

In “Perception of Risk” and “Perceived Risk, Trust, and Democracy,” Paul Slovic demonstrates the reasons for and implications of the finding that individual and expert assessments of risk diverge so greatly. Subjective risk assessments matter because individuals have the power to influence national policy priorities, and we want choices that reflect informed assessments of the costs and benefits of alternative policies. In “Perception of Risk,” Slovic reveals that individuals may have surprisingly distorted views of the relative mortality risk of different events (for example, nuclear accidents vs. X-rays). Yet despite the distortions, Slovic argues that experts’ assessments of risks neglect to take into account factors (other than mortality) that shape subjective risk perceptions, such as voluntariness of exposure, familiarity, control, catastrophic potential, equity, and level of knowledge. Thus risk perception includes information other than statistical mortality rates about what is important to individuals. In this psychological context, accidents serve as signals, with impacts reaching far beyond the directly impacted people and environments to shape perceptions of risk and future policymaking.

In “Perceived Risk, Trust, and Democracy,” Slovic addresses the roots of public reaction to risk, identifying two broad factors: social values such as inequity or uncertainty, and the distortions created by lack of trust. Surprisingly, public risk assessments are more influenced by trust than by technical analysis, which may explain the relative risks assigned to nuclear plants and X-rays by the public: post- Three Mile Island, the public has little trust in regulatory agencies to policy nuclear facilities, but most people trust their doctors—and there is little evidence to suggest that providing people with technical analysis will change their minds. Slovic stresses the fragility of trust as well as its importance—not only do people give more weight to “trust-destroying” than to “trust-supporting” events, the media and special interest groups are quick to publicize evidence of high-profile, trust-destroying events. To solve the problem, the author suggests that it may be necessary to engage in “power sharing and public participation in decision-making that have rarely been attempted,” but admits that this may not provide any solutions to the problem of distrust in the short run.

In “Border Crossings,” Kasperson and Kasperson extend Slovic’s framework of social amplification of risk to examine social transboundary risks, which they defined as the risks “that arrive when human activities in one or more national states threaten current or future environmental quality, human health, or well-being in at least one other nation-state.” Like Slovic, they authors point to the importance of inequity and distrust in shaping transboundary risk perceptions. They provide a fourfold classification of transboundary risk occurring between the risk-source and the affected region: (i) border-impact risks, (ii) point source transboundary risks, (iii) structural policy transboundary risks or “hidden hazards”, and (iii) global environmental risks between the risk-source and the affected region.

To illustrate a form of point-source transboundary risk, defined as “one or several clear point sources of potential hazard that threaten” an adjoining region, the authors point to the case of the Barsebäck nuclear plant in southern Sweden, located 20 kilometers from Copenhagen, Denmark. Post-Chernobyl, public perceptions of risk from nuclear facilities were extremely high, and the Swedish government’s decision to close the plant was influenced by Danish public pressure and concern over the risk of a nuclear accident. Thus though none of the actual risks changed pre- and post-Chernobyl (they remained small), perception of risk and amplification of risk by the Danes increased, creating a policy response in Sweden.

In “Swedish Aid and the Ignalina Nuclear Power Plant,” Löfstedt and Jankauskas discuss the example of the Ignalina nuclear power plant in Lithuania and how Swedish aid was used to mitigate potential safety hazards of the plant. Unlike in the case of the Barsebäck nuclear plant,

there was evidence that the Ignalina plant was a potential hazard. Though giving aid to reduce environmental risk seems to violate the principle of “polluter pays,” several factors indicate that aid was the appropriate solution to this transboundary risk problem: the “polluter” was unable [for economic or political reasons] to mitigate the risk, the two countries perceived the risk differently, in both countries, the aid was widely supported by industry, government, and individuals. Though consultation and communications mechanisms could have been improved, the transfer of aid from Sweden to Lithuania served both to mitigate risk and improve relations between the two countries.