remarkable glasshouses in the Parc de La Villette development in Paris. He introduced these elements of the building on which he was working, which was to be a kind of science museum (Fig. 15.1).

We worked on these glasshouses in Paris which were in a way three places where the architect had asked for a view out at the park, he wanted vegetation and landscape, and he wanted to use solar energy. So you had the monumentality of these three glass boxes. Talking with people it became apparent, much more to me than them, that you couldn't do all these things because a greenhouse is about steaming up and not about looking out.

What we see here then is a process of introducing the objects as characters (glasshouses), defining their desired characteristics (views

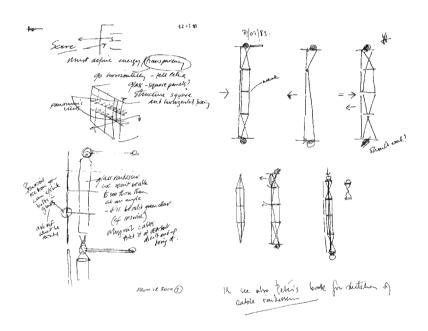




Figure 15.1

Two pages from Ian Ritchie's sketchbook exploring the ideas of transparency and panorama in the design of the glass pavillions at La Villette. The photograph shows the end result

out, vegetation and landscape, solar gain) and then through conversation identifying conflicts between them in terms of the possibilities for physical realisation. This first important step in the design conversation therefore is that of identification. This is very similar to what Schön called 'naming' (Schön 1984). Naming however seems too simple a word to describe properly what is happening here. Even in a normal conversation when you introduce someone, in addition to naming them, you often say something about them, perhaps where they work or who they are married to or some other aspect of their life which is relevant to the current context of the conversation. So it is in design conversations that the significant elements are not just named, but that their very character begins to be explored.

Here, in this design context then, Ritchie leaps in his conversation from the abstract ideas about 'vegetation' and 'solar gain' to his own experience of how these two are normally realised physically in a glasshouse. This experience leads him to see a conflict between the steamed up greenhouse and the 'views out' which are also desired in this case. This central and elaborate process of introducing characters is more than simply 'naming' and we shall therefore call it 'identifying'.

Conversations and negotiations

What we see next in Ian Ritchie's design conversation is a process of reconciliation of the conflict. As we shall see this is done through a very clever trick. It is all a matter of how you look at the problem it seems. Look from the right angle or perspective and the problem vanishes.

There was a conflict and what we homed in on was in fact a notion of transparency, it wasn't about material. It was about how you define transparency. It took us actually quite a long time, in the end we decided that we had to play something on a clear surface to tell you that it was there. Of course the irony is that you use glass and when you're working perpendicular to it, its magic as it disappears, but as soon as you go oblique to it then it is opaque. So we learned from those conversations about the concept of transparency.

First of all then Ritchie attempts to 'think through' the problem by introducing the idea or concept of transparency. He realises that steamed up glass in conventional greenhouse frames will not achieve the 'views out'. However he also recognises the irony that a perfectly clear glass is invisible and gives no sense of being there. Next he