INFORMATION + ARCHITECTURE

THE SYNTHESIS OF INFORMATION AND ARCHITECTURE IN KWAZULU-NATAL

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DECLARATION

I hereby state that this dissertation is my own unaided work. It is being submitted to the School of Architecture, Town Planning and Housing, University of KwaZulu-Natal, Durban, for the degree of Master of Architecture, and has not been submitted before for any degree or examination at any other university.

Signed on 20th July 2006

DEDICATION

To my parents and grandparents for their hunger for knowledge and learning, that they have imparted to me

A popular government, without popular information or means of acquiring it, is but a prologue to a farce or a tragedy or perhaps both. Knowledge will forever govern ignorance, and a people who mean to be their own governors must arm themselves with the power that knowledge gives.

James Madison (Mason 1999:37)

ABSTRACT

The changing nature of society has caused existing methods of knowledge dissemination to become ineffective, and even the types of information and knowledge required by people has changed. Therefore, through the study of the needs of today's society in regard to knowledge and information, and the study of existing systems of its transmission, an appropriate method for dissemination in today's environment will emerge and inform the manifestation of this in the built form.

This study aims to discover how architecture needs to respond to society's requirements, in an age dependant on information. Therefore, the research explores the definitions of information and the systems presently employed for collection, storage and dissemination. It is an important element of society that affects individuals and the state.

Information's relationship to the built environment and the importance of appropriate architectural expression is established in response to the study and is applied to the local context of KwaZulu-Natal.

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INTRODUCTION

BACKGROUND

The role of knowledge has changed over the course of history, but never before has it been such an essential part of worldwide social formation.

Our world has been reduced to a global village. 'Lateral thinking', 'shifting paradigms' and 'quantum leaps' are all phrases associated with a world spinning and reeling in information technology. Concepts such as 'Follow the Sun' and 'Just In Time' offer excitement and encourage progress. Globalisation has indeed changed the way we 'think and do'. According to Batt (1997:202), everything depends on the accuracy of information for its success, including the integration of people into a society that has a culture of continuous learning, and a desire for the attainment of knowledge. For societies of the developed world, Batt's assertion would appear most prudent and yet, there is another side to the global phenomenon, and it is to this 'other side' we now turn our focus.

Generally, there is a dramatic difference between First and Third World societies; the gap between the upper and lower income groups, the 'haves' and the 'have not's', and in this context, to those who have easy access to information, and those who do not! This difference, is being perpetuated because the methods and systems presently employed for information collection, storage and dissemination are ineffective in their context.

Access to information translates into knowledge and with knowledge comes power. Sadly, however, this quest is denied many and is central to our contemporary society; the denial of which prevents the people from contributing to social groups or being fully integrated within them. The gap between information-rich and information-poor is very evident!

RESEARCH QUESTIONS

This study sets out to question the reason for the prominence of information in our contemporary environment. The focus it has gained is affecting society dramatically; the reasons for this will be explored, and therefore the questions surrounding the condition of contemporary society are of interest, that is society both in an international and local context. This will form a background to the examination of libraries. They are sources of public information and are thus involved in the debate regarding information. These issues will explore the role that public libraries are playing in the 'information society'. Whether libraries are contributing to the widening gap between people or to the alleviation of it, is the most important question and thereafter the discussion concerning what is required from public libraries in today's environment. This is an important public institution in the information debate.

HYPOTHESIS

By answering these questions concerning information, society and the issues surrounding libraries, at the present time, the knowledge gained may be used to establish what relevance public libraries still have. Due to their principal function: to serve their neighbourhood through the provision of free information resources, they should be a very important component of contemporary community. I will apply these findings to the case study area of eThekwini and be able to ascertain what is now required from a public library in this specific location, in order that it does function to its full potential and contribute to the equality of society as a whole.

AIMS AND OBJECTIVES

The objective of this study is therefore to conclude what is required from the public library that would service the community of Hillcrest, in both function and form. The aim will be to discover the major theories and ideas in global information trends and relate this to South African society, which cannot be defined as a globalised society and yet exhibits some of its tendencies, and is greatly influenced by it.

I will set out to discover how the public interface of information gain operated historically and how public libraries are responding to a changing environment, internationally and locally. This will be used to gauge the micro context, where many people are not in contact with that information necessary to their lives, and establish a future response to the debate.

DEFINITION OF CONCEPTS

There are key terms in my text that are used extensively and need to be defined:

The definition of **knowledge** offered by Mason (1999:103) describes it as '...the collection of data that is contemplated and integrated into an existing knowledge base'. It is internalised because it is constructed by the individual, compared to **information** that is externalised, enabling others to use it and gain knowledge (Theron 2001). Information is described as the data; it is random and dissociated (Mason 1999:103).

Society is defined as the body of humankind in a general sense, or a community that has common rights under a common socialistic organisation. It refers to a large urban society characterised by a framework of laws and other formal regulations. Therefore, the word society is used to describe people on a national or provincial level. **Community** tends to indicate a smaller group of people that is based on individuals bound by mutual interdependence that affect all aspects of life including family and leisure. This definition is used in the context of the case study of Hillcrest, or other immediate group of people that a public library may service.

STRUCTURE AND METHODOLOGY

This study begins with the historical development of information transfer in society and its storage in libraries. The historical aspect consists of quantitative, conventional research and review of literature. Specialist books in the architectural and information fields were considered in five

historical periods that begin with Ancient Libraries and Middle Ages, Renaissance, Industrial Society and Modern Libraries follow. The past contextualises the study of contemporary information and libraries. Library design reveals evolving principals of information storage, public access and its image.

After this context is established, the changing nature of information in contemporary society is investigated. The concept of information, its systems and its prominence in the contemporary environment forms a discussion about the need for public access and the implications of this in society. The global information society (Fukuyama 1999), that has surfaced, is debated in terms of the basic needs of individuals and thereafter how a democratic government approaches this need in its citizens. Information and libraries are under much scrutiny and there are many theories and concepts that are readily available in conventional research. Critical examination occurred concurrently in information, society and libraries, in order that their relationship be established.

The study continues with the public library's role in society and its manifestation in the built form. The theoretical framework is concluded with the physical qualities of a library building, including its image and environmental considerations. International precedent was chosen for its attention gained through many architectural reviews. This established examples of buildings that are exploring the meaning of public libraries and this was critically examined according to criteria established in the theoretical framework.

The same criteria were applied to the exploration of the local case study area of eThekwini Municipality, where libraries are under renewed focus. The primary analysis was supported by written information as well as informal discussions with specialists, including librarians and architects.

Finally, conclusions and recommendations are formed that establish what is required from a public library in the case study area taking into consideration all previous study.

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THEORETICAL AND CONCEPTUAL FRAMEWORK

INTRODUCTION

The theoretical framework is primarily concerned with establishing the background of libraries and information, both historically and in a contemporary environment.

The history of libraries creates an understanding of the development of reasons for their existence and the particulars of the architectural style and expression to which they are associated.

Information and society's need to collect, store and disseminate it, is the central reason for the existence of libraries and has increasing focus in our lives. This is explored concerning recent theories, discussions and trends in order to apply this to the case study. This specifically involves the notion of an information society and its application in a local sense.

The public libraries of today are a direct continuation of this history and are examined as a present phenomenon and a future necessity in regards to information.

HISTORICAL DEVELOPMENT OF INFORMATION AND LIBRARIES

People have always had the desire and ability to record their lives, history and knowledge in some form or another. Whether through an oral tradition, through graphics, or the written word, we place importance on its collection so it can be recovered and understood by future generations. Feather (2000:2) argues that communication and memory are central to the human experience. Information systems began because of people wanting to preserve these records, and its history of development is inseparable from the history and advancement of writing and libraries.

ANCIENT LIBRARIES

The written word has existed for about 5500 years and at almost every stage of this development, people have assembled collections of written records into libraries. The first were established in ancient Mesopotamia, which is now Iraq. The Sumerians lived in cities and it became necessary to develop a common written way of recording practical information for business and administration. The collections of clay tablets were housed as archives in the temples, which were the centre of city life and controlled by temple officials. Royalty also had wealth that allowed for the accumulation of tablets that were stored in their palaces.

The ancient empires of Assyria, Mesopotamia and Babylon all exhibited this close connection between the written word and temples, because the religious community played an extremely prominent role in society. Temples began schools to continue the skill of writing and so continued this association.

The Babylonians were the first to extend writing beyond religious use and it is guessed that it became as widely spread as it is today, being used mainly for commercial reasons. Even though the number of literate people was small, it became necessary for many aspects of urban life.

Evidence indicates the existence of a large library called Ashurbanipal, in Nineveh, Assyria, during the period 722-705 BC. This is an example of a palace library and according to Bekker (1993); this institution was reserved for the instruction of public scholars and was not a public library. This asset would have been an indication of the status of the king's empire.

Libraries existed in Egypt from 1300 BC, also in temples. The most famous was founded in Alexandria in 330 BC. This library held the greatest collection of scrolls in the ancient world and was famous for the scholarly studies that it supported. It earned the distinction of being the first of its kind to provide a

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Illustration 1: St. Gall Monastery, Switzerland shows the small room that acted as the library (Roth 1993: 274).

service that existed beyond private ownership, but it was still accessed by a select few: scholars, researchers, religious leaders and students.

Libraries had also been established in Greece and Rome where libraries were both for public and private use. Books became less expensive with the increase in people trained as copiers and books became accessible to read in libraries and to be borrowed from them. The architecture of Classical libraries reflected that typical of all public buildings of the period, grand spaces with large volumes and located in the heart of the civic area. They were a symbol of the position that knowledge and the intellect held and were a public symbol of the society.

THE MIDDLE AGES

During the middle ages, many classical libraries were destroyed and records were only preserved in private royal libraries and in monasteries. Focus remained on spiritual faith and the phenomenon of monasteries began to develop, first in Ireland, and then they spread across to England and Europe. The monastery libraries were contracted spaces compared to those of the classical period and were merely small rooms in the monastic complex that allowed the storage of material (Illustration 1). The monks held value in reading and consequently, the collecting and copying of texts and they became the sole book producers. This lead to the distribution of their writings in schools and England developed into a great learning centre with new universities for this reason. Students did buy books, but for the most part these were expensive and the libraries became an essential component of the colleges, where students could borrow the resources. Intellectual life began to move outside of monasteries and began an active book trade.

Meanwhile in Byzantine Empire was flourishing and they too developed schooling and writing, increasing the need for libraries as storage for collected resources, especially from classical periods. This

Illustration 2: The library at Melk Monastery, Austria, shows the well-proprtioned, grand spaces of the Renaissance (Glancey 2003: 66).

continued with the Persians and the Arabs to varying degrees. They all placed great importance on the preservation and dissemination of religious texts, still controlled by religious and royal leaders.

RENAISSANCE

It was only in the period known as the Renaissance, or 'rebirth', that a complete shift in philosophical thinking and society did libraries change significantly. Scholars began to collect classical manuscripts with renewed interest and many nobles spent great amounts on private collections. Humanism and the new confidence in intellectual capacity made it important to record such aspirations and achievements and the opening of trade routes caused an increase in new and rediscovered knowledge.

However, the greatest advance was the invention of the moveable type by Gutenberg in 1450 with the development of paper. Society en masse began to demand books and production through the development of printing, allowed better and cheaper access to the knowledge they possessed. The history of the mass-produced book allowed rapid dissemination and the coming together of 'scattered ideas of representative thinkers' (Febre et al 1976:10). New ideas could now travel the world in this mobile form. Books and literacy knowledge began to extend beyond the clergy and royalty.

Renaissance libraries exhibited great prestige rather than functionality in their architecture. The library at Melk Monastery, Austria depicts this. The space created by the bookshelves is decorative and well proportioned, rather than functionally driven (Illustration 2). The architectural focus was based on the ideas of man being in created in the image of God and the centre of creation. The buildings reflected this through 'divine proportioning' methods relating to human anatomy. Many writings originate from this period that relate to architecture and methods of designing 'correctly'.

Michelangelo's Laurentian Library in Florence is an example of a Renaissance library. The commission

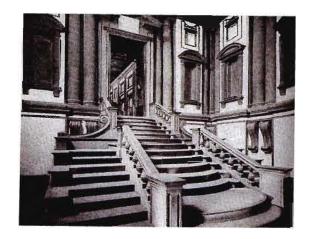


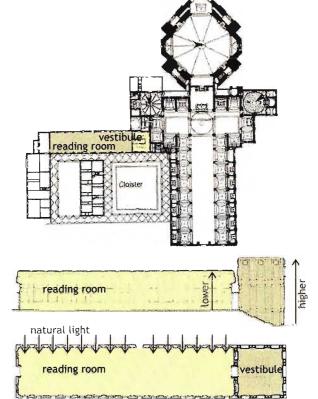
was for the addition of a library onto the existing San Lorenzo. It consists of a long, rectangular reading room, essential because books were not borrowed. It is well lit by windows that fit between pilasters down the length of one side, natural lighting was the only form of lighting suitable for this function and it was essential that it be sufficiently provided. (Illustration 3) The narrow proportion ensures that light may reach the full width of the space. This limited the time that the library could be used, to when there was adequate light. (Illustration 4) The space was carefully articulated in true Renaissance fashion and was preceded by a taller, monumental vestibule that has a square plan and is almost entirely filled by a staircase. The reading room is explicitly the functional component and the vestibule is the grand statement. (Illustration 5) The staircase was an important sculptural element to the entire experience, but is only necessary, functionally, because the library was located above other accommodation.

Illustration 3: The plan and section of San Lorenzo, Florence, shows the position of Michelangelo's Reading Room and light penetration (Hopkins 2002: 12).

Illustration 4: The natural light clearly filters through the narrow reading room (Hopkins 2002: 13).

Illustration 5: Michelangelo's sculptural staircase that fills the vestibule (Roth 1993: 346).





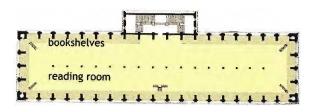


Illustration 6: The centralised plan of St. Genevieve, Paris (Roth 1993: 445).



Illustration 7: Light infiltrating through deep recesses, while the iron structure is light (Van Zanten 1987: 97).

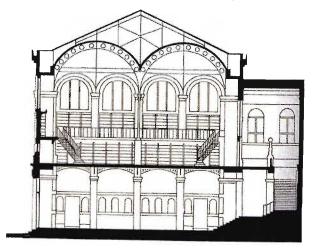


Illustration 8: Section through the reading room and bookshelves (Roth 1993: 446).

INDUSTRIAL SOCIETY

The Industrial Society with its advance of engineering and the production of machinery gave rise to a middle class that did not previously exist. As industrialisation quickened, the need for knowledge dissemination increased, not just for the religious and cultural elite, but also the public. This created the library as a great storehouse of knowledge.

Henri Labrouste designed the St. Geneviève Library in Paris (1838-50), which became the model of what a library in this society should be. The style was Neo-Classical and it had a large, centralised reading room, with bookshelves on the perimeter. It was the first library to be gas lit allowing regular opening hours, even at night. Natural light was permitted through high-level fenestration that was controlled by deeply recessing the windows (Illustration 6). The 'new material', iron, was used for the structure and the architecture exhibited less classical ornament (Illustration 7). There was clarity of function and circulation was direct (Illustration 8). All this reflected an industrially focused society; it is clear that the ideals so explicit during the renaissance had changed and become earthbound, functional and industry orientated.

The Bibliothèque Nationale (1862-68), also by Labrouste, continued to express the advancement of material technology, using a cast iron structure that frees the reading room from intrusive structure and allowed for the large spaces needed to accommodate the increasing numbers of visitors. In this library, Labrouste used a series of nine terracotta domes finished in white porcelain to cover the reading room. Natural light was brought through an oculus in each dome and was reflected on the porcelain to optimise it. Gas lights were also hung from the dome and replaced the natural light at night. (Illustration 9) Iron was also used for a series of open grid walkways that allowed light through to stacks below in the large volume that was now required to house the increased number of books. This centralised plan typified these libraries.

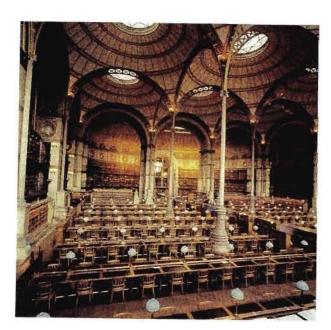


Illustration 9: The reading room at Bibliothèque Nationale, Paris, with the natural light and gas lights bringing light through the nine domes (Roth 1993: 446).

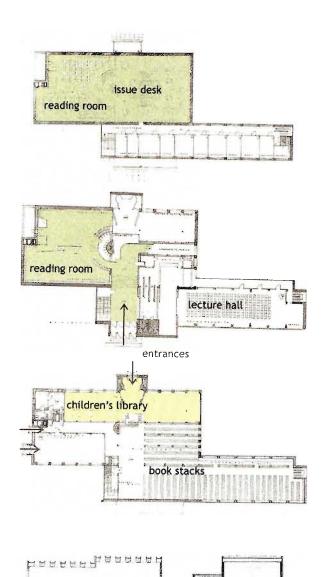
CARNEGIE LIBRARY ERA

The Carnegie Libraries are worth adding to this brief exploration of the library's history, due to their abundance. Andrew Carnegie was an Irish immigrant in the United States of America. From a poor beginning, he made his fortune from steel manufacturing and invested most of it in the provision of libraries. He believed that everyone shares equal opportunity in libraries and through them all have equal opportunity to educate themselves and uplift their status and become successful.

This had great influence on the public library provision and they became common fixtures in communities because of this. They generally had three services that they focused on: to be a repository, a reference service and place from which programmes were run. Therefore, the planning included a repository, reference room, reading room and always a grand entrance. Their architecture exhibited grandeur and prestige and many have been criticised for compromising function for the need to make their 'presence' felt where financial constraints and pressure from other institutions is increasing. He did, and still does, make this facility available to an enormous amount of people. Through the Carnegie Corporation of New York, libraries continue to be developed under this philosophy, worldwide, including South Africa.

MODERNISM

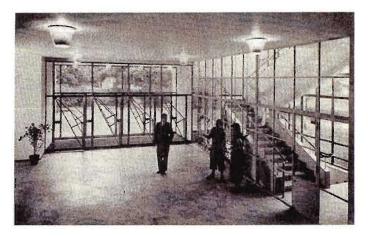
The Modern Movement was dominated by functionalism and this saw a great move away from the previous concepts of libraries. The main functional aspects in a library are circulation and light allowance and control. Alvar Aalto designed many libraries during this period and although they exhibit his personal style, their development with his maturity reveals the tendency of libraries during this period.



The Viipuri Library, Karelia (former USSR) (1927-35) was originally designed as a Neo-Classical library. However, the project was delayed and this allowed Aalto to develop the design into a radical reinterpretation of what architecture is. The final product consisted of two parts that 'slide' past each other (Illustration 10). The interior is open plan and fenestration and planning arrangement is asymmetrical, typical to Modernist principles. Other changes were a completely glazed entrance hall that allowed complete transparency of the building, visitors could view all parts of the building, encouraging the concept of public libraries being feely available (Illustration 11). The main reading area and stacks were lit by clerestory and all spaces were conceptualised to be as well lit as possible, from all directions, preventing shadows. The bookshelves in Modern libraries became human-scaled, as opposed to the multi-storey stacks that were dark, required ladders and had librarians exhausted finding books. These shelves were no higher than a person can reach and therefore were not restricted to being on the perimeter of the room, but could be arranged in a variety of ways. This radical change challenged the arrangement of the plan and the need for centrality. What did remain was the concept that the library provided a journey into separate world, the route remained, but it was no longer straight. The imagery differed and the antique reference of Neo-Classicism disappeared. The library also included a lecture room, which shows a shift in the functions that the library performed. The library became more than just a civic symbol (Quantrill 1983: 63), but invited people to read.

Illustration 10: The plan of Viipuri Library shows the decentralised planning, while sections reveal the play of levels (Jones 2002: 132).

Illustration 11: The transparent and unadorned nature of the architecture (Quantrill 1983: 62).



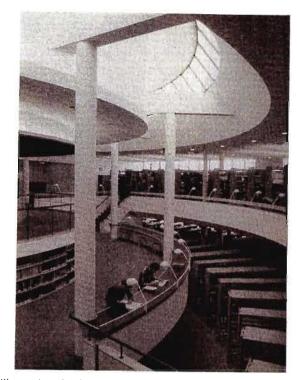


Illustration 12: The fan-shape with maximum sight lines through the space (Roth 1993: 514).

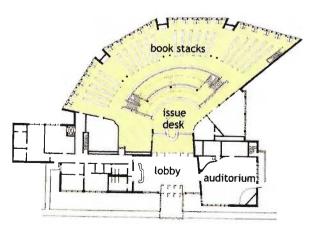


Illustration 13: The Mount Angel Library, Oregon shows the fan-shaped stacks and linear spine of subsidiary functions (Roth 1993: 513).

It is clear that Aalto battled somewhat with this break from Neo-Classicism, because he continued to explore the option of rustification and battled with the composition of the fenestration on the façades. The Mount Angel Library (1967-70), also designed by Aalto, reveals a more developed design philosophy. There is clarity of form that is a consequence of function and the building is designed from a human point of view. The planning is a lot clearer and simplified from the Viipuri Library and clearly separates ancillary and public spaces. The book stacks are located in a fan-shaped form that allows maximum amount of light into the stack area and the radial organisation of the bookshelves allows the centrally located librarian maximum sight lines through the space (Illustration 12). Ancillary functions and an auditorium are located in a linear arrangement at the base of the 'fan'. This narrow form takes maximum advantage of the north and south light. (Illustration 13)

This process of the library's development is indicative of the organised transfer of knowledge and shows how it originated as an elitist function in institutions generally only available to royalty, scholars and religious leaders. They were inaccessible to the illiterate and the uneducated of the population, who were without the necessary status or resources. They were left to transfer information, knowledge and history through informal methods of dissemination.

Modernist principals are still visible in our libraries, especially the older public libraries that we are familiar with in South Africa. The forms are functional and the planning is clear, spaces are human-sized and the librarian is placed centrally to keep a watchful eye on the users of the space.

Libraries are traditionally associated with the location of information collection and its organisation. It is impossible to separate information from our ability to record and access it, since this gives information its use. The development of libraries has slowly developed into the facility that we know: a publicly owned and accessible institution. However, this was for much of the time, untrue. Libraries were by nature, elitist institutions limited to the clergy, royalty and those wealthy enough. This limited

information transfer by the exclusive nature of its systems, even though many societies had the desire that all their population became educated through open access to resources.

THE CHANGING NATURE OF INFORMATION

PUBLIC INFORMATION SYSTEMS

Klobas (1997:45) describes two forms of knowledge: tacit knowledge, which is contained by the individual in their mind, and is unarticulated and unrecorded. Explicit knowledge, which is the articulated form, is recorded, so that it can be shared or transferred. Information transfer is a sensory experience: either hearing or seeing it. We receive it individually or in a group, publicly or privately. It may depend largely on graphics, be partly visual, or rely solely on sound. The medium of communication has always played an important role in the ability of the message to be relayed, as does the system that is used. Sharing of knowledge occurs informally through the general communication between people and through formal systems.

The educational system is probably the most formal method of knowledge dissemination. It includes dissemination of basic and advanced knowledge by trained people, and the testing of this transmission to learners. It is a worldwide, state-supported method of information transfer as governing bodies have recognised the value of knowledge. The objective is to equip people to be effectively integrated and useful in society.

Other formal systems include libraries, information centres, archives and museums. All these institutions support a democratic government by providing the public with access to information, which is an essential component of democracy.

A library's mission is to administer recorded information for the benefit of humankind (Bekker 1993).

This is the broad function of a variety of library typologies. The Public Library is financed with public money and is used by the general public. Community Information services provide information that is supplied for specific everyday needs of a community. Community Resource Centres house a more comprehensive collection of resources than a public library and are guided by specific ideology. Media Centres are defined by the provision of printed and audiovisual material that is available to teachers and students at schools. National Libraries are financed by the state to serve the entire population.

Public libraries contribute to public good; promote literacy, education and culture. They are an important component in the cultural fabric of a community and are now common institutions in most towns.

Their aim is to provide easy access to information. Generally, the governing principle is that this information is accessed free of charge. These recognised systems of information transfer have been in place for a long period and are well established; however it is not apparent that all have managed to adapt and change with the ever increasing volumes and demand for information. As is clear from the history of libraries and the written word, it is essential that the collection, storage and dissemination of information keep up with the changing demands of the society, since they are at service to them.

Information now comes in many more forms than just the book, as traditionally associated with the library. Systems have had to update and remain flexible because of the uncertain future caused by the revolutionary nature of information. Educational systems have changed to accommodate a variety of learners: those entering the system as young learners, together with adult learners. Education includes tuition in the use of information and the technology associated with it, as a necessary part of gaining knowledge.

Life-long learning has become a vital system because of the social and economic inequalities we see in

society. Those who did not have the opportunity of attending school and gaining a basic education are severely handicapped with regard to employment opportunities and other life enhancing activities. Adult education provides the opportunity to develop the individual inter alia through, skills transfer, health education and hobbies, all of which lead to a better standard of living, better employment opportunities and greater self-satisfaction. Apart from access to these new opportunities, people are empowered to develop confidence within, which ultimately contributes to a healthy community.

Libraries, on the other hand, appear to have been slower to manifest this change. Established with no membership fees and dependent on state-run administered funds and ideas, the upgrade of these public facilities is slower.

INFORMATION NEEDS OF INDIVIDUALS IN SOCIETY

People and societies have needs to be met in order for them to function effectively, individually and in a social group. These range from basic, essential needs such as air and water and extend to more advanced needs of a society such as the need for a system of governance.

In contemporary society, information has become a necessity for people to integrate into a global economic society. The elitist nature of an information-centred society excludes many people who do not have access to the systems and resources that are involved.

One theory states that the 'elite' of society have all their basic needs for survival fulfilled and therefore they search for something more to fill their lives and turn to intellectual betterment. Whereas people with lower economic standing spend their time fulfilling physiological needs: food, shelter etc., since this need is unfulfilled and more urgent for survival. It is also argued, however, that traditional societies spend no more than four hours a day on 'survival' (Dupuy 1980:5). Therefore this problem where people

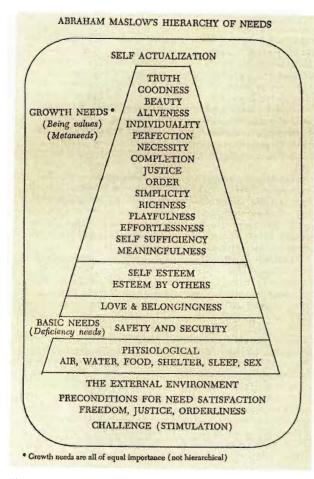


Illustration 14 (Maslow 1968)

are lacking basic things and not aspiring to greater personal development appears to have become a symptom of 'modern', urban society. Information has formed a contemporary, global society that is dependent on information's continuous supply. This extensive dominance has inflicted this dependency on any individual involved in the system. The existence of information has formed a reliance on those related systems that once begun, does not allow the independence of them.

Maslow believed that human beings are motivated by unsatisfied needs and therefore lower needs must be met before there is a desire to move on to the fulfilment of higher needs (Maslow 1968). His hierarchy begins with physiological needs, which are the most basic: air, water, food, sleep etc. Self-actualisation is the final stage in the hierarchy that expresses the desire of individuals to become all that they are capable of, through the attainment of knowledge, peace and self-fulfilment in personal growth. (Illustration 14)

Maslow's theory describes how the need for self-actualisation is characteristic of people in the middle to upper economic groups in society. This is concurrent with the contemporary situation, especially in South Africa, where lower income groups lack resources and are excluded from knowledge gain and the ability to improve themselves. The result it that they do not truly belong to the society that is created and of which they are supposed to be a part: both socially and economically.

The demands of society are such that people need to gain information and knowledge and apply this in their lives in order to contribute and survive in this contemporary, globalised society. Currently, it appears that even the fulfilment of physiological needs requires this gain of knowledge. The demands of society are causing this hierarchy of needs to become confused.

Norberg-Schultz (2000:33) writes that 'belonging' gives people identity and that our identity is wrapped up in 'place', that we identify ourselves by our nationality or place of origin. He argues that the loss of

a sense of 'place' causes the alienation of the individual and therefore he loses his sense of belonging. When one does not belong, you are not integrated and therefore will not participate, or contribute to the further growth of that 'place'. Maslow also talks of the need to belong. As Castells (2001:114) states, identity is meaning. The globalised environment places importance on the diminishment of the individuals identity and has aggravated the lack of integration of people in society, on this level.

In South Africa, we are left with a legacy caused by exclusion that is formulated by race, and which affects integration. This has caused people to become dissociated from the dominant economic society, which is stable and powerful. The white managerial class managed the consolidation of all South African manufacturing for the purpose of meeting the needs of a predominately-white domestic market of well housed and serviced, largely urbanised people. Many black people were physically displaced and there was a large amount of migration to cities. Apartheid used 'Influx Control' and the 'Group Areas Act' to reduce the costs of labour and this resulted in the disenfranchisement of the black majority from the nation-state (Swilling 1991: ix). This left only white people with full political, industrial and urban citizenship: they belonged. The sense of uncertainty and exclusion has affected all other South African's belonging and identity. This lack of integration was formed by Apartheid and it set people into a class structure that could not be changed by the individual.

Karl Marx writes about the dominant class, that exploits the majority class. He states that this relationship between the exploiter and exploited, has existed ever since humanity has been able to produce more than a subsistence existence would require. Marx uses the examples of Rome's patricians and slaves, and the Middle Ages where feudal lords owned the land on which the serfs worked. Finally, Marx describes the modern Bourgeoisie who exploit the Proletariat, the wage earning class. These classes are generally separated by the ownership of private land; the Bourgeois does have ownership, whereas the Proletariat does not. The Proletariat needs to work for the Bourgeois to survive, but they do not ever earn enough to change their class definition. The Bourgeois control the wealth and keep it

amongst themselves; the lower classes therefore have no means of bettering themselves.

The onslaught of information dictates that one must be integrated into society and ready to meet the challenge of a dynamic, globalised village or, be dissociated and left behind, ill equipped to cope with the rapid advancement and speed of new technology. There is a chance that the information revolution will deepen the level of social exclusion experienced by many.

Class structures, castes, the phenomenon of the 'have's' and the 'have-nots' has always existed and always will, but it is evident that globalisation has exacerbated these distinctions and aggravated scenarios, especially in countries of the developing world. Those, without even the basic resources that would enable them to be part of 'the society', must battle for survival, employment and integration. They remain marginalised people.

INFORMATION IN A CONTEMPORARY ENVIRONMENT

Marx and Engels (Nwosu 1995:42) state that communication is nothing more than the articulation of the social relations between people. *'In a profound sense, communication is one of the most unique products and producers of society's development'*. Contemporary global society positions communication at its centre because it is an essential tool for the existence and transfer of information. People communicate through speech, the written word and gestures, but it is argued that a society only evolves when people conform to a common communication, which therefore results in a unity that forms a society: communication aids the presence of social interaction and it is from this that social units can grow. Therefore, the cohesiveness of today's society depends on the equality of information in people's lives, as a common source of communication.

An information-centred society shows a great change in the methods of communication, but it is also

clear that it is a continuation from that which came before: historically, economically and politically.

The present position in the development of information is the introduction of a variety of media, including the computer that completely changed the speed and range of communication that now exists in our current context. (Illustration 15)

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From an economic standpoint, information is viewed as a commodity, making demands in the market place, together with related activities such as publishing its production. Hannesdottir (2002) describes information as a product to be used. He likens it to crude oil that contains potential value, but requires refining to become of any real value. The more refined it becomes, the greater the value. It has always been a commodity that has been bought and sold, it is therefore part of the social aspects of a society, and its value is thus determined. It has unusual qualities because it is expensive to produce, but is subsequently of little cost to multiply.

The increased presence of information has caused related activities, such as publishing and the market-place, to be redefined and activities in publishing and in libraries are becoming 'disentangled and recombined' (Feather 2000:5). Economically, information also has inherent worth and thus is sold at a profit to the provider by prices determined by the market. It is difficult to place a definite value on information because the worth of it is not dependent on the information itself, but on the individual user. If information does have a value, then it follows, that a circumstance that lacks information is disadvantageous.

Political consequences of information relate to the economic factors. There is an increased gap existing between rich and poor in regards to the access to information, on a global scale. More information is available to more people than there ever was, but the cost of the technology involved with information transfer is still a limiting factor. This creates the paradox and main political dilemma to the information revolution.

THE INFORMATION SOCIETY

The 'Information Society' is a phrase used to describe the post-industrial society. This shift is identified through the change from an economy dominated by manufacture to one that is service focused. It has

therefore changed its focus from physical to mental labour and typical jobs are those in the information related fields. The increase in inexpensive information technology causes globalised production and makes it increasingly easy to communicate in the global context. *'Information makes an impact on collective, social, cultural and working lives in several often crucial ways'* (Dick 2002:33). The society that is built around information theoretically tends to create freedom and equality, which are the things most valued in a modern democracy. However much it has been celebrated, the information age has not produced purely positive results. Fukuyama (1999:5) argues that with the *'uprising of the information-based era* came a social and moral decline through technological, economic and cultural connections. It caused disruptions to the marketplace as well as in our social lives.

Batt (1997:202) states that information is a vital component in our lives and societies. This indicates that the Information Age, or Society, is one dependent on information, and the continual transmission of it. Information Science has arisen because of information's prominence worldwide and is a contemporary field of study that explores it as a phenomenon, and its role in social formation. This 'contemporary phenomenon' is caused by the recent availability of mass amounts of information, easily available to many people, through the advancement of technology. To most people this is defined as the internet, because it is with this tool that many people have easy access to massive amounts of information on a regular basis. The internet developed slowly over a period of years and became an avalanche in the 1990's, and its advancement is continually speeding up.

Technology has increased the rate of information transfer and has forced this information dependency onto society. (Illustration 16) We are faced with more information than we can handle. Those with access to the internet, and other information sources, hardly scratch the surface of resources that are available, and daily we are bombarded by information through media and people: just about everything we come into contact with gives us information. This will continue and accelerate due to the nature of technological advances. Great pressure is placed on people when they have to deal with this influx, and

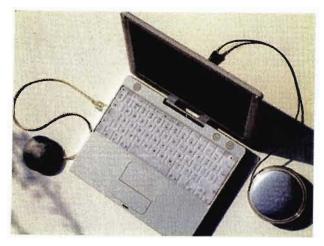


Illustration 16: The symbol of information technology: the computer

manage it. Technology has therefore both facilitated and inhibited access to information. The reliance on technology places an obstacle in the supply chain of information to many people who need it.

The media has been the greatest mediator of this occurrence. Their currency is information and they have definitely influenced society greatly in positive and negative respects. The media brings vital and interesting information to us. It forms awareness, such as photographs and stories of war, and it challenges governing authorities. However, the information we receive from the media may also be biased, sensationalist and untrue, due to the public receiving this information second hand. The media thrives on people's need for information and desire for news, gossip and to be informed. In addition, the public relies on the media to have integrity because of dependency on the media for information and news.

Information technology's paradox is that on the one hand it has created information-rich elites that have found easy access to information and conversely, the information-poor who have no resources with which to gain information. This has created a broad inequality that is found, either in whole nations or as pockets of disadvantaged or advantaged in a single country, as is the case in South Africa.

Information poverty is a disadvantage when it deprives people of the benefit that it has the potential to be. Benefits may be financial, professional, social, educational or a matter of personal convenience. The citizen who is deprived of information is deprived of choice and therefore power. This has become the central dilemma to the information society. '...Globalisation does not integrate everybody. In fact, it currently excludes most people on the planet but at the same time affects everybody.' (Castells 2001:10)

ETHICS, POLITICS AND INFORMATION

Access to information is a universal right, that public agencies defend and it is becoming an essential component in any democratic society. Democracy is about self-respect, opportunity, freedom, wealth and income making information justice essential, and therefore causing the unequal access to information to be injustice (Dick: 1999). If information is restricted, its essential use, to aid freedom and opportunity, is deformed and it violates the right of others who are denied that information.

Senecal (1995:3) argues that information is the keystone to democracy. He believes that although freedom of speech is an acquired right, information access remains ambiguous: freedom of speech is a right that has been globally developed and focused on, while there is still debate over what the freedom of information actually means.

The state has an important role to play in the information field because it has the ability to protect the rights of information as property. As well as controlling its unauthorised use, or guaranteeing its use, the state can control its dissemination in the interest of its citizens. In South Africa, the right to information is very important and the government recognises this by its inclusion in the country's constitution. South Africa's history is steeped in illiteracy, the lack of freedom and inequality enforced by the laws of Apartheid. This has caused the current awareness of the importance of equality in all respects. Disadvantaged people have been prevented from freely integrating into a dominant society. South Africa also acknowledges the importance of information in its political and economic future and the essential need of it amongst the country's people.

South Africa has established a legal act that defends this right to information. The Promotion of Access to Information Act 2 of 2000 states that its function is,

'To give effect to the constitutional right of access to any information held by the State and any information that is held by another person and that is required for the exercise or protection of any rights; and to provide for matters connected therewith...in order to...actively promote a society in which the people of South Africa have effective access to information to enable them to more fully exercise and protect all of their rights'.

Dick (2002:55) argues that justice and ethics will always be limited by informational constraints. Therefore information is a vital component in the attempt to be a just society since justice can only be manifest with the knowledge and information relating to the transparency of that society. Information ethics pertains to information access and the potential benefit to all who possess it (Dick 2002:63), and the access of information is what supports justice because without it, lack of information would cause injustice. It is justice that is essential in a democracy because at its core is equality.

This concept does show some discord. It causes one to question the role of the media with regard to the right of information. Since information professionals, for example the media, have direct access to information and citizens rely on the indirect contact, this system compromises the freedoms and the rights of the public. Senecal (1995:18) states that it is becoming more and more urgent that citizens be made aware of the need for active assertion of the right to information, so initiatives that support this right survive and do not collapse under commercial pressures in this field. He questions whether the right to information has merely become a right to communicate or whether we truly have freedom to information.

Information is politically connected and it is essential that there is an awareness of the importance of free access to necessary information, to ensure that the general public has equal opportunity to defend their personal rights.

THEPUBLIC LIBRARY IN SOCIETY

LIBRARIES AND INFORMATION

The literate and well educated of the population have generally been the creators of information systems. Even the use of public resources relies on the ability to understand basic cataloguing, instructions and equipment. This causes poverty of information where none should exist, because of the inability to access available resources. Therefore, the systems themselves cause barriers between information and potential beneficiaries, and it is important that public entities remain aware of this issue.

Technology can either cause or cure information overload. It's how we use it that counts' (Goldsborough: 2002). For the public library to retain a central position in community life, it is essential that technology is included in its future development. Public libraries, as opposed to university or school libraries are slow to break tradition; however, they must adapt quickly enough to maintain their goals, with the speed of technological advancement, and therefore the increased demands for information. Libraries have to contend with the issues pertaining to information not only being of a written format, but also digital form, with the existence of the internet and other computer-based technology.

Libraries are therefore not only a place where books are collected, but they have to address the need to become a multimedia, multi-dimensional centre to meet the needs of community. Multimedia resources and methods of information retrieval are more expensive and require a much greater volume of resources than printed media. It is also a risk investing in information since its growth has become unpredictable and it changes continually.

Libraries remain a vital component of a community as the unceasing flow of information and new resources generally encourage people to read more, not less; thus ensuring these facilities do not become obsolete. The library is the only public facility that encourages open, free public learning and information retrieval vital to a contemporary society, centred on information. The world's information

resources are still largely in the form of the printed word, which remains the most common method of information dissemination. It follows that it is essential for a country's infrastructure to include a well-organised publishing industry, efficient book trade and well-stocked, well-managed libraries.

Life-long learning and libraries play an important role in fighting poverty and encouraging individuals to explore their own potential, build self-esteem and develop confidence. We must not assume that without computer-based information, dissemination will be ineffective, although it does play an important role in making information available. This information infrastructure or the lack thereof, is a decisive factor in widening the gap between developed and developing countries.

LIBRARIES AND THE PUBLIC

For information to become a positive improvement to society and for it to be a positive component of people's lives it must be easily accessed by all people equally: the 'haves' and 'have-nots', literate and illiterate. 'Half of knowledge is to find it' (Hannesdottir 2000:39).

The library depends on public funding and is under the authority and leadership of the government, which implies that the institution has a social responsibility to foresee changes that are required and to act upon them. It is because of the state's responsibility to citizens, that it becomes necessary that the correct facilities be provided and that they work efficiently.

Society today generally does not recognise the importance of libraries. It could be that they have not fulfilled the needs of specific societies. They certainly have not maintained their position of importance with regard to changing requirements. The public library has in many cases, remained an old-fashioned collection of books. This was appropriate when books were one of the few information sources available and little else was required. Books and, therefore, the library have to compete with technologically advanced resources that have introduced the age of the instantaneous response. In the recent past, the

library, as a public entity, has exhibited little in recognising the arena in which it is now a part, and it was failing to fulfil its potential. It has appeared not to acknowledge the new context in which it finds itself: as a forerunning facility in the information society.

A public library plays a very important role in the community, because it is an institution that provides cultural resources and opportunities, together with educational resources, they are necessary for lifelong learning. It provides citizens with information about their rights and local democracy, economic activity and business development, as well as welfare and health information. Theories that predict that the internet will cause libraries and books to become obsolete are short sighted, because of the diverse role that they play in society, the support that they are capable of and, because the betterment of society is their core principle. Therefore, in a community there is no better-suited agency that has already been accepted by society, and that has the tradition to lead in the field of providing people with the required resources, support and education in the field of information. The quality of service in a library is measured by the speed and accuracy with which the users' needs are fulfilled. Society requires access to information, and libraries help to direct the flow of it, therefore enhancing people's potential in that society.

THE PUBLIC LIBRARY'S FUNCTION

Activities associated with information transfer include the articulation of 'tacit' knowledge, which is internalised, into an external form for the use of others, by recording and identifying the sources of knowledge. The formal functions that are required to retain accurate, useful records are the organisation and retrieval of the recorded knowledge, which forms the public interface. This is the point where recorded information must be easy to access and user-friendly. A library is a public institution that exhibits all of these activities and is created to collect, manage, store and disseminate information.

Because libraries have historically been the location of knowledge collection and transfer, they naturally become an important facility in an information-centred society with their established tradition. However, the independent nature of the internet allows people to access information anywhere, i.e. without dependence on a built form. This facility, however, is only available to those who can afford it, and information on the internet becomes a private, not public good, as is the definition of a public library.

Batt (1997:200) describes a public library as 'a place or building visited to borrow books and obtain information', a place to study, rest or shelter, to meet people and to exhibit artwork. Mason (1999:17) writes that it is a learning institution with public access to information and knowledge.

...a library is a public building ... where knowledge is collected, stored and made accessible...and...this knowledge (allows) people to develop a degree of historical and social awareness. Thomas Duff (Mack and Liebermann 2000:62)

These views show the primary, knowledge-based functions of a library and the potential they hold for becoming an important public institution, fulfilling many societal and personal needs.

This institution's primary function is to organise and provide easy access to information, and they have had to be open to adaptation to continue to perform this function successfully. The functional goals of a public library are now much more diverse than they were historically: their spectrum covers information, education, culture and recreation, and therefore focus on the 'enhancement of human life' through the effective management of the resources of human knowledge (Hicks and Tillin 1977:4). Batt (1997:200) argues that public libraries are to be for 'public good' and suggests services to include community information, reference services, independent learning, reading and literacy programmes, recreation and networking. Bekker (1993) describes the mission of the library as 'the administration of recorded information for the benefit of humankind' and the aims of the library as educational, the

provision of information, recreational, preservation, aesthetic appreciation and the promotion of culture and art.

The definition of the public library is broad and needs to remain flexible to enable appropriate change with the varying needs of societies, in addition to being sensitive to the specific needs of the community in which it is situated. It is obvious that different communities require different things from a community-based facility such as a library. Requirements will be very different in an area where people are of an upper income group and it is doubtful that they would require a facility with a study area, as children most likely have a suitable area at home, compared to a low-income area where this facility would be essential.

THE CONTEMPORARY LIBRARY BUILDING

The people, for which the library is intended, need to see this facility as more than just a storage facility for books and other resources. They must realise the potential that this institution has in society and in their own lives: to be at the forefront of 'propelling creative thinking in all members of society' (Marivate: 2001) and providing people with a relevant and useful facility.

Therefore, although this institution retains a traditional title that has a long and successful history of growth, it needs to develop further to fulfil the potential it possesses in contemporary society. The public library needs to break the connotations that are applied to it and reinvent itself in accordance with current society.

Thus far, this project has established what abstract functions the new library needs to perform and that it must provide appropriate resources for its specific community. We need to explore how this is translated into functions and forms of a built form: public library's functions need to be sheltered and the architectural expression must be appropriate to the community and adequately house its services.

Richard Neutra (1958:1) talks of a 'living library' as opposed to the libraries of the ancient world that were designed in the same monumental style of architecture associated with eternity and the dead. This is the connotation that many people have of a library: a silent, well-disciplined, 'dead' space. It is even the silence in a library that we must question: silence may be needed, or merely be a tradition handed down from past systems. It is suggested that a library building need not be quiet; perhaps it is only certain spaces that require quiet, for example, study halls. A public library must become a living space that is the centre of a community, which is continually inhabited and used.

The library has become less about the location and has become more about a concept (Feather 2000:183). The library as a building is becoming increasingly challenged as technology advances. Society debates the need for a physical library, when it is possible for it to be purely a digital resource. However, there will always be the need for a physical store of books, and a place to study or a place to find information where assistance is available.

A library building must be planned to function in a way appropriate to the community for which it is intended, i.e. the physical, economic and social characteristics.

PHYSICAL ASPECTS OF LIBRARY BUILDINGS

Dowlin (2004) argues that along with the functional aspect of a public institution, a physical presence is also an important aspect of the library design because the community supports the funding of the institution and it must be appropriate, in their eyes. The library is about the people; the resources are not the ultimate focus and thus architecture must address the people. Society holds onto the traditional ideas of a library and these ideas need to be changed. Therefore, in contemporary society it is becoming vital that a library must market itself appropriately and be attractive to the public.

A study in Tower Hamlets, London, explored the reasons for existing libraries not functioning successfully. It was discovered that most people felt that the existing libraries were unwelcoming, dull and institutional, confirming most people's experience of their own local library. It was concluded that the buildings in which the libraries were located were contributing to the declining use of the services offered; and these are deemed worthless if unutilised. It was known that the services inside the buildings needed upgrading to remain appropriate to the local community, but it was important that the building itself attracted people as it should, to ensure the desired response. The underlying understanding of the 'Idea Store' was that libraries are market-based facilities, therefore a direct relationship to retail was recognised and principles from this adopted.

If libraries are competing against other institutions of the information age then those are the internet and retail outlets that sell IT products, music and books: those that are involved in the same products as a library. The library must see itself in competition with these entities, even though it does not rely on the existence of sales. The greatest difference between other bodies and a library is that the retail outlets put primary importance on marketing and their customer. They rely on a customer base to which their product must be appealing and attractive. Libraries, however, do not have this same focus, theirs is providing the community with a pre-conceived service and they do not have the driving necessity to attract 'clients' in order to make the facility viable. 'Libraries are part of an increasingly commercialised chain of information supply' (Feather 2000:7). The public library must be aware of this and respond by giving more focus to their client base.

Worpole schematically presents his comparison of 'traditional' and 'modern' library architecture in an article written about the future of public libraries:

MODERN LIBRARY ARCHITECTURE
Modern free style
Street level, retail entrances
Good disability access
Atriums and top floor cafés
Escalators and lifts
Atrium light
Open access to books and other materials
Bookshelves at human scale
The 'living room in the city'
Domestic or club furniture
Shared space with other services
Open plan design and circulation
Contemporary cultural market-place
Seminar rooms and computer suites
Networked space
Librarians as knowledge navigators
The culture of mutual respect
Child friendly

This sets up a generalised, yet useful table that indicates the same attitude shift in library architecture, as has occurred in its theory. It serves as an introduction to the analysis of physical libraries that are manifesting themselves.

Because of the ever-changing nature of information and its future being so uncertain, any architecture, which is a permanent element, must be designed to be flexible and able to adapt as the needs of society

change, in order for it to be viable and enabling future growth and development.

ENVIRONMENTAL CONSIDERATIONS

Environmental comfort is an important aspect of library design and determines the use of the building. Neutra (1958) describes how comfort is important in order that the most is gained from reading.

These environmental aspects are all directly related to senses: Hearing, sound and noise; Sight, light and colour; Touch, ventilation and temperature; Smell and ventilation.

NOISE

When one visualises a library, it is often a space where the librarian commands absolute silence and the slightest murmur is met with great objection. The necessity of this attitude has been highly questioned in recent times.

The function of a library is dominated by the idea of individual study and reading, which is logically not possible in high levels of noise. However, the lack of all sound creates discomfort. In this situation, the slightest hint of noise is noticed and is distracting. According to Noon (2004), in his commentary of the Lanchester Library, although users complained about noise levels in the general library space, the silent study areas were not greatly used.

Neutra (1958) argues that people can read in unrythmical noise, but not rhythmical sound and that a low hum is not noticeable in a large room. It is also argued that a low hum encourages work, rather than hinders it.

LIGHT

Light is a vital aspect of sight, which in turn is necessary when reading and this is probably the most important aspect of environmental response in the design of a library, it can also prove the most complex aspect of design. It creates different moods in different places through the quality, colour, direction, shape and contrast of the lighting.

Natural light is definitely a valuable asset in any building; it is the lack thereof that is one of the causes of 'Sick Building Syndrome' and it is agreed that good natural light is necessary in all parts of a library. It is also the most efficient source of light; it has no cost and is the most powerful light source. Boaz (1958) suggests that libraries require 20-30% of the floor area as natural light compared to the minimum SABS 0400 Building Regulation of 10%.

However, natural light, especially in South Africa, is extremely bright and causes glare, is variable, difficult to control and comes with large amounts of heat, which is destructive to paper and other resources housed in a library. It also affects the flexibility of the building and therefore must be controlled and carefully designed.

Schliph and Moorman (1998) present 'Bad Lighting' as one of the 'Seven Deadly Sins of Public Library Architecture'. This includes glare, uneven lighting, dark surfaces, inefficient lighting, inflexible lighting, esoteric technology, skylights and downlighting. These are logical factors to consider for the best functioning of a library and it can be argued that it is not possible to avoid these situations in a purely naturally lit space.

Artificial light must be used to compensate for the variation of natural light. The choice of the type of artificial lighting is important to the quality of light produced. Fluorescent lighting is a white, bright and has a hum that can cause irritation. Candescent lighting is a warmer light that is not as even as

Emissivity of External surfaces

Thermal capacity

Ventilate cavities

Ventilation of interior

Air

movement

Illustration 17: Temperature and ventilation control in libraries (Thompson 1977: 151).

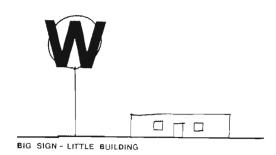
florescent. These can be easily controlled and used differently in various functions of the building.

High level windows that extend to the ceiling are practical for a variety of reasons. Book stacks can be placed against walls and the windows fit above. This also acts as a practical security measure, preventing books being able to be passed through the window. Glazing should be located to allow light between stacks as well as keeping the space flexible enough for some rearrangement.

VENTILATION and TEMPERATURE

Ventilation is a necessary consideration in any space, especially those with many people passing through. It is more important in a library building for the comfort of its users, than for the stabilisation of environment for resources, although this is also a consideration. Books, computers and other resources require a cool, stable environment, with controlled humidity and some argue that it is essential that this occurs through air conditioning. However, the appropriate conditions can also be achieved through passive cooling methods and careful design of the building, ensuring controlled heat gain and loss and efficient ventilation.

The connotation of libraries being stale and smelling of old books is a direct result of poor ventilation of the space. People require fresh, comfortable environments in order for them to perform the activities that occur in the library. In basic terms this means sufficient natural air movement and a sheltered space that is a more comfortable temperature than the exterior. Therefore, the choice of ventilation method depends on the ability to control the external environment; if it is a moderate climate it may be easier to use natural methods than a hot and humid climate that would probably require mechanical air conditioning. (Illustration 17)



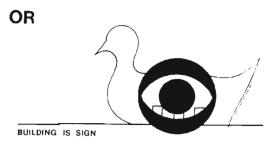


Illustration 18: Venturi's definition of buildings as signs (Venturi 1972: 12).

PUBLIC LIBRARY'S IMAGE

Buildings display an image, both literally and figuratively. Images, in a literal sense, are constantlysurrounding us in a visually orientated society. They are generated to gain our attention and to relay information and messages. Visuals communicate in a language that is internationally understood and does not depend on education or literacy. 'It is only shallow people who do not judge by appearances. The true mystery of the world is the visible, not the invisible' Oscar Wilde (Mack and Libermann 2000).

Architecture also communicates an image of symbolic value. To most people, the image of a public library does not excite them, even though they have not ventured inside one for a long period. Many people have simply forgotten that the public library exists. It is unwelcome and unattractive, and is enhanced by clichés and popular media.

However, the aim of the public library is not succinct with this image: to provide an exciting, highly effective centre for information access, study and learning. The desired image must portray open access and communicate that the information and resource needs of the community will be met.

Venturi (1972: 12) argues that all architecture communicates in one of two ways. The first type of building is non-descript and inexpensive, while a large 'billboard' or signage, placed in front, explains and advertises the function. The building's neutral architecture could house any number of activities. The second type of building does not separate itself from the sign, it becomes the advertisement and the function becomes explicit through the architecture. (Illustration 18)

If a library is to communicate all that it intends, it is important that it is not mistaken for any other building type and it will not be successful if it relies on signage to express all the symbolism necessary,

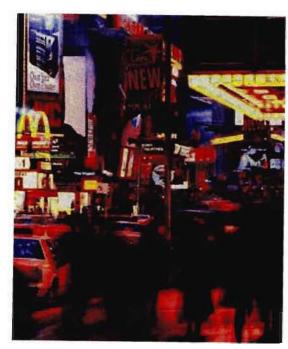


Illustration 19: Signage used by retail to attract customers (OMA 1999).

the message must be intrinsic to the architecture and its function legible.

Shovlin (2005:1) argues that the downfall of many public libraries is that they are located away from main shopping areas, that signage is low key, there are few 'shop windows' to entice people inside and that there is no advertising. These are recognisable features of retail architecture. (Illustration 19)

Public or civic architecture communicates another component of a library's image. Civic architecture is less transparent and welcoming than retail expression, but portrays importance through a large scale and central location in the community. Traditionally it may exhibit bureaucratic notions through impressive architecture that symbolises the success of the governing entity and the community that it serves. The buildings allow public to interact with them through the presence of public open space and open ground floor access. Public libraries require the expression of importance and centrality in a community, but must not express any bureaucratic or other exclusionary messages. Architectural image has a relative amount of practical formula that may be applied to communicate a particular image, however, no convenience of arrangement is to be sacrificed for architectural affect and no decoration must distract readers and attendants.

The expression must be a part of a contemporary environment and appropriate to the local community. It is debatable how a balance may be achieved between the global nature of information and the building that aids its dissemination in the local context, for a community that has a unique identity.

South Africa presents is own identity and context and an international image of a library may be applied, but does not show reference to the specific community and the relevance of the library as a symbol and expression of this context. The creation of an 'African' or 'South African library' begins the debate of an 'African identity' and this could continue at infinitum. What must be questioned is whether a library in a South African context would be different from one elsewhere.

The nature of libraries in South Africa is certainly different. The need for a library to be an accessible service to everyone in the community is vital and there is no place for the elitist institution of the past. The high illiteracy and lack of personal information resources, through poverty, dictates that services provided are appropriate and encourage an enjoyment of reading and use of this facility. The focus is predominantly on the presence of schoolchildren who require the books and a quiet study space to study.

Thus, the image of a 'South African library' cannot reveal hints of the grandeur of past library buildings, but must reflect the community-focused facility that it needs to be. The prevalence of poverty and lack of education enhances the importance of a public library in a community and therefore it is importance that it reflects its accessibility and encourages interaction with the building. The silent, stale connotations are far removed from the climate and culture of Africa and the African library must respond to the culture that does not hold the same regard for silence as the western cliché dictates. The library as a public symbol must acknowledge its location as the centre of a South African community, it must respond to the climate, reflect an image of shelter and comfort, and therefore, be an enjoyable place to inhabit.

The library is a public building, whose function is to provide the local community with appropriate services. The needs of the specific community therefore, must be examined. Libraries as a building type, and their services, do have common elements, but they are not generic buildings. It is mandatory for a library to be uniquely designed, after the context for which it is intended has been studied.

CONCLUSION

It is clear that the existence of libraries is dependent on society's need for information and that they must respond directly to this need. History dictates that the nature of information is constantly changing and that the public library must become a facility that has the ability to react to these changes.

The public library's importance in society cannot be doubted, as long as this need for information remains. South Africa is no different. Although, the society communicates slightly differing needs, the essential contemporary philosophy of library, that it remains at the centre of a community, stays the same. The South African public library, as well as those elsewhere, need to communicate an appropriate image, which must be reflected in the built form and in the service that they provide, in order that they prove themselves the worthy facilities that theory presents.

PRECEDENT STUDIES, MANIFESTATION IN THE BUILT FORM

INTRODUCTION

The study of international precedent includes three examples of contemporary buildings designed since 1995. Each is located in a unique environment; socially, politically and economically.

These will each individually analysed according to their approach to information and their community, as well as what image it portrays as a public building. The manner in which the building itself performs is also necessary in gauging what is occurring globally in the public realm of information presentation and dissemination.

LESSONS FROM THE SENDAL MEDIATHÈQUE

BACKGROUND

New concepts of libraries that are appearing are evident of the worldwide trend acknowledging the changing needs of public information and knowledge dissemination. They tend to use the idea of a traditional library as a foundation from which they examine the appropriateness and relevance of the existing model in contemporary society and arrive at a suitable solution for this environment.

The 'Mediathèque' is a Centre developed by the French, who saw the need to break away from the limiting definition of a library: the French word, Bibliothèque, specifically referring to books. A mediathèque houses a variety of media resources inter alia, library and theatre. The exact combination of facilities is dependent on the community where it is located. It is claimed that now just about every French town boasts a mediathèque.

The trend has also crossed oceans and a large Centre under this French title is found in the Japanese city

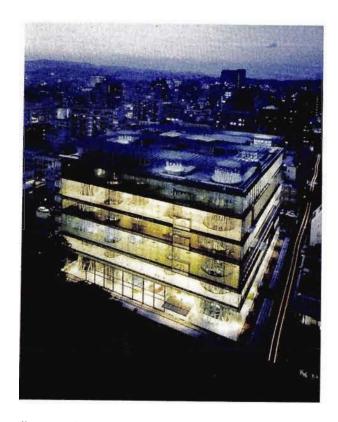


Illustration 20: The Sendai Mediathèque viewed in its context (Buntrock 2001)

of Sendai. It was completed in 1995 and was designed by Toyo Ito through a competition win. (Illustration 20)

APPROACH TO INFORMATION AND COMMUNITY

The existence of the Sendai Mediathèque is based on making a large variety of resources available to the public. Both the competition organisers and the architect aimed at providing a facility that deals with information as a present and future component of society. The mediathèque houses vast amounts of new information in a new way.

Ito writes that the human body exists on a real and virtual level. The real body has always existed and the virtual has been brought on by the increase of media. He believes that architects must assist in the integration of these two bodies by acknowledging it both in the design of buildings and cities (Barrie 1995:1). This building is supposed to be a public building that allows people to explore this virtual component of themselves. It is obvious through the architect's writing and the built form, that no reference to the past was desired and that this building is a clear break from historical libraries and all symbolism associated with printed information.

The mediathèque clearly wanted to be a central focus in the community, the aim being to provide the community of Sendai with a cultural and educational facility. 'The Sendai Mediathèque will gather, preserve, exhibit and present various forms of media without being bound to form or type'. (Sendai Mediathèque 2005). It provides a public facility that gives free access to information in a variety of formats. In theory, this means equal access to the whole community of Sendai. However, the facility says nothing of the community in which it is located, instead it focuses on the global aspects of the virtual and information. The 'high-tech' architecture expresses the architect's philosophy of information and definitely does not depict anything of a traditional library or much about what role the mediathèque

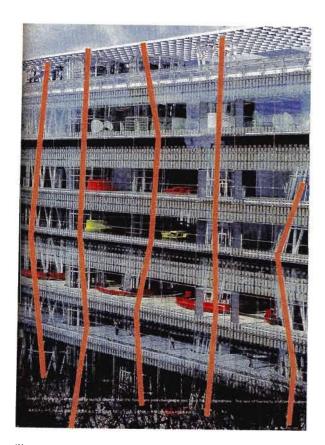


Illustration 21: The acontextual architectural language is visible with the manifestation of the concept of drifting seaweed (Anon 2001)

plays in the life of individuals. The context has been removed from the architectural expression and does not integrate the community of Sendai with the building. Rather, it provides the community with a facility that has placed itself in a global context.

Perhaps the break from the explicit expression of a library, to that of a more neutral building, could improve the public's perception of this building type: from an institution of limited services and value, to something with far more to offer. However, this does not validate the architecture being a neutral, glass box. This highly acclaimed building has not been designed for its users, but is used as an expression of the architect's philosophies. This cannot be excused in the global or local context. Alibrary cannot find itself in a 'neutral architecture' to which people will not relate. It must depict its function clearly, and at all times relate to the human-scale for which it is intended.

IMAGE

This approach toward information and the community is manifest in the presentation of information rather than the re-invention of its systems. The presentation is fresh and contemporary; using materials symbolic of new technology and today's society. The steel structure, with large amounts of glazing symbolises a global style of architecture, devoid of cultural reference and is connected to the developed world and particularly cities. The 'high-tech' nature of the building creates connotations of wealth and aspiration, which may deter or encourage use, depending on whether it causes intimidation or curiosity. The building creates a virtual world within the reality of its context.

Ito states that his concept was of drifting seaweed, which has no reference to the building's function of philosophy. This separation weakens the image of the building and de-contextualises it even further. (Illustration 21)

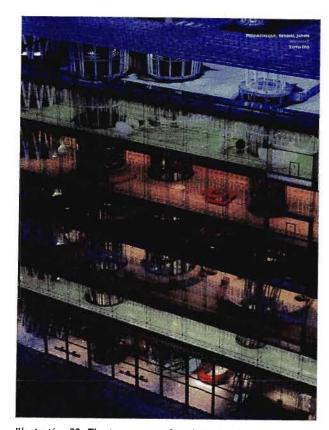


Illustration 22: The transparent façade is clearly visible at night (Webb 2001) $\,$



Illustration 23: Large, flexible spaces (Anon 2001)

THE LIBRARY BUILDING

The transparent nature of the façades displays the internal functions. Importance was placed on the internal design of the building, and these functions were to be advertised to the surrounding environment. The transparency would aid the perception of the facility being accessible to everyone and the symbolic value that information access is for everyone. High visibility into the building displays the inside from outside and allows views out. It also uses the façade as a visual advertising display, but the extensive glazing may also compromise the internal functions. Especially the areas that house printed material, where wall space is valuable and natural light needs to be controlled. (Illustration 22)

The design has very flexible, open, neutral spaces that arise from the architect's concept that we cannot design a library or similar building that is inflexible because of the continuously changing nature of information and resources. He argues that we must design for the unpredictable, for change and that it is not for the present that this building exists, but for an uncertain future. This is the attitude that is clearly necessary in the creation of buildings that handle information in its various forms, as its unpredictability and uncertainty has become apparent. However, the space does not speak as architecture inclusive of its function or that it was informed by it, but as a neutral space that could house any number of functions internally. (Illustration 23)

The same results are expected of these facilities regardless of the location. It was important that people visiting Sendai Mediathèque felt that they belonged and that they relaxed in the space that was created. It is necessary to encourage people to use the building and to gain something of worth from their experience. Barrie (1995:4) describes the scene on entering the mediathèque, '... it was packed with people: families in the children's library; teenagers in the video booths; students cramming in the library; old men sitting; shoes off...'. This sounds very positive and appeals to the goals that a contemporary library sets out to achieve. However, the photographs of the spaces do not exhibit any



Illustration 24: The plaza-like gathering space at the entrance to the building (Buntrock 2001)

contextual identity, and could be located anywhere. They are also very large, open spaces that would rather inhibit people from relaxing to the point that this quote speaks.

The mediathèque is located on an urban site, acknowledging public movement around the building by setting the building back from the street edge. This creates a plaza-like gathering or circulation space that stands harshly against the smooth glazed façade. (Illustration 24) It conforms to the general scale and proportion of its surrounding landscape, except for this expansive glazing. The image speaks the same language as other buildings in an average city. Orthogonal, high-rise blocks easily associate with Japanese modern city architecture. This does not support Ito's attempt to breakaway from conventional library architecture, since it merely swaps this style for that of a commercial CBD.

All internal spaces are generous allowing large areas for people to 'hang about', but these spaces are not cosy places that would encourage this. The entrance lobby is thus not a cellular space, but rather blurs into other functions that welcome the public into this building. This entrance includes an information area, shop and café. These functions are not exclusive to this building type. It creates revenue for a building that contains free public services, without compromising free use. As well as creating an atmosphere on the ground floor, that would encourage use. This grouping of books and café functions is taken from the retail industry where it has proved to be a good combination, both are associated with relaxation. Therefore, although it is not clear whether or not is successful in the library environment, it seems to be a concept that will be implemented more in future.

It is clear from the presence of the many information counters that this is a very necessary function in the mediathèque. These counters are highly visible from the main circulation routes but the architecture should lend to the clear navigation of a building. In such a large, open plan building, it could be easy to orientate oneself on a single floor, but would be confusing from the monotony of multiple storeys. The themed floors are therefore important in preventing this confusion occurring.





Illustration 25: The conventional layout of the book stacks contrasts with the intentionally free form of other sections (Anon 2001)

The various functions of this complex are stacked on top of each other, each function having a dedicated floor. Ito designed the building as large, neutral, spaces that have maximum flexibility. Thereafter, nominated designers designed these spaces individually, to contain the functions for which they were intended. Therefore, each floor intentionally has its own unique character that induces interest to the public users. (Illustration 25) The spaces are not only dependent on the functions housed and resources on offer, but the building itself becomes an attraction. The flexible nature of the spaces ensures a long lifespan. As needs change, the spaces have the possibility to redesign and adapt accordingly.

Three floors are dedicated to traditional library services, relating to resources of a printed form. This is broken down into small sections forming human-scaled spaces filled with comfortable seating. This includes a child's section and an area with newspapers and magazines. The book stacks stand out in their conventionality, compared to the more relaxed design of multi-media functions. The two floors above this have art galleries that remain large open spaces for changing exhibitions. A multi-media floor houses a theatre, audio-visual library as well as an arts and culture library. (Illustration 26)

The grouping of these public facilities creates an economic way of providing this variety of services, with regard to the built form, resources and staffing. It is a large, public resource that provides many services. Sendai Mediathèque provides the community with a state-of-the-art facility that welcomes the public into a world of resources, information and the virtual, apart from its context, and invites them to stay and use the facilities as much as possible. This scale of facility would not be practical to institute as a general model of contemporary libraries, because this requires such a large capital and public support.

CONCLUSION

Therefore, we can learn about the value of flexible space from this building, which has the ability to





second floor



seventh floor

adapt with the constant changes of information. This space has been successfully designed internally so that the flexibility does not compromise the building's use.

Another lesson would be the importance of awareness of the micro context and community, as well as the need for this facility to be of a global standard; that the function is to provide all people with equal access to excellent facilities. The changing of inequalities that may be present in society, did not appear to be a priority of the Sendai Mediathèque; however in the South African context this of great importance. In a global context, no one can ignore the issues that have been discussed: information equality. Therefore, it must be acknowledged that even in the context of Sendai this issue cannot be addressed and not ignored for the sake of a beautiful architectural element.

THE IDEA STORE

BACKGROUND

Tower Hamlets in London is located in the Docklands, an area that is undergoing vast renewal because of the increasing amount of business that has moved in. However, it still contains some of the poorest residential wards in Britain with high unemployment, low levels of education and inadequate employment skills. The government's agenda for improving these statistics is based on the renewal of libraries, life-long learning and community renewal. The government consequently established a team that would be able to explore how this strategy would be effectively implemented. It is important that the governing authorities can devolve power to the people who are closer to the information required since they are the 'experts' and understand the local issues at grassroots level and are therefore more equipped to offer appropriate, sustainable solutions.

The final proposal that was developed to confront these issues is in the process of being implemented, and called the 'Idea Store'. This would incorporate all the above objectives and renew the concept of the

traditional library in Tower Hamlets.

The most important step taken in order to establish the needs of the community was the conduction of public surveys. Where Toyo Ito designed the Sendai Mediathèque, as he believed appropriate, this library is founded on research specific to a local context. This gives greater validity to the final solution. It is also based on the global phenomenon of information and the state of society.

An advertising team was employed to work on refreshing the image of the new type of library and create a brand that would be attractive and advertise the concept to the client base. The changing role of the library from dictating the service it provides, to this client-orientated function, is a valuable shift.

The 'Idea Stores' are community-centred, public facilities on the high street that compete with the neighbouring shops for the public's attention and hosts functions and provide services that appeal to the specific community's requirements.

Idea Stores will be the first place that people will go to for information about any aspect of their lives and to gain skills. They will offer library and life-long learning facilities in an integrated and attractive way. They will become a focus of the local community. Anon (1999:4)

The concept includes life-long learning, which is a vital component in Tower Hamlets and in the global information society, to improve the education levels of the community and to provide the opportunity of integration into society, through skills gain. It sets out a vision based on a culture of self-improvement and a thirst for knowledge. Adult education is an integral and complementary component to a library.

There are seven 'Idea Stores' planned in Tower Hamlets that reflect these common principles, but each is designed specifically for the individual community at its location. They all have a lending library and classrooms with a combination of any of the following: IT stations, study spaces, cafés, art performance



Illustration 27: The Chrisp Street Idea Store in its high street context (Anon 2004)



Illustration 28: Transparency of façades allows contact with the context (Tower Hamlets Borough Council 2005)

and exhibition spaces and children's facilities.

Each Idea Store runs a dynamic programme of events, courses and activities. They include craft workshops, story telling and courses in languages, computing, managing your own tax and a variety of other skill enhancing courses. The Idea Store provides the facilities for these activities and the use of the classrooms and other spaces by others, is encouraged. Therefore, it provides the community with a multi-functional set of spaces that have high exposure.

It also has a café that challenges the traditional concept of the library that is devoid of food and drink and the perception that books are overly precious. Resources may be taken from the shelves and be enjoyed while sitting at the café. It also places the library in competition with the retail precinct in which it is located.

The Chrisp Street Idea Store was the second project to be realised in the planned series. It offers learning and library services according to the original concept. The facilities also include free internet access, courses and events, books to loan and CD's and DVD's are hired out for a small fee.

It is located in the Chrisp Street shopping area and was built over an existing shopping arcade. The architects, Adjaye Associates, have designed a building that stands out as a bold, glass object in a dull environment. It has the similar low-rise scale exhibited by its surrounds. The new building wraps itself around existing ground floor retail, which helps to integrate it into the existing fabric. (Illustration 27)

The extensive use of glazing contributes to the contrast between integration and a unique identity, since externally the glass is sleek and colourful in contrast to surrounding buildings, but internally the glazing allows uninhibited views and inclusion of the surrounding context. This glazing does not expose like the Sendai Mediathèque because the scale is smaller and the coloured glass restricts view. (Illustration 28)





Illustration 29: Community use of the spaces (left: Evans 2004) (right: Tower Hamlets Borough Council 2005)

idea"

Illusrtration 30: Bold signage and shopfronts are visible (Evans 2004)

APPROACH TO INFORMATION AND COMMUNITY

This building is designed specifically as a library and contains services that are needed in this particular environment. This Idea Store is about providing people with appropriate information to better their lives by gaining employment skills, therefore the space must be able to adapt as the community changes.

This is almost the opposite attitude to that of the Sendai Mediathèque. Focus was not on providing the most current information with as much variety possible, but rather focuses on offering those resources that the people would find useful and enough for the community to be uplifted. (Illustration 29)

The informing concept of the Idea Store is the context in which the facilities are situated and the unique client base that is found in Tower Hamlets. Chrisp Street Idea Store has depended on the exploration of the needs of the people for the decision on what services are available in order for the facility to be a success. The result acknowledges the combination of theory and pleasing architectural manifestation.

IMAGE

The image of the building appears to be a mix between a public building and an upmarket café, which is appropriate in this situation and speaks of the intentional use. The Idea Store was consciously seeking a new image to challenge that of a traditional library and to break the public's perception thereof. The result of this concept clearly states that it is a public building, but does not express the nature of its function architecturally. Instead, it reveals elements borrowed from retail, such as bold signage and attractive shop fronts that render the interior visible. (Illustration 30)

This creates a bold new image for libraries that is appropriate in its contemporary context and bridges a

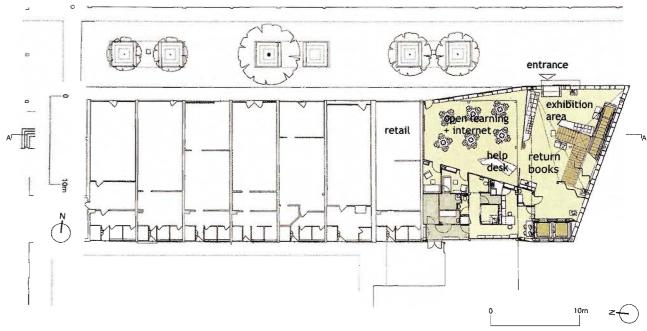
gap between a globalised society of information and a local community for which this facility must be useful. Integration into the existing fabric expresses its local connection, while the slick, glazed façade creates symbols of a global, aspirant society. The coloured glass used, definitely causes this building to stand out along the street edge. The colours bring a casual, fun element into the image of a public library and this façade creates an identity that can be associated with the Idea Store. The concept of allocating an identity to a building would work in a similar manner to the brand identities of the retail industry. People will create graphic associations with the function of this building, which creates an opportunity for it to become a landmark in the local context.

The image is not arrogant, but a balance of understated symbolism of the 'new' retail and traditional imagery internally to maintain comfortable familiarity.

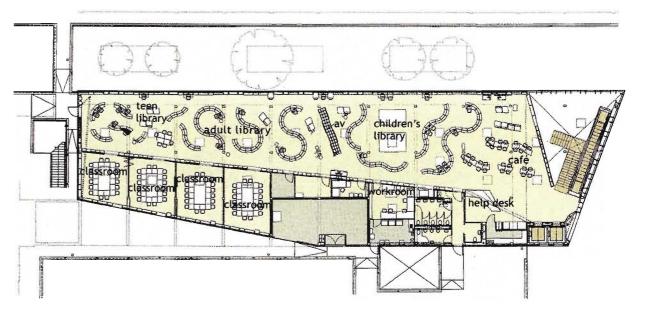
THE PHYSICAL BUILDING

The entrance is on the ground floor and opens into a large double volume exhibition and circulation space. Book lending is controlled from this point, as well as being the position of the help desk. This security control and help, forms the first point of contact with the public, two very important aspects in this context. Security is essential in an area where there is gang activity, as well as people who are unsure of how this kind of facility works. Resource control and the help desk facilities are vital for the services to be utilised successfully by the public who should not feel intimidated.

The ground floor houses the internet or open learning area. (Illustration 31) This allows free internet access as well as independent learning, and courses on computer use, to operate from this space. It is visible from the adjacent pedestrian street and advertises its use through the glazed curtain wall. The leftover space around the vertical circulation, help desk and control points is intended for exhibition. This space is awkward, but is used for the exhibition of new books, courses on offer etc. Navigation is







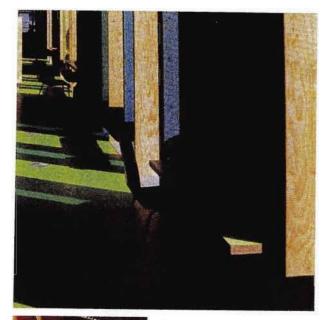


Illustration 32: Reading areas (Anon 2004)



Illustration 33: View from inside a classroom (Anon 2004)



Illustration 34: Interior of the book stacks (Tower Hamlets Borough Council 2005)

easy because of the simplicity of circulation and scale of the spaces.

The vertical circulation opens to a café space on the upper floor, encouraging the users to relax and utilise the resources in a comfortable environment. The position of the help desk allows site lines to most of the open plan library area where there is a child, teen, adult and audio-visual component. These site lines are extremely important in a public library where security is an issue and where staff is kept to a minimum. Comfortable seating is abundant throughout the space, encouraging people to spend time in the building. (Illustration 32) The linear arrangement forces the visitor to pass through areas not of interest to them. This mix does not work for adults having to walk past the children's area, which will be noisy and distracting.

Two small classrooms and a single large, divisible one are situated off the main library space. (Illustration 33) This keeps the library space narrow, which is useful for the division of areas into a variety of functions without the use of screens or other physical divisions. This also allows a maximum area of the library to gain from natural light. The classrooms may be used by anyone wanting to run a course or by the library staff for teaching. The proportionate area of the classrooms to library space shows the importance the Idea Store places on learning, as well as on the use of resources.

It is a simple, legible plan that contains a suitable library for the local community. It recognises the context for which it is intended and confronts the needs of the local people. (Illustration 34) This includes acknowledgement for the need of security and the value in designing a space that is attractive and is easy to use. It is obviously a part of the surrounding precinct and competes with the surrounding retail in a convincing manner.

CONCLUSION

Chrisp Street Idea Store appears to have met the objectives that were set for it: to refresh and promote the idea of a library, and to provide the local community with a locally appropriate resource. The driving force was that Tower Hamlets needed a facility that would increase the potential of the people and thus employment levels and reduce poverty, but no statistics are available in order to verify whether this final goal has been achieved.

The Idea Store, in Tower Hamlets has much in common with our local context in South Africa, where many people are still poor and uneducated, even though they live in close proximity to highly developed areas. The government has acknowledged the needs of this community and placed value and importance on the library and life-long education, as a process of uplifting the lives of this society. The concept that was developed is exciting and fresh and can be used to inform solutions that may be designed for our local environment.

SEATTLE'S NEW PUBLIC LIBRARY

BACKGROUND

The new Seattle Public Library was designed by OMA (Office for Metropolitan Architecture) in partnership with LMN, as a result of a competition win. The concept was based on the architects believing that libraries are blinded by insisting that there is only one form of literacy. They argue that libraries are threatened and that they 'don't reinvent or even modernise the traditional institution; they merely package it in a different way.' They also argue that, 'unless the library transforms itself wholeheartedly into an information storehouse, its unquestioned loyalty to the book will undermine the library's plausibility at the point of its potential apothesis' (OMA 1999:4). This was the concept that



Illustration 35: The new, sculptural Seattle Public Library (Webb 2001)



Illustration 36: Multi-media resources with book stacks visible in the children's section (The Seattle Public Library 2006)

OMA presented to the library's board: to create an information storehouse that could adjust to future expansion and includes public space that was seen to be essential in the contemporary city. The library would not become another place to just read, but become a social centre with multiple responsibilities. Technology was not seen as a threat, but rather as a way to realise the ancient ambitions, 'totality, completeness, dissemination and accessibility'.

The resulted building is very sculptural and appears to be a deconstructed form of the typical American high-rise. (Illustration 35) Joshua Ramus (OMA) describes the form as being boxes pushed in and out according to height restrictions and setbacks according to the zoning codes. The structure is a combination of steel, glass and aluminium as a diamond shaped grid. Expanded aluminium mesh is sandwiched between glass panels to reduce heat and glare and the areas that catch more sunlight. In this way, the idea of a glazed form has been made appropriate to contain the function of a place where light needs to be restricted.

APPROACH TO INFORMATION AND COMMUNITY

It is clear through the functions and services on offer at the new library that the community's needs and identity was at the heart of the new design. As the name suggests, the City of Seattle did not see the need to break away from the tradition of public libraries, but celebrates it through the increased amount of traditional book lending and systems employed.

The facility has included many multi-media resources and provides great variety in the methods of gaining information, though, and can only be considered a part of the information society. (Illustration 36)



Illustration 37: The re-vamped image of the interior (Webb 2001)



Illustration 38: Comfortable lounge-like spaces (The Seattle Public Library 2006)

IMAGE

It is the image of this service that has carefully been revamped. As a public building, it has made a statement and become a landmark. This has attracted tourists that account for 35% visitors and has caused checkout numbers to increase by 65%. If success of a library is thus measured, then it is indeed, and attracted people to utilise information in a contemporary library context.

As in the case of the Sendai Mediathèque, the expression is 'high tech', but internally the image is soften through use of timber and colours that create a balance in the architectural expression, between symbols of contemporary global society and a unique community facility. (Illustration 37 and 38)

THE PHYSICAL BUILDING

However, Such (2005) states that on entering the building he was disorientated and had to explore the library before becoming orientated enough to gauge how the library functioned. Signage is poor and it is necessary that librarians aid visitors in every section of the library.

Apparently, the public's comment on the library building is that they were disappointed by the lack of initial visual impact: the ceilings and columns are bare concrete and the floors are finished with brown polyurethane. The circulation stands out boldly against this, as escalators and lift interiors are bright yellow. (Illustration 39) Although it is up to the architect to decide on the most appropriate manifestation of the built form for the public library, this comment is an important statement about the fact that they are built from public funds and it is important that the public be provided with a building that they support and appreciate.

This building certainly makes a statement about the change in the image of a library. It has improved the

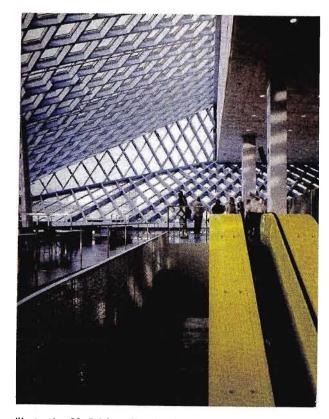


Illustration 39: Bright yellow highlights the vertical circulation (Webb 2001)

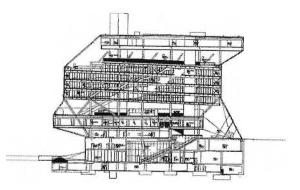


Illustration 40: The unconventional section of the library (Webb 2001)

public's perception of this service and therefore the building's usage. However, it is not clear that this extreme architectural expression and use of materials were necessary to achieve these results. (Illustration 40)

CONCLUSION

The novelty of the 'slick', new library's impact might exhibit the short lifespan that other elements of the information age have. The public library must be sustainable: through its theoretical principals and in the built form, by remaining adaptable. OMA's conceptual approach accurately reflects the state of libraries, but the built form is more complex than it appears necessary. All these examples of new concepts in library design require time to evaluate sustaining success, even if the only criterion is its ability to remain flexible and adaptable.

All the precedent that has been examined has a similar architectural expression: they are orthogonal forms with transparent, glass façades. This is far removed from the architecture associated with traditional libraries. They spoke of solidity, high education and classic orders. Libraries have not necessarily retained the classic styling, but they are guided by practicality associated with function. E.g. limiting light into the building is important: excess reduces the lifespan of books and causes discomfort when reading and working on a computer.

The image of the 'glass box' does not communicate the practical functions of a library, but expresses the contemporary developed world, where such architecture is common. It also speaks of globalisation, which is the melding of all cultures and societies into one. Thus, it tends to become a neutral society, devoid of particular cultural influence. This prevents the identification of a society, but in turn exposes them as a global phenomenon. The contemporary nature of information is part of this trend, and this gives justification to the new 'libraries' being expressed in this manner.

The local, public facility that provides a community with the services needed, concerning information and knowledge, must essentially be designed for the specific place in which it is located, and not for a global market. As I have stated, identity is fundamental to the well-being of the individual and, therefore, to a community. Thus, a library's architectural expression must be appropriate to that environment, as well. It cannot be a 'neutral' space that speaks only of globalisation and denies a specific identity of a society. Without this basic sense of belonging, an individual would be ill equipped to relate to a larger community, especially regarding the exposure to information.

If the built form lacks local individuality, it will not be offering the user the service required. The function of the library is to provide public information services, which would vary in every community. Although the buildings studied appear to have been successful in their local context, the architectural expression is guestionable.

However, one cannot renounce the importance that the global information field plays in the local library. Therefore, the design of a library needs to take into consideration the global importance of the local community in the global arena, without forgetting the micro-context, and an appropriate articulation of both.

CASE STUDY IN A LOCAL CONTEXT

INTRODUCTION

The objective of the case study is to conclude what is required from the public library that would service the community of Hillcrest, in both function and form. The theoretical framework and precedent examination form a foundation to this part of the study. This case study is chosen as an exploration of a specific community that would reflect a general trend in South African libraries and society.

KwaZulu-Natal Province exhibits all the typical characteristics of a society dealing with the concept of the Information Age. However, South Africa, is also dealing with unique issues. The legacy of Apartheid has left great inequality in societies and we find clear definitions between communities of the information rich and poor. Libraries are indicative of this gap: the former 'white' areas have well-established services, while all other former communities of other races, have until recently had nothing.

The library service in KwaZulu-Natal is well-established; Durban's first public library was established in 1853 (www.durban.gov.za 2005). Even though names, policies and objectives have changed, it is still an important department that is gaining renewed focus.

THE STUDY AREA

KwaZulu-Natal is serviced by the Provincial Library Services, with exception of the area formally known as Durban Metro, which was an independent entity. When eThekwini Metropolitan was established, extending beyond the former metro's borders, the jurisdiction between the Provincial and the eThekwini Library Services became blurred. (Illustration 41)

The area that will form the focus of this study lies outside of Durban's previous boundaries, but within the new eThekwini border, an area defined as the Outer West Region. The region includes areas that were previously 'white', that are well-developed and understood to be upper income, and areas that lack

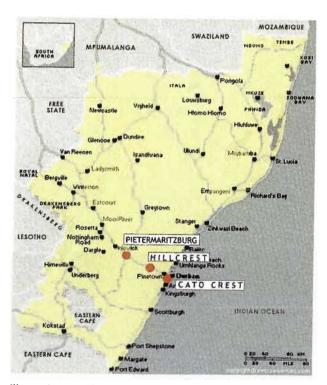


Illustration 41: The case study libraries locations in KwaZulu-Natal. (www.sa-venues.com 2006)

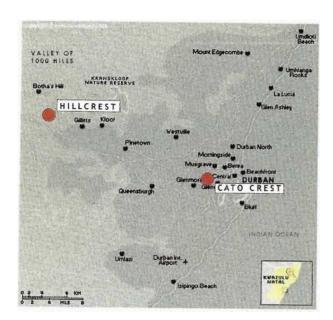


Illustration 42: Location of eThekwini libraries studied within the municipality.

(www.sa-venues.com 2006)

development and were previously classified as 'black' and 'indian'. This is indicative of the typical situation in South Africa, that depicts the close proximity of societies of great inequality economically, socially and thus also in regard to information. (Illustration 42)

LOCAL LIBRARIES POLICIES AND SERVICES

In KwaZulu-Natal the libraries that are long established in the developed areas of eThekwini Municipality are under management of the Provincial Library Services and new libraries that are being established in less developed areas are under the jurisdiction of the eThekwini Library Services.

Provincial Library Services is a sector of the Department of Arts and Culture in KwaZulu-Natal Natal Provincial Government. Their vision is, 'To ensure that all people in KwaZulu-Natal have free access to libraries and information services appropriate to their needs, in order that the empowering role that these services can play in enhancing all facets of people's development becomes a reality'. It is a vision that understands the social responsibility that libraries have, especially as an institution that is involved in the government, whose responsibility is to create equal opportunity for people under their leadership, in a democratic society.

The library service's function is to provide the infrastructure and facilities necessary for a library to operate in its required manner. The library itself is owned by the local municipality who operate it and provide funding for the running costs and maintenance. From this point an advisory service is supplied to local municipalities and the government body controls the policies and provides material. Therefore, each library is an independent entity that is dependent on the librarian, for its success. The librarian is responsible for choosing which resources and what facilities will be available in their library. The government relies on the librarian to interact with the local community and to establish what the particular resource and information needs are in the community. Neither governments, nor

corporations rely on bureaucratic or formal rules to organise people over whom they have authority in the information society. Instead, they rely on decentralised power and depend on the people to be reasonably self-organising (Fukuyama 1999:7).

The position taken by library services is to maintain a general standard of libraries on a provincial level, and to provide a support system to them.

eThekwini Library Services operate in a similar manner to that of the Provincial Library Services. However, eThekwini does control the library funding and maintenance because it is at local municipality as well as provincial level. eThekwini Municipality recognises the library's social responsibility and has a strategic plan in regard to what the Library Department should stand for and provide to society. Many new resource centres and libraries have been established in places previously lacking. However, this is often dependent on funding from outside government jurisdiction and this gives a boost to the budget allowance for libraries. It generally makes the difference between a facility that provides a minimal service and one that provides the community with a service that fulfils their information needs.

eThekwini Municipality (2005) states that the immediate purpose of their Library Department is:

...to enable all citizens to enjoy a culture of reading thereby widening their horizons and empowering them to:

- access all library resources and activities within a conducive environment
- improve literacy levels
- make informed decisions
- experience the arts and our cultural heritage
- improve life skills
- contribute to the socio-economic and political development of the unicity

To enjoy a culture of reading which will, in addition to widening their horizons, enable them to decide on and advance in their chosen fields of specialisation and leisure

- provide a window of opportunity to desired knowledge and information to empower the people to make informed decisions and enhanced life skills
- that the user experiences a higher quality of environment in which to work
- they enjoy an environment conducive to study and reading within the study halls
- enjoy and learn from life-enhancing library events and holiday programmes
- enjoy and experience oral, audio and visual programmes/facilities

To support the development of a culture of reading

- through ensuring access to information to be able to solve daily problems
- that people enjoy the experience of reading
- to gain knowledge
- to enhance life skills
- to make informed decisions
- that people are information-literate
- to use information to create new ideas
- the capacity of people to navigate information tools
- experiencing encouragement and support in developing and maintaining the skill of reading and information retrieval

(www.durban.gov.za 2005)

This is quite a comprehensive list of aims, but the library services, as controlling bodies, appear to have clear strategies with regard to libraries for a contemporary local context. This context is in need of a vision that would focus on reducing social inequalities so prevalent.

All the vision and strategic planning of the state departments, point to future goals of the provision of facilities to encourage growth and empowerment: positive consequences that the communities will enjoy, because of these facilities. This is evidence that the library service is still in a process, slowly achieving goals that have been set out. Even in an information age where everything is immediate, the

attitude of the library departments is one that aims to bring stability and growth to communities. It acknowledges that the service does not aim at keeping up with the advancement of information, but to aid people with their specific information and knowledge needs. They are not focused on the globalised society, but on the local community.

This is quite a different approach to that is alluded to in Sendai Mediathèque, who has focused on the global aspect of public libraries provision of services and is keeping up with technology. The Idea Store is similar to the study area, where the innovation of technology is not the focus so much the needs of the community. This is a more appropriate method, because with correct design decisions, the library will be able to change, and technology upgrade becomes a subsequence. The Seattle Public Library tends to be located somewhere in between these two expressions, where the architectural expression speaks of the contemporary and the globally focused, while their services remain grounded in the society to which they belong.

This means that local libraries vary with regard to the specific facilities and services that they provide. Many libraries in outlying, poor areas become an academic library as well as recreational: supplying text books, study guides and teaching material that contribute to the local school's resource stock and aid students with resources they otherwise could not afford. Other libraries even stock toys that they loan to local pre-schools.

The library services state that the library is a support to the educational system, but does not aim to become a part of it. Rather it provides facilities in which education can occur, and a place that acts in partnership with the educational system. It has become a very necessary part of a librarian's job to educate the community about the library as a public institution and to inform people about its use. Education is needed to ensure that materials are used correctly and returned timeously. This is an example of the complexity that the new library's service faces. In a well-educated community, it is

Cato Crest **Outfall Sewers** Cato Crest Multi-Purpose Centre

Illustration 43: The library is located centrally to Cato Crest. $(\mathsf{CMDA}\,\mathsf{2006})$

taken for granted that the population would know how to use the library service and the librarian's job becomes relatively simple. In an area where the library becomes an important catalyst for the education of its people, it is a foreign concept that needs to be learned and the dynamics of the librarian are important.

A library is a public building, free to all; however, the library building is often the best building in a local community and does not always give the impression that anyone can use it. It can be intimidating to the uneducated person, but these people require its services the most. Therefore, the library services have become less focused on statistics reflecting numbers of books issued, and more focused on the amount of people populating the library, which will ultimately translate into greater success.

A LIBRARY IN CATO CREST INFORMAL SETTLEMENT

A new library built in eThekwini Municipality is Cato Crest Public Library. It is located in the centre of Cato Crest Informal Settlement, a part of Cato Manor. It has become home to some of the poorest urban people, who settled in the area through mass invasions in the late 1980's and early 1990's. This area had been left vacant since the 1950's and 1960's following apartheid forced removals. Today, it is extremely densely populated and the government with the Cato Manor Development Association is in the process of formalising the housing and providing infrastructure.

The complex to which the library belongs is situated on the highest point of the steep terrain and includes a community hall and a school. (Illustration 43) It is intended to uplift the community through providing good public facilities and encouraging the high level of community organisation, citizen action and participation that already exists in this area.

This is becoming a common method of locating libraries in areas lacking in infrastructure. Each building provides support to the others, preventing duplication of services. A centre is also established that can

anchor the surrounding future development. eThekwini Library Services provide funding and material for this facility, while the librarian is in control of the everyday running and the services that are made available.

The librarian at Cato Crest is interested in encouraging social growth and making sure that the library would contribute to this. Cato Crest Library provides a printed media service that includes books and periodicals, as well as stocking music CD's, DVD's and video cassettes. It is also understood that a large amount of the population will not have the facilities at home to make use of these, and televisions and listening devices are available at the library. Other services include public computer workstations with internet access as well as providing the community with business and entrepreneur information and a fax and printing service. A study room and activities room is located on a split level below the main floor, enabling educational courses and providing students with valuable study space. The opening hours of the library are designed to be most useful to users: the study hall is open until 11pm or 12pm and is open 24hrs during examination periods. This indicates a combination of facilities that are designed to be appropriate to this particular community and it is well utilised.

This also portrays an attitude that is service focused and that indicates that it is important that the community is provided with something useful. Opening times for libraries have changed significantly with this attitude shift and with the need for libraries to work economically.

Although the catchment population is about 25 000, there is only membership of about 3 500. This does not reflect the number of users, which is significantly higher, as some residents are not able to become members due to a lack of identity documents. The success of this facility is therefore determined by the visible improvements in the community and by the amount of people who use the library in any sense.

I visited the library at its quietest period before schools finished for the day. The only visitors were

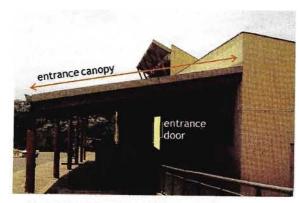


Illustration 44: The large sheltered entrance.



Illustration 45: The issue desk with views into the whole library.



Illustration 46: Lighting and ventilation methods are visible in this image.

young men reading newspapers. Yet, it was obvious that the community responded well to its presence. Informal traders surrounded it and there is good report of service utilisation. During informal discussions the librarian spoke enthusiastically about the facility's use and impact in the community. It was a positive and dynamic approach that is proving a success.

The location on the top of the hill, the highest point of the community speaks directly to the central role that it wants to play. The scale immediately separates it from the surrounding small scale residential buildings and locates itself with the other public buildings. Alexander (1977: 164) states that community facilities that are scattered individually through the city do nothing for the life of the city and that people seek concentration of activities. The library is therefore thrust into the public life of Cato Crest. The architectural expression again emphasises the community focus: the entrance is covered by an oversized veranda that welcomes people to engage with the building from the exterior and shelters. (Illustration 44) The form of the library is simple, with large open plan, column free areas that may be flexibly arranged, enabling librarians' uninhibited sight of the whole area, with the issue desk situated in the centre of the rectangular plan. (Illustration 45) The interior is completely invisible from the exterior, which is probably the result of the prevention of books being passed through low level windows. However, this results in a visually impermeable building with a small controlled entrance, which is not particularly welcoming. The small amount of low level glazing invites many people as an attractive reading space and it is a pity that security measures restrict the occurrence of these spaces.

Glazing is therefore all high level and limited because of the large span in relation to the small area of window. The space is predominantly artificially lit, which makes the space quite dull, yet is sufficient. (Illustration 46) There is no air-conditioning, with all glazing opening sections and ceiling fans in abundance. Although, on visiting the library no windows were open on an extremely hot day, the space was comfortably cool with the few people inhabiting it.



Illustration 47: Architectural details.



Illustration 48: A map of Pietermaritzburg shows the central locale of the library in the city centre. (www.pietermaritzburg.co.za)

The building is simply expressed in function and form, with no frivolity, yet is pleasing in the choice of the elements that create this simplicity. Materials are carefully chosen; the timber rafters, frosting on glazing and decorative security bars and built in benches add a human element to an otherwise uninteresting building. (Illustration 47)

ADDITIONS TO THE NATAL SOCIETY LIBRARY, PIETERMARITZBURG

The Natal Society public library is the main library in Pietermaritzburg. (Illustration 48) It is well-established and has seen great change in the city. Like all cities in South Africa it was a white-dominated urban area that, since the abolishment of Apartheid, has seen a demographic change. As other cities it has also seen decentralisation from its CBD. There is investment aimed at the revitalisation of the city centre and the library is becoming a part of this.

The visitor profile at the Natal Society Library has altered and grown significantly and this became the reason for major additions and renovation to the existing building. Provincial Library Services together with the library staff saw the need to add a new children's wing and study space onto the existing building.

As the head librarian states, it is the children who are becoming the most important and largest component of their users. The library is used extensively as a reference source for education and as a study locale. The librarian pointed out that in the South African context, with a large illiterate and uneducated population, the focus should be on the child. It is foreseen that this city library would develop into a facility solely for children in the future. The library does not have the capacity to educate and thus can only contribute to the alleviation of inequality in South African societies by providing people with resources that they require that facilitates an educational process. He also argues that that it is important that libraries be located where differing societies will use the service equally. Middle and upper class societies will request different resources to those known by people disadvantaged from

information access. The societies compensate for each other and provide a balanced and valuable range of resources. With this in mind, it is important to note the practicalities of allowing all people to feel comfortable; not chasing away the bourgeois for the sake of the proletariat.

These intentions are in the process of being translated into a built form. The new wing will include, among other things, a study area, reference section, children's lending library and an auditorium. It resulted that the study area had to open before the completion date of the whole project, due to the demand for this facility. The auditorium does have some planned use; however it is unclear to what its function will become: it will be a useful, high profile resource to the city, but is not essential, revealing levels of priority of service provision in public libraries.

In the context of South Africa, a public library has to have a long lifespan, due to economic constraints. This encourages the need for the building to be practical, flexible and adaptable.

The interesting result of this extension is that since the activity became evident, other investors have become interested in the project and the surrounding area. It has acted as a catalyst to gardens and other inner city upgrades.

It is obvious that the Natal Society Library has a captive market because of its central location near to main traffic nodes. With any addition of library area, there is no doubt that it will be filled to capacity. The dilemma that is faced is the maximum use of the resources and the provision of appropriate material. This occurs in existing libraries, they have a large collection of material that is not used and the need to upgrade and maintain an effective service. With the inner city upgrades and the central position of the library, it puts it in a good place to remain a public facility that contributes to the city centre, but it is also reliant on the staff, of both the library and library services, who are passionate about its future, even though it is so unpredictable.



Illustration 49: The new wing standing out against the existing.



Illustration 50: Visual connection with the context.



Illustration 51: The interior spaces of the new wing.

The existing portion of the library dictates an institutional image of a bureaucratic nature. It is uninspiring and does not look like a library, but old government offices. That the new component of the library wants to express the complete opposite is clearly expressed. It stands apart from the existing building in colour, form and planning. (Illustration 49) The external curvilinear form of the new wing makes reference to an African context through the use of traditional architecture as precedent. This formal concept is carried no further in the choice of materials, which remain contemporary. The paint colour of the exterior refers again to the local context where red brick is synonymous with Pietermaritzburg.

Internally the spaces are airy and well-lit, creating inviting, easy spaces. The open plan nature allows good sightlines; however, these are slightly inhibited by the curves. The extensive use of glazing allows continual connection with the existing building, therefore not denying the library's history, and the surrounding context through views into the city. (Illustration 50)

The image of the library is carefully revamped through this new wing through the use of form and light. Light is in abundance, through natural and artificial sources and is enhanced through light-coloured furniture. Floor to ceiling glazing and narrow spans take full advantage of natural light, but this has come with a heavy radiation toll. Heat levels are high near to the glass and air conditioning has become a necessity. The spaces become very crowded at peak times which justify the need for mechanical ventilation, however there is no option for natural ventilation during quieter periods. Artificial light is kept to a minimum is mostly needed at night and to compensate in dull weather. (Illustration 51)

The new wing has certainly brought new interest to the existing dull building, through the light, bright spaces and the relief of crowded spaces. It is sensitive to its context, but less so to environmental issues. The city library typology calls for carefully controlled spaces because of crowding and the large spaces required, and thus can be explained. With the completion of the new portion and renovation of the

Hillcrest
Pre-Primary
School

Hillcrest
Preparatory
School

Hillcrest
Primary School

Illustration 52: The library is located just off the main vehicular routes.



Illustration 53: The external expression of Hillcrest Library.

existing, a visit to the library promises to be a much more pleasant experience that it was, although even with this, it will probably remain over-used due to the lack of good, decentralised libraries that should relieve pressure from this main city public library.

A SUBURBAN LIBRARY IN HILLCREST

In the past few years, Hillcrest has seen unprecedented growth. It has always had the atmosphere of a small town on the boundary of rural areas, but now is developing into a large urban node. Most of the growth has been in the form of residential development, both upper and lower income in nature. This has in turn sparked off commercial growth, especially in the form of retail centres.

A public library was first established in Hillcrest in the 1950's and the current facility was opened in 1975. (Illustration 52) Throughout its history, it has been continually expanding to accommodate an increasing population. It is located in a complex that contains other municipal services including engineering services, town planning and a hall. Although this is a good combination of services, that compliment each other, it has no exposure and does not relate to the town centre.

This distance is not ideal. The lessons we have learnt through the study of contemporary library facilities indicate that they should be situated within the shopping district. Hillcrest has a large shopping precinct, which attracts passers by. Although the library is within walking distance, it is not within eyesight. This prevents convenient use of the service, as well as limiting the amount of people that would be exposed to this facility. However, it is close to all the primary schools found in the area and schoolchildren find it easy to access.

The building is constructed in a style that blends into the residential context, with pitched roof and orthogonal plan. (Illustration 53) The surrounding architecture is of a typically suburban nature. The

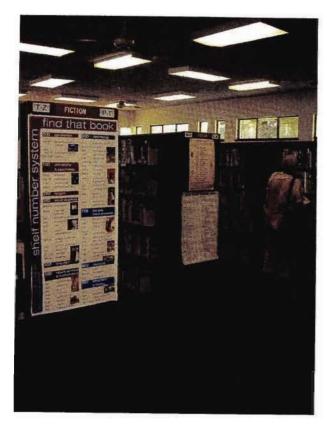


Illustration 54: The dull internal spaces.

rectangular plan does not work well to allow staff to have sight lines to all parts of the library, nor does it clearly define different sections of the library. The length of the rectangle has given reason for there to be an additional fire escape in the newest portion of the building; this has caused a security risk and is locked permanently. This indicates the importance of an economic form that will practically address the security issues relating to a library.

The shape and distribution of the windows restrict natural light and the building is reliant on artificial light. This is preferred over too much light and windows are carefully positioned and designed to allow bookshelves to be placed in between them and allow views out. It creates a dull, internalised space that is enhanced by the dark coloured furniture. (Illustration 54)

The entrance is not clearly demarcated, and on arrival, you could easily be confused about being in the correct place. The entrance to a public building is extremely important. It must point out the public accessibility of the facility, and must appear welcoming.

The library was intended to service the immediate community of Hillcrest. This region is known to be a high-income locale and was formerly known as a 'white' area. Therefore, the library is well established and was designed to serve a community that was educated, and familiar with the library resources and its systems of use. However, the evidence of low income housing being introduced into the area, and the use of Hillcrest as a node from which transport operates, to various other centres, indicates a different and much larger public base for which a library in this area would operate. It has an increased amount, and variety, of people who make use of the service, but as the librarian states, they are often telephoned in order to get directions.

The library, although dull and old-fashioned, is still busy and well used. Many children use the amenities after school, as it is within walking distance from many educational facilities. Children are then

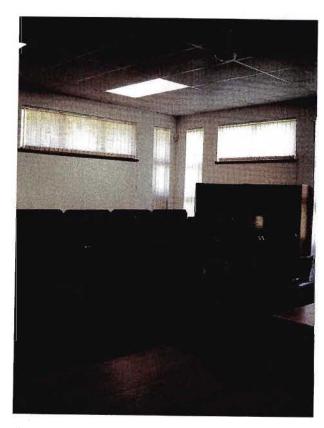


Illustration 55: The new addition of a study space.

collected from here by parents or make their way to other after school activities.

The newest alteration to the building is the addition of a study area. (Illustration 55) The demand for this function has amplified with the increased amount of students from the poorer, outlying areas using the facility. This is the only other service available apart from the traditional printed services. The librarian explained that there is plan for the installation of computers for public access, but this is not a priority.

The Hillcrest Public Library is operated by the eThekwini Library Services, but construction funds still come from the Provincial Library Services. This has caused some tension and discord over control and responsibility for this libray, which must have some negative impact on the success of it. Although it functions adequately, it reminds me of the existing Pietermaritzburg library that has lost its lustre and is no longer an attractive experience; it certainly seems to be asking for revitalisation that would break the stale image.

CONCLUSION

The libraries examined in the case studies have a lot less flair and dramatisation in their architectural expression than the precedent studied, but are a lot more grounded and more obviously integrated with their context. It reflects the state of South African society and the lack of extravagance afforded. They are more closely linked to the concept of the Idea Stores than the mediathèque.

South African society is showing great awareness of the important role that public libraries play in improving equality between people, yet this is only in certain population groups. The government have made vast changes to their policies and there are many people who are dependent on the public library for their education or to gain use of resources otherwise unattainable. For the middle and upper class, a

library is not highly valued.

The case studies show the focus that South African libraries are placing on the provision of facilities to previously disadvantaged communities and therefore correcting the previous unequal distribution, as with Cato Crest Public Library. These libraries are service and community focused and are practically and economically designed, yet still portray an attractive image that invites people and they enjoy an increasing number of users.

The lack of focus in existing libraries has left them in buildings that lack interesting architectural expression and do not function adequately for the growing demand. The Hillcrest Public Library exhibits this poor image that would not attract new visitors who are not reliant on its services.

The public library is beginning to gain renewed focus in South Africa and it is foreseeable that it will be an increasingly prominent public building. If the trend of using architects who carefully consider appropriate architectural expression of these buildings continues, they will also become a valuable example of interesting public architecture.

CONCLUSIONS AND RECOMMENDATIONS

This study began with a historical account of libraries since they occurred in ancient civilisations to the Modern examples. The concept of the library began as an elitist institution that was only accessible to royalty, scholars and religious leaders. Resources were highly valued because of there difficulty to produce and be re-produced.

Through societal and technical change, the library transformed into the facility that we are familiar. Government has adjusted from a capitalist to democratic system, which encourages education and access to public libraries. The Industrial Era brought the innovation of the movable type that made books cheaper and more mobile through mass production.

This affected the physical expression of the library building, which was no longer imposing, but through Modernism became human-scaled and user orientated.

Information and society continued to change, up to today, an era known as the Information Age.

We find that today information has become the common form of global communication. Consequently, equality of information in people's lives has become essential and has caused a change in the communication methods that are necessary. This change is both continuous with historical development of communication, and breaks away from all that we find previously existed. Information has also greatly affected society's economics and politics. In the post-industrialist era, information has affected the economic markets where information supply is essential. Business is now service orientated where previously it was focused on service and everything depends on the availability of information for its survival. Information has entered the political arena because of the inequality it has formed in society. This inequality, economically and socially is enhanced with the increase of information and the advance of technology.

Information systems include those of a formal and informal nature. Contemporary society has become more reliant on formal systems, including education centres and libraries, and informal systems of information transfer have become less useful. Technology has become intertwined with information also causing people to depend on its existence. Goldsborough (2002) states that information has the ability to cause or cure information overload.

Therefore, a gap exists between people that have continuous access to information through the availability of technology and those who do not have these resources to gain information or knowledge. The public library has the potential to reduce this expanding gap, because it is a public facility that deals in information and its collection, dissemination and transfer, with unlimited access.

People have a need to better themselves, which comes from knowledge enrichment and therefore from gaining information. This is not a primary need, such as water, but is becoming more essential for the survival in the information society. There is also a call for people to belong to a social group and it is from this community that they acquire an identity. It is only when a person gains this sense of belonging and ability to better themselves that they will make a valuable contribution. The definitions of primary and secondary needs have been blurred because of contemporary society's reliance on information. A society dependent on information requires a people who have a culture of continuous learning and the attaining of knowledge, but if this is not happening, a great inequality occurs in a society and therefore a lack of cohesiveness. People are left either included or excluded in the local community and on a global scale.

The information society has created a paradox between the global and local context. Information has formed an efficient global community that facilitates easy communication, worldwide. This has developed the global economy and has enabled masses of information to be accessible to individuals on this level. On the other hand, it ignores the local environment and individuals in a micro context. It

means that people, who do not have access to a global network, remain marginalised. '...Globalisation does not integrate everybody. In fact, it currently excludes most people on the planet but at the same time effects everybody' (Castells 2001:10). This information poverty is disadvantageous to people, since benefits of information access may be financial, professional, social, educational or just a matter of personal convenience.

The state recognises this essential need for information leading to access of certain information now being a right. Any information that is needed for people to exercise their personal rights must be publicly accessible. This political element of information, dictates that information is an essential part of a democratic governing system.

This political component states the importance of a facility such as a public library in a society. The primary function of a library is to fulfil the public's information needs, through the free access to information resources. This places libraries as a forerunning facility in the information society, especially because it has the ability to improve societal equality. The library is the only public facility that facilitates open, free public learning and information retrieval, which is vital to a contemporary society, centred on information.

We live in a society that seems to have lost the recognition of the value of the public library. Either it has been through disillusionment of what services and resources they offer, or the easy access of those resources and services from another source. However, they have become central facilities in undeveloped communities where they provide valuable information and social space.

A contemporary public library needs to be a living, dynamic institution, not one that is dull, stale and old-fashioned. It is debated whether a library building is still required in this digital age, but a library is much more than just a store of information and resources. It also facilitates learning about the

resources, methods of information retrieval as well as provides the community with a place to relax. Libraries are not only a place where books are collected, but they confront the need to become a multimedia, multi-dimensional centre that meets the needs of the community.

They also need to be carefully designed according to environmental considerations. Noise needs to be controlled, although absolute silence should be avoided. Indirect light is preferred and orientation, natural and artificial light must be controlled. People must feel comfortable and ventilation and temperature must respond accordingly.

The library's image must gain value for its location. It must be a civic, public building that advertises its use and intention. The image should draw reference from retail architecture that also depends on information and attracting customers. The library must remain contextualised and above all keep focus on their user base and the community's information and resource needs.

This study has examined the Sendai Mediatheque in Japan, the Chrisp Street Idea Store in England and the new Seattle Public Library. These were used to gain useful criteria that a public library needs to satisfy in order to be a successful civic entity. A public library needs to be designed for its specific, contemporary context to be successful. This refers to the global nature of the information society and that a facility dealing in information needs to be appropriate to deliver this to the community in which it is situated. This must be balanced with acknowledgement of the local context and the immediate community in which the library is situated. It is a public facility and therefore must be publicly accessible and identifiable as such.

It is important that the physical location be appropriately chosen. The concept of the 'Idea Store' indicated that it is important that a library be situated in the shopping centre of the community. It makes the facility convenient for the public to access and in today's environment a library competes with

retail and other attractions that want people's time and attention. It indicates the importance of the image of the built form. The architectural expression must be fresh and not refer to the architecture of historical libraries.

Information is continuously changing and its future is uncertain and unpredictable. As a result, the architecture that houses a library must also be flexible. It must be able to maintain its effectiveness and allow for future growth and development. The Sendai Mediathèque exhibits this characteristic, which was a driving factor in its design.

KwaZulu-Natal has a well-established library service on a provincial level as well as in the eThekwini municipality. These government departments control the standard of service that is provided on a local level. They recognise the social responsibility that libraries have in contemporary society and in a local context. It is seen that life-long learning and libraries play an important role in fighting poverty and encouraging individuals to explore their own potential, build self-esteem and confidence. This empowerment has been given more focus than the idea of providing a facility that keeps pace with the ever-changing and advancing information revolution.

The individual services of each local library depend greatly on the head librarian, and for that reason they vary greatly. This is a logical method of leadership since the library's facilities must be designed specifically for the local community and it depends on the needs of the local people as far as information, knowledge and resources are concerned.

The Cato Crest Public Library and additions to the Natal Society Library were examined as local precedent of differing characteristics. The first, a new library in a previously undeveloped area; the latter, an existing building adapting to a changing city context. These were used to establish issues faced in the South African context: firstly, accessibility that aids societal equality. Of a community, it is

found that it is the child that requires the most focus in public resource provision. Opening hours are an important part of economic provision of library facilities and these public facilities are found to contribute to an urban wholeness.

The symbolism found in the civic location of the libraries is important and it is clear how the library created a catalyst in the community to other development. The desperate need for the public library in a South African community is obvious by how congested and over utilised the spaces are.

The focus study area is a growth node in the Outer West region of eThekwini Municipality. Hillcrest has shown unprecedented development recently. It is becoming an important urban centre in the Outer West region.

The existing library was obviously built to service a very different community to the one that it now serves. The larger, more varied catchment population is made up of both residents and commuters. The needs are different, but the library is still a small building that blends into the surrounding low scale residential architecture. The internal spaces are not well defined and lighting is dull.

It is clear through the study of the three local libraries that city libraries are gaining attention, only after areas that previously lacked these facilities gain a public library. However, it is clear that even in the suburban regions where libraries have existed for a while, that all existing libraries are not satisfactory and are not providing a sufficient service to the changing communities in South Africa's contemporary context.

This study has explored aspects of information and its affect on society and therefore the consequences that are manifest in the built form when delivering information to the public.

The inequality of society that has been discussed is visible here and a public library may be designed to be appropriate to this context and project this facility into the position it should take in contemporary society to perform the public good for which it is intended.

Internationally, there is an increased excitement about the future of public libraries. It is a growth industry that has redefined where its role in lifelong learning begins and it is playing a much more dynamic role in community development. The use of library services and community demand for the programs associated with community learning and new skills development has generally increased. Libraries are an integral partner in the lifelong process, not a competitor with other learning facilities. Governments are identifying libraries as key access points to ensure fair access to information. Libraries are taking a more professional approach to marketing. (Clifford 2003:121)

The public library has not been utilised to its full potential in our contemporary information society. This study concludes that this facility must be understood as far as its potential and position in the information revolution describes: to reduce social and economic inequality and increase the knowledge of a nation that empowers people to live in their own potential.

There is much to be gained by placing public libraries at the heart of the information society and too much to lost if we don't! Batt, C (1997:218)

BIBLIOGRAPHY

- ANON. 1999. A Library and Lifelong Learning Development Strategy for Tower Hamlets. Unpublished.
- ANON. 2001. Sendai Mediatheque. Japan Architect, spring 2001(41): 16-57.
- ANON. 2003. *Idea Store The Future of Urban Libraries*. http://www.go-london.gov.uk. Accessed 2005-10-06.
- ANON. 2004a. Idea Store in London. Detail, 10(2004): 1120-1123.
- ANON. 2004b. The World Book Encyclopedia, 12L, 257-261. Chicago: World Book.
- ANON. 2005. Libraries. http://www.durban.gov.za. Accessed 2005-09-05.
- ALEXANDER, C. 1977. A Pattern Language. New York: Oxford University.
 - 1987. A New Theory of Urban Design. New York: Oxford University.
- BARRIE, A. 1995. Architectural Media. http://www.artspace.org.nz. Accessed 2005-10-10.
- BATT, C. 1997. The Heart of the Information Society: Public Libraries in the 21st Century. In: RAITT, D, ed. Libraries for the New Millennium: Implications for Managers. London: Library Association Publishing.
- BEKKER, J et al. 1993. Applied Information Science. Pretoria: UNISA.
- BOAZ, M, ed. 1958. A Living Library. Los Angeles: University of Southern California.
- BUNTROCK, D. 2001. Lightweight Heavyweight. World Architecture, 6(97): 46-53.
- CASTELLS, M. 1996. The Information Age: Economy, Society and Culture. Volume 1: The Rise of the Network Society. Oxford: Blackwell.
 - 1997. The Information Age: Economy, Society and Culture. Volume 2: The Power of Identity.

 Oxford: Blackwell.
 - 2001a. The New Global Economy. In: MULLER, J. et al. 2001. Challenges of Globalisation. Cape Town: Maskew Miller Longman.
 - 2001b. Growing Identity Organically. In: MULLER, J. et al. 2001. Challenges of Globalisation.

 Cape Town: Maskew Miller Longman.

CATO MANOR DEVELOPMENT ASSOCIATION. www.cmda.org.za.

Accessed 2006-04-23.

CLIFFORD, N. 2003. International Public Library Trends. Aplis 16(3) September 2003.

CORNER, J and HAWTHORN, J. 1980. Communication Studies: an Introductory Reader. London: Edward Arnold Ltd.

DICK, A. 1999. The Philosophy of Information. The Political Economy of Information. Pretoria: University of South Africa.

2002. The Philosophy, Politics and Economics of Information. Pretoria: University of South Africa.

DOWLIN, K. 2004. The Library as Place: Challenges in the Digital Age. In: BISBROUCK, M et al.

Libraries as Places: Buildings for the 21st Century. The Netherlands: International Federation of Library Associations and Institutions.

DUNLAP, L. 1972. Readings in Library History. New York: R.R. Bowker.

EVANS, B. 2004. *Ideas in Store*. Architect's Journal, 12/08/04: 24-30.

FEATHER, J. 2000. *The Information Society*. London: Library Association.

FRIEDMAN, T. 2005. The Exhausting Race for Ideas. *Newsweek*, December 2005 - February 2006, 10-12.

FUKUYAMA, F. 1999. The Great Disruption. New York: Touchstone.

GLANCEY, J. 2003. The Story of Architecture. London: Dorling Kindersley.

GOBLE, F. 1970. The Third Force. New York: Gossman.

GOLDSBOROUGH, R. 2002. Breaking the Information Log jam. *Intermedia*, December 2002 March 2003, 81.

HADLEY, C. 1924. Library Buildings. Chicago: American Library Association.

HANNESDOTTIR, S. 2000. School Libraries: Visions and Possibilities. *Intermedia*, June 2000, 37-39.

HICKS, B and TILLIN, A. 1977. Managing Multimedia Libraries. New York: Bowker.

- **HOPKINS, A.** 2002. *Italian Architecture from Michelangelo to Boromini*. London: Thames and Hudson.
- ITO, T. 2001. Lessons from Sendai Mediatheque. Japan Architect, spring 2001(41): 6-8.
- JOHNSTON, J and DOLOWITZ, D. 1999. Marxism and Social Class. In: GAMBLE, A et al ed. Marxism and Social Science. London: Macmillan.
- JONES, B. 2002. Modern Architecture Through Case Studies. Oxford: Architectural Press.
- KLOBAS, J. 1997. Information Services for the New Millennium Organisations: Librarians and Knowledge Management. In: RAITT, D, ed. Libraries for the New Millennium: Implications for Managers. London: Library Association Publishing.
- WAZULU-NATAL DEPARTMENT OF EDUCATION AND CULTURE: CULTURAL SERVICES BRANCH.

 Undated. KwaZulu-Natal Provincial Public Library and Information Service.

 Pietermaritzburg.
- LAMPRECHT, B. 2004. The Nice and the Good. Architectural Review, August 2004: 52.
- **LORENZEN, M.** No Date. *Deconstructing the Philanthropic Library*. www.michaellorenzen.com. Accessed 2006-03-06.
- MACK, G and LIEBERMANN, V. 2000. Eberswalde Library: Herzog and de Meuron. London: Architectural Association Publications.
- MARIVATE, C. 2001. Libraries as Centres for Creative Thinking. *Intermedia*, December 2001 March 2002, 42-45.
- MASLOW, A. 1968. Toward a Psychology of Being. New York: Van Norstrand.
- MASON, M. 1999. Strategic Management for Today's Libraries. USA: American Library Association.
- NEUTRA, R. 1958. A Living Library. In: BOAZ, M, ed. A Living Library. Los Angeles: University of Southern California.
- NWOSU, P. 1995. Development Theory: An Overview. USA: University Press of America.

NOON, P. 2004. Daring to be Different. In: BISBROUCK, M et al. Libraries as Places: Buildings for the 21st Century. The Netherlands: International Federation of Library Associations and Institutions.

NORBERG-SCHULTZ, C. 2000. Architecture: Presence, Language, Place. Milano: Skira Editore.

OFFICE FOR METROPOLITAN ARCHITECTURE. 1999. Seattle Public Library Proposal. http://www.spl.org. Accessed 2005-02-14.

QUANTRILL, M. 1983. Alvar Aalto: A Critical Study. London: Martin Secker and Warburg.

RIUS. 1976. Introducing Marx. UK: Icon Books.

ROTH, L. 1993. Understanding Architecture. Great Britain: Herbert Press.

RUSHKOFF, D. 1997. Do Books Have a Future? Intermedia, November 1997, 31.

SCHILLER, A and SCHILLER, H. 1988. Libraries, Public Access to Information and Commerce. In:

MOSCO, V and WASKO, J. The Political Economy of Information. USA: The University of
Wisconsin Press.

SENDAI MEDIATHEQUE. 2005. *Sendai Mediatheque*. http://www.smt.city.sendai.jp/. Accessed 2005-10-10.

SHOVLIN, C. 2005. Increasing the Attractiveness of Libraries for Adult Learners. London: MLA.

SUCH, R. 2005. Seattle Public Library. http://www.architectureweek.com. Accessed 2005-02-14.

SUTCLIFFE, M. 2004. *Outer West Integrated Development Framework: Agreement with Developers*. http://www.durban.gov.za. Accessed 2005-11-17.

SWILLING, M. ed. 1991. Apartheid City in Transition. South Africa: Oxford University.

THERON, J (compiled). 2001. *Information Technology: Computerised Information Storage*. Pretoria: UNISA.

THOMPSON, G. 1977. *Planning and Design of Library Buildings*. Great Britain: The Architectural Press.

TOWER HAMLETS BOROUGH COUNCIL. 2005. http://www.ideastore.co.uk. Accessed 2005-10-06. THE SEATTLE PUBLIC LIBRARY. 2006. http://www.spl.org. Accessed 2006-04-17.

VAN ZANTEN, D. 1987. Designing Paris. USA: MIT.

VENTURI, R, SCOTT BROWN, D and IZENOUR, S. 1972. Learning from Las Vegas. USA: MIT.

WEBB, M. 2001. Layered Media. Architectural Review 2001 (10): 46-51. WORPOLE, K. no date. The Future of Libraries. Source: Photocopied article in private collection.