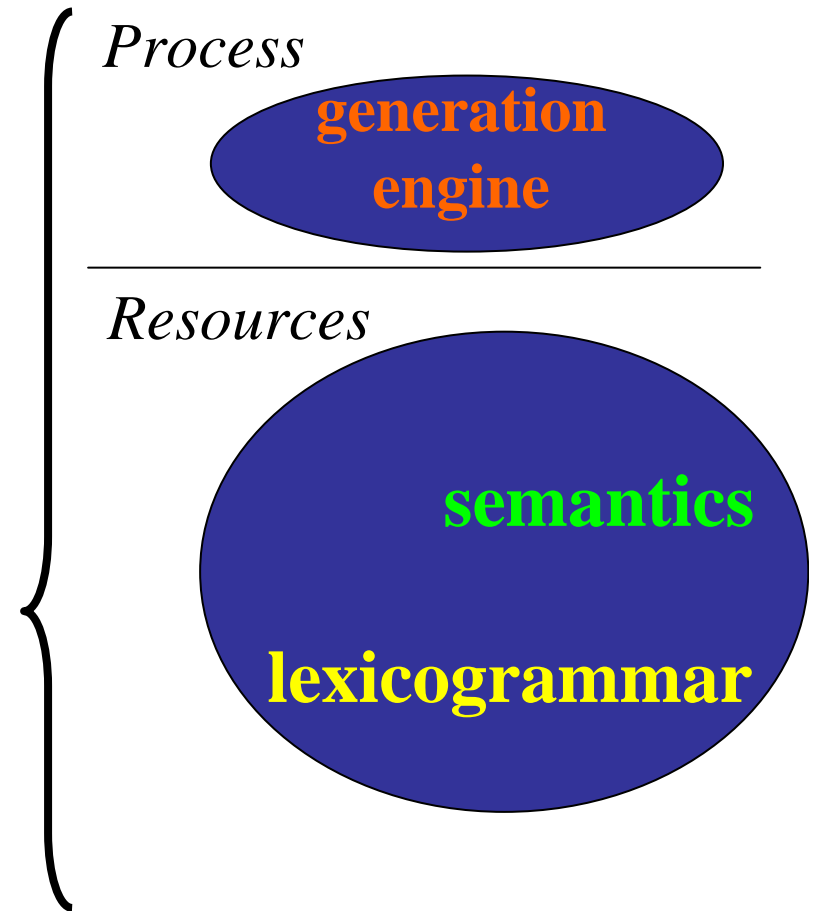
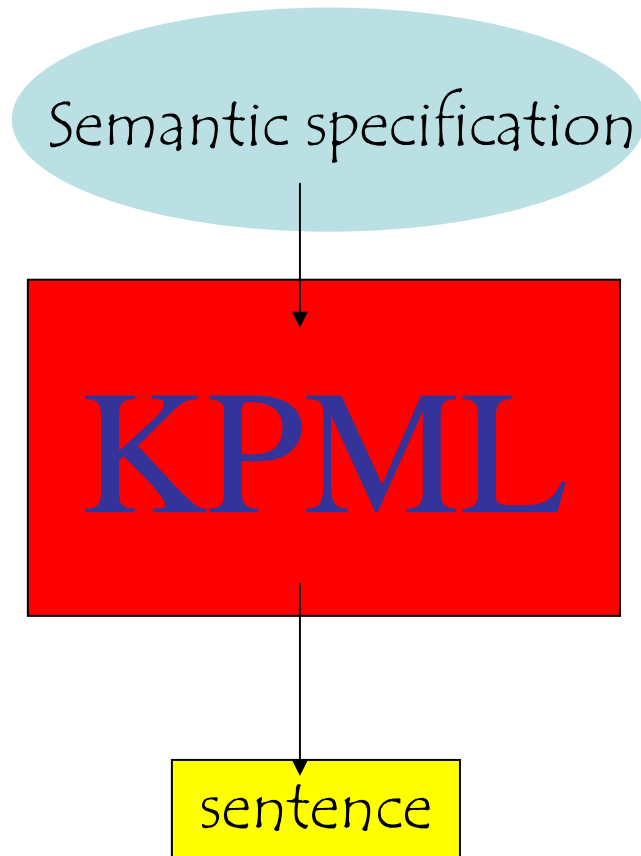


Semantics for NLG

KPML

(tactical generation)

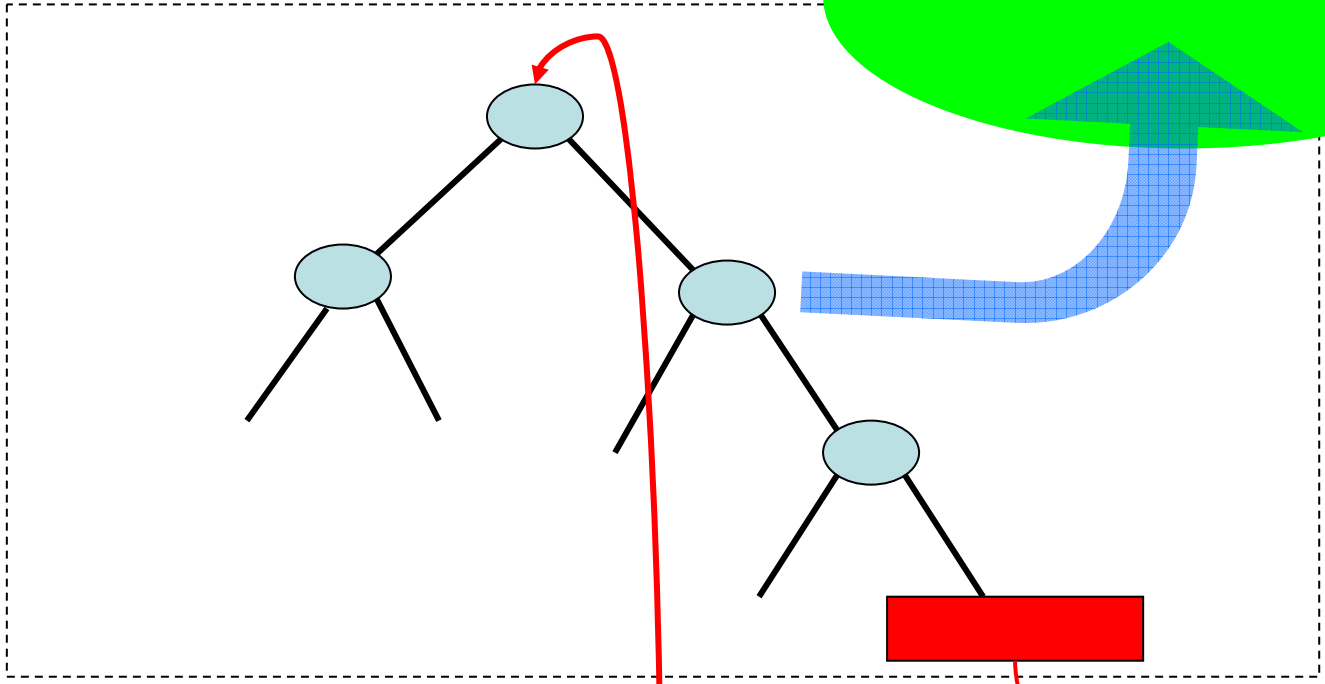


Resources for Generation

- Grammar definition (network)
- Lexicon definition

CHOOSERS & INQUIRIES

semantics

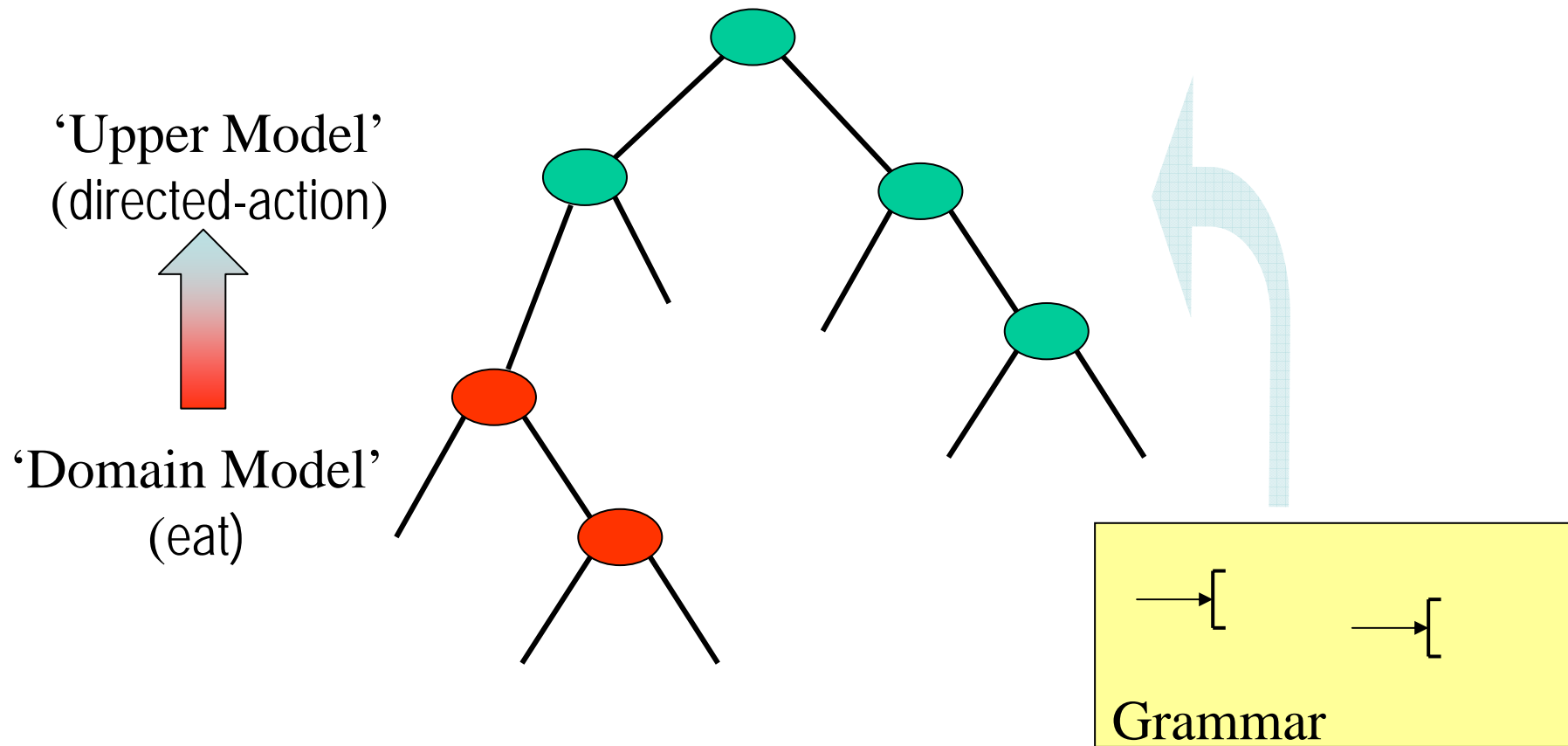


imperative
indicative

interrogative
declarative

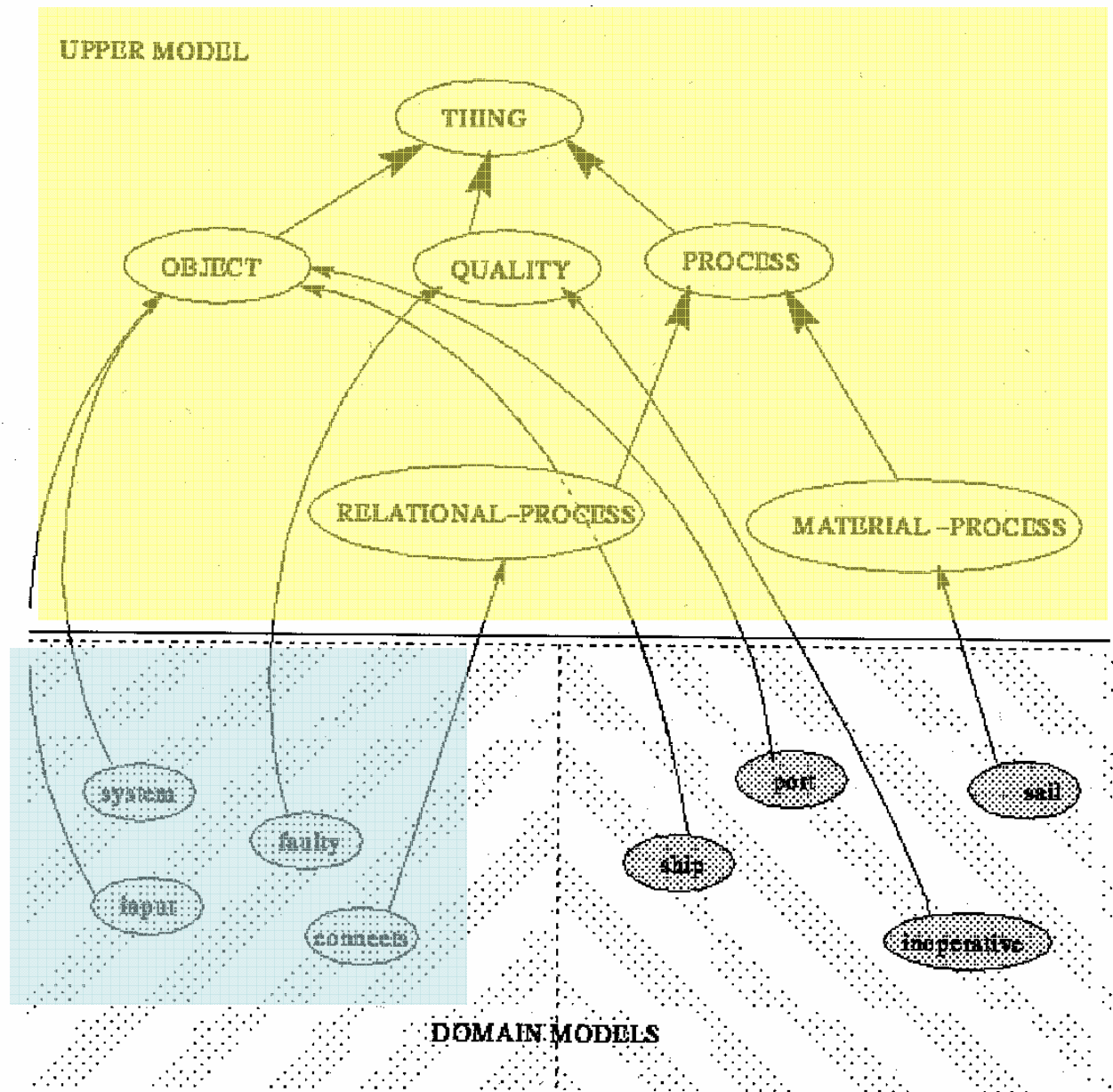


Control from an ontology



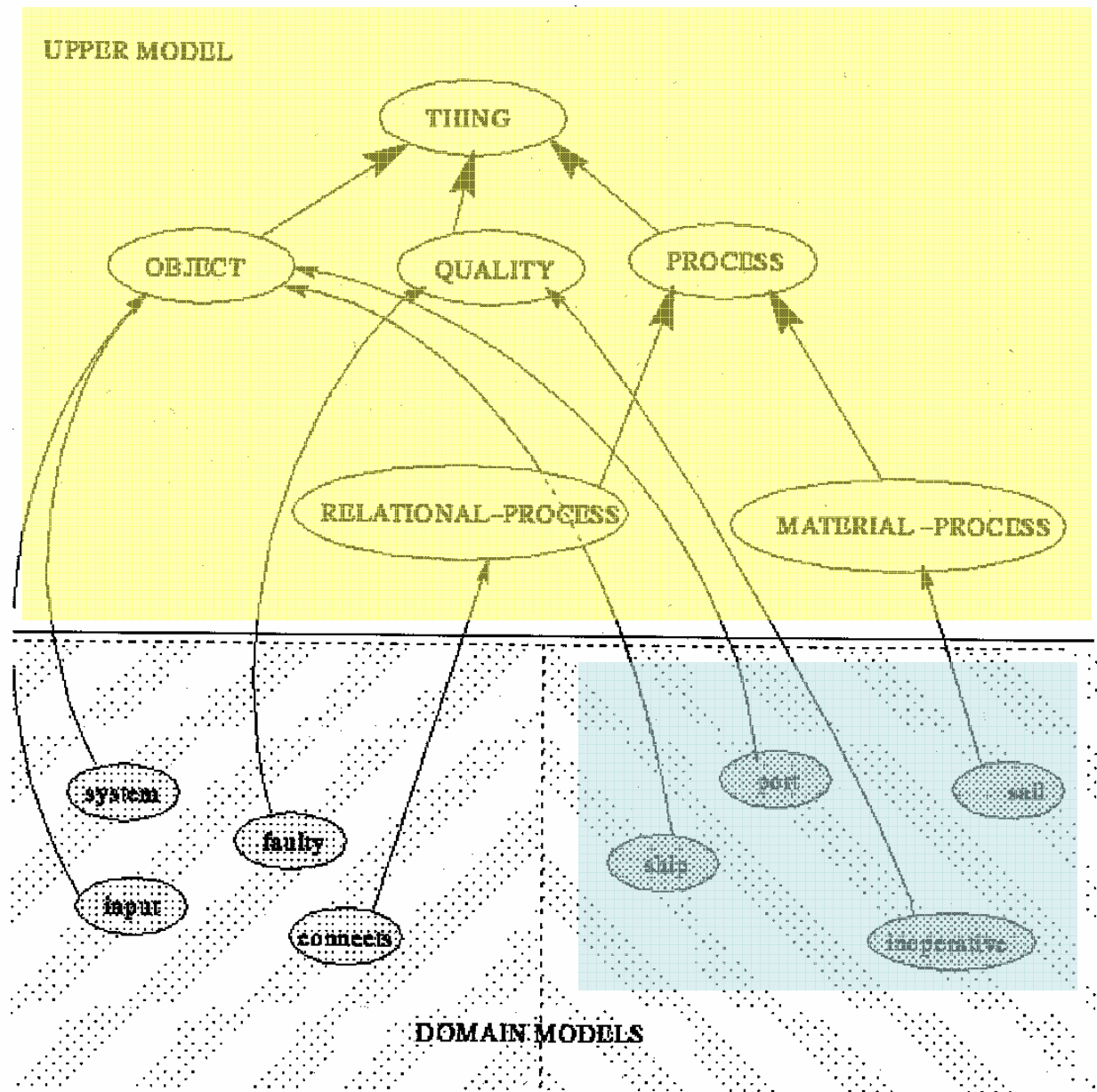
Relation between upper model and domain models

(1988-1990)

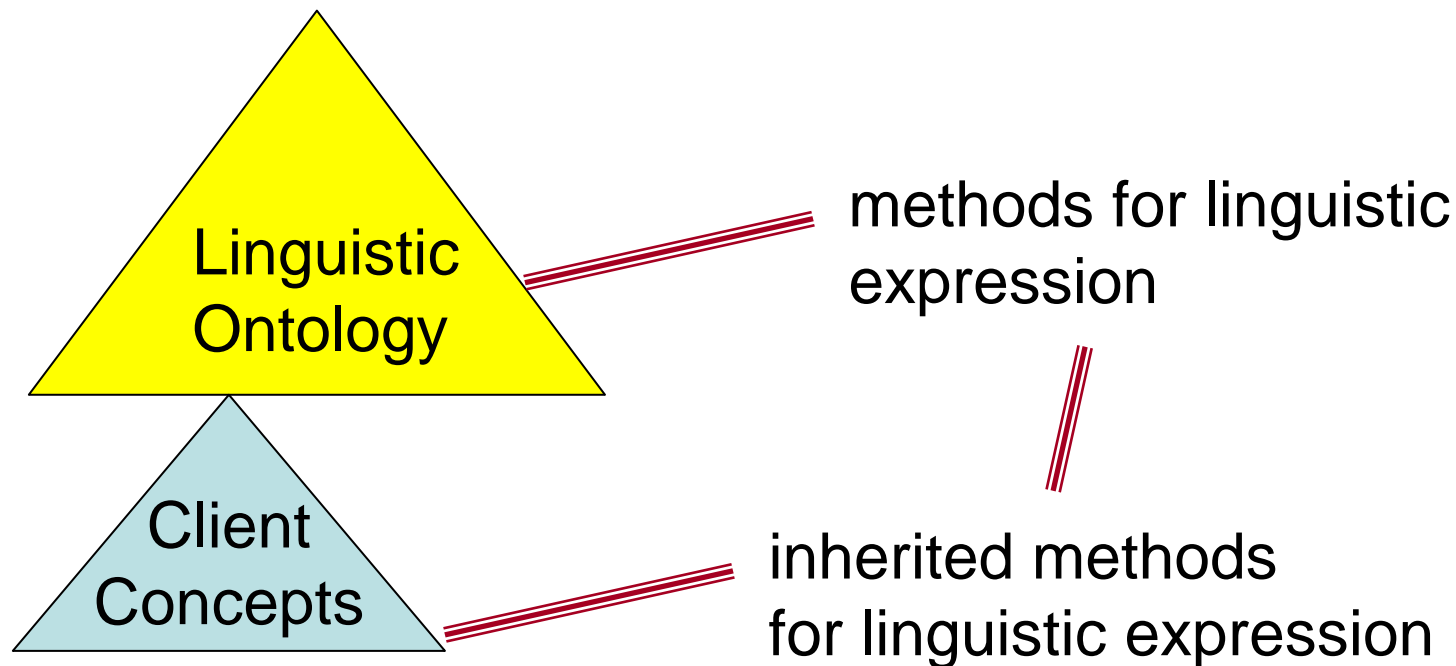


Relation between upper model and domain models

(1988-1990)



Relations between ontology and client knowledge representation



Semantic Input: Sentence Plan Language (SPL)

“The robot moves to the red block”

(x / nondirected-action :lex move
: *actor* (r / object :lex robot)
: *destination*
 (p / object :lex block
 : *color-property-ascription*
 (c / color-quality :lex red))))

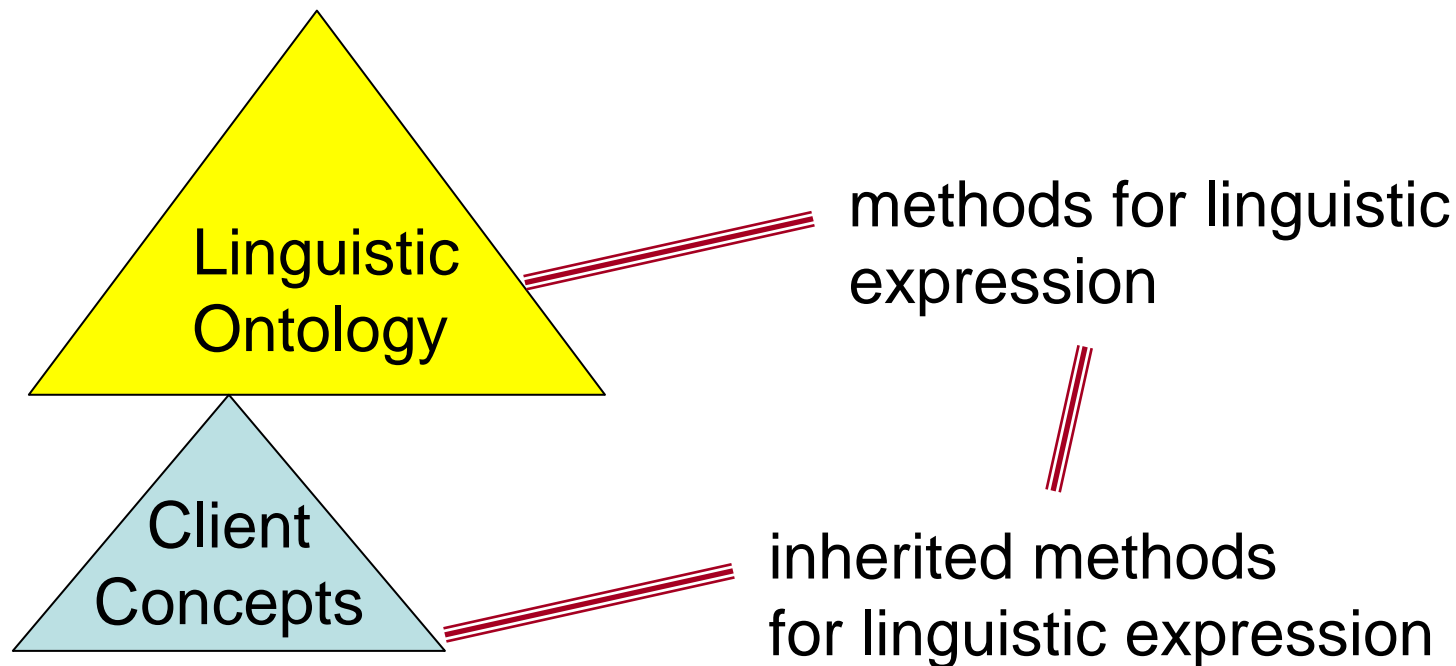
Upper model concepts

Upper model relations

KPML: downloading

- <http://www.fb10.uni-bremen.de/anglistik/langpro/kpml/long-black-box-instructions.htm>

Relations between ontology and client knowledge representation



Example of use: semantic specifications

concepts and relations drawn from the upper model only

“The robot moves to the red block”

(x / nondirected-action :lex move
: *actor* (r / object :lex robot)
: *destination*
 (p / object :lex block
 : *color-property-ascription*
 (c / color-quality :lex red))))

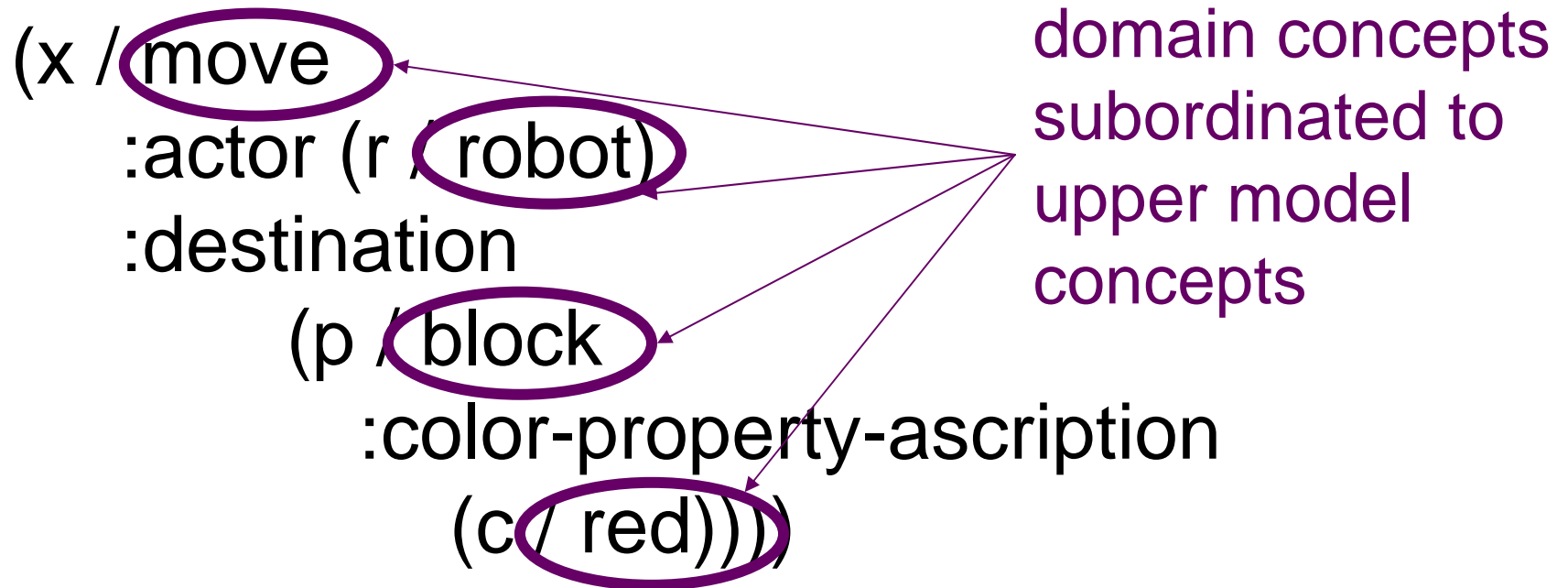
Upper model concepts

Upper model relations

Example of use: semantic specifications

moving domain concepts into the semantic specifications

“The robot moves to the red block”



Resources for Generation

- Grammar definition (network)
- Lexicon definition
- Domain model definition

Generating Sentences

- basic event structure
- reliance on ontological knowledge
- directed/non-directed actions
- temporal information
- polarity
- speech acts
- textual appropriateness
 - :theme
 - :identifiability-q identifiable
 - :empty-number-q empty

*Short Documentation /
Information on writing
semantics specifications:*

<http://www.fb10.uni-bremen.de/anglistik/langpro/kpml/Doc/tutorial/tutorial.htm>

Resources for Generation

- Grammar definition (network)
- Lexicon definition
- Domain model definition
- Text planning