#### Digital Media, Society, and Culture

Angus A.A. Mol

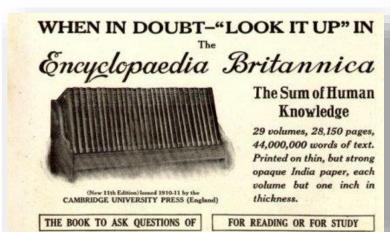


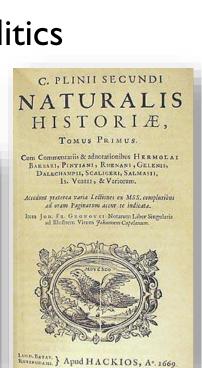
# The World Brain



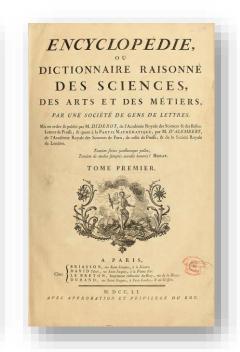
#### Encyclopedias

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









#### H.G. Wells' The World Brain

- 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."
  - "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."





### The 'Spoils of War': An Issue of Information Indexing

"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."

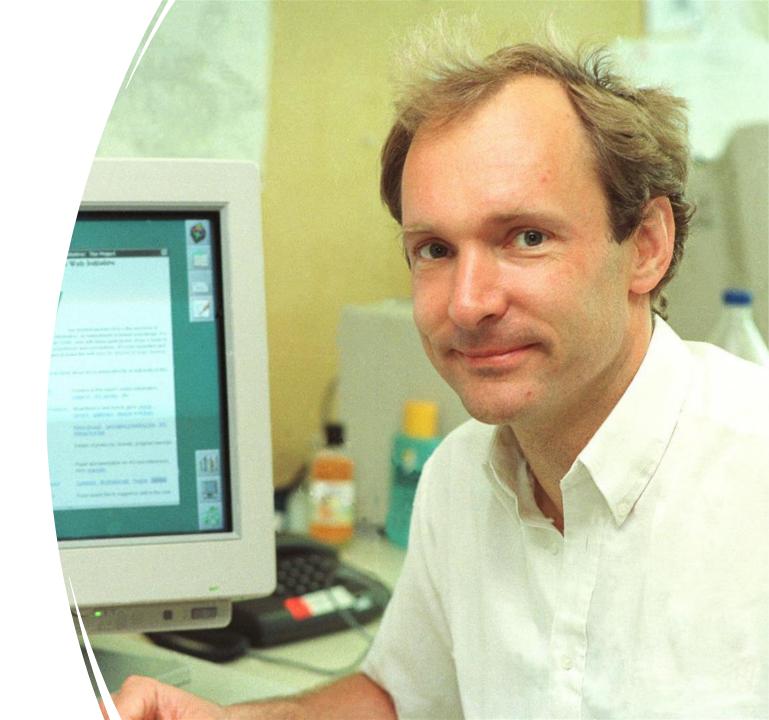
1945, As We May Think, V. Bush in the Atlantic



## The Invention of the World Wide Web

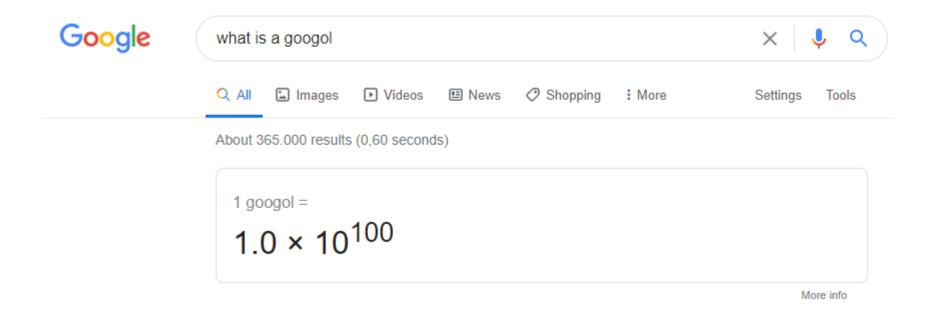
- Sir Tim Berners-Lee at CERN (1989)
- Colloquially and wrongly referred to as the 'Internet'
- Standards
  - HTML (Hyper Text Markup Language)
  - URL (Uniform Resource Locator): the link
  - World Wide Web hostname
  - HTTP (Hypertext Transfer Protocol)

More info at **CERN** 

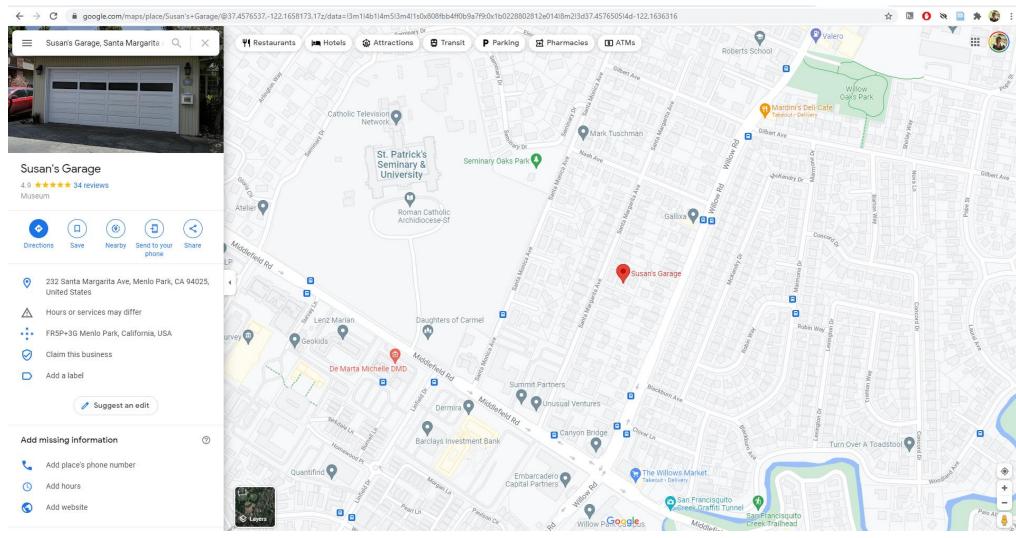


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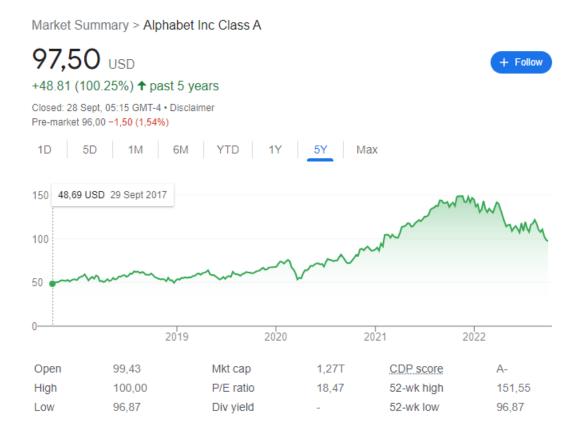
#### A Google Quiz: Name?

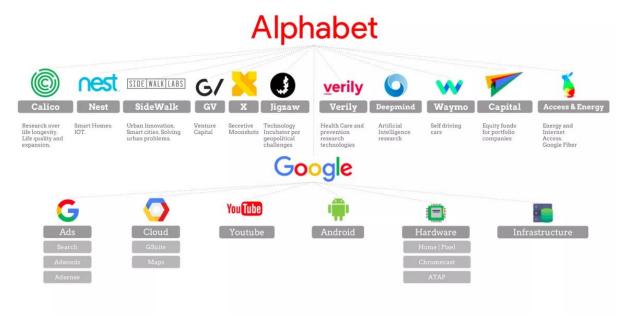


#### A Google Quiz: Where?

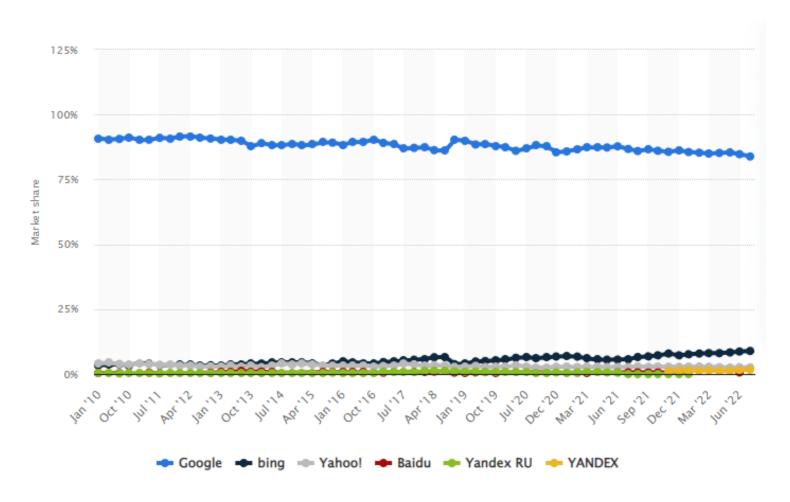


#### A Google Quiz: Owner?



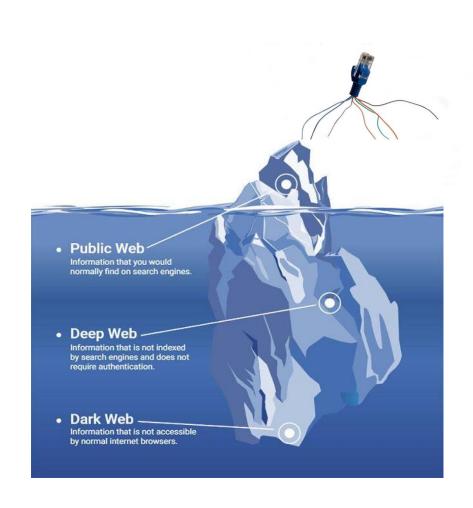


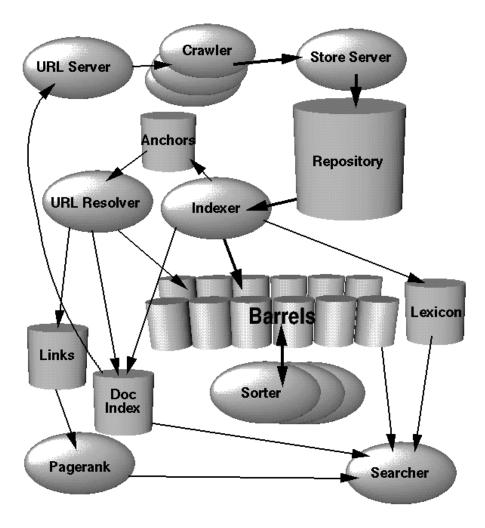
#### A Google Quiz: Market share?



(source: <u>Statista</u>)

#### A Google Quiz (answer in 1999!):





Brin and Page Original "Backrub" Schema

#### Old Search Engines: Archie and WebCrawler

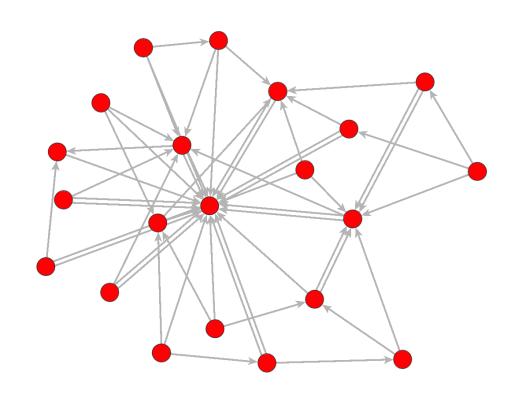


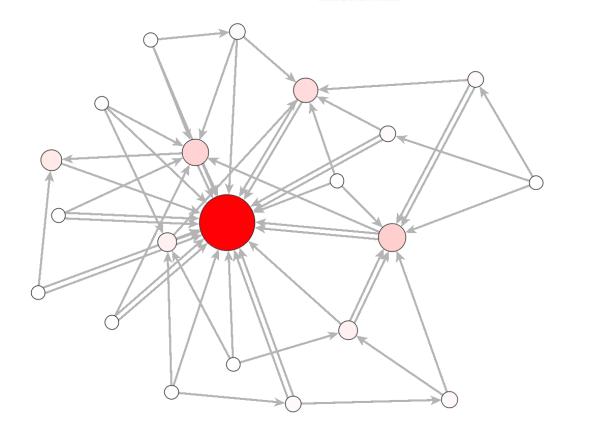
#### Backlinks and the PageRank Algorithm





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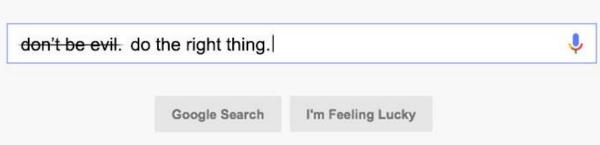
#### What else does Google look for?

- 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 Optimalization









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

#### 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