designing buildings which will be able to outlast their initial function whilst, on the other hand, architects are increasingly finding that old buildings need not be demolished but can often easily be converted to new uses. John Johansen describes his approach to architectural design which he has developed in response to the uncertain future. For Johansen, this is a key aspect of his work, and he argues that 'if we assume the nature of our accommodation will change in the near future, then we must write programmes not for the present, but for the future as well'. To Johansen (Suckle 1980) it therefore seems to follow logically that he must design buildings which are themselves capable of changing.

Throw-away design

The third response to uncertainty is to design for the present only. Thus obsolescence is built in and the designed object is intended to be thrown away and replaced with a more up-to-date design. This strategy has been increasingly adopted by the designers of mass-produced goods. Everything from clothes to motor cars may be discarded in favour of new styles and images. Such an approach is particularly favoured by fashion designers with the very word 'fashion' confirming its transient nature. However, such ideas have already begun to invade more traditionally stable fields such as interior design. We are expected not only to wear this year's clothes but to prepare this year's food in this year's kitchens. Unfortunately this consumerist approach is not only wasteful of resources but also leads to short-lived goods of continually reduced quality and, thus, the need to replace things becomes not just an option but a necessity.

Design solutions creating design problems

Designing in times of rapid change is clearly more difficult than designing for a stable and predictable world. As we saw in Chapter 2 the rate of socio-technic development is itself an important influence on both the design process and the role of the designer in society. But it is important to recognise that designers are not just dependent on the future, they also help to create it. Each of the design responses to uncertain futures discussed above, themselves fashion the future, whether it be in the form of blighted inner-city areas,

indecisive architecture or out of fashion motor cars. As Chris Jones (1970) puts it:

> To design is no longer to increase the stability of the man-made world: it is to alter, for good or ill, things that determine the course of its development.

So it turns out to be the case that many of our contemporary design problems are themselves substantially the results of previous design activity. This may be in the form of noise from machines or activities, or in the shape of urban decay or vandalised buildings, or in terms of dangerous and congested airports and roads. Each of these and countless other similar ailments of modern civilisation provide some of the most pressing problems facing designers, and yet to some extent at least they can 'be thought of as human failures to design for conditions brought about by the products of designing' (Jones 1970).

Finding and solving problems

It has often been suggested that design is as much a matter of finding problems as it is of solving them. In later chapters we shall discuss strategies and tactics for controlling these intermingling processes of problem identification and solution generation. At this point, however, it is important to recognise that the problems identified in any design process are not only likely to be a function of the designer's approach, but also of the time available. An interesting illustration of this may be found in Richard Rogers's account of the design of the Pompidou Centre, to which we have already referred. From an early stage Rogers tells us that he identified the need to design for flexibility. Indeed, for Rogers, the design concept, perhaps even the primary generator, caused the building to be 'conceived as a flexible container capable of continuously adapting not only in plan, but also in section and elevation to whatever needs should arise'. Rogers quickly came to view his building as a 'gigantic ever changing erector set' (Fig. 7.1). Technically, the proposed solution involved many movable components such as partitions, cladding and floors. However, Rogers had to abandon the attempt to find a technical solution to the problem of the movable floors:

> As soon as it became apparent that there was a time constraint of five years from competition to opening, we realised that it would be utterly impossible to debug the initial idea of moving floors held by friction clamps in the time allotted and consequently abandoned it.
>
> (Suckle 1980)