

# MAKING SENSE OF MODELING: BEYOND REPRESENTATION

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[Paper based on material presented at the *Society for Philosophy of Science in Practice*, University of Minnesota, June 2009. Forthcoming in the *European Journal for Philosophy of Science*]

**Abstract :** This paper addresses a specific way of using representational models to construct other models, dubbed ‘generative constructive use’. This use is distinguished from other ways of using models to construct new models. In particular, the case study shows how the model, in coordination with its target, opens up or extends a domain of investigation by suggesting and generating new targets and thereby prompting and enabling new forms of empirical investigation. That suggests that, in this case, it is the model in coordination to its target, rather than the model alone, that should be regarded as an epistemic tool. This use is philosophically important because it is what makes some models scientifically significant. Even though these models are successful representations, to make sense of their scientific significance we then need to go beyond their success as representation and adopt a perspective large enough to include the models and targets that they are used to produce.