

# **Untangling Scenario Components with Agent Based Modelling:**

an Example of Social Simulations of Water Demand Forecasts

Olivier Thomas Barthelemy

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Under the supervision of:

**Dr B. Edmonds**  
**Professor S. Moss**  
**Dr M. Stubbs**  
**Ms L. Walley**  
**Dr T. E. Downing**

Centre for Policy Modelling  
the Manchester Metropolitan University

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This research undertaken initially as part of the FIRMA project used the model developed to represent existing scenarios. The aims are:

- To develop a model of household water demand
  - using integrated assessment
  - based solely on ownership, frequency of use and volume per use of appliances
  - composed of qualitative and quantitative elements
- To investigate the consistency of the scenarios represented
- To show that Multi Agent Based Simulations can be a descriptive method allowing partial validation of model components
- To demonstrate that computer simulations can be used to explore causal relationships behind scenarios
- To provide supporting evidence of the importance of new technology uptake