

$P_{s,i}$: student s is younger
than instructor i

S : finite set of all students

I : finite set of all instructors

$$\bigwedge_{s \in S} \bigvee_{i \in I} P_{s,i}$$

$S(x)$: x is a student

$I(x)$: x is an instructor

$Y(x, y)$: x is younger than y

$\forall x (S(x) \rightarrow \exists y (I(y) \wedge Y(x, y)))$

$(\forall x (\text{Man}(x) \rightarrow \text{Mortal}(x)) \wedge \text{Man}(\text{socrates}))$

$\rightarrow \text{Mortal}(\text{socrates})$

$\forall x (\text{Child}(x) \rightarrow \text{Younger}(x, \text{mother}(x)))$