I. GENERAL

I.1. Introduction to Complexity Theory


I.2. Emergence


I.3. Thermodynamics, Energy and Complexity


Complexity Reading List


**I.4. Non-linear/Threshold Behaviour**


**I.5. Self-organized criticality**


**I.6. Power Laws**


**I.7. Networks**


**I.8. Complex Adaptive Systems**


**I.9. Evolution and Co-evolution**


**II. SPECIFIC TOPICS**

**II.1. Complexity Economics**


**II.2. Complexity in Social and Political Systems**


Jervis, Robert. “Complexity and the Analysis of Political and Social Life.” *Political Science Quarterly*
Complexity Reading List


II.3. Ideology and Complexity


II.4. Alternative Concepts of Economic Growth


Schneider, Francois, Giorgos Kallis, Joan Martinez-Allier. “Crisis or Opportunity? Economic degrowth for social equity and Ecological Sustainability. Introduction to this Special Issue.” *Journal of Cleaner Production* 18, no. 6 (April 2010).

II.5. Climate Complexity and Nonlinearity


### III. METHODS

#### III.1. Agent-based Modeling


[http://mass.leeds.ac.uk/2013/02/13/an-excellent-abm-paper/](http://mass.leeds.ac.uk/2013/02/13/an-excellent-abm-paper/) (link for online resources, textbooks and papers related to agent-based modeling).

#### III.2. System Dynamics


#### III.3. Cognitive Models


 Complexity Reading List


   http://issuu.com/waterloo_institute_complexity/docs/final_version_manjana_milkoreit?mode=window&backgroundColor=%23222222


