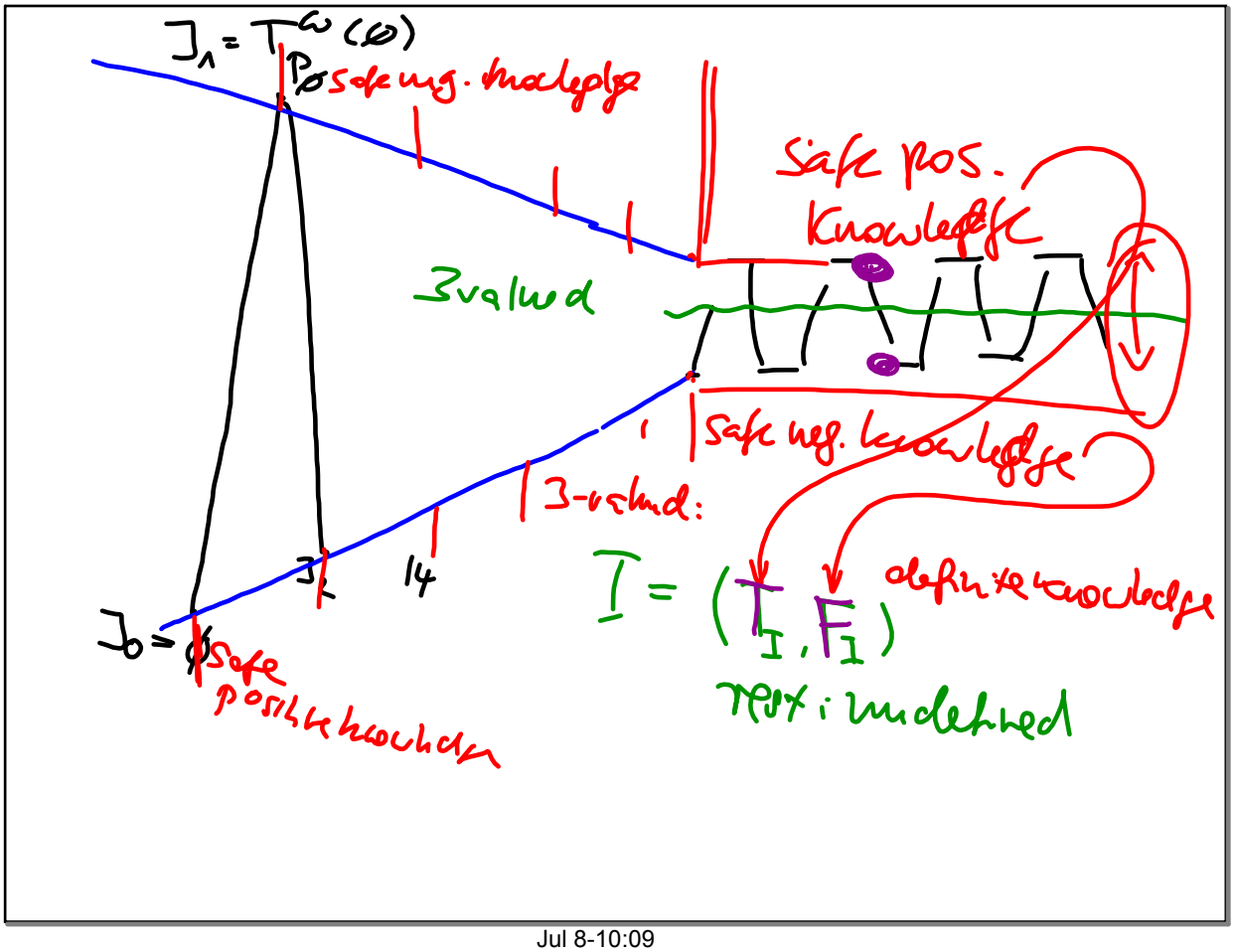


Jul 8-10:09

3-valued:

$\underline{I} = (T_I, F_I)$ definite knowledge

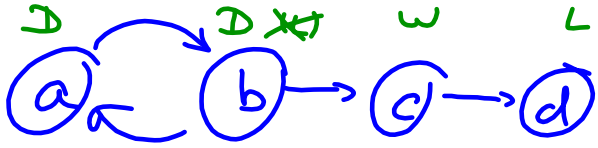
next: undefined

$\Rightarrow$ some notion of "more knowledge":

undefined is less knowledge than "true" or "false"

Jul 8-10:26

Sl. 614



$I_0 = \phi$

$I_1 = T^{\omega}_{P_\phi}(\phi)$

$P_\phi = \{$ pos... move...

win(a) ← move(a,b)
win(b) ← move(b,c)
win(c) ← move(c,d)
lose(a) ← true
lose(b) ← true
lose(c) ← true
lose(d) ← true $\}$

$= \{$ win(a), win(b), win(c), lose(a), lose(b), lose(c), lose(d) $\}$ ← not win(a)

Jul 8-10:42

I_1.. win(a) is false ....

$I_2 = T^{\omega}_{P_{I_1}}(\phi)$

$= \{$ win(c) lose(d) $\}$

$P_{I_1} = \{$ ....

win(c) :- move(c,d)

lose(d) :- pos(d). $\}$

underestimate! → definitely true knowledge

$I_3 = T^{\omega}_{P_{I_2}}(\phi)$

$P_{I_2} = \{$ ...

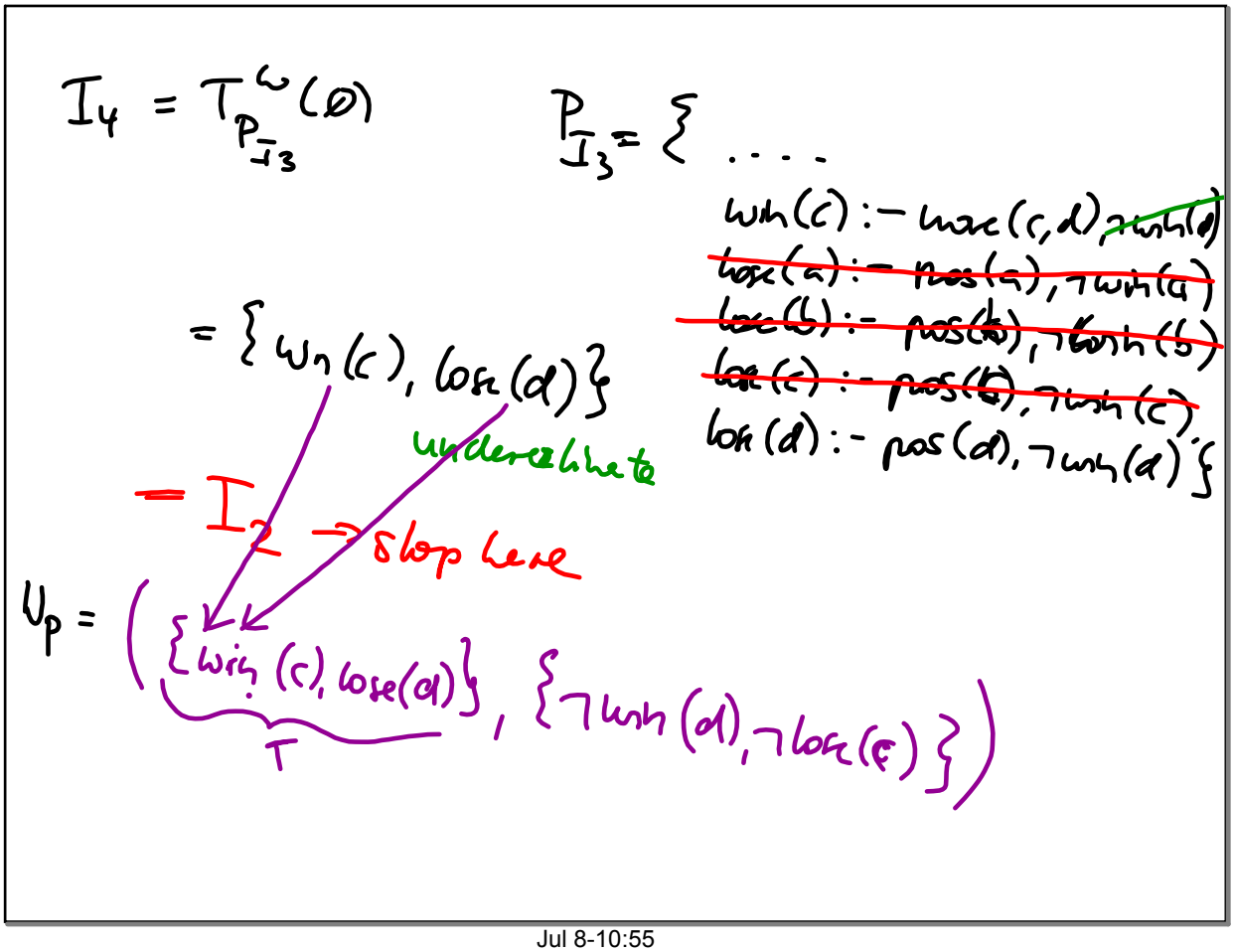
win(a) :- move(a,b)
win(b) :- move(b,a)
~~win(c) :- move(c,d), not win(d)~~
lose(a) :- fail
lose(b) :- true
~~lose(c) :- not win(c)~~
lose(d) :- pos(d), ~~not win(d)~~ $\}$

$= \{$ win(a), win(b), win(c), lose(a), lose(b), lose(d) $\}$

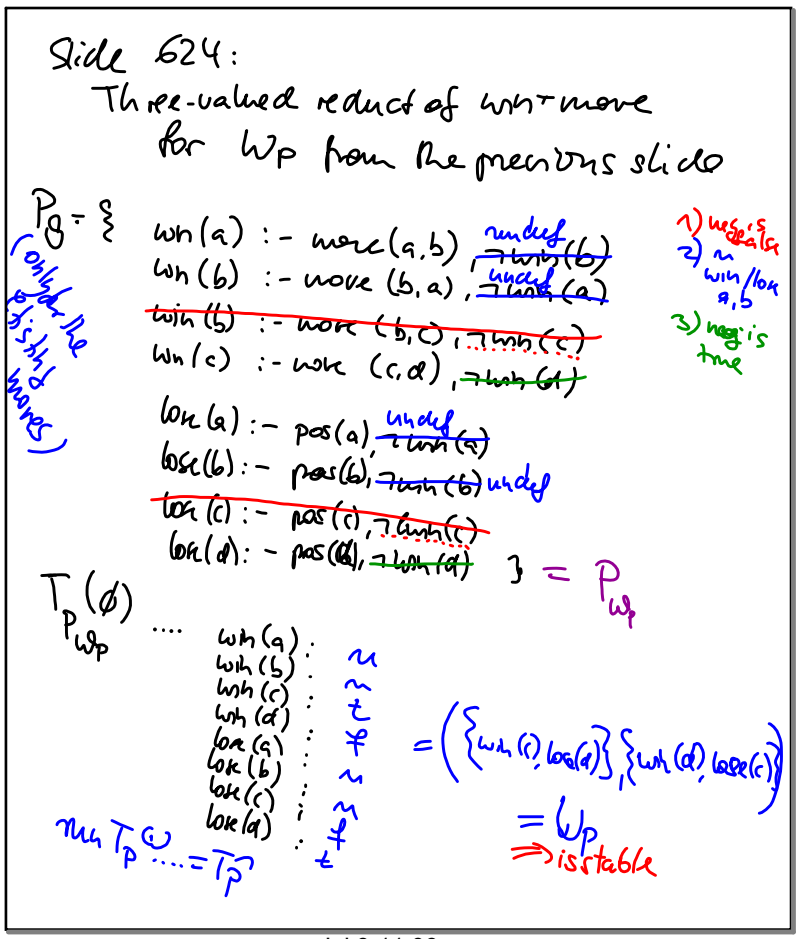
overestimate

$\Rightarrow \neg$ win(a) is definitely true
$\neg$ lose(c) " " "

Jul 8-10:46



Jul 8-10:55



Jul 8-11:06

Exercises:

- big win-move-game from Slide 616:
  - Site WP, show 3-valued stability
- big win-move-game:
  Start AFP computation with
  win(f), lose(c), lose(h)
  lose(k), win(b)

there are wrong

here are true

Jul 8-11:21

Sl. 627:

... two ~~total~~ 3-stable models:

T F

({p(a)}, {q(a)})

({q(a)}, {p(a)})

T F

Jul 8-11:40