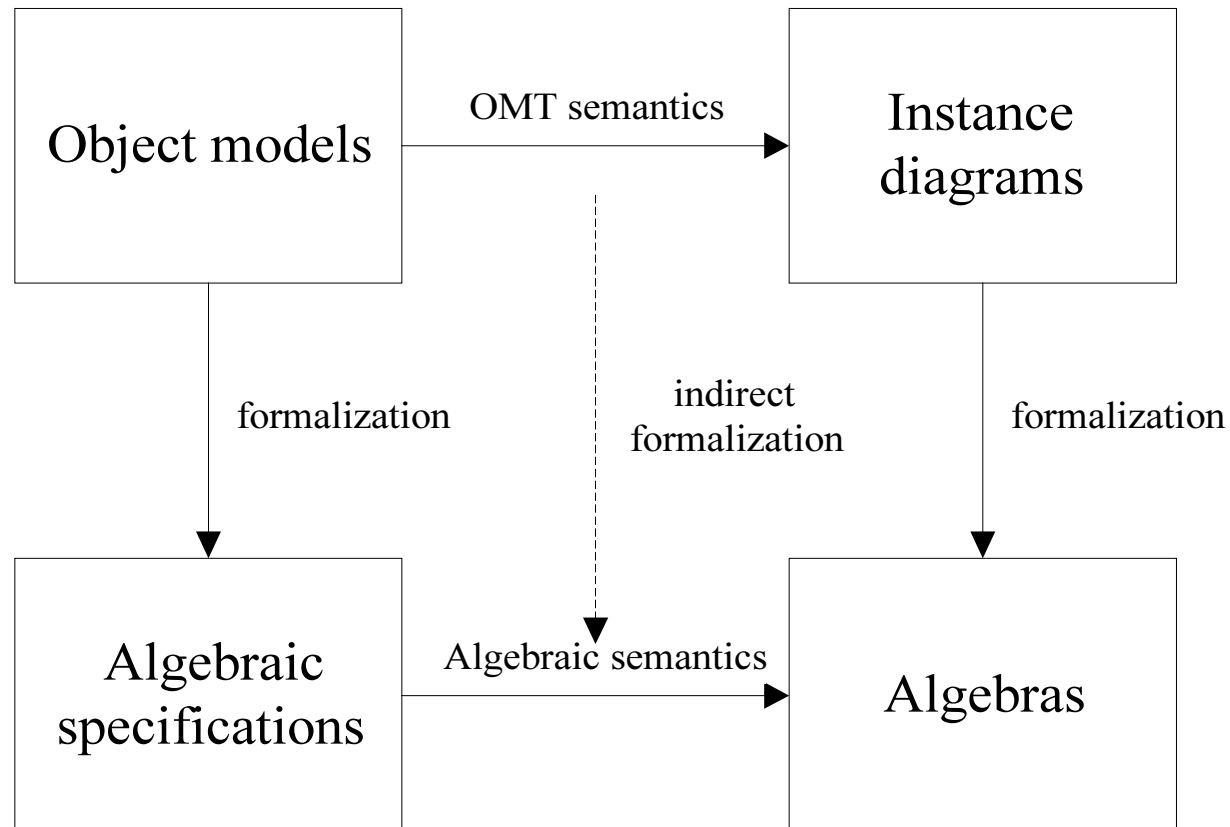




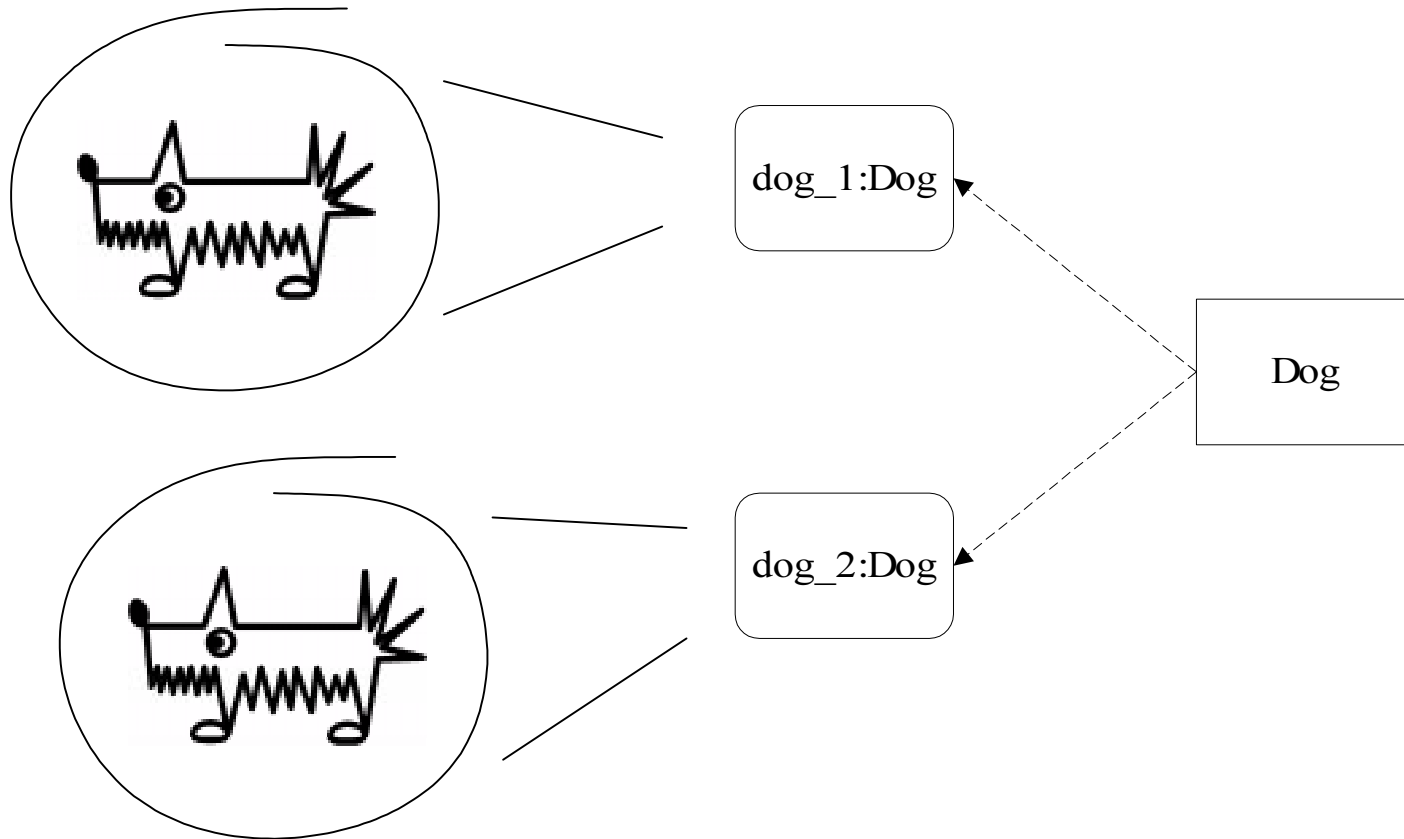
# **Towards Cartoon Semantics of Object Modeling**

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# One of the methods of semantics definition



# Easy understandable objects



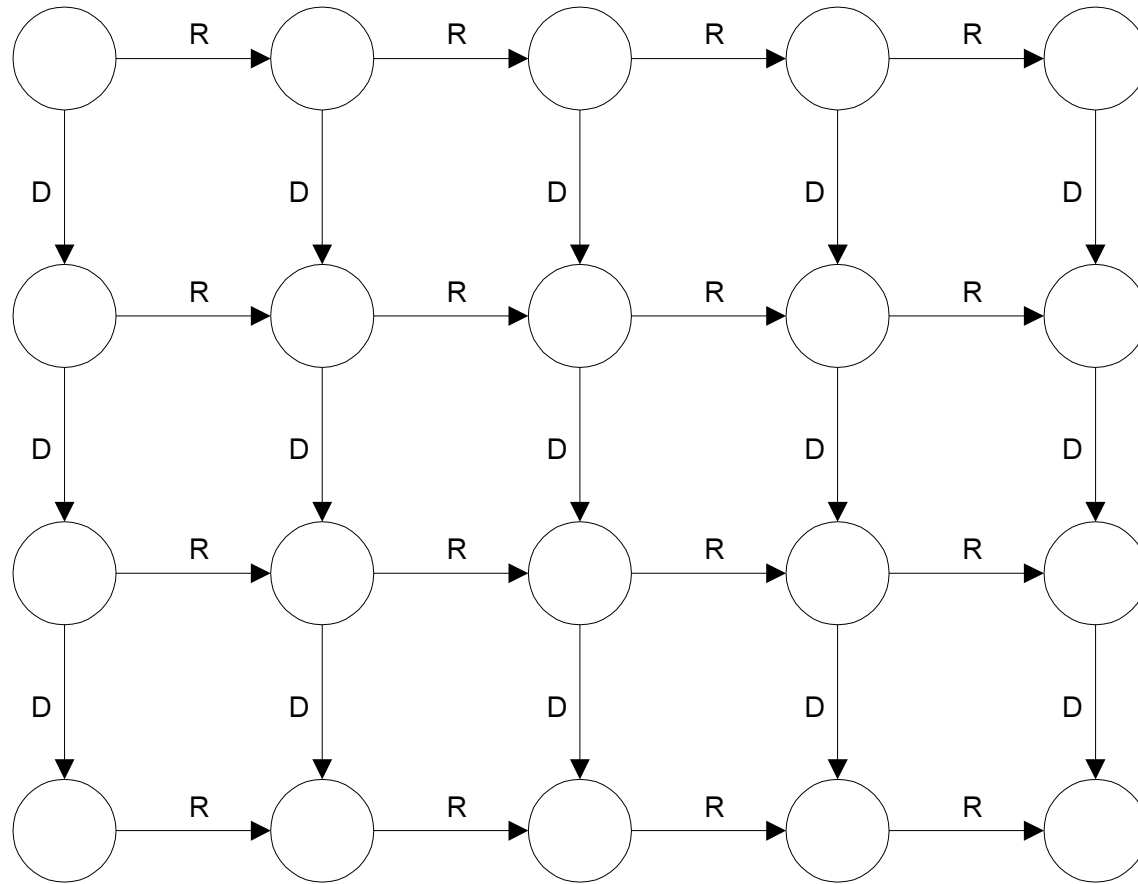
# The way to solution



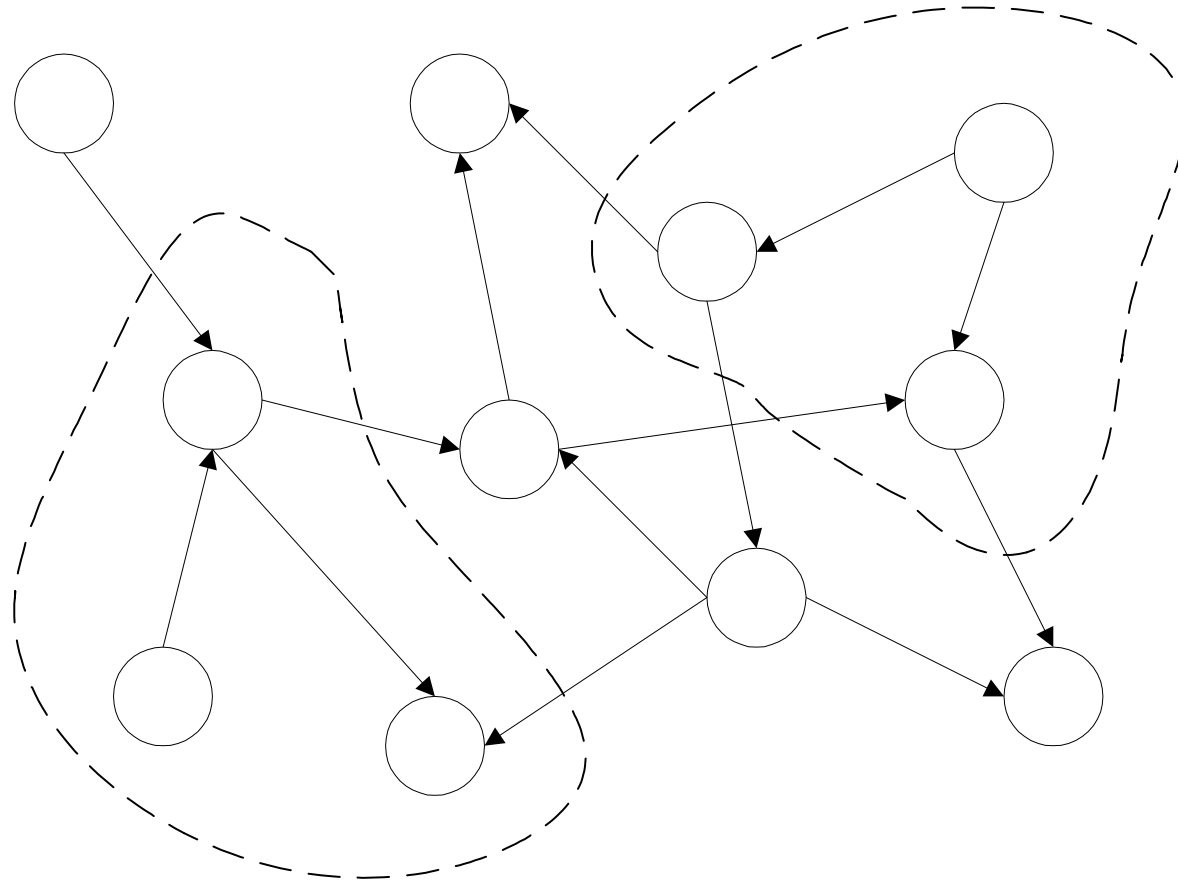
⌘ Formalization of the Real world

⌘ Formalization of the Abstract  
world

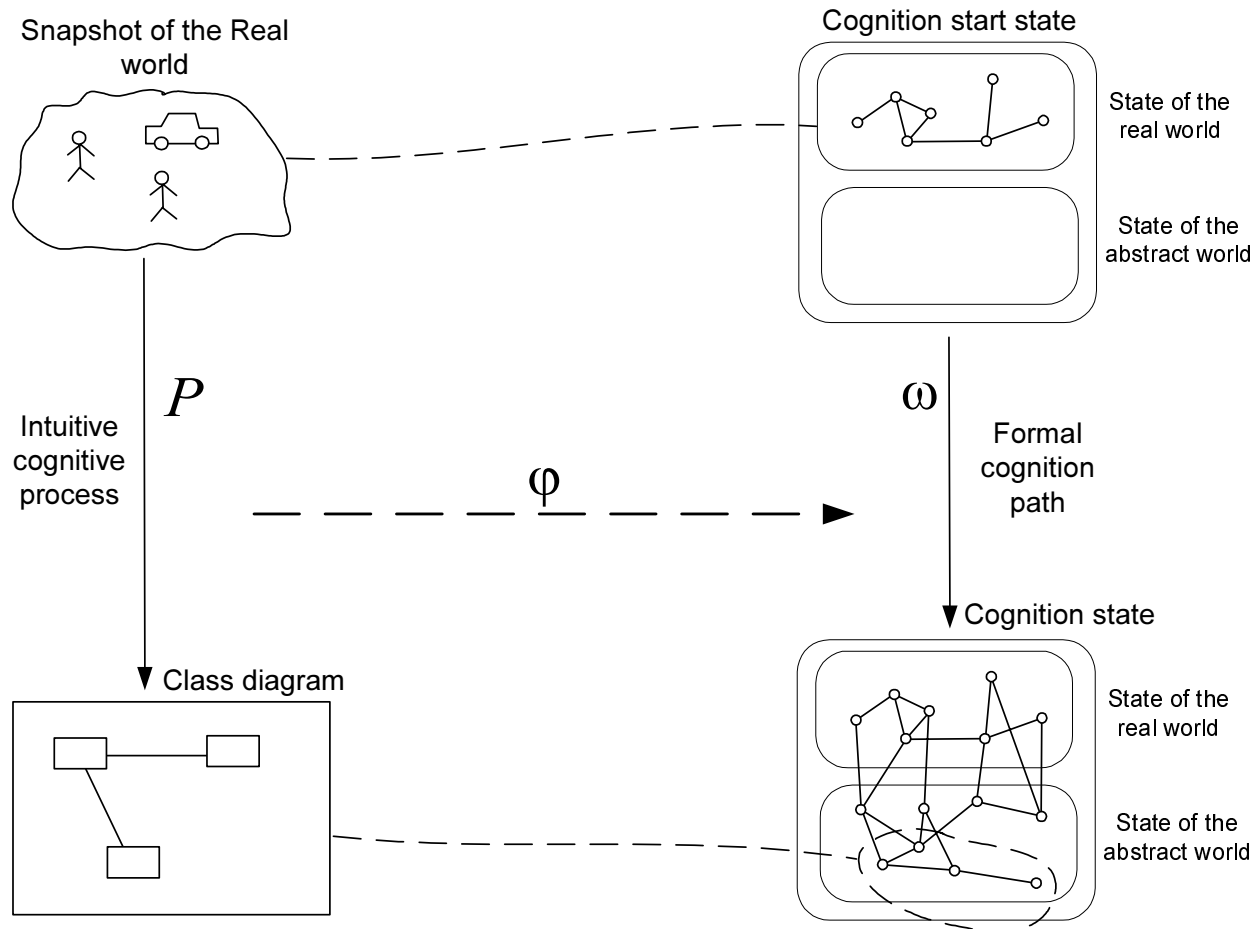
# Display screen



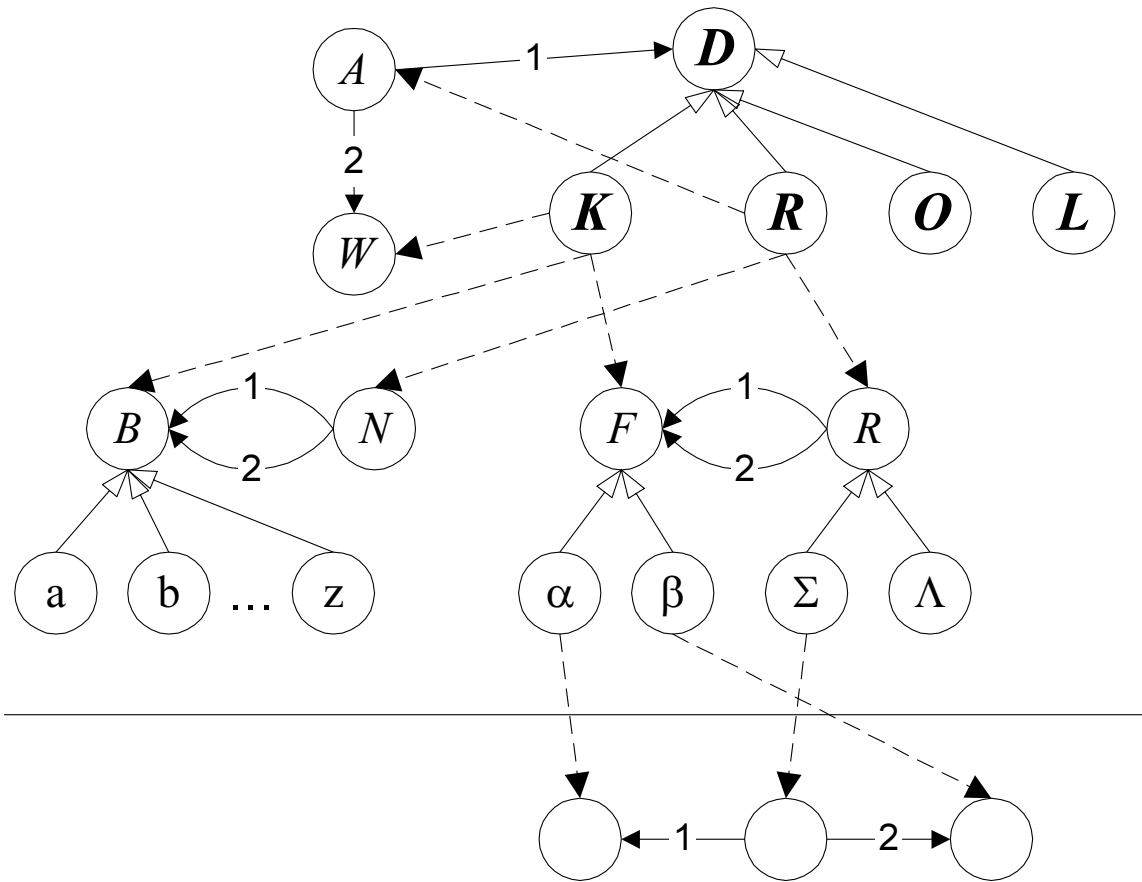
# Model of the real world



# Formalization of the cognitive process



# Cognition start state



# Steps of the cognitive process



- create an object, which represents a subgraph (of the real or abstract world state)
- create a class
- create an edge *instance-of* from an existing class node to any existing abstract node
- create an edge *subclass-of* between two existing class nodes
- create an edge *subclass-of* between two existing relation nodes
- create a new occurrence of a letter
- create a new word
- attach an existing word to an existing abstract node
- create a relation
- create a link
- create an edge *instance-of* from an existing relation node to any existing link node

# Main thesis



- ⌘ For every intuitive cognitive process  $P$  beginning with a fixed real world state  $S$  there exists a correct formal cognition path  $\omega$  beginning with the same state  $S$  and a mapping  $\varphi$ , such that:
- model  $M = \langle O, K, R \rangle$  (corresponding to  $P$ ) can be embedded into the formal model  $M_\omega$  (corresponding to  $\omega$ ) by the mapping  $\varphi$ ,
  - for every  $x \in O \cup K \cup R$  its mapping  $\varphi(x)$  is *intuitively adequate* to  $x$ .