

# searching for information

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## **the world through the search box**

what are we searching for?

what does search tell us?  
-search as a diagnostic tool



# what are we searching for?

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## **information**

life, liberty & the pursuit of  
happiness

the record of ideas  
... the summation of experience  
Vanevar Bush, "As we may think," 1945

## **words**

McLuhan's nightmare?



# searching for words

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## **the birth of grep**

The next morning I [Doug McIlroy] found a note in my mail announcing a program named grep. It worked like charm. When asked what that funny name meant, Ken [Thompson] said it was obvious. It stood for the editor command that it simulated, g/re/p (global regular expression print). ...

The date given for the creation of **grep is March 3, 1973**, following the creation of pipes -- *Netizens: An anthology*: 1996

## **prior art?**

thematic ordering  
alphabetical ordering  
concordances  
indexes



# searching for words

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**google**

"to organize the world's information"

**prior art?**

WAIS

Veronica

Alta Vista

Yahoo

**a natural, emergent order?**



## a natural order

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Up until now most search engine development has gone on at companies with little publication of technical details. This causes search engine technology to remain largely a black art and to be advertising oriented (see Appendix A). .. we have a strong goal to push more development and understanding into the academic realm.



# appendix a

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For example, in our prototype search engine one of the top results for cellular phone is "The Effect of Cellular Phone Use Upon Driver Attention", a study which explains in great detail the distractions and risk associated with conversing on a cell phone while driving. This search result came up first because of its high importance as judged by the PageRank algorithm, an approximation of citation importance on the web [Page, 98]. It is clear that a search engine which was taking money for showing cellular phone ads would have difficulty justifying the page that our system returned to its paying advertisers. For this type of reason and historical experience with other media [Bagdikian 83], we expect that advertising funded search engines will be inherently biased towards the

## Cellular Phone

[www.Sprint.com](http://www.Sprint.com) Phones To Match Your Needs. Get it On The Now Network from Sprint

## AT&T™ Official Site

[att.com/wireless](http://att.com/wireless) Get your iPhone 3G Online Now plans starting from \$69.99

## Cellular phone

[VerizonWireless.com](http://VerizonWireless.com) Verizon Wireless - Official Site. Phone Plans starting at \$39.99!

Sponsored Links

Sponsored Links

## Free Cell Phones & Plans

Free Phones with a 2 Year Plan. Authorized Dealer of All Carriers! [LetsTalk.com/CellPhones](http://LetsTalk.com/CellPhones) California

## Cellular Phones

Save On Sprint, T-Mobile, Nextel Verizon, AT&T And More Today! [www.Wirefly.com](http://www.Wirefly.com)

## Brand New BlackBerry®

Everything You Need. Anywhere You Go. Find Your BlackBerry Today. [www.BlackBerry.com](http://www.BlackBerry.com)

## Buy Cell Phones

Look Here for Great Deals on Buy Cell Phones [discountelectronicsworld.net](http://discountelectronicsworld.net)

## Stuck in a Cell Contract?

Get Out of Any Contract Any Provider Any Time Any Where [www.celltradeusa.com](http://www.celltradeusa.com)

## Cell Phone Accessories

Huge Selection of Chargers, Headsets & More - Buy At Cost [www.CellularOutfitter.com](http://www.CellularOutfitter.com)



## Cheap Cell Phones

Find the absolute lowest prices on cheap cell phones. [www.shoppersource.com](http://www.shoppersource.com)

## Get Free Cell Phone Now

100% Free Brand Name Cell Phone. Hurry - Limited Time Offer. [www.GetFreeCellPhoneNow.com](http://www.GetFreeCellPhoneNow.com)

[More Sponsored Links >](#)

## Mobile phone - Wikipedia, the free encyclopedia

1G mobile phones, such as Mobile Telephone Service, were not cellular, .... Cellular phones became widely available only relatively recently, while tumors ... [en.wikipedia.org/wiki/Mobile\\_phone](http://en.wikipedia.org/wiki/Mobile_phone) - 122k - [Cached](#) - [Similar pages](#) -

## Cell Phones and cell phone plans - | Wireless from AT&T, formerly ...

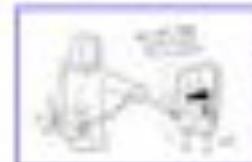
Shop and Learn about cell phones, accessories, cell phone plans, prepaid phones and ringtones on the nation's fastest 3G network at AT&T, formerly Cingular ... [www.wireless.att.com/](http://www.wireless.att.com/) - 71k - [Cached](#) - [Similar pages](#) -

## Cell Phones, Cellular Phone Plans, Prepaid Cell Phones, Free Cell ...

T-Mobile: Cell phones you love, plans you want. Offering the best deals on cellular phone service, prepaid cell phones, cell phone accessories, free cell ... [www.t-mobile.com/](http://www.t-mobile.com/) - 36k - [Cached](#) - [Similar pages](#) -



## News results for cellular phone



[Editorial: Celebrate Earth Day: Recycle cell phones](#) - Apr 21, 2009

These same people will probably coordinate these events via cell phones that they'll probably replace every year or so. But with a lingering recession, ...

[Baylor University The Lariat Online](#) - [33 related articles >](#)

[Science, Technology and Innovation : How to Trace or Reverse Cell ...](#)

[SkyNewsline.com](#) - [2 related articles >](#)

[Travel Q & A: Using cell phones abroad](#) - [San Jose Mercury News](#) - [3 related articles >](#)

## Free Wireless Cell Phones with Plans from AT&T, Sprint, T-Mobile ...

Shop and compare wireless cell phones at LetsTalk.com. We have the best free cell phone deals on mobile phones from AT&T, Sprint, T-Mobile, Verizon Wireless ... [www.letstalk.com/](http://www.letstalk.com/) - 98k - [Cached](#) - [Similar pages](#) -

## Cell Phones

Wirefly is the #1 site for cell phones and wireless phone plans. We offer free cell phones, cheap cell phones and discount prepaid cell phones from AT&T, ... [www.wirefly.com/](http://www.wirefly.com/) - [Similar pages](#) -

## Now Cell Phones, CPO Cell Phones, Prepaid Cell Phones, Cell Phone ...



# search for information

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## **memes and their roots**

presentism

*information a historical constant*

information-technology determinism

*the thirst for information drives information  
technology*

whiggishness

*a long, linear progression from closed to open*



# presentism

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"every society is an information society  
and every organization and information  
organization"--Andrew Oettinger,  
"Information Resources," 1980

"every age was an age of information, each  
in its own way ... hearsay did not  
satisfy Parisians with their powerful  
appetite for information"--Robert Darnton,  
"An Early Information Society," 2000

"coping with information overload, ca  
1550-1700" --Ann Blair, 2003



# presentism to determinism

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"The need for readily available information,  
which had been steadily rising, was  
accelerated by the advent of Christianity.

...

"The need to find information more rapidly  
than is possible in a papyrus-roll-form book  
initiated the development of the Greco-Roman  
codex in the second century ..."

-- Frederick Kilgour,  
*Evolution of the Book*, 1998



# geographic presentism?

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## **information : goods, price, quality, suppliers, clients**

Some recent developments in economic theory  
having to do with the role of information ..

Spence .. Stigler ... Arrow ... Aekrlof ..  
Rees .. provide an analytical framework ...  
understanding how bazaars work. ...

The search for information... the central  
experience of life in the bazaar

two most important search procedures...  
clientelization and bargaining

--Clifford Geertz, *The Bazaar Economy Information  
and Search in Peasant Marketing*, 1978



"books ... tree  
flakes encased in  
dead cow"

Bill Mitchell,  
*City of Bits*



## closed to open

### **information shucking**

"The external make-up of a book, its format and the personality of its author are unimportant provided that its substance, its sources of information and its conclusion are preserved and can be made an integral part of the organization of knowledge, an impersonal work, created by the efforts of all ... the ideal ... would be to strip each article or each chapter in a book of whatever is a matter of fine language or repetition or padding and to collect separately on cards whatever is new and adds to knowledge". --Paul Otlet



# shucking

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He came a far road, was weary, found peace,  
and set all his labours on tablets of stone

...

See the tablet box of cedar,

**Release** its clasp of bronze

Lift the lid of its secret

Pick up the tablet of lapis lazuli

and read out

the travails of Gilgamesh,

all that he went through

--Gilgamesh, 3000 bce

[trans Andrew George]

**material**

**institutional**

**graham's law**

"The method of ensuring quality" in peer  
production is "Darwinian ... People just  
produce whatever they want; the good stuff  
spreads, and the bad gets ignored" --Paul

Graham



# the world through the search box

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## **a man with a hammer**

"seek to substitute an algorithm

... for intuitive judgement"

--Daniel Bell, "Social framework of the  
Information Society," 1979

the power to imagine and pursue to their  
furthest points the implications and prior  
conditions of comparatively simple facts  
which are known with a high degree of  
precision". --J.M. Keynes



# perils of presentism

## algorithms & intuition



**Russia thrusts into South with Georgia reported**  
5 hours ago

JAVA, Georgia (AFP) — Russian tanks and troops Ossetia province on Friday to repel a Georgian offi said to have left hundreds dead.

"Fierce clashes" between Russian and Georgian tr Ossetia's capital Tskhinvali were reported by Russ



# perils of presentism

## algorithms & intuition

About this book

Read this book

**The Warden** By Anthony Trollope

### Popular passages

MODERN COOKERY-BOOK. Modern Cookery in all its Branches, reduced to a System of Easy Practice, For the use of Private Families. In a Series of Receipts, all of which have been strictly tested, and are given with the most minute exactness. By ELIZA ACTON. New Edition : with Directions for Carving, and other Additions. - [Page 5](#)

[Appears in 356 books from 1836-2006](#)

Hints to Mothers on the Management of their Health during the Period of Pregnancy and in the Lying-in Room : With an Exposure of Popular Errors in connexion with those subjects, &c. - [Page 6](#)

[Appears in 1255 books from 1823-2007](#)

Dr. Ure's Dictionary of Arts, Manufactures, and Mines : Containing a clear Exposition of their Principles and Practice. - [Page 20](#)

[Appears in 510 books from 1822-2007](#)

A General Dictionary of Geography, Descriptive, Physical, Statistical, and Historical ; forming a complete Gazetteer of the World. By A. KEITH JOHNSTON, ESQ. lvo. 31s. 6d. McCulloch's Dictionary



# info-determinism

Page last updated at 09:08 GMT, Thursday, 18 March 2009

[E-mail this to a friend](#)

[Printable version](#)

## 'DNA bungle' haunts German police

Police in Germany have admitted that a woman they have been hunting for more than 15 years may never have existed.

Dubbed the "phantom of Heilbronn", the woman was dubbed by police as the country's most dangerous woman.

Investigators had connected her to six murders and an unsolved death based on DNA traces found at the scene.

Police are now acknowledging that swabs used to collect DNA samples may have been contaminated by an innocent woman - possibly during manufacture.

### 'Serial killer'

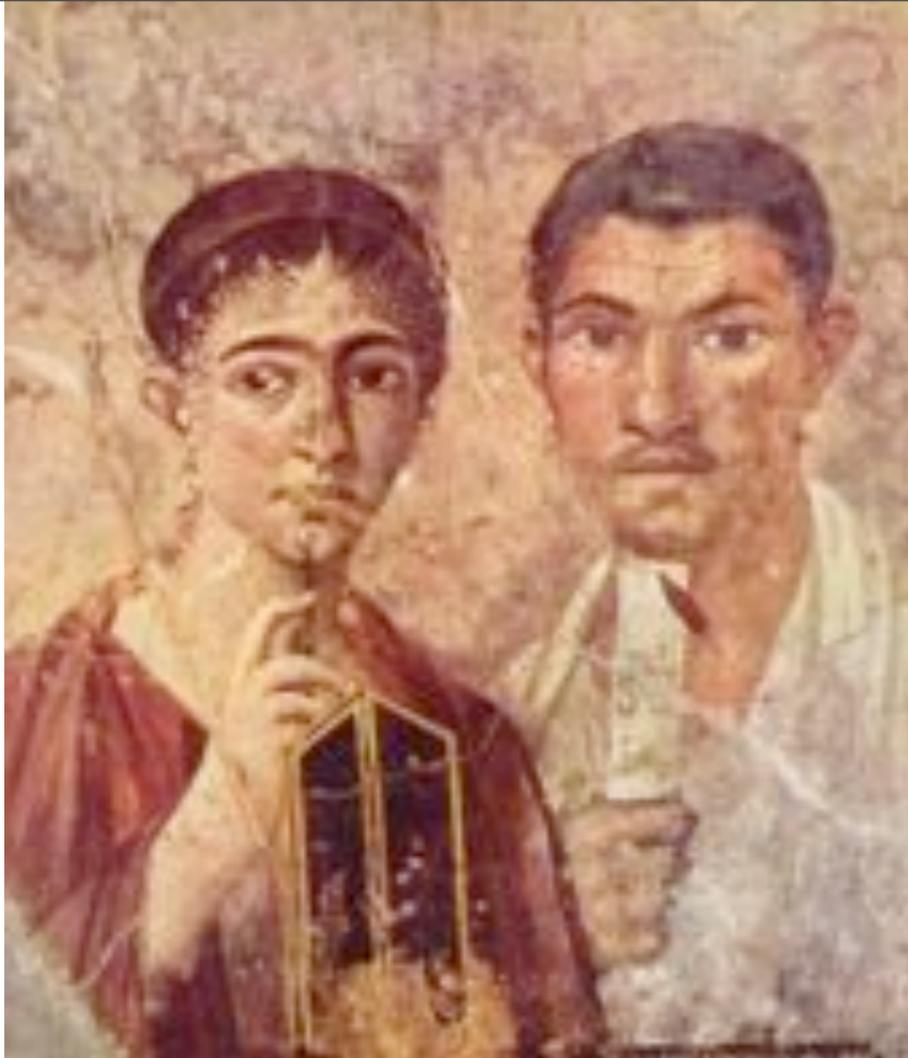
She was Germany's most wanted woman, alternatively called the "woman without a face" and the "phantom of Heilbronn" after the city in southern Germany where she allegedly killed a policewoman.

Police suspected the unnamed woman of being a serial killer who over 16 years carried out a string of six murders, including strangling a pensioner.

Their suspicions were based on traces of identical female DNA they found at 40 crime scenes across southern Germany and Austria.



This 2007 murder was believed to be the work of the phantom killer



# info-tech determinism

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## **the Christian codex**

Christians as information foragers?

"The need for readily available information, ...accelerated by the advent of Christianity."

"the revolution between the second and fourth centuries that changed the very structure of the book by substituting the codex for the roll"

Roger Chartier,  
*Forms and Meaning*  
1995

## **trivializing the scroll**

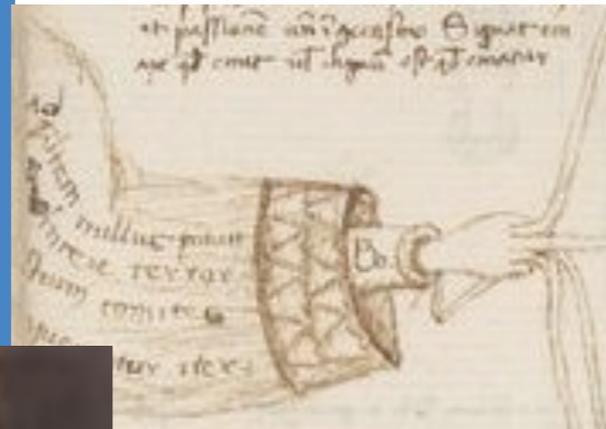
*external* arrangements:

Zenodatus & Callimachus

*internal arrangement*: incipits, explicits, sylliboi, pages



# info-determined?



**undoubted advantages**  
margins & marginalia  
from the page to the spread  
two sides; one hand  
random access, more durable

**a triumph of paper?**  
papyrus, vellum, palm, bark ...

**or a matter of distinction?**





# the next step: ms to print

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## the 'new' search tools

gloss  
running titles  
subdivisions: books, chapters  
analytical tables of contents  
chapter headings  
cross references  
alphabetical order  
*page numbers, indexes*

## trivializing again

"The late medieval book differs more from  
its early medieval predecessors than it  
does from the printed book."

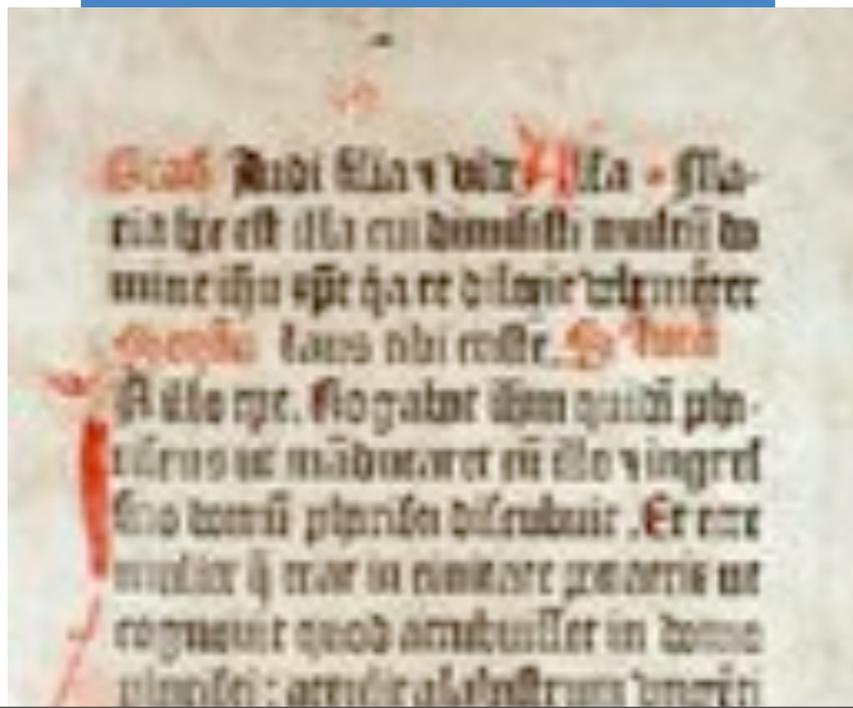
--Parkes, "Influence" 1976



# searching print



"From about 1300 very many scribes, librarians, and book owners provided their volumes with leaf numbering ... [by the fifteenth century] the numbers were overwhelming ...



"of 4194 incunables ... only 10.3 percent use printed foliation, none use page numbers ... nearly half ... in the period 1495-1500"  
--Smith, "Printed Foliation"



# msfoliation

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**1470:** first printed folios  
--Serna, *Des Signatures et des Chiffres*, 1798.

"After examining about 80,000 Dutch books from the 16th and 17th century I think that printers did not care for page numbers ... 60-70% contain mistakes in the page numbers" [some printed books with 50% of the page numbers wrong]

Verkruijse, "Wacht u voor de bladwachter!"



# the print book: a triumph of the west?

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## **the short step from Gutenberg to Google**

"[Theodore]De Vinne, in his book [*The Invention of Printing*, 1879] writes, 'The inventor of printing did not invent paper .. did not originate engraving on wood. He was not the first to print upon paper, he was not the first to make printed books, it is not certain that he made the first press, it is not probable that he was the first to think of or make movable type. What he did was to invent the type mold.'

It was the *type mold* that the Koreans developed."

--Carter, *The Invention of Printing in China*, 1955.



# the print book: a triumph of the west?

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# the need for search

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## **diffusion: looking for patterns**

Christian codex, 2d century

Islamic codex, 8th century

Hebrew codex, 9th century

Chinese sutra fold, 10th century





# the need for search

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## **diffusion: looking for patterns**

paper: China 3d century bc

Islam, 8th century

Byzantium, 9th century

Europe 12th century





# still looking

## a foraging imperative?

	Paper	Codex	Printing	Typography
China	3d cent bc	10th cent *	8th cent	11th cent
Korea	4th cent ad	19th cent	8th cent	15th cent
Japan	7th cent ad	19th cent	9th cent	17th cent
India	5th cent ad	6th cent*	19th cent	19th cent
Islam	8th cent ad	8th cent	19th cent	19th cent
Europe	12th cent ad	2d cent	15th cent	15th cent



# closed to open

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# gracenote

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## **cataloguing 52 million tracks** song -- artist -- album -- genre

If you see an error in the data for a favorite CD, or the data is incomplete, or the service does not recognize the CD at all, you can submit changes or additions to the database maintained by the service. In turn, you benefit from the processed submissions from the millions of other fans who have ever used the service. In addition, Gracenote staff are constantly entering and correcting disc entries by hand and working with artists and labels

Don Giovanni	5:51	1.01	Introduzione: Notte E Giorno Faticar (Leporello, Donna Anna, Don Giovanni, Il Commendatore)	Mozart - Don Giovanni
Don Giovanni	6:30	1.04	Recitativo Accompagnato: Ma Qual Mai S'offre, O Dei (Donna Anna, Don Ottavio)	Mozart - Don Giovanni
Don Giovanni	1:35	1.06	Recitativo: Orsu, Spicciati Presto (Don Giovanni, Leporello)	Mozart - Don Giovanni
Name	Time	Artist		Album
Di Mi - Par Ch'oggi Il Demonio Si Diverta	1:13	Krips, Siepi, Della Casa, Danco, Gueden, Corena, Dermota, Berry, Bohme		Don Giovanni (2/3)
Non Ti Fidar, O Misera	4:16	Krips, Siepi, Della Casa, Danco, Gueden, Corena, Dermota, Berry, Bohme		Don Giovanni (2/3)
Don Ottavio, Son Morta !	3:10	Krips, Siepi, Della Casa, Danco, Gueden, Corena, Dermota, Berry, Bohme		Don Giovanni (2/3)
Or Sai Chi L'onore	3:08	Krips, Siepi, Della Casa, Danco, Gueden, Corena, Dermota, Berry, Bohme		Don Giovanni (2/3)
Dalla Sua Pace	4:09	Krips, Siepi, Della Casa, Danco, Gueden, Corena, Dermota, Berry, Bohme		Don Giovanni (2/3)
Name	Time	Artist		Album
Di Molte Faci Il Lume (Leporello)	0:29	Wolfgang Amadeus Mozart (1756-1791)		Mozart: Don Giovanni Siepi
Sola, Sola, In Buio Loco (Donna Elvira)	8:13	Wolfgang Amadeus Mozart (1756-1791)		Mozart: Don Giovanni Siepi
Ah, Pieti signori Miei (Leporello)	2:39	Wolfgang Amadeus Mozart (1756-1791)		Mozart: Don Giovanni Siepi
Il Mio Tesoro Intanto (Don Ottavio)	4:14	Wolfgang Amadeus Mozart (1756-1791)		Mozart: Don Giovanni Siepi
Name	Time	Artist	Album	Genre
Allegro Con Brio	9:05	Ludwig van Beethoven (1770-1827)	Alexander String Quartet	Classical
Adagio Affettuoso Ed Appassionato	9:20	Ludwig van Beethoven (1770-1827)	Alexander String Quartet	Classical
Scherzo. Allegro Molto	3:29	Ludwig van Beethoven (1770-1827)	Alexander String Quartet	Classical
Allegro	6:58	Ludwig van Beethoven (1770-1827)	Alexander String Quartet	Classical
Allegro	6:31	Ludwig van Beethoven (1770-1827)	Alexander String Quartet	Classical
Name	Time	Artist	Album	Genre
Op. 18 No. 2 in G Major	7:45	Allegro	Beethoven String Quartets vol. 2	Classical
Op. 18 No. 2 in G Major	6:56	Adagio cantabile	Beethoven String Quartets vol. 2	Classical
Op. 18 No. 2 in G Major	4:46	Scherzo (Allegro) & Trio	Beethoven String Quartets vol. 2	Classical
Op. 18 No. 2 in G Major	5:30	Allegro molto, quasi presto	Beethoven String Quartets vol. 2	Classical
Name	Time	Artist	Album	Genre
String Quartet in D major, Op. 18, No. 3.0 - Allegro	7:56	Alexander String Quartet	Alexander String Quartet	Classical
String Quartet in D major, Op. 18, No. 3.1 - Andante con moto	8:55	Alexander String Quartet	Alexander String Quartet	Classical
String Quartet in D major, Op. 18, No. 3.2 - Allegro	3:21	Alexander String Quartet	Alexander String Quartet	Classical
Name	Time	Artist	Album	Genre
String Quartet No.13 Op.133	13:43	Beethoven - Alexander String Quartet	String Quartets - Vol.7 - Op. 130 - No. 13 - Op. 133	Classical
Presto	2:00	Beethoven - Alexander String Quartet	String Quartets - Vol.7 - Op. 130 - No. 13 - Op. 133	Classical
Andante con moto ma non troppo	7:06	Beethoven - Alexander String Quartet	String Quartets - Vol.7 - Op. 130 - No. 13 - Op. 133	Classical
Alla danza tedesca. Allegro molto	3:36	Beethoven - Alexander String Quartet	String Quartets - Vol.7 - Op. 130 - No. 13 - Op. 133	Classical
Cavatina. Adagio molto espressivo	6:40	Beethoven - Alexander String Quartet	String Quartets - Vol.7 - Op. 130 - No. 13 - Op. 133	Classical
Finale. Allegro	9:34	Beethoven - Alexander String Quartet	String Quartets - Vol.7 - Op. 130 - No. 13 - Op. 133	Classical
Grosse Fuge Op. 133 in B flat major	17:36	Beethoven - Alexander String Quartet	String Quartets - Vol.7 - Op. 130 - No. 13 - Op. 133	Classical



# sympathetic witness

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*Pan:*

Translated from  
the Norwegian of  
Knut Hamsun  
by W. W. Worster

Introduction by  
Edwin Bjørkman

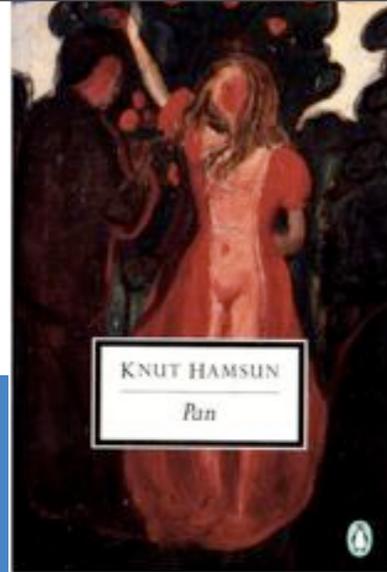
New York  
Alfred A. Knopf, 1927  
Published July, 1921

**project gutenber**

Gutenberg *Pan*

And when she comes, my heart knows  
all, and no longer beats like a  
heart, but rings as a bell. I lay my  
hand on her.

"Tie my shoe-string," she says,  
with flushed cheeks.



## pan

[T]he first version by W.W. Worster (Knopf, 1921), was bowdlerized, all the expressly erotic elements, however innocuous, having been deleted.

Penguin *Pan*:

"And when she comes my heart understands, and it no longer beats, it peals. And she is naked under her dress from head to foot. I lay my hand on her.

"Tie my shoelace," she says with flaming cheeks. And a little later she whispers directly against my mouth, against my lips, Oh, you're not tying my shoelace, sweetheart, you're not tying ... not tying my ..."



# material matters

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## **Project Gutenberg :**

The Life and Opinions  
of Tristram Shandy,  
Gentleman.

A work by Laurence Sterne

(two lines in Greek)



# typographic culture

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By inspection into his horoscope, where five planets were in coition all at once with Scorpio (Haec mira, satisque horrenda. Planetarum coitio sub Scorpio Asterismo in nona coeli statione, quam Arabes religioni deputabant efficit Martinum Lutherum sacrilegum hereticum, Christianae religionis hostem acerrimum atque prophanum, ex horoscopi directione ad Martis coitum, religiosissimus obiit, ejus Anima scelestissima ad infernos navigavit--ab Alecto, Tisiphone & Megara flagellis igneis cruciata perenniter.-- Lucas Gaurieus in Tractatu astrologico de praeteritis multorum hominum accidentibus per **genituras examinatis.**) (in reading this my father would always shake his head) in the ninth house ...



# typographic culture

264

TRISTRAM SHANDY

in coition all at once with Scorpio<sup>1</sup> (in reading this my father would always shake his head) in the ninth house, which the Arabians allotted to religion—it appeared that Martin Luther did not care one stiver about the matter—and that from the horoscope directed to the conjunction of Mars—they made it plain likewise he must die cursing and blaspheming—with the blast of which his soul (being steeped in guilt) sailed before the wind, into the lake of hell

1. Haec mira, satisque horrenda. Planetarum coitio sub Scorpio Asterismo in nonâ coeli statione, quam Arabes religioni deputabant, efficit Martinum Lutherum sacrilegum hereticum, christianae religionis hostem acerrimum atque prophanum, ex horoscopi directione ad Martis coitum, religiosissimus obilit, ejus Anima scelestissima ad infernos navigavit—ab Alecto, Tisiphone et Megara flagellis igneis cruciata perenniter.

—Lucas Gauricus in Tractatu astrologico de praeteritis multorum hominum accidentibus per genituras examinatis.



# missing evidence

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## **lost pages**

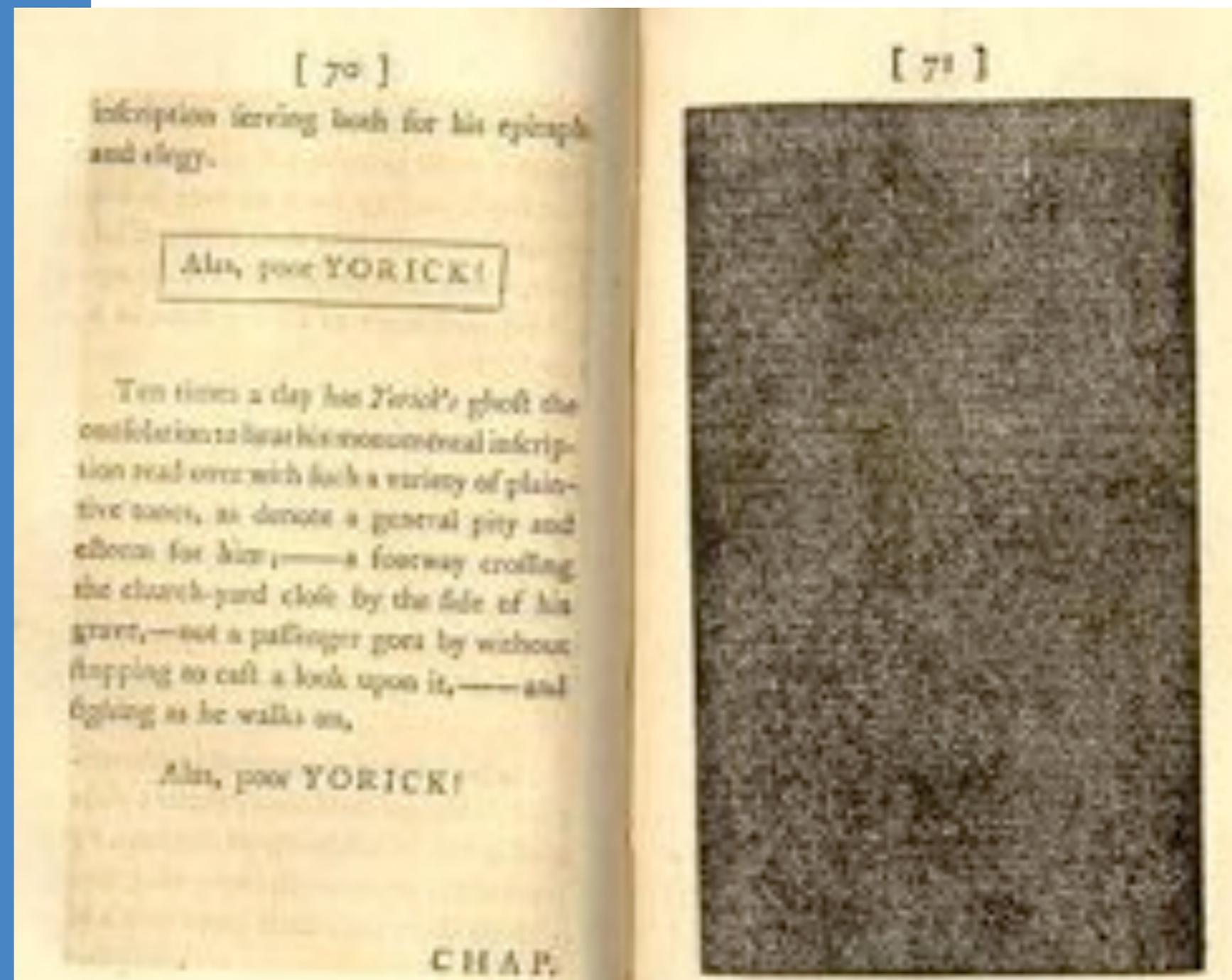
Ten times a day has Yorick's ghost the consolation to hear his monumental inscription read over with such a variety of plaintive tones, as denote a general pity and esteem for him;--a foot-way crossing the church-yard close by the side of his grave,--not a passenger goes by without stopping to cast a look upon it,--and sighing as he walks on, Alas, poor Yorick!

Chapter 1.XIII.

It is so long since the reader of this rhapsodical work has been parted from the midwife, that it is high time to



# missing evidence



Jump to: 1 [21](#) [41](#) [61](#) [81](#) [101](#) ... [681](#)

SAVE AVAILABILITY

**Title** The life and adventures of Robinson Crusoe / written by himself  
**Author** [Defoe, Daniel, 1661?-1731.](#)

making a case



**WIKIPEDIA**  
The Free Encyclopedia

Navigation

- Main Page
- Community Portal
- Current events
- Recent changes
- Random article
- Help
- Contact us
- Donations

## Daniel Defoe

From Wikipedia, the free encyclopedia.  
Revision as of 08:44, 11 October 2005; view current revision  
← Order revision | Newer revision →

**Daniel Defoe** (1660 – April 24, 1731) was an English writer and journalist, who first gained fame for his novel *Robinson Crusoe*. Defoe is also notable for being arguably the earliest constant practitioner of the novel form.

**Contents** [hide]

- 1 Biography
- 2 Defoe and the Anglo-Scottish Union of 1707
- 3 Quotations
- 4 See also
- 5 Electronic books



Daniel Defoe

### Biography

Born Daniel Foe, the son of James Foe, a butcher in [Stoke Newington, London](#). He later added the aristocratic sounding "De" to his name as a *nom de plume*. His gravestone gives his name as DANIEL DE-FOE. He became a famous pamphleteer, journalist and novelist at a time of the birth

(cur) (last)  04:14, 13 October 2005 Malo (Talk | contribs) m (re-added gravestone info, it demonstrates that he accepted a name, varied from his birthname.)



# dubious evidence

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"I strongly suspect that most English speakers would only recognize Defoe through RC; the Esperanto article mentions two or three translations of Robinson Crusoe, but no other works of Defoe, and a quasi-random sampling of the Library of Congress catalog turned up a number of translations of RC into French, German and Japanese, but no obvious translations of any of Defoe's other works"

**Daniel Defoe** (1660-April 24, 1731) was an English writer and [journalist](#), who first gained fame for his novel [Robinson Crusoe](#).

## entropy in action

"He is most famous for his novel [RC]"- 9/02

"He became a famous pamphleteer, journalist and novelist"--1/04

"He became famous for [RC]"--10/04

"He first became famous for [RC]"--11/04



# easily fixed?

The screenshot shows the Google Book Search interface. At the top, there are navigation links for 'Web', 'Images', 'Video', 'News', 'Maps', and 'more...'. The Google logo is on the left, and the search bar contains the text 'Pan Hamsun'. Below the search bar, there are radio buttons for 'All books' (selected) and 'Full view books'. The search results are displayed under the heading 'Book Search'. Two results are visible:

- Pan: From Lieutenant Thomas Glahn's Papers - Page 3**  
by Anita Loos, Svein (THN) Lyngstad, Knut Hamsun - 1900 - 190 pages  
... Hamsun ... Pan ...  
[Limited preview](#) - [Table of Contents](#) - [First page](#) - [About this book](#)
- Pan - Page 3**  
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The truth, however, is that Hamsun stands today where he has always stood. ...  
Problems do not enter into the novels of Hamsun in the same manner as they ...  
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Around this time Joyce was attacked by a dog; this resulted in a lifelong canine [phobia](#). He also suffered from a fear of thunderstorms, which his deeply religious aunt had described to him as being a sign of God's wrath.[2]

In 1891, Joyce wrote a poem, "Et Tu Healy," on the death of [Charles Stewart Parnell](#). His father was angry at the treatment of Parnell by the Catholic church and at the resulting failure to secure Home Rule for Ireland. The elder Joyce had the poem printed and even sent a copy to the [Vatican Library](#). In November of that same year, John Joyce was entered in *Stubbs Gazette* (an official register of [bankruptcies](#)) and suspended from work. In 1893 John Joyce was dismissed with a [pension](#). This was the beginning of a slide into [poverty](#) for the family, mainly due to John's drinking and general financial mismanagement.[3]

James Joyce was initially educated by the [Jesuit](#) order at [Clongowes Wood College](#), a [boarding school](#) near [Clane](#) in [County Kildare](#), which he entered in 1888 but had to leave in 1892 when his father could no longer pay the fees. Joyce then studied at home and briefly at the [Christian Brothers school](#) on North Richmond Street, Dublin, before he was offered a place in the [Jesuits'](#) Dublin school, [Belvedere College](#), in 1893. The offer was made at least partly in the hope that he would prove to have a vocation and join the Order. Joyce, however, was to reject Catholicism by the age of 16, although the [philosophy](#) of [Thomas Aquinas](#) would remain a strong influence on him throughout his life.[4]

He enrolled at the recently established [University College Dublin](#) (UCD) in 1898. He studied modern languages, specifically [English](#), [French](#) and [Italian](#). He also became active in theatrical and literary circles in the city. The article *Ibsen's New Drama*, his first published work, was published in 1900 and resulted in a letter of thanks from the [Norwegian](#) dramatist himself. Joyce wrote a number of other articles and at least two plays (since lost) during this period. Many of the friends he made at University College Dublin would appear as characters in Joyce's written works. He was an active member of the [Literary and Historical Society, University College Dublin](#), and presented his paper "[Drama and Life](#)" to the [L&H](#) in 1900.

After graduating from UCD in 1903, Joyce left for [Paris](#) to "study medicine", but in reality he squandered money his family could ill afford. He returned to Ireland after a few months, when his mother was diagnosed with [cancer](#).[5]



# a new world view?

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## **units of analysis**

"Peer production is limited not by the total cost or complexity of a project, but by its modularity, the granularity of its components, and the cost of integration"

--Benkler



# what are we searching for?

**... authority?**

*Christianity*

monastic copying, Carolingian minuscule

*Islam*

"the golden chain"

*Byzantium*

the university

*China*

the National Academy

*general government control*

copyright; stationers ...

	Paper	Codex	Printing	Typography
<b>China</b>	3d cent bc	10th cent *	8th cent	11th cent
<b>Korea</b>	4th cent ad	19th cent	8th cent	15th cent
<b>Japan</b>	7th cent ad	19th cent	9th cent	17th cent
<b>India</b>	5th cent ad	6th cent*	19th cent	19th cent
<b>Islam</b>	8th cent ad	8th cent	19th cent	19th cent
<b>Europe</b>	12th cent ad	2d cent	15th cent	15th cent



# circling around the question

## search, v.

SECOND EDITION 1989

Pronunciation

Spellings

Etymology

Quotations

Date chart

[a. OF. *cerchier* (mod.F. *chercher*), corresp. to Pr. *cercar*, It. *cercare* to seek, Sp., Pg. *cercar* to surround:—late L. *circāre* to go round, f. L. *circus* circle.]

**I.** To explore, examine thoroughly.

## encyclopædia, encyclopedia

SECOND EDITION

Pronunciation

Spellings

Etymology

Quotations

Date chart

**1.** The circle of learning; a general course of instruction.

**1531** ELYOT *Gou.* i. xiii, The circle of doctrine..is in one worde of greke Encyclopedia. **1646** SIR T. BROWNE *Pseud. Ep.* a3a, To Rdr., In this Encyclopædie and round of knowledge. **1654** WHITLOCK *Zootomia* 187 Borrowed from the Bank of the Encyclopædia, or generall Learning. **1662** PHILLIPS *Dict. Advt.*, A Dictionary for the English Tongue, would require an Encyclopedia of knowledge. **1681**



ONE  
ARGUMENT  
MORE

20.

uncircling

A G A I N S T  
THE  
CAVALIERS;

enlightenment  
beyond the preconceived

TAKEN FROM THEIR VIOLATION  
OF CHURCHES.

finding aids  
market

Where towards the c<sup>o</sup>l<sup>r</sup> are subtilly Disputed  
These two Questions,

1 Whether the Separatist (as he is called) who makes his house (or as it is  
said) his Barn a Church, is more scandalous or the Cavalier ( who look-  
ing another way in his discourse and Profession) hath put at Oxford where  
his Vaulted resides, turned Churches (with Reverence be it said) into  
his Priests, and Lagers, and in Devonshire at many places into Stables,

politics

2 Whether Churches that profaned, and fallen from  
Grace, and Housesse, or as by the Bishops  
to be Reconsecrated.

London. may. 22<sup>d</sup>. 1643

Printed in the year when men think what they list and speak and  
twice what they think.

science



# re-circling?

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## **institutions for enlightenment**

market: Bank of England

politics: the newspaper

science: Royal Society



# institutions of the enlightenment

---

## **going closed?**

publishers

newspapers

encyclopaedias

dictionaries

*trésors*

scientific societies vs antiquarians

scholarly editions

university



Numb. 364.

Beginning the Thirty first Volume.

# PHILOSOPHICAL TRANSACTIONS.

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## The CONTENTS.

- I. *Some Remarks on a late Essay of Mr. Cassini, wherein he proposes to find, by Observation, the Parallax and Magnitude of Sirius.* By Edmund Halley, L. L. D. Astron. Reg. Geom. Prof. Savil. & R. S. S.
- II. *An Account of the External Mamillæ, and other Solitary Glands: Also of the Injections of all the Lymphatick (as well above as below the Subcutaneous) into the Pores; which Glands and Injections have not hitherto been mentioned, or not truly described by any Authors.* By Richard Hale, M. D. Reg. Soc. & Col. Med. Lond. Soc.
- III. *De Peste Constantinopoli grassante. Auctore auctore V. Cl. Emanuele Timone. M. D. Hæc scriptum ab Auctore Clarissimo, qui Constantinopoli per multos annos Medicinam præcavit, Excellentissimo Abbate Benigno, Roberto Sutton, Eq. Aurato, traditum, ipsiusdem Equitis permissa, cum Societate Regia communicavit idem R. Hale, M. D.*
- IV. *An Account of a Luminous Appearance in the Air, seen at Dublin on January the 12th, 1792.* By Philip Percival, Esq; Brother to the Right Honourable the Lord Percival, F. R. S. and communicated by his Lordship to the Royal Society.

V. 07

change to believe in

(1)

Numb. 1.

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Munday, March 6. 1667.

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Numb. 364.

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- V. *Of the Infinity of the Spheres of Fix'd Stars.* By Edmund Halley, L. L. D. R. S. S.
- VI. *Of the Number, Order, and Light of the Fix'd Stars.* By the same.
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- VIII. *A Copy of an Affidavit made in Scotland, concerning a Boy's living a considerable time without Food.* Communicated by Patrick Blair, M. D. F. R. S.
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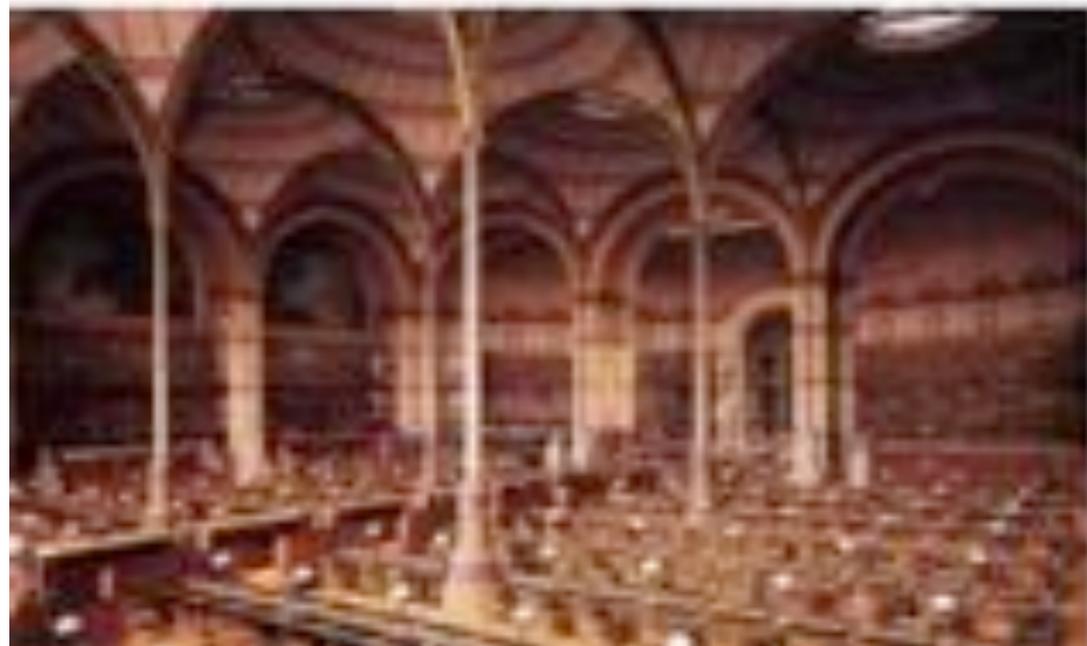


# circling libraries

Smirke, British  
Museum Reading  
Room, 1851



Pelz/Casey Reading Room,  
LOC, ca 1898



Labrouste, Bibliothèque  
Nationale 1868



Asplund, Stockholm City  
Library, 1928



# recircling

---

## **authority needed**

"new evils [that] created confusion and  
uncertainty in the law."

## **law amendment: closing in again**

## **a familiar problem**

"The almost universal view among judges  
in England is that too much, rather than  
too little, is reported"



## related cases

---

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a shared digital repository

**so, what are we searching for?**