- Hudson, L. (1968). Frames of Mind: ability, perception and self-perception in the arts and sciences. London, Methuen.
- Kneller, G. F. (1965). *The Art and Science of Creativity*. New York, Holt, Rinehart and Winston.
- Lawson, B. R. (1994). 'Architects are losing out in the professional divide.' *The Architects' Journal* 199(16): 13–14.
- Lawson, B. R. (1994). Design in Mind. Oxford, Butterworth Architecture.
- Laxton, M. (1969). Design education in practice. Attitudes in Design Education. London, Lund Humphries.
- Mackinnon, D. W. (1962). The nature and nurture of creative talent. Yale University.
- Mackinnon, D. W. (1976). 'The assessment and development of managerial creativity.' *Creativity Network* **2**(3).
- Poincaré, H. (1924). Mathematical creation. Creativity. London, Penguin.
- Roe, A. (1952). 'A psychologist examines sixty-four eminent scientists.' *Scientific American* 187: 21–25.
- Watson, J. D. (1968). The Double helix: a personal account of the discovery of the structure of DNA. London, Wiedenfield and Nicolson.
- Whitfield, P. R. (1975). Creativity in Industry. Harmondsworth, Penguin.

10

Guiding principles

Working in philosophy – like work in architecture – is really more a working on oneself.

Wittgenstein

'Why,' said the Dodo, 'the best way to explain it is to do it.'

Lewis Carroll, Alice in Wonderland

Introduction

The designer does not approach each design problem afresh with a tabula rasa, or blank mind, as is implied by a considerable amount of the literature on design methods. Rather, designers have their own motivations, reasons for wanting to design, sets of beliefs, values and attitudes. In particular, designers usually develop quite strong sets of views about the way design in their field should be practised. This intellectual baggage is then brought by a designer into each project, sometimes very consciously and at other times rather less so. For some designers this collection of attitudes, beliefs and values are confused and ill formed, for others they are more clearly structured and for some they may even constitute something approaching a theory of design. Ultimately, some designers even go so far as to lay out these thoughts in books, articles or lectures. There is perhaps more of a tradition of publishing arguments and positions in some design fields than others. Architects, for example, seem more easily tempted to go into print than industrial designers! We might call these ideas 'design philosophies', although perhaps in many cases this would seem rather too grand a title. Whether they represent a collection of disjointed ideas, a coherent philosophy or even a complete theory of design, these ideas can be seen as a set of 'guiding principles'. This collection of principles is likely to grow and change as a designer develops. Sometimes they may be defended with