I've been learning from my ERG colleague John Harte about a statistical technique called MaxEnt. For many environmental problems — most notably climate change — we are not only unable to provide a reliable estimate of harm, but we don't even know the shape of the probability distribution. MaxEnt is a way of constructing a curve that fits whatever we do know (such as the mean or variance of the distribution) without implicitly making any other assumptions about the curve.

Technically, this method maximizes the informational entropy of the distribution given the constraints. This concept is derived from information theory, and has been used successfully (for instance) to estimate species populations. For more on this subject, look here and here.

Very cool stuff.