

We are alive today! Therefore, we face greater (global) risk

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The central problem of risk analysis consists in determining the probability of a particular kind of adverse outcome: *how likely is your car to be stolen? what are the chances of your failing to repay a bank loan? how seriously one should take the probability of dying in a plane crash?* The answers clearly depend on a number of input parameters. For instance, more realistic questions to ask are: *how likely is your car to be stolen, given the neighborhood in which you live? Or: what are the chances that you will not be able to repay a bank loan, if you have an unemployment history?* This motivates further inquiries, however, in particular how do we choose the relevant set of input parameters and how do we measure or estimate their values. What if the relevant information is buried in distant past and is thus inaccessible (at least physicists invent a time machine)? Since there is no unique, royal road leading to the values of these parameters, we have to use widely different techniques and approaches, making risk analysis a complex, adventurous, and often combat sport. In it, we need to be ever vigilant for errors, confusions, and biases which influence our calculations and conclusions.

There is, however, a bias so pervasive and so overwhelming that it is almost universally ignored – which consists in the simple fact that we are here, alive in the present epoch! This mundane fact, surprisingly enough, scrambles our estimates of global catastrophic risks such as asteroid impacts or supervolcanic eruptions. In simple toy models, it is easy to perceive that the bias actually underestimates the magnitude of risk. In order to correct for this bias – which is evocatively dubbed *the anthropic shadow* – we need to obtain better insight in the very concepts of causal networks, observation selection effects and past evidence. This insight, which might too often be downplayed or dismissed as merely “philosophical”, has an important role to play in our analysis and management of global risk and is, therefore, of great practical importance. Some directions and opportunities for further interdisciplinary research in this area will be outlined.

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