

The Archivist and his Accommodation

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I offer some comments on what the archivist ought to do and what he needs to know about the provision of accommodation for his materials, his users and his staff. My remarks are set in the context of a purpose-building and I ignore the possibility of the building being shared with other occupiers. There are advantages and disadvantages in sharing but, though they may be prominent in daily use, they can be regarded as secondary details for present purposes. The provision of a purpose-building, though far from being the common solution to our problems, requires the most radical study and one from which it is possible to extrapolate to the case of adaptation. Adaptation might thus be seen as an attempt to convert an existing building to resemble a purpose-building, though it must be admitted that such a process involves its own peculiar snags.

INITIAL PLANNING

The treatises on archive administration offer us sage advice on the ideal *location* for archives. The site should be on high, well-drained ground, free from atmospheric pollution and conveniently situated for government offices, libraries and universities. In practical terms, however, archives buildings are put up on sites that authorities are prepared to offer and it seems that the cost of and competition for them are the really significant factors. Negotiations in this respect, therefore, are political rather than professional and that must be my excuse for not discussing this aspect of the question further.

The fundamental requirement imposed on the archivist in building-planning is to state what his business will be like in, say, twenty years. It is worth putting the point in this bald, even silly, fashion because it helps to emphasise that archival activity is very much constrained by the building that contains it. Offices, factories and warehouses can be regarded in relative terms, as so many square feet of easily re-usable space, whereas an archives building consists of a number of specialised, interlocking parts. If it turns out to be unsuitable it is very difficult to conceive of it being used for some other purpose so that a replacement can be acquired. We have to go on living with our mistakes.

The best, in the sense of most justifiable, basis for *forecasting* is information about the past. Statistics extending back a number of years can be used to

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construct projections of future space requirements, as well as being useful in planning the transfer and relocation of records. The assumption that archival activities will go on, or go on changing, as they have done in the past is clearly not entirely satisfactory, but it is difficult to imagine any better method of calculation. The most important sets of figures are those relating to the use of archives. They include the number of users, the distribution of users through the year, the length of time they remain on each visit, the numbers of documents demanded and the distribution of demand during the day and week. Archives have generally seen in recent years a considerable growth in use and the fluctuations in this pattern appear to be related to the general level of economic activity. This vague relationship is not helpful in predicting future archival use. One would imagine that there is some relationship to university activity, at any rate at the postgraduate level, which could enable archivists to prepare forecasts linked to educational planning, but I am not aware of any work that has identified such a statistical relationship. It might in any case be overshadowed by our non-academic users. It is certain that the overall rate of growth that has been seen will slacken at some point in the future, if only because it involves a growing proportion of the population as archival users and it is hardly possible to imagine this process continuing indefinitely. However, there seems to be no way of telling when this is likely to occur and archivists really have no better initial basis for establishing their forward requirement for accommodation over the next twenty years than mathematical extrapolation from past figures. This is not to say, of course, that the results of calculation will not require adjustment in the light of common sense. Information about other comparable archives may be relevant here. Where a completely new activity is to be undertaken in the new building this approach probably provides the most helpful guidance. Even those of us who have not a new building in immediate view should be accumulating figures regularly against future use.

It will be apparent how *usage projections* can be deployed in planning the number of seats in a reading-room together with the nature of communications between it and the storage areas. The same is true of relationships between the figures, such as the ratio of visitors to demand for documents. The considerations affecting the size of the storage areas themselves are rather different. It is notorious that past predictions of storage requirements have been inadequate, though it is difficult to say to what extent this is due to our natural tendency to fill the space available. The growth of stock is under closer archival control than the growth of users and ought also to be more susceptible to forecasting. The reason for this is that within the reasonable time-span for building planning, given the currently typical access restrictions, the records that will occupy the building are already in existence at the time of planning. It ought to be possible to estimate the size of the total from which a selection is to be made to occupy the archives. Even if this is not the case, or if the proportion of officially created records to which such arguments can be applied is outweighed by material of non-official origin, it remains open to the archivist to ration intake to make the available space last for the appropriate period. When all else fails the outhouse solution for material identified as generating no demand, or a very low demand, remains. I should have thought it undeniable that all archives contain documents for which the demand is negligible in relation to the space they occupy. The need is to maintain records of usage that enable such documents to be identified in useful quantities.

For these reasons, I regard the forecasts of usage as more important than those of stock growth. Nevertheless, records of stock growth must be maintained as a planning guide, and the same is true of the statistics of reprographic demand, conservation output or exhibition visitors.

The estimates of *staff requirement* should be related to the estimates of demand and stock growth together with changes in other activities of the archives, such as education. When this has been done the archivist will have the basis for his brief to the architect.

THE BRIEF

It is important to treat the brief as a formal document. It should be prepared as a *statement of archival requirements* without architectural assistance and, when it has been finally negotiated, the architect will rely on it as the expression of what he is contracted to deliver. Such emphasis on the brief is a protection for both parties, for a less formal approach to the design can lead to misunderstandings which become apparent only when it is too late to rectify them. It follows that the brief changes which are necessitated by the architect's continuing study of the archivist's first attempt must be accepted by the archivist as a satisfactory restatement of his requirements and formally recorded as such. Given this approach it also follows that the brief needs to be very detailed. A narrative statement of the functions the building is intended to serve, even when accompanied by figures, is only a useful first step. At this stage one should assume that the architect needs to be told what archives are for and what sorts of work are carried out, whether by staff or visitors. Then one can go on to consider the main spatial relationships. Since it is impossible for every space to adjoin every other it is necessary to assign priorities for ease and rapidity of movement, whether of archives, in bulk and individually, or of people. In addition to the priorities, the quantities of movement should, of course, be estimated and the areas of activity between which these movements take place are as follows (in no particular order):

Information bureau	Microfilm
Exhibition	Photography
Reference	Packing
Reading	Disinfestation
Secretariat	Sorting
Archivists' Offices	Destruction
Archives Distribution Centre	Binding
Repository	Repair
Loading Bay	Photocopy
Library	

Before the architect can go on to translate this information into an initial design the archivist must enable him to take account of certain *general constraints*. These are environment, security and provision for future growth. The environmental requirements for document storage are well established and, where the external climate or degree of atmospheric pollution calls for it, are provided by mechanical means. If a different environment is required in the repository from the staff and public areas, or if control is required over different periods, difficulties can arise in the design that need to be solved at an early stage. As far as security is concerned, in

addition to the external security of the building, one has to consider what sort of control is to be provided at the interfaces between public, staff and repository areas. Finally, if it is conceived as desirable to add to the repository in later stages provision must be made for this. All these are factors which are going to contribute to the overall strategic shape of the building, and they interact with each other. For example, good external security can be provided by wrapping the public and staff areas around the repository and this layout would assist in stabilising the repository environment, thus reducing the load on air-conditioning plant. If such a solution is adopted totally, however, repository growth can only be upwards. This is possible but it has its own difficulties. Similarly, separation of the repository from the rest of the building can have environmental, internal security and growth advantages but cause difficulties for communications. There is no single recipe which can be put forward for resolving such conflicts.

Apart from balancing the considerations I have mentioned, which are matters of archival policy, one has to take into account the finance available, the period of time the building can be made to serve without expansion and the nature of the site. What the archivist has to do at this stage is to set out all of these broad constraints and priorities. What he cannot do is to design the solution, but he can expect to be involved in examining the grand strategic options. During the course of this examination it will probably be necessary for him to reconsider what he wants because constraints are found to clash with each other. This, of course, is only the beginning of the business and more information will have to be provided to enable the design to be carried forward.

BRIEF DETAILS

The most satisfactory way in which to complete the brief is to adopt a *standard form* for the description of each space, a form which ensures that no element is accidentally omitted. Each form should identify the persons to work in the space and the nature of their activity; the floor space (including the method by which it is calculated) together with the requirements in respect of: height, lighting levels, natural lighting; floor, wall and ceiling coverings; ambience; door width; floor loadings; furniture and equipment; power; telecommunications; orientation; temperature, humidity and dust; water supply and drainage; acoustic treatment; nuisance; ventilation; contiguities; fire precautions; security.

Obviously, some of these items will be repetitive from form to form and many others will be irrelevant in each particular case, but this bureaucratic approach helps to ensure that the archivist will not forget to put something in—or simply assume that it is obvious, which amounts to the same thing—and that the architect will not leave something out.

THE ARCHIVAL ROLE

It is possible to use such forms for computer input so that the calculation of different kinds of space and net to gross ratios can be performed by machine. If such a procedure is used its impact on the archivist is likely to be a demand for more precise and detailed forecasts. Even at this relatively early stage in the life of the project it is apparent that its demand on limited archival resources is considerable. Archive authorities must be prepared to divert staff from more

traditional activities if the right results are to be achieved. It is not adequate for the various parts of the archives to put in their contributions to the brief as an addendum to their ordinary work, nor is it necessarily the case that those currently responsible for a particular area of activity are best suited to the work of planning and consulting about the future of that activity and its integration into an overall scheme. A decision is required to make the right people available, in growing numbers, to form a project team to carry out the archival side of the planning. It has already been noted that at the strategic level the brief will require amendment in the light of what is established by the architect's studies. The same is true at the more detailed level and the consequent demand for reconsideration, amendment and elaboration will impose a burden on the archival planners. The certainty of changes in the brief must be foreseen and machinery established for updating it.

It is the archivist's role to provide a brief, the architect's to meet it with a design. There is a boundary here which should not be allowed to become too rigid. However much general explanation and apparently precise detail the brief offers one can never hope to encompass in it all that an architect might have in mind. Because of this, although it is the architect's responsibility to execute the brief, it is highly desirable that some arrangement be reached whereby the archivist has an opportunity to certify that a given drawing fulfils the brief. This procedure includes, but goes further than, looking at the drawings to choose between options or to check that nothing undesirable has been incorporated through not being prohibited in the brief. The extra step is to establish by agreement the archivist's right to see the successively amended drawings. The design is an increasing flow of changes and without an agreement of this kind undesirable archival consequences may not be avoided, even though the changes do not breach the formal brief. This position can be reached only by negotiation.

Theoretically, there is a clear dividing line between design and construction. The archivist has an obvious interest in design, an interest that procedures should accommodate, as outlined above, even though his formal responsibility is only for the brief, but in the actual physical creation he has no role to play. This theory assumes that the building will be constructed according to the approved design, delivered on time and at the original price. In practice all sorts of things occurring during construction will call for design changes to overcome unforeseen problems or mistakes, the occupation date will steadily slip away and increased costs at the earlier stages will create pressure for cuts in the later part of the design. Obviously, all these things might significantly affect operations within the finished building and may, in some cases, affect the archival contribution to fitting out. For example, the archivist might be responsible for the installation of reprographic or computing equipment, the timing of which depends on the course of construction.

At this stage it is difficult for the archivist as a client to get a firm position, let alone make any demands. It is not unreasonable for him to seek access to information that will enable him to defend his legitimate interests and to have confidence in the control of the project. If he is to do this he must, of course, be prepared and able to acquire the technical understanding, of a necessarily limited kind, that will help to make the architect and builder willing to consult him.

TECHNICAL FACTORS

In some areas, of course a certain amount of technical knowledge is regarded in the profession as a normal part of the architect's equipment. During the course of his training one would expect him to learn about environmental requirements, communications, fire precautions, security precautions, shelving and floor loadings, but archivists do not always find it easy to take an interest in such things, let alone keep up-to-date. In the context of the brief these technical aspects call for separate statements, applying to the whole building or large parts of it, rather than being dealt with on the basis of forms for each limited area. In general, one can see that in the past twenty years greater reliance has come to be placed on mechanical and electronic methods of achieving desired ends and as a general corollary we now always have to ask how the building can continue to function if there is a breakdown. In some cases, of course, it is not possible to continue and all that can be done is to provide emergency arrangements for people to leave the building. I cannot help contrasting this situation with that of the old Public Record Office where the arrangement of windows and walls provided all the lighting and most of the environmental control, fire precautions and security.

I propose to do no more than refer to some new techniques or latest fashions in these areas, without necessarily approving or disapproving of any of them. In the present context my remarks should be taken as no more than exemplifying what the archival building planner needs to be up-to-date in.

It is generally accepted that *low temperatures* assist conservation and, for this reason, one is tempted to press for a low temperature in repository areas. The main limit, apart from the extra cost of cooling, is set by the willingness of staff to work in low temperatures. They may be more willing to do this in the repository than in offices, because of the nature of the work, but there are two factors limiting the size of the temperature differential that can be prescribed. It is physically difficult, and therefore expensive, to maintain a temperature differential. It requires openings between the two areas to be minimised, possibly by double doors, yet this is precisely where one must have fast and frequent movement. Apart from this the transfer of documents between warm and cool areas can result in their distortion or in condensation on them. The result of all these factors, is that the prescription of the environment is a matter of balance. It is a much simpler matter, of course, to provide special conditions inside one room, e.g., for microfilm storage. The *communications* with which archivists are concerned are both of documents and messages. In addition to elevators and book hoists we can now use paternosters, endlessly circulating bin-holders, for vertical conveyance, while on the horizontal plane electric trucks and trolleys and conveyor belts are available. It is possible, though I do not know of archival examples, to have automatic interchange between belts and paternosters. All these things are intended to speed up movement and reduce the human labour involved. The same is true of the communication of messages, primarily requests for documents, for, apart from the vacuum tubes which have been in use for some years, these can now be distributed and printed by computer. The spread of *automatic fire detection* and extinction systems is well-known, as are their effects. False alarms are all too frequent and extinguishing gases are effective only in relatively confined spaces. There are now gases available that are not

harmful to humans, though they are expensive, and foam systems have been used as alternatives. The great drawback to water sprinkler systems in the minds of most archivists has been the risk of damage from accidental discharge; this can be very greatly reduced by using detectors to control the passage of water into the discharge pipes within the repository, so that there has to be a conjoint failure of detector and sprinkler head to release water in the absence of a fire.

Problems of *floor-loading* strictly should not arise in a purpose building. Given the chosen racking layout the load per sq. ft. can be calculated and should be provided: the only reason for not doing so would be that a layout involving a lower floor-loading was cheaper for the same quantity of records and this is hardly likely. The choice of shelving may require more thought; cantilever shelves are easily shifted and can be adapted to hold rolled maps, for example, but it may not be possible to use them with free-standing uprights, so that the mobility of the racking units themselves may have to be sacrificed. In considering mobile shelving the basic question, given that records will fit within it, is how many records can be stored for a dollar, which should be a reasonably straightforward question. As the dollar has to buy land, construction, shelving and installation there is a different answer for each instance; the general point that frequency of retrieval can be so high that it delays access in mobile shelving does not appear convincing.

In *security matters*, as with some others, archivists find themselves riding on the back of a much more widespread industry. In any other trade, such a remark would be a commonplace unworthy of utterance, but archivists are all too conscious of the areas in which their requirements are peculiar and therefore difficult to meet. Although intruder alarms are used in archives I have not come across the more advanced devices of this kind such as photoelectric cells and body sensors. Closed-circuit television is in use, though time will be needed to evaluate whether it is strictly a detection device or a primarily a deterrent. One of the important advantages of all these aids is in dealing with the conflict between fire escape and security. Modern fire regulations quite properly demand the large-scale provision of exit paths from all parts of a building and these paths can provide access to restricted areas. The risks of such access can be much reduced by fitting fire escape doors with intruder alarms linked to a central control room.

FINAL PLANNING

Association with the developing design of a building merges, during its construction phase, with the plans for removal to and operation in it. It is for these planning activities that the number of those assigned by the archives to the project must grow. The major element in removal is, of course, the transfer of records, which imposes the need to marry speed and security with the minimum dislocation of public services. To achieve this it may be necessary to plan the relocation of records in very great detail, using a lot of staff resource to buy removal time. The removal of staff and their accoutrements is, in itself, a minor matter by comparison with the removal of records, but the consultation with staff made necessary by current fashions can become an important additional feature in planning. It would not be too much to say that removal plans should be sufficiently robust to tolerate a degree of lack of co-operation in execution.

Although in the design stage much thought must be given to the nature of the operations in the new building it is not likely to have been expressed in a form suitable for the instruction of staff. Whereas staff who join an existing office can learn to find their way around and discover how to perform their duties from the existing inhabitants, in a new building all are strangers. It is not simply a matter of finding the cafeteria or knowing where to get stationery; the new building will require changes in the way some jobs are performed. To my mind the only way of dealing with this difficulty is to assign staff to working out and writing down all the answers beforehand. This not only provides a set of tools for beginning the new life, it offers an excellent discipline for identifying all the questions which have not yet been decided. None of the importance of this is lessened by the sure knowledge that practice will work out differently. It is better to make a plan for operations and amend it in practice, thereby following up its consequential effects, than to flounder in a confusion of uncoordinated on-the-spot decisions. A final feature that may be brought to light in the course of this planning is the tasks that have suffered repeated postponement, the records that have not been arranged or packed and cannot be safely moved. There is nothing that concentrates an archivist's attention on these bare necessities so much as the knowledge that his neglected collections are to suffer removal, traditionally one of the prime causes of loss, disorder or damage to archives.

When all these things are taken into account a new building absorbs a lot of archival resources before it opens its doors for business. This should be included in the appropriate part of the budget, along with a sizeable sum for the festivities proper to such a rare event as an archives getting a new building.

Résumé

Ce discours, donné lors d'une conférence par le planificateur en chef du "Public Record Office" d'Angleterre, examine les étapes à suivre par l'archiviste qui envisage la construction d'un nouveau dépôt d'archives.