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Competing Ontologies and Verbal Disputes

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Overview of the talk

- **The background idea:** Formal ontology languages can perspicuously capture an ontology in the philosophical sense.
- **I. Backbone ontology**
- **II. Verbal disputes**
 - Chalmers' definition on the concept of meaning
 - My proposal based on ontology agreement
- **III. Case study:** WAB ontology and the dispute over traditional and resolute readings of the Tractatus

Philosophical vs. formal ontologies

- Ontology in the philosophical sense
 - Aristotelian sense
 - Ontological relativity, Carnap and Quine

- Ontology in the informational sense
 - Ontology in information science aims to represent knowledge of a source domain.

Hierarchy of ontologies

- 1) Reality,
- 2) an ontological_p text about reality, i.e. about (1),
- 3) a description of the ontology_{t1} of (2),
- 4) a description of the ontology_{t2} of (3),
- 5) a description of the ontology_{t3} of (4),
- 6) ...

Collapsed hierarchy of ontologies

- 1) reality,
 - 2) an ontological_p text about reality, i.e. about (1),
 - 3) a formal ontology_t of (2).
- ⇒ There is no *ontological*, but only *ontic* difference in these ontological_t texts.
 - ⇒ A practical issue: We choose the language that presents the most surveyable knowledge of the source domain.

I. Backbone ontology

- is possible only in the Carnapian conception of language.
- consists of “bedrock” concepts, their relations, truths involving these concepts (i.e. axioms) and perhaps other classes.
- The formal ontology_t of (2) consists of the ontology_p of (1) plus a backbone ontology.
- A Quinean ontology would become a linked web of expressions including sentences and words, none of them being privileged there.
- Wittgenstein’s language-games are more/less local ontologies within a global holistic picture.

II. Verbal disputes

A dispute over [sentence] S is (broadly) verbal when for some expression T in S , the parties disagree about the meaning of T , and the dispute over S arises wholly in virtue of this disagreement regarding T . (Chalmers, 2011)

Solving (verbal) disputes: Elimination

- A dispute is resolved if it is identified as a verbal dispute.
- The method of elimination (Chalmers):
 1. Pick out a term T from S .
 2. Eliminate T from the vocabulary and reformulate S into S' .
 3. If there is disagreement over S' , repeat the procedure with respect to S' .
- The method of elimination is a rough heuristics.
- Computationally inefficient.

Solving (verbal) disputes: Ontology agreement

A dispute over two sets of sentences P and S is *verbal* if and only if there is an *agreement* between ontologies of P and S .



Solving (verbal) disputes: Ontology agreement

- Set P consists of philosophical text T and its interpretation I , while set S consists of T and interpretation I' . Then we have a dispute over two competing interpretations of T .
- If set P contains only one sentence and set S its negation, we have Chalmers' scenario.
- My definition generalizes Chalmers' account. Consider, e.g., two terms T_1 and T_2 both occurring in S and P , but their meanings are swapped. If this is the only disagreement, this dispute is verbal in my account, but it is not in Chalmers' account.

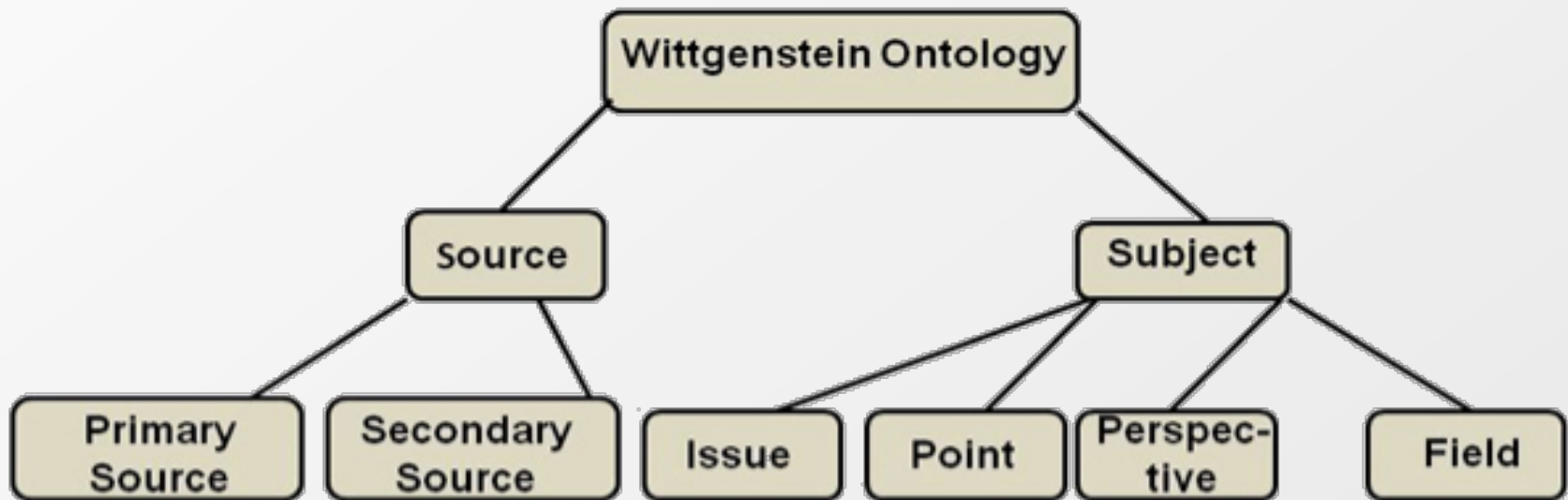
Two levels of dis/agreement

1. Dis/agreement in entities
 - Ontological commitments
 2. Dis/agreement in statements
 - presupposes (at least partial) agreement in entities
- A more precise definition: A dispute over S and P is verbal iff
1. both sets have the same ontological commitments (i.e. there is an agreement in entities) and
 2. there is an agreement in statements.

Advantages of my account

- It is able to handle the Carnapian as well as the Quinean conception of language/ontology.
- Algorithmic heuristic methods, as well as methods of automatic processing are available to solve verbal disputes.

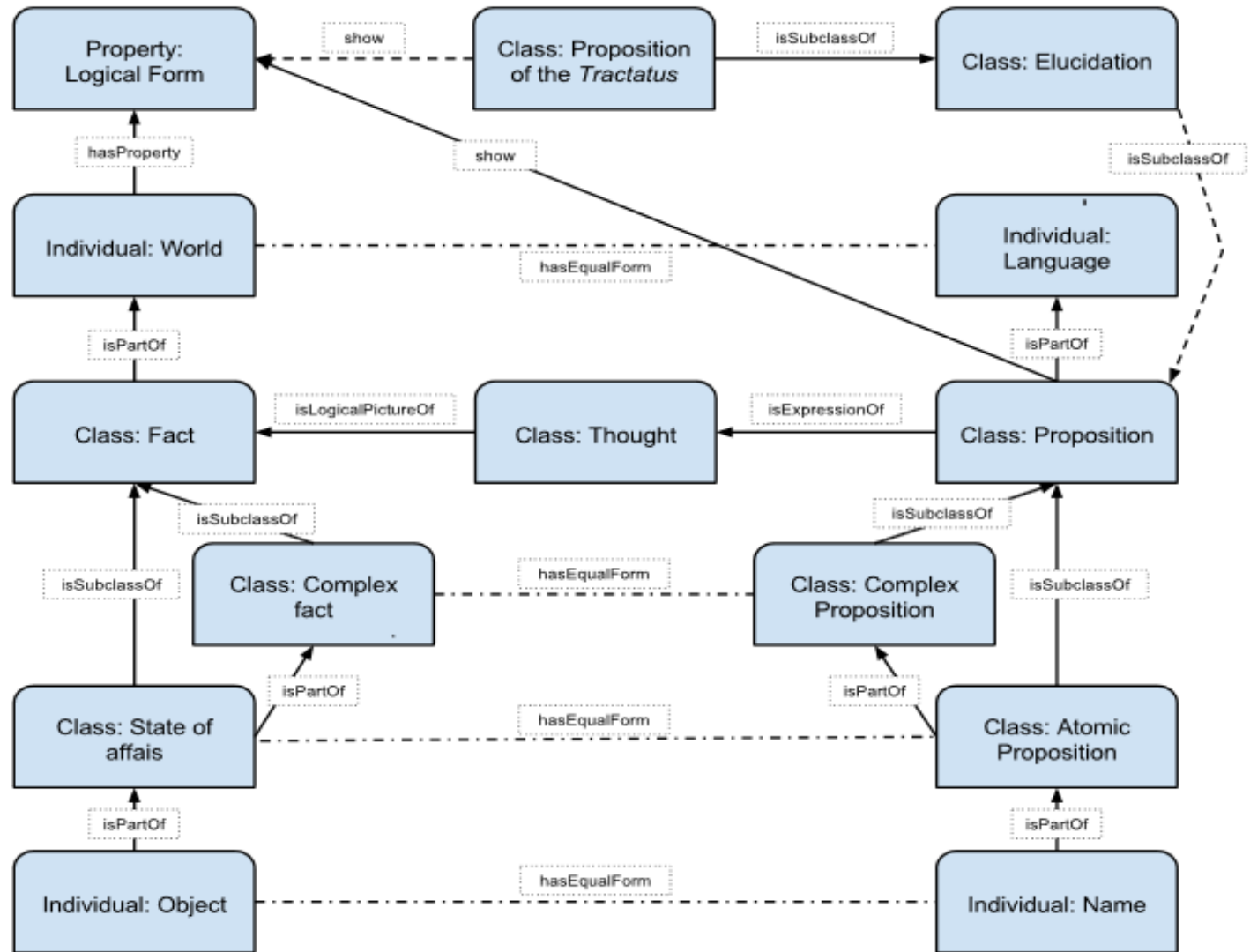
III. Case study: WAB ontology and the dispute over the resolute reading of the Tractatus

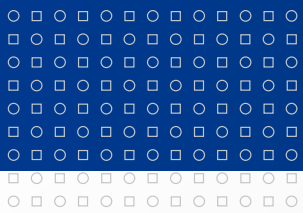


The resolute reading of the Tractatus

1. It takes its propositions as 'nonsensical', which has to be understood as 'not capable of conveying any insights'.
2. The recognition of this "nonsensicality" does not require that one grasps the theory of meaning advanced in *Tractatus*
3. The resolute reading distinguishes between 'showing' and 'elucidating', while the traditional one does not.

The ontology of the Tractatus





Thank you for your attention!

