

Formal Models for

Cadastrre

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## - Quality of Science

- clear definitions of concepts
- relate concepts
- logical deduction
- empirically grounded



There is nothing more  
practical than good theory!

# Semantics and Ontology

Description languages

Based on logic

Types and subtypes

Concepts

:

Dowl, o1l

DARL + OIL

DWL

not expressive enough

add: Database Schema languages (~ DDL)

Database world : Closed world

- all known

- all individuals are known

- all names are distinct

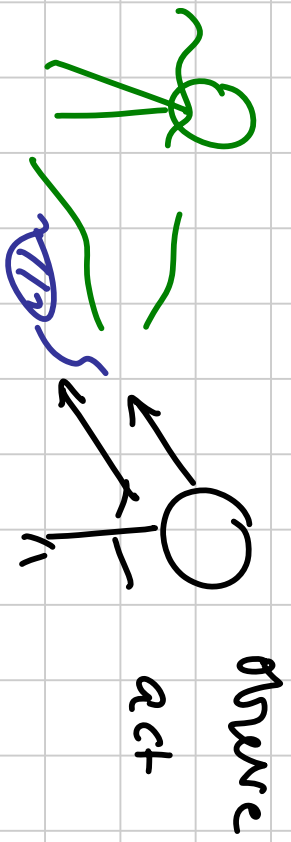
Rites

# A language for semantics

- expressive users : computationally complete

- grounded - physically, bodily

## closed loop semantics



- fixed ontology

Def. Real Estate

1)

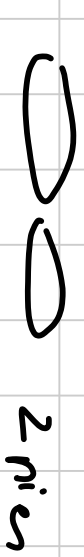


2)

abstract  
concept

physical  
+  
skus

Functor  $\sim$  Category theory



$$\frac{2}{3}$$

$$ax^2 + bx + c = 0$$

$$\sqrt{-32} \rightsquigarrow 3 + 4i$$