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Reaction Paper #3

### Epstein – “Climate and Health”

This paper draws links between climate change events and the spread of health problems. Heavy precipitation can contaminate drinking water and create breeding grounds for disease-spreading rodents and insects. Prolonged drought can kill off predators and make favorable conditions for weeds and plant-eating pests, which negatively affect food supply. The author argues that tracking climate events can ultimately be used to predict and respond to health crises, and that a focus on clean energy can help stabilize man’s impact on the climate.

Using climate information to predict disease outbreaks and health crises seems logical. One concern I have though is the coordination of the information exchange. Different stakeholders will have different problems buying into the idea of the event’s occurrence. How much probability of an outbreak or event is needed to convince health workers to dedicate resources to mitigating that event?

### Epstein – “Assessing Climate Stability”

This article examines indicators that the current climate system may be growing more unstable. A recent loss of sea ice, coupled with historic data extracted by examining ice cores indicates that current climate trends are unusual. Weather patterns have become less predictable over the last 50 years and there are “outlier events” that are not consistent with current models. A systems framework is then applied to the stability problem to assess which factors are influencing stability.

While I personally believe that human actions over the past half-century have contributed to destabilizing the climate, I wonder how well a systems approach can be used to analyze all the contributing factors. Systems frameworks are usually applied to engineered or man-made organizations, and I question whether one can be generalized enough to include everything that effects climate change. Also, I would like to learn more about the historical data that is gathered from ice cores.

### Epstein – “Is Global Warming Harmful to Health?”

This article looks at how global warming specifically impacts incidents of disease and poor health. Like the other two articles, it focuses on climate change (flood and droughts) and the impact of pests on human health. It spends significant time on mosquitoes and the fact that hot, moist environments contribute to massive mosquito population booms. It also emphasizes the impact of sequential climate extremes in making environments that are well-suited for disease explosion. It finally looks at the changing patterns of the El Niño phenomenon, and links those patterns to a danger of things to come.

One thing I like about this article is the almost 1.5 pages that it dedicates to possible solutions. Although they are not necessarily novel (climate surveillance has already been used to track and predict West Nile Virus outbreaks, and emission reduction has been a staple of the environmentalist platform for decades), it is nice to see a focus on solutions to which most papers only devote a paragraph or two. However, as the author himself states, the presented solutions may not even be practical, especially in developing countries. Obviously, this is an area where more work can be done.