





Seminar of Innovation in Technological and Scientific Information

The Evolving Academic Library: A Key Partner in Society

Peter Sidorko
Deputy University Librarian
The University of Hong Kong



Santo Domingo Dominica Republic 24 March 2010



Overview

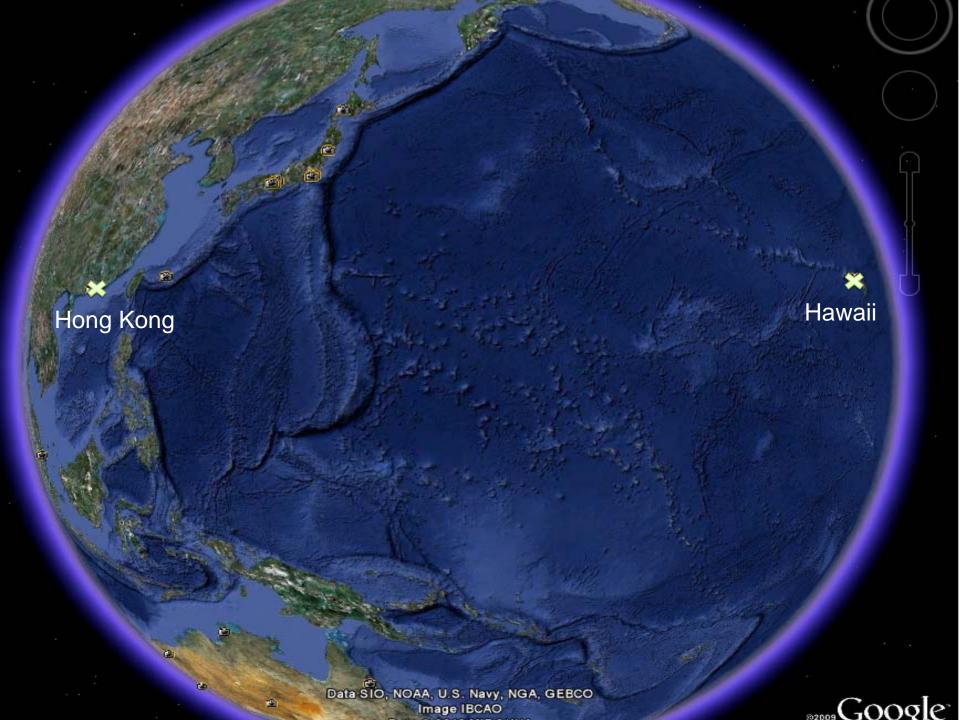
- About me, my university, my library
- Key trends for a 21st Century Academic Library
- Challenging times
- Bringing collections to life
- Partnerships
- The future

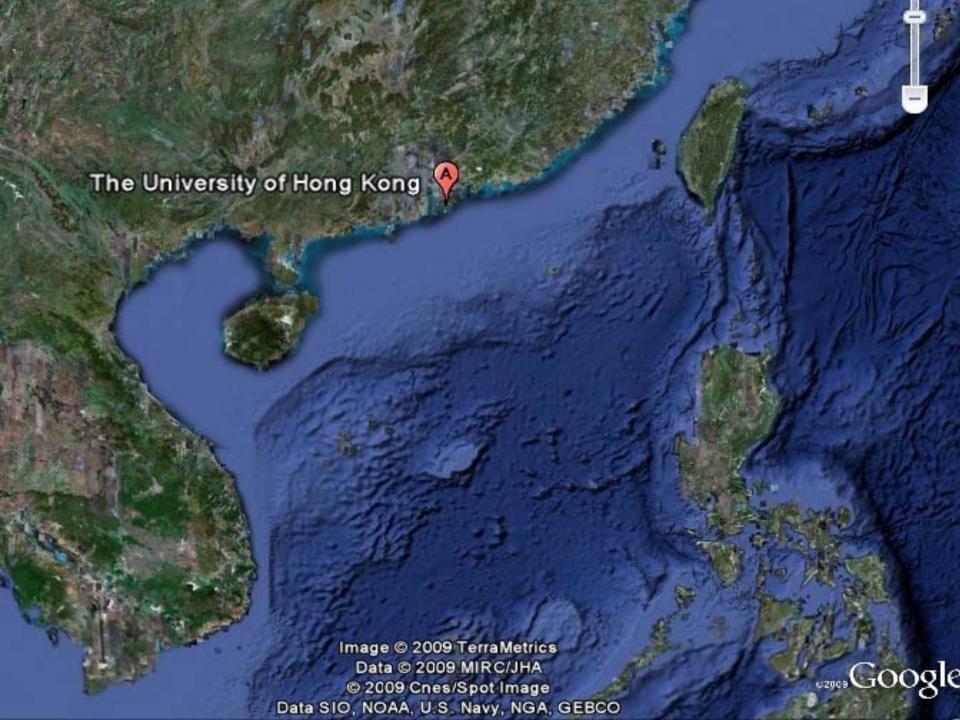
Context: Some introductory comments

About Me

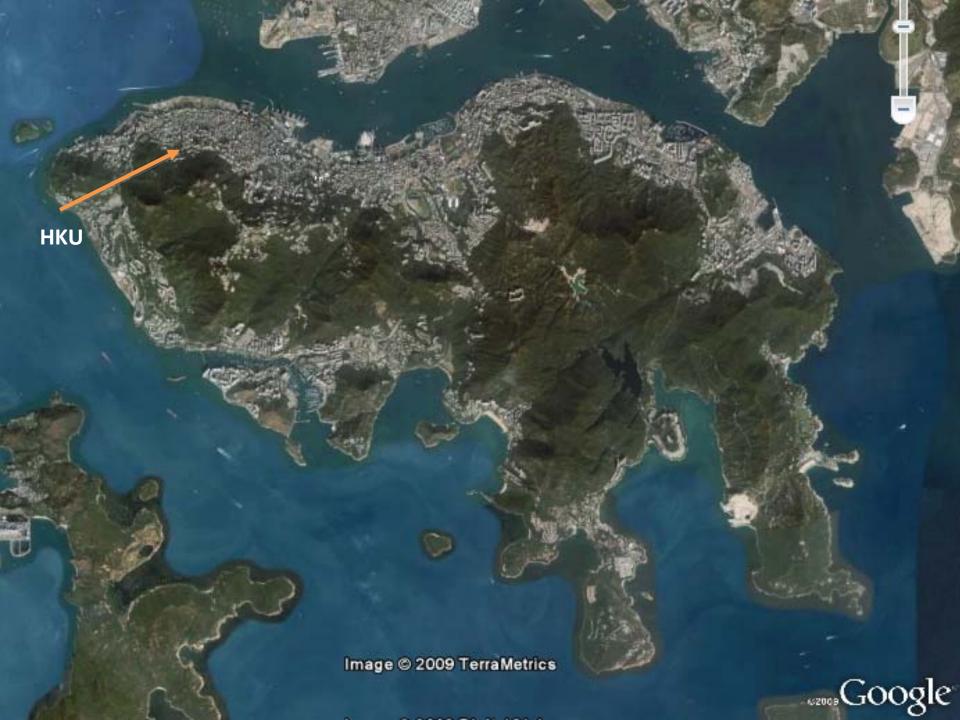
- Australian
- Deputy University Librarian at The University of Hong Kong
- Previously Program Manager, Client Services, The University of Newcastle (integrated library and IT)
- 26 Years academic library experience
- Part time lecturer at HKU Library and Information Science programs – subjects include: library supervision and management; information policy; professional development and change, etc.















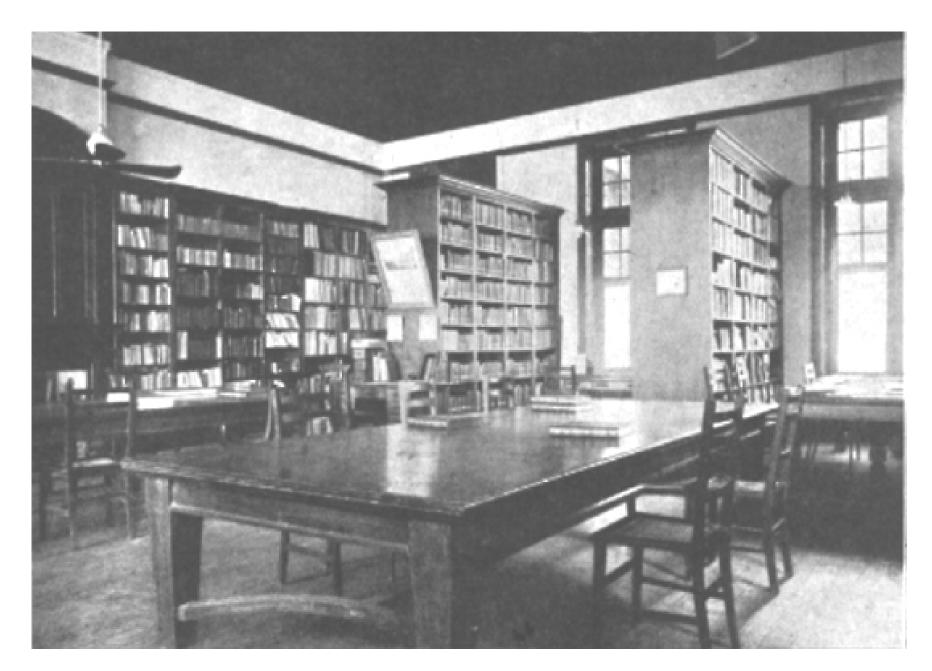


The University



- Evolved from the Hong Kong College of Medicine, founded in 1887
- Founded 1912
- Multidisciplinary/comprehensive undergraduate
 & postgraduate
- 22,000 students (Government & self funded)
- 111,000 students (Continuing education school)
- Ranked 24 in the world's top universities (THES, 2009), 18th in 2007
- Ranked 1 university in Asia (Quacquarelli Symonds, May 2009)

Main Building -- the Library 1915



The Library today

- 1 Main Library (arts, architecture, humanities, science and technology, social sciences)
- 6 branches (Dental, Education, Law Medical, Music and Chinese)
- ca 235 staff including 33 professionals



Moto Library







Content

- 2,729,901 physical volumes
- 1,895,309 e-books
- 57,862 e-journal subscriptions
- 707 databases
- Many locally created databases



The HKUL Digital Initiatives, through its digitization projects, has opened up online access to local collections originally in print format. The first HKUL Digital Initiative, ExamBase, was launched in 1996 and other projects of scholarly interests were subsequently introduced. More digital projects are being developed to provide continuous access to digital content and services.



HKUL Digital Initiatives

- Basic Law Drafting History Online
- China Through Western Eyes
- Chinese Collectanea in Japanese Libraries 日本見藏中國叢書目錄
- Community Health Projects NEW
- Digital Editions from HKU Press
- e-Video ****
- Electronic Gallery of HKU
- ExamBase ARD ONLY
- * Fung Ping Shan Library Rare Book Catalogue
- Historical Laws of Hong Kong Online
- HKU Scholars Hub NEW
- Hong Kong and the West until 1860
- Hong Kong Government Reports Online (1853-1941)
- Hong Kong Journals Online
- Hong Kong Listed Company Papers Online
- Hong Kong Newspaper Clippings Online
- Hong Kong Oral History Archives NEW
- Hong Kong Stock Market Archives and Artifacts Collection
- Hong Kong Tourism Board Collection
- Hong Kong Table of Contents Database
- Hong Kong University Theses Online
- The Last Governor Online
- Sun Yat-sen in Hong Kong 孫中山在香港
- Translations from Chinese
- Union Catalogue of Overseas Chinese Collection in HKU and JU 華僑華人研究書目庫

Budget Shift towards Electronic

Year	% of Materials Budget
01/02	12%
02/03	21%
03/04	29%
04/05	42%
05/06	48%
06/07	50%
07/08	56%
08/09	59%
09/10	71%

Services and usage

- 102,401 registered users including 46,891 alumni
- 1.6 million physical volumes re-shelved last year (1.2 million checked out, 400,000 read in-house)
- 180 million hits on our website last year
- E-resources accessed 3.7 million times
- 14,000+ enrollments in our information skills classes
- Answered 70,000 reference questions including 2,881 sent in by email
- 24,124 sqm

Major challenges

- Lack of collections space. Annually have to store 90,000+ volumes in remote storage (Hingwai and Main Storage)
- Lack of library resources fund budget increases. Annually in deficit situation. Relying upon rapidly dwindling carry over funds from previous years.
- Insufficient overall funding for the Libraries once our carry over funds are exhausted
- Complications related to our moving from print to digital world
- Need for better trained library staff (now have 32 professionals down from 44 seven years ago)
- Introduced RFID world's largest academic library RFID implementation
- Knowledge exchange and open access

Key trends for a 21st Century Academic Library

Key trends for a 21st Century Academic Library*

- Customization and personalization
- Delivering content, services anywhere, anytime
- Demand for self-service
- Constant change, and innovative and hybrid approaches and structures
- Successful graduates and productive faculty as key measures of success (Rol)

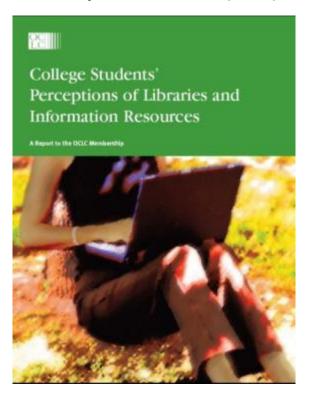
- Expanding social environments
- Culture of assessment and accountability
- Need to market content and services and to raise their awareness and availability
- Collaboration at all levels
- Competition for funding, for collections, for staff, for donors, for political attention and for visibility

^{*} Neal, J. & Harboe-Ree, C. (2009) *The University of Hong Kong External Review of the University Libraries* [Unpublished Manuscript].

Where do you start your information search?

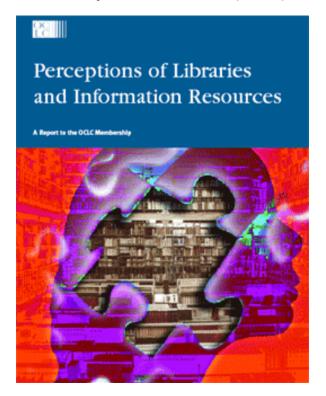
College

- Search engines (72%).
- Library web site (2%)



Everybody

- Search engines (84%).
- Library web site (1%)



Perceptions and habits

- Quality and quantity of information are top determinants of a satisfactory information search. Search engines are rated higher than librarians.
- The criterion selected by most information consumers to evaluate electronic resources is that the *information is* worthwhile. Free is a close second. Speed has less impact.
- Respondents do not trust purchased information more than free information.
- Library users like to *self-serve*. Most respondents do not seek assistance when using library resources.

Libraries

- "Books" is the library brand. Borrowing books is the number 1 service.
- Most information consumers are not aware of, nor do they use, most libraries' electronic information resources.
- Only 10 percent of college students indicated that their library's collection fulfilled their information needs after accessing the library Web site from a search engine.
- People trust what they find using search engines. They also trust information from libraries. They trust them about the same.
- Search engines fit the information consumer's lifestyle better than physical or online libraries



Students' Use of Research Content in Teaching and Learning

A report for the Joint Information Systems Council (JISC) 2009

by Stuart Hampton-Reeven, Claire Mashiter, Jonathan Westaway, Peter Lumaden, Helen Day, Helen Howertson and Anna Hart

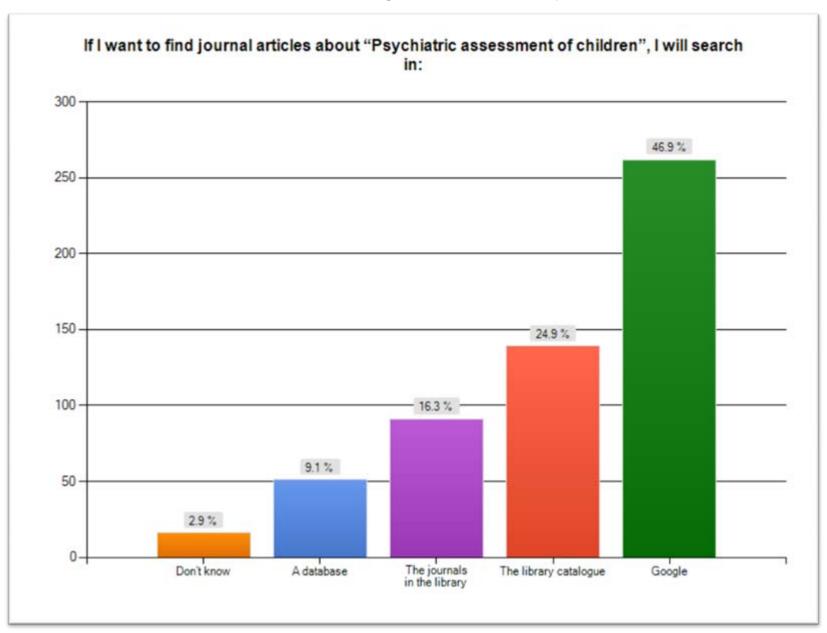
Produced by the Centre for Research-Informed Teaching, University of Central Lorcathine



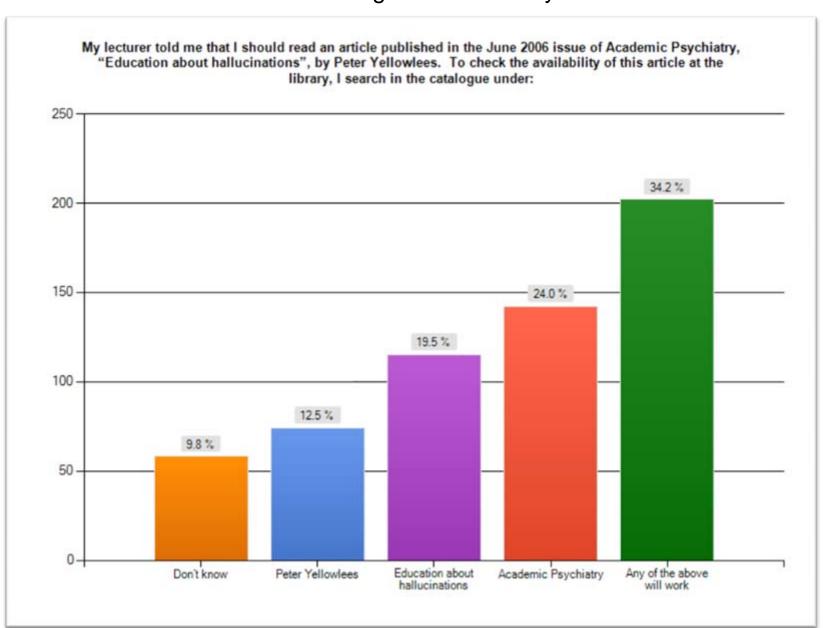
http://www.jisc.ac.uk/media/documents/about us/workinggroups/studentsuseresearchconte nt.pdf

- Most students will go to their library catalogue first, then Google
- Although Google, Google Books and Google Scholar are heavily used, the library catalogue is still the preferred first choice for most students
- Students rarely look beyond the first couple of pages in Google
- Trend is towards electronic access still students use library visits with or instead of the internet
- The internet is used but also distrusted.

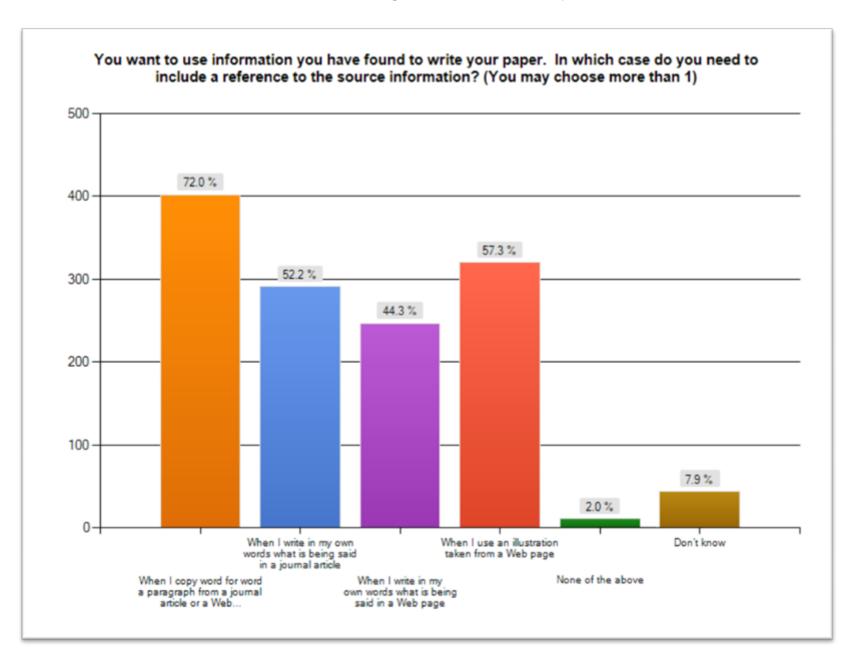
HKU Incoming Student Survey 2009



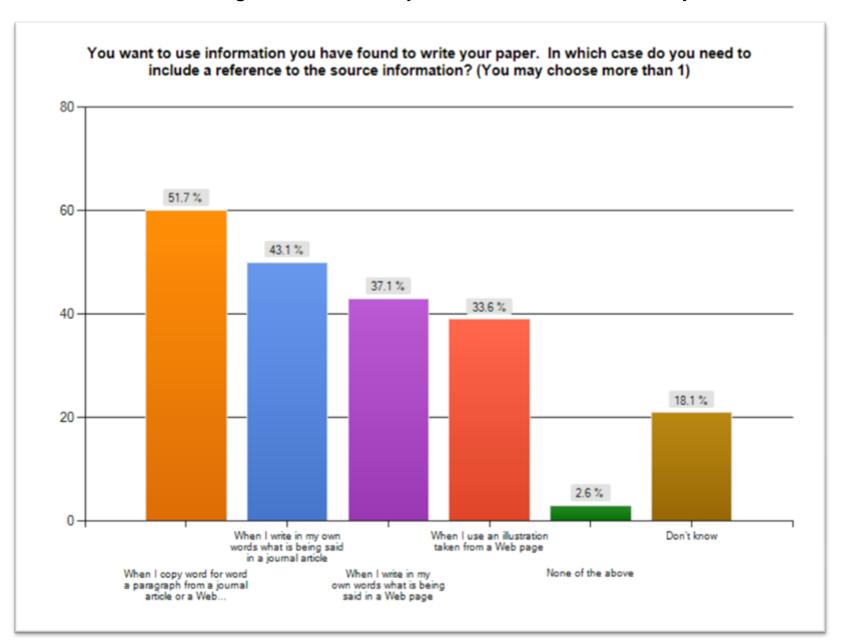
HKU Incoming Student Survey 2009



HKU Incoming Student Survey 2009



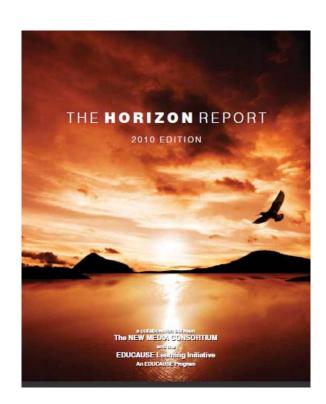
Incoming Student Survey 2009 – another university





Key trends: 2010

- The abundance of information resources challenges the way education must perform its business.
- People expect to be able to work, learn, and study whenever and wherever they want to.
- Work of students is increasingly collaborative by nature, and there is more cross campus collaboration between departments.



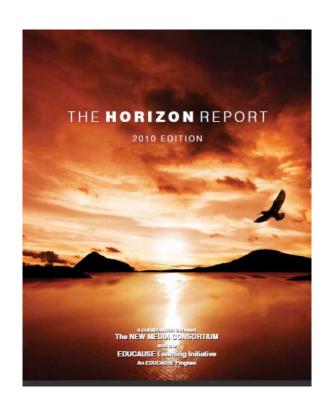


Critical challenges: 2010

- The role of the academy and the way we prepare students for their future lives — is changing.
- New scholarly forms of authoring, publishing, and researching - need new metrics.
- Digital media literacy continues its rise in importance.
- Institutions focus more narrowly on key goals (\$s)

Technologies to Watch

- Mobile computing
- Open content
- Electronic books
- Simple augmented reality
- Gesture-based computing
- Visual data analysis



Scholarly Information Practices in the Online Environment

Scholarly Information Practices in the Online Environment

Themes from the Literature and Implications for Library Service Development

Carole L. Palmer Lauren C. Teffeau Carrie M. Pirmann

Graduate School of Library & Information Science (GSLIS)
Center for Informatics Research in Science & Scholarship (CIRSS)
University of Illinois at Urbana-Champaign



A publication of OCLC Research

- Reports on "the state of knowledge on scholarly information behavior"
- "And how they differ among disciplines"
- Identifies "directions and ... priorities for development of digital information services"

Library Forecast: Rain, continuing



Extinction timeline* 1950-2050

* Existence insignificant beyond this date Sit down breakfasts **POST OFFICES** WW2 John F Kennedy **SMALLPOX** BERLIN WALL Repair shops Great Barrier Reef PHYSICAL NEWSPAPERS DEATH Direct marketing Phone boxes Communism KEYS Blindness Butchers **MENDING THINGS** Soviet Union Childhood **GOOGLE** Free parking Exchange controls (UK) Reality TV WW1 survivors WW1 SIZE 0 Czar Nicholas II Manned moon landings Primitive forms of money Unfenced beaches Trade Unions Static ads George Bush II Secretaries Vacuum tubes CFCs National currencies Secrets Keynesian economics Lindsay Lohan A good night's sleep DVD Lunch Low doc mortgages Betamax Bank notes Village shops Passenger airships FM radio LETTER WRITING Wallets Russian democracy Space Invaders Crafts people Tony Blain Free public spaces **NATION STATES** Kingdom of Greece Kurt Cobain Text-based search Inheritance tax Studio 54 Carbon emissions **BRITISH EMPIRE** Sinclair C5 Intimacy Affordable housing Deafness Barings Bank Milkmen Real handkerchiefs Pluto Tower Records 8-track Wrinkles Wire recorders RETIREMENT European Union Cheap od Disco PRIVACY Kim Jong II Futurists The next big thing Normal weather "SORRY" Apartheid WW2 survivors Big political ideas Ottoman Empire Public intellectuals Viadimir Putin Customer service Cher Free roads Punch cards Computer mouse Wooden toys 78-rpm records Waistines **PEACE & QUIET** Over the counter cocaine AM radio Issac Asimov Telephone directories Cosmetic surgery Sunday lunch **DESKTOP COMPUTERS** State pensions GLACIERS Philip K. Dick Concorde Receptionists PHYSICAL PAIN East Pakistan Work free weekends British Royalty Polaroids Yugoslavia Pans Hilton Natural childbirth UGLYNESS Bone phone Jim Morrison John Lennon Careers Open borders **GETTING LOST** Gold Standard (US) WEB 2.0 PETROL ENGINED VEHICLES Chemobyl Imperial measurement (UK) The Maldives Eleven European currencies Addiction Pacman Video rental stores SPELLING Lists of predictions Paternity disputes Manual typewriters Internal EU passport controls Fax machines Aral sea BLOGGING Low-cost travel Segway Bangladesh Jimi Hendrix Buckteeth Manchu Dynasty OIL NATIONAL SOVEREIGNTY Janis Joplin Titanic Microsoft Get Smart Habeas corpus Taisvari CRI television. The Middle class TWA Household chores COPYRIGHT "Thank.you" Spam Steam locomotive Douglas Adams Newspaper delivery Aboriginal culture Enron Corporation DIAL-UP Booky films Arthur Anderson Chinese Imperial family **EMAIL** The family room INNOCENCE Buggy whips COINS Hope Landline telephones Love bites John Howard Swiss Army knives Queen Victoria Princess Diana Advertising regulation B&W television Ashtrays Telex 35mm projectors 1950 1960 1970 1980 1990 2010 2018 2020 2025 2030 2040 2050 2000











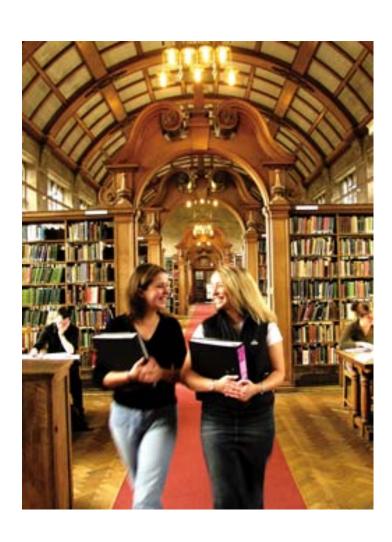
Extinction timeline 2019*

- Sit down breakfasts
- Post offices
- Direct marketing
- Butchers
- Free parking
- WW1 survivors
- Size 0
- Libraries
- Unfenced beaches
- Static ads

^{*} http://www.rossdawsonblog.com/extinction_timeline.pdf



Do you know Bangor?





(UWB) to achieve its proposed [pounds sterling]300,00 University Wales Bangor (UWB) has called on Cilip to help with the restructuring of its library

A UWB Executive restructuring proposal released earl service. In March, IWR reported that a major restructuring of the library would see subject librarians

librarians bring to staff and students as "hard to justify laid off in an effort by UWB to save [pounds sterling]300,000 from the library budget. Professor

Merfyn Jones, Vice Chancellor of UWB, has written to Bob McKee, Cilip's chief exec, requesting

Eileen Tilley, president of the Bangor Association of UCilip's advice on the restructuring of the LIWB library service. "Cilip has got a lot of experts in higher

Eileen Tilley, president of the Bangor Association of UCilip's advice on the restructuring of the UWB library service. "Cilip has got a lot of experts in higher under threat, said that an undisclosed number of subject education and the University College & ...

Do you know Bangor?

The Consultation Document, January 2005

"the support...from the qualified subject librarians is hard to justify in value-for-money terms at a time when the process of literature searches is substantially de-skilled by online bibliographical resources."

J Wright, From adversity comes strength? Raising a new profile for the library at the University of Wales, Bangor

http://www.conference.ie/Conferences/menu.asp?menu=245&Conference=36>

And this...

The university library of the future will be sparsely staffed, highly decentralized, and have a physical plant consisting of little more than special collections and study areas...

August 3, 2009

July 30, 2009

June 17, 2009

Library

» The Equal Opportunity Library

The Interdisciplinary Science

FREE Daily News Alerts

Enter e-mail address



to outsource virtually all the services [they have] developed and maintained over the years," Greenstein said. Now, with universities administrators are more likely than ever to explore the dramatic

Search

Within the decade, he said, groups of universities will have shared print and digital repositories where they store books they no longer care to manage. "There are national discussions about how and to what extent we can begin to collaborate institutionally to share the cost of storing and managing books," he said. "That trend should keeping continuing as capital funding is scarce, as space constraints are severe, especially on urban campuses - and, frankly, as funding needs to flow into other aspects of the academic program."

Under such a system, individual university libraries would no longer have to curate their own archives in order to ensure the long-term viability of old texts. Greenstein said. "What is the proportion of a library



\$\$\$

- administrators are more likely than ever to explore the dramatic restructuring of library operations
- "...and, frankly, funding needs to flow into other aspects of the academic program."
 - Attributed to Daniel Greenstein, vice provost for academic planning and programs at the University of California System, Libraries of the Future, Inside Higher Ed, September 24, 2009 http://www.insidehighered.com/news/2009/09/24/libraries

We need to bring our collections to life

Accessibility vs Discoverability

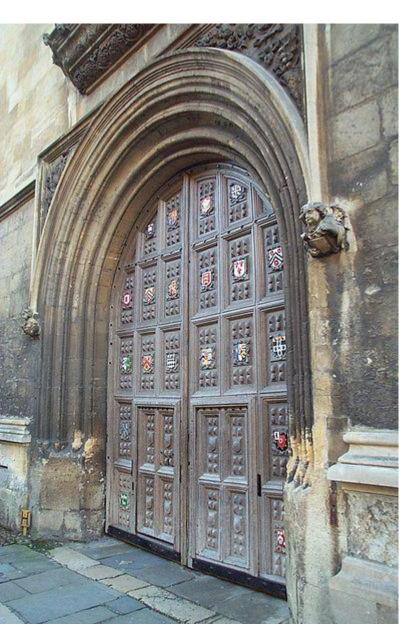
Accessible

- Unlocked
- Not hidden
- the degree to which a product (e.g., device, service, environment) is accessible by as many people as possible
 - http://en.wikipedia.org/wiki/Accessibility

Discoverable

Can you find it?





Accessibility?



Bodleian Library entrance, Oxford.

The Sistine Hall of the Vatican Library http://en.wikipedia.org/wiki/File:Salone-sistino.jpg





HKU Chinese Rare Books "cage"



Open shelves. Accessible yes, but discoverable?

Knowledge Transfer and Knowledge Exchange



The University of Hong Kong's 3 Strategic Themes

- Enhancing the student learning experience
- Advancing research & innovation
- Promoting knowledge exchange & demonstrating leadership in communities across the region



Knowledge Transfer

 Within a modern, knowledge driven economy, knowledge transfer is about transferring good ideas, research results and skills between universities, other research organisations, business and the wider community to enable innovative new products and services to be developed.

(www.ost.gov.uk)

- www.bl.uk/aboutus/stratpolprog/redeflib/glossary/index.html
- The British Library described as a "Cathedral for Knowledge Transfer".
 - http://www.bl.uk/knowledgetransfer/morenews.html

Knowledge Exchange

 the process of engaging, for mutual benefit, with business, government or the community to generate, acquire, apply and make accessible the knowledge needed to enhance material, human, social, cultural and environmental wellbeing

– (HKU internal document)

What role should the library play?

Bringing collections to life (1): HKU Scholarly Output

The Scholars Hub

The HKU Scholars Hub The University of Hong Kong



The HKU Libraries through its digitization projects, has opened up online access to local collections originally in print format only. The first HKUL Digital Initiative, ExamBase, was launched in 1996 and other projects of scholarly interests were subsequently introduced. More digital projects are being developed to provide continuous access to digital content and services.



HKUL Digital Initiatives

Google™ Custom Search

Search

- Basic Law Drafting History Online
- Beijing Historical Geography Database 北京歷史地理數據庫線的數
- China Through Western Eyes
- Chinese Collectanea in Japanese Libraries 日本見藏中國叢書目錄
- Community Health Projects
- e-Video HKU ONLY
- Electronic Gallery of HKU
- ExamBase ARUGHLY
- Fung Ping Shan Library Rare Book Catalogue
- Historical Laws of Hong Kong Online
- HKU Scholars Hub
- Hong Kong and the West until 1860
- Hong Kong Government Reports Online (1842-1941)
- Hong Kong Journals Online
- Hong Kong Listed Company Papers Online
- Hong Kong Oral History Archives
- Hong Kong Stock Market Archives and Artifacts Collection
- Hong Kong Tourism Board Collection
- Hong Kong Table of Contents Database
- Hong Kong University Theses Online
- Pacific Rim Digital Library Alliance (PRDLA) Archive
- Sun Yat-sen in Hong Kong 孫中山在香港
- Translations from Chinese
- Union Catalogue of Overseas Chinese Collection in HKU and JU 華僑華人研究書目庫

Open Access (OA) and the Institutional Repository (IR)

- Open access (OA) is free, immediate, permanent, full-text, online access, for any user, web-wide, to digital scientific and scholarly material en.wikipedia.org/wiki/Open_access
- An institutional repository (IR) collects, preserves, and disseminates in digitial form, the intellectual output of an institution. IRs usually provide open access on items held within the IR. The "HKU Scholars Hub" is the IR for HKU. http://hub.hku.hk/help.jsp

OA Policy: Why?



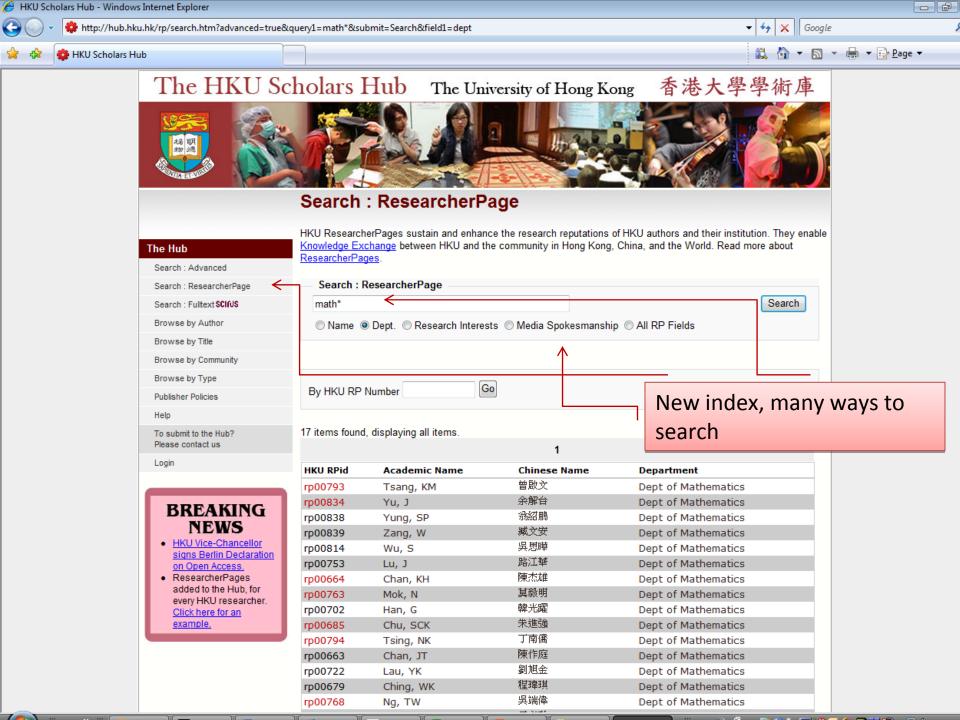
- HKU Vice-Chancellor signed Berlin Declaration on Open Access, November 2009.
 - http://oa.mpg.de/openaccess-berlin/berlindeclaration.html
- [HKU Knowledge Exchange] "We will continue to inculcate in our academic staff members a culture of knowledge sharing with the public.
- "They will be encouraged to share their intellectual knowledge through public and inaugural lectures, media interviews, publications, continuing and professional education courses, memberships of public committees and company boards, and other services and activities."
 - http://www3.hku.hk/strategic-development/eng/strategic-themes-for-09-14/promotion-knowledge-exchange-and-demonstrating-leadership.php

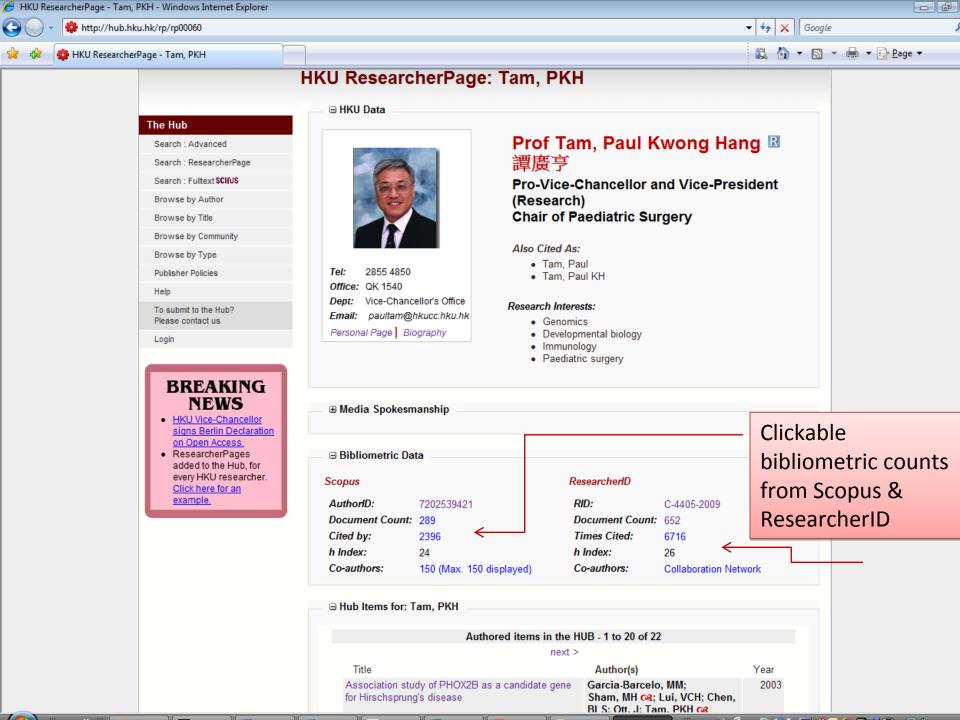
HKU ResearcherPages

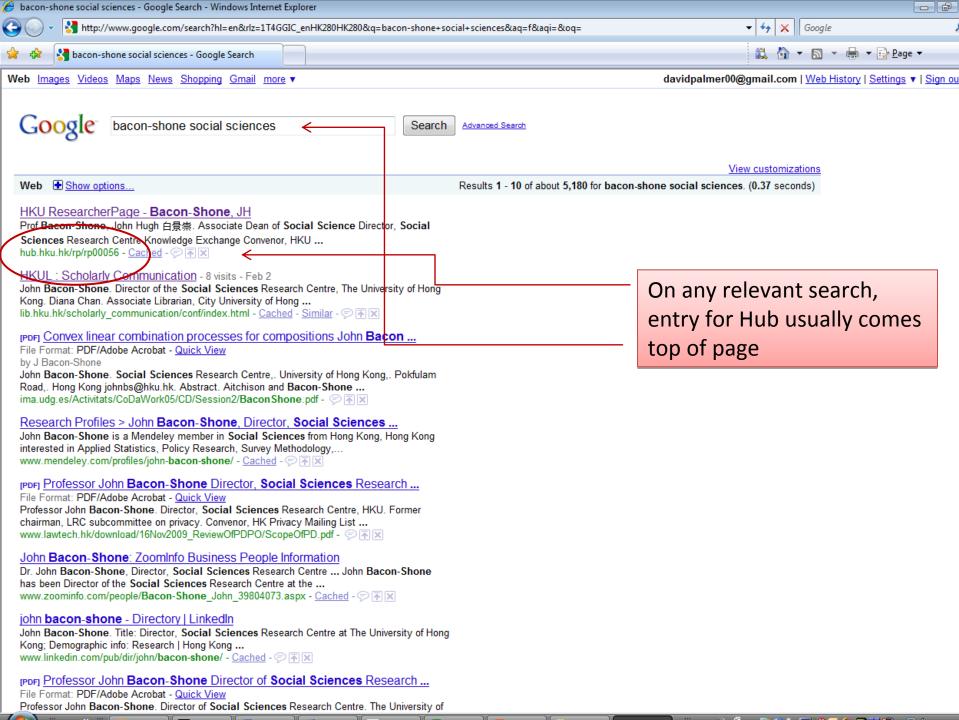
- Knowledge Exchange:
 - A database in which government, industry and the community can easily find an HKU expert for media comment, contract research, collaboration, etc.

- Created for every current HKU researcher;
 2,000+
- Reputation management









Gooale

Freely available on the web...

Citations increase up to 250%

Harnad, S. (2005) "Australia

Is not maximising ..." See -

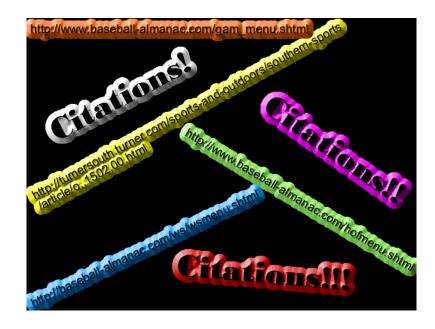
http://www.ecs.soton.ac.uk/

~harnad/Temp/research

-australia.doc.



library.thinkquest.org/.../citations.htm



HKU Scholars Hub Holdings

Material type	2006-07	2007-08	2008-09
Article	1,338	3,234	3,685
Abstract	0	0	197
Book	149	156	450
Book Chapter	0	0	4
Conference Paper	0	1,524	2,165
Finding Aid	0	0	1
Image	0	0	101
Journal	3	6	11
Learning Object	0	0	165
Moving Image	173	173	188

HKU Scholars Hub Holdings (cont'd)

Material type	2006-07	2007-08	2008-09
Newspaper article	0	0	56
Patent	20	87	88
Postgraduate Thesis	15,166	16,001	17,012
Postprint	200	350	432
Preprint	0	0	8
Presentation	6	115	115
Student Project	145	152	169
Undergraduate Thesis	268	268	455
TOTAL	17,468	22,066	25,302

Output

- Global access to HKU scholarly content
- Increased visibility of the work of HKU and its scholars
- Increased citation counts for HKU scholarly works
- Greater accountability of faculty output (visible citation counts)
- Greater global impact of HKU scholarship.

Downloads (2008/09)

Туре	Totals
Article, Preprint & Postprint	74,011
Book	807
Book Chapter	123
Conference Paper	21,619
Finding Aid	6
Image	126
Journal	161
Learning Object	304
Moving Image	1,421

Downloads (2008/09) (cont'd)

Туре	Totals	
Newspaper Article	1,514	
Patent	1,226	
Postgraduate Thesis	1,303,889	
Presentation	3,660	
Student Project	18,257	
Undergraduate Thesis	35,209	
Unknown Type	6,776	
Grand TOTAL	1,597,198	

Top item downloads (2008-09)

Title	Туре	Download times
Dental care service in the post-secondary institutions in Hong Kong	Student Project	6,597
The profession of EDP audit in Hong Kong	PG Thesis	2,723
Dental service for nursery children in Yuen Long	Student Project	2,149
Risk-resilient heuristics and genetic algorithms for security-assur	Article	1,975
Promoting Client Participation: A Study of Youth Probationers in Ho	Postprint	1,207
Quantum spin field effect transistor	Article	892
A general actuator saturation compensator in the continuous-time do	Conference Paper	840
Variation in Antiviral 2',5'-Oligoadenylate Synthetase (2'5'AS) Enz	Article	784
A cognitive-functional investigation of questions in Chinese	PG Thesis	768









Bringing collections to life (2): Rare Book Digitisation Project

A HKUL-iGroup Collaboration





Project Scope

- Digitization, i.e. scanning of images and production of 4,000 e-books (about 1,200,000 images) plus 800,000 pages of rare Chinese newspapers
- Rare, out-of-copyright books on China and Asia written in English
- Project started in July 2008

Digitisation motivators

- Preservation
- Access
- Improving searching capabilities discoverability
- Supporting teaching and research
- Strengthening the role of HKU Libraries as a digital content provider.
- Collaborative resource sharing
- Commercial exploitation
- Demonstrated demand and need from users
- Enhancing access to rare and valuable materials e.g. Web access
- Preservation and reduce handling of originals
- Promoting image of an organization
- Solving storage problem

Scanners

 Kirtas APT 2400 - an automatic book digitization device that features an integrated automatic pageturning robot





The University of Hong Kong (HKU) was founded in 1910, making it the oldest tertiary education institution in Hong Kong, and today it attracts more than 20,000 students from mainland China and around world. As a leading research university, HKU prides itself on developing the largest number of research postgraduate students in the territories.

As with most universities, HKU's Libraries (HKUL) provide much needed resources to the campus community and beyond, with the exception of a few rare collections unique only to HKUL. The libraries' Hankow and Morrison Collections are home to rare, out-of-copyright books, dealing specifically with China and more generally with Asia.

"Our collection of rare books on China in Western languages is rather unique in this part of the world," noted Dr. Y. C. Wan who oversees main library services. "We need to exploit the full value of this collection by both scanning and producing fully useable e-books as rapidly and inexpensively as possible."

E-books are the digital media equivalent to a conventional printed book. They can be downloaded to your computer in various file formats enabling you to search and cross-reference text using hyperlinks making e-books highly desirable for research work.

The Kirtas Solution

In order to begin this transformation from hard-copy books to e-books, HKUL needed an efficient, cost-effective, gentle, highquality digitizing solution. Together with their partner i Group, Kirtas Technologies was able to provide it.

HKUL decided to purchase a Kirtas APT BookScan 2400, a book digitization system that can capture up to 2,400 pages per hour using two high-resolution cameras. The cameras capture each

right- and left-hand page simultaneously through their precision 24-70 mm Zoom EF lenses in full color with all the details, in a fraction of a second.

"Technically, the Kirtas system provides a total solution to our scanning of rare books and the production of their digital counterpart," said Wan. Previously, HKUL attempted an in-house operation to scan rare books, but the results led them to discover that it was not an efficient or cost-effective way to tackle mass digitization.

"It [the Kirtas system] also enables us to work with a regional Asian partner like iGroup to fully exploit the potential value of our content and gain global visibility and identification with other leading universities who partnered with Kirtas."

The Next Step

So what does the future hold for HKUL now that they've embarked on their own mass-digitization journey? "We will use the Kirtas machine for other collections,' concluded Wan. "Early serials about China, our own theses collections, and other non-copyrighted books."



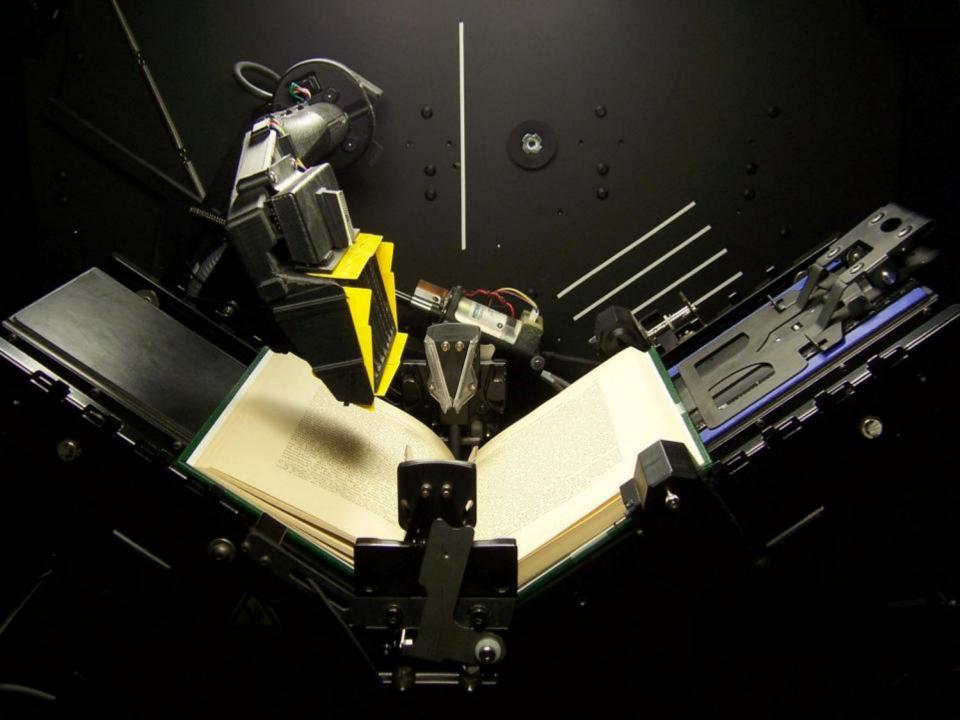
7620 Omnitech Place, Victor New York 14564 email: Info@kirtas.com

"HKUL needed an efficient, cost-effective, gentle, high quality digitizing solution. Together with their partner iGroup, Kirtas Technologies was able to provide it."

http://www.kirtas.com/index.php?option=com _content&view=category&layout=blog& id=16&Itemid=80

The Kirtas APT 2400

- 2400 images per hour
- Two 16.6 megapixel cameras simultaneous
 L/R capture
- Auto adjusting cradle (as pages decrease/increase)
- Adjustable, robotic vacuum arm changes pages
- "Page fluffers"



Our commitment

- Reaching out to the community, local, regional and global
- Making HKU scholarly output accessible and discoverable through open access
- Making our collections accessible and discoverable through mass digitisation projects.

A Future?



Functions a University library should be providing over the next decade

- Space
 - Virtual
 - Physical
- Services
 - Self directed
 - Mediated
- Academic engagement
 - Teaching and learning
 - Research

- Content
 - Collectiondevelopment –continued (R)evolution
 - Managing locally created content
 - Creating/reformatting content
 - Partnering with publishers, authors etc
- Cultural icon



Librarians for the future

- Flexibility
- Mind shift probably regularly
- New positions
- Changed positions
- New skills constantly
- Embedded in faculty, community
- Collaborative and supportive work environment
- Liblisher or pubrarian

Thank you!
Gracias!
Obrigado!
Xie Xie!

