

This is a book about design with an attempt to involve materials in more than just an engineering sense. It deals with the feel, appearance, texture and mood of materials, and how they translate into devices and items which are a joy to own and yet function in the intended way. In modern societies which are used to conspicuous consumption, fashion frequently matters more than utility; expensive items sometimes attract consumers more than equally effective cheaper items. The book tries to deal with these and other intangible factors which influence design.

It is richly illustrated with examples, sometimes contrasting the old with the new. And the book itself has an endearing appearance. It is as if the authors have spent time creating a layout which reflects good design. Even the sketches are neat and yet, rough.

I like the book – I now understand more about aesthetic design and the importance of creativity in engineering.

The treatment of materials in the context of design is less satisfying. Creativity can be exercised in design when the original problem has many solutions. Designers need to know of the properties and potential properties of materials but should not be biased by general statements about the relative importance of materials. Much prominence is given to niche materials, thereby missing many of the fascinations of modern times. The materials datasheets are, perhaps necessarily, simplistic. It is said that 10% of the population is sensitive to nickel. What does this actually mean, and should a designer of cutlery take this statement seriously? How does the risk of reaction to NiTi stents compare against that of dying from coronary disease?