

Evaluating conceptual models and modeling languages: The quest for sensible evaluation criteria and methodic guidance

Invited Talk—Abstract

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Abstract: Thinking and reasoning about evaluating conceptual models and modeling languages has a long, intricate history (e. g. [BCN92], [LSS94], [MS94], [Ma96], [Fr98], [Fr00], [Po02], [Wy04], [Fr07], [Fe12]) entailing enlightening controversial debate (e. g. [Sc99], [Ka99], [Sc00], [Ka00], [Wy06a], [Wy06b]). The discussion includes numerous proposals for evaluation criteria and corresponding methodic guidance for evaluating conceptual models and the modeling languages they are created with—oftentimes discussed under the headline of the “quality” or, rather, the appropriateness and adequacy of conceptual models and modeling languages [Fr07]. Arriving at a qualified and justifiable judgement on (the appropriateness and adequacy of) conceptual models and modeling languages—in the quest for sensible evaluation criteria and methodic guidance—has proven a delicate matter which requires to think about aspects of linguistics (e. g. semiotics, semantics, pragmatics), philosophy of language (e. g. theories of reference, semantics, pragmatics), cross-disciplinary fields such as communication sciences (e. g. interpretation, sense-making), and about fundamental considerations in further branches of philosophy (e. g. epistemology, ontology, aesthetics), among others. This talk retraces selected aspects of the discussion on “model evaluation” and “model quality”, and highlights a personal selection of aspects deemed in need of further consideration, argument and debate.

Keywords: Conceptual modeling; “model quality”; “model evaluation”; evaluation of conceptual models and modeling languages.

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