

concept. Should the design process be based on the deliberate development of one solution or, by contrast, a conscious search for alternative solutions followed by selection and possibly combination? Many questions like this to do with the design process cannot be unequivocally answered, and this one is no exception. It seems that both ways are used by designers who are considered successful. Before exploring the idea of generating alternatives and exploring ways of doing this, let us first examine the case for the single solution approach.

Many designers dislike the idea of generating alternatives and in particular the showing of many alternatives to clients. This seems very much a matter of personal design style and client management, but leads to the fear amongst designers that a client may want to pick ideas from several alternatives that are either impossible or extremely difficult to combine, or that will result in an incoherent and rambling solution lacking in integrity.

The architect/engineer Santiago Calatrava feels that to explore too many alternatives is a sign of doubt and that since eventually the designer must develop only one solution and fight to defend the ideas behind it then it must be believed in to the exclusion of all else:

You have to let an idea run and proceed with it to be convinced . . . of course you criticise it and you may leave it and start again with something new, but it is not a question of options, it is always a linear process.

(Lawson 1994b)

Perhaps this is similar to what Philippe Starck describes as 'capturing the violence of the idea'. Somehow to leave an idea and search for an alternative may be thought to lose the 'mental inertia' which is needed to develop an idea into a workable proposition. There may be some parallel here with choosing a name for something, a child perhaps. You can look through hundreds of alternatives and none seem particularly to stand out, but when you settle on one and use it for a while it soon becomes special and feels 'right'.

However, Santiago Calatrava was certainly not telling us that he invariably goes straight to this one 'right' idea, but that the process, for him, is based on working on only one solution at once. The architect Richard MacCormac also believes in both evolution and revolution during the design process, but is not enthusiastic about deliberately generating alternatives as a conscious process. He feels that the designer can sense something in the nature of a design problem that indicates whether the generation of alternatives is likely to lead to success:

There are certain kinds of design programme that structure the design very much . . . and you have to have a sense that unless you explore options you are going to miss some tricks, whereas in other cases, for example the St. John's College competition which we won, I rushed headlong as it were into an idea for the project which enthralled the client and which was quite different to the other submissions.

(Lawson 1994b)

Unfortunately, Richard MacCormac has not yet been able to express clearly just how this 'sensing' of the problem nature works. Denise Scott Brown whose practice with Robert Venturi ranges from large-scale planning right down in scale through architecture to furniture and even pottery, also seems to have this feeling that the generation of alternatives works for some problems and not others:

The use of options in planning is to achieve democracy in the process. You have to accommodate more complexity and confront more political options in planning than in architecture.

(Lawson 1994b)

There may well be something in what Denise Scott Brown says here, purely in terms of political expediency, but the idea that there is a hierarchy of design problems with town planning at the top, architecture in the middle and product design at the bottom has limited value. In particular the idea that therefore town planning is more complex than architecture was questioned much earlier in this book and found wanting. As we shall see very soon, Eva Jiricna working at the scale of interior design works very much by generating alternatives. It seems, therefore, more likely that while Richard MacCormac and Denise Scott Brown may feel some problems are more amenable to the generation of alternatives than others, in reality this may be at least as much a matter of the personal style and preference of the designer than an inherent characteristic of the problem.

## Generation of alternatives

Let us then explore the use of alternatives and how designers generate them. In such a process, the designer generates many ideas each of which have at least some possible advantages, rather than focusing on one idea too soon. The process then becomes a matter of eliminating unworkable or unsatisfactory ideas and choosing between the remainder, possibly combining some features or several.

Two very different advocates of this approach are Michael Wilford, working at the urban scale and Eva Jiricna working on interiors (Lawson 1994b). Michael Wilford describes it as 'a very systematic process of investigation of options and selection' (Fig. 12.3).