Libraries as worldwide infrastructure for information and open access

Ankara Hacettepe University October 25 2007 Elmar Mittler

The history Middle ages

- self sufficient
 - Monasteries:
 - sriptoria
 - Universities
 - professors own and produce books as commentaries, excerpts, and disputations
 - Students got lectures
 - Scribes depending from the university (Bologna, Paris)





The history Early printing age

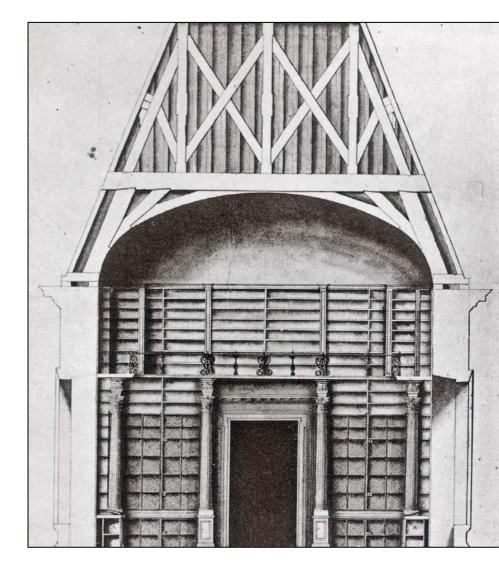
- printing accelarates research communication
 - State of knowledge
 - Libraries need
 - regular budget, professional care
 - Regulated opening ours
 - (Ottheinrich von der Pfalz)
 - Libraries have a leading role in the media shift from manuscript to Printed books (Heidelberg, Vaticana)



The history 16. /18. centuries

- Age of private libraries
 - Naudé: Advis pour dresser une bibliothèque
 - Research value
 - Classified
 - Accessible
 - Mazarine

- Leibniz
 - State institution for research and government
 - Asset of the state



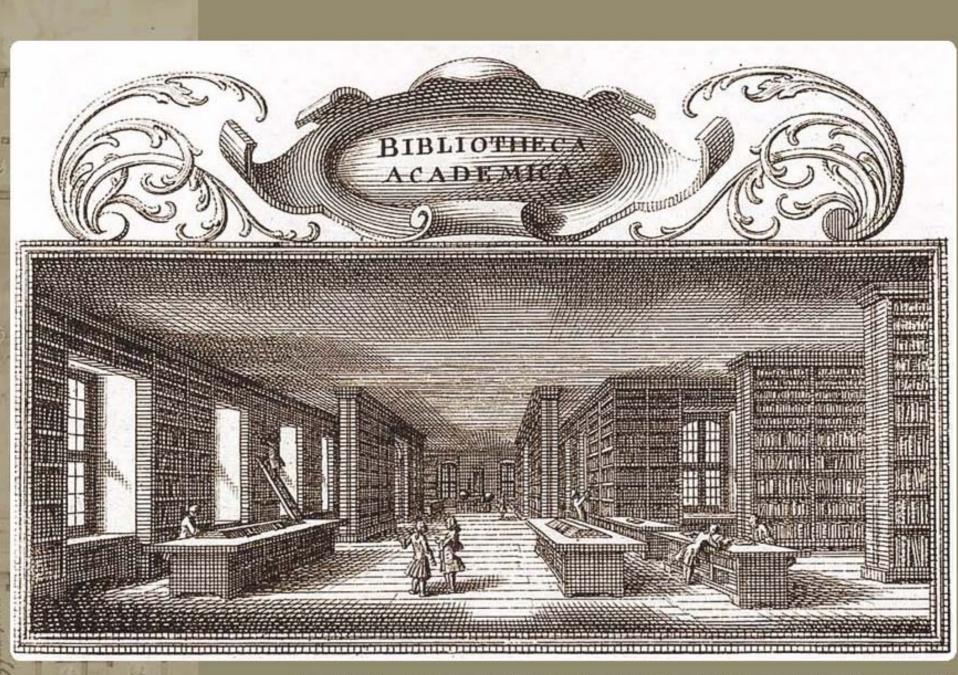
The history Modern research library



Abb. zu B.6 Christian Gottlob Heyne (1729-1812)

1734 University of Goettingen

- Library as perfect research instrument
- Providing old and new publications showing the progress of knowledge
- Universal acquisition
- Easy access: Classified order with author/title index
- Liberal loan facilities for and students and professors also from outside
- Integration into the research environment (GGA)



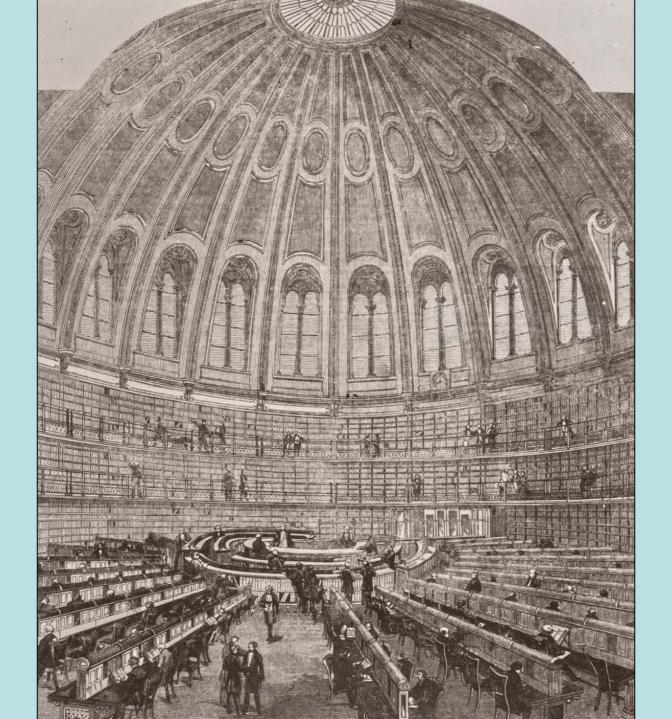
Man fühlt sich wie in Anwesenheit eines großen Kapitals, das lautlos unberechenbare Zinsen spendet." (Johann Wolfgang von Goethe 1801)

The history

19/20th century The age of the national library

- 1850
- British Museum Library
 - Universal (complete) collection
 - Research instrument for the nation
 - Cataloguing standards
 - Panizzi





The concept of the modern research library

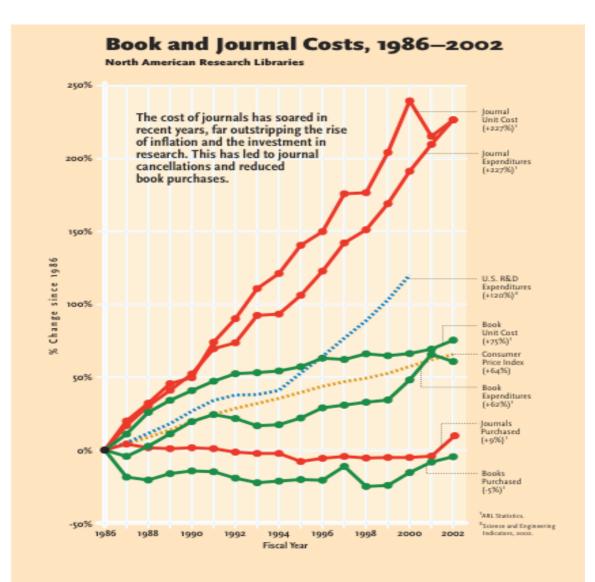
- Choice take the best research publications from all over the world
- Pay- collect the financial power of institutions (eg universities) for the acquisition of publications
- Access give free access for the library patrons and the research community via interlibrary loan and/ore document delivery
- Archiving provide access and service for recent and future generations of research workers

The second half of the 20th century The golden age of the modern research library

- research and education principal fields of investment worldwide
- Libraries
 - increasing budgets
 - able to compete with the rise of publications till the mid-1980s
 - increasing their efficiency
 - leaders in the development of state, nation and worldwide networks for shared cataloguing
 - Well organised Interlibrara loan and document deliveryi guearantie access to research material



The journal crisis.



The electronic age

• The Information society

- The dream
 - Every information everywere at any time (without costs)
- The reality in the 80th
 - Researchers used electronic means to work from home:
 - they prepared new research papers electronically;
 - publisher used electronic versions for printing;
 - and libraries delivered texts as copies to their users,
 - who were annoyed about the media break (which, in their view, was caused by librarians).
 - But innovative librarians started innovative publishing schemes (e.g. Highwire linking references in electronic journals
 - leading publishers like Elsevier and Springer
 - invested a lot in the development of electronic publications, mainly databases and journals, and
 - offered licensed access.

Licensing versus selling.

- legal difference between printed and electronic publications:
- electronic publications are
- online services that are licensed instead of sold.
- The legal regulations for licensing are much weaker than for those for selling – at least in regard to copyright.
- Exemptions like fair use or the German right of a personal copy, or a copy for research and educational purposes, can be disregarded many publishers do so.

Consortia

- Libraries built consortia to strengthen their position:
- they tried to overcome the legal problems by developing licensing principles
- but their power was limited.

The Big Deal

group of libraries got access to the full set of Elsevier journals; . The pros

- free online access to the full list of Elsevier journals
- all the libraries fulfilled their mission of 'access provider' quite

The cons

- non-cancellation clause for printed subscriptions, and
- additional fee for electronic access for the full membership of the consortium

The more negative side effect

- the increasing costs of the Elsevier contract brought reductions in subscriptions and purchases of monographs from other publishers
- the increasing market power made Elsevier a quasi monopolist, able to dictate prices and contract conditions.



The purchase of nation-wide licenses was financed by four **research and university libraries** with financial support from the **Deutsche Forschungsgemeinschaft (German Research Foundation** - DFG):

- Bavarian State Library
- Goettingen State and University Library
- Staatsbibliothek zu Berlin
- Universitaetsbibliothek Johann Christian Senckenberg Frankfurt/Main

The following databases are currently available:

➡ Periodicals Contents Index	A bibliographical aatabase with more than 14 million entries from 4,600 humanities and social sciences journals published between 1770 and 1995 (inclusive)
➡ World Biographical Information System (WBIS)	Several million short biographies from references works starting with the sixteenth century. Countries covered are the USA, Great Britain, France, Italy, Spain/Portugal/Ibero- America, Scandinavia, the Benelux, and Russia

All imprints from the U.S. from the years 1639-1800 (2.3 million pages)

💋 Internet

out Us

iversity iversity Press

sthead

arch in SUB Web-Site

ontact

۱ks

The open access movement. the ArXivserver http://arxiv.org/

- Paul Ginsparg's idea of collecting all the papers of physicists in one database - the ArXivserver[- became more and more accepted by other research communities such as mathematicians. But:
- No change of publication behaviour:
- publication had still to be in one of the high impact journals, mainly edited by commercial publishers,
- to get recognition in the research community.
- Delivering to the ArXiv was not much more than a modern way of n of exchanging preprints. A way to communicate not to publish

The open access movement SPARC

- 1998 SPARC Scholarly Publication and Academic Resources Coalition
- (SPARC Europe followed in 2002)
- first attempt to facilitate the starting of new journals as alternatives to the overpriced titles of commercial publishers, and
- to make the publication market more competitive.
- But soon, SPARC looked for new models of community projects like the Public Library of Science.
- <u>http://www.sparceurope.org/</u>-

The open access movement

The Budapest Open Access Initiative

- a statement of commitment, arose from a meeting convened in Budapest by the Open Society Institute (OSI) on 1-2 December 2001. The outcome centred on two main proposals:
 - First, scholars needed tools and assistance to deposit their refereed journal articles in open electronic archives, a practice commonly called, self-archiving.
- Open-access Journals: Second, scholars needed the means to launch a new generation of journals committed to open access, and to help existing journals that elected to make the transition to open access.

The open access movement The Bethesda Declaration

http://www.earlham.edu/~peters/fos/bethesda.htm

• the result of a meeting on11 April 2003 at the headquarters of the Howard Hughes Medical Institute in Chevy Chase, Maryland. The purpose was to stimulate the goal of providing open access to primary scientific literature. Members of all the relevant parties — organizations that foster support for scientific research, scientists that generate the research results, publishers who facilitate the peer-review and distribution of results of the research, and the scientists, librarians and others who depend on access to this knowledge — made proposals to promote a rapid and efficient transition to open access publishing.

The open access movement The Berlin Declaration

 mainly used the definitions of the Bethesda statement. It has had great international impact; and researchers either in the sciences or the humanities have never promoted open access so successfully with such widespread international publicity.

http://oa.mpg.de/openaccessberlin/berlindeclaration.html

The role of granting societies and public funds

 Perhaps the most important result of the Berlin Declaration was the acceptance of open access by the major funding institutions such as the DFG (Deutsche Forschungsgemeinschaft) in Germany. They declared that publication was a necessary part of the research process and, therefore, could be financed as part of the grant. Similar announcements came from the Maxwell Trust in the UK.

Publicly financed research as public good

• One of the most valuable reasons for open access is that research financed with public money has to be in open access for the common good. That was proposed many times in Europe as well as in the United States. In the US, the Congress decided in July 2007 that the National Institute of Health would have a legal obligation to deliver the publications of all funded research on open access at the latest after one year. That is a breakthrough for open access development, at least for biological and medical research. The former regulation that funded authors had to deliver a copy directly to the PubMedCentral of the National Library of Medicine within six months was a real disaster: only 5% of authors complied with the rule.

Green Way Self Archiving 1

- Homepage of the author ore the Institution
- Subject oriented : Learned societies and Scientific Communities
- 1. Preprint
- No reputation for the author
- No alternative publication strategie for the author

Green Way: Self Archiving 2

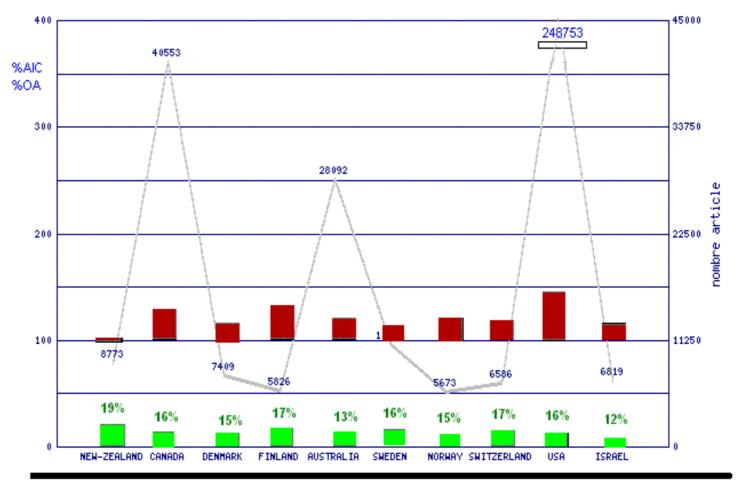
2. Postprint

- Homepage of the author or of the institution
 - Additional way of publication
 - Parallel way of distributing

- Improves the visibility
- Higher citation rate
- Increasing the Impact Faktors of the journal too

The open access advantage

Discipline Biologie

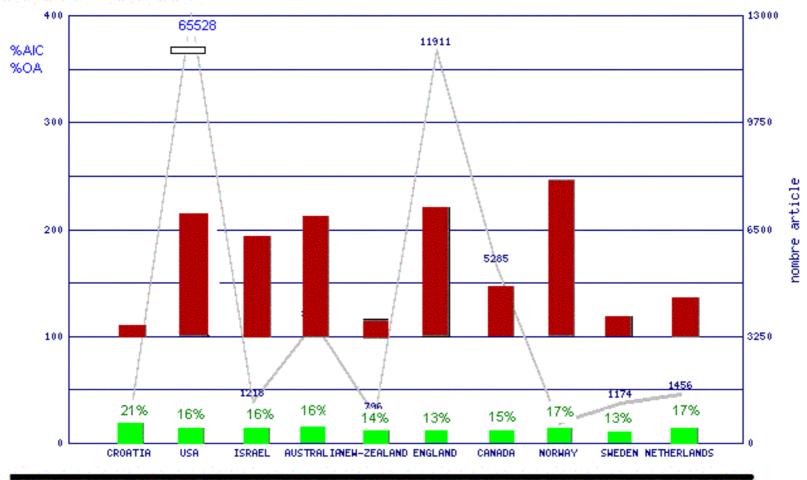


- Avantage Impact de Citations (AIC)
- Pourcentages d'articles en accès libre (OA)
- Nombre total d'articles (N)

Légende

The open access advantage

Discipline Sociologie



Légende

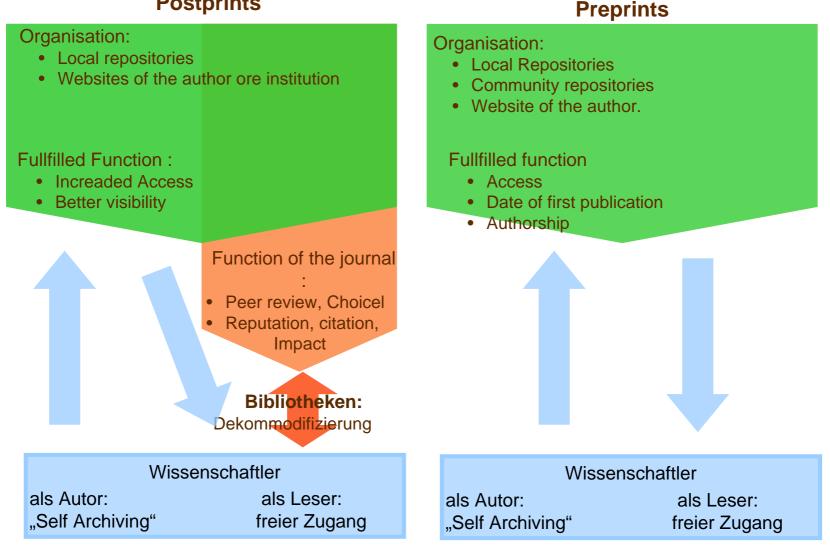
- Avantage Impact de Citations (AIC)
- Pourcentages d'articles en accès libre (OA)
- Nombre total d'articles (N)

The reaction of the publishers

- Many publishers accept postprints delivered on the personal or institutional server of the author.
- There is a list prepared by the SHERPA project <u>http://www.sherpa.ac.uk/romeo.php;</u>
- with additional German informations <u>http://miles.cms.hu-berlin.de/oap/</u>

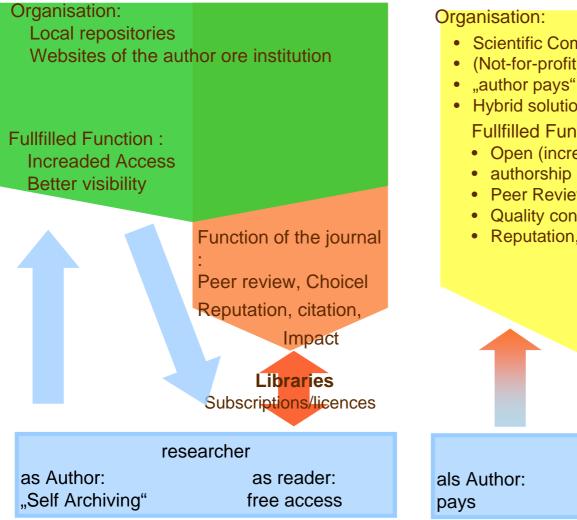
Open Access: Green way - "self archiving"

Postprints



Open Access: Green Road - "Self Archiving"

Postprints



Golden Road - Open Access Journale

- Scientific Community
- (Not-for-profit) Serviceprovider
- Hybrid solution
 - **Fullfilled Function**
 - Open (increased) access
 - Peer Review
 - Quality control
 - Reputation, Citation, Impact

researcher

as reader:

free access

The future of open access

- necessary as the preferred scheme for research
 - More researchers worldwide will produce
 - More research results that have to be published
- If we count the additional overhead costs of publications via commercial publishers are extremely high
 - no-one anywhere can afford anymore the traditional outsourcing scheme of publications
 - fast developing countries are trying to be at the forefront of the open access development

How can we succeed? Library activities

- Standards as the foundation for open access
- Local repositories:
- University presses

Standards as the fundament for open access

- Dublin Core is widely accepted as a metadata schema for electronic documents
- The Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)
 - OAlster (12 million items)
 - scientific commons_(15 million items)
- The DINI-Certificate for Document and Publication Services 2007

"Electronic Publishing Group"

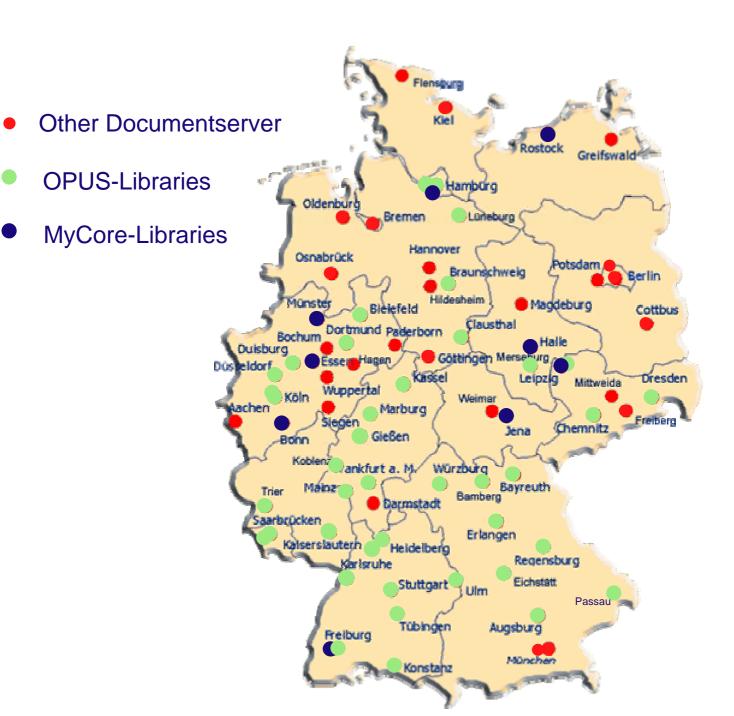
DINI – Certificate

Document and Publication Repositories



Local repositories:

- Libraries are accustomed to using standards for cataloguing; they are leaders in the acquisition and delivery of printed as well as electronic documents; and so, therefore, they are responsible for the local repositories of most universities – normally in close cooperation with the computer centre.
- There are additional services in development such as on demand ordering of printed versions via Pro print[2]. The German development is networked with the European scene, mainly via the DRIVER project
 [1] <u>http://www.dissonline.de/</u>
- [2] <u>http://www.edoc.hu-berlin.de/proprint/</u>

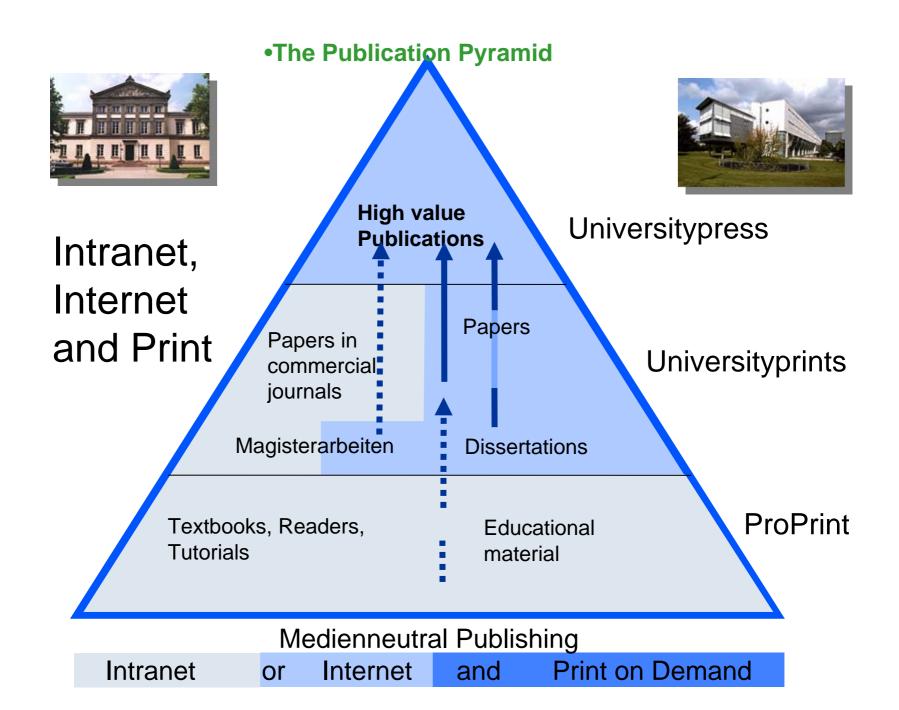




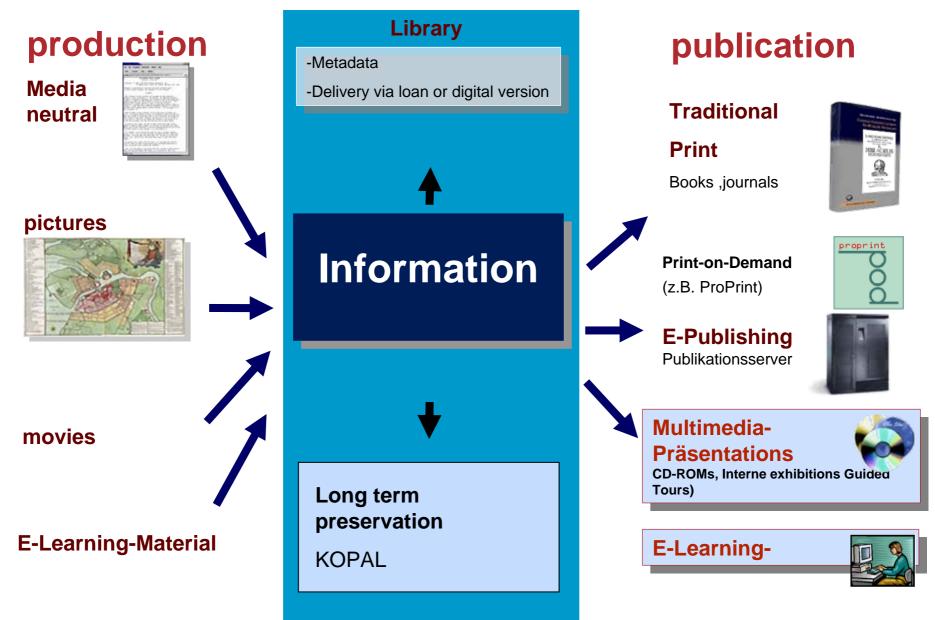


© Project "Dissertation Online" and Co-ordination Agency DissOnline

Imprint



Scientific publishing



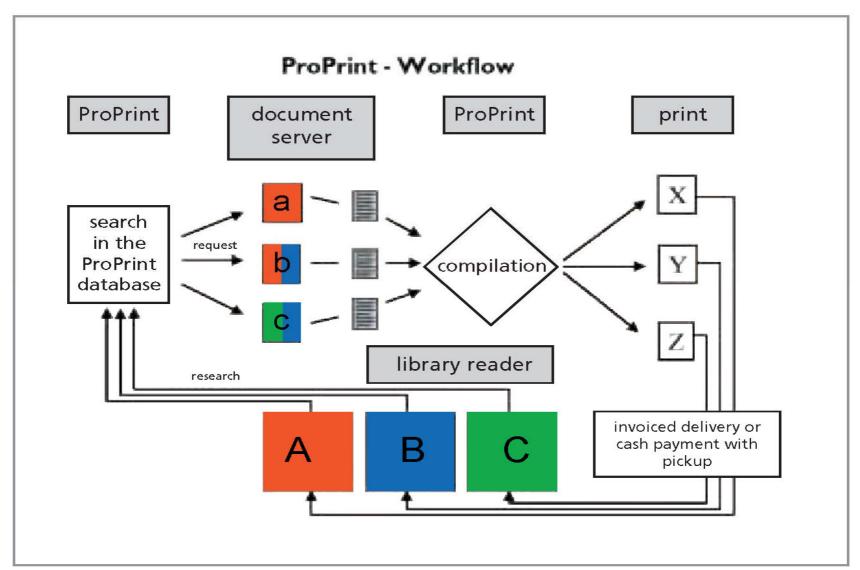
Infrastructure for Marketing and Delivery

Publication server

and University press

- Electronic and print medianeutral (University Press)
- Institutional (GOEDOC)
- by subject (GEO-LEO)
- Metadata: OPAC PICA WorldCat
- Harvesting Server (OAlster)
- Search engine (Google/ googe scholar)
- Bookseller (amazon, buchhandel.de)

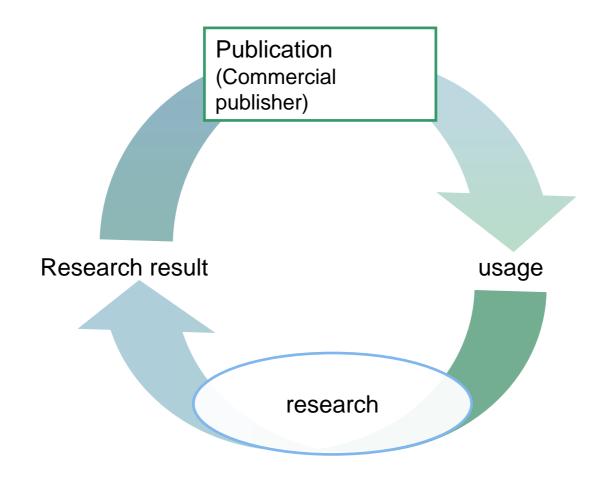




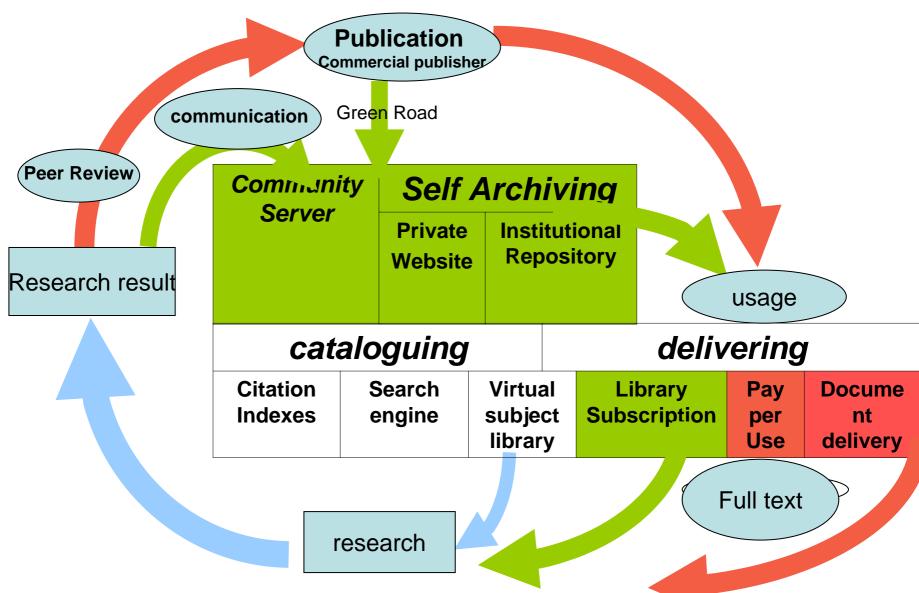
Library Hi Tech, Vol.22, No 2, 2004, p. 227-230.

http://titania.emeraldinsight.com/vl=4173657/cl=127/nw=1/fm=html/rpsv/cw/mcb/07378831/v22n2/s13/p227

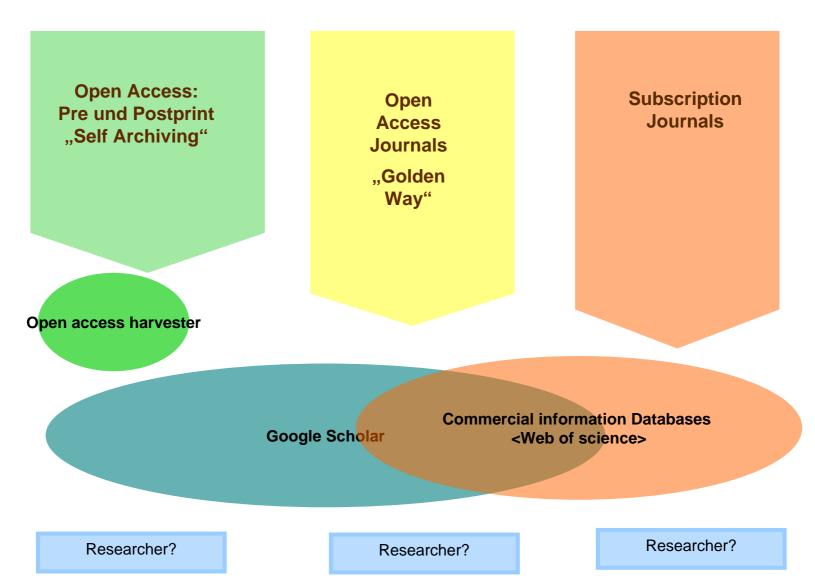
The scientific publication system



The new system of scientific communication



Competition



Publishing as distributed system

university server

- pre-prints
- papers from journals for local access
- learned society server
- pre-prints
- peer reviewed articles/journals

Publisher

- added value publications
- aggregating peer reviewed articles
- aggregator of material stored on the university servers ?

(Hans Rosendaal)

E- research The new research environment

• e-Science is about global collaboration in key areas of science, and the next generation of infrastructure that will enable it.'

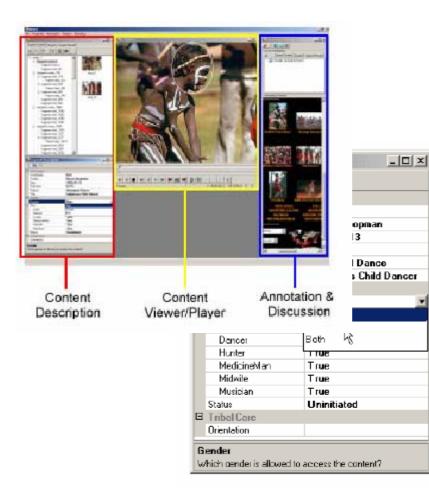
John Taylor Director G. of Research Councils Off. of Science and Technology

- Researchers need robust middleware services to routinely build secure 'Virtual Organisations' to support an international "collaboratory"
- Open access for data as well as for publications'
- Libraries as service infrastructure for e-research

Beyond the Web?

- Scientists developing collaboration technologies that go far beyond the capabilities of the Web
 - To use remote computing resources
 - To integrate, federate and analyse information from many disparate, distributed, data resources
 - To access and control remote experimental equipment
- Capability to access, move, manipulate and mine data is the central requirement of these new collaborative science applications
 - Data held in file or database repositories
 - Data generated by accelerator or telescopes
 - Data gathered from mobile sensor networks

Semantic Grids for Museums and Indigenous Communities



Enable museums & indigenous communities in distributed locations to collaboratively:

- discuss
- define
- annotate

rights associated with objects in museums

Courtesy – Jane Hunter, DSTC

Storage and Management

Synchronous & Collaborative Indexing, Annotation and Discussion

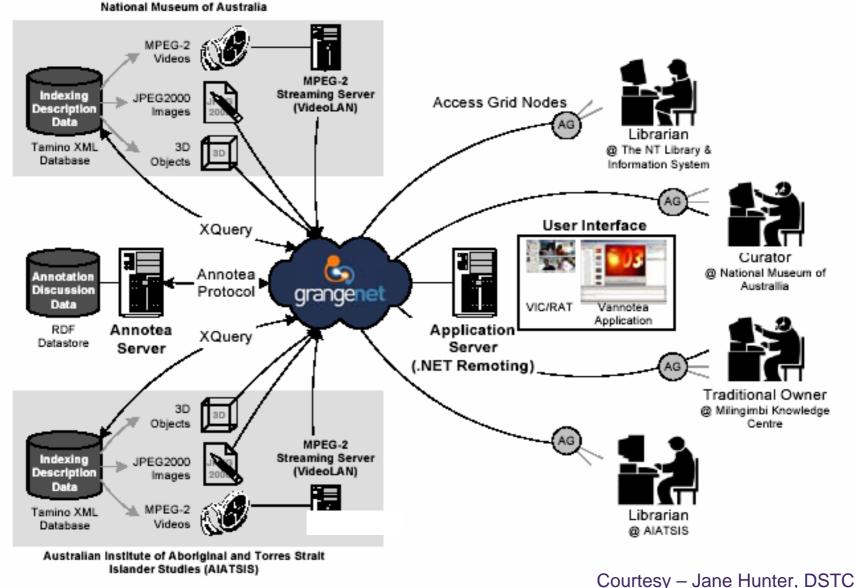
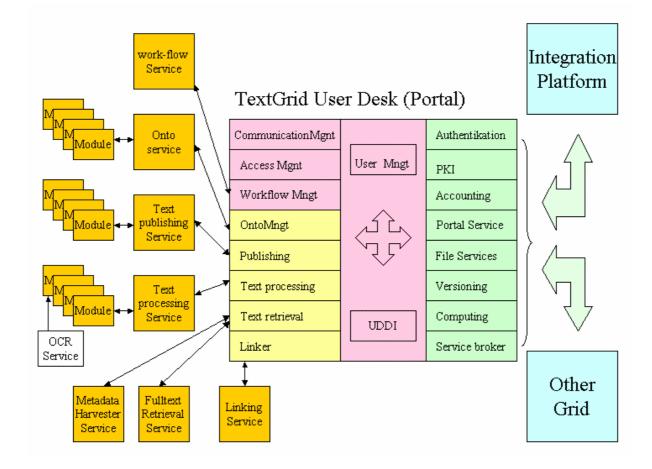


Figure 2: System Architecture

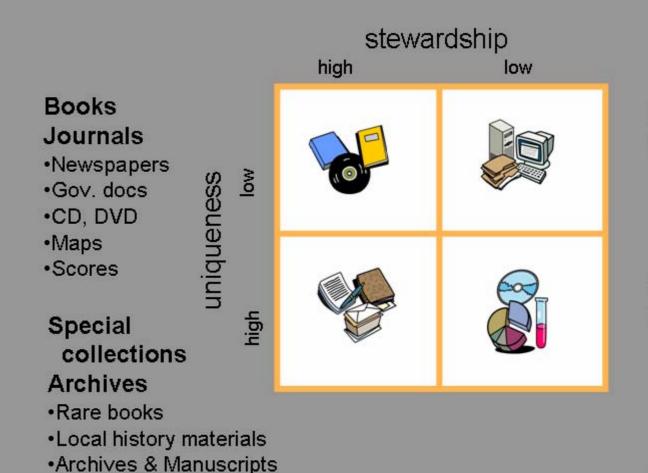
Textgrid-Architektur: Werkzeuge für eine gridfähige und gridgestützte Philologie



	licrosoft Internet Explorer URT	<u>. </u>
atei Bearbeiten Ansicht	Favoriten Extras ?	
⇔ →	. 🛛 🗗 🐴 🗔 🖻 🧭	
Zurück Vorwärts	Abbrechen Aktualisieren Startseite Suchen Favoriten Verlauf	E-Mail Drucken Bearbeiten
/esse 🙆 http://germazope	e.uni-trier.de/Projects/WBB/woerterbuecher/gwb/wbgui?lemid=JB04633&subid=JB0463	3
кз 🙋 Best of the Web 🧯	🖹 Channel Guide 🛛 🕘 Customize Links 🖉 Das Beste im Web 🏼 🕘 Internet Explorer I	News 🔞 Internet Start 🔞 Internetstart 🍘 Kostenlose Hotmail 🍓 Links anpassen 🍓 Windows Media 🍓 Windows
oogle -	💌 💏 Web-Suche 👻 🎻 🗗 104 blockiert 🛛 💌 Optionen 🥒	
	· · ·	haften [bis Bd. 1, 6. Lfg.: Deutsche Akademie der Wissenschaften zu Berlin; bis Bd. 3, 4. Lfg.: Akademie der Heidelberger Akademie der Wissenschaften. Bd. 1 (A-azum), 1978; Bd. 2 (B-einweisen), 1989; Bd. 3 (einwenden-
Gesäusel)		
/orworte TBenutzerhinw B	veise Siglen- und Abkürzungsverzeichnis Wörterbücher im Wörterbuchne Brosame - Brownisch	Band 2, Spalten 904 - 907 Artikelgliederung Artikelvernetzung
		Brosame
Brosamlein	👕 🗉 Brosame 🛛 Stückchen, Krume von Speisen, meist von Brot S	Sie reichte ihm Lotte dem
broschieren	Kanarienvogel] einige B-n mit ihren Lippen AA97,23 Werth ² II häufig	
Broschüre	16,21 bzw Mark 7,28) als Symbol der Dürftigkeit, bes im Hinblick a	ut Kunstschätze Sie gehen
Broschürenwesen	[in Rom] um die Colossen auf Monte Cavallo herum und von da	Wörterbuchnetz - Microsoft Internet Explorer URT
Bröselein		Datei Bearbeiten Ansicht Favoriten Extras ?
Brot	hängt es blos von ihnen ab, sich zu andern köstlichen Gastmahlen	hinzi
Brotbaum	arme Nordländer von den B-n leben, die keineswegs vom Tische fall	
Brotbrocken	mit Mühe, Zeit und Kosten zu verschaffen haben B16,172,18 WHun	
Brötchen	CarlAug 13.7.20 K B48,58,10 GAChKestner 27.12.30 uö	Adresse Children Adresse Adres
Broterwerb brotessend	Syn Brosam vgl Bröselein (sd)	Links @Best of the Web @Channel Guide @Customize Links @Das Beste im Web @Internet Explorer News
Brotfrucht		Google - 👔 🚯 Web-Suche - 🖗 🔁 104 blockiert 🛛 Mockiert 🥖
Brotfrucht Brotjournalist		
Brotjournalist	🕫 Drocomion — euris der auf Metth 15-37 beruhender Wide Ver	Mittelhochdeutsches Handwörterbuch von Matthias Lexer. Zugleich als Supplement und
	Brosamlein nur in der auf Matth 15,27 beruhenden Wdg 'ke	Mittelhochdeutsches Handwörterbuch von Matthias Lexer. Zugleich als Supplement und
Brotjournalist Brotkarren	Brosamlein nur in der auf Matth 15,27 beruhenden Wdg 'ke lassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75]	ain B. Mittelhochdeutsches Handwörterbuch von Matthias Lexer. Zugleich als Supplement und alphabetischer Index zum Mittelhochdeutschen Wörterbuche von Benecke-Müller-Zarncke.
Brotjournalist Brotkarren Brotkorb		Mittelhochdeutsches Handwörterbuch von Matthias Lexer. Zugleich als Supplement und alphabetischer Index zum Mittelhochdeutschen Wörterbuche von Benecke-Müller-Zarncke. Nachdruck der Ausg. Leipzig 1872-1878 mit einer Einleitung von Kurt Gärtner. 3 Bde. Stuttgart
Brotjournalist Brotkarren Brotkorb Brotkrume	lassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75]	ain B. Mittelhochdeutsches Handwörterbuch von Matthias Lexer. Zugleich als Supplement und alphabetischer Index zum Mittelhochdeutschen Wörterbuche von Benecke-Müller-Zarncke. Nachdruck der Ausg. Leipzig 1872-1878 mit einer Einleitung von Kurt Gärtner. 3 Bde. Stuttgart S. Hirzel 1992.
Brotjournalist Brotkarren Brotkorb Brotkrume Brotlieferung Brotneid Brotschnitte	lassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] broschieren auch -och-, stets -ir-; einmal subst (kleinges)	Mittelhochdeutsches Handwörterbuch von Matthias Lexer. Zugleich als Supplement und alphabetischer Index zum Mittelhochdeutschen Wörterbuche von Benecke-Müller-Zarncke. Nachdruck der Ausg. Leipzig 1872-1878 mit einer Einleitung von Kurt Gärtner. 3 Bde. Stuttgart S. Hirzel 1992. Vorworte Wörterbücher im Wörterbuchnetz B brosem, stawyf brôt-oven, stm. Artikelvernetzung konsem stawyf.
Brotjournalist Brotkarren Brotkorb Brotkrume Brotlieferung Brotneid Brotschnitte Brotschnitte Brotteig	Iassen'iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] ■ broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18	A brosem, stswf. B brosem Mittelbach van Mittelbach van Matthias Lexer. Zugleich als Supplement und alitelbabetischer Index zum Mittelbachdeutschen Wörterbuche von Benecke-Müller-Zarncke. Nachdruck der Ausg. Leipzig 1872-1878 mit einer Einleitung von Kurt Gärtner. 3 Bde. Stuttgart S. Hirzel 1992. Vorworte Wörterbücher im Wörterbuchnetz B brosem, stswf brôt-oven, stm. Artikelvernetzung brosem, stswf.
Brotjournalist Brotkarren Brotkorb Brotherung Brotlieferung Brotneid Brotschnitte Brotschnitte Brotteig Brottorte	Iassen'iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] ■ broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu	A brosem, stswf. B brosem, stswf. C B B B B B B B B B B B B B B B B B B B
Brotjournalist Brotkarren Brotkorb Brotkrume Brotheid Brotheid Brotheid Brotheite Brotteig Brottorte Drottragend	■ broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt	Artikelvernetzung brosem, stswf. alles brosem, stswf. alles brosem, stswf. brosem, stswf
Brotjournalist Brotkarren Brotkorb Brotkrume Brotlieferung Brotneid Brotschnitte Brotschnitte Brotschnitte Brottorte orottragend Brottransport	 Iassen' iSv nichts vergeuden DjG³5,397,20 RAnw [7.8.75] broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Buwir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41²,93,13 MuR(252) 	A brosem, stswf. B brosem, st
Brotjournalist Brotkarren Brotkrume Brotlieferung Brotneid Brotschnitte Brottschnitte Brottorte Brottorte Grottragend Brottransport Brottribut	 Iassen' iSv nichts vergeuden DjG³5,397,20 RAnw [7.8.75] broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41²,93,13 MuR(262 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la 	A brosem, stswf. B brosem wr. B brosem stswf. B brosem stswf.
Brotjournalist Brotkarren Brotkorb Brotlieferung Brotneid Brotschnitte Brotteig Brottorte brottragend Brottransport Brottrinsport Brottribut Brottribut Brotiilamini	 Iassen' iSv nichts vergeuden DjG³5,397,20 RAnw [7.8.75] broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41²,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator 	A brosem, stswf. brosem, stswf. brosem, stswf. broseme, stswf. broseme
Brotjournalist Brotkarren Brotkorb Brotlieferung Brotneid Brotschnitte Brotteig Brottote Brottorte Brottragend Brottransport Brottribut Brotillieren	■ broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planirt werd	A brosem, stswf. brosem, stswf. broseme, stswf. brosemin, stn. brosemin,
Brotjournalist Brotkarren Brotkrume Brotkrume Brotlieferung Brotneid Brotteig Brotteig Brottorte Brottragend Brottransport Brottransport Brouillamini Brouilleren Brouilleren Brouillon	■ broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden (zu Shakespeares Zeit) erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planirt wer oder leichte Pappe zum Deckel und ein dunkles Papier zum Überzu	A brosem, stswf. brosem, stswf. brosemer, stswf. brosemill, stn. brosemlin,
Brotjournalist Brotkarren Brotkorb Brotkrume Brotlieferung Brotneid Brotschnitte Brotschnitte Brotschnitte Brotschau Brottragend Brottragend Brottransport Brottribut Brouilliamini brouillieren Brouillon brotzeln	■ broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planirt werd	Attikelvemetzung brosem, stswf. brosem, stswf. brosemlin, stn. brosemlin, stn
Brotjournalist Brotkarren Brotkrume Brotlieferung Brotlieferung Brotschnitte Brotschnitte Brotschnitte Brotschute Brottragend Brottragend Brottransport Brottribut Brouilliamini brouillieren Brouillon brotzeln	■ broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden (zu Shakespeares Zeit) erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planirt wer oder leichte Pappe zum Deckel und ein dunkles Papier zum Überzu	 A brosem, stswf. B brosem, stswf. B brosem, stswf. C brosem, stswf. D brosem
Brotjournalist Brotkarren Brotkorb Brotkrume Brotlieferung Brotneid Brotschnitte Brotschnitte Brotschnitte Brotsgend Brottragend Brottrapport Brottribut Brottribut Brouillieren Brouillion brotzeln	Iassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] ■ broschieren auch -och, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planitt werd oder leichte Pappe zum Deckel und ein dunkles Papier zum Überzu (Lerche 70) ChAYulpius 11.6.00 [G/Voigt BiblKomm] uo vgl heften	A brosem, stswf. B brosem, stswf. B brosem, stswf. Chrie B A brosem, stswf. B brosem, stswf. Chrie Chrie B brosem, stswf. Chrie B Chrie B Chrie B Chrie B D brosem, stswf. Chrie Chrie Chrie B D brosem, stswf. D brosem, str. D brosener, str. D brosener, str. D brot.becke, swm. D brot.becker, str. D brot.becker, str. D brot.becker, str. D brot.becker, str. D brot
Brotjournalist Brotkarren Brotkorb Brotkrume Brotkrume Brotheid Brotneid Brotschnitte Brotteig Brottorte	Iassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] broschieren auch -och-, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252) Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planitt werd oder leichte Pappe zum Deckel und ein dunkles Papier zum Überzu (Lerche 70) ChAVulpius 11.6.00 [G/Voigt BiblKomm] uö	ain B. Mittelhochdeutsches Handwörterbuch von Matthias Lexer. Zugleich als Supplement und alphabetischer Index zum Mittelhochdeutschen Wörterbuche von Benecke-Muller-Zamcke. Nachdruck der Ausg. Leipzig 1872-1878 mit einer Einleitung von Kurt Gärtner. 3 Bde. Stuttgart S. Hirzel 1992. vorworte Wörterbücher im Wörterbüchertz brosem, sts.wf. brosem, sts.wf. brosem, sts.wf. brosem, sts.wf. chrie B brosem, sts.wf. brosem, sts.wf. chrie B brosem, sts.wf. brosem, sts.wf. chrie B broseme, sts.wf. brosem, sts.wf. chrie B broseme, sts.wf. brosem, sts.wf. chrie B broseme, sts.wf. broseme, krume BAIL. FREID. LIEHT. HELMER. ALEXIUS 94,590. EVANG. 245 ⁹ . WACK. stellt es zu brösten, eher ist wol mit DWB. 2,398 u. WEIO. 2,184 entstehung aus bröst-becker, stm bröst-becker, stm bröt-becker, stm brötehen, vgl. oben brohseln u. ahd. prochsön, prochsön bröt.den
Brotjournalist Brotkarren Brotkorb Brotkrume Brotlieferung Brotneid Brotschnitte Brotschnitte Brotschnitte Brotschnitte Brotsgend Brottrapport Brottrapport Brottribut Brouillamini brouillieren Brouillon brotzeln	Iassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] ■ broschieren auch -och, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planitt werd oder leichte Pappe zum Deckel und ein dunkles Papier zum Überzu (Lerche 70) ChAYulpius 11.6.00 [G/Voigt BiblKomm] uo vgl heften	A brosem, stswf. brosem, stswf. brosemere, stswf. brosemere illex brosemere illex brosemere illex brosemere illex brosemere illex brosemere illex
Brotjournalist Brotkarren Brotkrume Brotlieferung Brotlieferung Brotschnitte Brotschnitte Brotschnitte Brotschute Brottragend Brottragend Brottransport Brottribut Brouilliamini brouillieren Brouillon brotzeln	Iassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] ■ broschieren auch -och, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planitt werd oder leichte Pappe zum Deckel und ein dunkles Papier zum Überzu (Lerche 70) ChAYulpius 11.6.00 [G/Voigt BiblKomm] uo vgl heften	Artikelvernetzung Artikelvernetzung Artikelvernetzung Artikelvernetzung Artikelvernetzung Brosem, stswf. Brosem, stswf. Brosemere, stm. Brosenere, stm. Bros
Brotjournalist Brotkarren Brotkorb Brotkrume Brotlieferung Brotneid Brotschnitte Brotschnitte Brotschnitte Brotsgend Brottragend Brottrapport Brottribut Brottribut Brouillieren Brouillion brotzeln	Iassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] ■ broschieren auch -och, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planitt werd oder leichte Pappe zum Deckel und ein dunkles Papier zum Überzu (Lerche 70) ChAYulpius 11.6.00 [G/Voigt BiblKomm] uo vgl heften	ain B. Mittelhochdeutsches Handwörterbuch von Matthias Lexer. Zugleich als Supplement und alphabetischer Index zum Mittelhochdeutschen Wörterbuche von Benecke-Müller-Zarncke. Nachdruck der Ausg. Leipzig 1872-1878 mit einer Einleitung von Kurt Gärtner. 3 Bde. Stuttgart S. Hirzel 1992. Vorworte Wörterbücher im Wörterbüchnetz B brosem, stswf. Correst Strutter brosem, stswf. B brosener, stswf. B brobt-becker, stm.
Brotjournalist Brotkarren Brotkrume Brotkrume Brotlieferung Brotneid Brotschnitte Brotteig Brottorte brottragend Brottransport Brottribut Brouillarnini brouillarnini brouillon brotzeln	Iassen' iSv nichts vergeuden DjG ³ 5,397,20 RAnw [7.8.75] ■ broschieren auch -och, stets -ir-; einmal subst (kleinges Zustandspass, subst PartPrät B(Knittermeyer 30) JMFärber 9.7.18 festen Umschlag einbinden [zu Shakespeares Zeit] erschien ein Bu wir aus dem damaligen Einbande sehen wir aber broschiren jetzt vor dem Einbande noch seinem Inhalte Respect 41 ² ,93,13 MuR(252 Heft [von KuA] ankündigen. Da es broschirt ausgegeben wird, so la Decke in Kupfer stechen B26,216,12 Cotta 10.1.16 Der Registrator broschiren darauf zu sehen, daß die Bücher vorher wohl planitt werd oder leichte Pappe zum Deckel und ein dunkles Papier zum Überzu (Lerche 70) ChAYulpius 11.6.00 [G/Voigt BiblKomm] uo vgl heften	Artikelvernetzung Artikelvernetzung Artikelvernetzung Artikelvernetzung Artikelvernetzung Brosem, stswf. Brosem, stswf. Brosemere, stm. Brosenere, stm. Bros

Collections grid

Theses & dissertations



Freely-accessible web resources

Research and learning materials

- ePrints/tech reports
- Learning objects
- Courseware
- E-portfolios
- Research data

Untransferred records

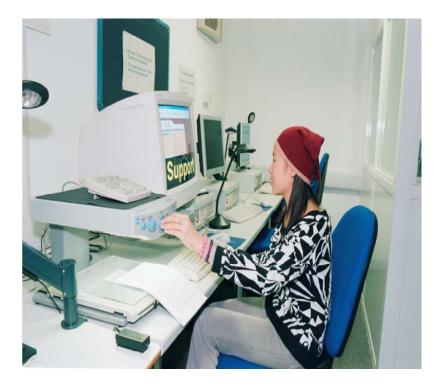
Changes in student expectations • Students behaving as



- consumers
- The need to actively engage students in learning
- The demand for flexibility in when and where people study
- New generations of students and their use of technology and multimedia
- The learning needs of each individual

Community tools

- Blogs
- Wikis
- Discussion forums
- Instant messaging
- Newsfeeds



New learning and teaching environments

- Libraries have to integrate publications, data and other digital objects into modern learning and teaching management systems.
- The learning of information literacy is as valuable for the students of today as the skills for active publishing in the open access internet world. Libraries have an increasing teaching role in this respect.

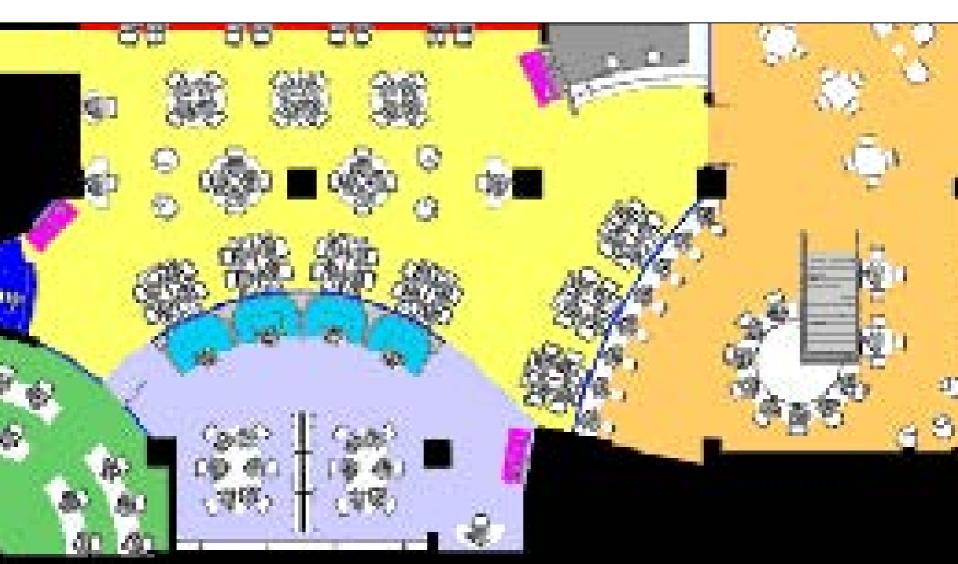
The virtual learning environment

" The aim is to create an electronic environment which replicates all the facilities of the real environment...

...allowing students to move seamlessly between the two...in a way which meets their own needs."

The new learning environment Univ. of Chicago: Crerar Library

Video Computer Cybercafe Helpdesk group workingt teaching area TV



The eCampus

- Course information
- Enrolment
- Fees payment
- Learning materials
- Information resources
- Interaction with staff
- Contact with students
- Assignments
- Assessment
- Feedback
- Certification



Learning resources centre

- The institutional service for the learning and teaching of the future
- providing
 - library services,
 - IT facilities,
 - e-learning and e-teaching environments, combined with
 - human advice
- and all this as a 24/7 service throughout the year.

The Learning Centre at Sheffield Hallam University

library and information services user computing multimedia production educational innovation eLearning development educational research

'THE BRAIN' – Philology Library FU Berlin

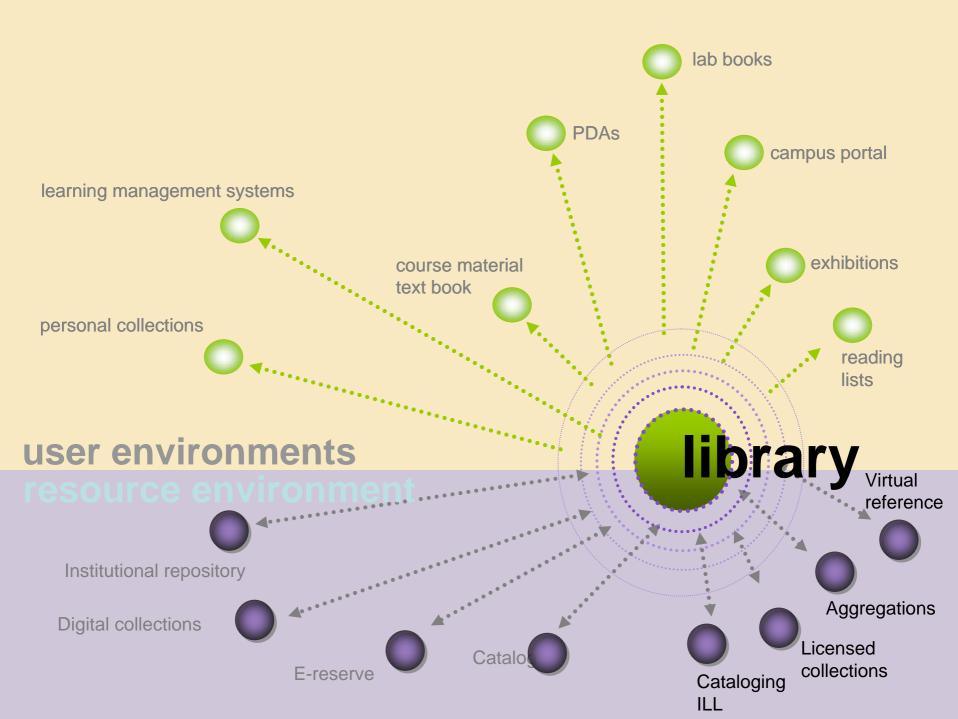


Universitäty Library Utrecht



Bringing the library into the workflow of the user

• The real challenge is to bring these services into the working and live environment of the user – researcher, teacher and student. Library services have to be ubiquitous – accessible from the campus, from home or from anywhere else in the world – another meaning of open access.



Personal Learning Landscape

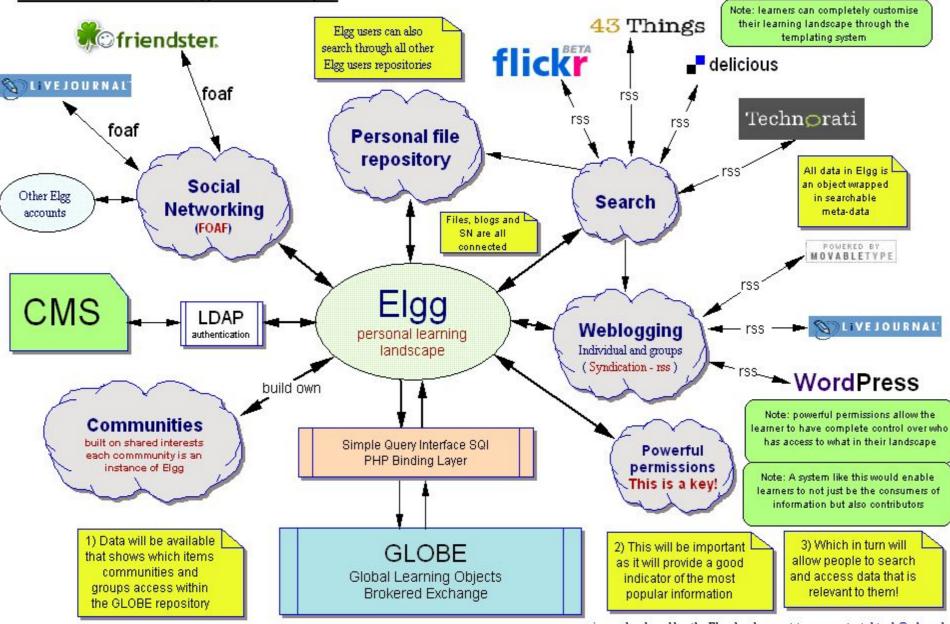


image developed by the Elgg development team - contact $\underline{d.tosh@ed.ac.uk}$

In the user *-flow

- Workflow
- Learnflow
- Commuteflow
- Lifeflow

Gamers as Metaphor

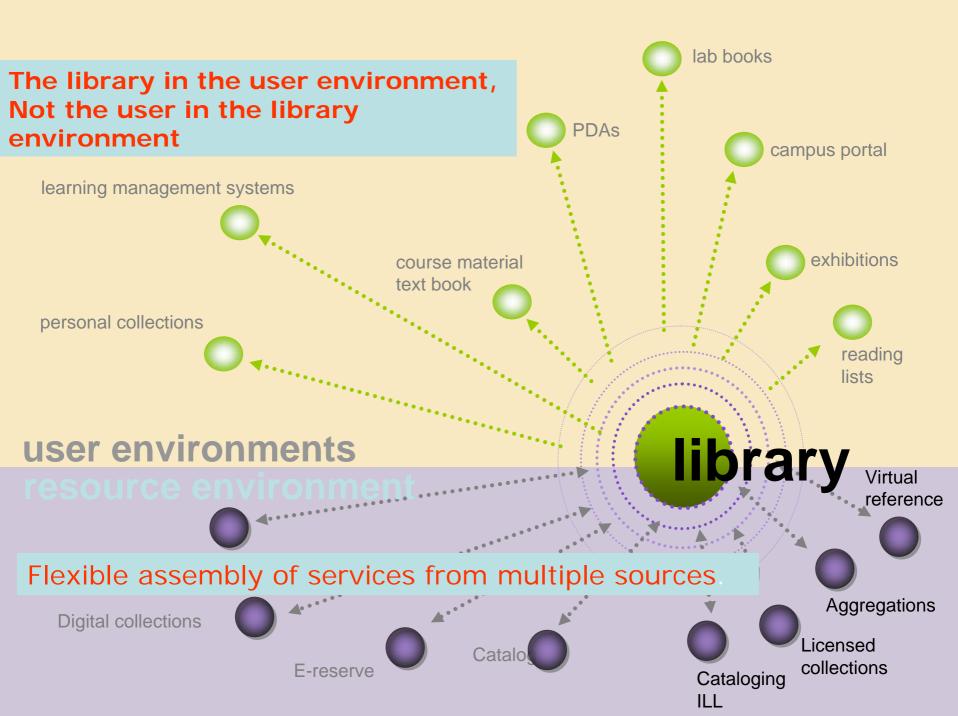
Permanently

Plugged Ir

- Compete
- Collaborate
- Create



- Personal collections and citation chaining
- Integration of data and literature





In May 1961, JFK said that he was going to put a man on the moon. The idea was unthinkable at the time, but within the decade, the goal was achieved.

Google Book Search (<u>books.google.com</u>) is our **man on the moon** initiative. We see a world where **all books are online and searchable***. How exactly will this be done? How long exactly will it take? We aren't sure, but **we're committed to making it happen**.

Imagine this program's potential impact on education and research. On how our children discover books. On writing and publishing. On how all of us find and use information.

🖳 IS Departm...



Internet

EN <

15:31

💽 2 Microso... 🔻 🥔 Google Boo...

Do we need your help? Yes.

start

💁 Inbox - Mic...

Open past

Digitising à la Google



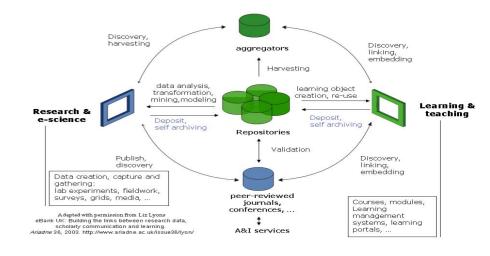
- The library way
- "do it once, do it right"





And the libraries?

 Institutional intellectual asset management



 Learning resources centres for the learning and teaching of the future are the



Virtual libraries



- Combination of high value
- information services
- electronic and
- Print material

Virtual Library of Engineering	7 and ViFaTec
Virtual Library of <u>Medicine</u>	MedPilot
Virtual Library of Pharmacy	ViFa Pharm
Virtual Library of Physics	Vittate Papaladore Prink En: Argebot der UE/TIB Hannover
Virtual Library of Veterinary Medicine	ViFa Vet

Geography, Maps and Mining	try out:
Wood-Technology	see Institute of
	<u>Wood</u> Tochnolog

And the libraries?



Early American

😹 Start 🖈 T-Onine StanCenter 🛛 🐼 Norton Antoines 🖉 11 tete

All imprints from the U.S. from the years 1639-180

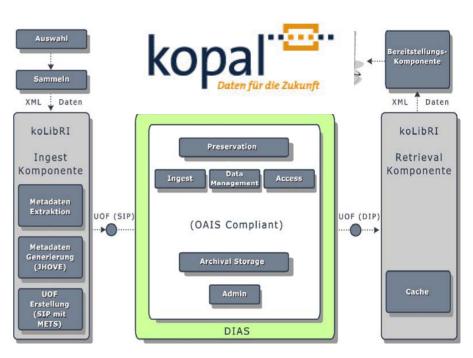
0.04

Microsoft PowerPoint - [... 🔟 # 🥩 🗞 📆 🐔 19-1

(2.3 million pages)

et Explorer - Digene Dateen

- Combination of virtual research libraries (VASCODA)
- National licences
- Long term preservation



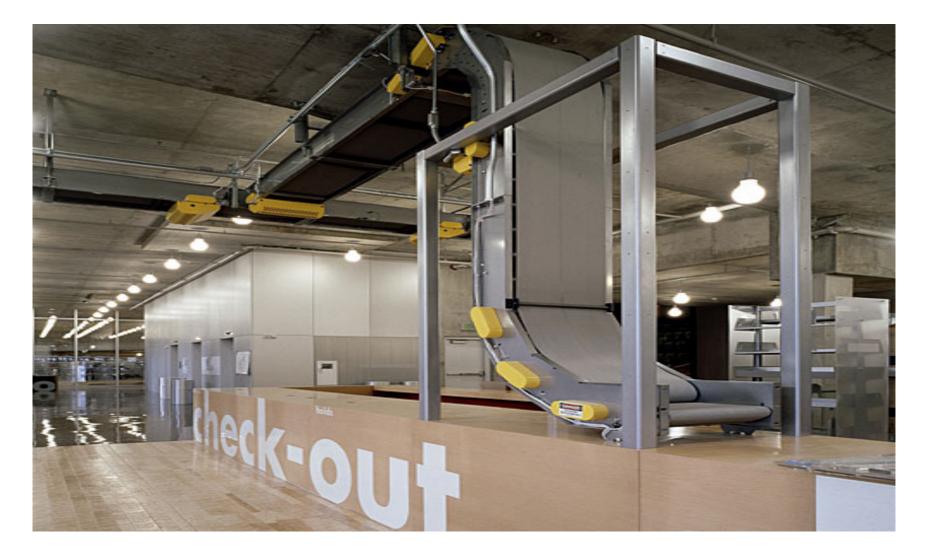
...and the Books?

Open access for the classified literture 1700 – 1900 - The Research Library of the SUB Göttingen



Libraries as the worldwide learning and research service infrastructure of the future

- the mission of libraries for centuries
 - providing free access to expensive as well as free publications.
- libraries are open access providers for their institutions and patrons
- As a worldwide co-operative community, they guarantee access to the published information
- it is a corporate obligation to keep this mission in the information society of the future.
- Let's do it together.



The end elmar@mittler.de

Many thanks to my colleagues

- Graham Bulpitt
- Lorcan Dempsey
- Tony Hey
- Peter Schirmbacher
- Helen Shenton
- Sarah Thomas



The purchase of nation-wide licenses was financed by four **research and university libraries** with financial support from the **Deutsche Forschungsgemeinschaft (German Research Foundation** - DFG):

- Bavarian State Library
- Goettingen State and University Library
- Staatsbibliothek zu Berlin
- Universitaetsbibliothek Johann Christian Senckenberg Frankfurt/Main

The following databases are currently available:

➡ Periodicals Contents Index	A bibliographical aatabase with more than 14 million entries from 4,600 humanities and social sciences journals published between 1770 and 1995 (inclusive)
➡ World Biographical Information System (WBIS)	Several million short biographies from references works starting with the sixteenth century. Countries covered are the USA, Great Britain, France, Italy, Spain/Portugal/Ibero- America, Scandinavia, the Benelux, and Russia

All imprints from the U.S. from the years 1639-1800 (2.3 million pages)

💋 Internet

out Us

iversity iversity Press

sthead

arch in SUB Web-Site

ontact

۱ks



nestor Kompetenznetzwerk

nestor: Newsletter

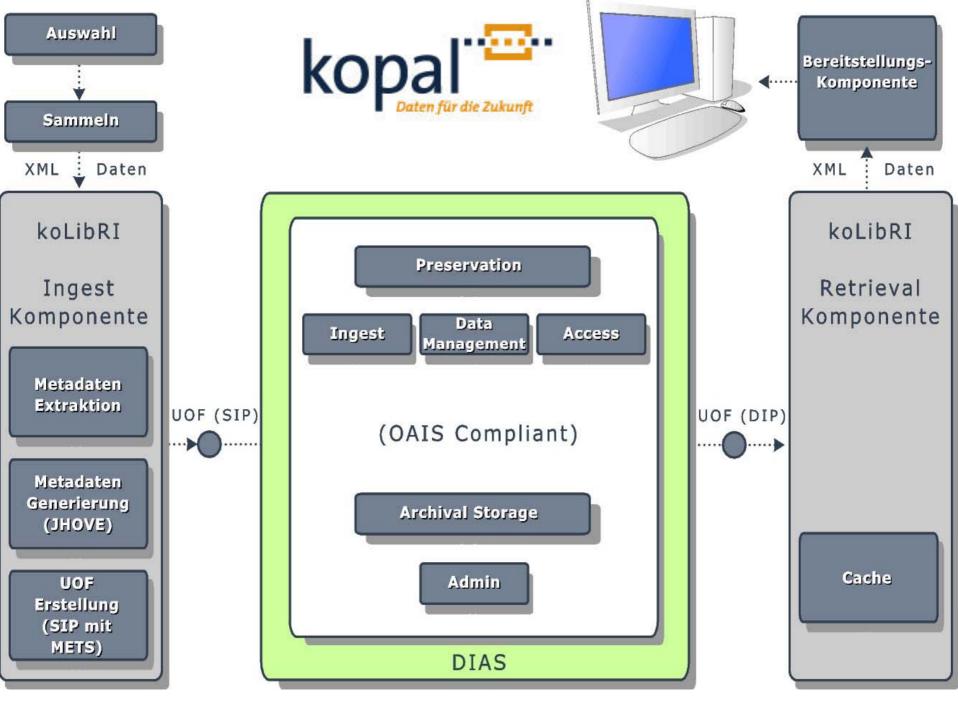
Issue no. 8 (March 2006) of the nestor newsletter is now available at the nestor website

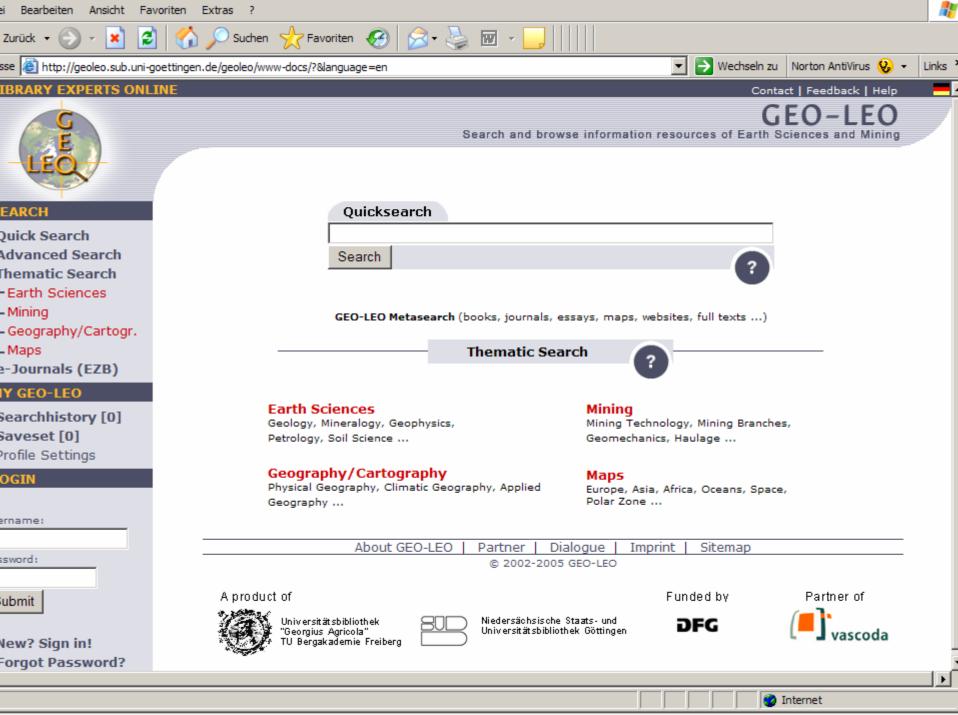
http://nestor.sub.uni-goettingen.de/newsletter/

Selection of topics:

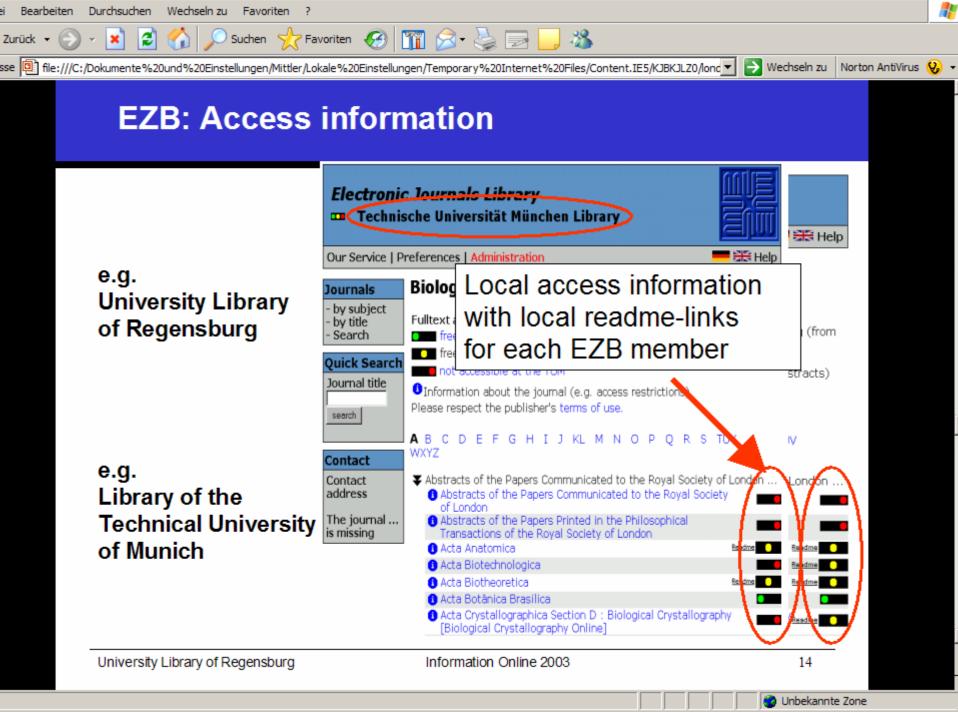
- Press release: Integration of PADI metadata in the nestor information database
- 2005/2006: nestor has commissioned seven studies on digital preservation topics
- "Digital long-term preservation on microfilm" by Roland Dreyer







. . .



Virtual Research Libraries

Virtual Library of Anglo-American Culture Virtual Library of	
Contemporary Art	ViFa ART
Virtual Library of Dutch Culture	Nederate
Virtual Library of the History of <u>Eastern Europe</u>	virtuelle fachbibliothek osteuropa
Virtual Library of <u>History</u> (Early Modern History)	sfn
Virtual Library of Economy and Business	
Virtual Library of <u>History</u> CLIO-Online	
Middle East Virtual Library <u>MENALIB</u>	MENALIB
Politics and Peace Guide	Politics and peace guide Virtuelle Bibliotheken Politikwissenschaft und Friedensforschung
Virtual Library of <u> Psychology</u>	Saartändische Universitäts- und Landesbibliothek
Social Science Virtual Library	ViBSoz

Cooperative Internet services –

- Websites
- Electronic material
- text repositories

• Print material

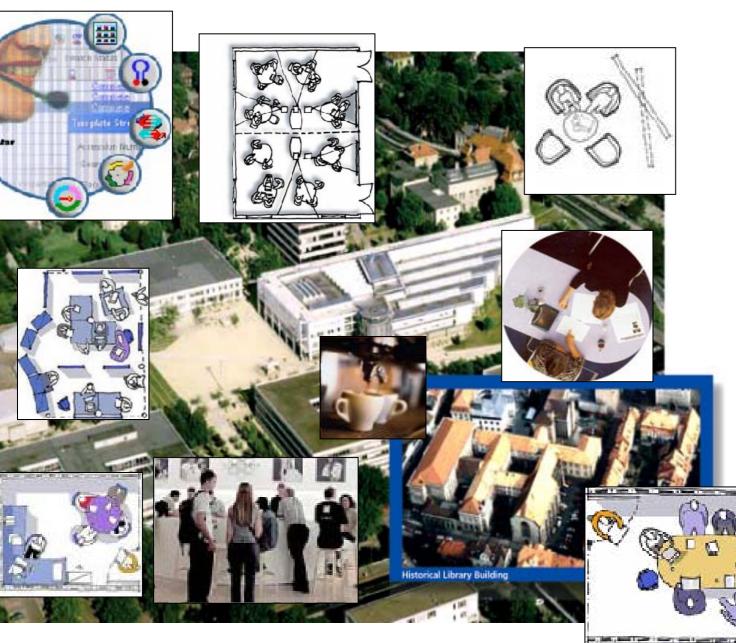
Virtual Library of Engineering	The last Difference of Contract of Contrac
Virtual Library of <u>Medicine</u>	MedPilot
Virtual Library of <u>Pharmacy</u>	ViFa Pharm
Virtual Library of <u>Physics</u>	Partbolineries Bysiki Bysiki Ets Angeloat der UK/128 hannever
Virtual Library of Veterinary Medicine	ViFa Vet

-

Convergence and dissolving of boundaries

- It is not enough just making resources available on the network
 - Have to be integrated into workflows
 - User workflow
 - Library workflow
- A library will source services within multiple deep collaborative and third-party arrangements
 - Need to standardize processes
 - Shared services institution, interinstitution
 - More hosted services?
 - Organizational structures lacking

Die Bibliothek in die Universität bringen



Beratung Interaktive Lehre Abgetrennte Arbeitsplätze Gruppenarbeit Angenehme Atmosphäre Help desk Sicherheit Wohlfühlen

...and the Books?

Open access for the classified literture 1700 – 1900 - The Research Library of the SUB Göttingen

