

**“Where should we draw the line—at fewer trials (in order to reduce dangers), or at more trials (so as to experience errors that can teach us how to proceed more safely)? There ought to be more than a negative finding of actual, or potential, harm from an activity. In addition, the good that is done should be allowed to counterbalance the bad. “Net benefit,” not “no harm,” should be the criterion of choice. ... Benefits (like errors or catastrophes) cannot be fully anticipated in advance. Even newly discovered dangers that cannot be eliminated through trial and error may be tolerated if benefits turn out to outweigh hazards. And benefits will never be discovered unless risk is tolerated.” (Aaron Wildavsky, *Searching for Safety*, 63)**

Questions for discussion:

1. What understandings of risk underlie the “precautionary principle”?
2. Can the precautionary principle guide public policy responses to environmental problems?
3. How are different attitudes to the precautionary principle reflected in interpretations of what “sustainable development” requires?
4. How are arguments about the burden of proof with relation to the riskiness of future development related to the question of what reason requires?

### **Risk, uncertainty, and ethics**

Environmental sustainability, risk, and limits are indistinguishable components of debates in environmental philosophy and social science. Environmental protection consists of efforts to contain or reverse environmental change for the purpose of sustaining things that we value, and so it necessarily incorporates a theory of what changes we should expect. However, change, or the future, is necessarily uncertain, because it hasn’t happened yet. It follows that arguments about environmental protection necessarily take a position on risk, and whether environmental risk can be reasonably managed (and if so, how).

The principal question concerning risk in environmental policy is whether we should follow the “precautionary principle”. This principle is intuitively attractive, because it is rational to preserve value through time. But it is difficult to fill out, because although it *appears* to speak to the problem of uncertainty, it requires that the problems we face are risky in the economic sense of the term, rather than genuinely uncertain. For instance, implicit in the first round of (neo)Malthusianism is the assumption that in terms of environmental values, human activity is on balance more harmful than beneficial. The implication is that we’d be safer if we avoided, or dramatically curtailed, development. Both stronger and weaker Promethean responses asserted that we would in fact run greater risks by not developing than we would by prohibiting development. We would, in other words, be safer if we developed. Even Wildavsky’s rejection of the precautionary principle, which rests on the idea that humans will be safer (in terms of securing the things we value) if we allow learning through error. It is clear, however, that Wildavsky assumes that catastrophic dangers have a small probability and a relatively low expected cost (relative to the expected benefits of learning). What if the risk of catastrophe is higher, and the benefits of trial and error learning lower? Can one set of probabilities be defended against another, when the truth of the matter is that no one knows?

More generally, the questions and ambiguities concerning risk raise the question of what is reasonable—and to whom reasonable justifications are owed. Humans are in a unique position, ethically, because we are uniquely capable of changing—and potentially protecting—nature. But it is unclear both how much control we have over these processes, or what goals we think should animate them. Debates over risk and the precautionary principle, then, are as much about efforts to control the narrative, or meaning, of humanity, and its modern condition, as they are efforts to realise some rational pursuit of the good. What matters more: that we emerged from the kingdom of animals, or that our thinking manifests a form of transcendence from that kingdom?