

# *Comparing Multi-Level Modelling Approaches*

**Colin Atkinson and Thomas Kühne**

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- Debate is good, but ....
  - no consensus yet on how debate should be framed
  - what objective criteria should be used to evaluate different approaches
  - what questions should be asked
  
- What are the core issues that currently hinder progress towards the required consensus?
  
- What are the key terminological differences that have amplified confusion?



- Language Size
  - core language versus predefined libraries?
- Semantics
  - Internal consistency
- Intended Target Audience
  - tool builders versus tool users (i.e. modellers)
- Level of Modelling Discipline
  - Strict versus loose
- Terminology
  - Adherence to definitions



- The treatment of an element is not dependent on its level in the ontological classification hierarchy
- Level-blind Languages
  - everything is an object
  - no special significance attached to classification levels
  - no discipline for deep characterization scenarios
  - no levels to prohibit paradoxes
- Level-agnostic Languages
  - new concepts to capture an element's "typness"
  - classification levels used as a core discipline for modelling
  - direct support for representing deep characterization
  - less change of paradoxes



- Research groups need to reach consensus on some fundamental concepts
- Future debates should transcend rigid schools of thought
- Incompatibilities between approaches is not a proof of invalidity per se
- Most judgements are between “better” and “worse” rather than “right” or “wrong”
- The merits of multi-level modeling approaches need to be judged in terms of the benefits to the target audience

