ERS 701 Complexity and Sustainability in Social-Ecological Systems
Fall 2018

Meetings: Monday 11.30-2:30; Venue: TBC

Instructors: STEPHEN QUILLEY, EV2 room 2009, ext. 38335, squilley@uwaterloo.ca
(with BOB GIBSON, EV2 room 2037, ext. 33407, rgbibbon@uwaterloo.ca)

Special organizational note

This course will be delivered, in part, jointly with ERS 680, the roughly parallel core introductory course for ERS MES students. Some experimentation with joint and separate components, etc., will be involved. All participants will be encouraged to suggest desirable adjustments as we go along.

• THIS GUIDE COVERS THE ERS701 SPECIFIC MATERIAL AND SHOULD BE READ IN CONJUNCTION WITH THE ERS-680 GUIDE
• WHERE THEY DIFFER, I HAVE INCLUDED THE DISCUSSION EXERCISES FROM ERS 680 – mainly because these may feature in the earlier lecture period of the class.
• SMALL GROUPS: Generally we will be working in small groups. See LEARN for details of your group. Please exchange contact details and make arrangements to work together as necessary.
• FOR MAIN LECTURE READINGS PLEASE REFER TO THE MOST UP TO DATE COPY OF THE ERS 680 GUIDE (The most recent draft is pasted below)

A. Purpose
As a core offering in the ERS doctoral programme, this course is intended to help its participants establish a reasonable working base from which to explore different fields of interest within environment and resource studies. The course focuses on the theme of creating and maintaining a sustainable society in a world of complex socio-ecological systems and interactions. In particular students will become attuned to the ways in which
a variety of contrasting environmental discourses structure the grounding assumptions and priorities of different activist, academic and policy actors.

The main tasks of ERS 680/701 are:

- To introduce the participants to the main contextual areas and issues related to the underpinnings, design and establishment of a sustainable society;
- To explore wicked dilemmas and trade-offs that may be associated with ecological integrity at different spatial and temporal scales;
- To explore generally how insights from a variety of different fields can contribute to the pursuit of a sustainable society in a complex world; and in so doing;
- To help the participants develop a defensible basic framework in which to prepare for doctoral research including development of a comprehensive paper and a thesis, and to engage in a host of other potential applications.

The course will give special attention to three core questions:

- Can the main objectives and key considerations of sustainability efforts in a complex and uncertain world be at least roughly specified as basic guides for decisions and decision-making processes for very different issues and contexts?
- Can we overcome, or at least accommodate, the various big apparent tensions – between global and local, immediate and long term, socio-economic and ecological, planning ahead and expecting surprise, highly complex and practically manageable, generally applicable and context specific, etc.? and
- If so, how?

The approach here rests on a small set of basic propositions. Six main ones are as follows:

- Sustainability, which in our usage is little more than a shorthand for attractive, long-term viability, involves a combination of ecological (biophysical) and human (physical, social, psychological, cultural, political, economic, institutional, etc.) considerations;
- These considerations are inevitably linked over time and space;
- The relationships involved (historically, currently and desirably in the future) are interactions of and in complex socio-ecological systems that are diverse, multi-scalar, nested and intersecting, dynamic and surprise-filled;
- In all sustainability issues and decisions, the specifics of the case and context matter; and
- What we choose to do in pursuit of sustainability is ultimately a matter of ethics as well as understanding, and an appreciation of the relations among ethics, understanding and uncertainty is likely to be helpful.
- In consequence of the wicked dilemmas and trade-offs involved, it may not be possible to make our liberal-cosmopolitan-global civilization sustainable over a long period; it may not be possible to make any human society sustainable.

Beyond these propositions, there is no proper framework to be taught or accepted. Critical exploration in these areas will lead different individuals to different conclusions,
and subsequent study will provide new enlightenment and perhaps very different perspectives. At the same time, each participant will be encouraged to assemble his or her own framework for understanding and applying the concept of sustainability in complexity, most immediately for the purposes of setting the anticipated doctoral research in its larger context.

Assembling this framework will require development of:

- A critical grasp of the assumptions and institutional practices that now prevail (your critique);
- A reasonably coherent view of the basic characteristics of alternative assumptions and institutions – or alternative combinations of assumptions and institutions – that are more in keeping with sustainability objectives in a complex world (your vision) and unavoidable circumstances; and
- A set of working propositions about the most desirable means of making the transformation (your conclusions about the appropriate strategies and tactics applying various tools, techniques, etc.)
- The recognition that the kind of societal disruption implied by any radical environmental politics is likely to generate unintended and unforeseeable consequences.

Accordingly, ERS 701 examines:

- Why sustainability and complex systems thinking have arisen as a critique of and alternative to prevailing ideas, institutions and behaviour;
- What their essential foundations are, what different forms a sustainable society might take and what main considerations guide development of appropriate strategies for response.

And also

- Critiques of orthodox sustainability theory framed in relation to longer time-horizons and greater emphasis on long term processes of social development.

The course also addresses central implementation considerations, especially respect for complexity and uncertainty, understanding of the main theories of change and appreciation of the range of possible applications. It looks carefully at actions that can be taken to help meet essential requirements for sustainability in campaigns for positive change locally and globally, with attention to the problems to be faced and the barriers to be overcome as well as the opportunities available.

ERS 701 is meant to assist individual student work in practical applications, including designing a sound and valuable thesis. In ERS, each thesis must be explicitly located in a larger context and include a rationale that shows how the specific work illuminates, or contributes otherwise to, steps towards sustainability in a complex world. By the end of the module, students will better be able to recognize the frames of reference and grounding environmental discourses structuring the projects and research priorities of different faculty members in the Department.
B. Structure

We will initially meet as a full graduate class, both Masters and PhDs in EV2 (room tbc), for a collective lecture/discussion session. The second portion of the class will normally be for the 701 students only (venue tbc).

In addition to the topics to be addressed collectively with the Masters students, the 701 class will devote some special attention to matters related to critical thought, assessing claims, and building logical arguments. Topics to be addressed include arguments (deductive and inductive), premises and conclusions, logic, fallacies (statistical and informal), knowledge, belief, evidence, bias and the significance of framing narratives or discourses in structuring all environmental research.

Students will be working in SMALL GROUPS – that will be assigned on LEARN. Please make contact with other group members as soon as possible via the LEARN system and prepare to work with each other through the semester.

C. Readings

In the ERS 680 Guide, there are lists of readings, usually in two categories: core “readings” and supplementary “additional readings”. The core readings are priorities – though most weeks there are many core readings so you will need to select among them. They have been listed in a rough and debatable order of potential importance, which you are free to ignore. Particular interests may lead you to look also in the additional readings. These readings will be supplemented as appropriate throughout the course. Further suggestions are welcome.

Most of core readings are available electronically on the ERS course website on D2L (Learn), at https://learn.uwaterloo.ca. In the weekly lists below, core and additional readings on D2L are marked with an asterisk (*).

In addition to this main reading list, this ERS 701 Guide lists a much smaller number of texts more relevant to the discussions in ERS 701.

For both ERS 701 and 680, significant portions of three books are included in the core readings and will be generally useful:


Dryzek, J (2013) The Politics of the Earth. Environmental Discourses (Oxford) [Several additions are available in the library – they are all very similar. Get a second hand copy if you can]
Copies are available in the bookstore.

For those wishing to delve a little more deeply into complex systems and sustainability, the following book is recommended:


**D. Advice about reading**

You won’t and can’t read everything – or even half of half of everything. Nowhere near! Welcome to academia! Don’t complain about the long list. Here as in everything else you do, the onus is on you to peruse, scan, select, reject and to make decisions. Only you are able to decide what is relevant or not, interesting or not, worth your time or not. My advice would be to get into the habit of scanning as much as possible, using the index, looking at the way books are signposted, delineating the landscape of contributions in your own area – probably across multiple disciplines. Map it out on paper. Try and keep that map in mind. Don’t get lost in the trees. Come up for air and try to contextualize everything you read, as you read.

- Who wrote it?
- Why?
- When?
- What was their main point?
- Who is the main audience?
- Who is their interlocutor or intellectual antagonist?
- What was going on at the time that gave rise to this way of posing the question?
- What discipline are the writing in?
- How might this be relevant?

*For each thing you scan or read, jot down answers to these questions. You will be amazed at how quickly this information accumulates and starts to make sense.*

**E. Assignments and assessment**

The assignments for the course are:
1. A reading journal [35% of the final mark]
2. A concluding commentary paper [50% of the final mark]
3. Open Mind Exercise (OME) [15%]

*Submission:* Electronic Submission via LEARN
*Due dates:* TBC – see LEARN
Both journal and paper will involve expectation of familiarity with the lecture and reading material (recognizing that there are far more numerous readings than anyone will be able to read), and incorporation of learning about critical thought, assessing claims and building logical arguments (see above under “structure”).

As noted above, one role of the course is to help establish a strong contextual foundation for the anticipated research and dissertation. In aid of this, at the beginning of the course, each participant is asked to prepare and submit a concise description of his or her intended area of research. A paragraph will do. As part of the final commentary paper (see below), participants will be expected to return to that initial research statement and reassess it in light of the course lectures, readings and discussions.

1. Reading journal

The main purpose of the assignment is to encourage reading that will round out and deepen your general understanding of issues concerning sustainability and complexity and clarify the links among these issues. This is meant in part simply to strengthen your foundations for understanding and acting. But it is useful also to anticipate application in your thesis or, if your thesis agenda is still fuzzy, application to the general thesis area with more particular attention to some reasonably specific issue or case that you know well enough.

Quite aside from this course’s purposes, you should be keeping a journal of some sort (perhaps an annotated bibliography) where you record new ideas, data, arguments and other useful findings from your readings (and other sources) for future reference.

The journal format is flexible but should include:

- proper bibliographic references to written materials, addresses or information from other media;
- brief summaries of the main contents or main relevant points made or questions raised in the readings covered;
- relevant points from the class lectures/discussions;
- considered comments on the significance and implications of these points or questions (particularly with regard to the larger sustainability and complexity issues being addressed in the week and through the term);

and, as the journal progresses,
• increasing concentration on connections or conflicts among the ideas considered.

Normally, each weekly entry should cover at least two readings relevant to the week's discussion. You may choose to consider these readings jointly or as separate items. You may mix longer and shorter entries. You must use proper grammar but may include bullet point lists.

Incorporating ideas from the class lectures/discussions and from sources outside the course is also a good idea.

It is a good idea to prepare the journal entries weekly, as we go. This will not be an enforced requirement.

2. Commentary paper

The commentary paper can be thought of as the conclusion to the reading journal with special consideration of implications for your anticipated research.

With particular attention to your research area, the commentary paper should discuss what you consider to be the defensible essentials of a defensible approach to research and practical action (an ethical framework for decision making seeking to contribute to sustainability, recognizing complexity) including any or all of the following:

• What (if any) principles should be applied generally in assessing past experience, in identifying and choosing among potential options for action, and in designing and applying processes for deliberation and decision making;
• What time-frames should be taken into account both in assessing the past and attempting to steer the future;
• Any more specific principles or guides relevant to your own research area;
• The trade-offs and zero-sums that are associated with any set of choices;
• Whether sustainability is in fact a useful framework for understanding human dilemmas in relation to the environment.

You are free to challenge any of the underlying premises here, so long as the challenge is supported by good argument.

The paper should be properly referenced and not more than 2500 words. While this is not obligatory, you are likely to find it useful to illustrate your key points with examples or applications in your anticipated thesis or research paper topic area. Please feel free to do so.

3. Open Mind Exercise

Completion of the Open Mind Exercise (OME) is part of the assessment. All you have to do is to complete the exercises over a minimum of 5 days (there is a lock out period
between each of the five steps) and then print out and submit an electronic copy of the completion certificate. The OME is worth 15% of the final mark.

Open Mind is a very useful exercise developed by the Heterodox Academy to promote reflection and dialogue across political and religious or spiritual divides.

For more information see https://heterodoxacademy.org/announcing-openmind/

How to use OpenMind

1. Go to the following link to access OpenMind: https://openmindplatform.org/app-user
2. Create a username and password with GuidedTrack. This will enable you to save your progress and log in from different devices.
3. After creating your username and password, you will be prompted to enter an access code. Enter: QuilleyUniversityofwaterlooF18 (case sensitive).

Please note: OpenMind is divided into 5 interactive steps, each of which takes 10-25 minutes to complete. After each step, you'll be required to wait 12 hours before you can begin the next one. We've found that this makes the program more enjoyable and helps you get the most out of it!

F. Discussions and presentations

Each participant will be expected and encouraged to contribute to the weekly discussions. All of the weekly sessions will be structured to include some opportunities for discussion, both in the full grad class portion and the portion for 701 participants only.

G. Lecture Schedule (with ERS 680)

1. Introduction
2. Indicators
3. Sustainability
4. Complex systems
5. History
6. Integrity, resilience and precaution
7. Efficiency
8. Equity, sufficiency, opportunity, civility and democracy
9. Integration and trade-offs
10. Limits: boundaries and opportunities, growth and degrowth
11. Governance
12. Global and local action
H. University of Waterloo policies on key course related matters

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trustworthiness, fairness, respect and responsibility. [Check www.uwaterloo.ca/academicintegrity/ for more information.]

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please contact the department’s administrative assistant who will provide further assistance.

Discipline: A student is expected to know what constitutes academic integrity [check www.uwaterloo.ca/academicintegrity/] to avoid committing an academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline, www.adm.uwaterloo.ca/infosec/Policies/policy71.htm. For typical penalties check Guidelines for the Assessment of Penalties, www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm.

Appeals: A decision made or penalty imposed under Policy 70 (Student Petitions and Grievances) (other than a petition) or Policy 71 (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals), www.adm.uwaterloo.ca/infosec/Policies/policy72.htm.

Disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Religious Observances: A student needs to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.
PLEASE NOTE: The main readings for each week are to be found in the ERS 680 reading list (available as a separate document on LEARN). The readings here are additional specific to the ERS 701 seminar. Please use both documents in conjunction with each other.

1. (a) LECTURE (ERS 680) Introduction to the course
   (b) ERS 701 SEMINAR

Introduction
Summary of research interests and doctoral project ideas.
Discussion
- Provisional ideas about the role of Inter-[multi] disciplinarity
- The relevance of time-frames
- Wicked questions and systems-thinking
- The significance of discursive frames/templates in structuring what we see and can prioritize/attend to
  …with regard to different topics/applications/domains

Choosing the cases/applications – for future discussions.

Instructions: Each group should:

(1) Prepare to present two environmental discourses. The monograph by Dryzek summarizes a range of dominant discourses/templates very well. The Debating the Earth reader, provides examples. Please try to think through how this discourse would manifest itself in relation to your own prospective research area.

(2) Choose one or two cases/applications – for future discussions. As far as possible choose problems that have some fit with each person’s research interests.

READING:


ALSO
Mills, S (2004) *Discourse* (Routledge) – this is available online through the library and provides a handy little intro to the concept of discourse

And read this: [http://www.massey.ac.nz/~alock/theory/foucault.htm](http://www.massey.ac.nz/~alock/theory/foucault.htm)

2. (a) ERS 680 *From indicators to actions: critiques, visions, strategies, tactics*
   (b) ERS 701 SEMINAR

General discussion of lecture material

Students should all come individually prepared with (1) mainstream and (2) idiosyncratic/wacky indicators (see above). In groups, discuss your indicators and select the most illuminating of each to present to the class.

Specific consideration of:

- Indicators and time-frames
- Numbers/quantification/disenchantment:
- Wicked dilemmas in relation to modernity, knowledge and meaning.
- Is science always corrosive (like Sauron’s ring for Gandalf?) **

**QUESTION:** Consider the discourses considered last week. Is there any relationship between the kind of indicators that one might (dis)favour and the discursive framework/template through which the problem is considered?

**READING**

**Turner – The Abstract Wild (On Learn)**

3 (a) The history and character of the sustainable society idea
   (b) ERS 701 SEMINAR

What are the roots of the ecological crisis?

Mainstream green narratives often equate the global crisis with modernity and a process of modernization (from the 17th century) that conflates urbanization, the rise of capitalism and scientific/technical rationalization. However, there are other possible answers.

**HEALTH WARNING** – I have mentioned some of the great names of sociology/political economy from the last two centuries – Marx, Weber, Elias, Polanyi, Ulrich Beck. You
are not expected to read or understand great dusty tomes [at this stage]. Use the Internet. Find short cuts. Use Wikipedia and skim a few books – just to get a sense of who these people are, the nature of the critical positions that derive from their work and their relevance to contemporary debates. Treat it like a piece of investigative journalism or legal prep: which is to say a brief you need to get on top of quickly with any short cut that you can find.

WORKING IN GROUPS, research and develop arguments for ONE of the following propositions:

i.) The roots of the ecological crisis are in the evolution of language and (linked) fire-culture [Reading: Joop Goudsblom (1992) *Fire and Civilization*; Norbert Elias (1989) *The Symbol Theory*; Colin Tudge *Neanderthals Bandits and Farmers; How Agriculture really began*; Stephen Budiansky – *the Covenant of the Wild*]

ii.) All human cultures have been prone to expansion and collapse [Shepherd Kreche – *The Ecological Indian*; Jaren Diamond *Guns Germs and Steel & also Collapse*; Paul Martin on the Pleistocene Overkill Thesis – start here [http://en.wikipedia.org/wiki/Paul_S._Martin]]

iii.) Ecological crisis results from the ‘decision’ of some humans and cultures to do agriculture [Daniel Quinn *Ishmael*]

iv.) Ecological crisis is a function of capitalism [look at Marxist arguments (see Lowy below) but also Karl Polanyi [http://onthecommons.org/why-karl-polanyi-still-matters ]

v.) Ecological crisis is caused by (bad?) religion – and can be rectified by (better/no) religion/spirituality. See: Lynn White Jr. for classic argument -- ‘The Historical Roots of Our Ecologic Crisis’ by White,, Lynn *Science*, 1967, Vol.155(3767), pp.1203-1207 [online at library]

vi.) Ecological crisis is a function of modernity and modernization [Lowy’s article on Marx versus Weber a good start - [http://newpol.org/content/marx-and-weber-critics-capitalism]; and most famously in recent years Ulrich Beck’s Risk Society thesis: [http://en.wikipedia.org/wiki/Risk_Society]]


viii.) There is no ecological crisis [start with Julian Simon [http://en.wikipedia.org/wiki/Julian_Simon]]
Don’t panic. This is not about giving chapter and verse. It is just to give you a sense of the scope of the possible answers, the different time-frames involved and the intellectual/political and policy consequences of foregrounding some arguments and pushing others into the background.

**QUESTIONS:**

Can you see some of these positions reflected in the research and outlook of Faculty in ERS, or prominent environmentalists?

How, if at all, do these positions really engender different positions/agendas/priorities in relation to the chosen case studies/applications?

**4 (a) The history and character of the complex systems idea**

**4 (b) ERS 701 SEMINAR**

**SMALL GROUPS: Short power-point presentation**

Working in small groups, we will again examine the applications cases chosen in week one. Each group will:

(i) identify one particular problem or opportunity or initiative (actual or anticipated) in the case/place that could have significant sustainability-related effects that merit careful attention;

(ii) list at least five sustainability-related objectives that would be desirable results from an effort to address the identified problem or opportunity or initiative;

(iii) sketch a one page systems depiction, centred on the identified problem or opportunity or initiative, noting the key factors you expect do or would influence the prospects for success, considering at least one scale larger and one scale smaller as well as overlapping influences at the same scale;

(iv) identify where there are most likely to be points of system stress – where the system might be near a threshold for significant change (desirable or undesirable); and if there is sufficient time

(v) consider the major implications for selection and design of the response efforts.

**Recommendation**

As a complement to your journal entry for the week, develop for your own research area (or, better, for an illustrative case example within it) a system depiction as in (ii) above, relying on what background information you have on hand, supplemented by a quickly gathered set of up to 10 news articles on the place/case.
5 (a) The longer background to sustainability in complexity: old sustainability, progress, critiques and the context for new sustainability
(b) ERS 701 SEMINAR

Introductory discussion: developing a time-line for the variety of positions referred to in the lecture

GROUP PRESENTATION

Each group presents and provides brief support for one key lesson from the great sweep of human (pre-) history about human relations with the larger environment. The lessons can be directly about human attitudes and practices involving nature, or about human approaches to personal interests, or relations each other that have implications for how humans view and treat the environment.

We will then consider whether these lessons are compatible and reasonably well supported by evidence, and what the implications may be for options today and in the future.

In our discussions, we will look for:

- challenges to and/or support for common basic assumptions about the nature of a good and viable life on Earth, that rest on deeper views about the essential character of human beings and nature of biophysical systems and proper relations between humans and the rest of the environment (e.g. humans are naturally self-centred, social, forward-looking, competitive, happier when immersed in nature, rational, spiritual, insatiable consumers, curious, conservative, destructive, dissatisfied, inherently alien from nature due to self-consciousness, doomed to over-exploit their environment, capable of learning from mistakes, driven by economic motives, subservient to culture, etc.;

- implications for setting objectives and choosing strategies for change towards sustainability.

6 (a) Sustainability requirements: integrity, resilience and precaution
(b) ERS 701 SEMINAR

Group discussion
How does the concept of ‘resilience’ relate to the seven answers to the question of the roots of ecological crisis? i.e.
i.) The roots of the ecological crisis are in the evolution of language and (linked) fire-culture

ii.) All human cultures have been prone to expansion and collapse

iii.) Ecological crisis results from the ‘decision’ of some humans and cultures to do agriculture

iv.) Ecological crisis is a function of capitalism

v.) Ecological crisis is a function of religion

vi.) Ecological crisis is a function of modernity

vii.) Ecological crisis is a function of bad technology and technological choices

viii.) There is no ecological crisis [start with Julian Simon


For the applications/case studies - how do these seven positions change the temporal framework/system boundaries or the definition of the system?

SMALL GROUP WORK
Small groups take the applications topics from weeks 3 and 4, recalling the major sustainability-related problems and/or opportunities and the depiction of the place/case as a complex system, and consider:

(i) the focal system’s desirable characteristics, threats to these characteristics and possible ways to reduce the stresses and build system resilience to maintain these characteristics;

(ii) the focal system’s undesirable characteristics, the nature (including evident resilience) of the institutions and other factors the perpetuate these characteristics, and possible ways to encourage a transition (overcome undesirable resilience).

(iii) two examples of desirable links between actions identified in (i) and (ii).

PRESENT BACK TO THE CLASS

7 (a) Sustainability requirements: efficiency
(b) ERS SEMINAR 701: EFFICIENCY AND SCALE

IN SMALL GROUPS

Part 1: For each of the case studies/application – identify one area of evident need for greater material and/or energy efficiency. Consider:

(i) the major approaches that have been or could be taken to enhance material and/or energy efficiency;

(ii) the most promising approach;

(iii) the main barriers to effective action and how they might be overcome;

(iv) the extent to which these efficiency initiatives might be sufficient from a sustainability perspective (or whether they might be deficient or problematic – e.g. because of conflicts with resilience objectives, or inequitable in their effects, or …).

Part 2: How does your discussion of efficiency relate to the seven causal frameworks?
Part 3: How does the problem of ‘efficiency’ relate to the problem of ‘scale’ in ecological economics (see readings by Herman Daly)

*Present back to class*

**Reading:**

Anything by Herman Daly – e.g. *For the Common Good* (1990) or the textbook *Ecological Economics* (opening chapters)

Look through his work for a discussion of the relationship between efficiency and scale. It won’t be hard. He hammers on about this ALL THE TIME.

**8 (a) Sustainability requirements: equity, sufficiency and opportunity, civility and democracy**

**(b) ERS 701 SEMINAR**

**ERS 701 SEMINAR**

Following on from the dilemma of efficiency versus scale, this seminar focuses on the wicked dilemmas viz-a-viz the relationship between social justice and liberal civil societies on the one hand and growth on the other.

**EXERCISE 1**

Each small group should choose an area/place – and identify what people in that area, individually and collectively, need for the essentials of lasting wellbeing (sufficiency, etc.). In the process you should consider:

- The major deficiencies, vulnerabilities and opportunities seem most significant for those people in that place;
- The ways in which such vulnerabilities have been addressed in some way by recent or current initiatives;
- Those interests (present and future, human and non-human) that have been influential in the relevant decision making and those interests that have been neglected or suppressed;
- What kinds of knowledge have been applied (scientific data, economic analysis, traditional understanding, political strategizing, etc.), and what kinds have been neglected or suppressed.
- What could be done to correct or reduce the deficiencies in your case (e.g. different decision making processes, different legal or economic arrangements, different education, better data, …).

**EXERCISE 2:**

Enumerate the ways in which inequalities and vulnerabilities in relation to class, gender, disability, race, ethnicity HAVE been addressed in Western countries. Sketch a systems
diagram of the relationships between these agendas/policies and (i.) wider public infrastructures (transport, health, education, civil service [e.g. information gathering] etc.) (ii) the tax system and (iii.) the dynamics of liberal polities.

What does this tell us about the apparently easy alignment of ecological integrity and social justice in the discourse of sustainability?

Reading:

Quilley (2012) Degrowth is Not Liberal Project – ON LEARN

9 (a) Sustainability ethics: integration and trade-offs
(b) ERS 701 SEMINAR

ERS 701 SEMINAR

EXERCISE:

The set of sustainability requirements (as criteria for evaluations and decisions in assessment processes) in Bob Gibson’s Sustainability Assessment book, enriched by attention to complex systems realities and resilience considerations in the Resilience Thinking book, represents an ethical package of sorts.

How does this implied sustainability ethic compare with other ethics have been offered for practical application in decision making related to sustainability initiatives in general and in particular areas (ecological restoration, wildlife management, development assistance projects, water management, community building, and so forth)?

TASK

Each group should identify one of these other ethics (or set of criteria for planning or evaluation or management design, or …), preferably one that is particularly relevant to your anticipated thesis research area, and be prepared to discuss how it compares with, and/or differs from Bob Gibson’s package.

QUESTIONS

What is an ‘ethic’?

What are the assumptions that underpin the Sustainability Assessment framework? [Time frames? Species perspective?]

Are they universal? If not, why not?
How did Aldo Leopold’s concept of a ‘land ethic’ depart from the dominant tradition of Western moral philosophy – and with what consequences?

Reading

Aldo Leopold, Norbert Elias, and Environmental Philosophy
*Environmental Ethics* Volume 31, Issue 2, Summer 2009
Pages 115-134
DOI: 10.5840/enviroethics200931215

10 (a) Limits: boundaries and opportunities, growth and (de)growth agenda
(b) ERS 701 SEMINAR

Groups will consider whether and how limits for the GGH/Greenbelt region should be defined and applied concerning:
- Population
- Land allocated to housing and non-agricultural industry
- Overall material and energy use
- The gap between rich and poor

Reading


11 (a) Implications and means for action: governance issues and options
(b) ERS 701 SEMINAR

EXERCISE

Take the case/place/issue topics that you have used in several of the earlier exercises (or some new one with which you are familiar), and

(i) Consider the basic characteristics of a more desirable future in that place or field of activity, the transformations needed to get there, and the particular changes that seem most likely to be successful in encouraging these transformations

(ii) The main players and tools involved, and how they may be connected (players include government agencies at various levels, corporations, private sector associations at various levels, non-government public interest organizations at
various scales, community organizations, particular individuals, particular kinds of experts, religious or aboriginal bodies, etc.); and

(iii) What these main players apparently assume about how significant change is to be accomplished (e.g. by individuals or institutions; by better knowledge or more effective motives; by sudden major changes or by slow incremental steps).

We can discuss whether attention to the full suite of sustainability requirements and complex system features (multiple scale influences, thresholds, feedbacks, etc.) would lead to different assumptions and approaches.

12 (a) Scales: global and local actions
(b) ERS SEMINAR 701

SMALL GROUP EXERCISE

Take the case/place/issue topics that you have used in several of the earlier exercises (or some new one with which you are familiar).

Recap from last week the basic characteristics of a more desirable future in that place, the transformations needed to get there, and the particular changes that seem most likely to be successful in encouraging these transformations (you can think of these as a set of strategies for change)

Now consider the particular question of food.

- What approaches to food system design and related aspects of the socio-ecological systems involved would be most appropriate for your case area recognizing also its global context

- How might the food systems of your place best be maintained and/or transformed for greater sustainability and resilience, paying particular attention to what aspects should be global or local or some combination.

Globalisation discussion questions

- For sustainability, what problems and opportunities need to be addressed at a global or at least multinational level?

- What sustainability criteria are and are not being addressed/met in the predominant economic globalization initiatives centred on trade liberalization? Do the faults lie in the objectives and underlying assumptions or in the implementation efforts?

- What matters are properly left largely for market management?
• Where non-market mechanisms are needed, how can they be provided effectively, within the capabilities of actual communities, governments, civil society organizations, etc.?

Localisation discussion questions

• What are the key advantages and disadvantages of a community-centred approach to sustainability?

• Where there are trade-offs to be made among local interests and between local and larger scale interests, how might this best be done?

• What should be done where local culture appears to conflict with sustainability objectives?

• On what matters is local self-reliance most crucial?

…..AND WRAP UP