In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation (Rio Declaration, 1992: 15).

Those responsible for composing the now famous Rio Declaration on Environment and Development no doubt tried to be absolutely clear and unambiguous. They quite obviously did not see the extent to which the very ideas and words of this precautionary principle would prove to be the Trojan Horse of ambiguity. In due course, as the horse opened up to discharge its content, an evolving and costly political war was declared.

Before entering into discussion of that war, it is worth noting that the precautionary principle has long held a place in human thought. Aristotle (Nicomachean Ethics, 1142:3) spoke of phronesis (practical wisdom) as “the science of what is just, fine and good for a human being” not as a branch of knowledge, but as quality in understanding and deliberation. Coming closer to the present day, the 19th century German legal system recognised it in Vorsorgeprinzip. In the 1890s, it was invoked in Britain with regard to issues in public health. But it emerged in its present form at the 1972 Stockholm Conference and was formally identified as a principle at Rio in 1992.

Since that time it has been strongly supported, particularly by environmentalists and the public health field and at the same time strongly criticized by various industries and governments. It has been more fully developed by the UN Convention on Climate Change, another on Prevention of Marine Pollution and the Cartagena Protocol developed under the auspices of the Convention on Biological Diversity. It has been adopted by the European Community, by the International Union for the Conservation of Nature and is now recognised in environmental law. But the debates over it have produced an immense body of journalism and professional publications. It is fair to say that the built-in ambiguities and great diversity of responses to it made it a vital issue in political debates, both within any one country and internationally.

The largest confrontation is that over the use of genetically modified food crops, and Whiteside has used this as the central case study of his book. Since 1996, the efforts of the United States to export genetically modified (transgenic) crops to Europe have been blocked or delayed by the European community’s adherence to the precautionary principle. Specifically, this was “. . . not because the technology has been proven harmful, but because of uncertainties about its potential.” Some European governments eventually approved the entry of some plants, but even when
they allowed entry, massive protests arose and the process of importation was significantly delayed.

The major example upon which Whiteside opens up his discussion, and to which he returns throughout the book, is a transgenic soy bean. He points to the immense difference between the generally negative perspective on precautionary strategies amongst both growers and politician in the United States. By contrast, precaution has a long history and a generally positive acceptance in Europe. He argues that US public perception and policy is largely based in "science-based" risk regulation with quantitative cost-benefit evaluation, marginalist economic reasoning and an overall technocratic view of policy. Many public opinion leaders argue for reliance on "scientific rationality" but totally fail to recognize the immense irrationality of relying on a single perspective.

In Europe, there is much more attention to social and moral values and a well-developed sense of social responsibility. Even with the rise of the neo-liberalist hegemony, while this has served to strengthen the established individualism of the United States, it is being treated with considerable caution in many European countries. In brief, the precautionary principle serves to demonstrate the immense intellectual and moral gap between the dominant public thought and belief systems in the United States and those in the United States. (Whiteside expresses this concern more gently than I do, partly because of the depth and detailed evidence of his presentation. Bring confined to the relatively few words of a review, I am perhaps more blunt and direct— but I trust my summary does justice to the underlying meaning of his expressed concerns.)

Whiteside presents a comprehensive and penetrating review of the politics of precaution. He certainly carries out an excellent analysis of the philosophical and sociological understandings that underpin the various political arguments. But I am left with one bit of dissatisfaction. The book provides a graphic description of the extent to which the politicians (of course) but also many scientists show little or no understanding of the ontology and epistemology of science. Whiteside certainly shows his own strong understanding, but gives limited attention to the basis of this deficit in decision makers.

Amongst the plethora of writing on the principle, this book stands out in its analysis of the political wars. It should be particularly valuable to those involved in transnational relationships in any sphere. Clearly, nobody is happy about uncertainty, but it is important to understand what it means and how it is dealt with in different countries.

Elery Hamilton-Smith <elery@alphalink.com.au>, Adjunct Professor, School of Environmental and Information Sciences, Charles Sturt University, Albury, New South Wales, Australia.