Experience of e-Social Science: A Case of Andy Turner and MoSeS

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Overview

• Introduction
• MoSeS starts for the promised land
• Blogging
• Philosophy of e-Social Science
• Reflections on MoSeS
Introduction

• Andy Turner
  – http://www.geog.leeds.ac.uk/people/a.turner
  – Autobiography
  – Blog
    • http://www.geog.leeds.ac.uk/people/a.turner/personal/blog/

• MoSeS
  – http://www.geog.leeds.ac.uk/people/a.turner/projects/MoSeS/

• Open eResearch
  – Research and Blog in detail
  – Distill from Blog
What is MoSeS?

• Modelling and Simulation for e-Social Science
  – http://www.ncess.ac.uk/research/nodes/MoSeS/
  – e-Social Science being the application of e-Science concepts to social science problem domains
    • e-Science is enhanced science that uses the Internet, software tools and structured information for collaborative work

• A first phase research node of NCeSS
  – Part of a UK collaborative partnership developing e-Social Science
  – The key part of it’s program of work is to develop an individually based demographic model of the UK for 2001 to 2031

• MoSeS people
MoSeS Starts for the Promised Land

• Work on MoSeS was divided into 3 strands
  – demographic modelling
  – applications of demographic models
  – user interface and portal development

• 3 applications
  – health care planning
  – transportation research
  – business application.
My MoSeS Checklist

• Outputs to be made as openly available as possible
• Use appropriate standards
• Automate with free and open source software.
• Results to be replicable
• Be open about what we were trying to do and how
• Adopt best practice and learn from others in NCeSS and think about what else they wanted.
Blogging

• What is a blog?
• Why blog?
• The evolution of my blog?
• People use my blog
• It has opened up what I do
• The benefits far outweigh the costs
Philosophy of e-Social Science

• Jankowski 2007, Scott and Venters 2007

• Is e-Social Science open by definition?

• Is e-Social Science more than simply the application of e-Science methods to the social sciences?
Reflection on MoSeS

• Never-ending story…
• Too early to judge
• There are many positives:
  – I have learned a great deal over the last 3 years and found a community of collaborators that I am happy and excited to work with.
  – I have developed a lot of structured information about me and my research interests.
  – I have participated in lots of surveys.
Acknowledgements and Thanks

- This work was supported by the ESRC under RES-149-25-0034.
- Thanks to all involved in eResearch for your ongoing collaboration.
- Special thanks to my NCeSS and MoSeS colleagues.
- Thanks to the Oxford eResearch conference organisers.
- Thank you for listening!
MoSeS Rationale

• The idea is to provide planners, policy makers and the public with a tool to help them analyse the potential impacts and the likely effect of planning and policy changes.

• Example Application:
  – There may be a housing policy to do with joint ownership, taxation and planning restriction legislation that can be developed to alleviate problems to do with lack of affordable housing and workers without precipitating a crash in the housing market and economy as a whole
  – A balanced policy may be easier to develop by running a large number of simulations within a system like SimCity for real to understand the sensitivities involved
Initial Tasks

• Develop methods to generate individual human population data for the UK from 2001 UK human population census data

• Develop a Toy Model
  – Dynamic agent based microsimulation modelling toolkit and apply it to simulate change in the UK

• Develop applications for
  – Health
  – Business
  – Transport
Challenges

• Grid enabling the data and tools
• Visualisation
  – Google Earth
  – Computer Games
• Collaboration
• Retaining a problem focus
• Design and Development
Generic MoSeS Approach

- MoSeS to date has approached Modelling and Simulation from a specific angle
  - Geographic
  - Demographic
  - Contemporary
  - About the UK
  - Targeted towards supporting a developing set of applications
- It is not a requirement to make it clear what steps can be followed by other Social Scientists wanting to Model and Simulate something different
  - However, the generic work of MoSeS should be relevant and we are working towards this
MoSeS Vision

• Suppose that computational power and data storage were not an issue what would you build?
  – SimCity
    • For real on a national scale
MoSeS First Steps

• The development of a national demographic model
• The development of 3 applications
  – Health care
  – Transport
  – Business
• The development of a portal interface to support the development and resulting applications by providing access to the data, models and simulations and presenting information to users (application developers) in a secure way
Communal Establishments
Aggregate HPControl Characteristics

HSAR

ISAR

Aggregate CEP Control Characteristics