HOW DESIGNERS THINK

considerable vigour and become highly personal territory. Their impact on the design process may be quite considerable.

We can explore the significance of these guiding principles in several ways. First, some designers seem able to articulate these principles very clearly and to hold them with great conviction, whilst others are less certain of their 'rightness'. Second, some designers seem to allow their guiding principles to dominate the process, whilst for others they are more in the background. Finally, we can examine the content of the ideas themselves and see how they relate to the model of design problems which we have already mapped out.

Morality and design

Design in general can be seen to pass through phases of relative certainty and doubt. Right now we seem to be in a post-modern period of pluralist confusion with no one widely held set of design theories. However, only relatively recently during the modern movement could design ideas be seen to be fairly generally accepted across the various design disciplines. Walter Gropius (1935) who was largely responsible for the creation of the Bauhaus, itself a cross-disciplinary school of design, announced this period of confidence by claiming that 'the ethical necessity of the New Architecture can no longer be called in doubt'. The great architect, James Stirling (1965) was to reflect that as a student he 'was left with a deep conviction of the moral rightness of the New Architecture'.

Such high levels of confidence were not new amongst architects. Roughly a century earlier Pugin had famously defended the Victorian Gothic revival not only as structurally honest, but as an architectural representation of the Roman Catholic faith. He saw the pointed arch as true and pure, and deprecated the use of its rounded counterpart: 'If we view pointed architecture in its true light as Christian art, as the faith itself is perfect, so are the principles on which it is founded' (Pugin 1841). All this is a little curious since some four centuries before that Alberti had studied Vitruvius and published his *De Re Aedificatoria*. Here he commended to Pope Nicholas V the whole idea of the Renaissance, rejecting the authority of the medieval stonemasons and therefore, of course, their Gothic arches! He too implied support from the 'ultimate authority' by advocating the use of proportions and design principles which he based on the human body! We come full circle back to the twentieth century to find Le Corbusier advancing his own variation on this theme in his famous treatise *The Modulor*. (Fig. 10.1) He proposed a proportional system based on numbers which he claimed could be derived from the ratios of parts of the human body and which, therefore, had some deep significance and rightness (Le Corbusier 1951).

It is not our purpose here to debate the rightness or otherwise of these ideas and others have covered the various theories of design far more thoroughly. What is of interest here is the apparent need to create an underpinning theory of design based on some kind of moral certainty. The moral stance in design has been explored by David Watkin (1977) who illustrates a series of such currently held positions and shows how they 'point to the precedent of Pugin when they suggest that the cultural style they are defending is an inescapable necessity which we ignore at our peril and that to support it is a stern and social duty'.

I have been privileged to study the work and process of a considerable number of leading architects and find none of them think of themselves as working within a 'style', and yet all have strong



Figure 10.1

Le Corbusier claimed a higher level of authority for his proportional system by relating it to the human frame