From Concept to Commissioning: The Library - Scheduling, Programming, Phasing

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INTRODUCTION

Following assessment of the last two seminars organised by the LIBER Architecture Group in 2000 (in Warsaw) and 2002 (in Leipzig), it appeared that a certain number of participants from those seminars wished to have a re-run of the various organisational phases involved in operations for building, extending or restructuring libraries: the motivation being to ensure the clear definition of the associated processes, and identify the various players and their respective roles, together with the actions required at various times to ensure the harmonious implementation of the construction programme.

I should therefore like to describe this process in as objective a fashion as possible, given that other speakers will later be telling you of their experiences as "library builders" - in particular Karl Krarup and Elmar Mittler. Karl's presentation, entitled "How to Survive in the World of Architects and Building Departments", and Elmar's, rather "combatively" (!) presentation, entitled "The Battle for Good Library Buildings". This will certainly leave you with an understanding of just how much of a cool head is required, not to mention clear ideas, a sharp sense of diplomacy and a generous dose of organisational and management skills, all underpinned by a long-term vision as to the likely development of libraries in today's world and tomorrow's, in order to arrive at the goal: the realisation of a fine and efficient library. The need is also there, of finding ways to communicate the vision over the long term, to all players involved, to ensure that the necessary funds remain available.

Therefore I should like first to sketch - in as dispassionate terms as I can manage - how the scenario evolves, or should evolve, if we all lived - like we deserve - in a well organised world, with each party working without the slightest ulterior motive towards the design and production of our libraries.

I propose to examine the situation from certain aspects, in particular:

- the team formed by the library and its partners: putting the right person in the right role
- financing the operation
- the programme
- the choice of architect
- the obligatory programme phases, and the time required for each, and finally
- the "additional sites" accompanying the main project.

LIBRARY – PARTNER TEAM / PROJECT TEAM

The whole project hinges on the will of the person in charge of the library, long before any will on the part of the political owner (the "contracting authority", who is the financier of the operation). This will to have a new building, a building extension or restructuring works for one's existing library, will stem from an appreciation "what is wrong with my present library?". This can be many things: absence or quasi-absence of free-access collections; lack of reading areas; insufficient differentiation between reading-areas and other accommodations (work rooms for groups, carrels, individual workspaces etc.); lack of office space; insufficient computer assets (numbers-wise or quality-wise); absence of relaxation or social areas for students, an so on.

Such an appreciation will give rise to the desire to change things and, consequently, to the development of a "wish-list" and an assessment of the scope of change required. All of which, of course, does not "yet" constitute a programme for a future building, but as I said, a wish-list, accompanied by a loosely formalised yet necessary first draft, the purpose being to define the initial space requirements to accommodate the desired changes, and provide a discussion base around which to organise the major functions. At this stage, we are still operating in absolute terms, that is, without consideration of external contingencies such as choice of land, a "restructuring only" approach et cetera.

Once ideas start to take shape and a relatively precise file has been drafted, it devolves to the Project Manager - the Library Manager - to speak to the first decision-maker that is, for an academic library, the University President. The University President is the man - or the woman - that has to be convinced of the need, in reality, the emergency situation, requiring "change"; however, as you will see, that term "emergency" does not necessarily take on the same proportions as in a "medical emergency", that is, urgent action required to obviate painful disorders or even death...!

FINANCING THE PROJECT

If the President is not convinced, then nothing is going to happen, because the University President is the only party able to take the project to the political level, which equates, in reality, to the "Financial Level". Someone, somewhere has to decide at some time whether it is necessary and reasonable to put money into this project. The library's first partner, therefore, is the university, in the person of the President, and his (or her) ability to carry the project forward to a sufficient level for it to be included in a financing programme, and as soon as possible.

Once the Library Manager has cleared this first hurdle, his or her work is far from over, since he and his team need to organise myriad other details, and in a particularly precise fashion.

The main tasks at this stage involve:

- developing a detailed building programme for the library (to which I will return shortly);
- organising discussions with immediate associates as well as with the staff in general, on multiple topics, by creating working groups and workshops in several areas:

  - how best to change access to the collections,

  - developing information technology,

  - user-training,

  - conservation of collections,

  - changes in the internal work organisation of the library staff,

  - organisation and sharing of the training role with the teaching staff,

  - ensuring the library participates openly in the life of the university,

  - opening the library to the world of work and the economy, the cultural environment et cetera,
- implementing and managing "project communications", publicising the state of the planning process within both the library and the university as a whole.

These working groups must be allowed to function with all openness and freedom to propose and innovate, thereby not simply "slapping the future on the present". They will subsequently need to prioritise their wants and needs, to cater for likely constraints. This will be achieved through progressive discussions with the supervising authorities; the said constraints being especially financial, but sometimes also have a technical nature.

Perhaps it is Machiavellian to say so - Machiavellianism nonetheless being born of experience! - but when defining a library management programme for our future library, I have a tendency to recommend having a fall-back title or designation for certain areas or rooms, because as librarians, we know the importance of such a necessity.

To cite an example: when during reconstruction of one of our libraries we were required to defend the space requirements we desired to build in, we carefully chose to eradicate any area designations such as "social area", in favour of "citizenship space" (the idea being to offer a less-dense presentation for these collections, which cover social life and public affairs) - we wanted to arrange them as "reading lounge", instead of the traditional presentation of "reference section". Therefore the designation "Social" was not acceptable, whereas "public" was! "Social space" would have been regarded as superfluous (whereas for the library personnel it was indispensable for the students); and on the contrary, "citizenship space" was viewed by the university as having a more "responsible" connotation, associated with "teaching students how to embrace the public good", instead of affirming their own individualism (and the connotation of "lounging" ...")!!

Therefore, it is up to us librarians to track down "appropriate" terms and designations (that is, "appropriate" for the financiers...) to achieve our ends, our ends being, of course, the well being and satisfaction of our readers!

These "library-internal" working groups are of fundamental importance in the set-up and development of the future building programme, since we must avoid at all costs the library reconstruction becoming a simple re-hash of its predecessor, "only bigger and newer". The needs of our students and teachers evolve, even though certain of our associates or teachers may pretend not to realise ... Within the library, these working groups constitute a prime-mover for change, change that in the end will occur through a "hearts and minds" approach, considering that the time required to fully implement a programme is calculated in years.

While the library management programme is being ironed out within the library, other parts of the programme - just as necessary, in fact, coercive - are implemented outside of the library with other players, examples being:

- the possible need to find land on which to build, and highlighting of the inherent constraints of such an acquisition (surveys, soil studies, servitude's or easements with regard to residents, the environment et cetera.) all factors dictating choices for the construction of the future building (number of floors, disposition of the building et cetera.);
- the search for temporary premises if the present building must be demolished to make way for the new building (in which case, creating an "operation within an operation", hence doubling the work!),
- determining financing for the operation by the corresponding political authorities (central government, regions, other territorial communities, funds from a foundation et cetera.): how much? how soon? splitting the budget to build in successive phases? et cetera;
- the increasing requirements and technicality of large new buildings, which demand ever-more specialised contractors in fields such as data processing, building construction techniques, safety standards, acoustics, environmental quality et cetera.

Insofar as multiple partners are required in the design, it is important that the library project manager be identified very clearly from the start of the operation, and particularly, that he remains the sole point of contact with the contracting authority ("*The Owner*"), that is to say, the political financier of the operation (central government, local government, city et cetera.) and the university, if the latter is representing the library before the political authority.

Within the library itself, it does not mean that the project manager alone is the fount of all ideas, communicating the same to the various partners; rather it means that after collating all opinions from his associates and working groups, it is he, and he only, who speaks for the library outside of the latter. He is the library's sole representative in this respect, interfacing with the other players in the operation: financier, university, architect et cetera. Later on in the process, he will delegate part of his responsibilities to his specialised associates in the more technical fields (data processing, audio-visual et cetera.).

I have not yet emphasised the necessary qualities for a library project manager, so allow me to summarise these as follows:

- a sure library-management approach (equating to excellence of today's library management choices, but also deciding the near future and the medium term);
- excellence in library-management and therefore in managing *change*, which is perhaps the most difficult, since libraries are still not places where the notion of evolution and novelty takes priority over that of perenniality (perenniality of collections; perenniality of cataloguing: "it has to be perfect, so let's take our time, the future will reward our successors for all our efforts...");

- in the framework of the makeup of the library's internal working groups, our manager needs to make the correct choices, that is, put the proper person in the proper job, without necessarily taking account of hierarchical position within the establishment, yet fielding all possible skills in diplomacy et cetera;
- speaking of which, the library-side project manager must also be skilled in the art of compromise, that is to accepting not to win every time, accepting to lose on certain points while conserving the main lines of the library programme, ensuring the essential is maintained.

We can start to see that these eminent qualities, plus a few others such as being solid as a rock, being capable of working night and day on occasions, accompanied (naturally) by an immutable faith in one's chosen path and so forth, should be much sought-after!

Without erring towards conceitedness, I should say that it is also especially important for us as librarians not to underestimate ourselves, when dealing with our diverse partners (the university, the local authorities financing the project, architects, contractors, suppliers of all kinds): librarians have their knowledge and ability in their fields of expertise, just as these other parties have theirs; we therefore operate on the basis of "equal" yet "differing" expertise, and this certitude in ourselves is of critical importance for supporting us throughout the project design and execution. It will be there to keep us free from stomach ulcers! We have much to learn from one another, but on an equal footing, and without any inferiority of the part of some with regard to others... I must emphasise this point because I consider it crucial, particularly with regard to relations with a partner who holds the future life and organisation of our library in his hands... I am, of course, referring to the architect...

THE COMPLEXITY OF THE PROGRAMME

I should at this stage like to come back to the programme and its complexity, because there are things that depend on us librarians, and others that do not, or at least not to the same extent, though they nonetheless play a major role in executing the programme.

The programme is a document that must simultaneously address various requirements - the operational, the behavioural and the environmental. It must be drafted in terms that are comprehensible to the users, who have to validate it, and be directly usable by designers, who have to base themselves on it, and format it in the strict sense of the term, that is, give it an architectural form.

Due to the dual nature of the requirements to be addressed, namely, the qualitative and the quantitative, the programme includes descriptive parts, diagrams, functional diagrams, and architectural and technical recommendations, and architectural and technical performance levels.

In functional terms, the programme follows a certain logical process:

- the defining of objectives, and determining of functions for meeting those objectives,
- determining activities in order to service the necessary functions,
- organising the said activities according to functional diagrams,
- planning traffic routes,
- expressing requirements associated with each activity,
- stating the performance levels required of the building and its equipment, in meeting the requirements.

This part of the programme is essentially managed by the library; the latter must, for each area providing one or more activities, determine the associated geometric characteristics: area, ceiling height, any recommended layouts et cetera.

The library also has a role to play in terms of the internal environmental of the building: admissible sound level for various spaces, lighting level (for reading areas in particular, including computer lookup), temperature, relative humidity (for book-storage and similar areas), equipment footprints, floor loads, power and utilities requirements, protection of property, access control et cetera.

In environmental terms, the programme describes the urban and site contexts, the role of the future building within the site and its immediate environment, links between activities within the building and those in the surroundings. This part is the preserve of the contracting authority and the related engineering managements.

Drafting of such a programme is achieved in phases, each with an increasing level of detail, corresponding to the phases of the proposed design:

- the general programme provides the basis for establishing sketch plans and the preliminary design,
- the specific programme serves for producing the detail design,
- the definitive programme serves for producing the final design, also referred to as "The project".

HARMONISING THE PROGRAMME WITH THE PROJECT

The role of the Library will be constant monitoring, to ensure that the definition of requirements remains at all times in phase with the current project phase, rather than ahead of it, avoiding requiring the architect to produce overly detailed answers to such and such an aspect of the project, corresponding to a later phase of the programming. An example might be not asking for a door to be moved between one or other office pair (which would be part of the detail design) whereas the space distribution for the particular floors of the building is not yet complete (a task belonging in the preliminary design); the difficulty always being to stay just abreast of operations.

But programming cannot be restricted to "simply" the building programme itself, since as soon as the preliminary design is complete and the general concept has frozen the interfaces between "building" and "systems", the programme is subdivided according to the parties for whom it is intended, into:

- a building programme, for the Architects and Engineering design offices,
- an "equipment programme" for the Architects and Designers,
- an "operations programme" for organisation and management specialists, and finally,
- an "environment programme" for urbanists.

It can clearly be seen that additional players come on board at various points, joining the others, and it is therefore difficult at times for library personnel to determine who is who and handle co-ordination. An analogy would be with modern medicine, where no physician has a full overview of the patient, such knowledge being broken down into specialisms and specialists: cardiologist, neurologist, dentist, dermatologist, endocrinologist et cetera.

In the long process required for developing drawings and technical documents, the library should ensure that, at each drawing stage, the functional needs of the library (areas, organisation of services et cetera.) are taken into account by the architect.

Yet what is certainly the most difficult for the library, is to follow the project step by step, insofar as projects evolve "accordion"-fashion, that is, periods of deep quiet, followed by violent periods of total feverishness, and I am not always sure which is the hardest to put up with during these cycles! In "calm" periods, there is a risk that the library personnel lose their enthusiasm for the project, because they have many other things to do, keeping their current users happy. And in the programme's "feverish mode", they have to come up with instant answers to each and every request by the architect, a design office or the contracting authority; and answers requested "on the fly" often lack precision or consistency, and may not be quite what was being sought ...

Table 1. The design & programming process

	Specialised town planners	Users (Readers)	Users (Library)	Contracting authority		
Programming	Environment criteria	Behavioural criteria	Operational criteria	Cost and building-time criteria	Manufacturing & maintenance criteria	Safety criteria
	Where?	Why?	How?	How much and when?		
	Environment requirements	Behavioural requirements	Operational requirements	Cost and delivery time requirements	Manufacturing & maintenance requirements	Safety requirements
		Architectural and technical recommenda-tions	Functional diagrams	Performance levels of building and equipments		
Design		Spatial organisation		Building subsystems	Equipment subsystems	Implementing safety requirements
		Formalising of interior and outside areas				
Use	Commissioning					
	Modifications to operational and behavioural requirements					
		New spatial organisation		Modifications to equipment sub-systems		New safety requirements

THE CHOICE OF THE ARCHITECT

The architect is the main player in the operation: he is the one who will design a coherent architectural space suited to the developed programme. Without him, our building will not get off the ground! The library personnel has great expectations for the wide efforts it deploys with the architect: whence the necessity to choose a good one! and not necessarily a leading name in the architecture field! We need to recognise that the difficulties sometimes encountered in dialoguing with an architect are the result of the "clash" from seeing the same thing from two angles - firstly the architect's, who understandably wishes to create original art, then the librarian, who, while not insensitive to the aesthetic nature of things, does not count aesthetics within his main preoccupations. The librarian for his part requires above all that his future library will function correctly for both the users and the staff, that is, the library areas will be well organised, as easy to manage as possible considering the recurrent problems of under-staffing, and that they should evolve over time according to the needs of the users.

Therefore the choice of the architect is fundamental, yet it is not facilitated by the makeup of architecture juries, least of all in France ... (However, discussing these questions with colleagues from other countries, I have the impression of hearing myself speaking back!)

In most cases, the future users of the building are not represented in the jury: while this applies for the representatives of the university itself, it is even more true for the actual librarians; in the best cases, effectively speaking, only the library project manager is part of the jury, as opposed to a large number of architects (five but more likely six or more), often, therefore making up over one-half of the jury members. It may be said, therefore, that rather than being judged by the future users of the building and those paying for the day-to-day operation of the building, architecture competitions are essentially judged by architects, who are neither the payers nor the users. Therefore it is form rather than content that most often wins the day, that is, regarding the layout and functionality of the library areas.

Regarding the technical committees employed in the framework of contests to look into the detail design of the various competing projects: these will sometimes have one or two librarians, lodged in a subcommittee called "Operations", but experience shows that these librarians have but little impact, and their recommendations and advice - proffered generally in the field of equipment functionality, choice of an architectural scheme, technical proposals, or the forecast cost of operations and maintenance of the future building - only very rarely influence juries in their choice.

PHASING AND DEADLINES

If we turn to the time factor, we need to be aware that a building project requires many years, from the time that the need first arises, to the necessity of building new premises, and finally the into-service date, whence the necessity for a project manager who can also stay the course!

But remaining optimistic, and provided that things go according to plan, and discounting the various validation periods by the various powers and organisations (the library, the contracting authority, the city-planning department, emergency services, independent surveyors et cetera.), then a certain idea of timing may be gleaned from table 2.

Table 2. Time schedule

Operation	**Duration [1]**	**Cumulative duration [1]**	**Scale of documents**	**Notes**
Programme	6 to 12 months	6 to 12 months		▪ Library visits ▪ Photography ▪ Creating reference-document base (standards) ▪ Set up working groups **[2]** ▪ Draft feasibility scenarios ▪ Sketch out fixtures, furnishings & equipment (FF&E) from onset of the programme
Architecture competition	6 to 12 months	12 to 24 months	Sketches: 1/500th- and 1/200th-scale drawings	Library to be present in technical committee and jury
Preliminary design Safety study. Application for building permit	4 to 6 months	16 to 30 months	1/200th- and 1/100th-scale drawings	Extremely close involvement of Library in developing the Preliminary design which corresponds to the organisation of library areas **[3]**
Detail Design	4 to 6 months	20 to 36 months	1/100th-scale drawings	▪ Development of technical solutions (construction and operation of the building) ▪ Library often required to examine technical documents that are hard to read and interpret **[4]** ▪ More library visits, specialised exhibits (library furnishings etc.) ▪ Refining (by library) of FF&E file ▪ Detailed organisation of collections and staff ▪ Creation of a photographic record showing progress of site ▪ Drafting description of building ▪ Preparing to move in
Project sub-contracting file	4 to 6 months	24 to 42 months	1/50th- and 1/20th-scale drawings	
Tender negotiations	2 to 6 months	26 to 48 months		
Appointment contractors; signing of agreements	2 months	28 to 50 months		
Site works	12 to 24 months	40 to 74 months		
Site handover, remedial works and snag-clearing	2 to 4 months	42 to 78 months		Publicising opening of new building Publicising opening of the new building
Installing FF&E	2 months	44 to 80 months		
Move in staff and services	1 to 2 months	45 to 82 months		

Safety Committee report (allowing opening of building to public)				
Opening to public	**(and HERE is where it really starts ...)**			

[1] Working groups: Access to Collections, Information Technology, Conservation of Collections, Management, User Training, Communication, etc.

[2] Excluding time required for validating the various drawing stages by contracting authority and compulsory oversight committees.

[3] Traffic routes for users, staff and documents and supplies should be efficient at the outline design phase

[4] The "heaviest" technical files are: electricity, building wiring systems, telephony, safety, access control, plumbing, walls & floor coverings, ceilings etc.

During this lengthy test of time, experience shows that, psychologically rather than objectively, the hardest period to endure is that preceding the site opening, since uncertainty is a factor continuously hanging over the effective finishing of the building. So at least once the site is opened, one can be 99.9 per cent sure that it will be completed one day!

To conclude, therefore, I hope you will excuse the essentially didactic style of my contribution: my aim has been to try and do justice to the request I received to plot out the path of things as experience has taught me. And I should like to conclude with a few words by the architect Pierre Riboulet, who passed away just a few months ago, and who was the inspired author of three major libraries in France over the last few years (Université de Toulouse 2 and Paris 8, and the municipal library at Limoges). I would like to quote from a book he wrote in 1998, presenting recent academic library construction in France (Riboulet, 1998). He said: "*For architects who have had the fortune to build them, libraries always retain a place among their finer buildings, they are the most Inspired, the most Masterful, as if a fine osmosis was taking place between this book – the most precious of objects to one and all -- and this shell that envelops it and protects it. Each library is a joyous event: constructing, magnifying this book-object, and demonstrating the sense of it.*"

So I am infinitely grateful to Pierre Riboulet, for having known like no other architect, how to present magnificent libraries wherein it is a joy to be.

"*The building must be very legible*", he wrote in his last work (Riboulet, 2003), "*it must attract like a magnet. But once he has been welcomed, the reader must be sheltered. The library must reinforce the protection that the book gives the reader, which is - in reality - helping to guide him through the world.*"

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