

1 Introduction

The formalized notion of a model emerged from the model theory. According to the model theory and omitting all complexity, a world consists of objects. In turn, objects are endowed with properties. A model represents an original whose properties are described as mapping to the image in a model. [CK90] It is worth noting that not every model is an abstraction of a real object but can be an abstraction of another model. An intuitive example of such a sequenced model is a map application, the domain model of which cannot be a direct model of our planet. Moreover, as stated by [Hel+16], depending on the purpose of a model it serves, it can be either descriptive or prescriptive. The former means abstracting a real object. Hence, an origin stems from an actual entity. The latter ones comprise the specification of a real entity to be constructed. Deviation from a prescriptive model specification indicates an error. Thus, in such models, an origin originates from the specification of the created entity.

1.1 Motivation

1.2 Objective

1.2.1 State-of-the-art limitations

1.3 Thesis structure