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3

Public Libraries and Access to Knowledge (A2K)

A history of open access (OA) and the Internet in India in the nineteenth and twentieth centuries*

Prashant Iyengar

Introduction

This sounds rather formidable, but if someone wants a special book, he merely goes to the librarian in his own local free library and asks for it. The librarian looks at his catalogue and if the book is not available gives the reader a form to fill in. The form is forwarded to the regional bureau where it is checked with all catalogues of all the libraries in the region. If it is held in stock it is forwarded by post. If it is not in the region, the request is sent on to the National Central Library. There it is checked with all other regions, and if the book is [*sic*] in any library in England which lends books, it is forwarded to the library asking for it. The only charge to the borrower is the postage.

Langton Gould-Marks, 'Public Libraries in England', 22 June 1947¹

The user enters the web address for Technofriends (www.technofriends.in) in the browser's address bar. The browser then contacts the local nameserver and asks for the IP address of the webserver. If the local nameserver has this information in its cache, it passes this on to the client browser. If not, it sends back the reference to the Root DNS Servers. The client browser then gets in touch with the ROOT DNS Server and asks for the IP address of www.technofriends.in.

The Root DNS server, then gives back a reference for .in DNS servers.

The client then gets in touch with the .IN DNS servers for the IP of www.technofriends.in. The .IN Server then returns a reference to the name server of TECHNOFRIENDS.IN. Client then contacts the TECHNOFRIENDS.IN nameserver to get the IP of www.technofriends.in. The TECHNOFRIENDS.IN nameserver returns the IP Address of www.technofriends.in. Client browser then connects to the IP Address and gets the content.

'How Does DNS Work', Technofriends²

*The chapter title is adapted from Lawrence Liang's (forthcoming), 'A Brief History of the Internet from the 15th to the 18th Century'.

At the start of the first Yale Access to Knowledge Conference in April 2006, Professor Jack Balkin articulated three elements of what the ‘access to knowledge’ (A2K) movement stood for. First, *A2K was a demand of justice*. Second, it was *both an issue of economic development and an issue of individual participation and human liberty*, and last, *A2K was about intellectual property (IP), but it was also about far more than that*.³ Leaving aside, momentarily, the first two points of Prof. Balkin’s nuanced analysis, I take that he even considered it important to state his third point expressly as a telling indication of the extent to which the daily drama of IP has come to dominate the modern-day A2K movement. Like the term ‘Y2K’⁴ in its time, A2K has come to bear an irresistibly new-age, techno-savvy allure. Various A2K enterprises – ‘open source’, ‘open access’ (OA), ‘open medicine’ and so on – have as their primary object the circumvention of rigid IP regimes, often with the aid of Information and Communications Technology (ICT). To that extent, the discussion of any ‘knowledge’ activity that does not primarily involve a major IP or ICT twist – libraries, for instance – appears almost unfashionable in A2K circles. It’s *so* twentieth century.

This ‘narrow’ conception of A2K inherits the concept of ‘knowledge’ uncritically, as if it were a settled ‘good’ (in both senses), and sets up its problem as one of simply improving the distribution of knowledge. The prescriptions of the modern A2K movement seem to be reducible to two components – OA and ICT. Written from this perspective, one could imagine an A2K study on Indian libraries as observing the following template: (1) an introductory lament on the state of disrepair of Indian libraries; (2) statistics that animate this state of lack and the role that high prices of books have to play; (3) the importation of already articulated international principles of OA; (4) the invocation of studies that highlight, internationally, the economic gains and savings from a combination of OA and ICT, especially for developing countries; and concluding finally with (5) policy prescriptions, possibly a word thrown in relating to the progress already achieved on the path to open accessing everything. The point I am making here is that A2K is not just a movement, but it is also a distinctive genre of writing. Fidelity to this genre would mean that this study would contribute nothing substantially to the concept of A2K and would merely occupy its predestined space as a case study confirming a global trend towards OA.

In this chapter, I attempt to write against the current of this genre. I examine the public library in India with a view to seeing what account of the A2K movement can emerge at the end of such a study of Indian libraries. Such an enquiry views the library as the site of the negotiation of various claims – including justice, economic development and human liberty as in Prof. Balkin’s conception – and focuses attention on these claims as forming the nucleus of A2K. If libraries are the answer (and even if they are not), then one needs to ask what the questions have been. And who’s asking?

A glimpse into the nearly two-century-long history of the Indian library movement (discussed in ‘History of the Library Movement in India’ section) reveals

Table 3.1 India – key demographics

Population ^a	Persons	1,028,737,436		
	Males	532,223,090		
	Females	496,514,346		
	Rural–urban distribution ^b			
	Rural	72.2%		
	Urban	27.8%		
Literacy rate ^c		Persons	Males	Females
	Total	64.8%	75.3%	53.7%
	Rural	58.7%	70.7%	46.1%
	Urban	79.9%	86.3%	72.9%
	Mobile phone users	827 million (April 2011)		
	Internet users	42,000,000 ^e (September 2008)		
	Graduates	48.7 million (2005) ^f		

^a‘Census Data 2001: India at a Glance: Population’, Census of India – Office of the Registrar General and Census Commissioner, India, 10 May 2009. Available at http://www.censusindia.gov.in/Census_Data_2001/India_at_glance/popul1.aspx [accessed 3 May 2011].

^b‘Census Data 2001: India at a Glance: Rural-Urban Distribution’, Census of India – Office of the Registrar General and Census Commissioner, India, 10 May 2009. Available at http://www.censusindia.gov.in/Census_Data_2001/India_at_glance/rural.aspx [accessed 3 May 2011].

^c‘Census Data 2001: India at a Glance: Number of Literates & Literacy Rates’, Census of India – Office of the Registrar General and Census Commissioner, India, 10 May 2009. Available at http://censusindia.gov.in/Census_Data_2001/India_at_glance/literates1.aspx [accessed 3 May 2011]. Literacy, for census purposes, is defined as the ability to read and write with understanding in any language. ‘A person who can merely read but cannot write is not classified as literate. Any formal education or minimum educational standard is not necessary to be considered literate’. K. Ramamoorthy, *Literacy in the Context of Constitution of India*. Ministry of Law, Justice and Company Affairs, 2002. 10 May 2009. Available at <http://lawmin.nic.in/ncrwc/finalreport/v2b1-5.htm> [accessed 3 May 2011].

^dAnon, 2011. TRAI: Press Release: Highlights of Telecom Subscription Data. Available at: http://www.trai.gov.in/WriteReadData/trai/upload/PressReleases/827/Press_Release_15_April-11.pdf [Accessed June 20, 2011].

^e‘Internet and Mobile Association of India’. 10 May 2009. Available at <http://www.iamai.in/reports1.aspx> [accessed 3 May 2011]. ‘I-Cube 2008 Summary Report (Modified)_31.pdf’, 10 May 2009. Available at [http://www.iamai.in/Upload/Research/I-Cube%202008%20Summary%20Report%20\(Modified\)_31.pdf](http://www.iamai.in/Upload/Research/I-Cube%202008%20Summary%20Report%20(Modified)_31.pdf) [accessed 3 May 2011].

^fSunil Jain, ‘Graduates in India? 48.7 million’, *Rediff News*, 19 December 2005. Available at <http://in.rediff.com/money/2005/dec/19guest1.htm> [accessed 15 February 2009].

that both the questions and their authors have changed over time. While voluntary associations of ‘public-spirited individuals’ were, almost exclusively, the engines of the library movement in India during its first century, since Independence the management and furtherance of public libraries have fallen entirely into the hands of the patriarchal state. As one would expect, the imperatives that govern voluntary associations in the running of public libraries are somewhat different from those that are observed by the state. From being vehicles for the arousal of nationalist sentiment, to promoting adult/universal education, to promoting local language policies, to being interfaces between the local and the global, the public library has performed various roles at different times in its history.

The changes in the ownership and roles of the public library have been duly accompanied by changes in the collections that they house, and so one question that becomes important to ask is what *kind* of ‘knowledge’ do libraries house? Who decides? And how do people access the knowledge that gets left out?

The constituencies that public libraries have served have changed significantly. For instance, until at least the middle of the past century, fiction was the most popular category of works that circulated in libraries. This is no longer the case and it is worthwhile to investigate why. What knowledge do people desire and how do they gain access to it?

While public libraries in India tend to languish due to insufficient financial support, other factors contribute to the slippage of patronage. However, the crisis of libraries is not the same as the crisis of ‘public reading’⁵ in India. As inadequate as the facilities in Indian public libraries may be, the library does not exhaust the avenues available through which people may (and do in fact) cheaply access the kind of knowledge that they desire. As a corollary, the kind of information that they may, by and large, appear to desire may not correspond to the kind of ‘knowledge’ that the OA or library movements have been privileging. The point I am attempting to make here is that although public libraries are conceived as embodiments of a particular liberal egalitarian ethos,⁶ in truth they are vigorously controlled sites where privileged clientele may gain access only to approved knowledge. This could be a valuable lesson for the A2K movement, which has, at best, remained agnostic towards structural questions of knowledge and at worst has been complicit in the continued privileging of certain forms of (accredited/refereed) knowledge over others.

In ‘History of the Library Movement in India’ section of this chapter, I outline the progress of the library movement in India over the past two centuries. At first glance, these details of the history of the Indian library movement may appear to be of little relevance to a *globalized*, IP-focussed A2K agenda. However, if one reads this history not merely in order to pay homage to what went before but, instrumentally, with the intention of establishing patterns of continuity and identifying recurring themes in the struggle to make knowledge accessible, such a reading may suggest some useful directions that the A2K movement, at least in India, may progress towards.

The introduction of information technology into Indian libraries in the late 1980s was greeted with enthusiasm by the librarian community. More recently, there have been various legislative attempts at creating 'digital libraries' and repositories of electronic theses and dissertations to expand access to materials. 'The Indian Library Goes Digital: e-Resources and Digitizing Collections' section of this chapter evaluates the success of these initiatives.

The 'Conclusions: Bibliomania in the margins – How Indians Read' section of this chapter makes a start at the sort of study on Indian readership I have set up as one of the goals of this project. A reading of the preceding sections might suggest that public libraries are the only mode through which the ordinary public has access to printed materials. This final section broadly asks what are the residual modes, other than libraries, through which people access materials that they desire access to.

History of the library movement in India

The library has, for long, occupied a favoured position in policy discussions concerning the educational upliftment of and growth of public opinion among citizens. As the physical embodiment of abstract knowledge accumulation, libraries have been regarded historically as crucial spaces that enabled the emergence of an informed (thus, empowered⁷) citizenry. Like many countries, public libraries in India now form an integral component of the municipal services that citizens can expect to have access to in most towns and cities. Several states in India have Public Library legislations and are home to, by official accounts, flourishing networks of library systems.⁸ The Indian Library Association (ILA), formed over seventy years ago, currently has a membership touching 4,000, of which about 270 are institutional members.⁹ The ILA recently organized its 53rd Annual All India Library Conference in December 2007 – a testament to the fairly robust state of affairs in the Indian library movement. If the state of the library system in India appears to be in a more vibrant state than its counterparts in other countries inhabiting the same socio-economic neighbourhood, this has been on account of strides made in the library movement in the first half of the past century. India has been home to one of the pioneers in the field of Library Sciences, S. R. Ranganathan, a mathematician-turned-librarian who formulated the acclaimed Colon Classification system of classifying books.¹⁰ His 'Five Laws of Library Science' (1931) acquired a canonical stature in the early days of Library Science and may be viewed as one of the first articulations of OA principles anywhere. While there is much to celebrate about the Indian public library system's history, in reality, today, public libraries in India are, with notable exceptions, visibly in a state of neglect.¹¹ This section offers a brief glimpse into the various stages of the progress of the Indian library movement.

Various studies on public libraries in India broadly designate three broad stages in which the development of public libraries in India took place.¹²

Phase I – establishment

I have no knowledge of either Sanscrit [*sic*] or Arabic. But I have done what I could to form a correct estimate of their value. I have read translations of the most celebrated Arabic and Sanscrit [*sic*] works. I have conversed, both here and at home, with men distinguished by their proficiency in the Eastern tongues. I am quite ready to take the oriental learning at the valuation of the orientalists themselves. I have never found one among them who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia. The intrinsic superiority of the Western literature is indeed fully admitted by those members of the committee who support the oriental plan of education.

T. B. Macaulay, 2 February 1835

[A] half-dozen monkeys provided with typewriters would, in a few eternities, produce all the books in the British Museum.

Jorge Luis Borges, 'The Total Library', 1939

The first phase of the Indian library movement lasted through the course of the nineteenth century. During this phase, the character of libraries began their transformation from private collections 'that housed mostly manuscripts for the sole provenance and purview of feudal rulers and aristocrats' into 'public and civic institutions that boasted community pride and interest in their mostly print collections'.¹³ By the middle of the nineteenth century, public libraries had been established in the three presidency towns of Bombay, Calcutta and Madras.¹⁴ The organization of the Calcutta Public Library during this period, in particular, was along radically egalitarian lines – created as it was, in 1835 by the citizens of Calcutta, as a library 'of reference and circulation, which would be open to all ranks and classes without distinction and sufficiently extensive to supply the wants of the entire community in every department of literature'.¹⁵ By the turn of the century, the library was said to have housed around a hundred thousand books although its administration had 'weathered its way to a standstill'.¹⁶

It was during this period that the first colonial legislation mandating the free supply of all books to 'designated' libraries was introduced in India in 1867.¹⁷ This was, paradoxically, at the foot of a statute that had overtly sought to regulate the freedom of printers to publish.¹⁸ Importantly, both the 1867 Act as well as the post-independence 'Delivery of Books "and Newspapers" (Public Libraries) Act, 1954' speak only of physical delivery of books to libraries,

while remaining silent on the actual terms governing the public's access to these venues.

Two parallel developments during this period also had a bearing on the progress of the library movement – the advent of public education in English following Macaulay's Minute on Education and the parallel growth of the vernacular presses, which played a significant role in the cheap diffusion of literature in India.¹⁹ Besides these, the spread of the Indian Railways and the expansion of the Indian Postal Service also contributed towards extending the avenues through which people could access books.

By the end of the nineteenth century, libraries had become fairly popular in several cities and towns. During the last decade of the nineteenth century, the number of libraries and 'reading rooms' in Madras, Bombay and Calcutta had witnessed a threefold increase.²⁰ The foundations had been laid for the flourishing of a public library system in various parts of India during the course of the next century.

Phase II – consolidation

The potentiality of a well-developed Rural Library Service for
the uplift of the masses is enormous.

Our ideal should be to have a national frame-work of libraries with a *taluk* as the ultimate unit, with the district library as the next higher reservoir, directing and co-ordinating the work of the *taluk* libraries, and central library in each of the linguistic areas linking up the district libraries. To bring about such a system, the nation should put before itself a definite programme with a definite time-limit, say 30 years or even 50 years, within which the system should be developed fully.

S. R. Ranganathan, 9th Annual Conference of Madras Non-Gazetted
Educational Officers, 23 December 1927²¹

The apex of the library system, as contemplated in the Five-Year Plan, will be the National Central Library and its vast base will be made up of about 160 city libraries and about 400 rural library systems, academic libraries and industrial libraries ... Each Development Block will have about 100 villages occupied by a lakh of people ... Each development block should aim to have ten copies each of 1000 books, which will cost them Rs. 50,000.

S. R. Ranganathan, All India Library Conference, 1 June 1953²²

In its second phase, a period of furtive activity spanning roughly the first half of the twentieth century, the library movement came gradually to become associated with the rise of anti-colonial nationalism²³ and began to be regarded

as a vehicle both for adult education and 'cultural renaissance'. Successive 'Government of India Acts' in 1909 and 1919 introduced a system of *diarchy* in India whereby certain areas of administration such as education (including libraries), public health and land revenue came under the exclusive purview of elected, provincial Legislative Councils comprising mostly Indian members. Thus, for instance, in 1920 the Legislative Council of the State of Madras issued a grant of Rs 20,000 for the purpose of encouraging public libraries in recognition of their potential to 'serve as stimulative centres for national awakening and public spirit'.²⁴ Prominent public libraries were established during this period in various centres, most notably the Central Library at Baroda that was established through the patronage of the king, Maharaja Sayajirao III, Gaekwar of Baroda. The following account describes the extraordinary progress that this library network had achieved by as early as May 1913:

Baroda city had its Central Library, comprising Reference and Lending Departments with a book stock of 40,000 volumes. Twenty-five thousand more books were awaiting addition as soon as more space was provided ... Two of the three *prant* (district) libraries had been established and thirty-six of the thirty-eight towns had provided their own libraries. Two hundred sixteen of the four hundred twenty-six large villages had founded their libraries. Even the small villages had come forward and had initiated their own libraries. There were 140 travelling libraries as well.²⁵

Similar progress was witnessed in the southern state of Andhra where libraries appear to have been somewhat at the nucleus of local politics. As one commentator had remarked, the typical Andhra library 'is not a mere store-house of books but is a centre from which all the healthy activities of the village, social, religious, literary and political also proceed'.²⁶

In 1903, Lord Curzon bought up the rights of the Calcutta Public Library and merged it with the East India College Library. The new institution was christened the Imperial Library and was opened to the public in January 1930. It was also made a 'Designated' library under the Press and Registration of Books Act, so that a copy of every book published in the country was required to be sent to it. Further, it was designated a public lending library, a fact that appears to have been not too widely known, at least until much later.²⁷ Today, the library houses one of the richest collections of publications on the British period of Indian History.²⁸

In 1918, the first All India Librarians Conference (AILC) was held in Lahore, with thirty-one members attending from across the country.²⁹ This was soon to become a regular event³⁰ and the Indian Librarians Association (ILA) was an outgrowth of the AILC held in Kolkata in 1933.³¹ Likewise, a regional association called the Madras Library Association (MLA) was formed in January 1928 to promote 'the book habit' and by March 1928 could boast of over 240 members on its rolls.³² In the annals of the history of the Indian

library movement, the efforts of the MLA during this period, especially one of its founders, Dr S. Ranganathan, deserve special mention. Ranganathan was a mathematician-turned-librarian and was the first librarian appointed to the library at the University of Madras. At a conference in 1927, he outlined plans for an extensive interconnected rural library system that, owing to strong political support, rapidly became the blueprint for rural library services in the entire region.³³ As mentioned previously, he was one of the pioneers, the early hackers, in the developing science of classification and his 'Five Laws of Library Science' was one of the earliest articulations of the egalitarian ethos that underlies the librarian's mission. The salience of Ranganathan's *Five Laws* in the context of the objectives of the A2K movement merits a short elaboration of the principles outlined and is given in the box below.

The Five Laws of Library Science – S. Ranganathan³⁴

1 Books are for use.

This 'law' was posited in opposition to the then prevailing ethic of fetishized 'preservation' books by absolutely barring access to them, even from the very people who sought them. Here Ranganathan announces that it is time to 'declare amnesty for books and free them of their chains' and advocates a new organizational ethos – the recognition of the rights of users to free and unhampered use of books'. He recognizes that carelessly framed institutional policies – for instance, regarding the location of the library, the hours it was open to the public, the architecture of the library itself and the skill of its staff – could interfere with the substantive realization of this law's goals. 'Books are for use', importantly, casts a positive obligation on the custodians of books to ensure their use.

2 Books are for all.

Though rather tersely framed, this is one of Ranganathan's most extensively theorized laws and occupies a large chapter in his book. Briefly, the law demands that the rights of every class of users be recognized equally irrespective of age, gender, class, location/ distance or disability. Not content with merely an abstract statement of this non-discriminatory principle, he elaborates on various contexts within which this principle was to be realized. Thus, 'books are for all' would have to be reflected in the location of the library, the selection of books, in the funding for special rural outreach programs, selection of library staff, design of the library

interiors and so on. This principle would insist on every reader being supplied his or her book uniquely suited to his or her tastes. It places an onus on the librarian to actively inform herself about the needs and demands of her immediate clientele and to respond to those demands. Going further, it demands that the librarian adopt positive measures to reach out to those who would normally be unable to access libraries – the sick and infirm, prisoners undergoing imprisonment and so on. Under this conception, the library was cast as a uniquely open, barrier-less space organized on radically egalitarian principles.

3 To every book its reader.

This law posits that every book has its own unique reader and that it was the duty of the librarian to take all necessary steps to see that the book finds its audience. This is done through a range of processes – from appropriate arrangements of book shelves to the organizing of book readings and lectures or performances. Ranganathan conceives of the librarian as a salesman of the idea of reading and considers it her duty to increase the market for books through her efforts.

4 Save the time of the reader.

This principle mandates the adoption of institutional policies and administrative procedures that are directed towards saving the time of the reader. These included the adoption of the open access system where readers were free to browse books placed on shelves as opposed to ordering them from a catalogue and the adoption of classification and cataloguing systems that would make it easy for readers to locate books on shelves. The governing principle in all cases would have to be the convenience of the reader over administrative convenience.

5 The library is a growing organism.

The last of Ranganathan's principles is one of institutional design – libraries should be designed to allow them to grow since 'an organism that ceases to grow will petrify and perish'. Thus, for instance, the classification system should be open ended to allow for new categories of knowledge to emerge, and space in libraries should be designed to allow for changes to be made and for different kinds of users to occupy it. The library, including its administrative policies, must be kept 'open source' – to accommodate emergent uses.

Ranganathan was also instrumental in drafting the first state public library act for the State of Madras, which was enacted by the state legislature in 1948.

Village libraries were set up during this period through governmental effort in the states of Assam, Bihar, Bombay, Orissa, Punjab, Cochin and some other provinces and states, and according to one estimate in 1942 there were 13,000 village libraries in India.³⁵

By March 1954, the country reportedly had '32,000 libraries with a book stock of about 7.1 million volumes; an amount of Rs. 9 million (US\$1.89 million) was spent on library services'.³⁶

All in all, this was an extremely fertile period for the library movement in India, and the following important changes were observable:

- 1 The public library came to be regarded as a companion to pedagogy at a time when the idioms of pedagogy themselves were undergoing vast changes. Thus, from being the primary instrument for achieving 'adult education', libraries became more broadly the vehicles of 'non-formal' education. The focus of education shifted from the 'camel' model³⁷ to 'lifelong education', and libraries were seen as facilitating such continuing education, beyond the qualifications one acquired through schooling. Libraries were, thus, the first preferred technology of the state for mass non-formal education. Over time, they came to be replaced, in turn, by radio, the television and the Internet – each of which were spectacularly successful as mediums of entertainment but failed ultimately in realizing the benignly pedagogical purposes for which they had been introduced by the state.³⁸
- 2 It was during this period that 'library science' emerged as a discipline in its own right, as opposed to a vocational skill that one acquired through apprenticeship. This development of a technique into a discipline occurred worldwide with at least an equal intellectual contribution having come from Indians, most notably Mr S. Ranganathan, to the technique of classification. Unfortunately, this initial period of indigenous experimental and extensive research did not endure for long, and formal library science courses today merely teach adherence to prevalent dogmas about classification.
- 3 With the University of Madras beginning to offer undergraduate degrees in Library Science, and other institutions following its lead, a professional class began to take shape of librarians who were skilled in the specialized task of requisitioning, inventorying, classifying and curating printed material. While the library movement hitherto had been propelled by the efforts of social reformers, and men and women of diverse motivations, as well as librarians, in the course of the next half century, it was to become the sole preserve of librarians. This professionalization unfortunately did not translate into a heightening of

their status, however, and despite repeated laments, to this day librarians continue to be accorded a somewhat stepfatherly treatment at best and, at worst, are relegated to a janitorial status.

Phase III – expansion

It should be open to everyone. This will be a national monument. There will not be a single individual who does not have the right to enjoy it.

It will have such an influence on the mind, it will so elevate the soul, it will so excite the heart that it will be one of the most powerful ways of proclaiming the illustriousness of the French Republic.

Minister of the Interior, France – Inaugural of the Louvre, August 1793³⁹

Old residents of Calcutta will, I have no doubt, welcome the transformation of what was a citadel of power into an abode of learning. Formerly, this palace was the preserve of State dignitaries and bureaucrats. Today it is a temple of learning for whoever seeks to worship at its altar. Formerly it was a place which imposed decisions on the people, regardless of what they wished or needed. Today it is a storehouse from which the nation can derive its intellectual sustenance in accordance with its wish and its needs. The noble building, and ground which formerly catered for the proposed rulers of the land will henceforth be the resort of even the humblest seeker of knowledge and truth.

Maulana Azad, renaming and inaugural of the National Library of Calcutta, 2 February 1953⁴⁰

The decades following independence in 1947 continued some of the progress achieved in the previous half century. Internationally, in 1948, UNESCO issued a Public Library manifesto at the second session of its General Conference summarizing the aims and key missions of public libraries. In its current iteration,⁴¹ the manifesto affirms UNESCO's belief in the public library as a 'living force for education, culture and information, and as an essential agent for the fostering of peace and spiritual welfare through the minds of men and women'. It recognizes that 'Constructive participation and the development of democracy depend on satisfactory education as well as on *free and unlimited access to knowledge*, thought, culture and information' and conceives of public libraries as being 'local gateways to knowledge'.⁴²

In 1948 the Imperial Library at Calcutta was renamed the National Library, and in 1951 the Delhi Public Library was created under the aegis of the UNESCO.

Under the new Constitution that India adopted in 1951, the responsibility of overseeing libraries was given to the states exclusively. This led to an uneven growth of libraries across states and a complete abandonment of all plans for installing a nationwide framework of public libraries.

In 1954, the Delivery of Books Act was passed, which made it mandatory for publishers in India to deposit a copy of every book they published with the National Library in Calcutta; the Asiatic Society (Central) Library, Bombay; Connemara Public Library, Madras; and the Delhi Public Library. A national bibliography, based on books received under this Act, is published by the Central Reference Library, Calcutta.⁴³ By 1954, reportedly, the country had 32,000 libraries with a book stock of about 7.1 million volumes.⁴⁴

An Advisory Committee (Sinha Committee) appointed in 1957 recommended the development of public libraries along a hierarchical model with the national central library at the apex, followed by state central libraries, district libraries, block (sub-district) libraries and *panchayat* (village) libraries.⁴⁵ However, this has not been implemented to date.

Beginning in 1948, over the next half century, ten states would enact Public Library legislations analogous to the Madras Public Libraries Act.⁴⁶ These legislations typically install a hierarchical network of libraries within the state with the State Central Library at the apex followed by several district and village-level libraries and reading rooms. Funding for these libraries is provided from out of excise levies or levies on property tax.

The new Copyright Act enacted in 1957 incorporated an extensive list of 'fair dealing' exemptions, including the right of public libraries to make up to three copies of books that were not available for sale in India. Research users of previously unpublished library resources were given the fair dealing right to reproduce them in publications provided the reproduction was accompanied by an identification of the author. At a general level, the statute protected 'fair dealing' uses of literary, artistic, musical and dramatic works from the ambit of infringement if the purpose was for private use, including for research. This potentially made the public library amenable to a range of uses by its members without the fear of prosecution.

In 1972, the Raja Rammohun Roy Library Foundation (RRRLF) was established by the government of India to spread library services all over the country in active cooperation with state governments and enlisting the aid of voluntary organisations. The foundation matches the funds of the states for purchasing furniture and books, organizing conferences and seminars, and providing mobile library service to the rural areas and advises the central government on all matters relating to library development in the country.⁴⁷ Until the year 2000, the foundation had extended support to over 31,000 public libraries in India, despite which the rural library services in India continue to languish as this telling account by the director of the RRRLF reveals:

The condition of the majority of rural libraries, particularly, in the heartland of India, is extremely miserable. Many of them do not have their own building, some are located in small thatched huts and some share a room and time with their institutions. Very few libraries can provide reading-room facilities even. Storage facilities are also very poor. Stock of reading materials is insignificant. Moreover, the service is highly irregular and uncertain. All these does not encourage people to use libraries. There is also the dearth of suitable reading materials in regional

languages. The demand for books in rural libraries is mainly limited to light literature in regional language.⁴⁸

Estimates of the total number of public libraries in India today vary between 50,000 and 60,000. While this is a huge number by any standard, reports on the quality of these libraries cast an ominous shadow on their ability to meet the A2K needs of people. The box below draws on Sarah Kamala's account of the public library system in the southern Indian state of Andhra Pradesh. It provides us with a glimpse into what may be regarded as a typical sample of the problems afflicting public libraries in India today.

A snapshot of public libraries in Andhra Pradesh – Sarah Kamala⁴⁹

Number of public libraries

State Administration Report (1984–5)

- 749 libraries in urban areas out of which 424 were operating in thirty cities and large towns (with a population of 75,000 or more).
- The number of other towns in the state is 222 out of which library service exists in 188 towns.
- No library in thirty-four towns and 166 urban areas.
- Out of 1,222 villages with a population above 5,000, which are required to have a public library according to the AP Libraries Act, only 346 villages had a functioning library.
- Out of 12,080 villages with a population between 1,000 and 5,000, only 928 villages had a library. 2,820 villages were provided with mobile libraries and aided libraries.
- None of the 16,408 villages with a population less than 1,000 had a library.
- There are only 1,540 village *panchayat* libraries out of 21,493 village *panchayats* existing in the state as per the 1991 census. This amounts to fewer than 1 in 10 villages having any library facility.

State of public libraries

According to Sarah Kamala, the public libraries in Andhra Pradesh suffer from the following defects:

- They cater exclusively to the recreational and light reading needs of a small strata of the upper and middle classes while ignoring completely the needs of illiterate users.

- They are passive institutions and do not actively participate in engendering change and development in the community. Their impact on the community is minimal.
- Books have little bearing on the real lives of people and are generally seen as not being useful to rural people.
- State financial support is weak and the government does not consider libraries as suitable agencies for the dissemination of information regarding their own policies.
- Personnel in charge of libraries are not given autonomy to incur expenditure on furniture or to acquire new books.

Reasons for the decline in the public library movement since independence

Kamala traces the decline in the library movement in Andhra Pradesh since independence to the following factors:

- Interest in the library movement waned after independence after the enactment of public library legislation transferred the maintenance and growth functions of public libraries to statutory authorities. As Kamala puts it, 'It seemed to signal that the government will do all that was needed for library development, and that the efforts of individuals were no longer needed'.
- The growth in the number of libraries did not keep pace with the growth in population, resulting in decreasing levels of access.
- The salaried and unmotivated librarians and library staff started keeping users at a distance, greatly diminishing the popularity of libraries.
- The centralized system of administering public libraries undercut the authority of the local librarian to cater to the local needs of the people.
- Book acquisition was centralized and the same sets of books were supplied to every library. There was no choice for selection of books according to local interests and no provision for the rotation of books among libraries.
- Funds were inadequate to allow for continuous purchase of new books.

Accounts abound of the dissatisfactory state of affairs in public libraries during the latter half of the past century. Capping these was the damaging indictment delivered by the then general secretary of the IFLA, Mr Paul Nauta, who remarked during a visit to India in 1992 that 'Indian libraries were still in the 60's or the 70's at most'.⁵⁰

From the early 1990s, Indian libraries began using computers to inventory their collections, and by the turn of the twenty-first century, library science, much like everything else, was firmly in the throes of an Information and Communications Technologies revolution. The creative deployment of IT by public libraries has, in some cases, demonstrably enhanced their popularity. This may be seen, for instance, in the manner in which the Delhi Public Library has successfully, over the past five years, succeeded in improving its patronage despite a widely perceived decline in the 'reading habit'. This was achieved reportedly through a reconfiguration of their book procurement policy, the introduction of new services (for instance, the opening of a new children's section) and the offering of free public Internet services on the premises.⁵¹

Reflections on the Indian library movement

In addition to the introduction of IT into the library, the wide circulation of concepts like the 'knowledge society' and 'information society' within official policy circles has succeeded in making the march towards an information society a major priority, and are frequently held up as evaluative criteria for state action.⁵² For libraries, this has meant a shift in the perception of their roles – from being positioned, at least on paper, as key players in the mission to advance universal education, libraries have come to be regarded as being both the repositories of untapped local information resources and 'gateways to the global'.⁵³ This has led to a heightened emphasis on networking, digitization and electronic archiving, about which more details are provided in the next section. Before parting from this section, however, I would like to record three observations on the history of the library movement in India.

Libraries, literacy, education and knowledge

The origins and spread of the library movement in India were closely linked to the need to expand literacy and to make available alternate channels of education in the wake of the rise of nationalism in the country. In S. R. Ranganathan's ideal conception, the public library existed in a dialectic relationship with the community within which it was located. On the one hand, it was meant to serve as the nucleus of the community and actively shape the opinions of that community – hosting lectures, organizing readings and conducting adult literacy classes and so on. In turn, the character and contents of the public library itself were to be determined reflexively by the community – for instance, a library located in an agrarian setting would, under

this conception, predominantly house materials that were useful to farmers to strengthen their position in their own communities. However, under the new 'Knowledge Society' model as described by the National Knowledge Commission of India, the library is reconstituted using a purely economic frame into a mere distributional node where global knowledge gets transmitted to local recipients expressly to facilitate the transformation of these recipients into 'knowledge workers'⁵⁴ who can then be appropriated as factors in the emerging global knowledge economy. While one needn't rush to the conclusion that such an appropriation will be undesirable, it would serve us well to think more broadly of the imagination that the public library *ought*, ideally, to subserve.⁵⁵

My point is that through much of its history, the Indian library has been conceived instrumentally as the venue for the furtherance of some transcendent social (literacy), economic (knowledge society) or political (freedom, national integration) goal. Perhaps a bottom-up approach that consults and privileges the local community's more modest aspirations may yet revitalize the flagging library movement.

Libraries and leisure

In his fascinating article 'Museums: Leisure between State and Distinction',⁵⁶ Nick Prior suggests that in order to understand the nature of the museum 'one must grasp the institution as an allotrope – an element with dual properties'. On the one hand, he says that 'the marriage of museums with discourses of taste, connoisseurship, and high culture connected them with the struggle for a refined identity that was so crucial to the historical position of the bourgeoisie'. Hence, 'the museum became a contributory badge of quality fought for by ascendant social groups in the struggle for symbolic power. For this reason, museums tended to exclude in the act of distinction, symbolically purifying themselves of lower historical tendencies and visitors'.⁵⁷

On the other hand, he acknowledges that 'museums also catered for shifts in the structure of governance, peeling away older remnants of monarchical or aristocratic grandeur and religious servitude'.

National publics were now encouraged to exploit the operation of new leisure regimes and partake of the moral benefits offered by the museum as a repository of civilization's highest values. Governing forces also recognized the role that museums could play in the regulation of social behavior, 'civilizing' the population as a whole and making the visit an instance of self-amelioration.

Prior imputes this allotropic quality of museums to what he terms as the 'double-bind of modernity in which aspirations to social exclusivity and expert control vied with what were increasingly more inclusive strategies of public mobilization and "improvement" coordinated by state agencies'.⁵⁸ It was also 'coterminous with the formation of mass leisure and urban cultures *in which*

*groups previously excluded from the halls of (artistic) learning gained increased access to the cultural capital deployed for visual consumption in museums and other venues’.*⁵⁹

Prior’s account of museums as allotropes offers a useful prism for us through which we may view the history of the emergence of public libraries in India. In a country whose literacy is only now hovering around the two-thirds level, the library was every bit an institution around which a new bourgeois identity was sought to be forged through the nineteenth century.⁶⁰ However, as the speech of Maulana Azad quoted above shows, the inauguration of the library was also an intense moment of democratic possibility where those who were traditionally excluded could, at least notionally, gain access.

On balance it is difficult to say which of these dual qualities predominates with Indian public libraries. The primary clientele of public libraries comprises students appearing for various public examinations. Although they may harbour bourgeois ambitions, the public library, in this case, is decidedly *not* a site for the kind of ‘artistic learning’ that Prior has in mind. The public library in India tends more towards Public Education (with its emphasis on the factual instruction) rather than towards the Public Museum. In this avatar, the public library approximates to Adorno and Horkheimer’s famous description of amusement under late capitalism as being the ‘prolongation of work’:

It is sought after as an escape from the mechanised work process, and to recruit strength in order to be able to cope with it again. But at the same time mechanisation has such power over a man’s leisure and happiness, and so profoundly determines the manufacture of amusement goods, that his experiences are inevitably after-images of the work process itself. The ostensible content is merely a faded foreground; what sinks in is the automatic succession of standardised operations. *What happens at work, in the factory, or in the office can only be escaped from by approximation to it in one’s leisure time.*⁶¹ (emphasis added)

This ‘work’ function becomes even more pronounced with the public library being reconfigured as an ‘extremely important element of the foundation of a knowledge economy’.⁶² It remains to be seen in what ways this reconfiguration plays out.

Libraries and reading

I say, O Sir! Where would your Bengali education, Bengali literature,
Bengali language, Bengali religion, Bengali piety, Bengali blank verse be,
if the Bengali Mahabharata and Ramayana did not sell at Battala
for fourteen annas.

Playwright Amritlal Bose, c. 1880⁶³

In the introductory chapter to their book *Reading, Society and Politics in Early Modern England*, Kevin Sharpe and Steven N. Zwicker remind us ‘that reading

has a history, that its forms and practices have a past, that it is neither universal nor natural but socially specific and culturally constructed'. Reading, they say, 'is neither natural nor ubiquitous, ... geography, race and class are among the determinants that enable and delimit literacy'.⁶⁴

The authors trace the roots of modern reading practices in Europe to the rise of humanism and the Protestant reformation. While humanism 'educated and enabled readers to perform their own readings, and to construct their own, often dissenting, values and politics', the Protestant Reformation laid emphasis on 'individual conscience and personal scripturalism, on each godly man's reading and wrestling with Scripture, and ultimately democratized the word'.⁶⁵ The authors argue that the modern reader 'emerged from the new availability of texts and techniques, *the marketing not only of books but of hermeneutic strategies*' (emphasis added).⁶⁶

In her insightful essay, 'Disciplining the Printed Text: Colonial and Nationalist Surveillance of Bengali Literature',⁶⁷ Tapti Ray points out that far from engendering a culture of private cloistered reading, the arrival of book in India gave birth to new forms of urban performance – for instance, men were frequently employed as readers, to read to the women of reasonably well-off households – and it was not uncommon for the literate few in villages and towns to read out publicly for the benefit of minor audiences.⁶⁸ Reading, then, was not so much a private contemplative act but an aide for shared public meaning-making activities.

In her nuanced account of the circulation of fiction in Indian libraries in the nineteenth century, Priya Joshi grapples with the problem of the near-total absence of textual records of the Indian reader in the historical record. This is because, as Joshi says, 'All readers, including those being read to, consume entirely in the privacy of the mind so that the act of reading as such leaves almost no textual or representational byproducts'.⁶⁹

Joshi turns to the print archive of the nineteenth century to offer her glimpses of 'the novels that were available to literate Indians, where and how and something about the conditions under which Indians availed themselves of this reading matter'. She says,

[This archive also] yields information on local conditions of printing and publishing, on the role of the emerging serial press, and the ways in which books were purveyed and discussed, translated and adapted through the nineteenth century. In short, this quantitative archive provides the social context in which the British novel was consumed in nineteenth-century India. *From it we learn that because of Paternoster Row's pricing policies and the nascent Indian publishing industry, books were either too expensive or too elusive for purchase, and the public circulating library came to be an institution through which most Indian readers, and many British ones as well, availed of at least through the 1920s.* (emphasis added)⁷⁰

To an extent, the later growth of the library movement in India may be seen to have been hampered by the flourishing print industry in India that, since the

early nineteenth century, had begun selling books at extremely cheap rates and helped to popularize the spread of a culture of reading. The rise of nationalism during the nineteenth century, coupled with a religious 'reawakening', created and sustained a demand for more books in regional languages. Competition among printers, the laxity of copyright restrictions and the predominance of religious/folk themes in books that were in high demand ensured that prices of books remained well within the means of most users. To this day, prices of books in India are fairly low, and where they are not, market practices (piracy) quickly step in to compensate. Possibly one of the reasons why public libraries in India have not been such a big sell apart from among students preparing for public exams is that from the beginning the popular demands of the reading public have been fairly met by an extremely cheap print and publishing industry. More recently, relatively cheap access to the Internet either directly from home or from cybercafés⁷¹ has resulted in increasing numbers of Indians turning to the Internet as an inexpensive channel by which to satisfy their informational needs.

Against this context, it is likely that one of the causes of the failure of India's library movement has been its failure to learn from and leverage these new and varied modes of reading among its audience.

The next section outlines some initiatives by the government that aim to bypass what it sees as the primary drawback of the library system (distance) in delivering assured A2K.

The Indian library goes digital: e-resources and digitizing collections

Who knows that a day may not come in which dissemination of knowledge will be effected by direct transfer, in the *Dakshinamurthy* fashion ... that a day may not come when the dissemination of knowledge, which is the vital function of libraries, will be realised by libraries even by means other than those of the printed book!

S. Ranganathan, 1933⁷²

Mission 2007 aims to provide knowledge connectivity to every village of India by August 15, 2007 ... Following the launching of Mission 2007 ... some developments have taken place ... These include:

The VKC [Village Knowledge Centre] is based on the principle of an integrated and appropriate use of the Internet, cable TV, cell phone, community radio, and the vernacular press. To begin with, VKCs will be established in the 240,000 panchayats and local bodies. With the help of loud speakers and FM radio, they will be able to cover all the 600,000 villages in the country.

It is obvious that if we can achieve convergence and synergy among the numerous on-going as well as emerging programmes, the goal of achieving a rural knowledge revolution by August 15, 2007, can become a reality.

M. S. Swaminathan, *The Hindu*, 25 November 2005⁷³

The proliferation in the past two decades of personal computers, the expansion of information and communications technology, and the Internet have led to the displacement of the industrial information economy by a new 'networked information economy' where information becomes the 'core structuring fact' of the economy.⁷⁴ The capacity to access networked information assumes a crucial significance in this new economy, being the arbiter of both prosperity and freedom. ICT has been viewed in official circles in India as an instrument of what Ravi Sundaram has termed a 'temporally accelerative'⁷⁵ development through which we Indians could transcend our 'historical disabilities' and achieve parity with the incumbent masters of the world. The following excerpt from a report submitted by the National Task Force on Information Technology (NTFIT) in 1998 captures the stakes involved in this new scenario:

For India, the rise of Information Technology is an opportunity to overcome historical disabilities and once again become the master of one's own national destiny. IT is a tool that will enable India to achieve the goal of becoming a strong, prosperous and self-confident nation. In doing so, IT promises to compress the time it would otherwise take for India to advance rapidly in the march of development and occupy a position of honor and pride in the comity of nations.⁷⁶

In line with these aspirations, the NTFIT report places special emphasis on the content industry as potential sources of income and employment generation and makes several recommendations with a view to promoting availability and access to information. Among them, the following⁷⁷:

80. *All the reports generated out of the R & D works funded by the government and its agencies will be made available for wider dissemination and commercial exploitation.* The government will ensure establishment of a suitable mechanism for collection, compilation and timely publication (hosting) of such information in the electronic form.

81. *It will be made mandatory for all the universities or deemed universities in the country to host every dissertation/thesis submitted for research degrees on a designated Website.*

82. It will be maximally ensured that any information or report collected by the government will be in electronic form at the entry point itself. Similarly, all the information to be made available to the public by the government, such as budget documents, customs and excise rules, railway time tables, telephone directory, maps including public domain digitised maps, etc. will be made available in the electronic form.

83. *The national, regional and other public libraries will be required to develop databases of their holdings which will be hosted on a designated website for free access to users.*

99. *A pilot project on digital library development, based on indigenous software, will be initiated. The project will be time-bound and implemented at one of the suitable existing libraries to serve as a model. The software so developed can be distributed to other organisations to accelerate the development of digital libraries in the country.*

100. *Virtual libraries provide extensive information and instant access to users through information networks. The Government will promote a pilot project for creation of a model virtual library. The virtual library will be enabled to work out suitable copyright arrangements with the relevant publishers for providing the service.* (emphasis added)

As is evident, this policy was fairly forward looking and liberal in its outlook. In the sections that follow, I will take up the progress of two types of initiatives that were spawned as a result of this policy: electronic archiving of theses and dissertations and digital libraries.

Electronic repositories of theses and dissertations

Following the NTFIT Report mentioned above, the University Grants Commission (UGC) issued the UGC (Submission of Metadata and Full-Text of Doctoral Theses in Electronic Format) Regulations in 2005 in order to ‘effect systematic creation, collection and compilation of metadata of doctoral theses in a standardized format, and to commence the process of submission of theses in electronic format in all universities’.⁷⁸

The ‘Background Note’ attached to the regulations recognizes that the theses collections in most Indian libraries are difficult to access and remain ‘an untapped and underutilized asset, leading to unnecessary duplication and repetition of efforts’. The UGC’s Regulatory Framework aims at evolving a mechanism to improve the quality, accessibility and availability of Indian theses.

Electronic version of theses provides broader exposure to research students through greater accessibility. It offers opportunities to use new forms of creative scholarship through use of interactive elements, multimedia, hyperlinks, etc. It provides opportunities to research students for professional development as they learn the basic skills of scholarly publishing in electronic format.⁷⁹

While the regulations deal fairly minutely with the various details of setting up a National Database of Theses, metadata formats and so on, some of its key prescriptions are summarized below:

- 1 The regulations make it mandatory for doctoral students to create a record for their theses on the website of the Indian National

Theses Database. (At the time of writing no such database had been established.)

- 2 The regulations oblige universities to make it a mandatory requirement for all doctoral students to submit electronic versions of their doctoral thesis. The university was charged with providing assistance in this task.
- 3 The PDF format was the preferred standard for submission. However, other formats such as MS-Word, RTE, PS, LaTeX, HTML or any other standard format could, optionally, also be accepted.
- 4 Each university was required to get an 'Author Approval Form' signed by the students for assigning non-exclusive rights to the university to archive and disseminate the thesis.
- 5 Each university was responsible for evolving an appropriate copyrights policy relating to the doctoral thesis, 'which may be included in the IPR policy of the university'. Thus, putatively, the regulations demanded the definite articulation of policies through which the university's intellectual assets were to be maintained and curated.
- 6 All universities were required to install an e-theses repository to facilitate e-submission, archiving, maintenance and access to the repository.
- 7 It was recommended that Open Access International (OAI)-compliant open source software be used to set up these e-theses archives (e.g. D Space, Virginia Tech's ETD software, e-prints etc.).

In line with the regulations, several universities have set up functioning electronic repositories of electronic theses and dissertations. Details of the collections of some of the more prominent of these repositories are supplied in the Table 3.2 below:

Table 3.2 Statistics on electronic theses and dissertation projects in India

Name	Subject	Size of collection	Platform	Submission procedure/ access
1. IIT Mumbai (http://www.library.iitb.ac.in/~mnj/etd/)	Sciences/ engineering	3,128 – master's dissertations 1,533 – doctoral theses	Greenstone	NA/only bibliographic details accessible
2. Indian Institute of Science, etd@IISc (http://etd.ncsi.iisc.ernet.in/)	Sciences	428	Dspace	Online/full text

3. Indian Institute of Science, ePrints@IISc (http://eprints.iisc.ernet.in/)	Sciences	12,916	Eprints	Online/full text
4. Indian Institute of Astrophysics (http://prints.iiap.res.in/)	Sciences	4,401	Dspace	Online/full text
5. Vidyanidhi-Digital Library and E-Scholarship Portal, University of Mysore (http://www.vidyanidhi.org.in)	Multi-disciplinary	100,000 bibliographic records 5,000 full-text theses	Dspace	Online/full text
6. National Institute of Technology, Rourkela (http://dspace.nitrkl.ac.in:8080/dspace/)	Sciences	760	Dspace	Online/full text
7. National Institute of Oceanography	Sciences	2,890	Dspace	Online/full text
8. C. V. Raman Research Institute (http://dspace.rii.res.in/)	Scientific Research and Archives	3,576	Dspace	Online/full text
9. OpenMed (http://openmed.nic.in/)	Medical	2,400	Eprints	Online/full text
10. Indian Statistical Institute, Bangalore (http://library.isibang.ac.in:8080/dspace/)	Sciences			
11. IIT Kanpur (http://172.28.64.70:8080/dspace/)	Sciences/ engineering			

Note: Figures are as of 8 May 2009.

Over the past five years, there has been a healthy growth in the number of Electronic Repository Projects being undertaken by universities and the list given in the Table 3.2 is only a sampling of a few of the more successful of

these initiatives. While these projects are devoted exclusively to making theses and dissertations accessible, the next section looks at various government-funded initiatives to host more diverse materials, including books and archival materials, on the Internet under various ‘digital library’ initiatives.

Digital libraries

‘Digital library’ is used in India to describe two different types of projects – consortium-based subscriptions to electronic resources for universities (sometimes labelled ‘virtual libraries’) and document digitization projects. Both are taken up independently in the sections below.

Consortium subscriptions/virtual libraries

There are currently two large government-funded consortiums for electronic resources that have universities and institutions as their main beneficiaries. Although these are exclusive libraries and are not ‘public libraries’ in the sense of being accessible to the public at large, they represent an important investment of public funds by the state on information resources.

AICTE-INDEST In December 2002, the Ministry of Human Resource Development (MHRD) and the All India Council for Technical Education (AICTE) – a statutory body, established for the coordinated development of technical education throughout the country – initiated a consortium to collectively subscribe to various Electronic Resources for Technical Education. Named the ‘Indian National Digital Library in Science and Technology’ (INDEST) and headquartered at the Indian Institute of Technology, New Delhi, the consortium subscribes to twenty-one leading full-text electronic resources⁸⁰ and six prominent bibliographic databases.⁸¹ Currently, the consortium has a membership of 868 institutions, the subscription for forty-seven of which are borne entirely by the Ministry of Human Resources and Development. Sixty institutions receive funding from the AICTE.⁸²

The consortium boasts significant financial savings of between 22 and 95 per cent (average over 80 per cent) through its pricing agreements with publishers as well as better terms of agreement for various electronic resources.⁸³

Reflecting on the benefits of the system, Jagdish Arora *et al.*⁸⁴ note,

The access to e-resources for the beneficiary institutions under the INDEST Consortium has increased from the present level of access to e-journals from 100 to 500 to more than 4000 journals in case of IITs and IISc which is comparable to world class institutions like MIT. Similarly, access level for Category II institutions (NITs/RECs etc.) have [*sic*] increased to around 780 e-journals from almost no access at present.

The consortium is expected to trigger remarkable increase in sharing of both print and electronic resources amongst participating library through its Web site.

Moreover, with subscribed resources accessible online in electronic format, the member libraries would have less pressure on space requirement for storing and managing print-based library resources. Moreover, all problems associated with print media such as their wear and tear, location, shelving, binding, organizing, etc. would not be an issue for electronic resources.

UGC-INFONET Close on the heels of the successful implementation of the INDEST Consortium, the UGC initiated its own Library Consortium project, christened 'INFONET', in December 2003. The consortium provides current and archival access to more than 5,000 core and peer-reviewed journals and nine bibliographic databases from 23 publishers⁸⁵ in different disciplines. So far, 153 universities out of 171 that come under the purview of UGC⁸⁶ have been provided differential access to subscribed e-resources. These e-resources cover almost all subject disciplines, including arts, humanities, social sciences, physical sciences, chemical sciences, life sciences, computer sciences, mathematics and statistics, and so on. The programme is wholly funded by the UGC. The consortium has also launched an Associate Membership Programme through which private universities and other research organizations may join the consortium for selected e-resources.

Like the INDEST, the INFONET Consortium claims major savings in terms of 'cost avoidance', the 'difference between cost paid by the consortium for member institutions for e-resources and cost payable by individual universities in case they subscribed the resources on their own'.⁸⁷ According to one estimate, the consortium has led to a national saving of 'Rs. 113.20 crores (USD 22.6 mn) in 2004 and Rs. 228 crores (USD 45 mn) during 2005 with overall figure of Rs. 345 crores (USD 69 mn) approximately, considering the fact that the same resources on list price would have cost Rs. 130.11 crores (USD 26 mn) and Rs. 257 crores (USD 51.5 mn) for each of those years 2004 and 2005 respectively'. Instead, the Consortium was able to negotiate rates as low as Rs. 16.91 crores (US\$ 3.2 mn) and 25.92 crores (US\$ 5.2 mn) for the corresponding periods.⁸⁸

Digitization projects

One of the benefits of the installation of the ICT-based 'knowledge society' as a key developmental goal for India has been the attention and support that digitization projects have received from the central government. Where previously the development of libraries was seen as a matter exclusively within the purview of the states, the central government has, of late, and acting through the Union Ministry of Information Technology, been extending liberal financial and technical assistance to projects that create open digital libraries on the Internet by digitizing archival materials as one of the partner countries for the Carnegie Mellon University-led project to digitize a million books and host them for free on the Internet under the banner of the 'Universal Library'. As the website of the 'Universal Library' states,

It is proposed to create the Universal Library with a free-to-read, searchable collection of one million books, available to everyone over the Internet. Within 10 years, it is our expectation that the collection will grow to 10 Million books. The result will be a unique resource accessible to anyone in the world 24 × 7, without regard to nationality or socioeconomic background. ...

Thus, a first step was to demonstrate the feasibility by undertaking to digitize 1 million books (less than 1% of all books in all languages ever published). This was achieved in the 2006–2007 timeframe. We continue to digitize books at 50 scanning centers all over the globe to achieve the long term objective. We believe such a project has the potential to change how education is conducted in much of the world.⁸⁹

An overview of some of the main digitization projects currently being undertaken in India through government support is given in Table 3.3.

Although the materials made available through these digitization projects tend to be archival, out-of-copyright information, their utility as a free public resource is enormous. While these efforts (with the exception of the Digital Library of India project) usually tend to be uncoordinated, and not overtly a part of a public library scheme, their utility lies in their *coordinate effect*⁹⁰ of enriching the information environment as a whole.

Digital libraries, the Internet and A2K

The Indexed Web contains at least 13.15 billion pages.

Maurice De Kunder, 19 April 2009⁹¹

The Library of Alexandria was the first time humanity attempted to bring the sum total of human knowledge together in one place at one time.

Our latest attempt? Google.

Brewster Kahle, founder, The Internet Archive⁹²

In 1989, Tim Berners Lee proposed a global hypertext project called the ‘Worldwide Web’ that was designed to allow people to work together by combining their knowledge in a web of hypertext documents. The fundamental architectural principles of this system were decentralization (intelligence was to be located at the nodes rather than at the centre), non-discrimination between different platforms, speed, allowance for heterogeneity of content and scalability. The project was meant to install a system that would enable information to reach users and vice versa as swiftly and intuitively as possible, while not discriminating between users or kinds of information transported. The five years following the initiation of the project witnessed an explosion in the quantity of information on the Internet. While initial attempts were made to ‘order’ this information along hierarchical lines – for example,

Table 3.3 Overview of government-aided digitization projects in India (2008)

Name	Subject	Size of collection
1. V. V. Giri National Labour Institute (an autonomous body of Ministry of Labour and Employment, Government of India) ^a (http://www.indialabourarchives.org)	Labour-related records	Almost 7 gigabytes of data comprising eight major collections (nearly 50,000 printed pages and 100 hours of taped interviews)
2. Digital Library of India – twenty-two institutions collaborating as a part of the Carnegie Mellon University’s ‘Million Books Project’. The project is funded by the Ministry of Information and Technology (http://www.new.dli.ernet.in/testpage.html)	Various	297,219 books comprising approximately 80 million pages (10 May 2009) ^b
3. Judgments Information System (http://judis.nic.in)	Law	Decisions of various courts in India
4. National Databank on Indian Art and Culture	Art and culture	25.08 lakh pages (5,826 books) 54,724 digital images 189 hours of video 300 hours of audio (till 30 November 2008) ^c (It is proposed to digitize 25,000 rare books, estimated to be 50 lakh pages)
5. Traditional Knowledge Digital Library – Collaborative Project of Council of Scientific & Industrial Research (CSIR), Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy (AYUSH) (http://www.tkdil.res.in/tkdil/langdefault/common/home.asp?GL=Eng)	Ayurveda, Unani, Siddha and Yoga	Total of 142 books (224 volumes) (October 2008) ^d (These are not available openly to the public)

^a ‘Digital Archives’. V.V. Giri National Labour Institute. 10 May 2009. Available at http://www.vvgnli.org/digital_archives.htm [accessed 3 May 2011].

^b ‘Scanning Centre Wise Report as on 10/May/2009’. Digital Library of India: Indian Institute of Science, 10 May 2009. Available at <http://www.new.dli.ernet.in/testpage.html> [accessed 3 May 2011].

^c ‘Targets of the Project’. National Databank on Indian Art and Culture: Pilot Project, 10 May 2009. Available at http://ignca.nic.in/ndb_targets.htm [accessed 3 May 2011].

^d ‘About TKDL’. Traditional Knowledge Digital Library. 10 May 2009. Available at <http://www.tkdil.res.in/tkdil/langdefault/common/Abouttkdl.asp?GL=Eng> [accessed 3 May 2011].

Gopher, Yahoo and so on – the quantity of information on the web rapidly outgrew the capacity of any one organization to husband such vast amounts of data. While search engines made the task of finding information easier, they came with problems of redundancy of their own – early search engines could retrieve the text you were searching for, but not always from the most relevant sources. It took the genius and entrepreneurship of two doctoral students from Stanford University to radically alter the browsing experience through the invention of the Google search engine. Google was built in order to solve the problem of the *quality* of information that one received in search results, and the solution was based not on any novel advancement in artificial intelligence but by a return to one of the shibboleths of the academic and library system – the plain old academic citation system. The Google PageRank system was overtly inspired by the academic citation system and uses the number of incoming links to a page to determine its popularity and relevance. The result is that, as John Battelle puts it, ‘In the past few years, search has become a universally understood method of navigating our information universe. Put a search box in front of just about anybody and he’ll know what to do with it’.⁹³

In a way Ranganathan’s *Five Laws of Library Science* described in the previous section attempted, in his time, to install an analogue system of free, frictionless flow of relevant information between dispersed nodes that were called libraries. Although the two kinds of networks appear similar in their intentions, they are divided by a fundamental alteration in the orientation of the user who has, through using the Internet, ‘moved from a stance of *exploration* (“What’s out there?”) to *expectation* (“I want to find something that I know is out there”)’. Now we go online expecting that everything we want to find will be there.⁹⁴ It remains to be seen what shape a public library would have to take to cater to a clientele accustomed to the ‘expectation’ mode of receiving information.

The various digital library projects outlined above have resulted in a greater basket of information resources being accessible to the average Indian Internet user than ever before. To that extent, they may be seen as initiatives that enhance the opportunity of certain classes of citizens to ‘better exercise their reasoned agency’ – one of the measures of ‘development’ proposed by Amartya Sen.⁹⁵

Before I conclude this section, I owe an explanation for the fancy subtitle of this chapter – ‘A History of Open Access (OA) and the Internet in India in the Nineteenth and Twentieth Centuries’. The idea that I want to convey is that the early library movement in India, as elsewhere, divulged distinctively *Internet-like* aspirations – as manifested in its ambition to plug masses of distributed readers into a network of information and books. When Ranganathan is defining the Five Laws of Library Science, he is in fact prefiguring and prophesying the foundational principles of the Internet itself. I am conscious

of the anachronism involved in the use of the phrase ‘Internet-like’ to describe libraries; however, I think it serves us well in this instance and reminds us that the Internet is *not* a vast digitized ‘library’ (with the latter’s censorial proscriptions on who may enter and access what content and be a part of which community of readers), but rather the library is a vastly diminished Internet. As one commentator wryly puts it,

The Library of Congress contains 82.6 terabytes of data. Consumers can store, in their homes on a consumer-grade 1 terabyte hard disk drive, one percent of all of the data stored in the Library of Congress. But consumers don’t want the Library of Congress, and they don’t want millions of Word documents. They want to store multimedia files, and that ups the ante by an order of magnitude. ...

One terabyte is enough space to hold 17,000 hours of compressed MP3 music, or 1,700 hours of CD-quality music. Not bad.⁹⁶

Although it is tempting, in the face of this expansion of storage capacity, to predict the imminent death of the library, there is room for circumspection.

In his book *The Anarchist in the Library*, Siva Vaidyanathan recounts his impressions of a visit to the new technologically backed library in Alexandria. He notes,

[The new library] is not a real library for Egyptians. It’s a tourist site, a mark of pride, but it’s not a center of exploration for an eleven-year-old child who came to Egypt with his family from the Sudan. It’s not a community meeting place that fosters social capital. It’s a shrine and a museum, but little more.⁹⁷

With regard to libraries subscribing to ‘digital libraries’ of the nature outlined above, he poses the following problem:

So imagine this: An electronic journal is streamed into a library. A library never has it on its shelf, never owns a paper copy, can’t archive it for posterity. Its patrons can access the material and maybe print it, maybe not. But if the subscription runs out, if the library loses funding and has to cancel that subscription, or if the company itself goes out of business, all the material is gone. The library has no trace of what it bought: no record, no archive. It’s lost entirely.

For Vaidyanathan, this is not a good model for a library and, according to him, may as well be ‘a computer terminal in a copy shop’. Digital libraries especially on the consortium subscription model may enhance the range of materials that we have access to and reduce substantially the time we take to locate them; however, they also export ownership and control over the archive to agencies outside the library. The digital library exists in binary mode – in either an ‘on’ or ‘off’ state – and the switch is not controlled locally. To that extent, it would be advisable to evaluate the access promises of digital libraries from the prism of national interests.

Conclusions: bibliomania in the margins – how Indians read

Addressing the Library Association's Conference at Scarborough, Mr. F. M. Gardner urged that the training of library staff was a vital need and said 'I know of no library in this country which systematically trains in book knowledge and tries to make that knowledge a primary qualification'. He referred to 'assistants who have nothing but a hearsay knowledge of any modern novelist of repute', and who would be quite incapable, say, of assessing the comparative importance of Beverly Nichols and Pandit Nehru as authorities on Indian affairs ... The test of a good librarian is ... that readers with a genuine instinct for books are given positive encouragement and the correct lead to satisfy this instinct. 'Librarian's Job', 5 June 1948⁹⁸

Bishnu Kumar Sharma, a stocky, bearded book vendor near the lush green Oval Maidan in Mumbai, inhabits the lowest rung in the piracy chain ... He and his poorly educated tribe learn of best sellers through customers, know the value of rare books, and help book collectors trace out-of-print editions ... 'He creates a mechanism to find out which books are moving fast, in what discipline, and at what price,' explains Subrahmanyam. 'He prints these books, sometimes in a well-known press'. *Asia Times Online*, 23 April 2004⁹⁹

Whether conceived of as sites of leisure or as vanguards of adult education, there is a widespread perception in India that public libraries have been unsuccessful in their assigned role. While it is true that they continue (especially in the case of the four large national libraries and various state central libraries) to enjoy patronage by a narrow class of clientele comprising students appearing in public examinations and academic researchers, they have largely been ignored by the wider public. One may identify a range of factors, both intrinsic and extrinsic, that contribute to this state of neglect – including official apathy, heavily centralized procurement policies that disregard local demands, the widespread availability of cheap reading materials especially in regional languages, the mass popularity of cinema and television as the preferred modes of entertainment and so on. Further, and although this is not particularly reassuring, this decline in the popularity of public libraries in India is consistent with the overall decline of public libraries in other parts of the world (for instance in the United Kingdom¹⁰⁰).

If public libraries in India are inadequate, and access to the Internet is still not so widespread as to reach a significant portion of the population, then how do people read? I begin this section with two quotidian vignettes on A2K in India that may not directly be related to libraries but form an important component of the environment within which public libraries operate in this country.

- 1 In June 2008, in separate incidents, irate schoolchildren in the state of Andhra Pradesh¹⁰¹ and Karnataka¹⁰² staged marches protesting the inadequate supply of free textbooks from the government. While one may, rightly, regard these as instances of glaring government ineptitude, it is also possible to see here an instance of the vocalization of the urge to be educated immediately, now, for *free*. Textbook publishing in India is in most cases state-organized and heavily subsidized so that at least while in school students may largely expect to be supplied with the bare minimum of reading materials suited to their educational levels. While this is no substitute for a well-organized public library system, it is still heartening considering that constant access to printed materials is often a catalyst that sustains literacy.
- 2 The following account of a pirate bookstore appeared in an article in the *International Journal of Higher Education*:

Stacked to the ceiling in one shop alone were pirated copies of 70,000 books, from copies of first-year chemistry books, to reproductions of pricey medical texts – *enough copies to stock a large American-university bookstore*.¹⁰³

The three-year old Anti-Piracy Committee ... actively works with The Publishers' Association – UK and the American Publishers' Association to create awareness about the copyright issue through its workshops and seminars and to contain the malaise. In about 150 raids conducted by these bodies through their attorney ... in the past 3–4 years, about 2,50,000 pirated copies of books have been seized.¹⁰⁴

While the first vignette cited above confirms that there is certainly a demand for 'knowledge', I think this demand is restricted to knowledge that is relevant for earning accreditation. At least, no similar demonstrations have been held demanding the installation of libraries generally. Lest we take this as a determinative indicator of the knowledge demands of the Indian public, however, the rampancy of book and media piracy confirms both that the public's tastes exceed the mundanely informational and that there is an urgency and impatience to these demands such that their satisfaction will not await delivery through formal channels if it can be helped. More than the publishing industry, it is the pirate industry that shows India up as a nation of voracious readers constantly endeavouring, against the odds, to educate itself. More than librarians, it is pirates who have demonstrated the canny 'book knowledge' and the drive that enables them to fulfil Ranganathan's injunction to deliver 'each book to its reader'.

Public libraries in India operate in an environment that includes a system of government subsidy, a 150-year-old, low-cost publishing industry and a flourishing piracy trade in books, so that the particular shortcomings of the library movement in some corners is offset to an extent by an ecology of cheap print and media materials. If one of the objectives of the library movement has been to bridge the income gap in accessing materials, the widespread cheap

availability of these materials is definitely one of the important factors that impacts on the popularity of public libraries in India.

The development of the networked information economy and the widespread diffusion of information technology give rise to new opportunities for both learning and entertainment. The profusion of materials that have become accessible to Internet users over the past two decades has succeeded in reconfiguring the approach of users toward information, from one of *exploration* to *expectation*.¹⁰⁵

But, as Geert Lovink reminds us, 'Open Access only exists for those who have made it to the machine and are literate enough to login'.¹⁰⁶ To that extent, 'celebrations of inclusion' by the OA movement appear as so much 'rhetoric that hides actual existing exclusion mechanisms'.¹⁰⁷ The persistence of traditional exclusion mechanisms notwithstanding, we may be encouraged by an anecdote that Ravi Sundaram recounts in his 'Recycling Modernity'¹⁰⁸ about Selvam, a lower caste typist who taught himself programming by 'devouring used manuals, and simply asking around'. According to Sundaram, this gestures to a 'world of informal technological knowledge existing in most parts of India, where those excluded from the upper-caste, English-speaking bastions of the cyber-elite learn their tools'.¹⁰⁹

Current statistics reveal that as little (or as many) as 40 to 60 million Indians are active users of the Internet.¹¹⁰ Viewed as a percentage of the population, this is a meagre 4 to 6 per cent. However, this is close to the total number of graduates in India (48.7 million¹¹¹) and is adding users at a much higher rate than the number of new graduates every year (2.5 million¹¹²). This hints at a degree of techno-literacy higher than the figures of actual literacy would permit. A recent survey¹¹³ indicates that the Internet boom in India has been led not by the metros but smaller and non-metro towns, where the number of Internet users has risen sixty-nine times and thirty-three times respectively since 2000. According to the report, 'More than 60% of information seekers look for general information on the net and 45% look for educational information'.¹¹⁴

So while older forms of access barriers persist, the Internet remains a potential resource for self-learners who are 'merited' out of formal channels of education. Yochai Benkler, in *The Wealth of Networks*, points out the 'coordinate' benefits of access to the Internet – a search on Google delivers an 'information product' that is not made possible by cooperation between various sites but rather their simple coordinate existence.¹¹⁵ Without doing much more, by virtue of their mere existence on the Internet, open educational resources significantly enrich the information environment that we inhabit.¹¹⁶

As the recent successes of the Delhi Public Library have demonstrated, this presents a valuable opportunity for public libraries to reinvent themselves by adjusting to the changes in the informational environment. For librarians, the arrival of the computer and the Internet have added a new vibrancy into their profession. The concept of Open Access and Open Source Software in particular has been received enthusiastically among library professionals in India, and this

is tellingly revealed if one views the archives of the 'LIS-Forum' mailing list – a popular discussion forum for Library and Information professionals in India.¹¹⁷

As I suggested in the opening paragraphs of this chapter, I would like to end with some summary reflections on what the A2K movement could possibly learn from the Indian library movement.

First, I think it would be productive to think of what shape the A2K movement may take if it were to be reconceptualized, following S. R. Ranganathan's prescription, as *selling the idea of reading (and also, by extension, viewing and listening)*. So far, the movement's thrust has been on passively making 'information' available, on the assumption that its audience will take shape automatically.

Second, just like the librarians in the library movement, the modern A2K movement depends for its existence on the availability of the curatorial labours of trained armies of programmers and computer technicians. It remains to be seen whether the fate of these new-age 'coolie-techs' will ultimately mirror that of the librarians who are, in India, relegated to the janitorial class. There appears, as yet, no 'Indian' Jimmy Wales on the horizon. Just like with libraries, in the A2K movement it is possible to squat on a lot of information – to be a 'node' of that information – without in fact being 'knowledgeable' about it.

Third, Sarah Kamla makes an important point about the decline of public libraries in India in the aftermath of the takeover of the library mission by the state. While the energetic entry of the Indian government into the realm of digital libraries and repositories is welcome, it would be disadvantageous if this resulted in the withdrawal of individual enterprise from the field. Thankfully, there are signs that individual and government efforts at supplying information have been complimentary so far rather than conflicting. Thus, for instance, the availability of court decisions from government websites has not impeded (and has in fact spurred) individuals from hosting sites that build on this material.

Last, I think the public library movement in India has, in some senses, been a casualty of the various discourses that have been woven around it – whether that of promoting literacy, adult education, economic growth and so on. Neglected in these discourses have been the actual aspirations and desires of the local community. This is a danger that the modern A2K movement would do well to avoid – to be so completely sold on its own beneficial rhetoric as to be blinded to what people truly want and find useful.

Notes

- 1 Langton Gould-Marks, 'Public Libraries in England, 22nd June 1947', *The Hindu Speaks on Libraries* (Madras: Kasturi & Sons Ltd, 1992), pp. 66–8.
- 2 Vaibhav Pandey, 'How Does a DNS Work?', Technofriends, 1 June 2008. Available at <http://technofriends.in/2008/06/01/how-does-a-dns-work/> [accessed 13 February 2009]. See generally, 'Domain Name System', Wikipedia, 12 February 2009. Available at http://en.wikipedia.org/wiki/Domain_name_system [accessed 3 May 2011].

- 3 'What Is Access to Knowledge?' Balkinization, 21 April 2006. Available at <http://balkin.blogspot.com/2006/04/what-is-access-to-knowledge.html> [accessed 20 July 2009].
- 4 From the Wikipedia entry on Y2K 'The Year 2000 problem (also known as the Y2K problem, the millennium bug, the Y2K bug, or simply Y2K) was a notable computer bug resulting from the practice in early computer program design of representing the year with two digits. This caused some date-related processing to operate incorrectly for dates and times on and after January 1, 2000 and on other critical dates which were billed "event horizons"'.
- 5 Adapted from the title of Priya Joshi's fascinating account of public libraries in India in the nineteenth century. Priya Joshi, 'Reading in the Public Eye – The Circulation of British Fiction in Indian Libraries c. 1835–1901', in S. Blackburn & Vasudha Dalmia (eds), *India's Literary History: Essays on the 19th Century* (New Delhi: Permanent Black, 2006).
- 6 In his recent book 'The Anarchist in the Library', Siva Vaidyanathan reminds us that 'the library is not just functionally important to communities all over the world; it embodies Enlightenment values in the best sense. *A library is a temple devoted to the anti-elitist notion that knowledge should be cheap, if not free – doors should be open*'. Siva Vaidhyathan, *The Anarchist in the Library: How the Clash between Freedom and Control Is Hacking the Real World and Crashing the System* (New York: Basic Books, 2005).
- 7 The threat that free public access to knowledge (A2K) could pose to power was evident to mid-nineteenth-century lawmakers in the United Kingdom, who lobbied against the first system of public libraries on the grounds that it would make the working classes even more unmanageable than they already were.
- 8 To illustrate, the state of Karnataka in south India claims a network of libraries that includes nineteen City Central Libraries, twenty-seven District Central Libraries and over 3,000 village libraries with a cumulative membership of over a million registered members. 'Some Facts and Figures of Karnataka Public Libraries', *Karnataka Public Libraries System*, 1 September 2003. Available at <http://www.kar.nic.in/publib/SOMEFACTS.htm> [accessed 15 February 2009]. As salutary as these figures are, they say nothing about the kinds of collections these libraries house, the frequency of visits by patrons, the number of books issued and the kinds of books that are popular. In general, public libraries in India have tended to be little more than hangouts for students studying for various public service examinations, and their collections tend to be focused on this narrow clientele.
- 9 'ILA Membership', *Indian Library Association* 2001. Available at <http://www.ilaindia.in/> [accessed 15 February 2009].
- 10 For a complete description of this system and other contributions of S. R. Ranganathan, see Eugene Garfield, 'Tribute to S. R. Ranganathan, the Father of Indian Library Science – Part 2. Contribution to Indian and International Library Science', *Current Comments*, 7(7) (1984), pp. 45–9. Available at <http://www.garfield.library.upenn.edu/essays/v7p045y1984.pdf> [accessed 3 May 2011].
- 11 A letter to the editor of the *Deccan Herald* provides an instance of the dissatisfaction with the level of service of public libraries in the south Indian state of Karnataka. Abdul Majeed Khan, 'City Public Libraries in Shambles', 8 July 2008. Available at <http://www.deccanherald.com/Content/Jul82008/editpage2008070777524.asp> [accessed 11 February 2009].
- 12 See Jashu Patel and Krishan Kumar, *Libraries and Librarianship in India* (Westport, CT: Greenwood Press, 2001), p. 81. Available at <http://www.questia.com/> PM.qst?a=o&d=101358000 [accessed 10 February 2009]; R. Bhattacharjee, *Public Library Services in India: Systems and Deficiencies*, International Federation of Library Associations and Institutions, 2002. Available at <http://www.ifla.org/VII/s8/annual/cr02-in.htm> [accessed 10 February 2009].

- 13 See Note 5.
- 14 The Calcutta Public Library (est. 1836) and the Madras Literary Society (est. 1818) had both paying members as well as a policy that permitted entry gratis to students and 'respectable strangers visiting the City'. See 'What Is Access to Knowledge'.
- 15 'The National Library – Expansion to Be Stepped Up – Maulana Azad's Assurance – 2nd February 1953', *The Hindu Speaks on Libraries*, pp. 103–8.
- 16 'The National Library'.
- 17 The Press and Registration of Books Act, 1867.
- 18 See Margarita Barns, *The Indian Press: A History of the Growth of Public Opinion in India* (London: Allen & Unwin, 1940). However, Priya Joshi's account of the ease with which books seemed to circulate unhindered through the course of latter half of the nineteenth century despite the existence of this legislation casts some shadow of doubt on whether the Act was in fact ever used for the purpose of censorship. See Note 4 at p. 293.
- 19 See, for instance, Ulrike Starke's fascinating account of the influential role of the Newal Kishore Press in Lucknow in promoting Hindi literature across North India during the latter half of the nineteenth century. Ulrike Starke, 'Hindi Publishing in the Heart of an Indo-Persian Cultural Metropolis – Lucknow's Newal Kishore Press (1858–1895)', in S. Blackburn & Vasudha Dalmia (ed.), *India's Literary History*.
- 20 Relying on a census of 'Scientific and Literary Societies' titled 'Annual Reports of the Administration of the Madras Presidency', Priya Joshi reports that 'between 1887 and 1900, the number of scientific and literary societies in the Madras Presidency increased almost three fold from 146 institutions in 1887 to 401 in 1900. Annual membership figures varied greatly in these institutions from 5 members or visitors to 14,532'. From a similar report – *Thacker's India Directory* – she finds 'proportionate increases in the number of libraries and reading rooms for other regions as well, Calcutta went from having 49 libraries and reading rooms in 1886 to 137 in 1901; an almost three fold increase, while the number of such institutions in Bombay increased over five fold from 13 in 1886 to 70 in 1901'.
- 21 '9th Annual Conference of Madras Non-Gazetted Educational Officers – 23rd December 1927', *The Hindu Speaks on Libraries*, pp. 14–16.
- 22 'Establishment of Libraries – Dr. Ranganathan's Plan – 4th June 1953', *The Hindu Speaks on Libraries*, pp. 128–9.
- 23 Bipan Chandra, for instance, suggests that the easy availability of literature on the Soviet Union at the Dwarkadas Library in Lahore founded by Lala Lajpat Rai influenced Bhagat Singh and Sukhdev – two of India's revolutionary names – who began to look upon the Soviet Union as the state nearest to their ideal. Bipan Chandra, *Nationalism and Colonialism in Modern India* (New Delhi: Orient Blackswan, 1979), p. 230.
- 24 'Library Movement in Madras – 20th May 1920', *The Hindu Speaks on Libraries*, p. 3.
- 25 See Note 12.
- 26 'Indian Libraries Movement – Cocanada Conference – 5th January 1924', *The Hindu Speaks on Libraries*, pp. 4–6. The impetus to the library movement in this state seems to have been owing to the efforts of prominent social reformers, including Veeresalingam Pantulu (1848–1919) and S. V. Narasimhasastry. The former, in particular, was a noted champion of adult education, including women's education, and was instrumental in the renaissance of Telugu literature during the early part of the nineteenth century.
- 27 In 1926, over two decades after its designation as a public library, the librarian of the Imperial Library, Mr J. A. Chapman, issued a 'Plea for Popular Patronage' in *The Statesman* declaring that the Imperial Library was 'prepared to send its books to

- approved persons in India and Burma' upon payment of postage, but without any subscription charges being levied. 'The Indian Imperial Library – Plea for Popular Patronage – 16th January 1926', *The Hindu Speaks on Libraries*, pp. 7–9.
- 28 'Establishment of Libraries – Dr. Ranganathan's Plan – 4th June 1953', *The Hindu Speaks on Libraries*, pp. 128–9.
 - 29 'Librarians' Conference – 5th January 1918', *The Hindu Speaks on Libraries*, pp. 1–2.
 - 30 The AILC continues till this day and in December 2007 the 53rd AILC was held at Hyderabad.
 - 31 There appears to be some confusion regarding the exact nature of the AILC of 1933. The website of the ILA describes it as the *first* AILC; however, according to news reports, at least two previous AILCs appear to have been held in Lahore in 1918 and 1929, respectively. See 'History: ILA', Indian Library Association. Available at <http://www.ilaindia.in/> [accessed 11 February 2009]. See also 'All-India Library Conference – Sir P. C. Ray's Address – 27th December 1929', *The Hindu Speaks on Libraries*, pp. 36–7.
 - 32 'The Madras Library Association – An Appeal – 30th March 1928', *The Hindu Speaks on Libraries*, pp. 21–22.
 - 33 '9th Annual Conference of Madras Non-Gazetted Educational Officers – 23rd December 1927', *The Hindu Speaks on Libraries*. Madras: Kasturi & Sons Ltd, 1992, pp. 14–16.
 - 34 S. R. Ranganathan, *The Five Laws of Library Science* (Madras: Madras Library Association, 1931). Available at <http://hdl.handle.net/10150/105454> [accessed 29 May 2011].
 - 35 Zahid Ashraf Wani, 'Development of Public Libraries in India', *Library Philosophy and Practice* (2008). Available at <http://www.webpages.uidaho.edu/~mbolin/wani.htm> [accessed 12 February 2009].
 - 36 Neeta Jambhekar, 'National Policy on Public Libraries in India'. *World Libraries*, 5(2) (1995). Available at http://www.worlib.org/vol05no2/j_v05n2.shtml [accessed 12 February 2009].
 - 37 The educational theory is based on the belief that before the journey begins, one can be given food (in this case education) that is meant to last the entire journey. In educational terms, this theory places emphasis on acquiring qualifications through formal education from childhood and ceasing abruptly with graduation from a university.
 - 38 See, for instance, Sevanti Ninan's detailed account of the use of television to promote pedagogy by the Indian state. According to Ninan, 'The history of television education in India is the history of the origin of the medium'. Sevanti Ninan, 'Electronic Pedagogy: Hit or Miss?' *Through the Magic Window – Television and Change in India*, first edition (New Delhi: Penguin Books, 1995), pp. 100–16.
 - 39 Quoted in Nick Prior, 'Museums: Leisure between State and Distinction', in Rudy Koshar (ed.), *Histories of Leisure*, illustrated edition (United Kingdom: Berg Publishers, 2002), pp. 34–5.
 - 40 'The National Library – Expansion to Be Stepped Up – Maulana Azad's Assurance – 2nd February 1953', *The Hindu Speaks on Libraries*, pp. 103–8.
 - 41 The manifesto has been amended twice in 1972 and more recently in 1997.
 - 42 *UNESCO Public Library Manifesto*, UNESCO/IFLA, 1997. Available at <http://www.unesco.org/webworld/libraries/manifestos/libraman.html> [accessed 11 April 2009].
 - 43 Jambhekar, 'National Policy on Public Libraries in India'.
 - 44 Jambhekar, 'National Policy on Public Libraries in India'.
 - 45 Jambhekar, 'National Policy on Public Libraries in India'.
 - 46 (1) Madras (Tamil Nadu) Public Libraries Act (1948), (2) Andhra Pradesh Public Libraries Act (1960), (3) Mysore (Karnataka) Public Libraries Act (1965),

- (4) Maharashtra Public Libraries Act (1967), (5) West Bengal Public Libraries Act (1979), (6) Manipur Public Libraries Act (1988), (7) Kerala Public Libraries Act (1989), (8) Haryana Public Libraries Act (1989), (9) Mizoram Public Libraries Act (1993), and (10) Goa Public Libraries Act (1993).
- 47 See note 36.
- 48 R. Bhattacharjee, *Public Library Services in India*.
- 49 Sarah Kamala, 'Creating a Second Village Library Movement', in Brij Kothari (ed.), *Reading Beyond the Alphabet* (California: Sage Publications, 2003), pp. 169–85.
- 50 'Libraries Today: In 60s Not 90s – 7th February 1992', *The Hindu Speaks on Libraries*, pp. 288–9.
- 51 'Press Release: DPL Success Story: Membership and Usage Increase Substantially', *Delhi Public Library*, 23 December 2008. Available at <http://www.dpl.gov.in/Press.pdf> [accessed 8 May 2009].
- 52 For instance, the 'Vision 2020' document prepared in 2002 by the Planning Commission of India to guide the country's progress 'conceives of India evolving into an information society and knowledge economy built on the edifice of information and communication technology (ICT), of which telecommunications is the springboard'. *India Vision 2020* (New Delhi: Planning Commission, 2002). Available at www.planningcommission.nic.in/reports/genrep/pl_vsn2020.pdf [accessed 10 May 2009].
- 53 See, for instance, the 2007 Working Report by the National Knowledge Commission on 'Access to Knowledge'.
- 54 'National Knowledge Commission – Letter to the Prime Minister', 7 December 2006. Available at <http://www.knowledgecommission.gov.in/downloads/recommendations/LibrariesLetterPM.pdf> [accessed 8 May 2009].
- 55 Simultaneously, one needs to regard the public library's educating mission with a healthy degree of suspicion – both on account of its abysmal actual performance in furthering public education to any appreciable degree as well as the fact that 'modern education' itself is the child of the industrial age and is designed to serve primarily the ends of industry. As Gustavo Esteva and Madhu Prakash point out, 'Modern Education was born when a new conviction arose in Europe that man is born stupid and lacks vital competence unless he is educated. Everywhere education is promoted in the name of equality and justice. It is presented as the best remedy for the oppressive inequalities of modern society'. However, they caution, 'It produces exactly the opposite. No matter how much every society invests in education, most people fail to reach the end of the process and are disqualified as unfit for a manmade world'. The increasing frustration that ordinary people experience with modern education is leading more and more of them to reject the model and recover 'little by little their old art of learning in which every baby is an expert. Given the fact that education is the economization of learning, which transforms learning into the consumption of a commodity called knowledge, people recover their own notion of learning to live. Since the noun education imposes a radical dependence, of any educator, upon the public or private system of education, they substitute for it the verb "to learn", which re-establishes the autonomous capacity to keep a creative relationship with the others and with nature. People acknowledge that to know is a personal experience, and that the only way to know, to widen the competence to live, is *to learn from the world, not about the world*'. Gustavo Esteva and Madhu Prakash, 'Education', in Vinay Lal and Ashis Nandy (eds), *The Future of Knowledge and Culture: A Dictionary for the 21st Century* (New Delhi: Penguin Books India, 2005), pp. 84–9. It is worth asking in our context whether the public library is such a site that fosters learning *from* the world and not merely *about* the world.

- 56 Prior, 'Museums'.
- 57 Prior, 'Museums'.
- 58 Prior, 'Museums'.
- 59 Prior, 'Museums'.
- 60 For instance, in his *Five Laws*, S. Ranganathan recounts an anecdote in which a particular municipality sought to locate its new library on the outskirts of the town in order to keep out 'all sorts of fellows' who may otherwise land up at its doorsteps if the library was more centrally located. In contrast to this approach, Ranganathan advocates that access to the broadest possible section of the public be made one of the central tenets of the public library.
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- 62 'National Knowledge Commission – Letter to the Prime Minister'.
- 63 Tapri Roy, 'Disciplining the Printed Text: Colonial and Nationalist Surveillance of Bengali Literature', in Partha Chatterjee (ed.), *Texts of Power: Emerging Disciplines in Colonial Bengal* (Calcutta: Samya, 1995).
- 64 Sharpe, K. & Zwicker, S. eds., 2003. *Reading, Society, and Politics in Early Modern England*, Cambridge, U.K: Cambridge University Press. P.1.
- 65 *Ibid*, p. 3.
- 66 *Ibid*, p. 4.
- 67 Roy, 'Disciplining the Printed Text', pp. 30–63.
- 68 There is evidence of the existence of this kind of 'public reading' among the urban poor in Victorian England alongside the Protestant Reformation with its strictures on private reading. John Plunkett and Andrew King provide an account of such readings among the Costermongers of London in their *Reader on Victorian Print Media*. See Henry Mayhew, 'The Literature of Costermongers', in John Plunkett and Andrew King (eds), *London Labour and the London Poor*, Volume 1 (London: Griffin, Bohn & Co., 1861), pp. 25–6. John Plunkett and Andrew King, *Victorian Print Media: A Reader* (Oxford and New York: Oxford University Press, 2006), pp. 271–4.
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- 70 Joshi, 'Reading in the Public Eye'.
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- 73 M. S. Swaminathan, 'Every Village a Knowledge Centre', *The Hindu*, 25 November 2005, p. 10. Available at <http://www.hindu.com/2005/11/25/stories/2005112504941000.htm> [accessed 13 February 2009].
- 74 See generally, Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (New Haven, CT: Yale University Press, 2007).
- 75 Sundaram says 'Temporal acceleration was a significant part of the imaginary of developmentalism – this was inherent in the logic of 'catching up' with the core

areas of the world economy by privileging a certain strategy of growth that actively delegitimized *[sic]* local and “traditional” practices’.

- 76 Preamble, Government of India. Office of the Prime Minister. National Task Force on Information Technology and Software Development, 1998. Available at <http://it-taskforce.nic.in/prem.htm> [accessed 3 May 2011]. This view corresponds to what Ravi Sundaram terms as the first ‘fable of electronic capitalism’ in which “India’s access to western modernity (and progress) would obtain through a vast virtual universe, programmed and developed by Indians”. See Ravi Sundaram, ‘Recycling Modernity: Pirate Electronic Cultures in India’, in Geert Lovink and Shudhabrata Sengupta (eds), *Sarai Reader 01: The Public Domain* (New Delhi: Waag Society for Old & New Media, 2001).
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- 78 UGC (Submission of Metadata and Full-Text of Doctoral Theses in Electronic Format) Regulations, 2005.
- 79 UGC (Submission of Metadata ...) Regulations.
- 80 Respectively, ABI/Inform Complete, ACM Digital Library, ASCE Journals, ASME Journals (+ A M R), ASTM Standards & Digital Library, Capitaline, CRIS Ind. Information, Digital Engineering Library (DEL), EBSCO Databases, Elsevier’s Science Direct, Emerald E-Books (Business Management & Economics Collection), Emerald Full-Text, Emerald Management Xtra, Engineering Science Data Unit (ESDU), Euromonitor (GMID), IEEE/IEE Electronic Library Online (IEL), IEL Digital Library, Indian Standards, INSIGHT, Nature, ProQuest Science (formerly Applied Science & Technology Plus) and Springer Link. For the latest list, See *E-Resources List*. INDEST-AICTE consortium. Available at <http://paniit.iitd.ac.in/indest/eresources.html> [accessed 2 May 2008].
- 81 Respectively, COMPENDEX on EI Village, INSPEC on EI Village, J-Gate Custom Content for Consortia (JCCC), MathSciNet, SciFinder Scholar and Web of Science. For the latest list, See *E-Resources List*. INDEST-AICTE consortium. Available at <http://paniit.iitd.ac.in/indest/eresources.html> [accessed 2 May 2008].
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- 84 Arora, ‘Indian Digital Library’.
- 85 Respectively, American Chemical Society, American Institute of Physics, American Physical Society, Annual Reviews, Blackwell Publishing, Cambridge University Press, Elsevier Science, Emerald, Institute of Physics, J-STOR, Nature, Oxford University Press, Portland Press, Project Euclid, Project Muse, Royal Society of Chemistry, SIAM, Springer Link, Taylor and Francis, SciFinder Scholar, MathSciNet, Royal Society of Chemistry (6 Databases), ISID and JCCC.
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- 88 Chand, 'Access to Scholarly Literature', p. 577.
- 89 'About Us', The Universal Digital Library. Available at <http://www.ulib.org/ULIBAboutUs.htm#visionBkMark> [accessed 6 May 2011].
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The fact that every such effort is available to anyone connected to the network, from anywhere, has led to the emergence of coordinate effects, where the aggregate effect of individual action, even when it is not self-consciously cooperative, produces the coordinate effect of a new and rich information environment.
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