Library Buildings and Equipment Section

Key Issues in Building Design

How to get started in planning a project

Introduction

Based on the IFLA Library Buildings and Equipment Section's Library Building Guidelines published in 2007, this short publication summarises the key points to take into consideration when designing a new or refurbished library building. The aim of the brochure is not to replace any guidelines or standards but to provide librarians new to working on building projects with the essential facts they need to know. These basic issues are discussed under four headings: Preliminary Work and Research, Vision, Space Needs, and Communication. Four experts from the Standing Committee of the Library Buildings and Equipment Section have each authored a section on their area of specialist knowledge. Our goal is to provide you with initial tips and inspiration on the long and fascinating journey from the first tentative ideas to the opening of the new building.

Preliminary Work and Research

Introduction

Much has been written about designing library buildings fit for purpose in the 21st century and this tends to focus on space, service and user requirements. These are, of course, critical factors to consider but the process of planning and designing a new library starts well before the brief or programme is written or the architect selected.

The very first step in planning a new library building involves background research in order to clarify the vision that will define the building and will enable a sound and convincing business plan to be prepared. The aim of the research stage is both to become better informed yourself but also to enable you to bend others to your will through persuasive argument.

One factor that led to the publication of the *IFLA Library Building Guidelines* (KG Saur, 2007) was the "fact that designing and constructing a new library is an art that most library directors and professional librarians only experience once or only very occasionally in their professional lives". However, those same library professionals can gain much from colleagues and others who have been there before them and it is a crucial stage in the planning process to build on the existing body of knowledge and experience. This can be done in a number of ways.

Review of the literature

It is not the purpose of this brief introduction to list the numerous sources of information available on library building design although the Library Buildings & Equipment Section is working on a web-based bibliography but rather to give pointers which librarians of all people will be well able to follow up. A look at the references in the *Guidelines* and the bibliography (including texts and websites) in Ayub Khan's recent book on planning a new library building *Better by Design* (Facet Publishing 2009) gives an indication of the wealth of information available to the novice library planner. Like any literature review it is the sorting out of the wheat from the chaff that is important and in library planning it is often best to tackle different areas as required, moving from general information on the planning process to specific detail on topics such as lighting, furniture, IT requirements and so on. It is worthwhile to check both library databases such as *LISA* (Library and Information Science Abstracts) and architectural databases such as *RIBA Library Online* and the *Avery Index to Architectural Periodicals* amongst others to source material on all aspects of library planning and design and also to pick up information on best practice and post-occupancy evaluation.

"Much can be learned from existing successful buildings but there are lessons to be learned from other's mistakes also"

Much can be learned from existing successful buildings but there are lessons to be learned from others' mistakes also.

As well as databases, there are a number of excellent websites available to aid the library planner. In the UK the Designing Libraries website (www.designinglibraries.org.uk) now includes both public and, in partnership with

SCONUL, academic library information and in the USA the American Institute of Architects (www.aia.org) provides detailed advice on library building design. Both these sites act as gateways to numerous other helpful websites.

Library visits

In the *Guidelines*, Marie-Françoise Bisbrouck points out that “visiting other libraries is a central part of any new library building project in order to gain inspiration and to learn from the successes and failures of others”. The literature searching exercise described above will have helped identify libraries of interest and it is customary for the design team (including architects and librarians) to visit a number of key buildings early on in the planning process. To get the most out of such visits it is important to plan them carefully and pick the right buildings in relation to your own project in the first place. It is advisable to draw up checklists of areas of particular interest to look at such as, for example, the handling of robotic storage systems, the location of self-issue machines, the variety of study spaces provided, the impact of the entrance area or the success or failure of the various space adjacencies. Prepare a list of questions to ask. Take careful notes and photographs; look out for both the good and bad features of each building, and try to look at the layout and general impression from both the user and the staff point of view. It is always worth asking if there is anything that would be changed if the project were to be carried out again and if there are any notable successes or failures in the design. Finally note your own key impressions of the building – the main positive and negative points of each building visited.

Surveys

Another way of gleaning key information in advance of planning a new library is to find out what users (and this includes the staff who work in the building) need and the best way to do this is to ask them. This can be done in a number of ways: by sending out web-based questionnaires, by holding focus group interviews or by individual meetings with key users, by consulting advisory committees and by analysing complaints and suggestions. In addition watch what users do – how they currently use facilities and indeed how they use the new libraries you visit, or indeed other buildings as much can be learnt from different building types also.

Networking

All the above techniques (scanning the literature, searching websites, visiting key libraries, surveying users) will help at every stage of the library planning process from clarifying the vision and preparing a business plan through selecting an architect and writing the brief to driving the project through to completion. Throughout all these stages, colleagues will be invaluable so shamelessly pick their brains for suggestions, ideas and support.

Vision

Introduction

Planning a new library building always involves discussion as to the future of the physical library. There is ongoing debate about this issue inside librarianship as well as among our partners and stakeholders.

A solely functional description of the intended library building in terms of space needs and their allocations will be unrewarding. Even a refurbishment or extension project must be based on a new concept for the library space. A librarian has to know why he or she wants a new space – beyond simply requiring a more pleasant working environment. This stage of the preliminary process is strongly connected to the research work described in the section above and has to take place at the same time.

Theoretical Background

As a result of the abovementioned discussions about the future of the library there are various approaches to library space. All of them deal with the fact that storing and making available printed media are not the first and foremost activities of libraries any more. But it is not only changes in media and technology that are responsible for new considerations about the library. As an important public space in the industrial society, the library is directly affected by the cultural and social transformation associated with the rise of new social models especially the knowledge societies.

"Even a refurbishment or extension project must be based on a new concept for the library space."

Although there are various traditions and roles of librarianship in the different countries and regions worldwide, every library is affected by the changes mentioned above. Since the turn of the century these discussions have been becoming a hot topic in the library and information sector and many papers and conference proceedings are available dealing with different aspects of this issue.

Functionality and Flexibility

Therefore alongside functionality, flexibility became one of the most important qualities of what is seen as a good library building. But flexibility can only be taken so far otherwise the design becomes interchangeable and lacks focus. For that

reason first of all architects and then librarians started to think about the library as a sophisticated and identifiable space. In the IFLA Library Building Guidelines Andrew McDonald revises and extends Harry Faulkner Brown's *Ten Commandments* and gives them a more holistic and human approach. His *Top Ten Qualities of Good Library Space* are:

- functional
- adaptable
- accessible
- varied
- interactive
- conducive
- environmentally suitable
- safe and secure
- efficient
- suitable for information technology

In addition he adds the most discussed and adopted quality, "the 'oomph' or 'wow' factor". The most important outcome of these discussions is that functionality and flexibility are not the most crucial factors of the library space any more. Ambience and aesthetics have successfully reclaimed their role in library design.

Deliberations

To advance the plan for the new building it is not sufficient to discuss the Top Ten Qualities only. They are only hints as to what has to be taken into account in considering the space of a library. The reflection on how this space should look starts with a vision. This vision is developed through asking key questions about the new building:

- What kind of community does the library serve?
- What are the patron's and client's needs concerning the new space?
- Which kind of media is to be presented in the library?
- What is the role of the library within its social environment?
- In which way does the new building affect the neighbourhood?
- How does the library react to future changes?
- At what level and in which ways should librarians and patrons interact?
- What are the interests of sponsors and stakeholders?
- How does the building affect the mission and goals of the library?

As stated before, research and consultation are crucial to answering these questions. Workshops and task groups are suitable tools for the further elaboration of the vision. During this process of consideration and discussion, the first ideas and concepts for the new building will emerge. But the limitations and challenges will become obvious as well. The result should be a vision for the library which will be both utopian in relation to ideas and realistic concerning the budget and resources.

"Workshops and task groups are the suitable tools for the further elaboration of the vision."

Outline design brief and core statement

The tool for the next stage in the planning process, the budget allocation and the architectural competition, is the design brief which has to be developed as an outline brief at this stage and will become a full design brief including space allocation and technical directions later. The outline brief should contain a formulated and structured version of the vision and the most important quality measures for the new building.

During a competition it is easier to deal with objective qualities than with visionary considerations only. But there is another important document to be written at this

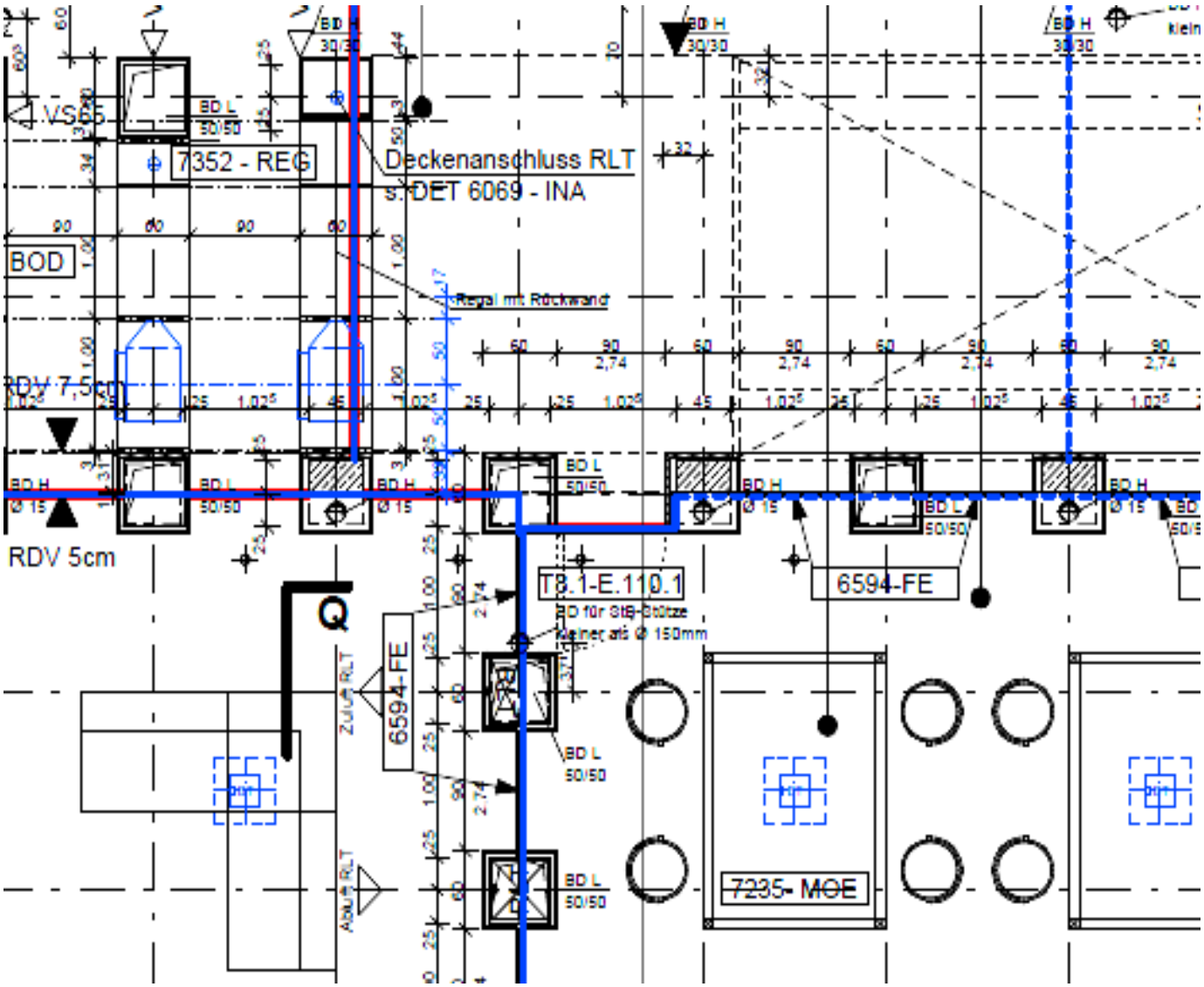
stage. This is the core statement for the building project. It works as a mission statement for the further planning process. An ideal core statement contains three sentences reproducing the major goals of the building as developed in the vision. It is an important tool for the communication of the further planning and building process to sponsors, stakeholders, planners and the public as it is described in the last section of this brochure.

Space Needs

Introduction

One good way to initiate a library building programme is to identify the library's space needs. An estimate of the library's overall space need can be used to evaluate whether the existing space is sufficient or whether an expansion is warranted. If an expansion is warranted, the initial estimate of space need can be used to evaluate whether the existing site offers sufficient area to accommodate the expansion. If a new site is needed, the estimate can be used to identify prospective sites of sufficient size. An initial estimate can provide early insight into the probable costs of the project, which can guide thinking about financing options.

Any library's space needs will be determined by the contents the library must house to meet the service needs of its community. Obviously, if one community needs a larger collection or more computers for public use than some other community, the library with the larger, more generous resource will need a larger, more expansive space. So the definition of a library's space need is really about defining the library's future service and resource inventory goals.



Method

The *IFLA Library Building Guidelines* detail a method for making such an estimate. Conceptually, the methodology is simple: identify the library's essential resource inventory and service goals, then multiply each of those elements by a recommended space allowance.

Specifically, library planners are asked to consider the library's resource inventory needs in the following areas:

- collections
- how many volumes should the library plan to provide in its collection?
- how many magazines should the library provide?
- how long a back run of magazines will be needed?
- how many audio and video recordings should be provided?
- how many computer network stations for public use are needed?
- reader seating – how many reader seats should the library provide?
- staff work stations – how many places or stations are needed where staff will complete essential library operations?
- meeting spaces
- how large an audience should the library plan to accommodate in a lecture hall setting?
- does the library need to provide separate conference rooms, and if so, how many individuals should such space(s) accommodate?
- does the library need to provide instruction space or classrooms (possibly for computer training), and if so how large an audience should be supported there?
- are there other types of meeting space the library should provide (such as a storytime room in the children's department of a public library)?

"So the definition of a library's space need is really about defining the library's future service and resource inventory goals."

Eventually, additional space accommodations must be made for other "miscellaneous" functions (possibly a photocopying centre or a library gift shop), as well as mechanical and other building support services.

Calculations

Different types of libraries will use different methods to determine the appropriate resource inventory and service goals in answer to the questions above. Once the library has defined its service goals, an initial estimate of the library's space needs in square meters can be made by applying the following calculations:

- number of volumes / 140 for high-density storage
  OR number of volumes / 100 for lower-density storage
- number of magazines to be displayed in current issue display / 10
- number of magazine titles to be held in back issues / 20, then multiply that result by the number of years to be retained
- number of audio and video recordings / 150 for high-storage
  OR / 120 for medium-density storage
  OR / 100 for low-density storage
- number of computer terminals for public use x 4.00 in a small installation
  OR x 3.25 in a larger installation
- number of reader seats x 3.00
- number of staff work stations x 12.50 in a smaller institution
  OR x 10.00 in a larger institution

- number of seats in a lecture hall x 1.00
- number of seats at a conference table x 3.00
- number of seats in an instruction room x 3.00
- add an allowance for any additional meeting room types that might be needed
- to make an allowance for “special use” or “miscellaneous” functions, add all of the above allowances and divide that total by 6 to create a minimal allowance, divide by 5 to create a moderate allowance, OR divide by 4 to create a generous allowance
- to make an allowance for mechanical and support services, add all of the above allowances (including that for special use/ miscellaneous functions) and divide that total by 4 to create a minimal allowance, divide by 3 to create a moderate allowance, OR divide by 2 to create a generous allowance

Add together ALL of these allowances to complete the estimate of the library’s space need.

Communication

Introduction

To create a library, a series of technical, administrative and financial steps must be taken. This long process begins with planning, in which the nature of the library that is needed is decided and defined. The description of the library service is drawn up by specialist library planners. The next step is the conception and realisation of the building that is to house it. This requires the intervention of an architect. An architect is trained to transform needs, desires and expectations into attractive spaces which can actually be realised; spaces that inspire those who occupy them, that encourage them to behave in a certain way. But we

must not presume *a priori* that this architect knows what these buildings must be like. What we do know is that, if the requirements are properly explained, he or she will design a good library.

Communication with the architect

The architect must be told what spaces are needed, of what dimensions, what activities are to take place, what there is to be in each space, what type of people the users will be, how some spaces must relate to certain others, which of them have to be directly connected and which have to be separated, in which of them it is best to find oneself on entering the building, and what is the preferable order in which they should appear appear if the user is to make the most of the facilities.

We must also convey to the architect how the librarian imagines the building, as well as the feelings it should arouse amongst the public in general, and future users in particular. Should it be a building that invites people to go in, that welcomes users so that they feel at home? Or should it be an iconic building, or indeed a discreet one? Or perhaps effort should be focused on designing a building of which the community will feel proud?

"… should it be an iconic building, or indeed a discrete one?"

Finally, before design work *per se* begins, certain basic aspects have to be defined: should the building have a very flexible organization because changes are expected which we are not yet in a position to specify, or is it intended to extend the building at a certain time in the future, etc. All this information, together with an analysis of a number of examples of good library architecture, will be the architect's starting point.

Interdisciplinary Communication

The creative process begins, a process which is difficult but exciting, and during which there will be contacts with library experts, since along the way doubts and decision-points will arise, situations that might offer several solutions of which one must be chosen. At this point inter-disciplinary communication starts. Bringing together knowledge is the most stimulating and intelligent way forward. It helps to clear away obstacles and enhance the building. It is important for the library advisor to be familiar with certain concepts of architecture, ranging from the interpretation of plans to a certain capacity for spatial conception.

This will make the dialogue with the architect more fluid and, above all, more complete.

Once the library that everyone wants has been expressed as an architectural project, construction can begin. Also at this stage interdisciplinary communication is needed. Generally the building process is a complex one and situations can arise in which swift decisions must be made that affect the project and also the budget. Hence, the architect as creator of the project and supervisor of the works can work hand in hand with the librarian to resolve such problems.

When the final result is an attractive, interesting building that works well, and makes sense, librarians and architects will share the satisfactory fruits of their interdisciplinary communication. A project without this communication will fail. We should neither accept buildings that are pretty but useless, nor those that are ugly but functional. The aim of the Library Buildings and Equipment Section, the very idea of the recently-published Guidelines, is precisely to build libraries of quality.

IFLA Library Buildings and Equipment Section 2009
Authors:
Anders C. Dahlgren: Space Need
Olaf Eigenbrodt: Vision
Karen Latimer: Preliminary Work and Research
Santi Romero: Communication

Photos: Olaf Eigenbrodt
Graphics: Max Dudler Architects