Book Review
Whole Life Sustainability

The preface of the book talks about experienced older practitioners who could assess a set of complex issues and come up with sound decisions – but couldn't explained how they did it. Their problem solving capability came from many decades of trial and error experience which allowed them to innately evaluate multiple alternatives. Given that acquiring decision making skills in this manner takes too long and can involve too many mistakes, the authors put forward the proposition that reliance on good decision making tools serve an alternative. The premise of the book, therefore, is to provide the reader with insights into a series of decision making tools, because, according to them, implementing sustainability depends on good decision making skills.

The book starts out by introducing the concept of sustainability and its three components (social, economic and environmental), and how it permeates everything. It then examines the basis of decision making, discusses the different levels of decision making expertise, and biases in decision making. It goes on to talk about buildings in general and sustainable buildings in particular.

There is a discussion on value, marginal utility, and how indifference curves can help to make trade-offs between design alternatives using the concept of fuzziness. There is an excellent chapter on "Time and Risk", where the authors' discussion on discounting and inflation was clearer than in any economics text book I have read! The importance of carrying out a sensitivity analysis, and the trade-off between an optimal solution and a robust solution is also well discussed. From this point onwards, the book becomes a more demanding read. There are chapters or discussions on multi-attribute decision making, assessment matrices to pull apart a decision and review it, heritage and value, adaptability, flexibility, etc.

When I got to the end of the book, it was clear that while the authors have provided a wealth of information about decision making tools, and some examples on how to use them, it does not take away from the reality that the process of developing a sustainable (or 'green') building is still a 'wicked' problem (Rittel and Webber). I would agree strongly with the authors' statement, made about two-thirds of the way through the book – "*ultimately many decisions are at least partially made on the basis of individual judgement – hopefully experienced, expert and thoughtful, and supported by one or more of the available tools.*" This sentiment admits the reality that although gaining experience involves time and mistakes, (characteristics which humankind as a species cannot afford in the race to keep the genie of runaway climate locked up in) ultimately the most sound decisions are made by experienced older practitioners. The book does expose the reader to robust and thoughtful discussions about the numerous complexities relating to the life cycle of sustainable buildings.

The book is aimed at architects in the UK, although, as the authors' note, it is useful for a much wider audience, to anyone who is involved in any sort of project which has sustainability at its core. In Australia the book may also be useful for owners, developers and builders; due to the popularity of speculative building development. Much of the decision making that affects the long-term sustainability of a building development project in Australia, either new build or refurbishment, happens at the owner-developer discussion level, almost before it gets to the design team. In my opinion, the book is a worthwhile read for anyone

interested in getting a glimpse of the myriad ways that outcomes for sustainability are entwined into the fabric of everyday decision making.

PC Thomas,
Team Catalyst, Pty. Ltd