might note in passing that vague language is often helpful in the more sensitive periods of negotiations!

A frame however can be seen to be a sort of window on the world. In our case that world is the design situation. Looked at from some angles the situation looks difficult to resolve whereas from other viewpoints it might seem much less tricky. One way of thinking about this would be the 'video referee' now used in a number of sports such as rugby and cricket. A complex event has just occurred on the field and the referee or umpire was not able to tell in real time from his position what the correct decision should be about this. A so-called 'video referee' then watches video clips from several angles to help make the decision. Some of these angles may be relatively uninformative but sometimes one of them makes the whole situation much clearer and as a result the decision is easily made. In design conversations a frequently employed form of negotiating is to select a particular view of the situation in such a way that what appeared to be difficult becomes clearer or what appeared to involve conflict can be seen to be harmonious. In Ian Ritchie's conversation this was done through the idea of turning 'transparency' into 'panorama'. This slightly different way of seeing what was really required enabled a new design solution to emerge that then allowed the designers to reconcile conflicts.

It is highly likely that experienced designers will have their own ways of framing situations which they have used before and which have proved helpful in the past. We can see that the guiding principles we discussed in Chapter 10 may well offer sources of inspiration about such frames for experienced designers. Nigel Cross studied the British product designer Kenneth Grange who could be described as having a set of guiding principles about the importance of radical constraints or primary functions (Cross 2001a). His varied output is characterised by products that reflect in a very direct and modern way their main purpose, their usability and their construction. So Grange it seems would frame his problems through the eyes of the user. 'I start entirely from the point of view of, can I make the use of the thing better'. One of Grange's most influential and well-known designs was the Kodak Brownie Vecta camera. This was to be seen hanging around the neck of a whole generation of amateur snap-shot takers and at the time became quite iconic. Grange totally reversed the form into a vertical or portrait format rather than the more normal horizontal landscape format. This he did after realising that the vast majority of pictures that were going to be taken with this sort of equipment were of people. According to Cross, it was almost literally the case that he

saw the problem through the eyes of his users, and Cross describes this 'as though his ability is primarily perceptual'. Grange also gives us an insight into this process by telling Cross that 'you do have to ferret around . . . to find that which is then suddenly obvious to you'. Grange also refers to 'unlikely analogies' as being the secret of his process. It seems then that this is a process of turning the problem around, describing it in different ways, explaining it to other people, talking to the client, in fact any form of conversation that might reframe the situation until some alignment becomes obvious between what is desired and what can be realised. Such a moment is recognised frequently in the descriptions of creative designers.

Conversations as shared experience

We must also remember however that design is very often a team activity and so the way in which these ideas are shared by the team is likely to be important to us in developing our understanding of the process. The idea of conversation can help us again here too. Another characteristic of normal conversations is the extent to which they reinforce the idea of shared experience. Conversations at work in which colleagues discuss the programmes on television the previous evening or the football or hockey match played by their local teams are obvious examples. The way in which we like to reminisce and recall social occasions from our past offer other popular examples. In a normal everyday conversation one participant may comment on the weather that day. Such a comment only works if the other participants share the ideas about what makes pleasant or unpleasant weather. Imagine how unsustainable such incidental gossip would become if you were talking to an interplanetary visitor unfamiliar with earthly climates. It seems that teams gain social strength through shared experience and that such events and the conversations that surround them offer ways of establishing strong ties and bonds.

Again this seems to have a parallel in design, most particularly in long-lived creative design teams. In the previous chapter we saw some examples of the work of the architect Richard MacCormac. As has been shown elsewhere his practice uses key shared concepts to progress their design ideas (Lawson 2004). Conversations with several members of the practice revealed popular words representing sophisticated sets of architectural ideas. For example the rather unusual word 'belvedere' being used widely in these conversations