

"The struggle of man against power is the struggle of memory against forgetting."

- Milan Kundera, The Book of Laughter and Forgetting

Digitization is much more than converting an analog object into its digital equivalent...

The past was analog. The future is digital. Tomorrow's historians will largely shine in a digital world, which will transform the way they research and present the past. Massive analog historical records, scattered around in a geographically vast area, would be of little use to these academicians, and the onus lies with us. Nānakshāhī is trying to effectively bridge this gap between the past and the future by offering services in digital archiving. Here, the past in the form of written records, photographs, oral history tapes, films, cultural material or any other analog document and artifact is converted into digital media. In doing so, we gain

significant advantages over such resources, including accessibility, flexibility and manipulability. This treasure will be a boon to historians, offering possibilities of online accessibility and research that was unimaginable just a few years ago. The experience of the first generation of digitizers provides with a set of benchmarks and approaches that will help us convert historical documents with greater efficiency, and hopefully, at a reduced cost. The real challenge is whether we can do better and last longer than the Alexandria Library, which was said to hold between 30-70% of the world's knowledge.





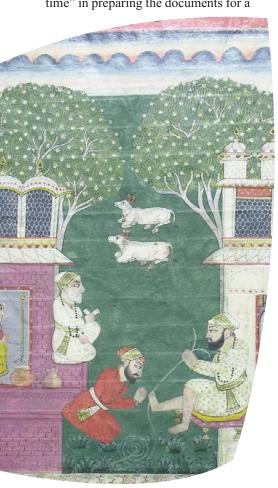
Pañjāb Virsā Digitization Initiative

Last year was a quantum leap for us: exponential growth in staff, support

base and assets. Considering its scope and role, our three year old project Virsā was renamed as Pañjāb Virsā Digitization Initiative (PVDI) last year. The year was research and development intensive, with a focus on making the current PVDI digital repository online. This included web specific indexing, cataloging and metadata creation. The development of the software for the online digital library is already in the progress.

The launch of the website is slated for later this year. PVDI continues to explore collaboration opportunities, statewide and internationally. In the meanwhile PVDI director Davinderpal Singh attended two conferences on Digital Libraries, one in Singapore and the other in Greece. He also visited National Archives of Malaysia to see their digitization project. The PVDI initiative is getting recognition and the project is gaining more visibility, while we address issues on how to connect with the masses. Nonetheless, we managed to secure some big projects and were recognized 'India's Best e-Content-2007' by Manthan Awards, New Delhi.

Initially the biggest challenge and handicap was the human resource, which has been overcome to a great extent. Now PVDI is ready to offer its expertise to libraries and educational institutions, both public and private. Expertise of professionals from the relevant fields is essential for running such a project. Otherwise, many first-time digitizers typically overestimate the production costs and underestimate the intellectual costs such as those associated with making the right selections and providing the most helpful metadata. Even a sophisticated library team at the University of Virginia reports that they "dramatically underestimated the labor and time" in preparing the documents for a



Achievements

Digitized...
2268 manuscripts
923 rare books
1675 issues of periodicals
3600 issues of newspapers
2448 photographs
2,48,000 legal documents
160 hours of video recordings
1.5 million pages in all
7000 GB data created

digitizing project.

Nānakshāhī constituted an Advisory Board to give able guidance to the organization. Lately PVDI formed two Working Groups, 'Content Selection Working Group' and 'Digitization Standards Working Group'. Experts from the respective fields are taking extra pains to give it their maximum. We welcome all to join hands in forming a global pool to preserve Pañjāb's heritage.

Pañjāb Digital Library

The Pañjāb Virsā Online Catalogue project planned last year, was later dropped, as PVDI decided to make the entire collection of digitized data online in the form of a Digital Library. This was a major policy shift, keeping in view the demand for such work and the encouragement we received from our supporters. The management is working full time on priority basis to make the website functional by the end of this year. With this, PVDI will be a pioneer in the field, transforming the way Pañjāb heritage is seen and accessed. It will give unprecedented exposure to the culture of the place, opening up enormous possibilities in research with an easy access of resources to the geographically distant seated researchers. The nation or society, which does not identify with its heritage, cannot fully comprehend its present and hence is incapable of steering its future. Pañjāb Digital Library (PDL) will effectively address this issue by presenting Pañjāb's heritage to the world. Many scholars and researchers would like to see and study the original texts and their authentic interpretations, which are not easily accessible today. Common people would also like to have access to such invisible heritage. With the development and spread of Information Technology, several projects have been initiated in USA

and Europe to build large-scale digital libraries, especially for the preservation of national heritage. Apart from these, several national projects on building digital libraries of national heritage are being initiated in UK, Germany, China, Indonesia, Russia, Japan, etc. It is interesting to note that while all these projects are Government initiatives with substantive funding, both for technological development and digital content creation, PDL is the only project in the region which is a non government initiative run by individuals without a grant.



Digitization of Newspapers

This February, a wide format scanner was acquired by the PVDI. It can scan documents of up to 42" width of any length. Whether it is large color posters, architectural sketches, detailed maps, drawings or newspapers, the 42" scanning area can handle them all with high resolution and accuracy. Initially, we intend to use this for digitizing all the major newspapers published from Pañjāb in the past. Concerned newspapers are being approached for permission to let us digitize their collections. Once permissions are granted the transformation from analog to digital will begin. The next leap in the digital world is the Optical Character Recognition (OCR) technology which transforms flat images into lively searchable text images. All digital images will be made computer readable using OCR software, thus making all newspapers in Roman script, searchable. After the project is over, one can search through the enormous data of all the previous issues online with a single click within minutes.

Digitization Projects

The Sikh Review

In November 2007, PVDI completed digitization of the entire collection of The Sikh Review, since 1953. The management,

especially S. Saran Singh, were extremely cooperative. They provided us with the permission and the copies that were missing in our collection. A few issues were provided by Dr. Kirpal Singh. The digitized issues are ready for OCR.

Jathedar Dalip Singh Malu Nangal

The digitization project for Jathedar Dalip Singh's collection stands complete with total 135 manuscripts, amounting to 45,000 folios digitized. He had quite a few rare manuscripts in his collection. We are thankful to him for getting them digitized and the warm reception that was given to PVDI staff.

Pañjāb Virāsat Charitable Trust

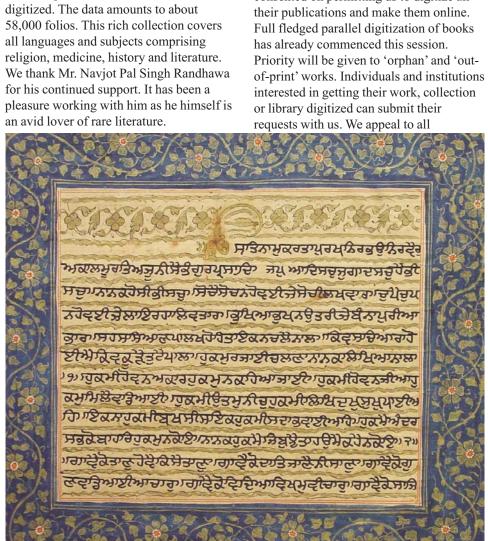
PVDI started a digitization project for the Pañjāb Virāsat Charitable Trust last September, which is still on. Out of a collection of over 800 manuscripts and about 200 rare books, so far 245 manuscripts and four rare books have been We thank Mr. Navjot Pal Singh Randhawa for his continued support. It has been a

Historical Legal **Documents**

November 1984 pogrom was a black day in history. Mr. H.S. Phoolka, an eminent lawyer of the Supreme Court of India has been active since then in seeking justice for both murdered and survivors. With time he has been able to collect a vast amount of legal papers on the issue thus creating a comprehensive documentary record of the genocidal event. All documents in his possession have been digitally preserved for the future through digitization. The records amounted to about 2,00,000 pages. PVDI appreciates Mr. Phoolka's farsightedness in thinking of preserving them for the future generations.

Digitization of Books

As a policy, PVDI also formally started systematic digitization of books from last year. We have already digitized almost 900 books, most of them are rare or out of print. We are quite elated with the response we have received for the books till now. Singh Brothers, Srī Amrtisar based publisher, has consented on permitting us to digitize all





individual authors and publisher to let us digitize their collection. The originals shall be immediately returned to the owners after the digitization.

Future Projects

Quite a few big projects are lined up for the near future; we hope to initiate them very soon. They include, the collection of Dr. Trilochan Singh, permission for the digitization of which was granted by S. Anurag Singh last year. Permission was procured for twenty eight manuscripts of Gurū Granth Sāhib, six of Dasam Granth and thirteen others in Banāras; Baba Sarabjot Singh ji Bedi also permitted us to digitize manuscripts from his collection. Proposals were submitted last year to SGPC, Srī Amritsar; Khālsā College, Srī Amritsar; Pañjābī Sāhit Academy Bhaī Vir Singh Sāhitya Sadan; Kurukshetra University and Pañjāb Archives, Patiala. We are waiting for their approval to start digitization at the aforesaid institutions.

Research and Development

Providing quality services has been the goal of PVDI ever since its inception. The work on the development of software to make PVDI digital library online has been on since last October. Now that the work is near completion, we are glad to share it with our valued supporters. PVDI online software has four phases, out of which three are intranet based and one is internet based. Phase I is of the digitization activities; Phase II is for documentation and classification by a specialized librarian. Phase III is Administrative in nature which interacts with all other project phases; this is crucial as all decision based activities will be in this module. Phase IV module is for internet based public domain; online users will utilize this to view the digital collection after the website is hosted. Access to the documents will depend on end-user access type. Different privileges would be dynamically set for different types of web users. The software will not only make the collection online, but will also be implemented in the office to make the processes automated, error free and efficient. This will considerably reduce project costs and time, and enhance productivity, promote accountability and data security. Right from providing accession numbers to metadata creation and archiving, the process will be automated with variable inputs. Each employee and member would have unique logins for different levels of access according to their role and data security requirements.

Project Documentation

Digitizing manuscripts is a daunting task. More so, if there is no yardstick to measure the project statistics and the work done is pioneering in the field. Carrying on from the previous year, PVDI put out the first print of the documentation created on the benchmarks, procedures and tools for implementing proper digitization projects. The developed manual will be edited and revised periodically. The manual confirms to the international standards set forth my leading organization in the field worldwide.

Administrative

Under the tireless leadership of Davinder Pal Singh, we have a staff of 13 full time, and three part time employees. PVDI is looking for a US based coordinator for the project; please contact us if you are



interested in championing the project in the West. Responsibilities include outreach, fundraising, and coordination.

Assets to be Acquired

We are also contemplating on buying a server, which is a dire necessity now. We need it urgently to manage digital data which is growing @ 30GB everyday. As a policy we are keeping backup of all digitized data at three locations and in two different formats, DVDs and hard Disks. We wish to add Tape Drive as third medium for backup. Also in the list is a sufficient capacity electricity generator, which has become a necessity because of poor power situation in Pañjāb. At the moment the project is getting only four hours of electricity during office hours.

Assets Acquired

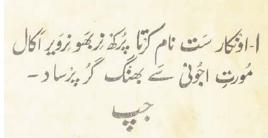
One wide format scanner, one digital camera, lighting equipment, indigenously developed stands and moving table apparatus for digitizing books, three desktops and a host of subsidiary digital equipment apart from the networking of the office.

Thanks

All this was made possible primarily due to generous contributions and leadership of Gurnihal Singh Pirzada and Harinder Singh. In 2007, we also received contributions from Advance India Projects Ltd., Woodland Shoes Ltd., Vikram Overseas Ltd., Unistyle Impex, and 1469 Traditional Value. We would like to thank the board of Sikh Research Institute for generating awareness of PVDI and their efforts in soliciting support. We would also like to acknowledge Prem Garg & Associates, for their pro bono accounting and legal support. Thanks are due to Gagandeep Kaur for her help in maintaining accounts. The project needs continuous support from you: from monetary to advocacy. Pañjāb heritage is suffering daily; it needs your attention and resources to preserve it now. We seek your inputs on the Perceptions, Possibilities, and Practicalities of our mission.

The Nānakshāhī Trust

2516, Sector 65 SAS Nagar, Pañjāb-160065 172 223 4867 info@nanakshahi.org Moving Forward into the Past is the Key to our Future





The treasure we lost in 1984

The treasure we tost in 1904	
Books	20,000
Manuscripts of Gurū Granth Sāhīb	2,500
Manuscripts related to Sikh Gurūs	500
Newspapers since 1876 1	20 file
Rare books and documents	200
Hukamnāmās and Sikh Relics	160
Rare paintings	250

Digitization is an important means of ensuring greater access to cultural material. In some cases it is the only means of ensuring that such material will be available for future generations.