UNIVERSITY
OF TRENTO - Italy

Know
dive

World models
the theory

what to prepare for the midterm
(T2MP)

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- Representations
- Models
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- World representations

Representations – key notions

- Semantic Gap, mental representation, memory
- Analogical mental representations
- Linguistic mental representations
- Partiality and number of mental representations
- Diversity of mental representations
- (Mutual) (in)consistency of mental representations
- Subjectivity of mental representations
- Representations, analogical representations, linguistic representations

… notions, properties possibly mapped to examples

Models – key notions

- Entities, properties, entity relations, etypes
- Percepts and Facts
- Reference models
- Wordnet
- ER models
- Relational DBs
- Natural Language

… informal semantics using sets or graphs

Theories – key notions

- Words, concepts
- Alphabet
- Assertions
- Languages, logical languages, assertional languages
- Assertional theories
- Examples of world models:
    - DBs,
    - ER/ EER models,
    - KGs,
    - Entity graphs, etype graphs,
    - Natural Language, pseudo-natural language,
    - Concept Graphs (CGs), i.e., Digital lexicons

… mapped to models

World representations – key notions

- Formal world models
- Semi-formal world models
- Informal world models
- Model
- Theory
- Interpretation function
- Truth and Falsity
- Syntax and semantics
- Language correctness and completeness
- Theory correctness and completeness

- Entailment relation
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- World representations
- TellL – language extenstion
- TellT – theory extension
- AskC – model checking
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- Reactive world representations
- How to use a world representation

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