

Rhodes: 'The upside of down'

By Patrick Harris
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Rhodes students were given an opportunity to consider some of the most pressing contemporary global issues with the visit on October 12 of Dr. Thomas Homer-Dixon, who delivered a lecture entitled "The Upside of Down: Leveraging Catastrophe for Positive Change". Homer-Dixon, a Canadian political scientist with extensive writings on the link between environmental stresses and human conflict, spoke at length on what he said were "the struggles mankind is facing now and will face for the remainder of the century": climate change, energy shortages, and economic instability.

Homer-Dixon stressed the interrelated nature of the major challenges facing humanity, likening them to a group of dump trucks hurtling towards mankind from different angles. He noted the tremendous growth of human capacity to affect the environment, claiming "we are now an actor as big or bigger as nature itself." Despite (or perhaps because of) the extent and increasing interconnectivity of human activity, Homer-Dixon warned "We have created systems that brittle and subject to cascading failures", citing the rapid spread of pandemic diseases or the economic fallout of the American mortgage crisis.

Much of Homer-Dixon's lecture focused on what he referred to, in homage to former Defense Secretary Donald Rumsfeld, as "unknown unknowns", or uncertainty as opposed to manageable risk. Homer-Dixon cited the fate of Canada's East Coast Fishery as an example of the failure to understand all of the variables involved in the operation of complex systems. In 1992, despite an elaborate scientifically-based regulatory scheme intended to maintain fishing stocks, a combination of overfishing and other environmental factors led to the sudden collapse of the ecosystem, destroying what was once the richest source of fish on the planet. Homer-Dixon compared this debacle to the ongoing economic crisis, noting the role of complex and little-understood financial instruments in the market meltdown. Quoting another expert, he said "The crisis continues because nobody knows what anything is worth." Homer-Dixon offered his conclusion that because of the spiraling complexity of such devices as credit-default swaps, "there was no accurate way of assessing risk in the system anymore. What people thought was risk became unbounded uncertainty."

Homer-Dixon also described Earth's climate as a complex system in which "positive feedback loops" can aggravate certain trends. The melting of Arctic Sea ice, for example, can cause greater absorption of solar radiation by the dark sea water, increasing the overall rate of melting. Homer-Dixon listed the potentially dire consequences of the planet's ecological trajectory, from catastrophic rises in sea-level to shortages of food and water.

Homer-Dixon offered constructive solutions to these challenges in the later portion of the lecture, noting the propensity for crisis to allow needed fundamental change. Homer-Dixon, who has coined a word for this phenomenon, "catagenesis", listed practical means to ameliorate environmental and energy crises, such as enhanced geothermal energy and in particular the adoption of an emission-limiting program such as a carbon tax or cap-and-trade scheme. "We need to start paying the price for using the atmosphere as a dumping ground for our carbon."

More broadly, he expounded on a need for a long-term shift in societal values, from "utilitarian values to moral and existential ones." Perhaps most controversially, he declared the model of continuous economic growth untenable and promoted a "steady state global economy" that would eventually take its place. According to Homer-Dixon, "We need to figure out how to maintain social peace and freedom in a steady state globally."

Dr. Jennifer Sciubba, Rhodes professor and Mellon Environmental Studies Fellow, said she hoped that students would take away from the lecture the idea that "big ideas and big thinkers are needed to solve big challenges", noting that Rhodes students "should be big thinkers themselves". Sciubba also said the Homer-Dixon's discussion of values was particularly relevant to the Rhodes community, given its own focus on values in academic life and beyond.