## Policy modelling: new multi-perspective approaches to "what if?" analysis

External Client & Supervisor: Lorraine Dodd, Centre for Applied Systems

Studies, Director of Research,

Defence Academy of UK, Shrivenham.

Warwick Supervisor: Yasmin Merali, Warwick Business School

The purpose is to address the need for analytical support for complex policy problems, aiming to acknowledge and then deal with any prejudices and also to avoid premature foreclosure. The research outputs will aim to promote insight and inquiry, using a multi-perspective approach, which formally supports and encourages open thinking – making explicit the many assumptions and preferences that often remain hidden and unspoken. The central theme of the work is one of open-eyes, open-mind; such that when policy-makers address issues of "where people are" there is a solid frame of reference that can open-up new and more comprehensive policy options.

The technical objective of the research work is to develop new methods for a Multiperspective, Multi-viewpoint "what if?" approach to policy modelling to aid the development of resolutions to messy/wicked policy problems.

**Multi-perspective, Multi-viewpoint "what if?"** analytical framework will be used to take several proposed policy planning options and will help to develop an open set of different stakeholder perspectives based on key stakeholder viewpoints/standpoints. It will begin by abstraction of the focal systems of interest lying at the heart of the proposed policy options; for example, if one policy option is to set limits on personal motor-car usage then the system of interest would be the motor-car and key stakeholder groups are defined according to their relationships with the motor-car.

The stakeholder perspectives then need to be constructed, each in the form of a profiled landscape. The novel use of internet-based crowd sourcing could be employed here to enhance the construction of perspectives by simple but direct involvement of prospective stakeholders in the virtual policy 'experiment'. Development of these perspectives allows policy-makers to use the multi-dimensional landscapes to imagine and explore possible knock-on effects of specific policy options. For instance, it will be clear to see where any option might be going against societal and institutional flow and, if so, then how the more challenging landscapes could be re-shaped by addressing issues relating to specific stakeholder lines of perspective; so helping to acknowledge and address any previously hidden institutional blocks.

The research will build on an analytical framework developed recently within an Action Group No 14 on Complex Adaptive Systems (operating under the direction of the Technical Cooperation Program (TTCP) of Australia, Canada, New Zealand, the United Kingdom and the United States) [1]. It will involve collaboration also with Prof Gwyn Prins [2] at Mackinder Centre for Long-wave events at London School of Economics http://www2.lse.ac.uk/researchAndExpertise/units/mackinder/Home.aspx

[1] Alston, A and Dodd, L. *Complex adaptive and 'inquiring' systems theory for contemporary military operations: a multi-perspective approach*, Proc. 14th ICCRTS Washington June 2009.

http://www.dodccrp.org/events/14th\_iccrts\_2009/papers/152.pdf

[2] Dodd, L, Stamp, G and Prins, G. *Going from closed to open: how may we help to make it bearable?* Proc. International Conference on Complexity Science, Boston October 2007.