

Decision Processes Colloquia

Monday, January 27, 2020

Where: 270 JMHH

When: 12:00 – 1:20 pm

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Global-Local Incompatibility: The Misperception of Reliability in Judgment Regarding Global Variables.

ABSTRACT:

A number of important decision domains, including global warming and natural hazards, are characterized by a *global-local incompatibility*. These domains involve variables that exist on a global scale, that cannot be observed by a single decision maker (DM), and require the integration of observations from locally available information cues. I present a new bifocal lens model that describes how the environmental structure can lead to a unique form of overconfidence when generalizing the reliability of the local environment to a global scale. When the local environment does not reliably reflect the global environment, they are incompatible. While local perspectives vary across DMs, global-local incompatibility can be understood using the structure of classical test theory to quantify (a) perceived reliability derived from the local environment and (b) the true reliability of the local environment. I model global-local incompatibility as the difference between the true and perceived reliability within different decision environments. Using a series of case studies and empirical surveys, I demonstrate the widespread utility of this framework for understanding perceptions of climate change and tornado threats, and conclude by discussing implications for cognitive-ecological theory, risk communication, and overconfidence.

