



Figure 2. Hazard locations on Factors 1 and 2 of the three-dimensional structure derived from the interrelationships among 18 risk characteristics in Study 2. Factor 3 (not shown) reflects the number of people exposed to the hazard and the degree of one's personal exposure. The diagram beneath the figure illustrates the characteristics that comprise the two factors.

| Factor                           | Conditions associated with increased public concern | Conditions associated with decreased public concern |
|----------------------------------|---|---|
| 1. Catastrophic potential        | Fatalities and injuries grouped in time and space   | Fatalities scattered and random                     |
| 2. Familiarity                   | Unfamiliar  | Familiar  |
| 3. Understanding                 | Mechanisms or process not understood                | Mechanisms or process understood                    |
| 4. Uncertainty                   | Risks scientifically unknown or uncertain           | Risks known to science                              |
| 5. Controllability (personal)    | Uncontrollable                                      | Controllable  |
| 6. Voluntariness of exposure     | Involuntary   | Voluntary   |
| 7. Effects on children           | Children specifically at risk                       | Children not specifically at risk                   |
| 8. Effects manifestation         | Delayed effects                                     | Immediate effects                                   |
| 9. Effects on future generations | Risk to future generations                          | No risk to future generations                       |
| 10. Victim identity              | Identifiable victims                                | Statistical victims                                 |
| 11. Dread                        | Effects dreaded                                     | Effects not dreaded                                 |
| 12. Trust in institutions        | Lack of trust in responsible institutions           | Trust in responsible institutions                   |
| 13. Media attention              | Much media attention                                | Little media attention                              |
| 14. Accident history             | Major and sometimes minor accidents                 | No major or minor accidents                         |
| 15. Equity                       | Inequitable distribution of risks and benefits      | Equitable distribution of risks and benefits        |
| 16. Benefits                     | Unclear benefits                                    | Clear benefits                                      |
| 17. Reversibility                | Effects irreversible                                | Effects reversible                                  |
| 18. Personal stake               | Individual personally at risk                       | Individual not personally at risk                   |
| 19. Origin                       | Caused by human actions or failures                 | Caused by acts of nature or God                     |

Fig. 2.1—Covello's list (Kasperson and Stallen 1992)

readily see as occupying a middle-ground—become polarized in a way that is comfortable for the left on some controversies, for the right on others. That is what we need to explain.

## 2.4

A usual complement of the ideological accounts focuses on questions of *trust*. Trust is item 12 on Vincent Covello's (1992) list of 19 factors that could account for expert/lay conflicts of intuition (fig. 2.1).<sup>3</sup> But placement in that list is not intended to reflect

3. See Kasperson and Stallen (1991), 133. The list was developed mainly from the work of Slovic, Fischhoff, and collaborators.