Standing on the Shoulders of Keynes

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An ~~Economist's~~ *Educator's* Perspective on Digital Resource Issues

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Main point

◆ **Need to teach**
- ❖ What data is available
- ❖ How to find it
- ❖ How to evaluate it

◆ **Why?**
- ❖ Professors don't do it
- ❖ Professors can't do it! (often not computer savvy…)

Secondary points

◆ Need consider how researchers look for data
  ❖ What do they expect?
  ❖ Usage habits are deeply engrained: databases that do not match habits may not be used

◆ Need think about what data researchers need
  ❖ The latter is my "Keynes" point
  ❖ Differs a lot by field
  ❖ Lots of "holes" in collections

◆ We must get researchers to use these resources

Structure of talk

◆ Example of teaching-oriented research
  ❖ How I do it
  ❖ How a student might do it
◆ Social science research needs
  ❖ General considerations
  ❖ What I use
◆ Dissemination of methdology
  ❖ Liberal arts college context
  ❖ Most US students NOT in research universities
    ◆ And in the US, this includes many of the "elite"

Teaching-oriented research example
*– Origins of "**Standing on the Shoulders of Giants**" –*

- ◆ No more need to go to a library
    - ❖ Did not find Bartlett's **_Quotations_** so…
- ◆ Proxy server to my university
- ◆ Linked to **_Encyclopedia Britannica_**
    - ❖ yielded the use of the phrase by Isaac Newton
    - ❖ from a well-known Robert King Merton book
    - ❖ confirmed my vague memory of the source
- ◆ But what was Newton's original?

Then tried *Oxford Reference Online*

◆ Meta-database

- ◆ Initially I did not know the actual source I used
- ◆ I had to redo the search to check!
- ◆ It was **The Oxford Dictionary of Scientific Quotations**

◆ "If I have seen further it is by standing on ye sholders of Giants." Letter by Newton to Hooke, 5 February 1675/6.

- ◆ Newton quoted Robert Burton's **The Anatomy of Melancholy** (1624): 'Pigmies placed on the shoulders of giants see more than the giants themselves'.
- ◆ Who used Bernard of Chartres in the early 12th century
- ◆ Who may have used the Roman grammarian Priscian.
- ◆ Source: Merton, **On the Shoulders of Giants** (1965).
 - ◆ So everywhere I went ultimately depended on Merton….

But then checked Wikipedia

◆Yielded same basic information

◆More detail on 12th century source

❖ ***PLUS*** photo of Chartres Cathedral (*13th century*) with links to art resources

◆***AND*** brought up to date:

❖Use in rock albums, contemporary culture

❖And as motto of Google Scholar

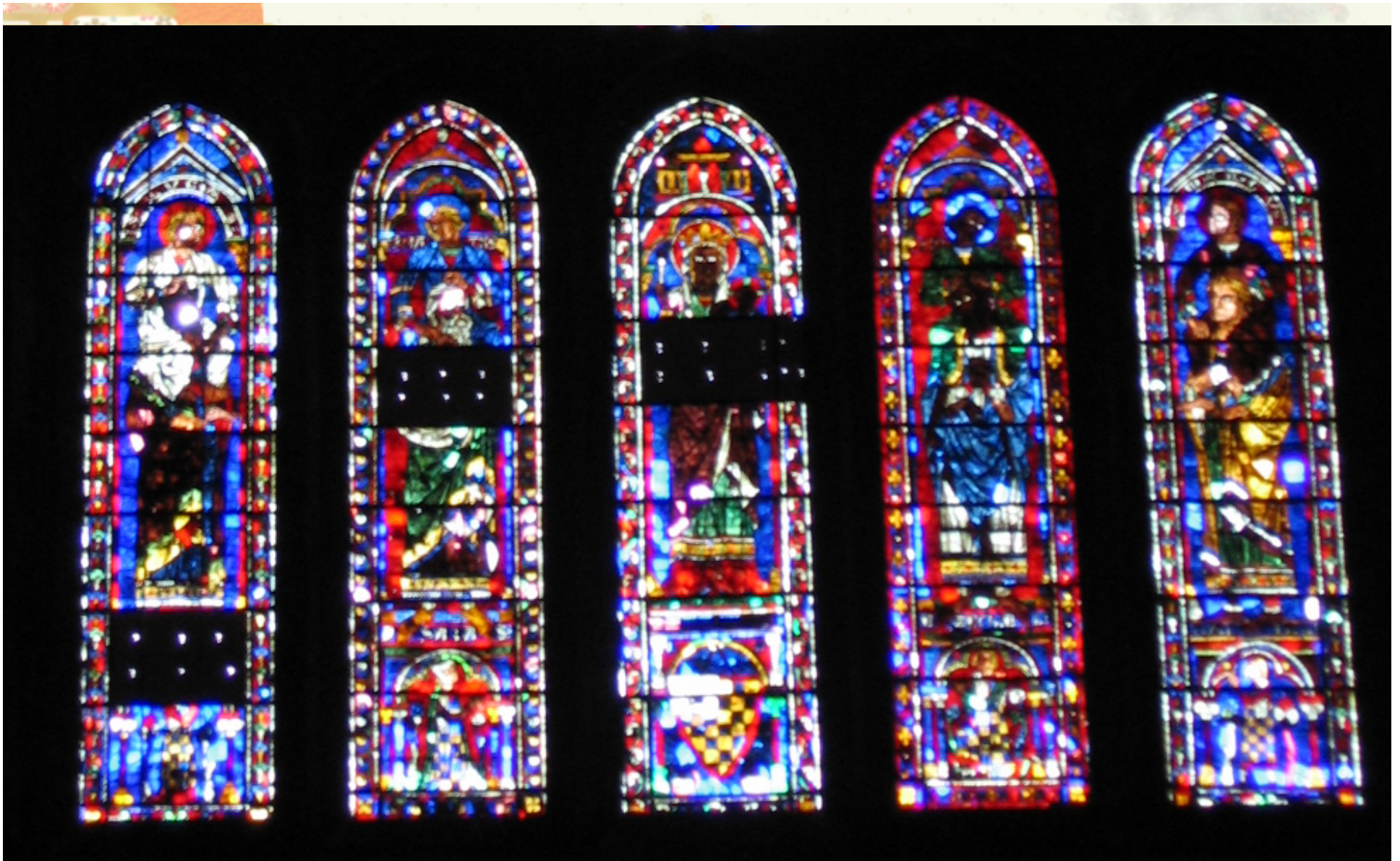❖ and hence this conference??

The
Glorification
Of Christ
(top)

Luke-Jeremiah
Matthew-Isaiah
Christ Family
John-Ezekial
Mark-Daniel
(bottom, left to
right)
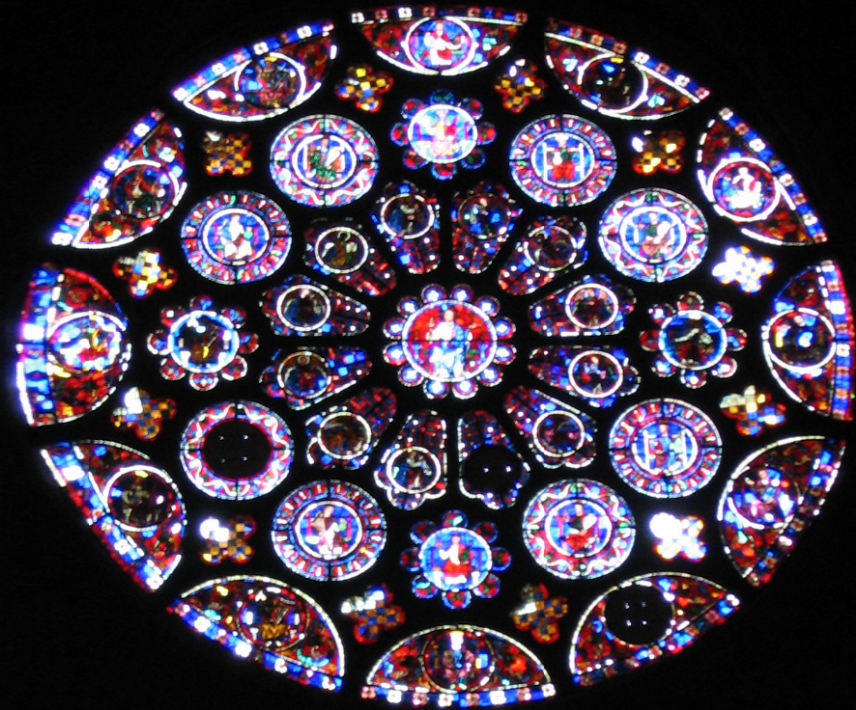
South Rose Transept Window,
Notre Dame Cathedral, Chartres, France

The Evangelist Mark on the Shoulders of the Prophet Daniel

Right Pane

University of Pittsburgh Images of Medieval Art And Architecture

Still, incomplete

- ◆ These sources missed one substantive use of the phrase
  - ❖ Motto of the $250 million capital campaign coinciding with the 250th anniversary of the founding of Washington and Lee University
  - ❖ and thereby to my salary!
    - ◆ Especially as the campaign ultimately raised $300 million (350 …)
  - ❖ Because W&L has many Fortune 500 CEOs and other very wealthy & successful alumni

But what if I was a student?
– *Google!* –

◆ Skipped first reference, in Japanese
- ❖
  - •

- ❖ Next one strange (£2 British coin)
- ❖ Japanese-language wikipedia unhelpful!

◆ Did give 2 useful links
- ❖ Also several misleading or partial links

◆ Which would a student use?
- ❖ Sometimes vastly inferior or garbage sources because they are at the top of Google!

Keynes _**General Theory**_ passage

Google led to _Wikipedia_ which yielded the full quote

◆ Beauty contest analogy

  ❖ Task is not to pick the most beautiful face

  ❖ but the one **others** think most beautiful

◆ We have to collect and store the faces

  ◆ But we don't know the rules for future contests!

  ◆ What will researchers want to look at?

Social Science Context

◆ Lots of types of data

◆ Statistical data: much now online on various government sites

  ❖ Archived?

  ❖ Can I relocate **and** know it's the same?

  ❖ Data only partial: some still hard copy

    ◆ is all online *except* the parts I need to use!

Social sciences, continued

◆ "Grey" matter *(cf. "black" matter in physics … we know of it but…)*

   ❖ Irregular government publications

   ❖ Government advisory groups

   ❖ Contracted research reports

◆ Ditto for many industry associations

   ❖ Not clear anyone collects this

   ❖ Associations don't always (seldom!) keep archives

◆ Company histories, etc.

Social sciences, continued

◆ Opinion surveys   *(ICPSR reference yesterday)*

◆ Popular culture / daily lifestyle sources

  ❖ *Chirashi* (advertising inserts), similar material

  ❖ Train passes (phone cards

  ❖ Local residence associations & maps

  ❖ Blogs, photo collections, internet *ephemera*

◆ And so on!

  ❖ Need to predict future research directions╁!

What I use

◆ How economists communicate…

◆ On my browser I have bookmarks for standard statistical sources (BOJ, MOF)

  ❖ System of National Accounts (GDP)

  ❖ Census of Manufactures (   )

  ❖ etc

◆ My primary source is working papers
   http://econpapers.repec.org

Not same as "pre-prints"

◆ economists around the world will present research at several seminars

◆ discussion papers "published" as pdfs so participants can access

❖ Repec.org and EconLit as databases

❖ BUT no repository; papers often disappear

❖ Google *often* locates "lost" papers

◆ *but not always*

◆ *No idea whether they're ever published*

❖ *I don't care, either!*

My sources (2)

◆ Through my library I get TOC services
  ❖ I have to specify journals for which I receive Tables of Contents

◆ I link automatically to full-text copies
  ❖ I do much of my work from home
  ❖ If it's only "on-campus" I may not read it

◆ For new topics & lectures I also turn to:
  ❖ EconLit
  ❖ Factiva [*Dow Jones?*] and LexisNexis

My sources (3)

◆ I seldom use hard copies of journals
- When I do, I send a "work-study" to copy them

◆ As an academic, I love books
❖ entering a library is dangerous
- Having access to the non-book economics literature from my desktop is also dangerous to this addict
- To write, I must go to a coffee shop

My sources (4th and last)

◆ I _**do**_ visit libraries a few times a year…

  ❖ To scan books to use in courses I teach

  ❖ To get books on new research topics

    ◆ I start with a boolean card catalog search

    ◆ I then scan shelves to cut from 60 to 6 books

◆ To check out DVDs (*no TV at home!*)

  ❖ But I get a list from my desktop computer

  ❖ I check them out at the library entrance

    ◆ *So that I don't get near a book or journal*

So in order to…
Stand on the Shoulders of Keynes

◆ Must teach others how to play the game

- ❖ Else no one will see the faces we collect

◆ Must offer in a way that matches use habits

- ❖ I expected to be able to find it from Japan
- ❖ I expected to be able to find it at an odd hour
- ❖ I expected to be able to find it without knowing which databases were appropriate
- ❖ I expected to be able to do it for free

◆ Are you designing a database I will use???

North American Coordinating Council On Japanese Library Resources

北米日本研究資料調整協議会

- ◆ My tools limited to *Bibliography of Asian Studies*
  - ❖ In Japan, from professor to professor
  - ❖ From library to library
  - ❖ Footnotes not always very thorough
  - ❖ Had to visit Japan to do useful research
- ◆ Growth of ILL resources: GIF etc
- ◆ Bibliographic databases for Japan
- ◆ **Only by happenstance that I learned such resources existed!**

NCC experience

◆ When joined Board of NCC
- ❖ T3 project: training the trainers (Japan librarians)
- ❖ Researchers scattered, not connected to research library
- ❖ Also our older colleagues not computer oriented

◆ Pushed for "regional task force" to run programs at Association of Asian Studies meetings, similar forums
- ❖ Evangelism: Very limited time, little to no hands-on
- ❖ So usage still quite minimal

◆ Junior researchers are often little better?

Summary

◆ ***How to use modern library resources is not taught at any point in a scholarly career***

◆ ***Ironically, despite my NCC involvement I still don't know how to use many of the Japanese-language bibliographic resources***

 ❖ ***No hands-on learning context***

Lots of colleges

◆ lots of small regional and national schools

◆ Plus state universities and research universities

◆ Community colleges *(2-3 year programs)*

- ◆ My wife teaches nursing in one (RN program)
- ◆ My son attends as a step to a 4-year school
- ◆ My daughter as "   " to learn business skills

◆ Virginia has about 86 colleges

- ◆ But many have more than one campus

◆ California has 1500 institutions

So what?

◆There are no specialist librarians!
  ❖Many librarians are trained in other fields
  ❖BUT there won't be one in *your* field at *your* school
    ◆ Only one science librarian at W&L (an anthropologist by training)

◆The closest Japanese collection is the Library of Congress *(300* kms*)*
  ❖I use the University of Michigan more often *(1000 kms)*

Liberal arts teaching context

◆ W&L is representative of the elite top 100 "national" schools

 ❖ 1800 undergraduate students

 ❖ 4 courses per term [2 x 12-week terms]

  ◆ under 25 students per class

  ◆ Classes meet 3 times per week, one hour per class

  ◆ Science classes add 4+ hours of lab per week

 ❖ "Open" offices -- my door is never shut

  ◆ Fortunately (?) I am on a quiet hall

Expectation of students

◆ Lots of hands-on requirements
  ❖ Papers, presentations, tests
  ❖ Ideal is one assignment due each class, but….
    ◆ Getting 75 papers at the same time generates 30 hours of grading! -- so short assignments dominate

◆ : Students are regularly asked to locate, organize, evaluate and communicate information
  ❖ How are they trained to locate information?
    ◆ *POORLY if at all…*
      ◆ Libraries should do that, right ?

Shift in library role

◆ Old pattern was "Economics 190"
  ❖ 1-credit (1 hour per week) research methodology course
  ❖ Taught by library staff
◆ Once done for roughly 40 majors
  ❖ Now only a handful have such courses
  ❖ Most seldom taught
◆ Economics has eliminated altogether
  ❖ *No required course covers techniques*

Library usage

- Library usage down
  - Visits by students
    - *Visits by faculty too…*
  - Much less use reference desk etc
- Students work from their apartment, from coffee shops, etc - 24 hours a day
  - My earlier example is representative
    - Done late at night!
    - Expectation that I can find resources quickly and for free

Who is to teach?

◆ Libraries not successful in keeping role
  ❖ At one time library time was part of primary and middle school
    ◆ I knew how to use a card catalog by age 10
    ◆ But boolean database searches?!

◆ College faculty seldom "teach" such skills
  ❖ In part done through office hours, hands-on help for students with questions on a project
  ❖ In part deliberate as not our job
  ❖ In part because we aren't competent!

◆ **So many resources are seldom used**
  ❖ *And are used poorly when they are used*

Naïve use

◆ Students are naïve in how they find and use
  ❖ *Only 2% of students start research in library*
  ❖ Google dominates, also news sources, blogs
  ❖ JSTOR, sometimes Factiva, LexisNexis
    ◆ **When not accessible off-campus, *not* used!**
◆ In economics, full stats often available
  ❖ *But Yahoo! headlines are what students use…*
◆ Also plagiarism issue: *not* trivial
  ❖ W&L expels students caught cheating

Conclusions

◆Librarians must be savvy marketers

  ❖Advertising is important

  ❖Product design is important

◆If students and faculty don't come to libraries / use databases…

  … the efforts of this group are in vain

Conclusions

◆Librarians must serve as teachers
- ❖How to use resources
- ❖How to evaluate resources
- ❖How to cite resources

◆**Don't assume professors do this!!**
- ❖Many are too old to learn new tricks
- ❖Many don't try to teach such skills

Conclusions

◆ Librarians must build collections
  ❖ Academics **_not_** oriented to doing so
  ❖ Lots of important research possible because of some long-dead archivist
    ◆ Anthropometrics
    ◆ US Civil War pensioner health records
  ❖ My current wish list
    ◆ *(newspaper advertising inserts)*

Concluding conclusion

◆ You must envisage what the next generation of researchers will need!

◆ **You must stand on the shoulders of others…**

…your professional colleagues…

(who, me??)

… even when they are not giants

Acknowledgments

◆ Librarians must be humble

  ❖ No one ever thanks librarians?!

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