

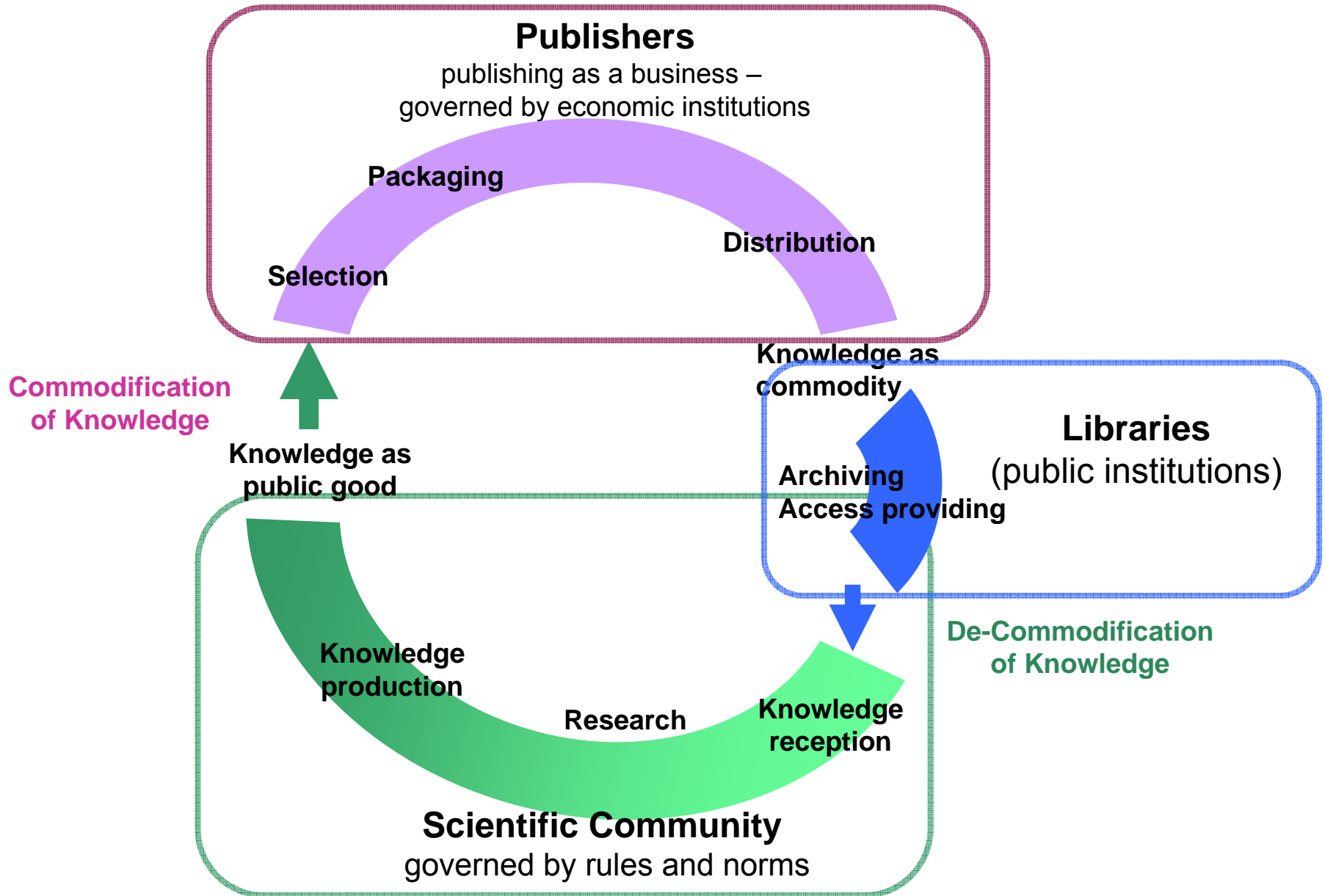
# Varieties of Open Access: Explaining the impact of Internet adoption on scholarly publication

Heidemarie Hanekop, Volker Wittke  
Sociological Research Institute Goettingen (**SOFI**)

# Structure

- System of scholarly publication: institutional configuration
  - Focus: Impact of the internet on *access* to publications
    - Q: Internet adoption: Institutional stability?
1. Impact on *access in a narrow sense* (as addressed by „open access“)
  2. Impact on *access in a broader sense*

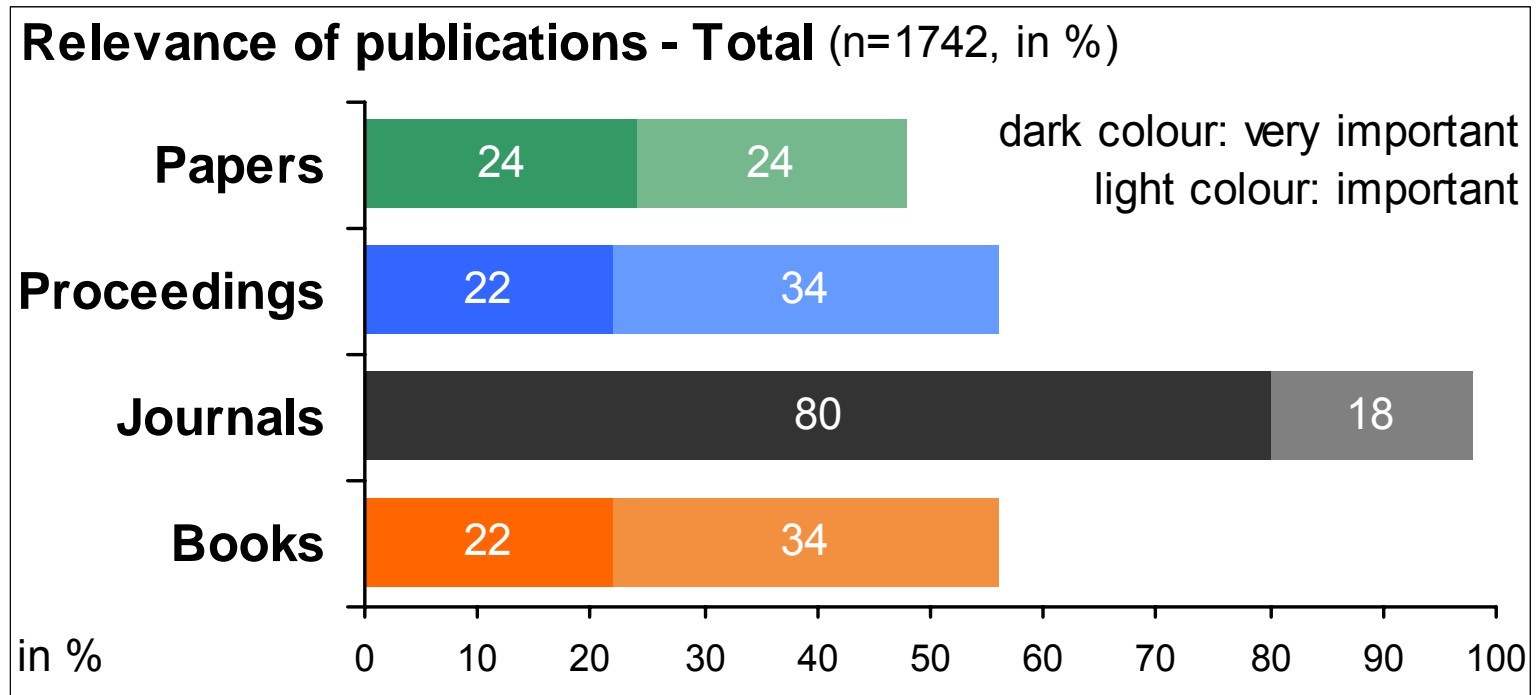
# System of scholarly publication: institutional configuration



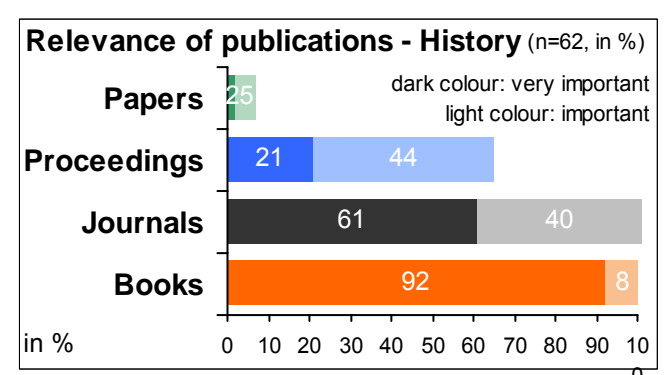
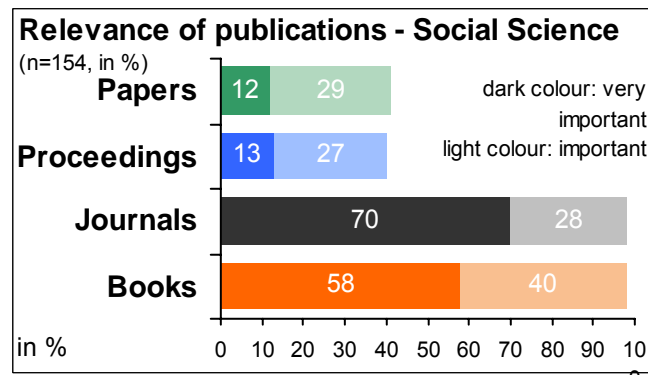
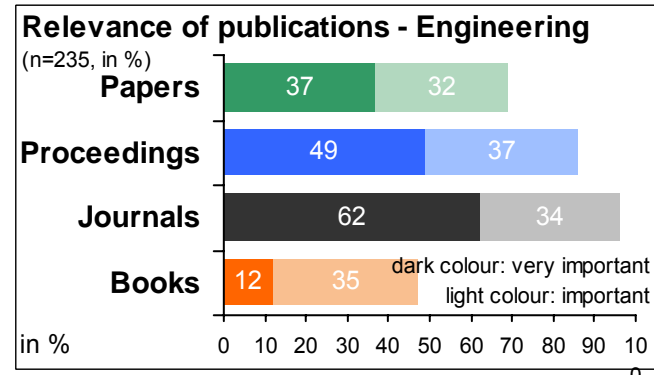
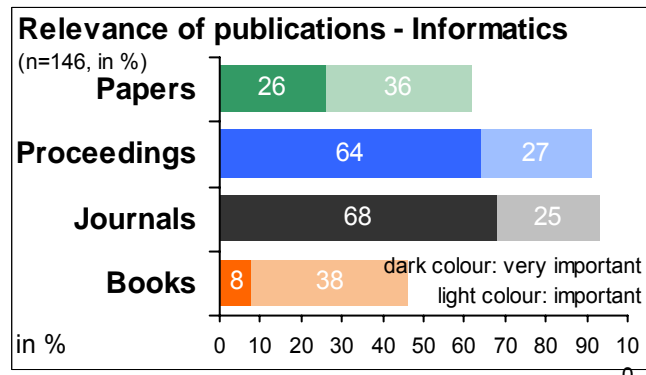
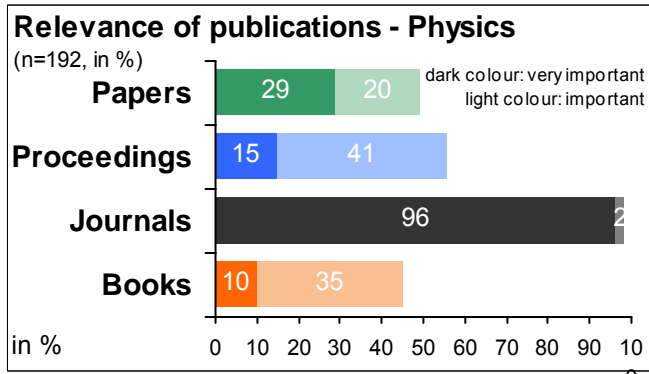
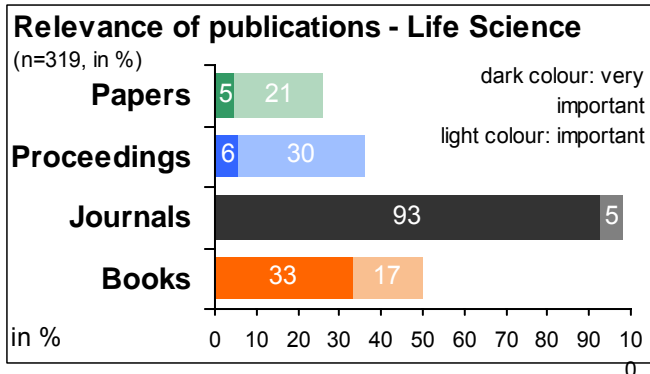
# Data

- Online-Survey (July – November 2007)
- Survey construction:
  - Scientists of selected disciplines at scientific institutions in 4 German cities
    - Bielefeld
    - Göttingen
    - Karlsruhe
    - Stuttgart
  - Scientific institutions include universities as well as non-university research institutes
  - Scientists with institutional affiliation only
- Sample:
  - Scientists addressed (total): 6.400
  - Respondents: 1.780
  - Response rate: 28%

# Kinds of publications: Assessment of relevance by scientists

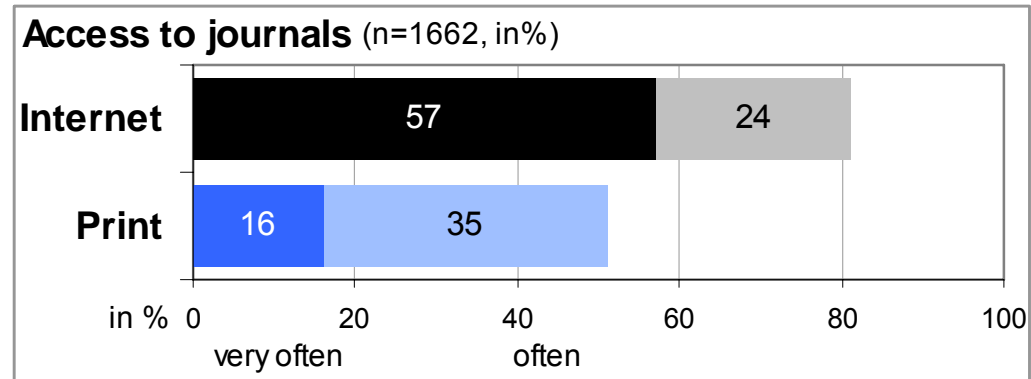


# Kinds of publications: variation of relevance by discipline

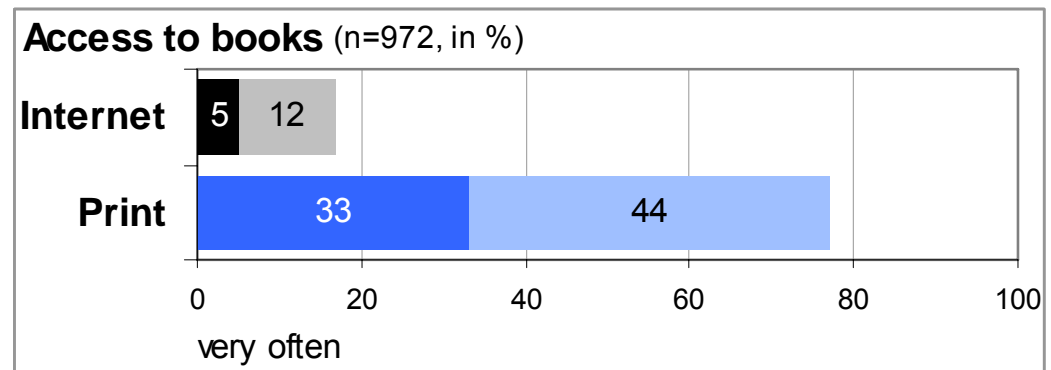


# Access to publications: internet vs. print

## Access to journals

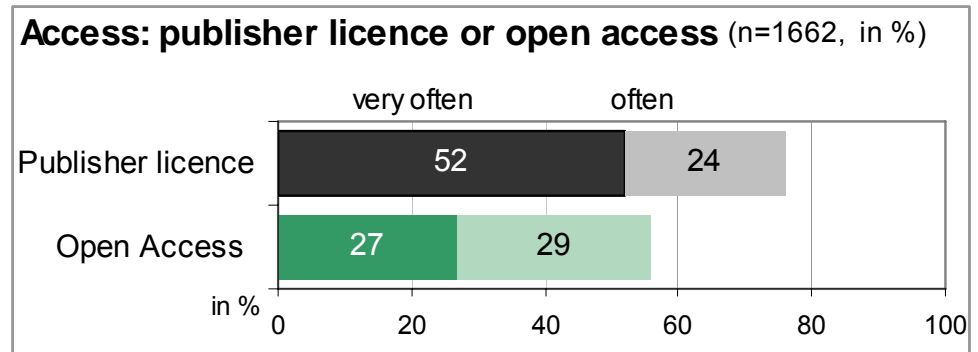


## Access to books

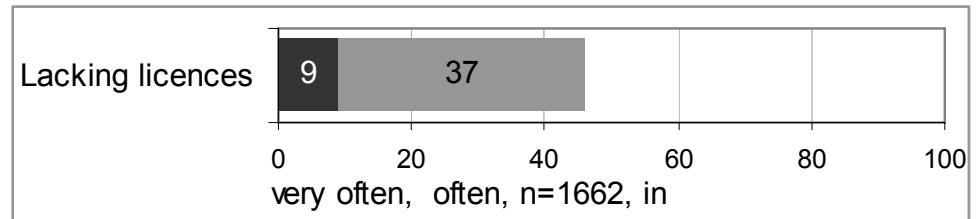


# Access to journal articles: relevance of licences

Internet access to journal articles:  
based on publisher licence  
vs.  
open access



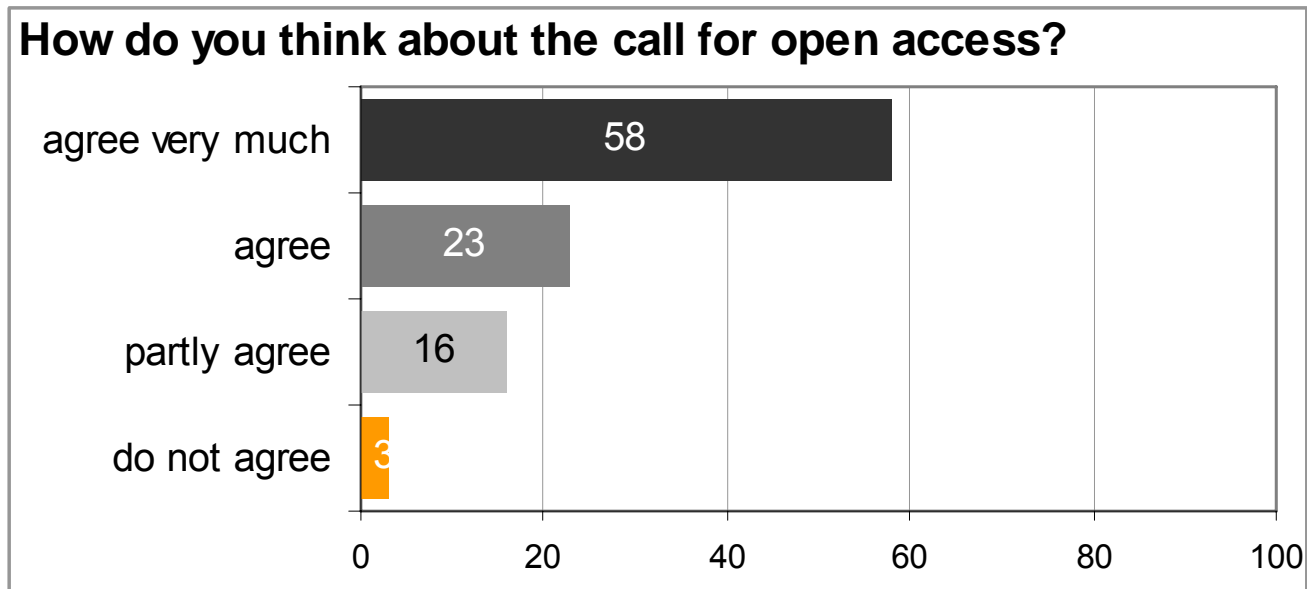
Lacking licence as access barrier  
(„how often can't you get [journal  
articles] full texts due to lacking  
licences“?)





# Open access: attitudes and practices

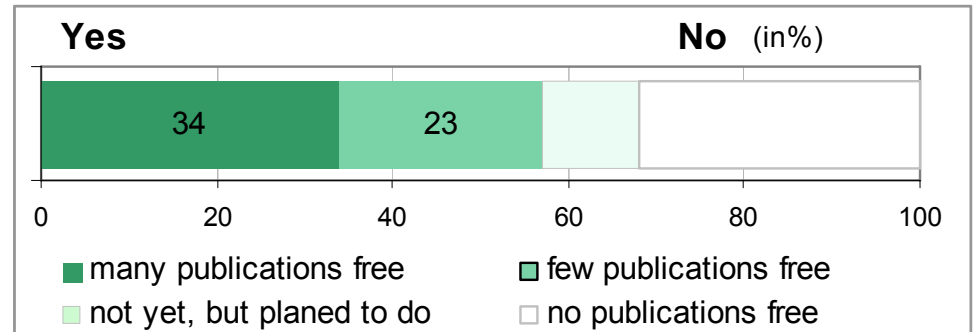
## 1. Attitude to open access



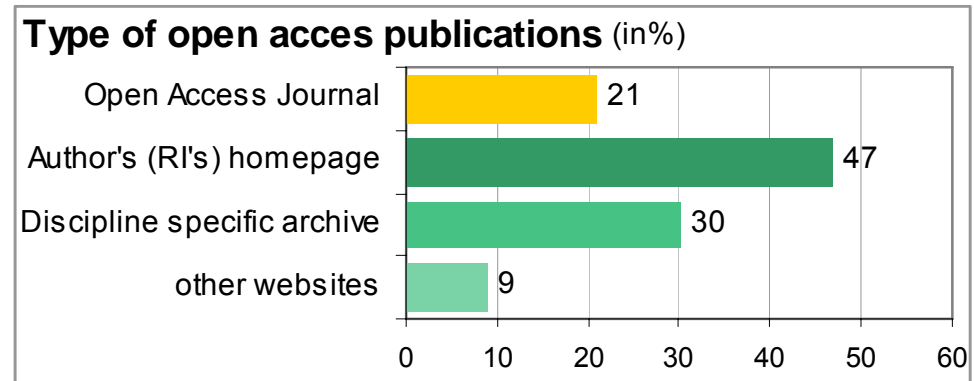
# Open access: attitudes and practices

## 2. Author's Publishing Strategies

„Did you publish something free to open access?“



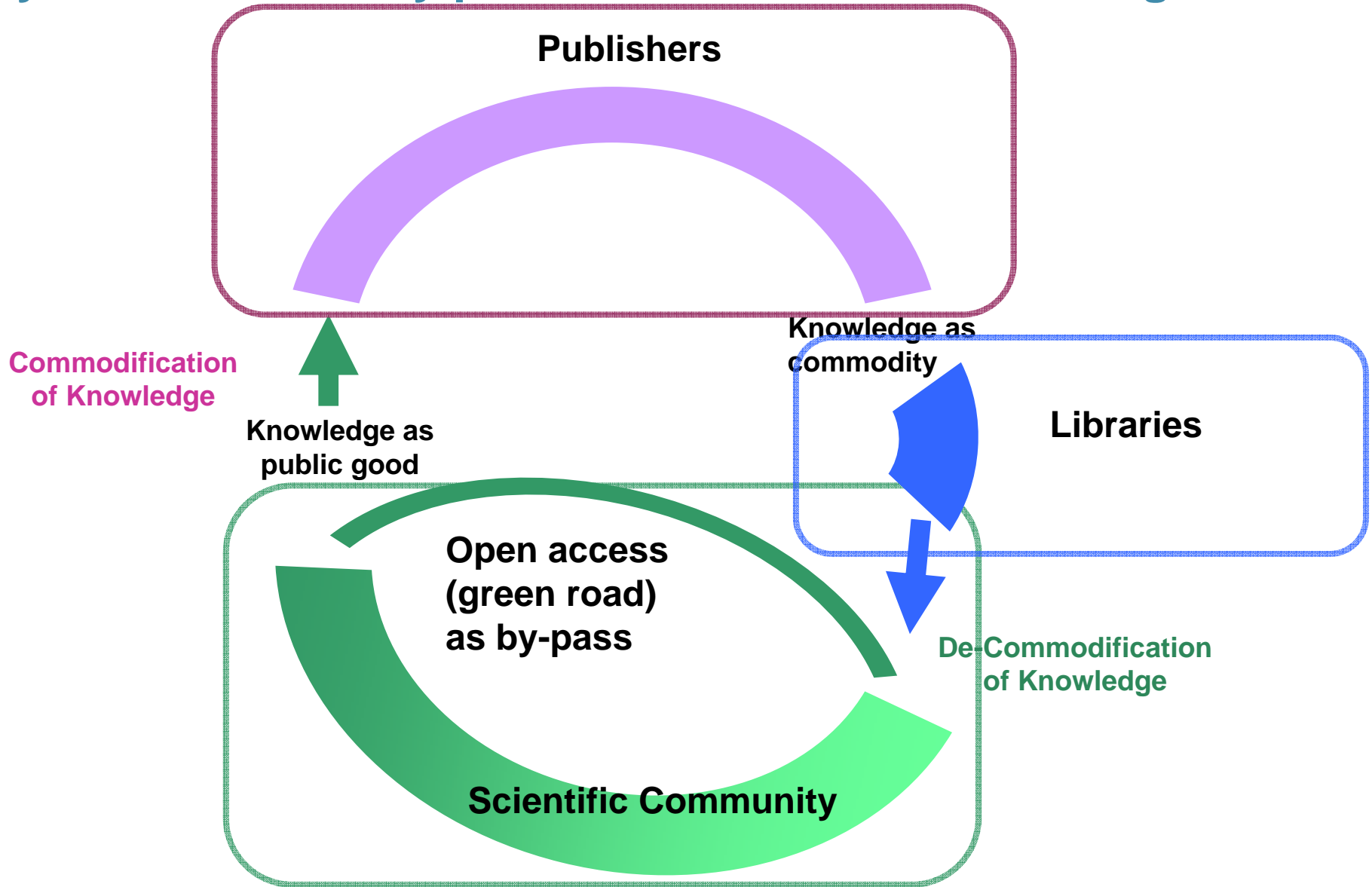
Type of open access publication:  
Open Access Journal („golden road“)  
vs.  
(self) archiving („green road“)



# Institutional configuration of scholarly publication: Impact of internet adoption

- Q: Internet adoption: Institutional stability?
- Results I: If access = access to full texts → institutional configuration remains stable
  - „green road“ as a by-pass for scholarly communication
  - „golden road“ (as an alternative way to publish) plays a minor role

# System of scholarly publication: institutional configuration



# Access in the digital age: Extending the meaning

- Narrow sense: Access to the full text of publications
- Broader sense: Identifying relevant publications
  - “search mode”  
 (“if you are searching for publications, how do you proceed?”)
  - “browse mode”  
 (“in order to keep you up-to-date in your field, how do you proceed?”)

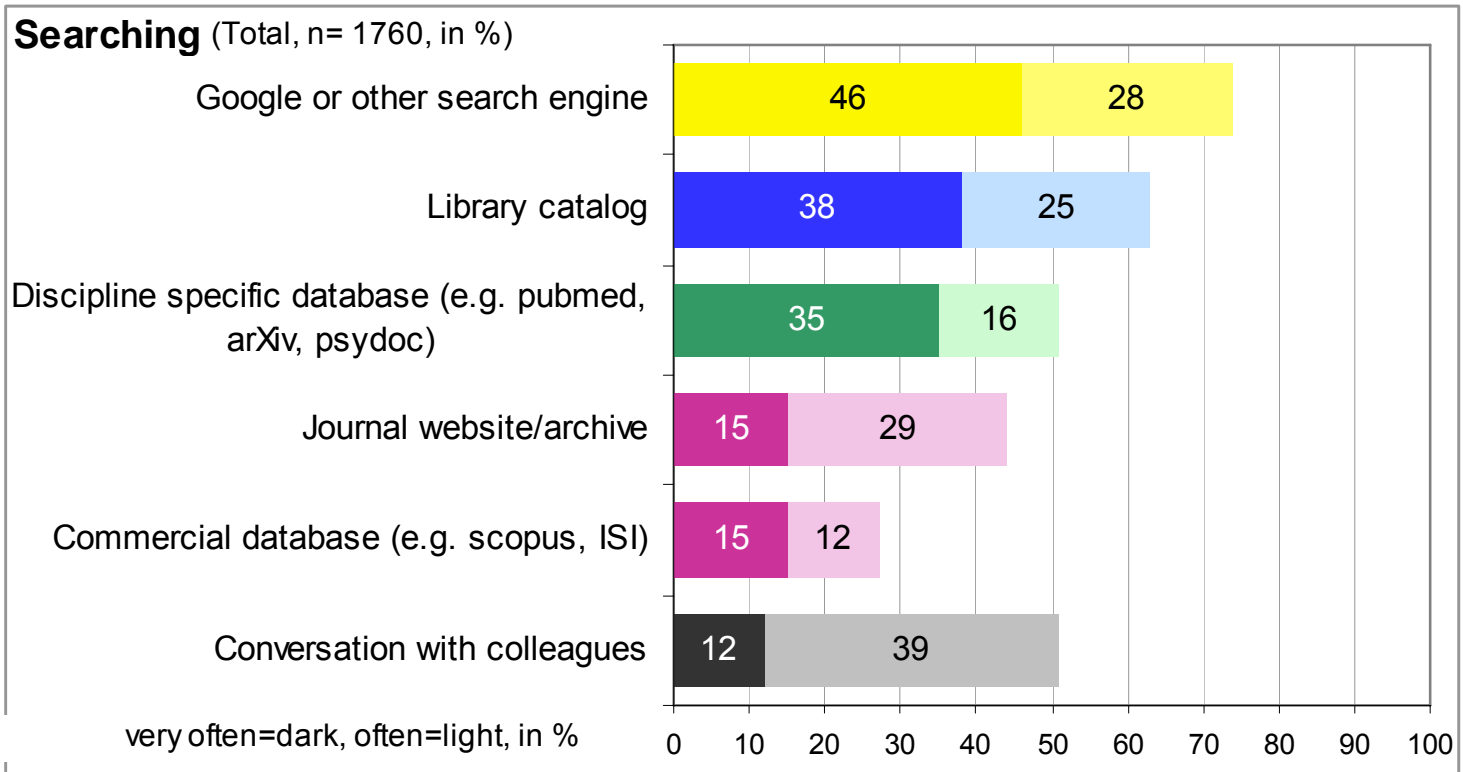
# Access in the digital age: Extending the meaning

## Searching for relevant publications

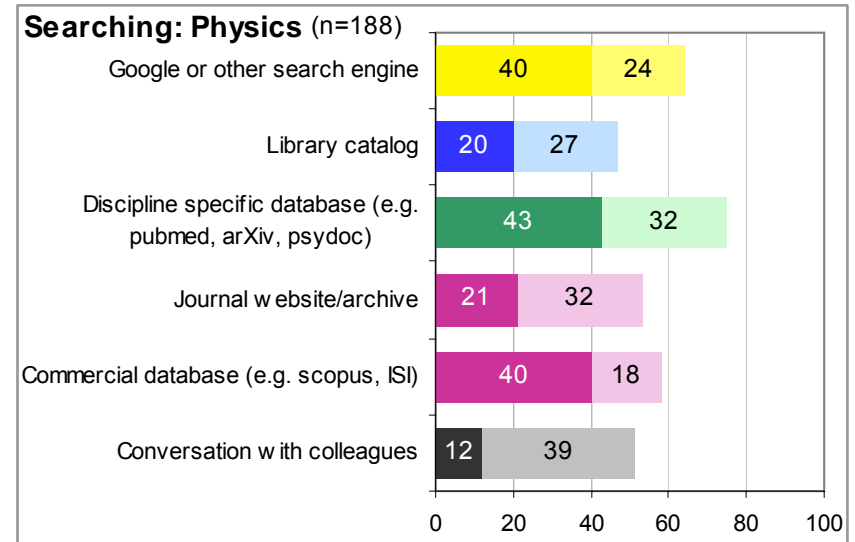
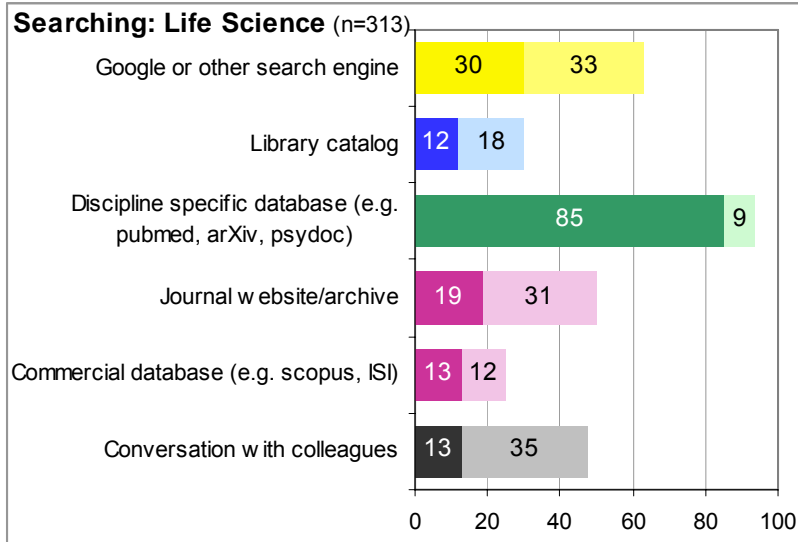
- Two-step process
  - Searching in databases containing the full text
  - Deciding (relevance: yes/no)
- Three-step process
  - Searching in databases in order to get bibliographic information and/or abstracts
  - Deciding (relevance: yes/no)
  - Accessing the full text

# Data: Searching for publications

## Tools and/or databases used to search for publications

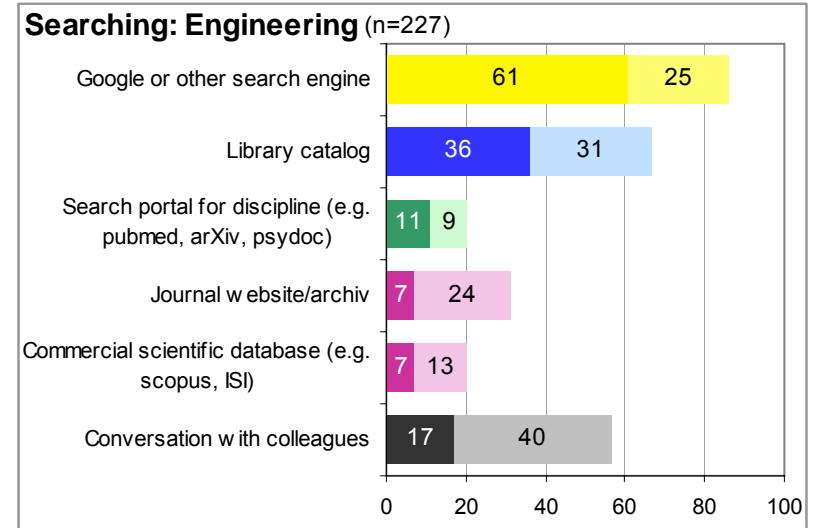
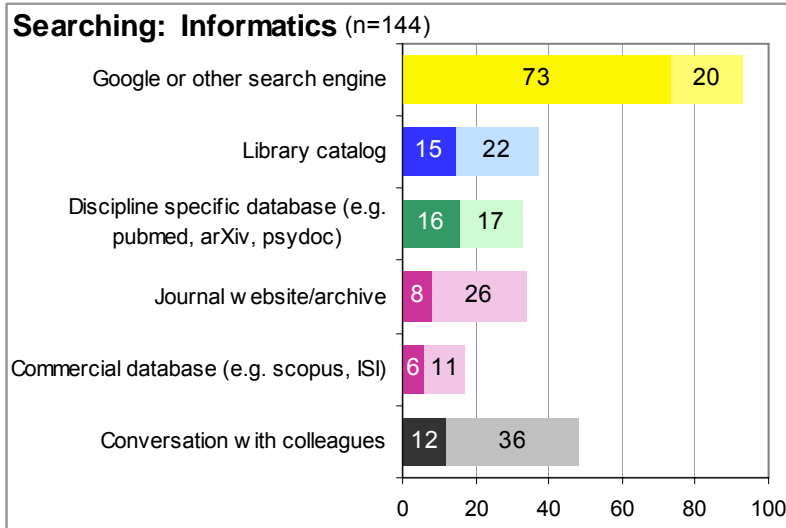


# Search: Tools/databases used by different disciplines

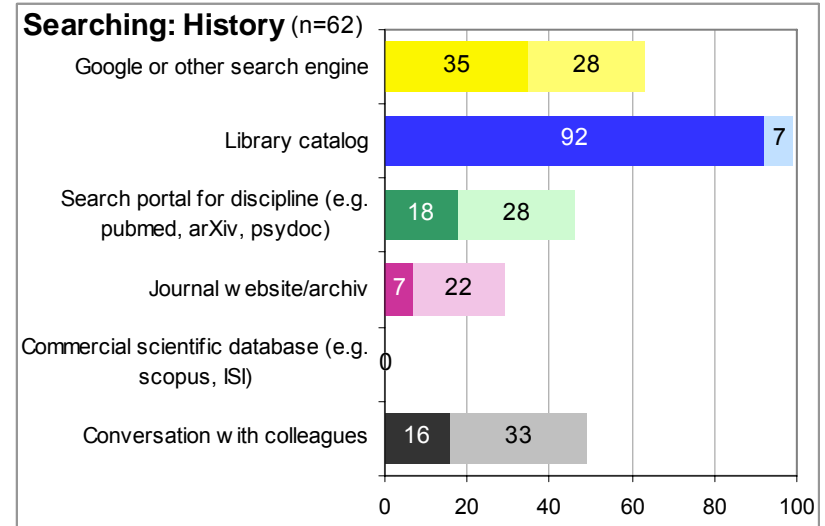
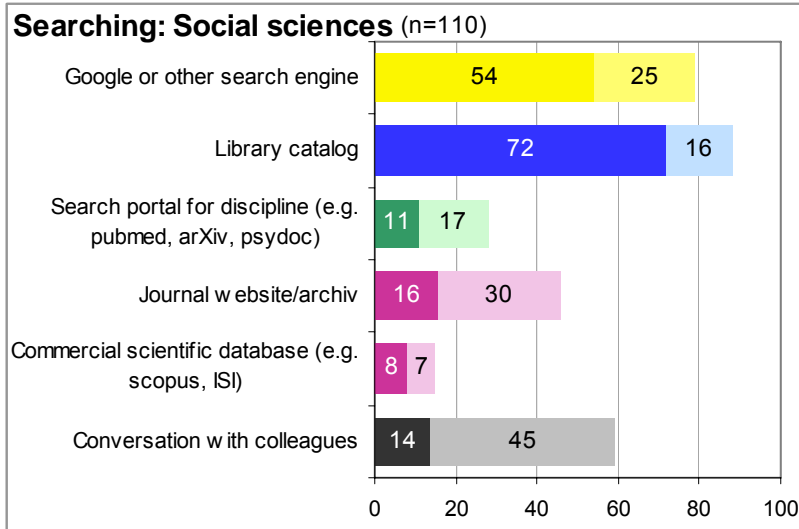




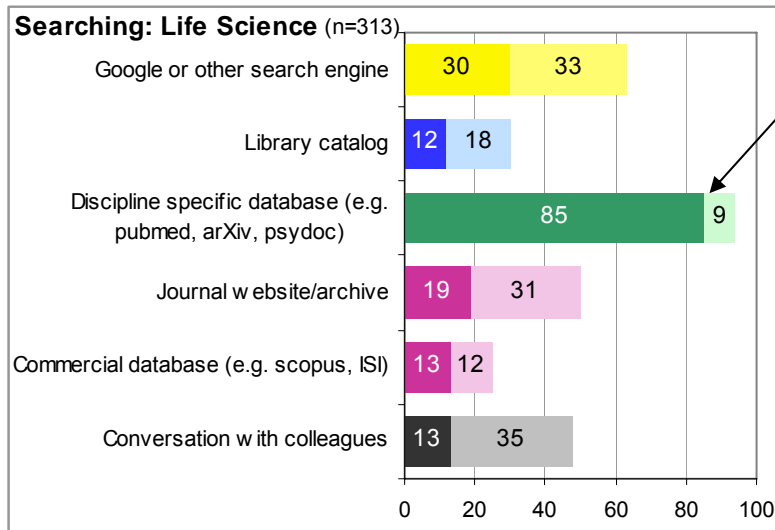
# Search: Tools/databases used by different disciplines



# Search: Tools/databases used by different disciplines

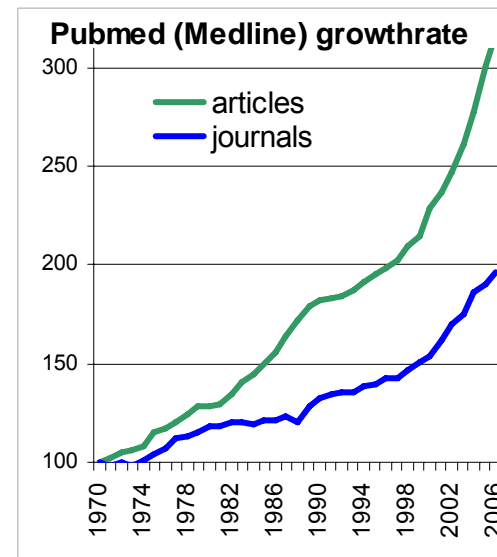


# Search: Tools/databases used by different disciplines

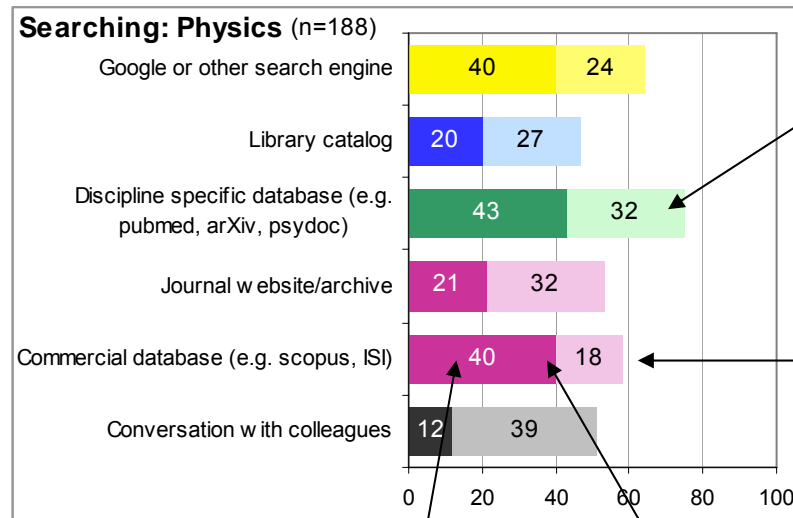


e.g **Pubmed:**

- NIH US National Institute of Health (public institution)
- Catalog for medicine, biology, chemistry
- bibliographie, abstract, references
- since 1965 (medline), online 1995
- number of journals 5.194 (2007)
- number of citations 16.113.221 (2007)
- mandatory open access for publicly financed research (2008)



# Search: Tools/databases used by different disciplines



e.g. **arXiv:**

- US-Universities (changing)
- open access archive for physics and other sciences (discipline specific)
- articles (fulltext)

e.g. **Web of Knowledge (ISI Thomsen)**

- Thomsen (since 1994),
- publicly initiated
- all disciplines (but sciences)
- catalog of articles
- references, citation indices, impact
- subscription

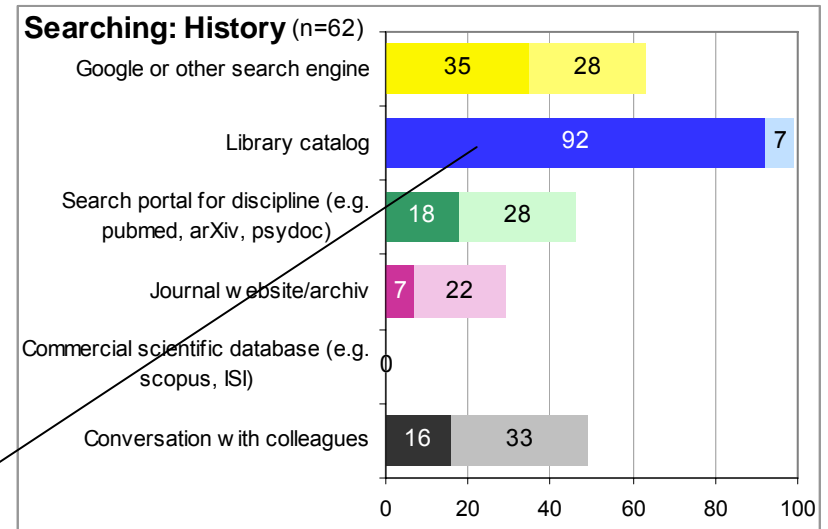
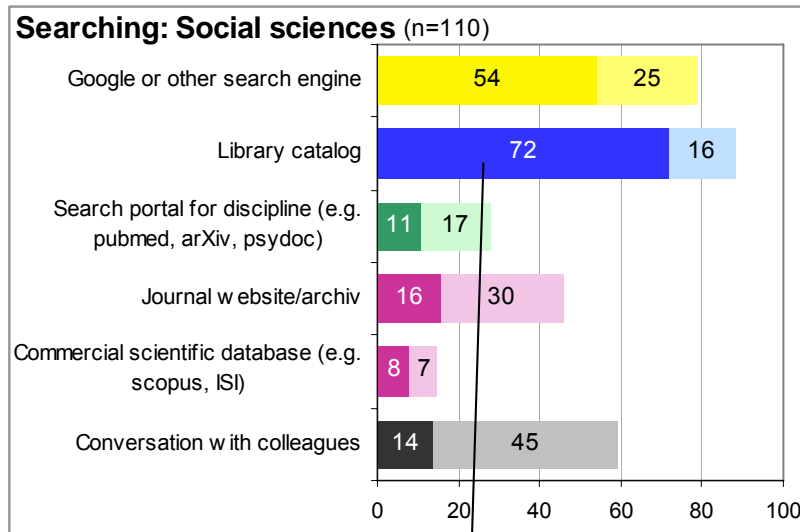
e.g. **springerlink or science direct:**

- publisher database
  - search functions
  - bibliographie, reference, (abstract)
  - articles (fulltext) subscription
- similar: sciencedirect (elsevier)

e.g. **scopus (elsevier)**

- search database
- publisher and other sources
- different disciplines
- abstracts, references
- articles (fulltext)
- subscription

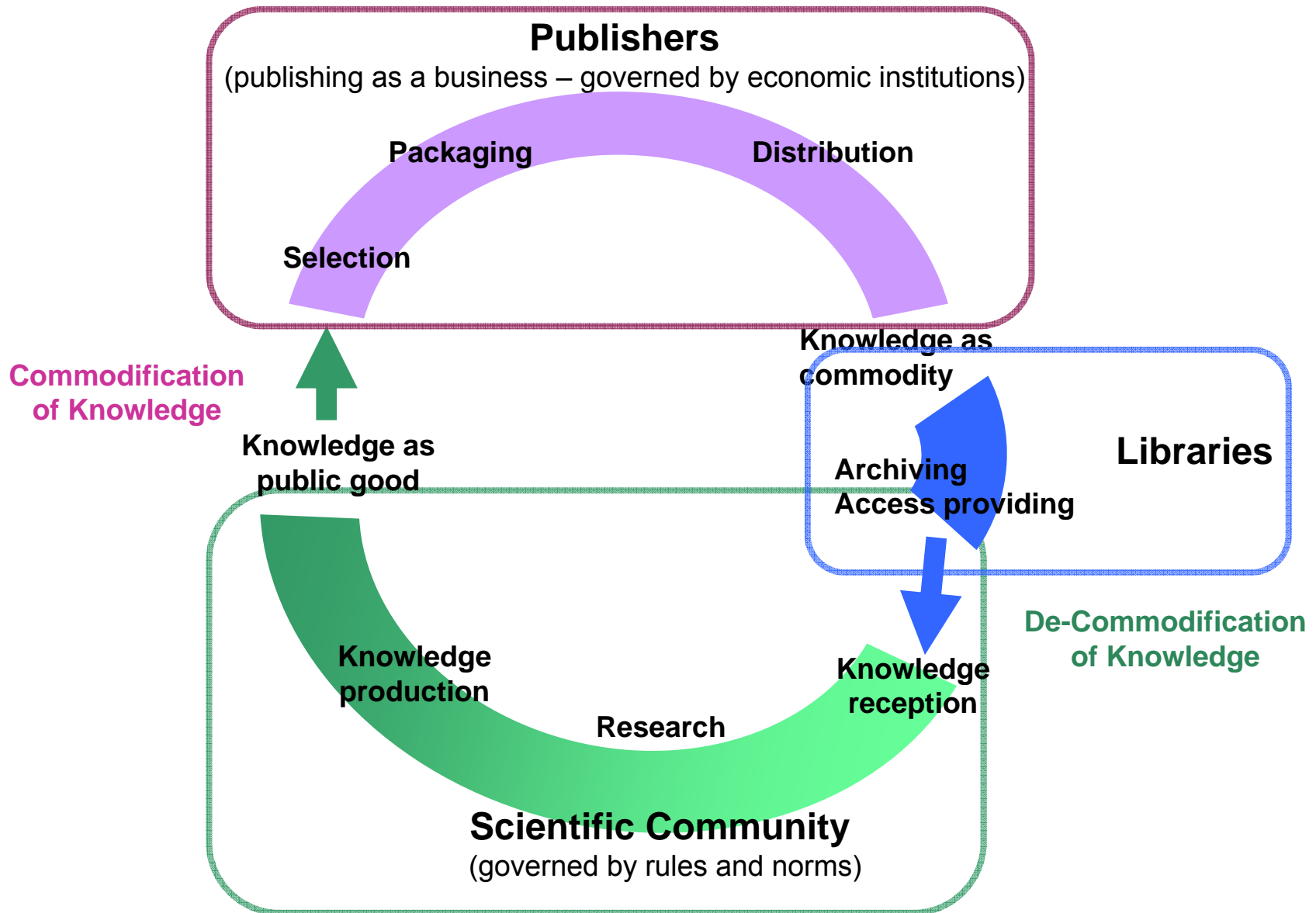
# Search: Tools/databases used by different disciplines



## Library catalogs:

- Digital databases
- Increasingly combined databases of different libraries such as the „gbv“ (a joint catalog of libraries in the northern part of Germany)
  - „gbv“ contains bibliographical informations on 56 Mio. publications
  - 22,2 Mio. search requests 2007
  - certain online services and resources

# Impact on the institutional configuration?



# Search tools and databases: impact on the institutional configuration

## *Tools/databases:*

extendend databases provided by

- public bodies (such as NIH, universities)
- libraries

**new search engines and databases provided by new actors (eg. Google, Fast)**

commercial databases provided by

- publishers (such as Springer, Elsevier ISI)
- other firms (such as Thomsen)

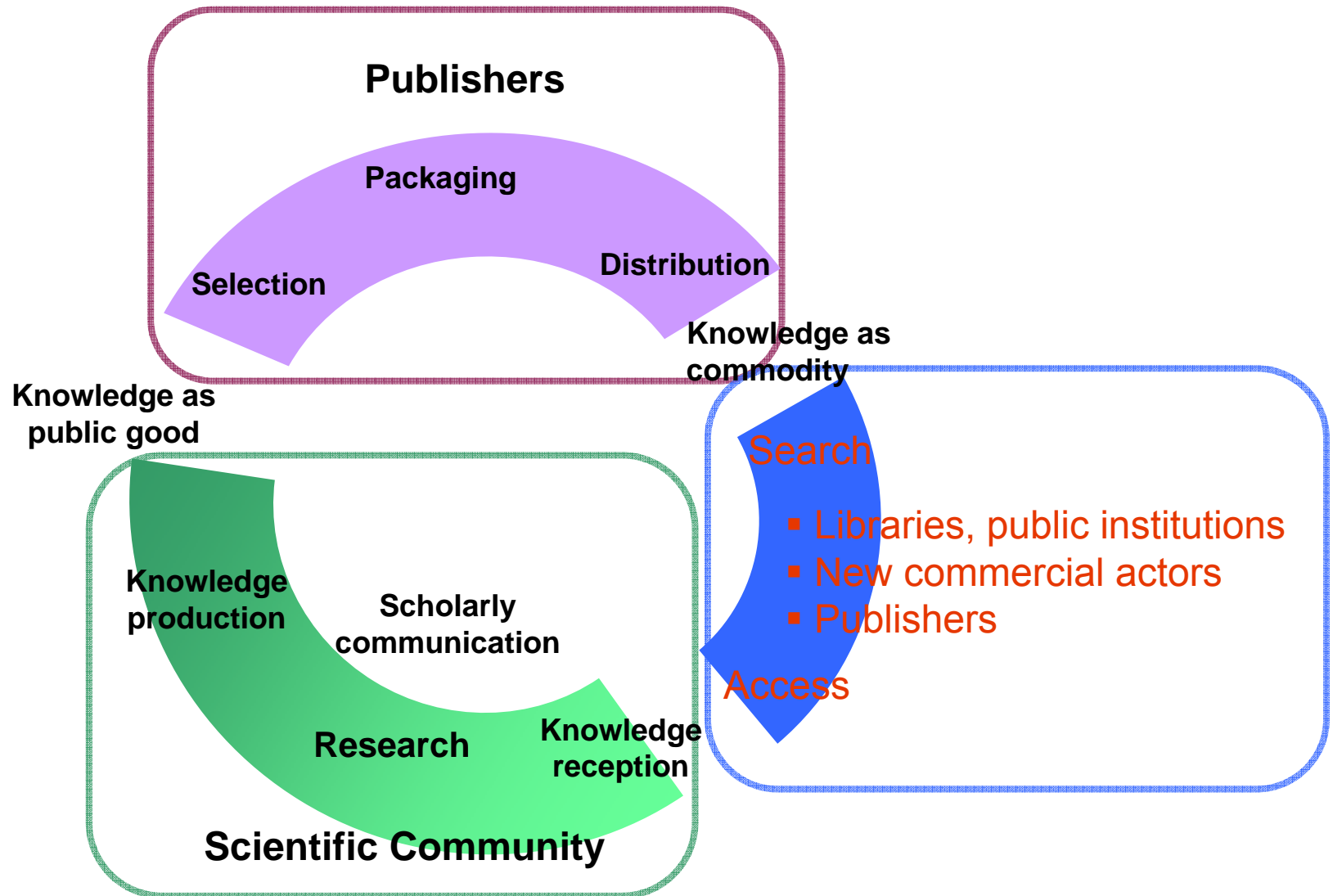
## *Institution base:*

**public institutions**

**new commercial actors**

**publishers and others firms**

# Impact on the institutional configuration





# Modified institutional configuration side effects: browse vs. search

“in order to keep you up-to-date in your field, how do you proceed?”

