Journal of Risk Analysis and Crisis Response, 2022, 12(4), 235-238
https://jracr.com/
ISSN Print: 2210-8491
ISSN Online: 2210-8505

Book Review

Book Review of Guide for Travelling in an Uncertain World: What is Risk?

Chongfu Huang [1,2,*]

[1] Key Laboratory of Environmental Change and Natural Disaster, Ministry of Education of China, Beijing Normal University, Beijing (100875), China
[2] Academy of Disaster Reduction and Emergency Management, Faculty of Geographical Science, Beijing Normal University, Beijing (100875), China
* Correspondence: hchongfu@bnu.edu.cn

Received: November 18, 2022; Accepted: December 28, 2022; Published: December 31, 2022

Abstract: This paper reviews the main contents of the following picture book: Guide for travelling in an uncertain world: what is risk? Zhang, J., and Huang, H.W. 2022. Shanghai: Tongji University Press (ISBN: 978-7-5765-0351-7) (in Chinese). This picture book can help children and their parents become aware of risk, learn the knowledge about risk analysis, and cultivate interests related to the science, technology, engineering, and mathematics behind risk analysis. It is a welcome and successful contribution to the education of risk analysis to the child and the public.

Keywords: Book Review; Guide for Travelling; Uncertain World; Risk

The popular science picture book Guide for travelling in an uncertain world: what is risk? (Fig. 1) by Professor Jie Zhang and Professor Hongwei Huang from Tongji University, China details the story of a child called Qiqi from Shanghai, China and his robot friend Kuqi when they experience a lot of adventures in an uncertain world. There are four chapters in this picture book.

Fig. 1. Cover of the picture book "Guide for travelling in an uncertain world: what is risk?".

In Chapter 1, Qiqi's family is introduced (Fig. 2). His father is a scientist working on nature hazards, and his mother is a financial analyst. Qiqi is a curious boy with a lot of questions such as whether aliens have visited Earth. He likes to watch outdoor adventure movies. Qiqi's parents are very busy, and Kuqi is a robot created by his father to be a friend for him in case he is lonely. During the dinner, the family discusses Qiqi's examination which will happen tomorrow. Qiqi's is indeed

anxious about the examination, but he tells his parents that he is fine. He asks Kuqi to come to his room after the dinner.

Fig. 2. Qiqi's family.

In Chapter 2, Qiqi asks Kuqi a lot of questions regarding the coming exam in Qiqi's room, which then initiates the discussions about uncertainties. Kuqi explains the natures of the two types of uncertainties to Qiqi, i.e., natural variability and knowledge-based uncertainty, and tells Qiqi that it is the uncertainties that make him stressful. Many examples like the height of children with the same age and the cause about the distinction of dinosaurs are used to illustrate such uncertainties (Fig. 3). Using examples like weather forecast in the ancient times and nowadays, the role of the development of science and technology in uncertainty reduction is emphasized.

Fig. 3. Examples about the inherent variability.

In Chapter 3, Kuqi explains to Qiqi the relationship between hazard and risk. They then look at typical risks caused by traffic accidents, earthquakes, and financial crisis. Kuqi explain that only when likelihood and adverse consequences are involved, the risk is real. Such an idea is illustrated using examples such as the presence of a rattlesnake in the remote desert or in downtown Shanghai. How to reduce risk through decreasing the chances and the consequences are also explained, using examples like building dams to reducing the likelihood of floods, and issuing early warning messages when earthquakes are arriving.

In Chapter 4, Kuqi teaches Qiqi how to assess the risk like a detective through asking a series of interesting questions (Fig. 5), including: (1) what can go wrong? (2) how it can happen? (3) how likely is it? and (4) what are the consequences? The importance of collecting evidence to support the answers to these questions is emphasized. The potential of recent developments in wireless sensors

network, data analytics, and artificial intelligence on answering these questions is also explained. Qiqi and Kuqi together analyze the risk on the campus of a primary school supposing the typhoon is coming. After these talks, Qiqi understands why he worries and becomes less stressful about the coming exam.

Fig. 4. Examples about the impact of chance and consequence on the risk.

Fig. 5. How to analyze the risk like a detective through asking a series of questions.

Both authors of this book are well-known experts in the field of risk analysis and management. Professor Jie Zhang obtained his PhD from the Hong Kong University of Science & Technology in 2009. His research mainly focuses on risk assessment and management of geohazards. He is one of the founding managing editors of the journal of Underground Space, and is currently the vice-chair of the Engineering Practice of Risk Assessment and Management Committee (TC304) of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). He is the recipient of the Early Achievement Award from the International Association for Structural Safety and Reliability (IASSAR).

Professor Hongwei Huang obtained his PhD from Tongji University in 1993. His research mainly focuses on risk assessment and management in underground engineering. Professor Huang is the founding director of the International Joint Research Center for Resilient Infrastructure of Tongji University, and is currently the chair of the Risk and Insurance Research Branch of China Civil Engineering Society. He is the recipient of many academic awards, including the Second-class Scientific and Technological Progress Award from the State Council of China, and the First-class Natural Science Award from the Government of Shanghai, China.

As noticed by Peter Bernstein, the notion of bringing risk under control is one of the central ideas that distinguishes modern times from the more distant past in the thousands of years of history of

humankind. In recent years, risk analysis has evolved into a science-based powerful tool to assess, communicate, and manage risk across different disciplines, and has infiltrated almost every field of our society. While it has been widely used in our daily life, the science behind risk analysis is still not well known to the public. This picture book can help children and their parents become aware of risk, learn the knowledge about risk analysis, and cultivate interests related to the science, technology, engineering, and mathematics behind risk analysis. It is a welcome and successful contribution to the education of risk analysis to the child and the public.

Prof. Chongfu Huang
Editor-in-Chief of
Journal of Risk Analysis and Crisis Response