Access versus holdings has become one of the key issues in information management in universities. Is it more appropriate that universities should build great collections, which by their very nature guarantee effective access, or are large collections very often in conflict with effective access? Have the technological changes which have been discussed through this Conference, the new developments in networking, electronic access to journals, new electronic current awareness services, - have these all fundamentally affected the balance between access and holdings? Is this balance going to be changed so much that libraries in universities will become increasingly obsolescent?

The purchase of journals is one of the biggest resource commitments of any university library, but for how long will this continue? Libraries have so far swallowed large price increases, despite their size. Cancellations have taken place, but the proportion that libraries spend on journals has moved inexorably upwards. Although the high price rises imposed by publishers have been questioned and criticised by librarians, the basis of the criticism often appears to have been naive with librarians basically complaining that publishers have put up their journal prices faster than the increases in the costs of production. Publishers’ response to this charge, that they have to replace the revenue lost from cancellations in order to invest in new journals, that journals have grown larger in size, that editorial costs have increased disproportionately - all these have been insufficiently appreciated by librarians. To compound the problem, we now have a major new issue, that of copyright in an electronic age. The view of universities that the research articles of their academic staff are the property
of the universities, and that universities should not have to buy back this property, is being stated with added vigour as technology makes article distribution ever easier. In an electronic environment we have the paradoxical position where electronically published articles could, in effect, be more inaccessible than paper published articles have been in the past.

So far librarians and publishers have in general worked well together. Indeed, the scholarly communication system has worked well, despite the misgivings expressed at times by each participant in the process. Researchers have found publishers to be remarkably flexible in creating new channels for the dissemination of the results of their research. Librarians, while grumbling about price increases, have nevertheless been able to persuade their academic institutions to make ever more money available for journal purchases. Universities still attach prestige to large journal collections, they like the research quality ratings which are associated with prestigious publication, and they have expressed no real reservation about the continuing proliferation in the volume of research publications, something which, as they see it, naturally follows from the large increases in international investment in university research. Publishers have been happy because they see that their services are wanted, both by authors and by universities, and many have done well financially from journal publishing. There are of course groups who have benefitted less from this system, eg. undergraduates, poor countries, and tax payers.

Despite the general effectiveness of the scholarly communication process, relationships have begun to feel the strain, as in a previously happy family seeing good traditions coming to an end. How shall we adapt? Will we resolve problems harmoniously, or will there have to be a fight? Publishers will want to make use of libraries to disseminate material, as long as libraries continue to communicate effectively and are willing to pay. Researchers will wish to visit libraries if libraries can provide effective services, and universities will wish to fund libraries if they are seen as necessary for maintaining the universities’ goals in financial, political and quality of service terms.
Document delivery is seen by many as one of the main solutions to the problems which now begin to affect the scholarly communication process. Document delivery seems to provide something for everyone. Researchers are able to make their research results more accessible, and can find out more quickly and more easily about the research of others and obtain the documents which describe that research. Librarians can supplement their holdings, use document delivery to assist the holdings rationalisation process, provide better services, give themselves an extra role, and even make money. Universities can provide improved services at lower costs. Publishers can gain additional revenue from copyright fee paid document delivery, can get better market knowledge, and can reduce the level of "piracy" in the electronic age. But what is this document delivery? Is it on paper, or is it electronic? Is it free or charged? And does it come from publishers, libraries, document supply centres, or researchers? Before we can present document delivery as the solution to the problems which face us, as the great alternative to collection development, we need to be clearer about the issues involved.

The ideal scenario gives the researcher an excellent collection or collections, and excellent access to information and documents, both inside and outside the collection(s). Librarians find it very difficult to develop a policy which achieves the right balance between access and holdings against an apparently ever more difficult financial background. Large collections are still too often the crude measure of effectiveness. In the UK for example, many publications describing universities list the size of the library’s collection as the only measure of its quality. There is strong pressure from academic staff for the maintenance of large collections, but this often seems to be for reasons of prestige rather than quality of service. All too often, universities have little knowledge of the use of their collections, particularly of their journals. There is little evidence that a larger collection on its own produces better research. Of course, many of the world’s greatest universities have great research strengths and magnificent collections, but there is little scientific correlation, for example, between the excellence of smaller institutions of a similar size, and their relative collection sizes.
The philosophy of "big is beautiful" is in sharp contrast to libraries in industry and commerce. Industrial libraries appear to worry far more than universities about the costs of space, storage, cataloguing, processing etc. Industrial libraries prefer professionals to provide the necessary added value rather than invest in large and perhaps little used collections. They prefer to pay for services, often on a contracted out basis, and to buy information, whether in the form of awareness services, document supply services, or information broker services, rather than invest heavily in collection of material, just in case it may prove useful.

Of course, most librarians would be rash to proclaim too loudly that small is beautiful. They would get few supporters in the university. The challenge for university librarians must be to improve the decision making process for the ordering and cancelling of serial publications and relate it to improved management of document delivery. There must be more analysis of the use of collections, set against the cost of collections, so that the economics of document delivery and awareness services can be put alongside the economics of collection development. User needs and quality of service can then be balanced against resource availability in order to find the most appropriate proportion of investment in collections on the one hand and document delivery on the other.

Document delivery cannot replace collections. Users will always want books and journals for browsing in order to look for things that may be of interest and to gain inspiration from serendipity. But collections are changing, and collections need not be local, or on paper or microform. We are in fact moving to a rich variety of collections, the local paper collection, the remote paper collection, the local electronic collection and the remote electronic collection. These will be supplemented by a variety of access routes which combine awareness and document delivery. Awareness services will include details of new publications, - monographs, journals, articles and grey literature, - as well as abstracts and keyword and subject searching. Web browsers will detect a whole variety of other resources in many different media from across the
global networks. Even random access may be built in to provide an electronic equivalent of browsing.

Document delivery services will also be very varied. Authors will be able to transmit their articles electronically far more effectively than they have done in the world of paper off-prints. But that distribution may of course affect their relationship with publishers. Publishers will wish to use site licensing and national licensing as an important and much improved form of document delivery, but this may limit access to those outside the institutions covered by the licences. Libraries will become ever more involved in electronic document delivery, primarily within their institutions, but also on a wider basis. Public sector document delivery services, usually subsidised by the State, will naturally respond to the likely continuing increase in demand for remote document delivery, but they will be in increasing competition with both publishers and other private sector document delivery organisations.

The pace at which these changes will take place will depend on the pace of change in a number of other key areas. How long will journals continue to be produced on paper, either exclusively or at the same time as electronic versions? Paper has much to commend it over screens! And paper has been a very effective medium for scholarly communication. All the participants in the process have liked paper, have done well from paper, and will probably wish to continue to use paper for as long as possible into the future. A recent British survey, however, suggested that British university librarians expected the number of paper journal subscriptions to be down to 20% of its present level within 15 years.

Allied to the question of the future of paper is the question of the future of publishing. Will publishers be able to adapt to the electronic age without killing the goose that laid the golden eggs? If publishers alienate the academic community by insisting on high levels of copyright fees for access to documents, there is a great danger that the academic community will put enormous resources into setting up a parallel system controlled by them rather than by publishers. It is very important for all concerned that broad agreement is reached between the academic community and the publishing
community on conserving what is best in the existing process, and much of the debate will hinge around copyright. How best can we ensure that researchers have the right to communicate the results of their research to as many as possible while maintaining a peer-review and quality process such as that provided by publishers? Will we not always find that articles are marketed far more effectively by publishers than could be done by individual researchers or universities? How do we ensure that there is a fair return for publishers at the same time that many libraries and researchers start to pay only for each article used, rather than buying in advance large packages of articles, some of which will be little used? How do we achieve measures of research excellence, which seem ever more important in all countries, if we do not have continuing growth of prestigious publications?

In my view there is scope for a hybrid system, where we need not all feel threatened by one another, and where we must work hard together to protect effective scholarly communication in the future. At the same time, we must try and help the disenfranchised, the undergraduates, and researchers in the poorer countries of the world, who may be harshly affected by a major shift from holdings to access in an electronic environment. The holdings may at times have been poor, but once they are there, they remain. Electronic access can in many cases be turned off like a water tap or an electricity supply, with the kind of calamitous results which in a paper based library would only come about from major disasters such as fire and flood.

University libraries will in my view never disappear. It will never be cost effective to digitise historic holdings on a massive scale. Books and journals on paper have a very high user appeal. They are physically and aesthetically attractive, and are technology independent. University researchers, especially undergraduates, will need reading and working places. The professional information skills and knowledge of university library and computer staff will become ever more important. But the resolution of the central resource management issue of access versus holdings will lead to major changes. University libraries, if they are to prosper as we all want them to, will have to:

1. Work much more closely with other information holders and providers in their institutions to plan and implement information service strategies for the future.
2. Justify their collections economically as well as politically, measuring use, need and lifecycle costs.

3. Expand access services, including awareness and document delivery services,

4. Do far more measurement of the relative benefits of holdings and access in order to get the best combination of the two.

The task before us is not to opt for either access or holdings, it is to find the right balance between the two.