Flood Risk: The Holistic Perspective

According to the International Disaster Database (EM-DAT), over the last seventy years, floods have shown the fastest rate of increase relative to any other type of disasters. Devastation due to these events occurs almost daily. Even though our technological capabilities for dealing with floods have advanced rapidly over the same period, and while global economic growth per capita has doubled, flood events have become ever more disastrous. Does this mean that our technological developments have advanced independently from the social and wider ecological needs? *Flood Risk: The Holistic Perspective* is a direct response to this question and it argues that this paradoxical situation is a result from our narrow and fragmented perception of reality which has been characteristic of our academic disciplines and government agencies. It suggests that the way forward can be found only if we broaden our view and learn how the natural or social phenomena can provoke a response in a society, or a social group, which in turn can trigger the technical developments, and so on, again and again, in what has the potential to become a network of interactions and relationships through positive feedback (or *coevolving*) cycles.

The holistic perspective however may raise the following question: If everything is connected to everything else, how can we ever hope to understand anything? Our response draws from the understandings brought by *complexity theory* where individual elements coevolve together both in development and application. This recognition opens a new analysis which goes beyond the direct objects or actors of concern (risk forecasting, early warning, land-use planning technology and systems for example), and into the relationships between them. The book suggests that our initial response to this and many other challenges is to change our perception from a disciplinary and defensive one to a progressive (or *transcendental*) and *transdisciplinary*, i.e., the one that turns challenges into the possibilities that can re-shape our future.