Lecture 1
26 September 2017
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I. Introduction
   A. Introductions of self and class
   B. Julia Butterfly Hill (tree-sitter): someone taking action to address a problem
      1. What was the problem that Hill was trying to address?
      2. What was her solution to it?
      3. Was her solution effective?
         a) If so, what do you mean by effective?
         b) If you believe it is effective, would you do it?
         c) Are there other actions you could take that would be more effective?
         d) How do you know they are more effective?
      4. What about a treaty on deforestation? Would that be more effective? How would we know?
   C. Class exercise:
      1. **Problem:** Write down one international environmental problem that you are concerned about
      2. **Cause:** Write down what you think is the most important cause of that problem
      3. **Solution:** Write down one policy that you think could make a big contribution to fixing the problem

II. Visual review of the “Human impacts on the Natural Environment”
   A. Most of the problems we have identified probably are real problems.
      1. But how do we identify REAL and prioritize IMPORTANT problems while avoiding worrying about not-real problems or prioritizing less important ones?
      2. Examples:
         a) Electromagnetic radiation – no evidence that it does any harm.
         b) Most women are most scared of breast cancer but heart disease kills >10x as many women each year
      3. What are the risks of worrying about the wrong things? What are the risks of not doing enough to figure out what we should worry about?
      4. What are the problems that we don’t yet know about but are already underway? How do we identify them before fifty years of damage is done (as occurred with CFCs and the ozone layer)?
   B. Most of the causes we have identified probably are real causes
      1. But how could we go about figuring out: whether the causes we suggested really are the causes or whether other things are more important causes
      2. Example: Major cause of fish-stock depletion is? helping threatened species survive – genetic diversity of stock more important than number of specimens.
      3. What are the risks of identifying the wrong causes of a problem? What are the risks of not doing enough to figure out what the real causes are?
   C. Most of the policies we have identified probably would help make things better
      1. But can we determine if our preferred policy solutions would help fix a problem; would fail to help; or would make matters worse? Example: cleanup of Exxon Valdez spill in Alaska.
      2. What are the risks of recommending the wrong policies? What are the risks of not taking any action?
         a) Which of these solutions is likely to work best
         b) Do we have time to try them out and see?
         c) What if we make mistakes in the meantime – can we afford to make any more mistakes?

III. Class summary
   A. Class goal: help you think more systematically about problems, goals, and solutions in ways that help you become more effective at contributing to solving problems in the world
   B. These things and provide one way to think about them so that you can be a more informed person.
   C. Make sure everyone does assignment #1 for next class: plagiarism and reading assignment packet.
   D. The importance of care in determining why something happened and what effect it has had or will have.