Communications

Technology and Historical Research

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Introduction

What is research? Research in any subject including history means either new discovery of facts or a new interpretation of facts already known. If a book or article has been written which fails to do that, it is not a piece of good research. In recent years, development of information and communication technology (ICT) has facilitated sound research by means of making it possible for the researcher to have instant and easy access to the vast source of information. Thus, technology has come to play an important role in research. By using ICT tools, a researcher can make a perceptible improvement in the quality of work. We propose to discuss some of the important databases which are of immense help to conduct historical research.

E-resources of UGC

The UGC has played an important role making e-resources available through different libraries. Some of the important ones are:
Cambridge University Press: http://journals.cambridge.org/
Economic & Political Weekly: http://epw.in/
ISID: http://isis..org.in
JCCC: http://jgateplus.com/search
JSTOR: http://jstor.org/
Project Muse: https://muse.jhu.edu/
Oxford University Press: http://www.oxfordjournals.org/
Springer Link: http://www.springerlink.com/
Taylor & Francis: http://andfonline.com/
Web of Science: http://www.webofknowledge.com/
Wiley-Blackwell: http://onlinelibrary.wiley.com/

For researchers of history, JSTOR is of particular interest. It was established in 1995. It is a digital library of academic journals, books, book reviews and primary sources. This means that small institutions have access to large collections of documents in soft form which means savings in shelf-space and expenditure. The contents of JSTOR are contributed by over 900 publishers and it provides full text access to about 2000 journals in all disciplines including History. As per the latest figure, JSTOR contains about 15000 articles on History. The Project Muse is another important database of relevance to History. It is a leading provider of digital humanities and social science content for the scholarly community. It covers books and journals published by over 120 publishers. It provides access to about 3,00,000 articles from academic journals and another 23,000 e-books.

Digital Library of India

It aims to offer free access to knowledge by providing free-to-read books to everyone over the internet. It is a unique resource accessible to whoever is interested in using it the world over.

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The users can be of any socio-economic background or nationality. The availability of online material allows users to locate relevant information fast and thus enhances their ability to tap source material. While the long-term aim is to capture almost all the books in the digital form, the task will take a very long time. Hence, as a first step, one million books are to be digitized.

The need for this effort is obvious. Libraries are unevenly distributed in the country. While the metropolitan cities have good libraries, in the hinterland many basic books for research are not available. In many institutions even when the books are available, their condition is so bad that either they are not made available to the readers, or if made available, they are too brittle to read. Then, there are constraints on the use of libraries. They have opening time and closing time. It has been estimated that more than 80 per cent libraries in India are open between 60 and 80 hours a week. The problem is more so for those sections of a library where rare books are kept. Compared with other departments of a library, these sections are open for a shorter duration. Often a book is already is issued out to a user and another user has to wait to get it. Going to bigger cities to consult books in libraries has problems of travelling, board and lodging, apart from their financial implications. Digitization of books goes a long way towards solving these problems. A book available in the Digital Library can be read on 24x7 basis and by any number of persons at the same time. All that is required is an internet connection by the user. He/she has to log in to: www.dli.ernet.in or www.dli.gov.in

At the same time there are some problems in reading books in this Library. First, the scanning of the documents has been done in haphazard manner. In-between some pages have been left out. Even when a page has been scanned, the full page has not been scanned. Parts of printed pages have been missed. Often the page numbers have not been scanned. This creates a serious problem because in a historical study it is indispensable to quote a page number.

INFLIBNET Centre

Information and Library Network (INFLIBNET) Centre is an autonomous Inter-University Centre (IUC) of the University Grants Commission. It is a major national programme initiated by the UGC in March 1991 with the Head Quarters at Gujarat University campus, Ahmedabad. Initially started as a project under the IUCA, it became an independent IUC in June 1996. INFLIBNET, among other things, provides access to e-resources through its website. The prominent links in this regard are: (i) Shodhganga, (ii) IndCat: Online Union Catalogue of Indian Universities, and (iii) UGC-Infonet Digital Library.

Shodh Ganga

This facility covers unpublished theses and dissertations which are not available to the researchers till they are published. Both theses and dissertations largely remain an untapped and under-utilized asset. This leads to an unnecessary duplication of effort by the researcher resulting in waste of both human and financial resources. The UGC tried to remedy this situation when it issued Notification (Minimum Standards & Procedure for Award of M.Phil./Ph.D. Degree Regulation, 2009 dated June 1, 2009. It mandates the submission of electronic version of theses and dissertations by the researchers in universities in order to facilitate open access to Indian theses and dissertations to the academic community world-wide. Online availability of electronic theses through centrally-maintained digital repositories not only ensures easy access and archival of Indian doctoral theses, but also helps in raising the quality of research. The responsibility of hosting, maintaining and making the digital repository of Indian electronic theses and dissertations accessible to all institutions and universities, is assigned to the INFLIBNET Centre. Nearly 50,000 theses are included in Shodhganga. History is one of the subjects included. Theses of more than 40 universities are covered. They are among the best universities in India and include: Jawaharlal Nehru University, University of Delhi, Punjabi University, Aligarh Muslim University, Gauhati University, Sardar Patel University, Gujarat University, Mahatma Gandhi University, Maharaja Sayajirao University of Baroda, Pt. Ravishankar Shukla University, University of Hyderabad, Pondicherry University, Goa University and University of Calicut.

Here a reference may be made Shodhgangotri. Under this initiative research scholars/research supervisors in universities are requested to deposit electronic version of approved synopsis submitted by research scholars to the universities for registering themselves for the Ph.D. programme. The repository reveals the trends and directions of research done in Indian universities as well as avoids duplication of research. Thus, synopsis submitted to Shodhgangotri finally leads to full text theses for Shodhganga. Till date over 2,000 synopses/research proposals are found in Shodhgangotri.

IndCat: Online Union Catalogue of Indian Universities

It is a unified Online Library Catalogues of books, theses and journals available in major university libraries in India. The union database contains bibliographic description, location and holdings information for books, journals and theses in all subject areas available in more than 162 university libraries across the country. A web-based interface is designed to provide easy access to the merged catalogues. The IndCat is a major source of bibliographic information that can be used for inter-library loan, collection and development as well as for copy cataloguing and retro-conversion of bibliographic records. It consists of three components available in open access to users and librarians. Over 13 million bibliographical records of books from 162 libraries, more than 2,65,000 doctoral theses from 302 universities, and more than 33,000 serials from 213 universities are accessible through IndCat.

UGC-Infonet Digital Library Consortium

It was launched in December 2003 by President APJ Abdul Kalam in the year 2003 soon after the internet connectivity to the universities is provided, under the UGC-Infonet Programme. The Consortium has proved to be a recipe to university libraries which have been discontinuing subscription of scholarly journals because of financial crunch which is also called the 'Serials Crisis' that refers to exponential and continuing increase in subscription cost of scholarly journals. The cost of journals continued to increase much faster than the rate of inflation. There was also a continuous increase in the number of scholarly publications which made it difficult for the libraries to subscribe to many important titles. The Consortium provides current as well as archival access to more than 7,500 core and peer-reviewed journals and 10 bibliographic databases from 26 publishers and aggregators in different disciplines. The programme has been implemented in three phases. The electronic resources covered under the UGC-Infonet Digital Library Consortium cover almost all disciplines including humanities. It is funded by UGC and executed by the INFLIBNET Centre. Recently, the Consortium launched its 'Associate Membership Programme' through which access to e-resources is provided to some non-academic libraries also (e.g., Asiatic Society's Library, Mumbai). The e-resources of UGC listed above are actually given under the UGC-Infonet Digital Library Consortium.

Institutional Repositories

Since 1990s, several institutional repositories have been established worldwide which started providing free and open access to their internal resources either through internet (across the world) or through intranet (within the campus). A typical institutional repository consists of pre-prints, post-prints, born-digital materials and digitized documents. The pre- or post-print of articles in journals are made available by the authors themselves in their institutional repositories, depending upon the copyright arrangements with the publishers. In India, there are about 70 institutional repositories. Some useful ones for historical research are:

> Aligarh Muslim University (http://www.amu.ac.in) and Social Science Cyber Library
> (http://socsccybraryamu.ac.in)
> Gokhale Institute of Politics and Economics (http://www.gipe.ac.in) DSpace@GIPE
> (http://dspace.gipe.ac.in)

Maharaja Sayajirao University of Baroda (http://www.msubaroda.ac.in) DSpace at M. S. University (http://14.139.121.106.8080/jspui)
Osmania University (http://www.osmania.ac.in) Osmania University Digital Library (http://oudl.osmania.ac.in)
Saurashtra University (http://www.saurashtrauniversity.edu) Etheses - A Saurashtra University Library Service (http://etheses.saurashtrauniversity.edu)
University of Delhi (http://www.du.ac.in) DU EPrint Archive (http://eprints.du.ac.in)
University of Mysore (http://www.uni-mysore.ac.in) DSpace at Vidyanidhi (http://dspace.vidyanidhi.org.in:8080/dspace)
University of Mysore Library (http://www.uni-mysore.ac.in) University of Mysore – Digital Repository of Research, Innovation and Scholarship (ePrints@UoM) (http://eprints/uni-mysore.ac.in)
V.V. Giri National Labour Institute (http://www/vvgnli.org) Archives of Indian Labour (http://www.indianlabourarchives.org)
West Bengal Public Library Network (http://www.wbpublibnet.gov.in.8080/openenrichy41/LIBRARY_new/html/home.jsp) Digital Repository of West Bengal Public Library (http://dspace.wbpublibnet.gov.in:8080/jspui)

Google Scholar

It is one of the useful free information sources that guide the researchers to thousands of useful e-resources of academic value. Unlike the general search engines, it indexes only the academic contents and can be relied upon by them. As it shows the citation, impact factor and associate the resources with other quantitative measures for quality assurance, the researcher may find it easy to make a choice about using only the highly cited references which is likely to ensure the quality of his work.

Concluding remarks

Use of technology in historical research has also facilitated open access of enormous source material. The open access movement has come as a protest against the policy of the publishers to charge high prices for old books re-printed by them and exorbitant cost of journals. This was accompanied by charging high prices even for recent works. There was a gradual realization that the results of publicly funded research projects should be available to the scholarly world without barriers of cost, copyright, licensing, etc. The open access literature is digital, online, free of charge and exempted from most copyright and licensing restrictions. Many countries in the west have made it mandatory that research coming out of public funded projects should be made available free of cost in institutional repositories and open access journals. During the last decade, many open access journals have started publication covering different areas of study. The Directory of Open Access Journals (https://doaj.org) provides a single platform through which all they can be accessed. As on March 2015, the database contained about 10,000 journals including history journals. This has heralded an era of deluge of information. Today a researcher is facing the problem of 'information plenty' as against 'information paucity' earlier. We come across thousands, if not lakhs, of links and it is not easy to find out which of them are genuine. Of course there certain parameters like source of the database, up-to-datedness, presentation in the website, etc. which help out the researcher to examine the authenticity of the electronic sources. Hence, he/she has to use his/her discretion to decide upon the sources to be used or not.