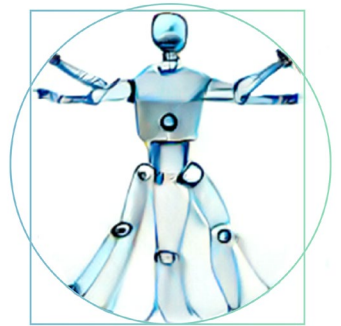


# Digital Media, Society, and Culture

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Angus A.A. Mol  
Walter Crist III



L U C D H

# The World Brain



# Encyclopedias

Encyclopaedias

H.G. Wells

Indexing

WWW


Google

Content cue

- “General education” (ἐγκύκλιος παιδεία)
- Natural histories
- Roots in deontology (storytelling as sensemaking)
- Education, science, ideology, administration, politics
  - Renaissance
  - Enlightenment
  - Nation Building



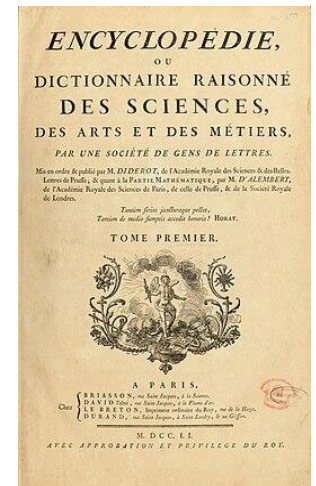
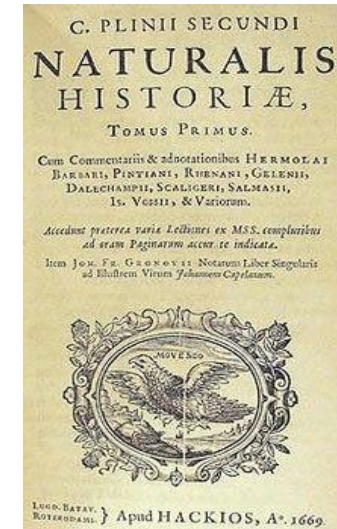
**WHEN IN DOUBT—“LOOK IT UP” IN**  
The  
*Encyclopaedia Britannica*  
**The Sum of Human Knowledge**



(New 11th Edition) Issued 1910-11 by the  
CAMBRIDGE UNIVERSITY PRESS (England)

**THE BOOK TO ASK QUESTIONS OF** **FOR READING OR FOR STUDY**

29 volumes, 28,150 pages,  
44,000,000 words of text.  
Printed on thin, but strong  
opaque India paper, each  
volume but one inch in  
thickness.



# H.G. Wells ' The World Brain

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Encyclopaedias

H.G. Wells

Indexing

WWW

Google

Content cue

“It can be reproduced exactly and fully, in Peru, China, Iceland, Central Africa, or wherever else.”

“Its creation is a way to world peace that can be followed without any very grave risk of collision with the warring political forces and the vested institutional interests of today”

“The whole human memory can be, and probably in a short time will be, made accessible to every individual”

“This is no remote dream, no fantasy. It is a plain statement of a contemporary state of affairs. It is on the level of practicable fact.”



# H.G. Wells ' The World Brain

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Encyclopaedias

H.G. Wells

Indexing

WWW

Google

Content cue

- Series of lectures by the “Father of SF”, futurist, social activist
- World Brain: more than an encyclopedia
- “The encyclopaedias of the past have sufficed for the needs of a cultivated minority.”
- “Pull the mind of the world together”
- “A world synthesis of bibliography and documentation with the indexed archives of the world.”





# The 'Spoils of War':

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## An Issue of Information Indexing

Encyclopaedias

H.G. Wells

Indexing

WWW

Google

Content cue

“There is a growing **mountain of research** . But there is increased evidence that **we are being bogged down** today as specialization extends. The investigator is staggered **by the findings and conclusions of thousands** of other workers—conclusions which he cannot find time to grasp, much less to remember, as they appear.”

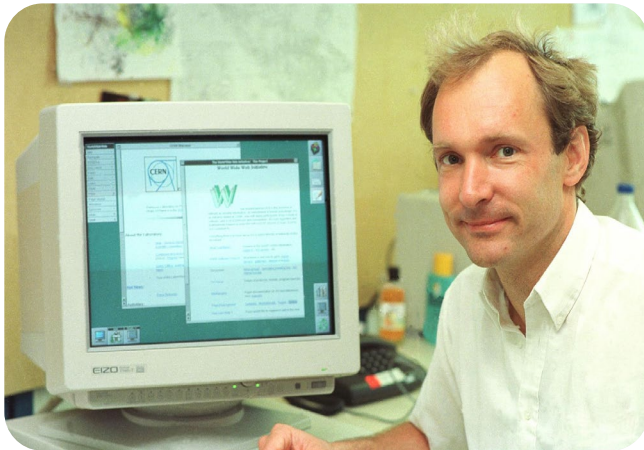
“Consider a future device for individual use, which is a sort of mechanized private file and library. It needs a name, and, to coin one at random, "**memex**" will do. A memex is a device in which an individual **stores all his books, records, and communications, and which is mechanized** so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate supplement to his memory.”

- 1945, As We May Think, V. Bush in the Atlantic



# The WWW

- Sir Tim Berners-Lee at CERN (1989)
- HTML (Hyper Text Markup Language): the layouting
- URL (Uniform Resource Locator): the link
- World Wide Web hostname
- HTTP (Hypertext Transfer Protocol)
- More info at [CERN](http://www.cern.ch)



## WORLD WIDE WEB

The WorldWideWeb (W3) is a wide-area hypermedia[1] information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an executive summary[2] of the project, Mailing lists[3] , Policy[4] , November's W3 news[5] , Frequently Asked Questions[6] .

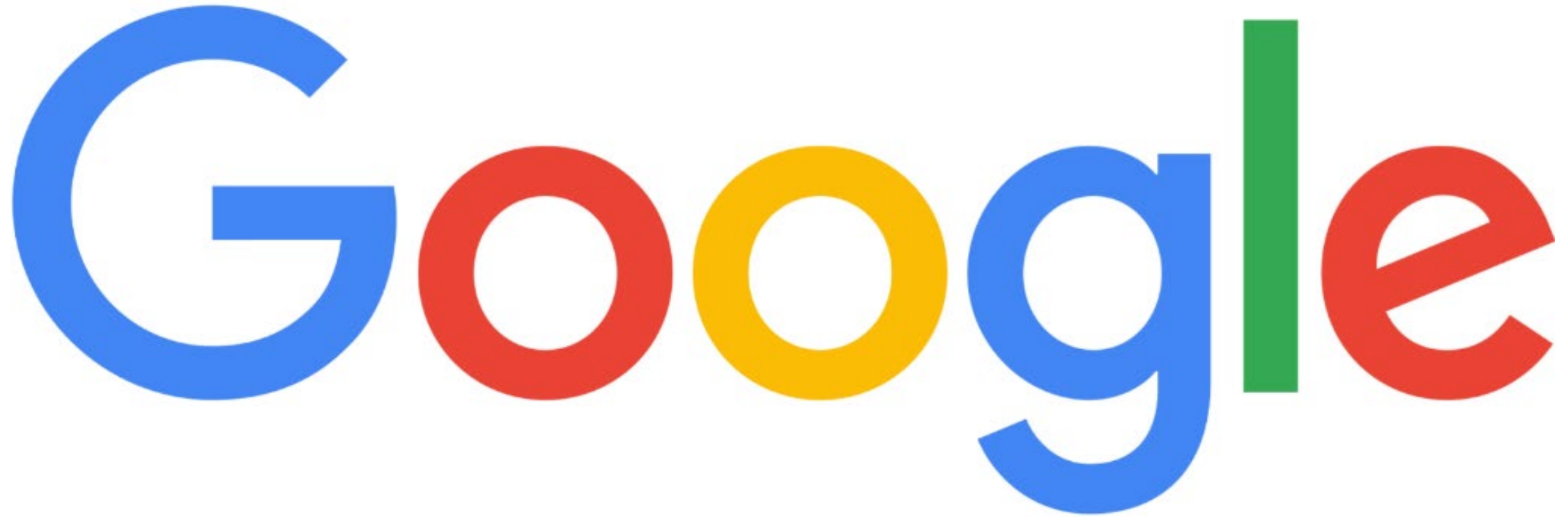
What's out there?[7]Pointers to the world's online information, subjects[8] , W3 servers[9], etc.

Help[10] on the browser you are using

Software Products[11] A list of W3 project components and their current state. (e.g. Line Model[12] ,X11 Viola[13] , NeXTStep[14] , Servers[15] , Tools[16] , Mail robot[17] , Library[18] )

Technical[19] Details of protocols, formats, program internals etc

<ref.number>, Back, <RETURN> for more, or Help:



“Our mission is to organize the world's information and make it universally accessible and useful.”

~ Google, [About Google](#)



# Google Quiz: Name?

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Encyclopaedias

H.G. Wells

Indexing

WWW

Google

Content cue



what is a googol



Images

In maths

Number

Used for

For kids

Gear

Exponent

Zeros

Squared

About 497.000 results (0,48 seconds)

1 googol =

$$1.0 \times 10^{100}$$

Feedback

# Google Quiz: Location?

Encyclopaedias

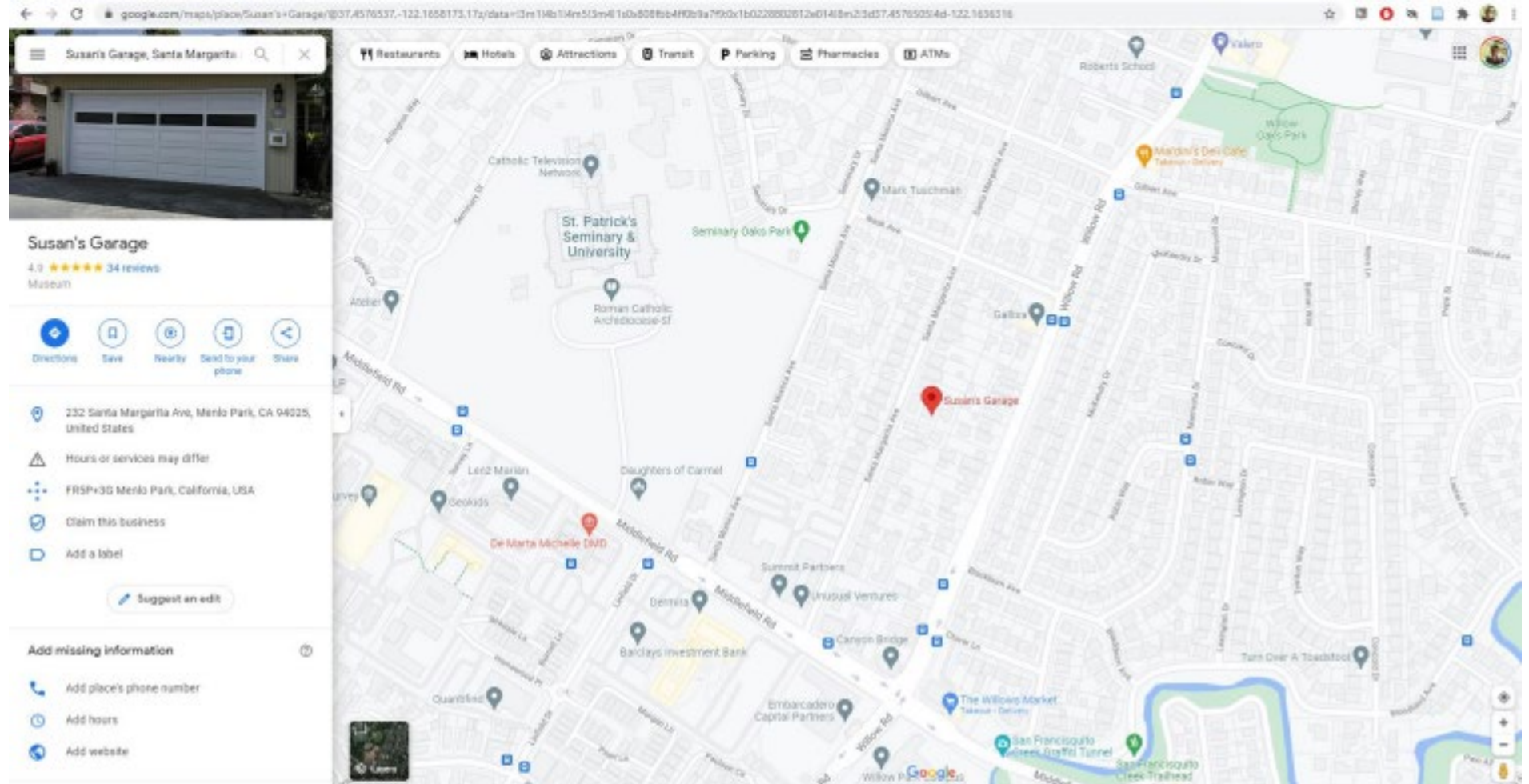
H.G. Wells

Indexing

WWW

Google

Content cue



# Google Quiz: Owner?

Encyclopaedias

H.G. Wells

Indexing

WWW

Google

Content cue



Alphabet Inc Class A

\$128.46 ↑ 4,640.04% +125.75 MAX

26 Sept, 09:57:19 UTC-4 · USD · NASDAQ · Disclaimer

1D 5D 1M 6M YTD 1Y 5Y MAX



Google becomes a part of Alphabet

# Google Quiz: Marketshare?

Encyclopaedias

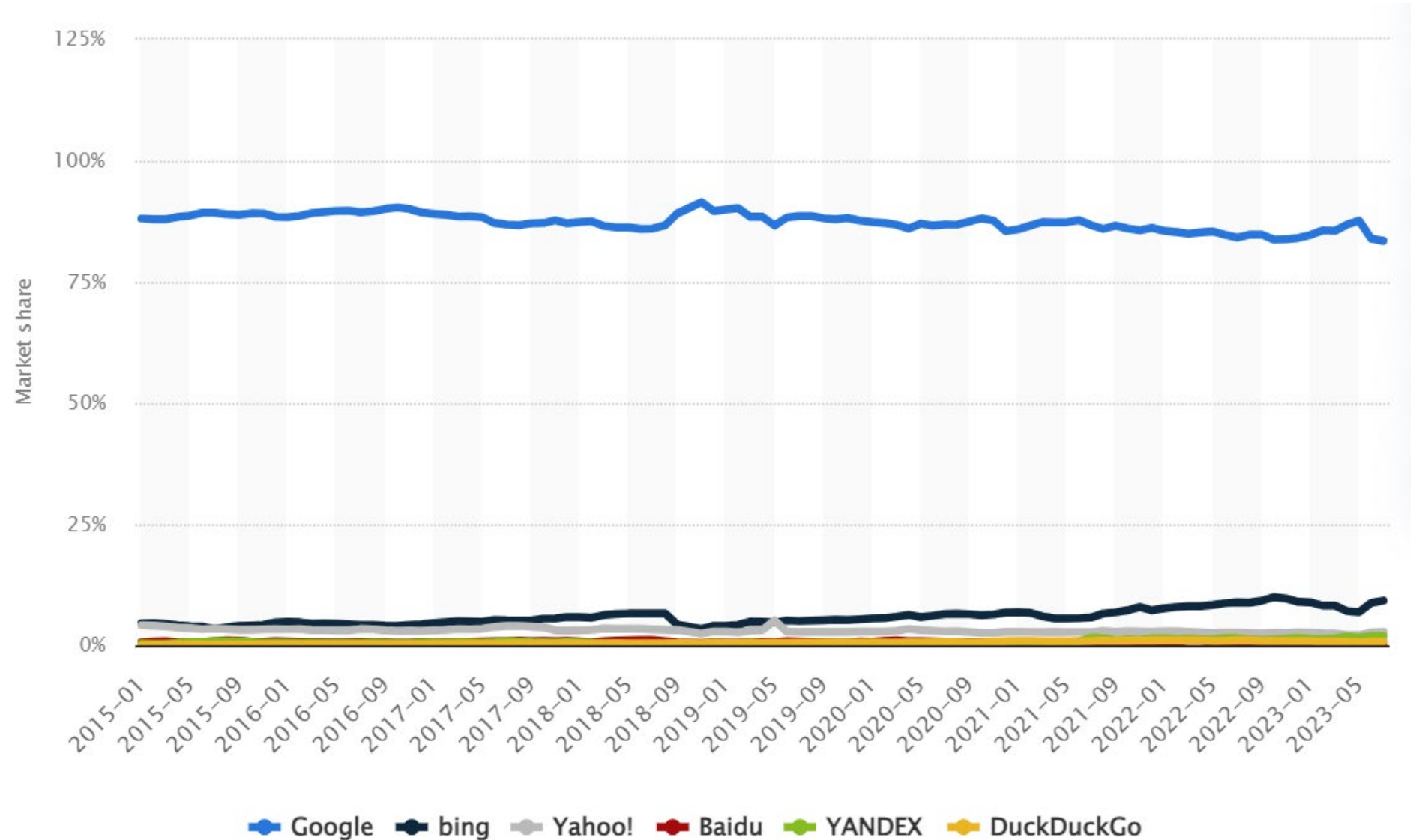
H.G. Wells

Indexing

WWW

Google

Content cue



# Google Quiz: (answer in 1999!):

Encyclopaedias

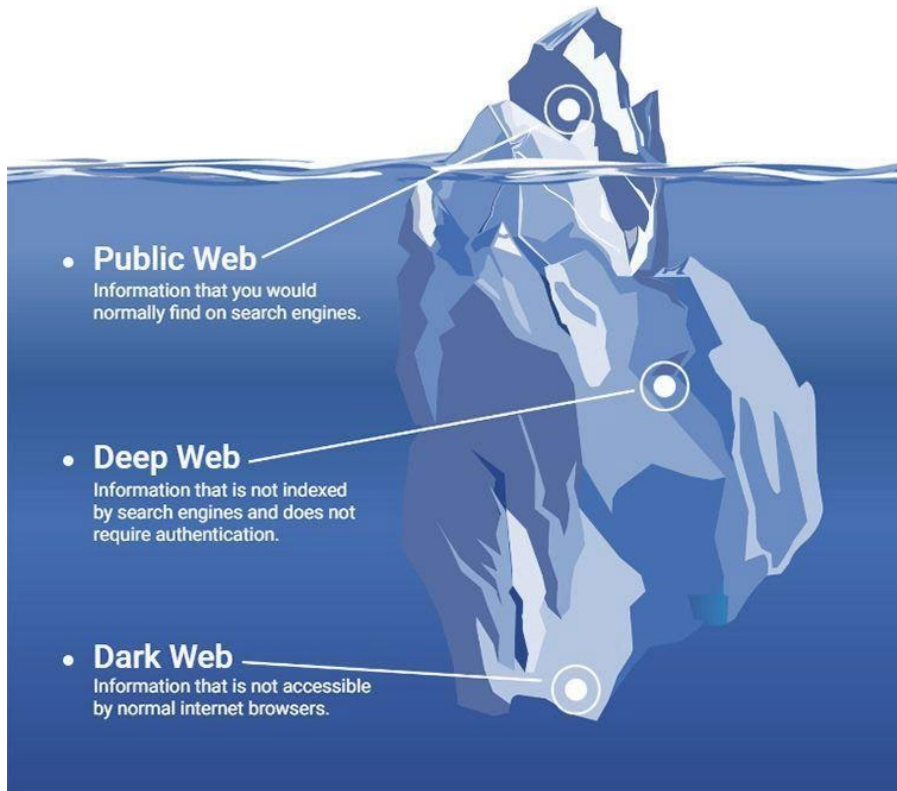
H.G. Wells

Indexing

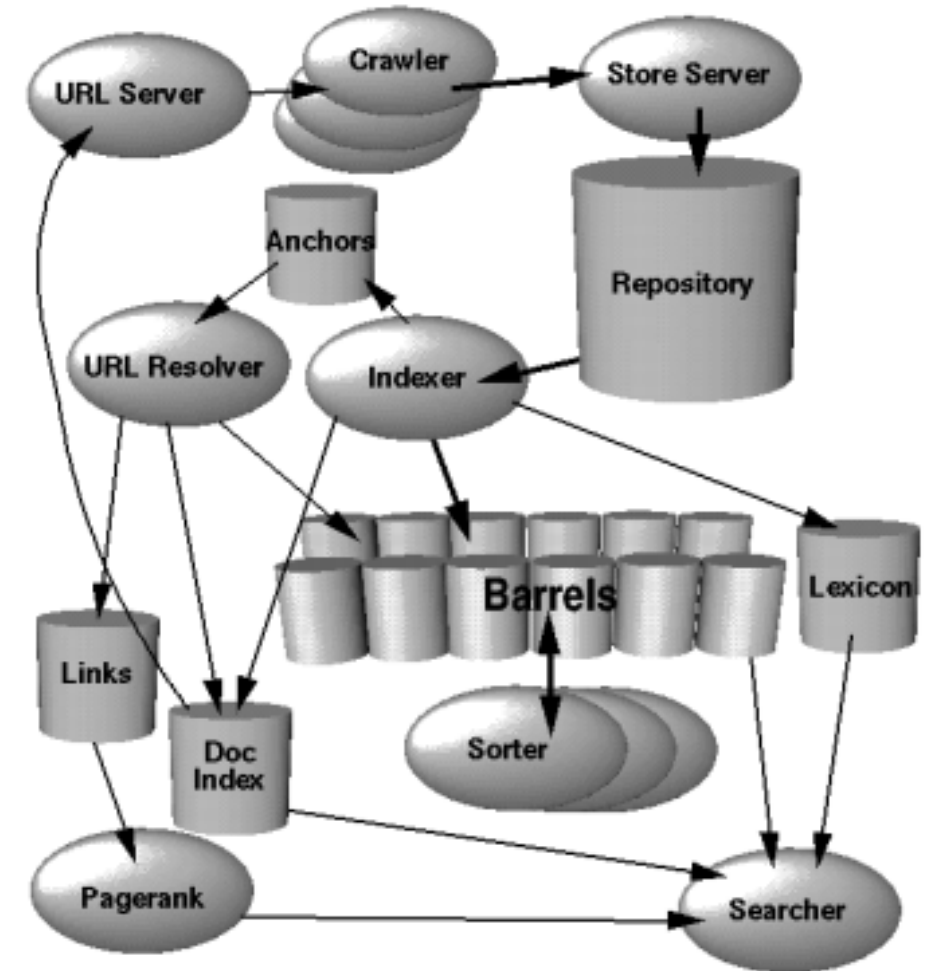
WWW

Google

Content cue



Links are used to map sites ([link](#))



Brin and Page Original "Backrub" Schema



# Old Search Engines:

## Archie and WebCrawler

Encyclopaedias

H.G. Wells

Indexing


WWW

Google

Content cue

Welcome to [archie.icm.edu.pl](http://archie.icm.edu.pl)

---

Archie Query Form 

Search for:

Database: ☒ Worldwide Anonymous FTP ☐ Polish Web Index  
Search Type: ☒ Sub String ☐ Exact ☐ Regular Expression  
Case: ☒ Insensitive ☐ Sensitive

Do you want to look up strings only (no sites returned):  
☒ NO ☐ YES

Output Format For Web Index Search: ☐ Keywords Only  
☒ Excerpts Only  
☐ Links Only

---

**Optional Search Parameters**

You can use as many terms as you like in your query, as long as you separate them by spaces. By default, **Archie** inserts "OR" operators between all of the terms of your query. If you prefer, you can change the operator to "AND" by choosing these radio buttons:

☐ OR ☐ AND

You can also limit the search results to match a directory path (this is optional):

Or to exclude search results that match a directory path you don't want (this is also optional):

If you want to limit the search so that it only looks in certain domains (such as ca, edu or com), enter one or more in the following boxes:



Web

Images

Videos

News

# Backlinks and the PageRank Algorithm

Encyclopaedias

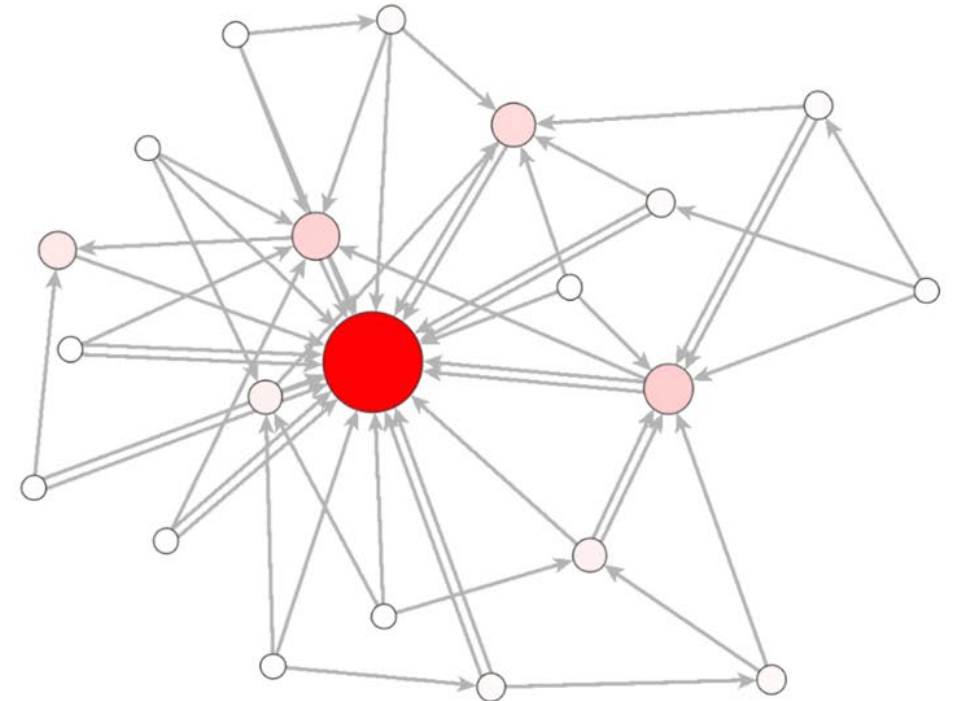
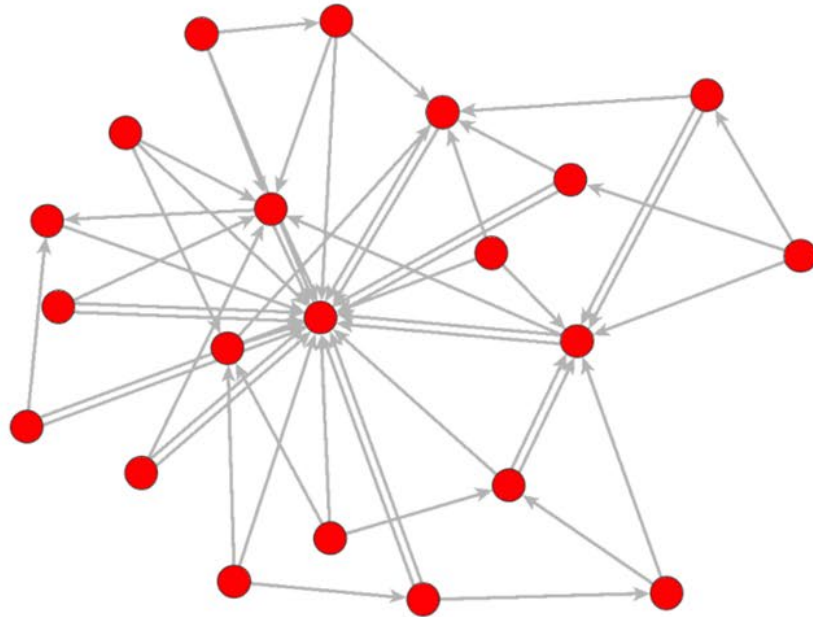
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# What else does Google look for?

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Encyclopaedias

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Content cue

- Robot.txt file
- Website security
- Keywords, tags, headers, content relations, existence of a site map
- Parsing of content:
  - Text
  - Images
  - Videos
  - HTML, CSS, JavaScript and other code
- The 'Dark' Arts of SEO:  
Search Engine Optimization



# Geevil?

Encyclopaedias

H.G. Wells

Indexing

WWW

Google

Content cue

- Google and Copyright
  - Books: Google and the World Brain
- Google and Privacy:
  - Try Google Take-out (thanks GDPR!)
- Google and the Military
- Google and Censorship
- Google is an ultra-pervasive, profit-driven, secretive company



don't be evil. do the right thing.



Google Search

I'm Feeling Lucky

Google

The image shows the word "Google" in a dark, textured blue-grey font. The letters are surrounded by flames and smoke, suggesting a burning or protest theme. The first 'o' is red with flames on top. The second 'o' is a textured brownish-gold. The 'l' is a solid green vertical bar with a thick plume of black smoke rising from its top. The final 'e' is red with flames on top. The 'G' and 'g' are the same dark textured blue-grey as the first 'o'.



[illegible]

# Geevil?

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Encyclopaedias

H.G. Wells

Indexing

WWW

Google

Content cue

## Stay Critical!

“We're not a truth engine. ... We can give you information,  
but we can't tell you the truth of a thing.”

- Danny Sullivan, Google search liaison in CNBC interview

## FEATURES

Aug 28, 2023, 4:00 PM  
GMT-2  
[72 Comments](#) / [T2 New](#)



*If you buy something from a Verge link, Vox Media may earn a commission. [See our ethics statement.](#)*

# The end of the Googeverse

For two decades, Google Search was the invisible force that determined the ebb and flow of online content. Now, for the first time, its cultural relevance is in question.

By Ryan Broderick  
Illustrations by Michelle Rohn for The Verge



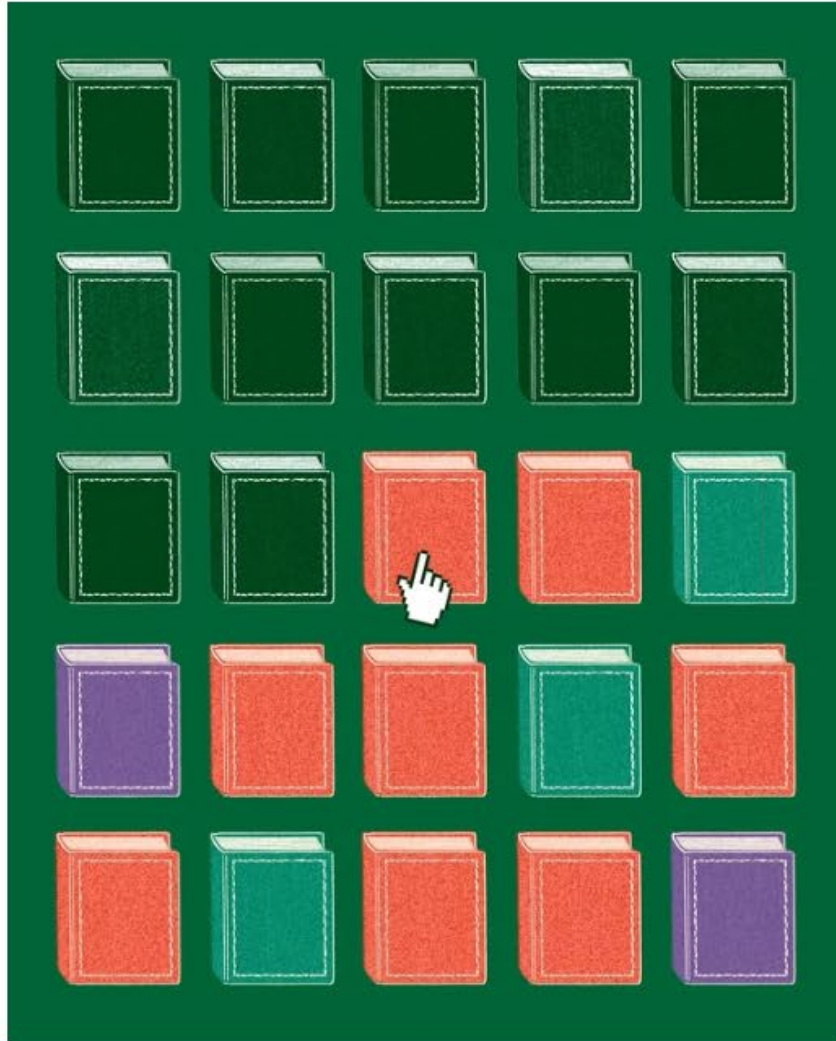


Illustration by Joanne Imperio / The Atlantic. Source: Getty.

TECHNOLOGY

## THESE 183,000 BOOKS ARE FUELING THE BIGGEST FIGHT IN PUBLISHING AND TECH

Use our new search tool to see which authors have been used to  
train the machines.

By Alex Reisner

The history of the World Brain begins with books and ends with books3.  
Curious about which books are in there, [check this search engine for books3](#).

# What's next?

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Encyclopaedias

H.G. Wells

Indexing

WWW

Google

**Content cue**

Content cue: What remarkable thing have you found on the World Wide Web and how?