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# Library places: What Library 2.0 means for international library public space design and use

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### **Libraries: Fighting against irrelevance?**

When Ken Chad and Paul Miller (2005) ask whether, “with information now so freely available, particularly through the Internet, do libraries really matter?,” they are voicing one of the biggest questions that library and information science professionals have been facing through the 1990’s and early 2000’s. Given the amount and quality of online resources, fewer and fewer people are heading to libraries for informational needs. The prevailing attitude of many potential library users is frequently that Google plus Wikipedia plus a PC with a high-speed internet connection equals an answer box. If a library is limited to being a place where one, bound by specific procedures and rituals, gets books, what is going to make sure that the library does not become obsolete and irrelevant in the same way as automats, downtown department stores, and airline ticket agencies have. And this is only exacerbated by increased competition from chain bookstores like Barnes & Noble and Borders, which are in many ways far more flexible than libraries can ever be. When such a store fulfils all of the traditional purposes of a library, while providing plenty of other value-added functionalities, while transcending many of the common shortcomings of traditional libraries, its appeal is not hard to see.

It is only in the last two or three years, however, that professionals in the library community worldwide have been mobilizing to counteract this trend, to find ways in which libraries can remain relevant in the Internet age, and to implement these ways. Paradoxically, the solution that libraries throughout the world are increasingly turning to

has its roots in the very things that have been thought to threaten the existence of the library as concept and as physical place.

Web 2.0 is one of those classic Internet buzzwords for which there are quite possibly twice as many definitions as there are people actually using the term. In fact, Tim O'Reilly, the originator of the concept, presents it (2004) as less something that can be tagged with a single all-encompassing definition, and more as a general set of principles governing the interaction of software and users. Paul Miller's (2006) definition is perhaps somewhat more easy to comprehend; he argues that Web 2.0 is features "individual components [that] are made available to all application builders to 'mix and match' and create new value-added applications." And from this kind of definition of Web 2.0, it is not too far of a leap to Library 2.0 – "A library service that operates according to the expectations of today's library users. In this vision, the library makes information available wherever and whenever the user requires it." (Chad, Miller, 2005).

Since the idea of Library 2.0 was first presented, and as it has gained rapid acceptance throughout the library and information science community, from this deceptively simple definition it has grown to encompass a whole range of issues in the fields as diverse as technology, collection development, patron interaction, and the role, place and purpose of the library in the community. But one aspect of this concept that has not received a lot of attention, though one that we feel is extremely important, has to do with the question of how Library 2.0 affects the actual physical nature of the library building. If Library 2.0 is going to change what libraries do, will it also change what libraries are?

To answer this question, we looked at three major library projects that have been constructed recently in major metropolitan areas. Each one claims to be progressive and paradigm-shifting, whether or not the term “Library 2.0” is ever explicitly referred to. In our analysis, which utilized review articles from architectural and LIS journals, newspaper reports, and where possible, policy planning guidelines, rather than attempting to cover the entire scope of Library 2.0, we focused specifically on the design elements of the new constructions. Operationalizing some of the more general concepts that Library 2.0 implies drew heavily on the thinking of Liv Saeteren (2006), who calls on “modern libraries” to:

- “- Offer ample possibilities for collecting and processing knowledge and information,
- Make the necessary facilities, resources and information accessible to groups and individuals, and act as a gateway to other services and sources,
- Provide a stimulating arena for meeting, working and learning - a laboratory for creative teamwork and dialogue
- Function as a meeting place for integration and diversity, and be a literary venue in the capital city,
- Be an important node within the city’s cultural life and network of knowledge”

Libraries evaluated were the National Library Building (Singapore), The Bronx Library Center (New York City), and Sweden’s Malmo City Library.

### **National Library Building, Singapore**

The new National Library Building (NLB) of Singapore opened on July 22, 2005. Conceptual work began on the building as early as May of 1999, but the policies and ideas that provided the philosophy behind the library’s design were set down in the Library 2000 proposal of 1994. The need for a new National Library Building was obvious to the members of the Library 2000 Review Committee (1994) who wrote, “the

character and architecture of the proposed new library building should be an architectural landmark, reflecting the learning aspirations of Singapore and the Library 2000 vision. The internal layout, facilities and design of the building should take into account the recommendations of Library 2000” (p.14). In many ways, the new building was to be a symbol of Singapore’s commitment to enhancing the lives of its citizens through reading, facilitating engagement, and life-long learning by way of the public library system.

As early as 1994, the National Library Board understood that public libraries needed to serve as more than static repositories of knowledge if they were to survive. Revolutionary for its time, the Library 2000 plan laid out the philosophy of a patron-centric orientation more than ten years before Library 2.0 began to have an impact on library services. “Not only should libraries provide points of access to the vast reserves of materials, available, they should be increasingly equipped to cater to the variegated needs of the population and the specific needs of different economic sectors and tailor their services to meet these diverse requirements” (Library 2000 Review Committee, 1994, p.3). The National Library Board also felt it was necessary to borrow techniques from business and retail to compete for the estimated 88% of Singaporeans who were not active library users (Library 2000 Review Committee, 1994, p.9). They felt libraries should, “adopt many new marketing and merchandising practices from the retail sector to draw in the crowds through promotions, attractive displays of books and interesting combination and layout of facilities such as inclusion of cafes. Libraries should provide a stimulating and lively environment that makes a visit to the library an enjoyable and enriching experience” (Library 2000 Review Committee, 1994, p.9). Library 2000 was

to be the roadmap for shifting the focus of Singapore's library system towards policies that would be collectively defined by others as Library 2.0 almost ten years later.

Progress was not without a cost. The Singaporean government poured more than \$600 million USD into the public library system during the 1990s. While all of this money certainly helped the library system, it was not the driving force behind the changes taking place. "While the library rode a budget boost, its success owes more to empowering its staff, learning from retail, and pushing the technology envelope" (Oder, 2004, p.42). While the cost was high, Singapore's library system can be used as an example of getting what one pays for. As early as 2001, the goals of the Library 2000 plan were beginning to be realized. "One in two Singaporeans is now a member of the library. We took more than 30 years to reach our millionth member, we took less than six years for the other 850,000. We have 25 million loans today and a visitorship of over 21 million. This is twofold and fivefold what we had respectively in 1995. That is equivalent to five times the population visiting the library every year" (Chia, 2001, p.345).

The concept of Library 2.0 began to gain ground in the international library community shortly after the NLB opened its doors on July 22, 2005. In many ways, the NLB was ahead of its time, even if only slightly so, in that it fulfilled many of the concepts of Library 2.0 before they had been articulated and debated. When compared to the criteria that help to define library service as Library 2.0 compliant, the NLB can be seen as an example for all libraries.

While the NLB incorporates many non-traditional library services and facilities, it is, at its core, a library with all of the traditional library service one might expect to find

in a large central library. The NLB houses two libraries, the Lee Kong Chian Reference Library (LKCRL) and the Central Lending Library. The LKCRL comprises seven stories of the NLB and is the main reference library for Singapore's public library system. The library has over 530,000 print volumes and collections covering Social Sciences, Humanities, Science & Technology, Arts, Business, Children's works (specifically pertaining to Asian works), Singapore, Southeast Asia, and Rare Materials (many from Singapore and Malaysia). While most of the LKCRL's materials are in English, it also features extensive collections of reference materials in Chinese, Malay, and Tamil. The library also offers access to a variety of electronic databases, a document delivery service, microfilm, and a variety of audio-visual materials (National Library Board 2007b). The Central Lending Library is located in the first sub-basement of the NLB and is the only lending library in the building. According to the National Library Board's Annual Report for Fiscal Years 2004 to 2005, the Central Lending Library handled 1,268,632 loans and saw 1,257,803 visitors in the first 5 months after its opening (National Library Board 2007a).

Library 2.0 compliant libraries should encourage patron interaction. The NLB offers a wide variety of facilities and services to engage the community and foster interaction between patrons. With 58,783 square meters of floor space covering 2 city blocks, the NLB is a large building designed to be a social space for all the people of Singapore to meet, learn, and collaborate. The Lee Kong Chian Reference library has three discussion/project rooms dedicated to hosting groups. The Pod, an observatory on the top floor of the library, is also used to host conferences and presentations. The Plaza is the name given to a large open space on the ground floor of the library used to host

exhibitions and events. It is also a loud space within the library where people can meet and converse freely. There is also a café in the NLB, with space allocated for another, should demand permit (T. R. Hamzah & Yeang International 2007). Singapore's libraries, in general, have been successful at transforming their physical locations into social spaces, almost to a fault, "the main patron complaint: noise. 'We don't get people complaining about service quality or about our collections any more,' crows Chief Executive Christopher Chia" (Oder, 2004, p.42). A focus on providing spaces for community interaction is continued and expanded upon in the Library 2010 plan, "we need to create social spaces that encourage community learning, social integration and a greater sense of ownership for our customers' learning journeys" (National Library Board, 2005, p.21).

It was important to the National Library Board that, "the character and architecture of the proposed new library building should be an architectural landmark" (Library 2000 Review Committee, 1994, p.14). Anyone who has seen pictures of the building would be hard pressed to disagree that the NLB is an impressive feat of architecture. The building is located in downtown Singapore in an area known for a high concentration of art and culture. One of the main non-traditional attractions of the NLB is that it houses the National Arts Council's Drama Center. The Drama Center consists of a 615 seat theatre, complete with a VIP section, box office, and even a bar. The Drama Center also includes a smaller 120 seat Black Box theatre and three small multi-purpose rooms used for smaller productions and events (National Library Board 2007c). By integrating these facilities into the National Library Building, the library became more

than just a building filled with books. It can be seen as a sort of a cultural center, drawing elements from multiple sources of important local culture.

Library 2.0 libraries are, by definition, participatory. Many examples of this philosophy can be found in the Library 2010 plan, the document that outlines the objectives of Singapore's public library system. "We will nurture learning communities in neighborhoods and workplaces. Book clubs, communities of interest, civic and community organizations will all be encouraged to work with libraries so that they can share information and knowledge and help one another learn"(National Library Board, 2005, p.32). The plan calls for libraries to do more than simply encourage cooperation and participation; it envisions libraries as one of the primary spaces within Singaporean society for such activities to take place. Under the Library 2010 plan, Singaporean libraries are to become public social spaces for all members of society, an ever-changing venue that reflects the values of the community. "We will aspire to deliver the following: A vibrant network of public libraries that are transformed into social learning spaces. Public libraries will form part of the social glue that binds our ethnic communities to enhance Singapore's cohesiveness and connectedness. Beyond providing access to information and content, we will provide spaces that help form social bonds and build relationships through knowledge sharing" (National Library Board, 2005, p.32).

The Library 2000 report outlined the transformations that needed to take place in Singapore's library system if it was to survive in the 21<sup>st</sup> Century. The NLB was designed to be a symbol of that progress, but its significance has quite possibly transcended this goal. While the Library 2010 plan was written after the completion of the National Library Building, it would be difficult to argue that the building is anything

less than a physical manifestation of the plan's underlying philosophy and focus on customer-driven facilities and services. The National Library Building has been a symbol of progress for Singapore's library system since its completion in 2005, and it can be seen as an example of the accomplishments that can be made by libraries with the resources and determination to create libraries that are more than storehouses for books.

### **Bronx Library Center, New York City**

The Bronx Library Center in the Bronx Borough of New York City opened to the public in January 2006. The \$50 million library built on a new site replaces the original 1920's era Fordham Library which is located down the street. The new facility was the largest New York City library project in twenty years (Snible, 2006).

The library was unlike its predecessor. The physical design incorporated Library 2.0 elements; patron influenced design, incorporated social space, venue for integration and diversity, responsive services, and harmonization in the community. Daniel Heuberger, the principal designer from Dattner Architects stated, "No longer simply storehouses for books, libraries are expected to fulfill the needs of a multicultural and multilingual clientele in an era of rapid technological change" (Snible, 2006). This quote reflects the new era in design - adaptability and user centricity.

Outside the structure does not integrate into the cityscape at all. This was on purpose. The library's glass façade created a link with the community outside. In order to engage patrons as defined in Library 2.0, the library must first invite participation (Chad & Miller, 2005). The architect wanted people to see from the outside that the

library was alive, with people, and worth investigating. The principal architect, Heuberger, met with librarians and citizens for concept ideas.

Barnes & Noble was a name that floated around during design," says Heuberger. "The retail model is what the library competes with. It's what people expect, it's what they're used to, and it's what they associate with books (Schneider, 2006).

The library chose to adjust to the perceptions and expectations of its patrons. The library with a predominantly open floor plan was designed specifically to make adaptations or changes easily. "Libraries reflect the changing needs and wants of the communities, schools, and institutions" ("Libraries = cultural icons", 2006).

One important way to bring people to the library was to offer users something more than one had. "Libraries should have equipment, software, and connectivity that are at least better than the typical user would have at home" (Wilt & Hrabowski, 2006). The Bronx Borough was the poorest of the five New York Boroughs. Providing computers for research, workplace searching, or just recreation was important. The Bronx Library Center equipped its facility with more than 150 computers and laptops. Additionally Wi-Fi access was available for those with a laptop. Bronx Library was more than technology. Warschauer (2002) stated hardware and software is not enough, but human and social systems are important. The Bronx Library Center incorporated plays, events, and teaching.

The new Bronx Library Center also included a theatre. Casey and Savastinuk (2006) discussed in Library 2.0 that "Library users will be fulfilled through entertainment, information, and the ability to create." The theatre not only provided

multicultural performances by professional groups, but also performances by its own users. Additionally teaching English, workplace training, and computer classes were offered (“Bronx Library Center”, 2007).

The Bronx Borough has always been an immigrant community. During the last century the population has shifted from mainly a Yiddish heritage to predominately a Latin heritage. Since the last census, influxes of Asian immigrants have too arrived. To reflect the large Latin community, an entire floor became the Latin and Puerto Rican Cultural Collection. Also with materials in Cambodian and Vietnamese, among other languages, the library catered to the borough’s diversity (Haddon, 2006).

At the end of its first year, reported statistics showed the new concept of the library successful.

- The new center counted 700,000 visitors in its first year, compared with less than 260,000 at the Fordham library in 2005.
- Item circulation also almost tripled, soaring from 184,469 in 2005 to 527,122 by the close of last year.
- In 2005 a mere 3,187 new library cards were issued while at the close of 2006, a total of 15,409 — almost five times as many cards — were issued.
- The branch’s programs received a boost as well, with over 9,000 more people attending in 2006 than in 2005 (Procario, 2007).

Not only did the library change to the perceptions and expectations of the community, but also the perceptions and expectations of the library were changed by its stakeholders.

City Council Speaker Christine C. Quinn said, “Libraries are not static institutions, but interactive cultural centers with unrestricted access to information” (Snible, 2006).

### **Malmo City Library, Sweden**

The city library of Malmo, Sweden, differs from the other two facilities in this study in at least two regards. Both the Singapore National Library and the Bronx Library Center were opened at a point when even if the terms Web 2.0 and Library 2.0 did not exist as such, the underlying factors that made these concepts possible (in particular, their technological components) had already been in existence for several year. The Malmo City Library, on the other hand, was designed starting in 1992, and completed in 1997 (Davey, 1998). And the population it serves is markedly different, numbering, as of the end of 2006, only 276,000 residents (Statistics Sweden, 2007). So it is extremely interesting to see whether, given such a significant difference in original conditions, whether the end result, the final building, turned out to be unique and markedly different, or, alternately, fairly similar to the two newer libraries.

As Gunilla Konradsson (2005) demonstrates, the process of actually building the Malmo library involved extensive discussion and planning. Some of the proposals for a new library included incorporating the building into a major shopping and transportation center, converting to library use one of a number of former department stores, and finally, incorporating the existing library building into a newly designed structure. In no small part because of the amount of time that passed before the final building was actually opened, librarians were able to become actively involved in the design process, tailoring

the final product both to specific needs, and more generally, to several closely related visions of what a library for the 21<sup>st</sup> century should be. A major component of this vision has to do with the kinds of inspirations a library can draw on in order to remain relevant and appealing to users. Writing somewhat later than the construction period, Thorhage (2006) notes: “The main challenge is to abandon the ‘book depository hall’ as organizational principle for the physical library, and replace it with an interior design principle that allows for the library being a multi-functional house.” But even as the Malmo library was being built, its director, Sven Nilsson, proposed (1997) that the two models that should play a key role in guiding the design of the physical structure would be the concept of the library as public living room, and an understanding that the library building should reflect and interact with the natural landscape surrounding the building. These principles were then expressed in the form of three specific mission statements that served to give the Malmo City Library a unique identity that would direct its future development. As elaborated by Konradsson (2005, May), the Library “has two faces. One turned toward history and the other toward the future.” Its actual building “should showcase and illuminate the library’s activities and its contents and reflect history and the future, memory and utopia.” Finally, within the building, the dominance of books as physical objects would be de-emphasized; “Media content, not form, will determine placement.”

It was with these concepts in mind that construction of the library was undertaken and completed. The design that was chosen, via an invited competition, was Henning Larsen’s “Ljusets Kalender” (“Calendar of Light”), which developed from the concepts a composition that Davey (1998) calls “an elegant and appropriate civic building for the

post-modern age” that, in its very construction, argues that “knowledge has many facets, and that there are many approaches to it.” By combining within a single architectural ensemble the original 1899 library, which Konradsson (2005, May) names “the Castle”, a drum-shaped entrance area (“the Cylinder”) that contained also the main reference desk, and the general stacks (“the Calendar of Light”), enclosed in a low glass tower, the design attracts visitors who demand different experiences from the library. One specific guiding principle behind this design was the fact that library patrons have a variety of learning styles. A design that features a wide range of formal and informal areas for reading and study, including some that acknowledge that some users may actually want a degree of background noise, speaks directly to patrons, and presents the library as not just an alternative to the home computer, but an alternative that is particularly appealing.

Perhaps it is no surprise, then, that, after being designed with the same principles in mind that are key to Library 2.0, the Malmo City Library generally fulfills most of its criteria. With at least four separate types of designs for study spaces (quiet and sheltered nooks, formal tables overlooking the main library floor, open spaces with direct access to stacks, and informal spaces with seating of various types (Dove, 2006), it welcomes patrons to collect and process information on their own terms, without pushing them into specific behaviors or learning styles.

Since the physical layout of the library “books” (and physical objects in general) are de-emphasized in favor of “content”, variously defined, even the role of the librarian changes. Rather than being information “masters” with clearly demarcated domains, the library’s employees become information brokers. Because of features like a fully-automated circulation system, the staff largely no longer need to devote significant

amounts of time to purely routine clerical tasks. Rather than making the focal point of the library be a “barrier-like” reference desk that implies a very clear differentiation between the librarian and the patron, the internal design of the building places reference staff in clusters that allow for direct interaction with the public, and for cooperation, rather than control. Konradsson (2005b) refers to the staffers as consultants, that is, colleagues, of the actual information users.

Interestingly, the third point that can be identified as a Library 2.0 feature – an environment for creative teamwork and dialogue – is not one that is reflected in the Malmo design to any great extent. The building does feature an auditorium, but it is in a the section of the complex that is the least exciting architecturally, and that contains, primarily, administrative offices, and the periodicals department (Davey, 1998). One possible explanation for this goes back to Nilsson’s (1997) concept of the library as a “knowledge organization” that is involved primarily with “choosing, systematizing and presenting knowledge and the means of finding it.” Similarly, Saeteren (2006) argues that the goal of a library should be to “guide individuals, groups and organizations through the process of finding and processing information so they can accomplish their particular, and often individual, goals.” Thus, for example, rather than offering opportunities for direct community interaction, the Malmo library initiated, in 2005, a “living library” project that makes representatives of marginalized or under-represented groups available for discussions with library-goers (Library Journal, 2005). A library will not be all things to all people, but it can compete effectively in specific areas. Perhaps, a corollary to the Library 2.0 concept is being comfortable with choosing which battles to fight, and which to walk away from.

The fourth of the Library 2.0 criteria, provision of a venue for integration and diversity, is one that the Malmo library has embraced fully, although not necessarily in the same way that an institution like the Bronx Library Center would. Although Malmo's population is up to 40% immigrant (Caldwell, 2005), the emphasis within the library is on integrating resources and giving users access to different experiences that naturally compliment each other. One design feature that is specifically oriented towards this goal is the fact that materials that would be of interest to younger and first-time library users (fiction, music, and audio-visual) are concentrated in the Castle section of the complex. A patron taking advantage of these collections will not be overwhelmed by the vast public space of the Calendar of Light immediately, but has the option of accessing these additional resources at the point when he or she feels ready to do so. This design, then, bridges the gap between what libraries have been and what libraries will be; it allows the library to exist as a place where "physical actions invoke computational processes, and computational processes manifest themselves physically." (Berndtson, 2001).

Finally, from the very start, the Malmo City Library was designed to be an integral feature of the city. By not only retaining, but actively using the Old Library, it specifically fulfils Konradsson's goal of a library with "two faces," while the central city location, directly adjacent to a major park, makes the "landscape metaphor" that was one of the underlying concepts of the design evident. It is a library that loudly and confidently plays a central role in the social and cultural life of the city; that is not afraid to argue convincingly for its own importance, and that makes it very easy to believe that reports of the demise of the public library have been greatly exaggerated.

## Comparison Summary

Drawing upon the Saeteren criteria, comparison (Table 1) revealed that different libraries employed different elements of Library 2.0 to better serve patrons. These differences re-enforced the point that while any element of Library 2.0 is potentially important for a given library, Library 2.0 solutions are, by definition, local.

	Singapore	Bronx	Malmo
Incorporates social space	YES	YES	NO
Services respond to user needs	YES	YES	YES
Patrons influence design	YES	YES	YES
Provides a venue for integration and diversity	YES	YES	YES
Fits into surrounding community	YES	NO	YES

**Table 1. Summary Comparison**

### What Library 2.0 is, and is not.

In a way, because the definition of both Web 2.0 and Library 2.0 is so vague and open to interpretation, it is extremely easy to turn into a meaningless buzzword, and potentially, into a parody of itself. It is equally easy to try to turn both of these terms into checklists

of problems to throw money at in the hope that enough money thrown at a problem will make the problem go away. A holistic and measured approach to Library 2.0, on the other hand, keeps in mind Paul Miller's (2006) statement that "Web 2.0 and Library 2.0 both are an attitude, not a technology." There is no fixed set of steps that will make a library "2.0 compliant," although there are definitely things a library can do to hasten its slide into irrelevance. Susan Erickson (2000) writes: "Different libraries have different purposes and foci in their particular community cultures." Recognizing this implies that the degree to which specific elements of Library 2.0 will be implemented in different libraries will depend on – and be driven by - local user needs. And the one thing that any library manager looking to transform their institution into a true library of the 21<sup>st</sup> century must keep in mind is that users will not adapt to a library that is not interested in engaging them. On the other hand, a library that can transcend both cliché, tradition, and the lure of easy buzzwords will be able to more than hold its own against all of the other institutions and entities that are now attempting to compete with libraries.

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