

Metaphorical Models for Managing the Transition from Industrial Growth to Sustainability

Workshop for the 30th International Conference of the System Dynamics Society
Thursday 26th July 2012; 8:30am – 12 noon, 09-110 Seminar room
University of St Gallen, Switzerland

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Overview

Last year, in Washington DC, I ran an interactive half-day workshop using small system dynamics models and simulators to explore limits to growth in an industrial society. Now, in 2012, I am offering a follow-up workshop to investigate the challenge of *managing* the transition from growth to sustainability. The workshop will last for approximately 3½ hours including a ½ hour break. The plan is as follows:

1. A quick review of the 2011 workshop involving a small model of the fishing industry as a metaphor to think about global growth and industrialisation and to interpret the structure and dynamics of Jay Forrester's *World Dynamics* model.
2. *World Dynamics* in the 21st century – thoughts on how the framework of the World model fits contemporary concerns about global industrial growth and sustainability.
3. A close look at scenario conditions in *World Dynamics* required for a sustainable industrial society. We then use the resulting scenario to ask whether this is a future we really want and how to bring about the necessary changes in behaviour and lifestyle.
4. The role of regulation in a sustainable future. We revert to a small model of a regulated fishery to explore, through simulation, the control and enforcement of sustainable investment.

In the spirit of SD conference workshops, participants not only listen but also join-in. There is an opportunity to simulate the small model of a regulated fishery and to test policies (for quota setting and ship deployment) that properly coordinate fish and ships. We then use the fishery model as a metaphor to discuss the lessons for managing the transition from growth to a sustainable industrial society.

Key words and phrases: growth and industrialisation; bounded rationality; societal strategy; investment policy; sustainability; frameworks and models for strategy development