

Relevant work

Participatory Modelling

PhD – Agent-based Models as “Interested Amateurs”. ABMs as discussion tools – an object to be critiqued to bring together stakeholders. In ‘Land’ journal, 2015, 4(2), 281-299. Model of farmer decision-making and conservation.

ERIE – stakeholder causal mapping / fuzzy cognitive mapping. Using these tools to understand complex SES and bring together stakeholders. Topic: river catchment management.

Policy Modelling

ePolicy – modelling solar panel adoption by households, using surveys and interviews to underpin model design (<http://www.epolicy-project.eu/>)

TELL ME – modelling protective behavior during epidemics, using psych theory to underpin model design (<http://www.tellmeproject.eu/>)

ABM as counterfactuals

CECAN – methods for policy evaluation in complex nexus settings (<http://cecan.ac.uk/>). Can ABM provide useful counterfactuals in a policy evaluation? Ongoing.

Modelling commons-based peer production communities

Why do people contribute to these communities? How might we help improve their longevity and activity?

Initial thoughts on ‘CRiSES’

‘Social self-organisation’

Examples(?!): commons-based peer production, community-led housing upgrading. When norms or informal institutions become formal, but still optional and low hierarchy.

When might SSO occur?
How does it relate to social resilience?
How might it be fostered?
How might we model SSO?

Market formation/resilience

In UK (and elsewhere?), government is trying to foster/support/provide certainty/build resilience in supply chains and markets for sustainable tech and activities.

When is a market or supply chain resilient?
How might we model support of a market, to know when it might be resilient?

Analysing and understanding simulations

How might we formalise, or improve rigour of, Pattern-oriented Modelling, without relying on highly technical, data hungry, optimisation etc?

Evolution and Resilience

How might evolutionary pressures (for example, on decision-making) have impacted on likelihood of social resilience?

Can we ‘grow’ resilience like we have grown ethnocentrism, cooperation, etc?

Can growing resilience help us understand it in modern settings?