

Here are some readings for the Seminar.

In order to make sure that you have some of the background necessary to appreciate the main paper I would like you to read: Complexity Rising: From Human Beings to Human Civilization, a Complexity Profile. Yaneer Bar-Yam. This is available at:

<http://www.necsi.edu/projects/yaneer/Civilization.html>

In addition to this essay I would like you to read a number of “Key Concepts” that are available on the Resilience Alliance Web Site:

<http://www.resalliance.org/593.php>

Please read the Key concepts of: Adaptive Capacity, Adaptive Cycle, Adaptive Management, Panarchy and Resilience. In the key concept section on Panarchy, for those really interested you can download the first Chapter of Buzz Holling and Lance Gunderson’s book Panarchy. The Chapter is titled: “In Quest of a Theory of Adaptive Change” which is a good introduction of how this way of thinking came about.

Lastly there is the paper that I would like to use as the main focus of discussion which is called “Resilience Management in Social-ecological Systems: a Working Hypothesis for a Participatory Approach” by Brian Walker et al. This is available at:

<http://www.ecologyandsociety.org/vol6/iss1/art14/print.pdf>

I would like to spend the first part of the seminar discussing the various concepts and underlying assumptions and then move on to discuss the value (or not) of Resilience management, the participatory approach to managing complex social-ecological systems.

Questions to consider:

In Bar-Yam’s initial paragraph he puts forward the idea that “our complex social environment is consistent with identifying global human civilization as an organism capable of complex behaviour...etc”. Is this an acceptable metaphor in your view?

After reading the essay are you convinced by his arguments that human beings are part of a global organism and that using the tools and concepts of complex systems is a useful and credible approach to understanding, managing and problem solving, issues related to social-ecological systems?

Is it likely to be better than other methods? If so why, or why not?

Please be able to describe in words/diagrams the following concepts:

The adaptive cycle.

Resilience (as opposed to redundancy).

In terms of the second paper by Brian Walker et al, that puts forward the idea of Resilience management in Social-Ecological systems:

What advantages do you see to using this approach over traditional management practices? What disadvantages?

Overall do you think that this approach might allow for social-ecological systems to be more sustainable?

Is the proposed framework practical? or is it just an interesting “academic” exercise? A “rich person’s game” if you will?