

any errors made at this stage could be expensive to correct once the project has moved into production.

12. *Tendering.* If the work (or even a part of it, such as audio-visual programmes or models) is to be produced by outside contractors, tender documents will need to be prepared together with specifications and drawings for each item. These will be circulated to those invited to tender. Depending on the size and complexity of the project, this stage may take several weeks. On receipt of quotations, some adjustments may be required in order to meet budget targets. Once agreement has been reached on costs, delivery dates and the like, orders can be placed.

13. *Production.* Once production starts, it is normally the designer's task to check and supervise all stages of the work in order to reduce the possibility of errors or misunderstandings. It should be a busy time, with the many activities such as building on and off site, the production of models, typesetting, production of artwork, etc., being undertaken concurrently. On completion of the structure, services such as lighting, security and environmental conditions will need to be tested. When they are satisfactory, objects may be installed. Some minor adjustments and 'touching up' may be required prior to hand-over, when formal responsibility for the items passes to the museum (subject to guarantees, etc.).

14. *Opening, on-going monitoring and maintenance.* Arrangements (including the preparation of printed material) for the opening will need to be put in hand well before the opening date. These may include advance publicity, invitations and press view material. Also to be prepared well in advance of the opening will be schemes to evaluate the effectiveness of the exhibition. Maintenance teams, too, should be formed and ready to go into action as soon as the public are admitted, to ensure that the exhibition is always in good order. Among the various end-of-project requirements, such as completing the files and the accounts, it is also a good idea to hold a debriefing session so that as much as possible may be gained from the project for possible application on the next. A photographic record of the exhibition should be made.

## 8. *The exhibition brief*

A good brief is a prerequisite of any successful design solution achieved by a systematic, methodical approach to the problem. Yet, surprisingly, the importance of the brief is often underestimated and, as a consequence, projects are often ill considered and superficial, and this is reflected in a troubled developmental stage and a less than satisfactory end product. Indeed, it has been said that the final solution can only be as good as the brief.

It is the brief which should define the exhibition problem, and this initial stage, when there is concentration of thought on the exact nature of the project, should clearly be important for all concerned. Indeed, since there may well be several ideas as to the definition of the problem, it is necessary to clarify thinking. Margaret Hall (1987) wrote:

A brief for an exhibition is a starting point for the design process. It is the culmination of the first stage of work on an exhibition, the outcome of the dialogue between the curator and the designer, of the consideration, discussion and agreement between all the parties involved.

It should therefore be the vehicle which brings together an agreed (or, in some circumstances, imposed) set of clearly defined problems which need solutions. As such it is important that it takes the form of a written paper to which reference may be made, if necessary, at various stages throughout the project. Writing the brief is normally the task of the curator or subject specialist. However, others, including the designer, may also contribute and would certainly need to be consulted frequently as the nature of the problem is defined. In particular, these specialists may be able to ensure that the brief is realistic, and does not set out a problem to which no physical design solution is possible.

The brief serves several functions, the most important of which is to provide the designer with a definition of the problem to be solved. A secondary function is that it enables or requires those initiating the project to clarify ideas and commit themselves to making firm decisions as to the nature of the project. It thus serves both designer and curator. Max Hebditch (1970), when speaking about the curator's role in briefing the designer, said:

Successful briefing of the designer, pre-supposes a number of things. . . Firstly a clear idea of what museum exhibitions are for, namely to assist the visitor to understand the language of real things; secondly, a clear idea of what roles the curator and designer play in creating the exhibition;

thirdly, curatorial staff who must be able to imagine the whole purpose, content and text of an exhibition in advance and present this to the designer in a way he can interpret visually.

Time spent in considering and formulating the brief is normally time well invested. Thinking through a project before expensive design work and yet more expensive production work are undertaken only makes sense, and can help obviate mistakes. It can also help prevent those associated with the project from feeling that their opinions do not matter, or, later, that changes to the agreed definition of the problem can be made on a whim. Thus it can also help prevent frustration, resentment and loss of morale. The successful setting-out of the nature of a problem, the exploring of its parameters and the determining of the approach to be used in its resolution are an achievement which should rank as at least equal in significance to the solution itself. Unfortunately, the creative aspect of writing a good brief is often overlooked by some curatorial staff, who see only the selection of colours, forms and textures as the truly 'creative' aspect of preparing an exhibition. Good practice shows that the production of an exhibition is a creative experience to be shared by the contributors, and not the sole prerogative of the designer. All associated with a project should have a contribution to make within their respective area of expertise. Martin Elliot (1977), rightly stressed that:

Of prime importance in any museum design work is the rapport between curator and designer. The designer will need to know what is intended by the design or display and the curator must accept responsibility for communicating this orally or in written form. It is his task to give instructions and information to the designer and these instructions form the basis of the briefing procedure.

The design problems in need of a solution can be isolated in a brief and solutions to the brief put forward. The designer is often in a position to advise on the problems as well as the solutions.

The relationship between the two principal contributors and their responsibilities has been discussed earlier (Chapter 7), but it is worth restating that each must respect the other; honour their agreed areas of responsibility, but not be afraid to give advice and take it as professionals working together in pursuit of a common goal.

### Formulating the brief

In most museum situations it will be a subject specialist, that is, a curator or keeper, who is charged with the task of writing the brief. However, it could be a collaborative effort, with staff within a specialism working together, or, if multi-disciplinary, could involve several specialists. Others who might be involved would be the specialist exhibition organizer, the education officer and, indeed, the designer. Those museums which now have a lively marketing policy may like the

apparently non-academic but nevertheless important marketing side to be included, especially as by doing so the consumer's interests may be said to have been considered. These could, for example, be represented by an input from the 'Friends of the Museum'. As many people as are considered helpful should, therefore, be consulted and have an input to the briefing document, for which, in these circumstances, the curator may act as convenor or editor. In this role, in addition to a knowledge of the exhibition subject, the curator will also need tact and firmness. Those contributing to the brief should be aware of the museum's communications policy and remember that the decision to mount an exhibition should not be arbitrary, but should emanate from a defined and agreed policy. On completion of a draft brief it may be helpful to circulate it to those with a possible interest in the project and who, perhaps, have not had the opportunity to contribute to it so far. By inviting them to comment upon it the curator may gain the benefit of their views, and in making their views known they will feel a part of the project.

### *The briefing sequence (checklist)*

The 'lead-in' time for a major project can be considerable and is often underestimated. A typical briefing sequence might be:

1. A need is identified and/or an idea for an exhibition is informally discussed by interested parties.
2. After discussion, first ideas are committed to paper as an exhibition proposal, outline brief or draft proposal. The basic information will include: provisional title; purpose; theme and content; proposed audience; timing; location and possibly an indication of the resource implications.
3. The proposal is circulated to a wider circle of interested parties and comments invited.
4. Proposal reviewed by museum exhibitions committee, the officer responsible and/or the director.
5. If the proposal is acceptable, a feasibility study is commissioned to explore the proposal in depth.
6. On acceptance of the feasibility study the briefing document is commissioned.

(For a further account of stages in the preparation of an exhibition see Chapter 7.)

### The brief: form and content

The brief should take the form of a well considered piece of instructive writing, written for ease of reference. It may well be prepared to a standard size (such as A4), be typewritten or produced on a word processor and it should have a title page and list of contents, with each section suitably coded and paragraphs numbered. It should not be as

'glossy' as a feasibility study or prospectus where the intention is to persuade or promote. Above all, it should be a purposeful, functional, workmanlike document. Supplementing the main brief may be appendices giving details of location and listing exhibits and draft text, or this information may be available in card index form or as computer print-outs. However, whatever the form this information takes, it should be regarded as a part of a single, comprehensive and all-embracing document. Although all concerned should strive to produce a complete and definitive brief, some revisions may be necessary, but obviously they should be kept to a minimum, and should be capable of being absorbed into the brief document.

The brief should include statements on each of the following topics:

#### *Title and nature of the project*

Ideally the brief should be headed by the project title, if it has been decided; otherwise a working title should be given, pending a decision being made early in the work sequence. This may be once the designer has considered the problem and proposed a title which might relate to the corporate identity of the programme. A good title will help promote the exhibition.

The statement on the nature of the project should describe the type of exhibition envisaged, with particular reference to the approach, which might be aesthetic, evocative, didactic or simply entertaining—or a combination of each. Main features such as the nature and extent of the material to be displayed or proposals relating to reconstructed environments or facilities required for practical demonstrations might also be mentioned in order to give an indication of the whole nature of the project and all that it embraces.

#### *Purpose of the exhibition*

The need for the exhibition should be stated in general terms and its purpose made clear in a series of aims and objectives. These should make reference to such topics as educational role, promotional role, commercial significance, political aspects, prestige, etc., or whatever is particularly relevant. Possible lines which should be developed in relation to the particular situation are: 'The exhibition aims to benefit visitors by . . .' 'The exhibition aims to benefit the museum by . . .' 'The exhibition aims to benefit museum staff by . . .'

These aims could be developed into specific targets against which the effectiveness of the project could be judged. Such targets should be carefully considered in order to be realistic, particularly as they will almost certainly involve design considerations. The types of targets which might, in some cases be appropriate include: 'The exhibition aims to attract  $n$  visitors, who on average should spend  $x$  minutes in the

exhibition. After this they should, on average, spend £ $y$  on souvenirs related to the exhibition.'

There should be a similar statement of aims and objectives in relation to each section of the exhibition and indeed, each individual display.

#### *Audience*

The brief should provide information on the audience for whom the exhibition is intended. Those aspects which will have a particular bearing on the design include:

1. *Age of the audience.* Each age group has its own physical and psychological characteristics which may affect the design approach. In particular exhibitions for the very young and the elderly will differ in style, content and facilities.
2. *Ergonomics.* Age also has a bearing on ergonomic factors and the need for displays to be functional. Such things as the average eye level of visitors are important, and visitor size if seating, etc., is to be provided.
3. *Anticipated visitor numbers.* Estimates of the number of visitors who might be in the exhibition at any one time and the duration of their stay will be of use to the designer in specifying the exhibition layout, such things as gangway sizes and, if necessary, queueing arrangements. If visitors are to be encouraged in family groups or parties of, say, ten or twenty, this too will have design implications.
4. *Motivation.* Targeting the exhibition at a group of visitors which is already interested in a topic and is therefore motivated will require very different considerations to those which apply when trying to interest an apathetic audience.
5. *Level of knowledge.* Communicating with a well informed audience requires a different approach from that adopted when the audience is ignorant in the subject.
6. *Intelligence.* An aspect which is less easy to gauge without formal testing. Intelligence, as distinct from knowledge, will have a bearing on the mental agility which can be expected of visitors.
7. *Reading age.* Allied to both level of knowledge and intelligence, the reading age of the intended audience will affect all written text.
8. *Gender.* Apart from the ergonomic factors which relate to all-male or all-female audiences, there may be circumstances in which the gender of the audience will be a consideration in relation to exhibition content and interpretation.
9. *The handicapped.* Facilities such as wheelchair access and viewing will be a consideration. Also, communicating with particular handicapped groups will need special consideration.
10. *Origin of visitors and language.* The language/s used in the exhibition should be those with which the intended audience is familiar. Cultural characteristics and customs may also be a consideration.

#### *Policy and context*

The general context in which the exhibition is to be presented should be stated. This may include reference to museum policy statements, and in

particular how the project relates to the museum's communications plan. Thus the relationship of the exhibition to other exhibitions, publications or services needs to be explored and links identified. These may be philosophical, subject-oriented or physical.

In addition to the internal museum context, there is also the wider context of the community which it serves to be considered. Competing institutions or 'rival products' need to be identified, and an approach similar to that which a commercial organization about to launch a new product might adopt could be considered. The intended role of the exhibition in the museum, in the locality and in the region and beyond needs to be explored.

### *Design*

Many museums have an identifiable 'house style' which has perhaps evolved through tried and tested solutions. The style may simply relate to the typeface used on captions or the design of showcases or go further to include the design concept of entire galleries and the 'total' design 'image' the museum wishes to project. The degree to which the new project should adhere to or depart from existing design will need to be stipulated.

### *Longevity and reuse*

An indication of the intended life span of the exhibition needs to be given, as this will affect the selection of materials and structural details. Additionally, if the exhibition is to be reused in other venues, this too will have design implications.

### *Location*

In addition to the context explored under 'Policy and context' above, details of the physical context and location need to be given. Items to be covered will include the site in relation to the museum's circulation pattern; location of proposed/existing entrances and exits; floor loading; access for large items; electrical capacity and services.

### *Regulations*

Any regulations which relate to the site/museum in terms of fire, buildings, planning, conservation, health and safety, etc., should be noted.

### *Security*

The brief should include general statements on the security requirements envisaged, in addition to information which might be provided in relation to specific objects. Some systems, such as CCTV or the extensive use of security staff will have particular design implications.

### *Conservation*

As with security, there will probably be a need for general statements on environmental conditions as well as specific specifications for individual objects or types of objects.

### *Maintenance and servicing*

Information on the resources available for exhibition maintenance should be given, together with any special considerations in respect of such things as lighting, computer equipment, etc.

### *Evaluation*

Mention may be made of the procedures and criteria to be applied in evaluating the project. These may, as indicated under 'Purpose' of the exhibition above, relate to the general purpose of the exhibition or deal with specific issues or the evaluation of particular displays.

### *Programme*

An outline programme should have been provided in any feasibility study. However, the programme included in the brief may be more considered, as more detailed information has become available.

### *Administrative procedures*

It may be helpful to clarify administrative procedures in relation to the project, indicating areas of responsibility and channels of communication in an effort to avoid misunderstandings as the project proceeds. Should the brief be given to a consultant designer or a design group working outside the museum, this information will be essential. However, in these circumstances it may well form part of a separate contract document. If this is the case, it will no doubt stipulate exactly what is required of the designer, i.e. the type of presentations required at various agreed stages in the project, the fee and other contractual arrangements.

### Theme and concept

The exhibition theme should be stated and a conceptual plan given showing the relationships of the main topic areas to one another. This may be done diagrammatically (figure 8.1) but should not, at this stage, be a plan of the actual physical layout of the exhibition.

### Exhibition contents

Accompanying the theme and concept paper, and using the same reference system, will come a proposed list of contents. Section by section, it should list the main aims and objectives of each, the individual exhibits proposed and their aims and objectives, right down to lists of every object to be displayed. These may well be individually numbered for reference and coded to indicate, for example, object type, e.g. 'original specimen', 'facsimile', 'model', 'photograph', etc. Accompanying this schedule, coded for cross-reference, will be the draft exhibition text, again right down to individual item labels.

The way in which this information is presented will depend on the type of project. Also, depending on circumstances, captions for individual items or possibly details of more significant elements might not be included in the initial brief but follow as the project progresses. This may be particularly appropriate for 'self-contained' elements such as audio-visual programmes and similar items.

### Related items

The brief may well extend to such items as exhibition catalogues, leaflets, posters and publicity; educational material; signage and souvenirs.

### Design methodology

Designing may be described as the solving of an identified problem or need by the purposeful use of creative thinking which leads to the production of a solution or artefact. In recent years designing, as an activity, has become more considered and, as a consequence, more complex. Possibly because of its close relationship with art, designing was, not so long ago, popularly considered to be largely intuitive, relying not just on the taste of the practitioner but also on some type of inspirational process which he experienced. Earlier than this, the designer's role was thought of in terms of the craftsman who would choose the right material for the job and specify how it might meet the functional need whilst, at the same time, making it look pleasing—and do this within a set budget and take into account the means of production available.

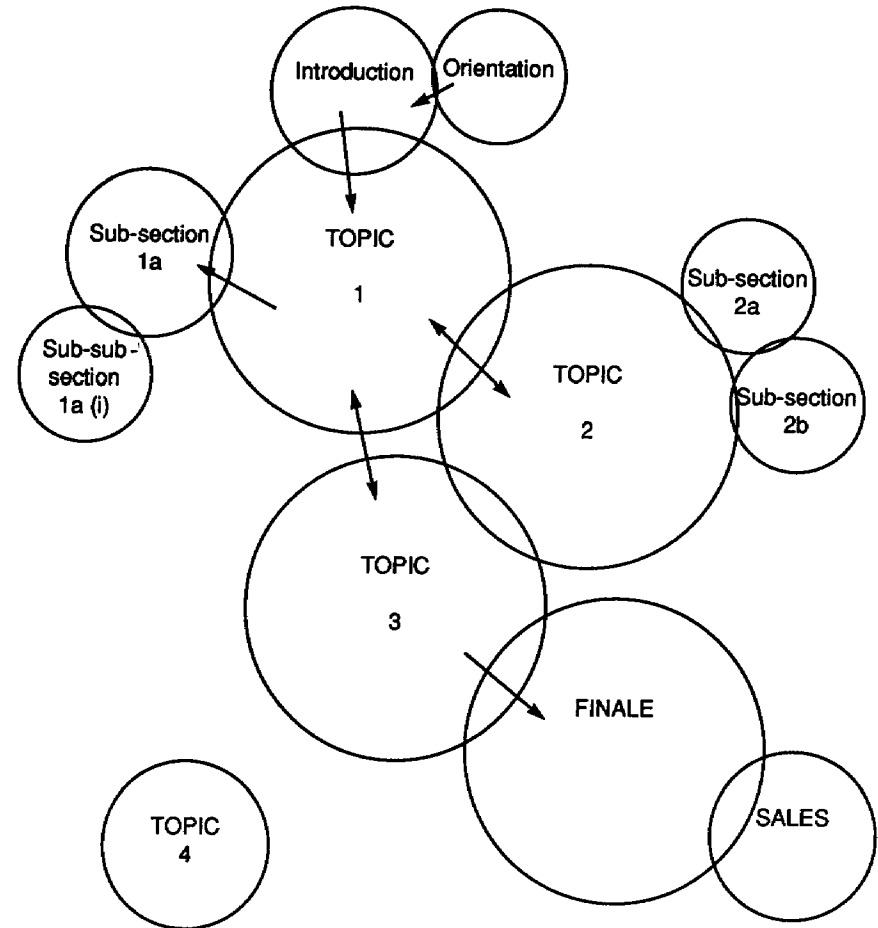


Figure 8.1 Example of a typical conceptual planning diagram

Designing today still embraces these processes, but they are set within a far more complex and systematic approach to problem-solving which relies less on intuition and more on selective methodology. Bruce Archer (1964) in his paper *Systematic Method for Designers*, identified no fewer than 229 distinct events within the structure of the design act. However, the effect of this process is not to reduce the need for creativity and original thought so much as to ensure that ideas evolve and are tested in a more logical way. It is a process aimed at reducing the risk of error or failure.

Designers have, in recent years, put forward various models of the design process. Most agree on the main stages but differ slightly on the detail, depending on their particular design specialism, for the demands on a product designer, for example, are different from those on a graphic designer or a theatre designer. That said, the underlying principles remain the same.

A simplified model of the design activity is given in figure 8.2. First must come an awareness of the need. As Bruce Archer (1964) expressed it, 'There can be no solution without a problem; and no problem without constraints; and no constraints without pressure or need. Thus design begins with a need.' More often than not, the need is discovered by someone other than the designer, who calls on him to share his problem, to help clarify it (stage 1, *preliminaries*), and to provide assistance in defining it (preparing the brief). The significance of involving the designer at the briefing stage is that he knows the questions that need to be asked and the sort of information that will enable the project to progress to the next stages. This will help to clarify the aims and objectives of the project. A useful guide to the type of initial questions a designer should ask is given in *The Study of Professional Practice in Graphic and Industrial Design*, published by the Society of Industrial Artists and Designers, now the Chartered Society of Designers (1974).

*Problem analysis* is a crucial stage. All too frequently in the past the designer has been tempted to jump to a solution before the problem has been thoroughly understood. It is necessary to establish a clear set of criteria in relation both to the overall problem and to any identified sub-problems, against which design ideas and proposals may be evaluated. These criteria may be ranked in order of priority and may also be given value factors, depending on their perceived importance. Constraints, too, need to be listed and their validity verified. As the totality and complexity of the problem become apparent, programming can be refined. If necessary, a feasibility study can be undertaken to examine the possibilities and explore the parameters of the project. Data collection becomes an important activity. The designer will want to see how others have solved similar problems and seek published research data and other information relevant to all aspects of the task. This should be a receptive and acquisitive period for the designer, who works with an 'open' mind and yet with direction, collecting ideas and information, and analysing and assessing their worth.

*Synthesis* is the putting together of conceptions or propositions related

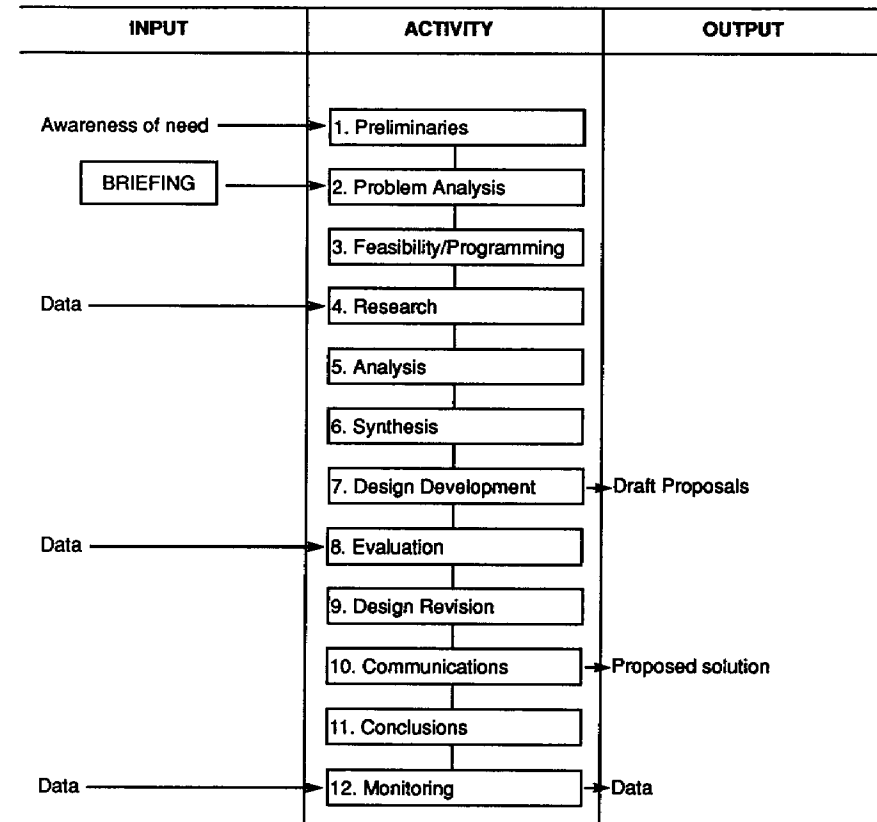


Figure 8.2 Model for design activity

to the problem. It is when the designer searches his mind, ponders the data, and deliberates on the reference material he has acquired in a quest for elements, or even fragments, which he thinks (rationally) or feels (intuitively) might have application in the project in hand. This is the abstract, creative thinking stage and as such is very complex.

In particular, the designer will again consider previous solutions to similar problems and how he has resolved problems of this type in the past. He will refer back to the problem in hand, and its sub-problems, and consider the elements and fragments he has isolated, and decide how, conceptually, they might be augmented and modified in order to satisfy the dictates of the problem.

The *design development* stage moves from the abstract to the concrete. Ideas, having been notionally examined in theory, are developed, modified and redeveloped into proposed solutions. This stage can be approached systematically. It might for example, involve proposing and then manipulating structures or colours, and working through a range of combinations; or of proposing a shape and then methodically varying the proportions of each element, or transposing elements, until a 'unique' combination appears 'right', and is worthy of being tested against the criteria established at the problem analysis stage and the requirements of the brief. Some ideas may well be thought to satisfy certain aspects of the problems better than others. At this point the application of the rank order of priority must apply, and will include the degree of importance attached to such things as function, aesthetics, manufacture, costs and maintenance.

On the one hand, the designer will seek a solution which will work well and do its job in a functional way. This, in itself, will determine certain parameters, and, if the basic problem is not new, may be deduced from tried and tested solutions. It is the baseline and provides a solution which can be relied upon. But on the other hand, he will almost certainly want to strive for something new, and to improve on what has previously been achieved, or to meet new needs. In the past this approach has often resulted in rather superficial 'styling', involving merely the changing of the outer appearance of something which was basically the same. To overcome this, a fundamental rethink of the problem is often the answer. The designer can work in one of two ways. He may begin from the starting point of the problem, logically trying to answer each separate sub-problem almost sequentially, until a solution emerges; or he may work by proposing an answer (the intuitive way) and then adapting and modifying it until it meets the requirements of the brief. Each is valid, because each involves systematic development.

The outcome of the *design development* phase is a series of draft design solutions which, the designer has adjudged, meet the demands of the brief. These may well take the form of models or prototypes or 'mock-ups'—convenient ways simulating the proposed solution which, in the next stage, are evaluated. The criteria for *evaluation* will be those previously applied as ideas were being developed. The evaluators will need to know how well the proposed design solutions satisfy the

requirements of function, manufacture, cost and maintenance, and any other requirements, including aesthetic standards. To obtain this information, a whole range of tests might be undertaken depending on the nature of the project. They might include the physical and behavioural sciences, test marketing and so on. The data obtained are used in any *design revision* work found to be necessary and then the revised proposal is re-evaluated, redesigned and re-evaluated until it is satisfactory.

The *conclusions* stage is concerned with bringing all aspects of the project to a satisfactory close and ensuring that the documentation is complete: it is about tying up loose ends. Project records—the systematic recording of each stage—are of considerable use, not only as points of reference as the project progresses but also afterwards in relation to a future project. They may also assist in the evaluation of project methodology and form the basis for refinement or improvement. Although it might be pleasant to close the files completely on a project, in practice that which has been designed and created generally lives on; and its progress in life justifies *monitoring*.