economic or technological change. The nature of medicine and systems of health care management have recently changed too quickly for the designers and builders of new hospitals so that new buildings are out of date or too small before they are even completed. In dense urban areas like Hong Kong, land values can change more quickly than we can construct buildings leaving projects uneconomical before they are finished. The power of the mass media can create sudden and fundamental changes of fashion and taste, leaving mass-produced items like motor cars looking outdated long before the end of their useful life. New materials and manufacturing methods can so dramatically alter the costs of items that old versions can be more expensive to maintain than the purchase of completely new ones.

How, then, can the designer respond to this uncertainty about the future? John Johansen, the American architect, describes the situation very concisely:

> Rare is the programmer or architect in a time of rapid social and technological change who can truly assume that he can deal with the present alone. A developer or financier who risks the sure possibility of functional obsolescence is surely short-sighted.
>
> (Suckle 1980)

So how can designers respond to an uncertain future? Unlike the scientist, the designer cannot apply for another research grant, and write an elegant paper describing the complexity of the situation. Designers are expected to act. There are three main ways of dealing with this in the design process, which we might call procrastination, non-committal design and throw-away design. Each seem to be more popular with particular groups of designers.

Procrastination

The first approach, procrastination, is based on the idea that somehow the future may become more certain if only we wait a little. If it is not possible to be sure of our actions now, perhaps it will be easier to take a decision next year or the year after. I regularly meet people who are tempted to follow this approach when buying a computer. If I buy now, goes the argument, they might bring out a new machine and I will be left with an out-of-date model. I try to point out that this will also be true next week, next month and next year, so it is no reason to delay. This strategy is also popular with very long time-scale decision-makers such as politicians and town planners. It is on this basis that we took so long to build the third

London airport and that we have no clear national policy on energy supply. Deep down this seems to be one of the reasons governments are following the lead of Margaret Thatcher in moving away from central strategic planning to allowing the market to decide. Design decisions taken by governments, whether regional, national or local, which can later be criticised are potential electoral millstones around the necks of the politicians. Far better, then, to be detached and free of all blame!

The real difficulty with this response to uncertainty is that once a problem has been identified it is no longer possible to avoid the consequences of making a decision. Delaying the decision itself adds to the uncertainty and may thus accelerate the problem. Once an inner city area has been identified as in need of some planning action, that area is likely to run down or become 'blighted' even more rapidly until decisions are taken about its future. Similarly if a new road is planned but the route remains under debate for any lengthy period, the property in the region of the various routes changes value. So procrastination as a strategy is deeply flawed. In many real-life design situations it is actually not possible to take no action. The very process of avoiding or delaying a decision has an effect!

Non-committal design

The second design response to uncertainty is to be as non-committal as possible whilst still actually proceeding. Thus architects have tended to design bland, anonymous and neutral buildings which are non-specific either in terms of their functions or locations. Not surprisingly there has been a reaction to such architecture which has been accused of failing to provide sufficiently positive urban environments. The notion of flexible and adaptable environments was popular for a while in schools of architecture. Habraken and his followers were highly influential and went so far as to suggest that architects should design support structures which would provide only shelter, support and services, leaving future users free to create their own homes and express their own identity by arranging the kits of parts that fit within these 'supports' (Habraken 1972).

Such ideas have remained largely theoretical and there are undoubtedly many practical and economic problems in providing buildings which are genuinely flexible and adaptable. Architects have now perhaps become slightly schizophrenic in their attitude towards flexibility. On the one hand much is said and written about