

Second CERF Fellow Report 2015 for Flavio Toxvaerd

As described briefly in the previous report, I have decided that the best programming environment for the analysis that I wish to carry out is the software package *Mathematica* (from Wolfram Research). Over the past few months, I have started to deconstruct the detailed codes provided by Gaylord and D'Andria (1998) for simulations of social interactions.

There are a number of different codes available, constructed for analysing a number of different models. I realise that for my purposes, I will need parts of several different codes and to modify them accordingly.

Another complication I have encountered is that since that code was written, Mathematica has been significantly updated (with new functionalities and capabilities). While this poses some additional and unforeseen problems in adopting and using the existing code, it also opens the possibility of streamlining the analysis. I am still trying to get to grips with the details.

Once I have achieved this, the implementation of specific information diffusion and trading models will become more manageable.

Bibliography:

Gaylord, R. J. and L. J. D'Andria (1998): *Simulating Society: A Mathematica® Toolkit for Modeling Socioeconomic Behavior*, Springer.