search, storage, & beyond

History of Information

December 5, 2007
a new line?

"to organize the world's information"

store
order
access
Mesopotamia

Ebla (Syria) c 2250 bce

Babylon (Iraq) 15,000 tablets

Nineveh (Iraq) c. 650 bce

Gilgamesh

Shin-equì-uninni

"and then he carved his story on a stone"
storing: Mediterranean

**Lyceum**
(Aristotle)

**Pergamum** [Turkey] (c 197 bce)
200,000 scrolls
parchment
storing: Alexandria(s)

libraries
royal library, Mouseion, "daughter", Serapion Caesarion

Ptolomies
I (367/6-283/2 BCE)
II (308-246 BCE)

490,000 "main"
42,000 "daughter"
Zenodotus
alphabetical ordering

Callimachus
categories

Aristophanes & Aristarchus
scholarly versions
editorial commentary

Dionysius the Thracian
Greek grammar
volumen to codex
monastic libraries

intensive to extensive

"[F]rom the fourth hour until about the sixth let them apply themselves to reading. After the sixth hour, having left the table, let them rest on their beds in perfect silence; or if anyone may perhaps want to read, let him read to himself in such a way as not to disturb anyone else."

Rule of St Benedict, Chapter 48.
Humbert de Romanis (1194-1257)

Dominican libraries:
dry, well ventilated, ample shelving, subject categories, catalogue, titles on spines;
up to date, selling old and duplicates to buy new; regular hours; 'reference' book chained,
others portable; loans recorded

Dominican reading:
the search for truth
Humbert de Romanis (1194-1257)

Dominican libraries:
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Dominican reading:
the search for truth
organizing (again)

alphabetized
Elementarium Doctrinae Erudimentum, 1053

topical indexes
Deusdedit's Canons, 1083-87

thematic classification
Gilbert of Poitiers's Psalms, c. 1150

running headlines, chapter titles, cross references, citations, "chapter & verse",
authoritative texts (Correctoria)
Alexandrian phantasies

"These Libraries in a few years, will be full and compleat, being furnished, not only with all the valuable and usefull Old Books in any Art of Science, but also with all the valuable New Books, so soon as every they are heard of or seen in the World"

An Overture for Founding and Maintaining of Bibliothecks in Every Paroch Throughout this Kingdom, James Kirkwood, 1699
collecting or selecting

Smirke, British Museum Reading Room, 1851

Pelz/Casey Reading Room, LOC, ca 1898

Labrouste, Bibliothèque Nationale 1868

Asplund, Stockholm City Library, 1928

40. [Kathar. Schürer: Strassburg, 1512.]

 imperfect, wanting five signatures (A-F) from the end of the volume, containing the 10. Antonius Jaanusen and Tu Peterson.
Photography applied to Catalogues of Books.—May not photography be usefully applied to the making of catalogues of large libraries? It would seem no difficult matter to obtain any number of photographs, of any required size, of the title-page of any book. Suppose the plan adopted, that five photographs of each were taken; they may be arranged in five catalogues, as follows:—Era, subject, country, author, title. These being arranged alphabetically, would form five catalogues of a library probably sufficient to meet the wants of all. Any number of additional divisions may be added. By adopting a fixed breadth—say three inches—for the photographs, to be pasted in double columns in folio, interchanges may take place of those unerring slips, and thus librarians aid each other. I throw out this crude idea, in the hope that photographers and librarians may combine to carry it out. ALBERT BLOR, LL.D.

Photographic Copies of Ancient Manuscripts.—Might not photography be well employed in making fac-similes of valuable, rare, and especially of unique ancient manuscripts? If copies of such manuscripts could be multiplied at a moderate price, there are many proprietors of libraries would be glad to enrich them by what, for all purposes of reference, would answer equally well with the originals.

A.

[This subject, which has already been touched upon in our columns, has not yet received the attention it deserves. We have now before us a photographic copy of a folio page of a MS. of the fourteenth or fifteenth century, on which are inscribed a number of charters; and, although the copy is reduced so as to be but about 2 inches high and 1 ½ broad, it is perfectly...
new technology

Vannevar Bush (1890-1974)

"There is a growing mountain of research. But there is increased evidence that we are being bogged down today as specialization extends. ... A record if it is to be useful to science, must be continuously extended, it must be stored, and above all it must be consulted"

--As we may think, 1945
Two centuries ago Leibnitz invented a calculating machine which embodied most of the essential features of recent keyboard devices... Babbage, even with remarkably generous support for his time, could not produce his great arithmetical machine... progress in photography is not going to stop ... dry photography ... is already here ... a scheme for facsimile transmission ... microphotography ... compression ... advanced arithmetical machines .... will select their own data and manipulate it

A memex is a device in which an individual stores all his books, records and communications ... mechanized ... associative indexing ... his trails do not fade
"an America where every child can stretch a
hand across a keyboard and reach every book
ever written, every painting ever painted,
every symphony ever composed". Bill Clinton, 1966

"A young generation of entrepreneurs asked
what if we could take all the information
in a library and put it on a little chip
the size of a fingernail? We did that and
changed the world forever". John Kerry, 2004

"universal access to all knowledge". Brewster Kahle
first the net

WAIS
ARCHIE
"the web is a global library produced by millions of people"
--Yochai Benkler

Alta Vista
Yahoo
then google

beyond hierarchy
"to organize the world's information"

beyond organization
"making the incredible breadth of information that librarians so lovingly organize searchable online".

6.5 billion searches August 2006
$2.9 billion, 3d quarter, 2006

beyond search
"the database of intention".
--John Batelle
## beyond google?

### web 2.0

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democracy?

the promise of using technology to bring more culture to the masses had been drowned out by FOO Campers' collective cry for a democratized media

... Everybody was simultaneously broadcasting themselves but nobody was listening.

democratization ... is undermining truth, souring civic discourse, and belittling expertise, experience, and talent ... threatening the very nature of our cultural institutions

today ... there is an even more threatening Big Brother lurking in the shadows: the search engine