Resumé

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Andy's current interests are in agent-based systems, specifically issues surrounding validation, error propagation and large-number individual-level modelling. As an adjunct to this, he's interested in visualization of dynamic indicators of system state and the automatic analysis of complex dynamic systems. This is not to say he has any solutions. Andy started life as a modeller of subglacial sediments, looking at how micro-scale structures could be used to derive ice-sheet-scale past behaviours. After his PhD he worked for a while on algorithms to ~~crack~~, sorry, improve confidentiality in aggregated census datasets, before becoming interested in online democracy and how the public understood space and risk. In particular he is interested in how vernacular models of the world might be used in combination with standard geographical data. This led, in turn, to an interest in modelling people and social systems, and, therehense, agent methodologies.

Papers that might be of interest:

Evans, A.J. and Waters, T. (In press), 'Mapping Vernacular Geography: Web-based GIS Tools for Capturing "Fuzzy" or "Vague" Entities' International Journal of Technology, Policy and Management.

Heppenstall, A.J., Evans, A.J. and Birkin, M.H. (In press), Genetic Algorithm Optimisation of a Multi-Agent System for Simulating a Retail Market. Environment and Planning B.

Heppenstall, A.J., Evans, A.J. and Birkin, M.H. (2006) 'Application of Multi-Agent Systems to Modelling a Dynamic, Locally Interacting Retail Market' Journal of Artificial Societies and Social Simulation, 9, 3.

Evans, A.J. (2006) 'The National Geographical Information Policy of Britain ' Proceedings of the GIS International Conference / GIS Korea 2006, Seoul, Korea, 17-19 May 2006, p.275-299.

Parry, H.R., Evans, A.J. and Heppenstall, A.J. (2006) 'Millions of Agents: Parallel Simulations with the RePast Agent-Based Toolkit' In Trappl, R. (ed) "Cybernetics and Systems 2006" Austrian Society for Cybernetic Studies, Vienna (Proceedings of the 18th European Meeting on Cybernetics and Systems Research, April 18 - 21 2006, Vienna.)

Parry, H., Evans, A.J., and Morgan, D. (2006) 'Aphid population dynamics in agricultural landscapes: an agent-based simulation model' Ecological Modelling, Special Issue on Pattern and Processes of Dynamic Landscapes, 199 (4), 451-463.

Heppenstall, A.J., Evans, A.J., Birkin, M.H. and O'Sullivan, D. (2005) 'The Use of Hybrid Agent-Based Systems to Model Petrol Markets' In, Terano, T., Kita, H. Kaneda, Arai, K. and Deguchi, H. (eds) 'Agent-Based Simulation: From Modelling Methodologies to Real-World Applications'. Springer Series on Agent-Based Social Systems, Vol. 1., Chapter 17.

Heppenstall, A.J., McFarland, O.E. and Evans, A.J. (2005) 'Application of Multi-agent Systems and Social Network Theory to Petrol Pricing on UK Motorways' M. Pechoucek, P. Petta, and L.Z. Varga (Eds.): CEEMAS 2005, Lecture Notes in Artificial Intelligence 3690, Springer-Verlag Berlin Heidelbergp, 551–554.

Evans, A.J., Kingston, R., and Carver, S. (2004) 'Democratic input into the nuclear waste disposal problem: the influence of geographical data on decision making examined through a web-based GIS' Journal of Geographical Systems, 6 (2), 117 – 132.