

CALL FOR PAPERS

“Agent-based simulation in sociology: principles, applications, and tools”

a special issue of the *RFS*

Guest Editor: Gianluca Manzo (CNRS, GEMASS)

During the last decade, research on/using agent-based computational modelling has accumulated quickly at the frontiers between social and natural sciences. One of the indicators of this diffusion process is the large number of special issues published by leading scientific journals in computer science (*Artificial Life*, 2003; *Sistemi Intelligenti*, 2005; *Simulation*, 2012), in physics (*Physica A*, 2005; *Advances in Complex Systems*, 2008, 2010), in economics (*IEEE Transactions on Evolutionary Computation*, 2001; *Journal of Economic Dynamics and Control*, 2001, 2004; *Computational Economics*, 2001, 2007; *Journal of Economic Behavior and Organization*, 2004; *Journal of Public Economic Theory*, 2004; *Journal of Economics and Statistics*, 2008), in geography and in ecology (*Ecology and Society*, 2006), and in sociology (*Journal of Mathematical Sociology*, 1990; *Sociological Perspectives*, 1995; *American Behavioral Scientist*, 1999; *American Journal of Sociology*, 2005; *Mind & Society*, 2009; *Sociological Methods and Research*, 2013, forthcoming). The articles collected in the *Proceedings of the National Academy of Sciences* (2002) and in *Nature* (2009) also testify to the large scientific audience currently reached by agent-based simulations.

Despite the scope of this diffusion dynamics, no French sociological journal has decided until now to devote a special issue to agent-based computational modelling. We are thus happy to announce that the first ISI-ranked sociological journal in France, i.e. the *Revue Française de Sociologie*, has decided to fill in this gap by collecting a set of papers whose main aim is to prove the power of agent-based simulations to better understand the generative mechanisms underlying clearly defined social phenomena.

To reach this goal, papers using agent-based modelling to solve specific sociological puzzles will be especially welcome. More particularly, we expect two types of paper proposals. On the one hand, if the puzzle is theoretical, simulation can be used to deductively explore all the outcomes logically associated with a given set of mechanisms. In this case, the comparison to empirical data is not necessary. On the other hand, we expect paper proposals dealing with clearly defined macroscopic empirical data in quest of explanation. In this case, the focus of the paper should be the way empirical data and the simulated model interact with each other. In this respect, we invite paper proposals focusing on (one/several

of) the following aspects: 1. the relationships between agent-based modelling and multivariate statistical techniques; 2. the relationships between agent-based modelling and qualitative/ethnographic data; 3. the relationships between agent-based modelling and experimental data; 4. the relationships between agent-based modelling and techniques of social network analysis.

Although the special issue is expected to be focused on papers applying agent-based simulations to the study of clearly defined sociological puzzles, the following types of paper proposals will also be considered. On the one hand, the papers addressing agent-based modelling from an historical and an epistemological point of view. On the other hand, the papers containing pedagogical presentations of concrete tools to implement agent-based models.

Paper proposals (min. 500 words – max. 1000 words), in French or in English, should describe the following elements: 1. topic and relevant literature; 2. materials and methods; 3. (expected) results; 4. short bibliography (max 5 references). Every proposal not respecting this format will be rejected.

Paper proposals should be addressed to Gianluca MANZO (glmanzo@yahoo.fr) and to RFS managing editors (rfs@pouchet.cnrs.fr) by the 29th of June 2012. Acceptance/rejection will be notified no later than the 31st of July 2012.

Authors whose proposal is accepted should send their article (max. 75000 characters, including spaces, figures and tables) no later than the **28th February 2013**. Articles will be evaluated independently by the guest editor and by RFS editorial board. Acceptance/rejection final decision will be notified no later than the **30th of May 2013**.