The Library Through the Eyes of a Researcher

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1. Introduction

- Researcher (40 years) vs Dean (2 years)
- Evolution of Research and its Implication for libraries/librarians for 40 years
- What to expect as an ideal library for a researcher in the (near) future
- Background: Chemistry —> some examples from the field
- Some prejudice in favour of the hard sciences?
- Experience with needs of Humanities (President of the Library Commission of the VUB)

2. The Ideal Library

Education and Research are intimitaly coupled in a University

2.1 Research Library

- Further diverting from the library for undergraduate and graduate students in its "physical aspect"
- Sciences research library dominated by electronic journals and databases
 - books (printed/e-books)
 - no longer an external part of the lab (as it was 40 years ago) for consulting journals, databases (Chemical Abstracts)
 - desktop library in the lab, in the office, at home
 - science is no longer created <u>in</u> the library but scientists <u>use</u> the library resources even more frequently in view of publication speed and online access

- knowledge is gathered not produced in the library
- books are partially loosing their status except for monographs and handbooks; multi-author volumes, Advances ... Annual reports ... are getting more and more replaced by (invited) reviews in high impact journals (added value for the author, price: reluctant contributors)

- Humanities
 still higher attendance of the library; more books with lasting relevance, special collections, archives
 - still more important physical place for books
 - nevertheless: electronic journals/databases witnessing increasing impact (cf. VUB Initiative)

2.2 Library as a teaching instrument (undergraduate, graduate levels)

- although lots of material is electronically accessible, the library gradually evolving in a learning center, is still and even more than some years ago, a working place
- social contact: group work
- social pressure: preparation of exams



- ? Transformation of (parts of) physical space of traditional library into learning center
 - appropriate paper/digital collection of books, data bases for undergraduate/graduate level
 - appropriate environment for collaborative learning
- ? Appropriateness of this approach for humanities, often with much higher number of students and higher needs for books

3. The ideal research library?

Evolution sketched above at first sight positive for every researcher

- But, library/librarians are tightened by publishers, and by the culture of publishing (academics/ decision makers)
 - astonishing and permanent increase in
 - number of publications
 - number of journals
 - economic reasons (publishers)
 - academic reasons (publication culture, decision makers)



An Example

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• Chemical Abstracts: # abstracts in 1967: 240.000 → Total Abstracts to Date 3.950.000

# 2007: 1.100.00 → Total Abstracts to Date 26.000.000

Present day Chemical Literature take 3-4 pp/paper

→ 100.000.000 pages! (underlimit cf books)
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The Journal of the American Chemical Society

pages in 1972: 9286 # pages in 2011: 21028

The Journal of Physical Chemistry

pages in 1972: 4039: 80 pages a week # pages in 2011: 58607: 1200 pages a week

How to cope with this?

- efficient, accessible databases to master this information explosion (ISI, SCOPUS,)
 - but who still reads the papers?
 - who still has the time to write a decent peer review?
- decrease the increase: quality vs quantity -----> persistent importance of peer review: unreviewed posting of paper is no option (?)
- stop the growth of number of journals
- attenuate the publication pressure

change in policy of decision makers at any level:

number of publication and citation scores as a key ingredient for measuring/judging output and impact of individual researchers, research groups, faculties, ... get rid of this one shot appreciation of a scientific career



- "Faute de mieux" keep the peer review process and honour it
- Monopoly of Commercial Databases
 - implicit danger of monopoly
 eg. Criteria for incorporating a journal into the database
 - what if Thomson Reuters (ISI) goes bankrupt?
 - Is it not time for a non-commercial, eg European (EU) initiative not to let the main instrument for research government in the hands of a commercial firm
 - ? Time for an EU initiative to create an instrument governed by peers

Do we need a new system for researchers and libraries?

- **Researchers** publish not peer reviewed papers?

 - open access (peer reviewed): presently financially unattainable for many groups

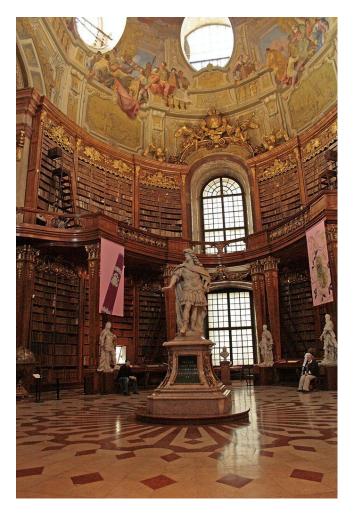
Libraries

- alliances | regional (cf ELEKTRON Initiative in Flanders) national International ??? <u>UNICA</u> initiative
- role of politicians/ rectors helped by librarians ...
 - create equal (digital) opportunities for information for each researcher
 - educate (younger) researches in retrieving information

Library as an education center for researchers in a LLL context

What with the library as an environment to inspire for creativity, a sacred place as I remember it from my youth and as a saw it back at previous UNICA

conferences



Prunksaal Austrian National Library Vienna

These icons of our culture may not disappear. They can be retrieved in a modern form

A Learning and Library Center has still a meaning as physical space

- make it the center of the Campus
- give it an outstanding Architecture (DELFT)





- give it an optimized infrastructure and use of space
- attract the younger generation by the most advanced electronic tools



Create an environment that inspires for creativity and promotes social contact among researches, create a forum for intellectual and social contacts.

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Chemical Abstracts

Help Desk