

Models as Epistemic Artefacts: The Case of Constraint Grammar Parser

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How to approach the epistemic value of a language–technological artefact such as a parser? In which ways do parsers bring us knowledge and what kind of knowledge objects are they? In my presentation I approach these questions by discussing Constraint Grammar Parser, which can be characterised as a computational model of syntax. I argue that the traditional approaches to models in the field of philosophy of science do not make due allowance to the epistemic intricacies of the technological research, in which typically a special kind of expertise, bound to the specific models and methods of modelling, emerges. This seems to be especially the case of computer models, which in addition to being models are complex technological artefacts. As an implemented computer program designed give a morpho-syntactic analysis of a running text the Constraint Grammar Parser appears to be entirely unlike the abstract theoretical models of physics that are often taken as the prototypes of scientific models. It is difficult to say what parsers, like many other natural language processing tools, represent or even imitate. They are rather valued for what they produce and how accurate their output is. Thus, from the traditional philosophical point of view the Constraint Grammar Parser seems to be relatively uninteresting thing being merely an instrument. However, I shall argue that a promising way to approach models like parsers is to treat them as epistemic artefacts, that is, as constructed things that can give us knowledge in various ways and which also, in themselves, provide us new objects of knowledge. Moreover, approaching models as epistemic artefacts discloses the affinity of the parser to various other things scientists call models.