

U.S.E. Research Institute  
Working Paper Series 23-03

## Materials Selection in Economic Modeling

Marcel Boumans  
Utrecht University School of Economics, Utrecht University

April 2023

### Abstract

Templates travel because they offer a tractable format that can be used for model-building in a variety of domains. It is often because of this quality that a particular template is chosen. But one cannot assume that there are always templates ready to model a new phenomenon, and moreover, templates have also been designed at some point. A critical aspect of this designing process is the choice of the mathematical objects with which one hopes to capture this phenomenon. This means that one has to assess which of the properties of different kinds of mathematical objects and which combinations of them are most appropriate. The selection of these objects is based on whether their properties enable the model to perform its function. This selection of mathematical objects is similar to the selection of materials in mechanical design.