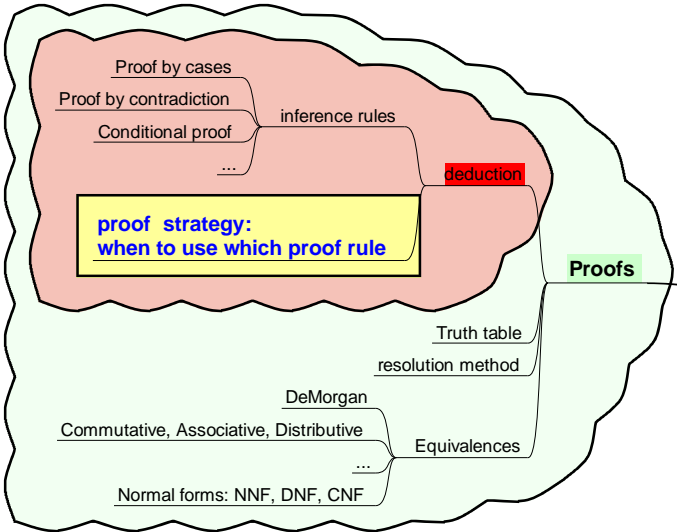
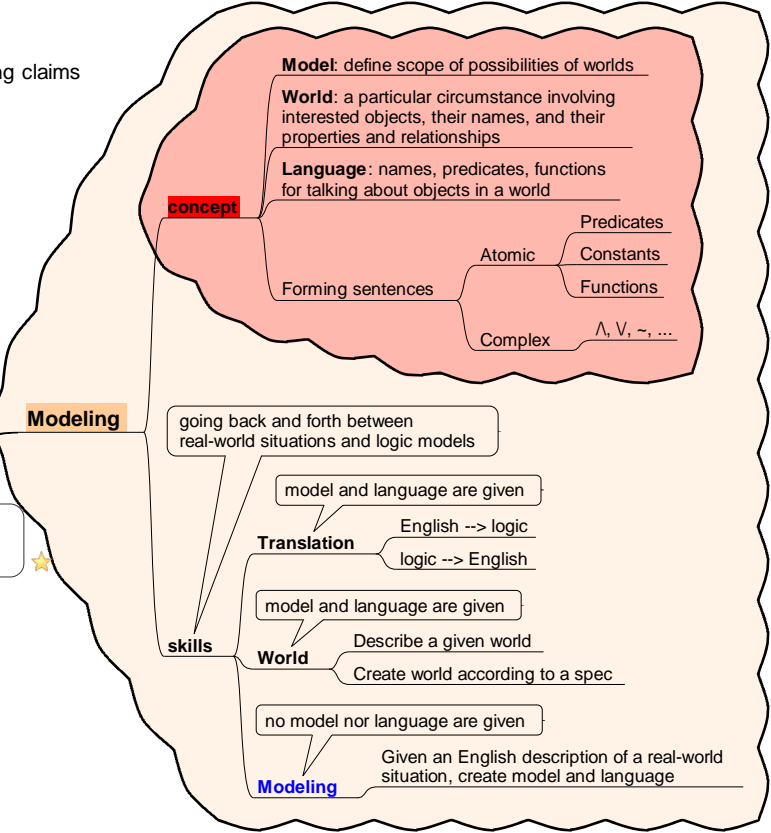
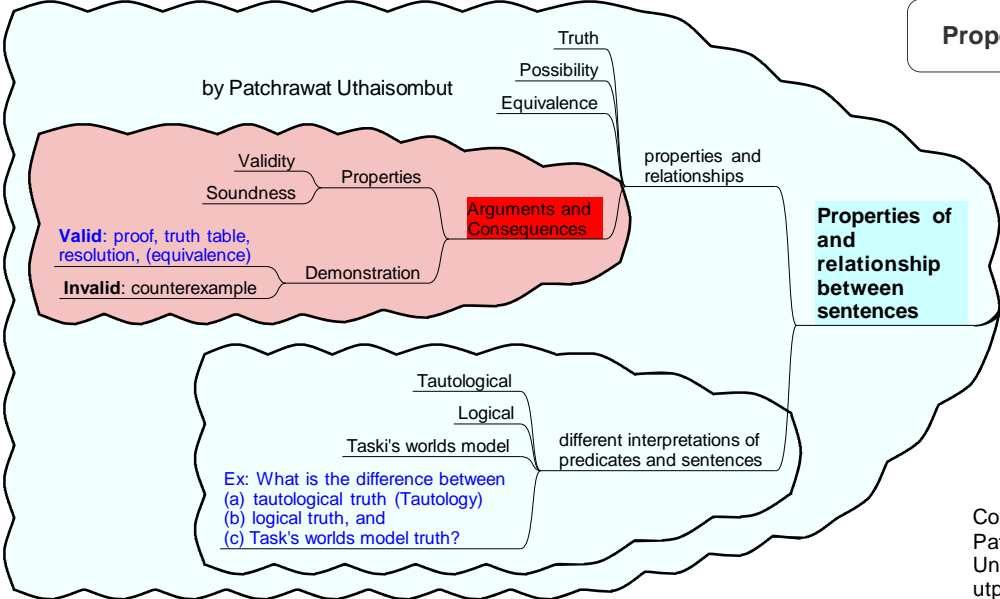


Propositional Logic



Formalizing ways to state claims
 Formalizing ways to state relationship among claims
 Formalizing ways to reason about claims



representative problem

Suppose the following are true.
 The wizard is either happy or angry.
 The dragon is afraid whenever the wizard is angry.
 The dragon hides in his lair if he is afraid.
 The dragon is out playing in the sky.
 The wizard is angry if he can't find his hat
 Can we conclude the following?
 The wizard has his hat

Create a logic model for this situation.
 Determine whether the last sentence is true
 Demonstrate that the last sentence is true (or false)

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