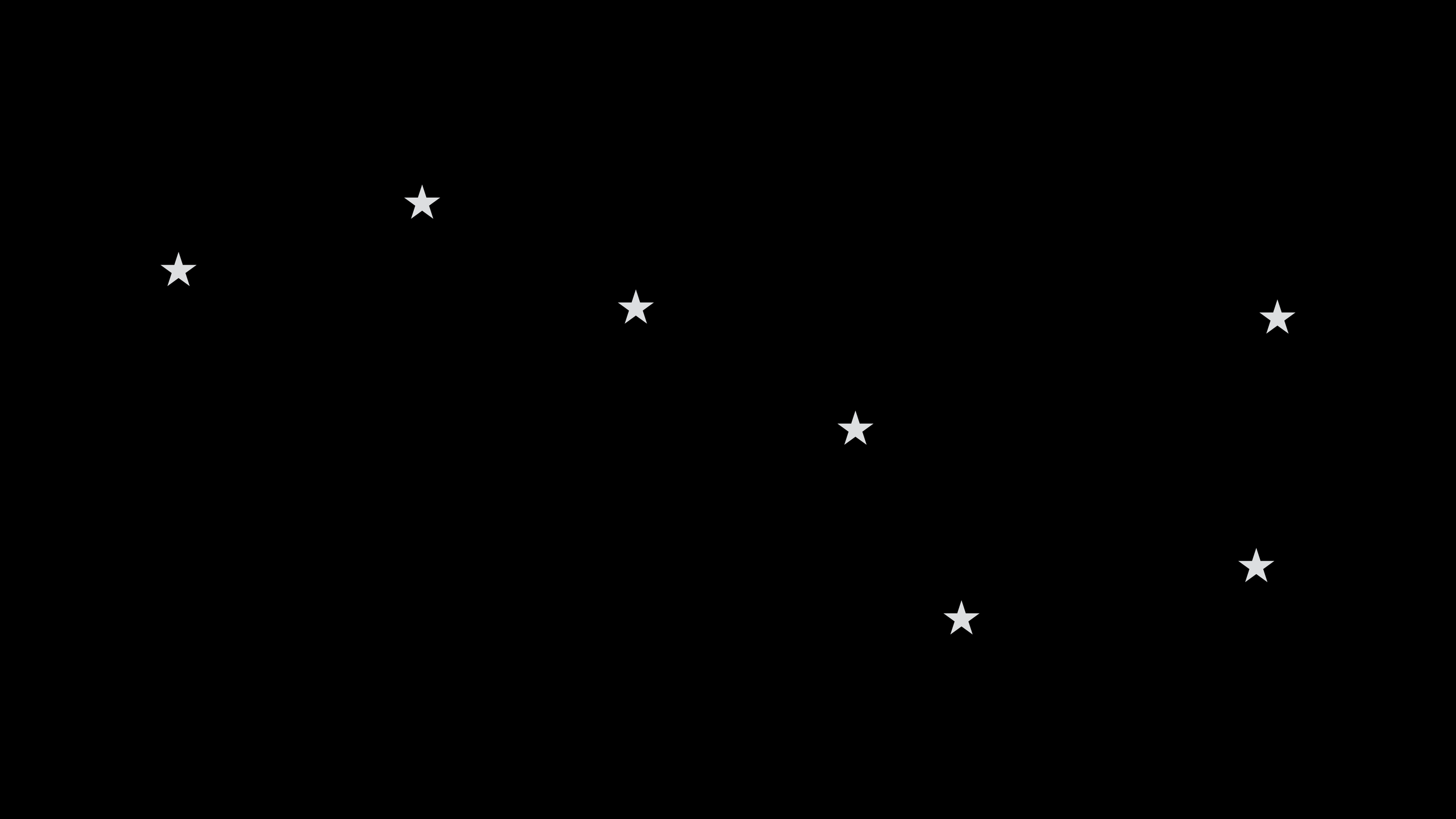
"The world exploded into a whirling network of kinships, where everything pointed to everything else, everything explained everything else."

—Umberto Eco
Foucault's Pendulum

apophenia



anchor

http://info.cern.ch/hypertext/WWW/TheProject.html

```
<A NAME=0
HREF="WhatIs.html">
hypermedia
</A>
```

http://info.cern.ch/hypertext/WWW/WhatIs.html

What is HyperText

Hypertext is text which is not constrained to be linear.

Hypertext is text which contains links to other texts. The term was coined by Ted Nelson around 1965 (see History).

HyperMedia is a term used for hypertext which is not constrained to be text: it can include graphics, video and sound , for example. Apparently Ted Nelson was the first to use this term too.

Hypertext and HyperMedia are concepts, not products.

See also:

- A list of terms used in hypertext litterature.
- Conferences
- Commercial (and academic) products
- A newsgroup on hypertext, "alt.hypertext" .
- WorldWideWeb is a project which uses hypertext concepts.
- Standards .

archive

Contents

Introduction 1
Scope 1
Epoch 2
The Role of Schemata 3
Pages, Books, and Libraries 4
The Relevance of Digital Computers 8

PART I

MAN'S INTERACTION WITH RECORDED KNOWLEDGE 11

1. The Size of the Body of Recorded Information 13
Estimates of the Size 13
Size of the Corpus versus Capacity of Computer Memories and Speed of Computer Processors 15

2. Aims, Requirements, Plans, and Criteria for Procognitive Systems 21
Acquisition of Knowledge 21
Organization of Knowledge 24
Use of Knowledge 26
Processing versus Control and Monitoring of Processing 28
Criteria for Procognitive Systems 32
Plan for a System to Mediate Interactions with the Fund of Knowledge 39
Steps toward Realization of Procognitive Systems 59

3. Information Storage, Organization, and Retrieval 70
Systems Based on Sets and Subsets 71
Space Analogues 77
Functions and Relations 78
Predicate Calculus 85
Higher-Order Languages 86

4. Man-Computer Interaction in Procognitive Systems 90
The Physical "Intermedium" 92
Man-Computer Interaction Languages 104
Adaptive Self-Organization in Man-Computer Interaction 126

PART II

EXPLORATIONS IN THE USE OF COMPUTERS IN LIBRARY AND PROCOGNITIVE FUNCTIONS 129

5. Syntactic Analysis of Natural Language by Computer 131

6. Research on Quantitative Aspects of Files and Text 142
On the Length of a Class of Serial Files 143
Entropy of Words in Printed English 146

80 symbols per line

40 lines per page

3200 symbols per page

410 pages per book

1312000 symbols per book

“The orthographic symbols are twenty-five in number.”

“In the vast library there are no two identical books.”

$$25^{1312000}$$

$$10^{1834097}$$

https://libraryofbabel.info/

Browse

Search

Random

About

Reference Hex

Image Archives

Forum

Theory

By this art you may contemplate the variation of the 23 letters

https://libraryofbabel.info/

Jonathan Basile
@JonotrainEB

Follow

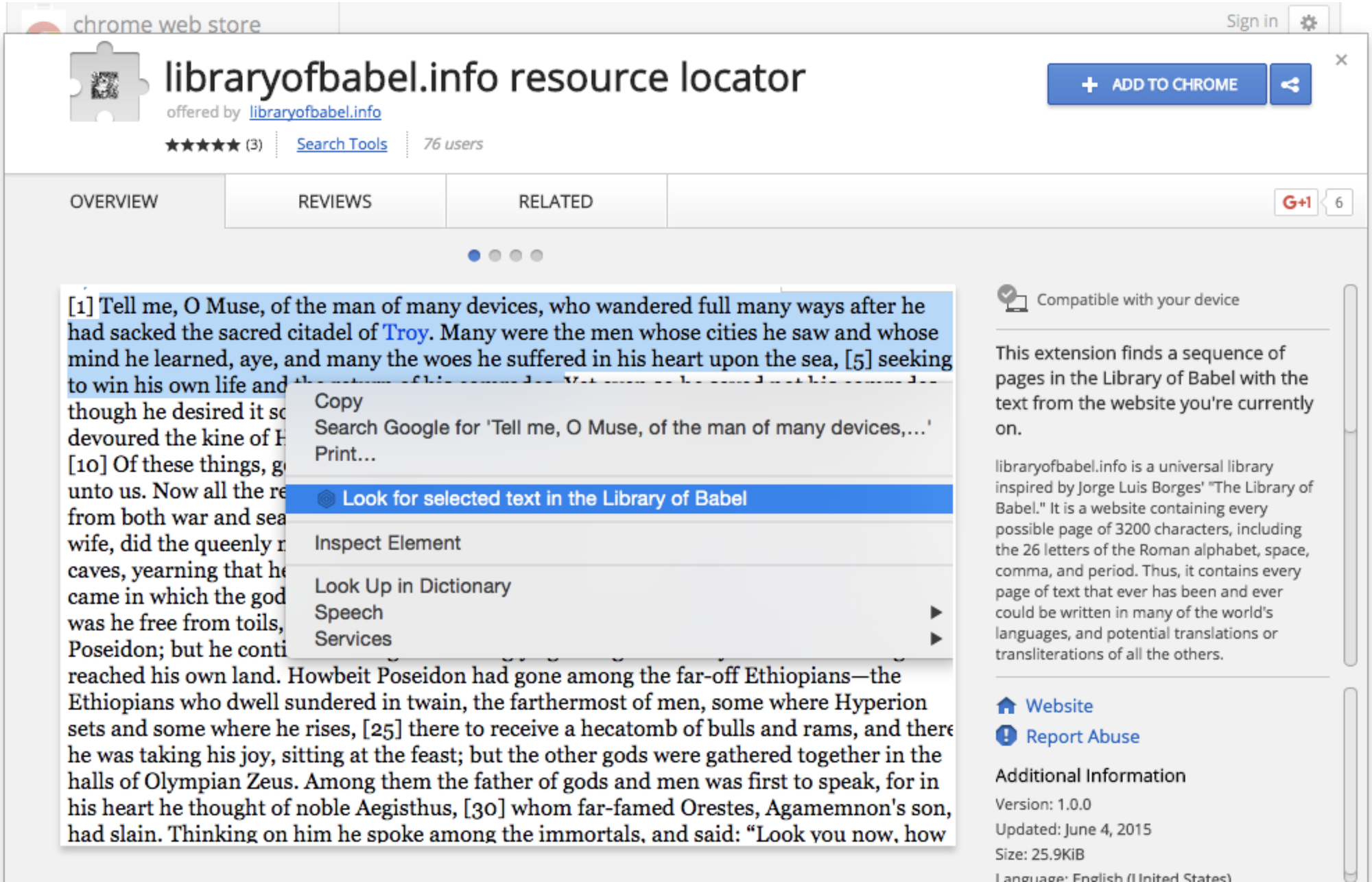
libraryofbabel.info is now a true universal library! All possible text, fully searchable. it even has this tweet.

Page 172 of 410

libraryofbabel.info is now a true universal library. all possible text, fully s
earchable. it even has this tweet.

sive honestest pones volutes perpetualities fishable engrenage roosers dreggish luminarisms dewclaws crucifixion autoschediasms coletits shtchis missileman endorsement scroungers riflemen regathers dirigismes trigs scalded greenskeeper symphonious stomia shola blastoderm corrodent antherozooids awkwarder brooks astacologist pyretotherapy conducts speedskating modging bands semibold foxie phosphatized insuppressibly eaved audiobooks sakkoi johnboat stolports bootikins trailblazings segregator syens foxskin skreens acquiree negroism whitesmith adnascent plowers flosculous acrimoniously medalplay genethliacal extincting stap unfair sectorised whitrets reinform kipped shatooshes italicizations nutbutters unliveliness belatedly embroils unloves toothworts figurate cancerphobias inconsistencies whitrets excretive curmudgeon unpractically hurdle yuky strippable ownerless hairdrier spadix butterdocks fremit lincomycin lakiest wipe underlit seal respiritualizes bluettes decandrian dildo knicker paduasoys fed jab jane twined bivium confected teethe dingbat regardlessnesses lorans infula democratize kamerading preadmitting pickaninnies buzzcut snappering caliginosities gooiest foziness mutualnesses shriek itinerantly wares stridulation noodged nonkosher maltreaters coscinomancy cantoning gazebo fairy renails coughs ignescent breaskits attractivenesses twiddlers towkays zingy chemoreceptions snobbery harbormaster preprocessor unpeerable bladdered empoverishes diphenyl naviculare anaphylactically overutilizing hormogonia sulfinyl the very words i am speaking now must be somewhere in the library osteosarcomata unartificially handsaw dithiol ayahuascas cimars siccities phrenologies juleps jab libellants incages undergrowths piccanin puissaunt imperforations pubs loppies neatness oasis chemisorbing temulences copperworms vol

https://libraryofbabel.info/



all

Wilkins

Linnaeus

Messier

Dewey

Otlet

Wilkins

“He divided the universe in forty categories or classes, these being further subdivided into differences, which was then subdivided into species. He assigned to each class a monosyllable of two letters; to each difference, a consonant; to each species, a vowel. For example: ***de****, which means an element;* ***deb****, the first of the elements, fire;* ***deba****, a part of the element fire, a flame.”*

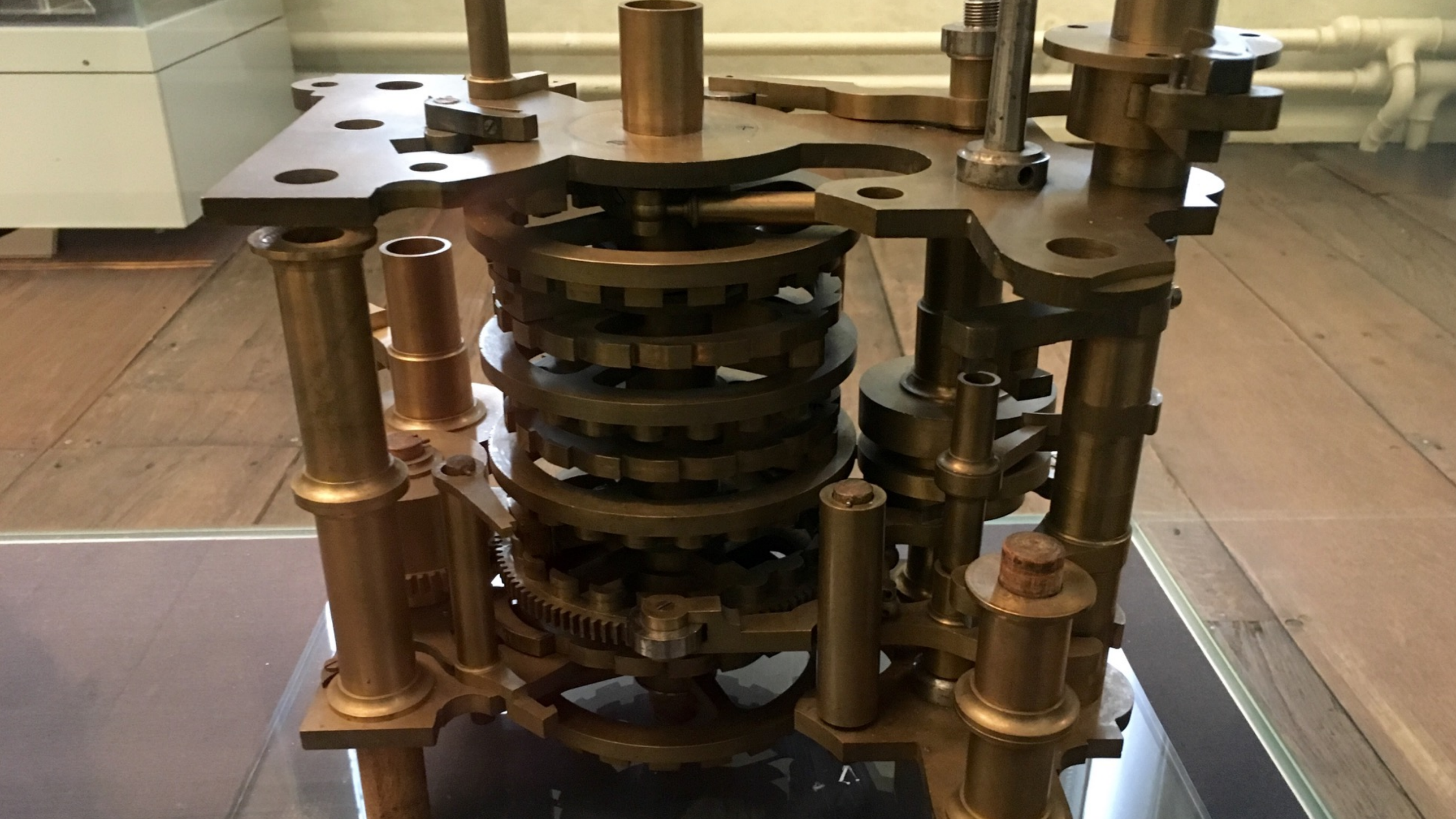
Wilkins

Leibniz

ada

"In enabling mechanism to combine together general symbols in successions of unlimited variety and extent, a uniting link is established between the operations of matter and the abstract mental processes of the most abstract branch of mathematical science."

—Ada Lovelace



alan

"...an infinite tape marked out into squares, on each of which a symbol could be printed."

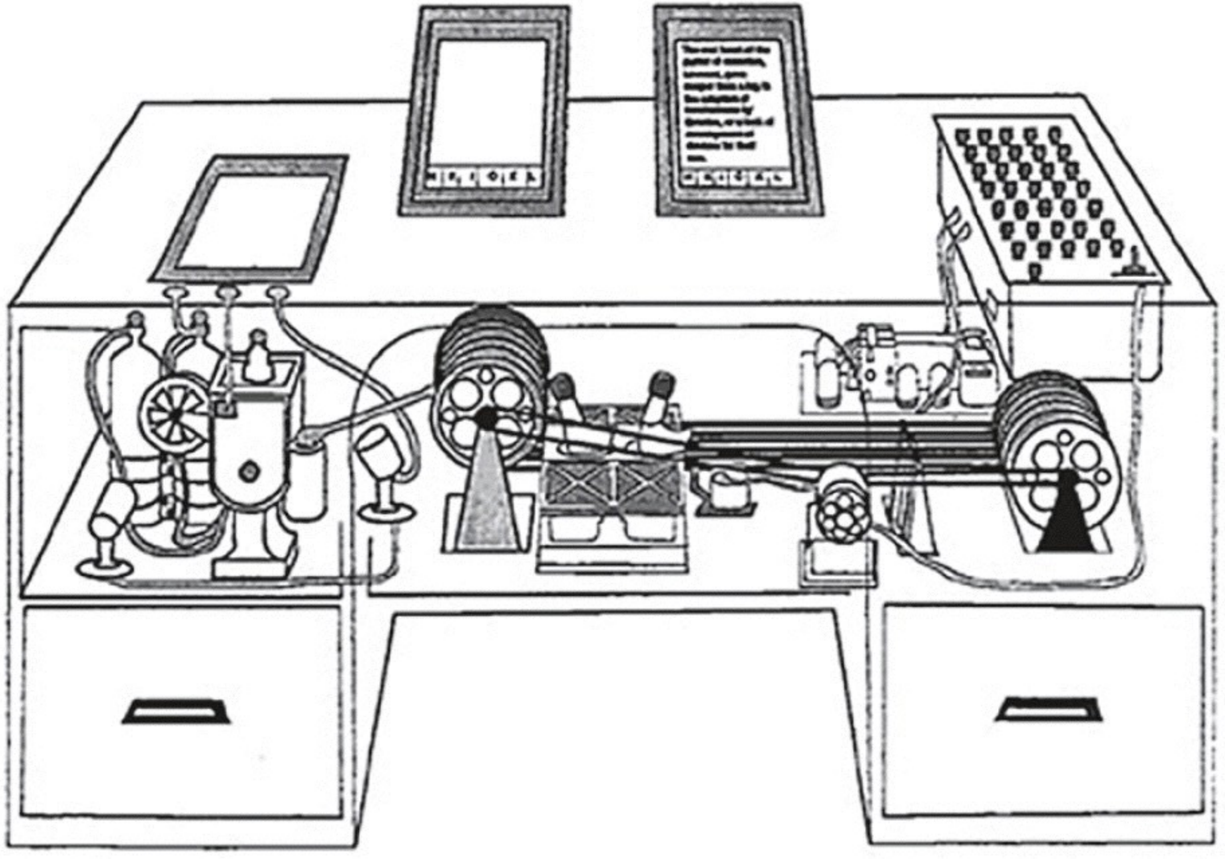
—Alan Turing
Intelligent Machinery

1

0

a-machine

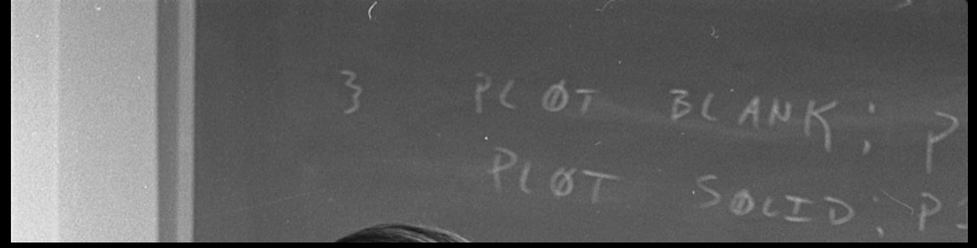
atlantic

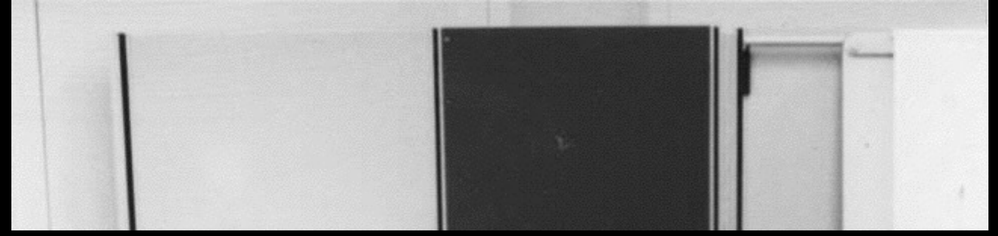


"Wholly new forms of encyclopedias will appear, ready made with a mesh of ***associative trails*** *running through them, ready to be dropped into the memex and there amplified."*

—Vannevar Bush
As We May Think

augmentation


3 PLOT BLANK; P
PLOT SOLID; P



arpa

Contents

Introduction 1
Scope 1
Epoch 2
The Role of Schemata 3
Pages, Books, and Libraries 4
The Relevance of Digital Computers 8

PART I

MAN'S INTERACTION WITH RECORDED KNOWLEDGE 11

1. The Size of the Body of Recorded Information 13
Estimates of the Size 13
Size of the Corpus versus Capacity of Computer Memories and Speed of Computer Processors 15

2. Aims, Requirements, Plans, and Criteria for Procognitive Systems 21
Acquisition of Knowledge 21
Organization of Knowledge 24
Use of Knowledge 26
Processing versus Control and Monitoring of Processing 28
Criteria for Procognitive Systems 32
Plan for a System to Mediate Interactions with the Fund of Knowledge 39
Steps toward Realization of Procognitive Systems 59

3. Information Storage, Organization, and Retrieval 70
Systems Based on Sets and Subsets 71
Space Analogues 77
Functions and Relations 78
Predicate Calculus 85
Higher-Order Languages 86

4. Man-Computer Interaction in Procognitive Systems 90
The Physical "Intermedium" 92
Man-Computer Interaction Languages 104
Adaptive Self-Organization in Man-Computer Interaction 126

PART II

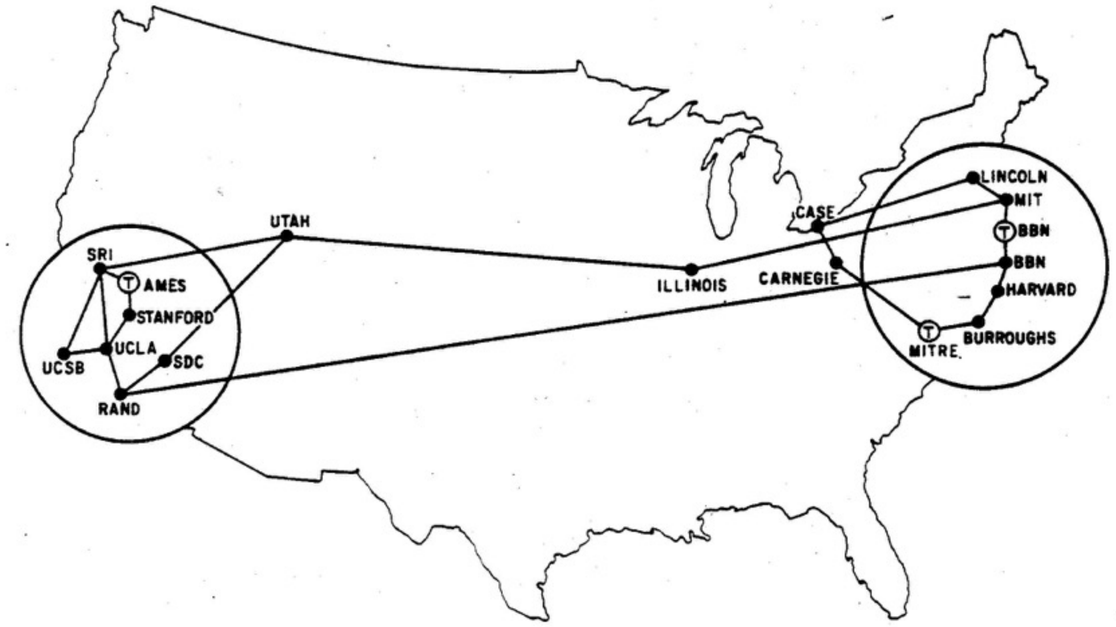
EXPLORATIONS IN THE USE OF COMPUTERS IN LIBRARY AND PROCOGNITIVE FUNCTIONS 129

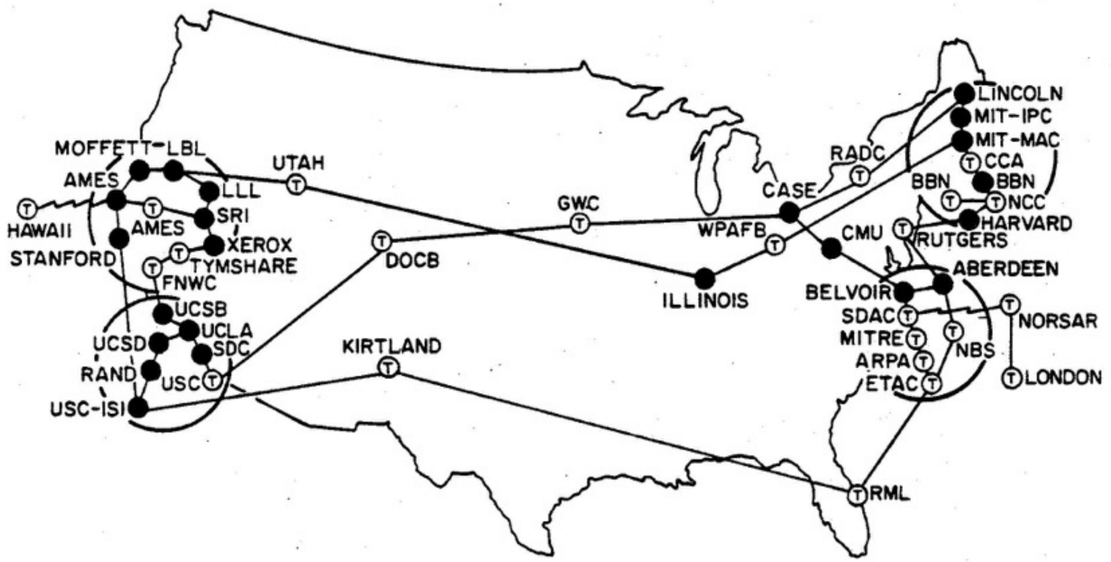
5. Syntactic Analysis of Natural Language by Computer 131

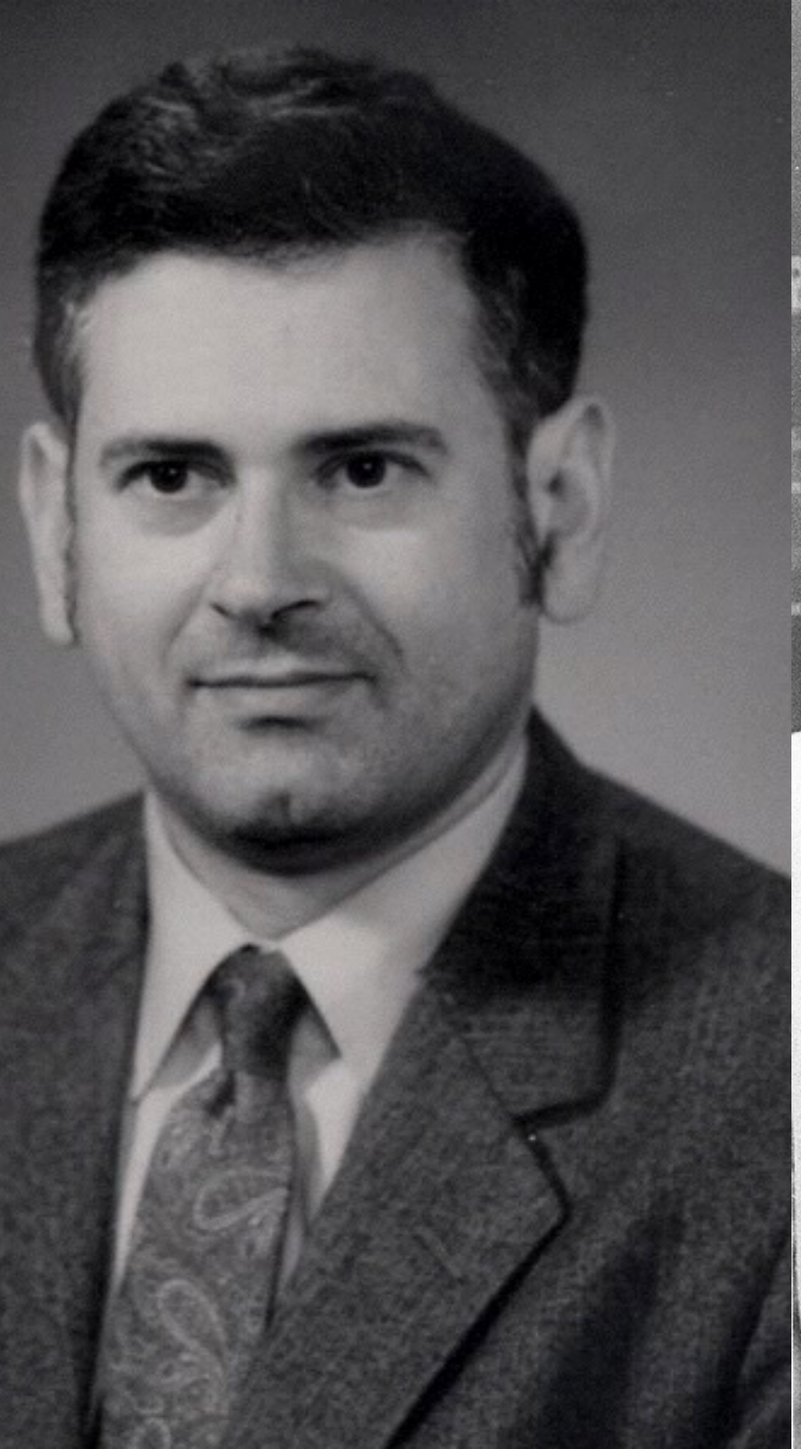
6. Research on Quantitative Aspects of Files and Text 142
On the Length of a Class of Serial Files 143
Entropy of Words in Printed English 146

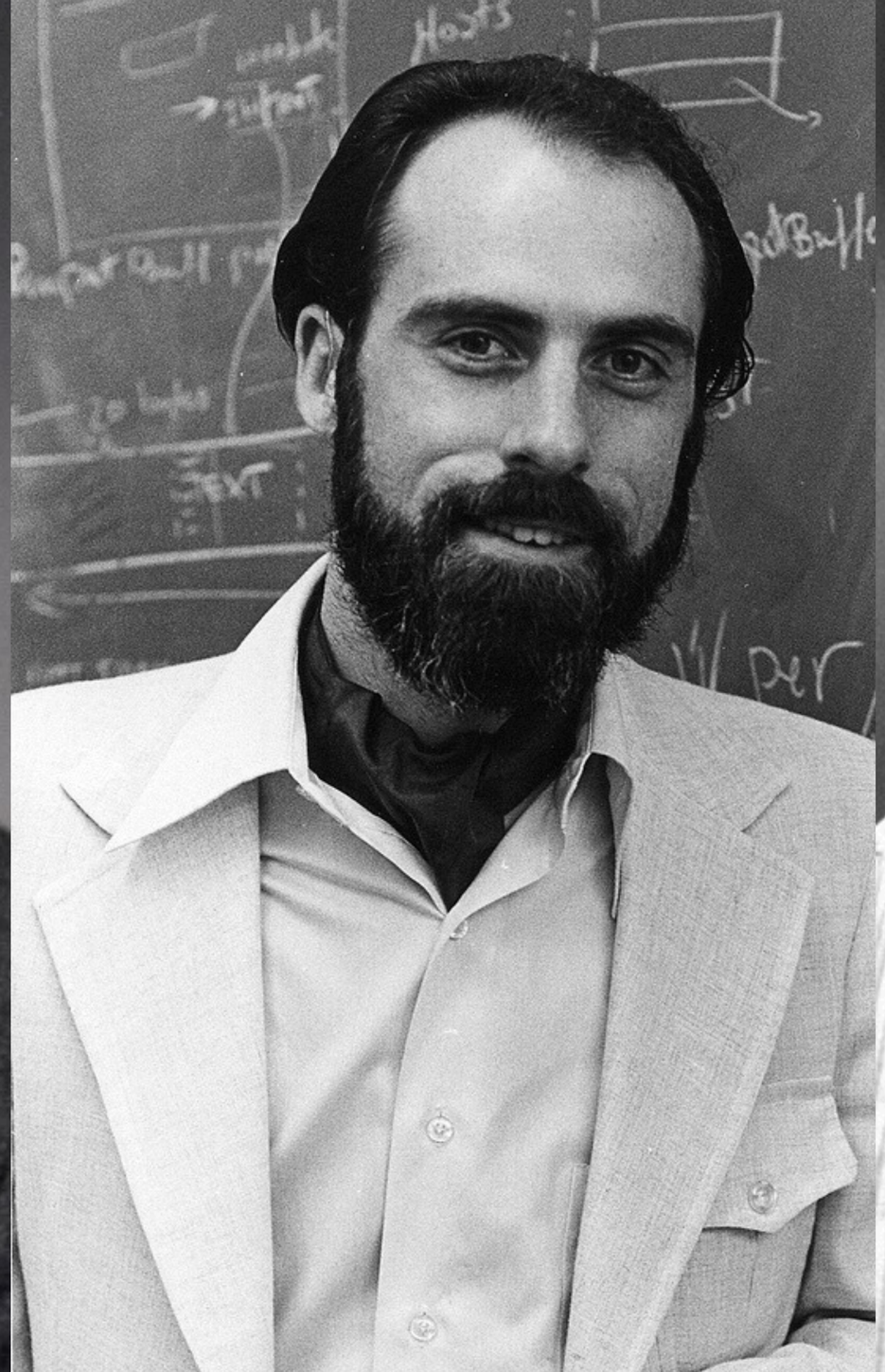
The ARPANET in December 1969

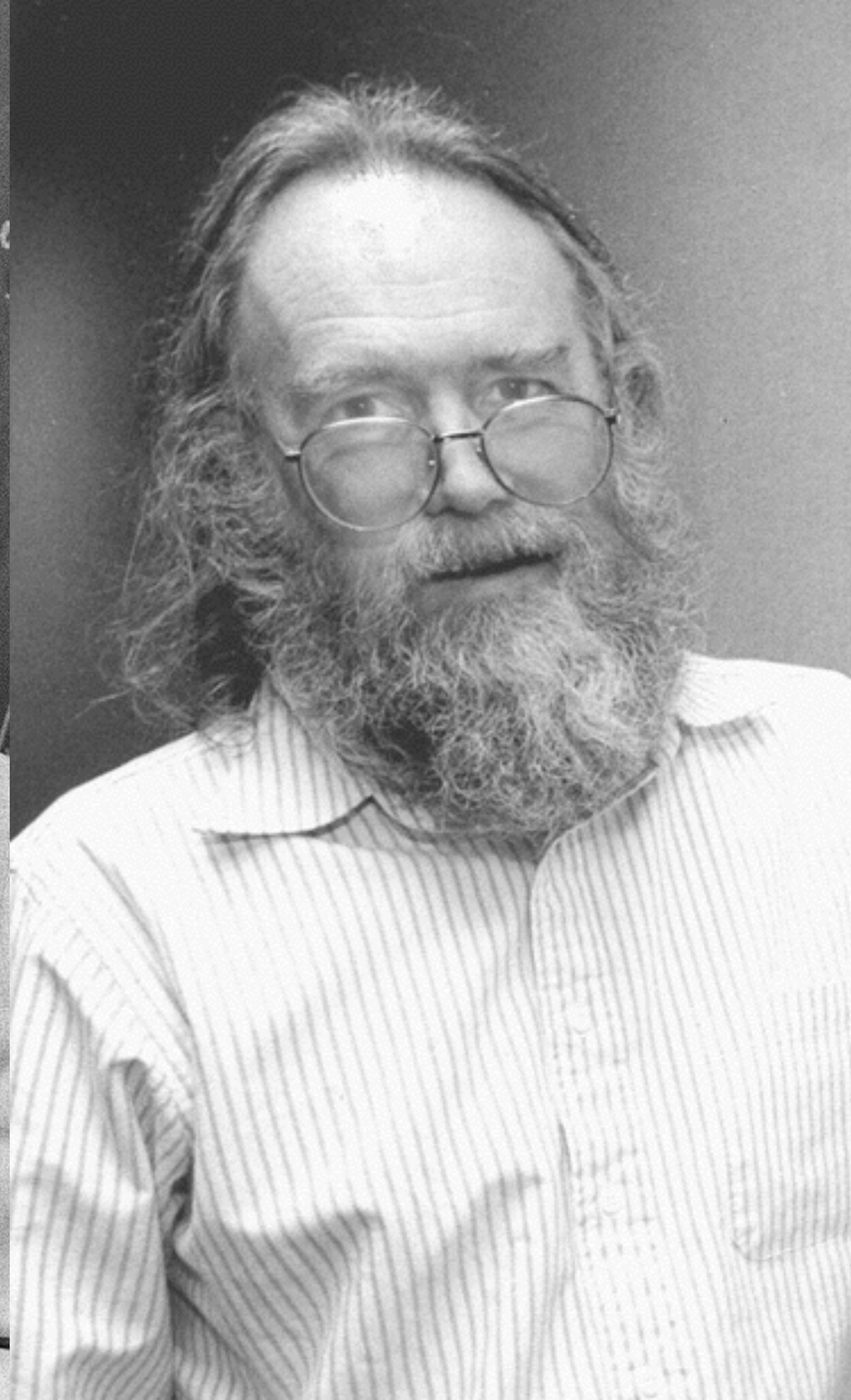
lo


SRI
AMES
STANFORD
UCLA
SDC
UCSB
RAND
UTAH
ILLINOIS
CASE
CARNEGIE
LINCOLN
MIT
BBN
BBN
HARVARD
BURROUGHS
MITRE


MOFFETT-LBL
AMES
LLL
SRI
AMES
XEROX
TYMSHARE
FNWC
STANFORD
HAWAII
UCSB
UCLA
SDC
UCSD
RAND
USC
USC-ISI
UTAH
GWC
DOCB
KIRTLAND
ILLINOIS
WPAFB
CASE
RADC
LINCOLN
MIT-IPC
MIT-MAC
CCA
BBN
BBN
NCC
HARVARD
RUTGERS
CMU
ABERDEEN
BELVOIR
SDAC
MITRE
ARPA
ETAC
NBS
NORSAR
LONDON
RML







TCP/IP

HTTP

email

ftp

telnet

gopher

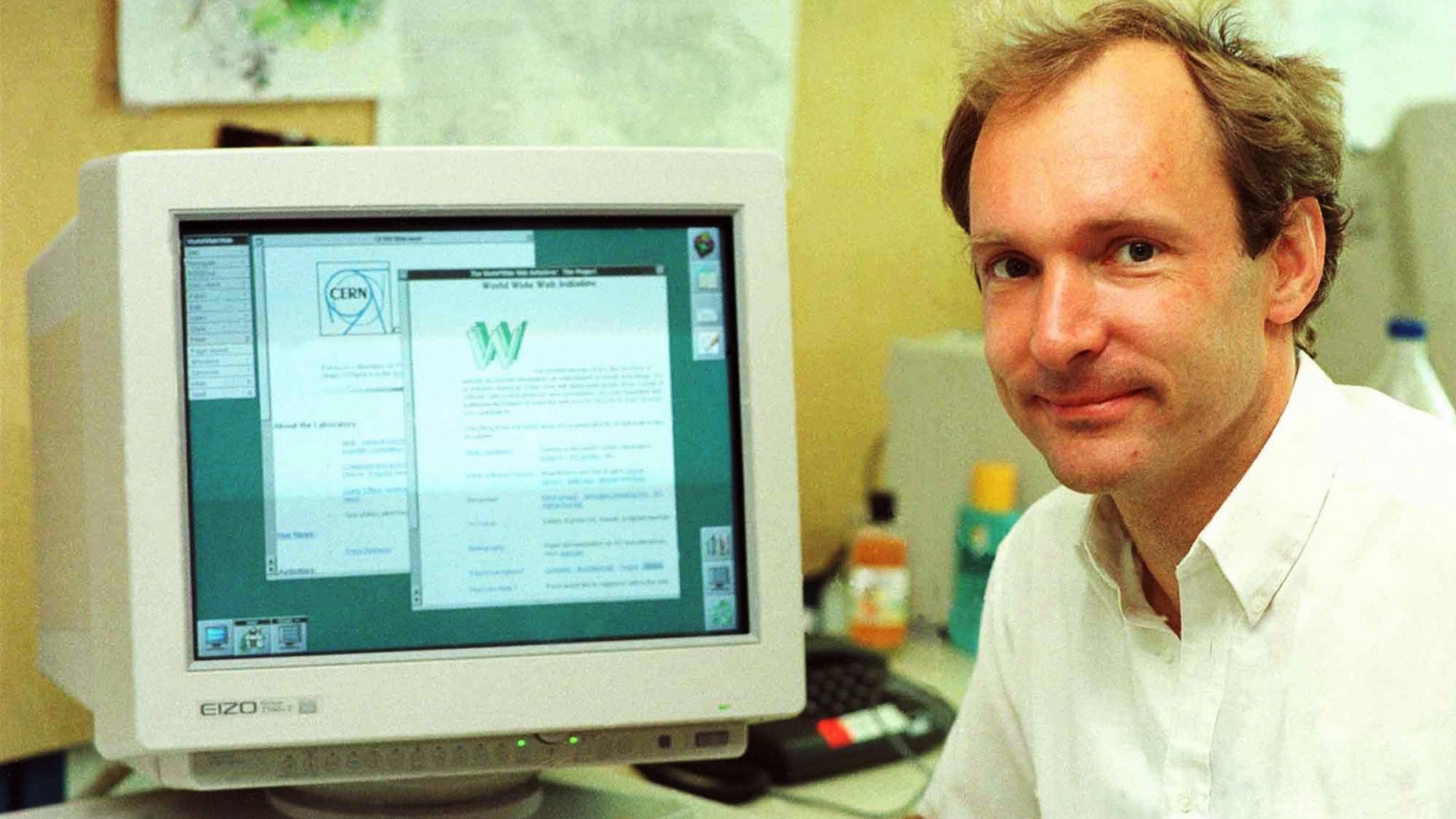
TCP/IP

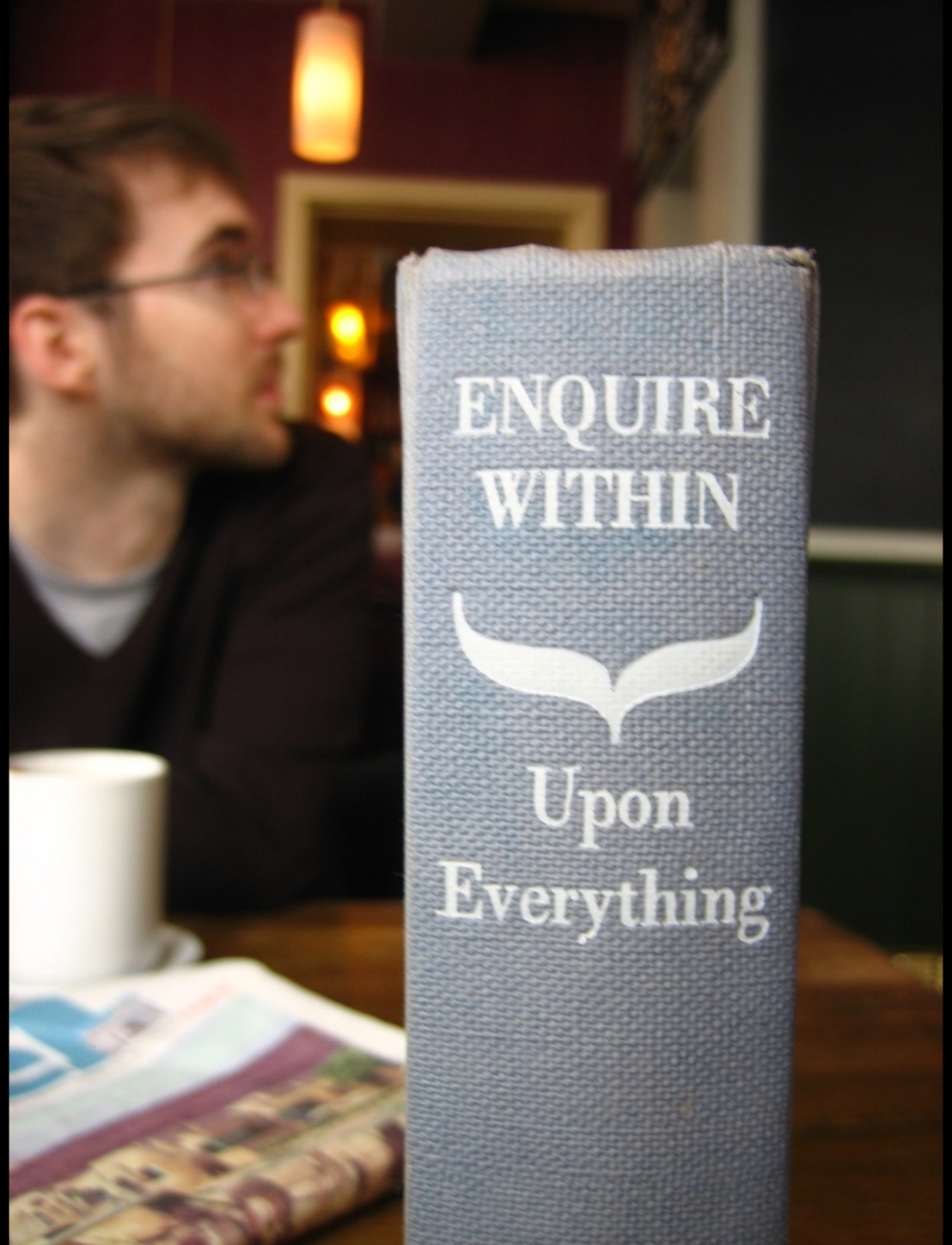
HTTP

URLs

HTML

WWW


CERN
World Wide Web initiative
EIZO


ENQUIRE
WITHIN
Upon
Everything

CERN DD/OC

Tim Berners-Lee, CERN/DD

Information Management: A Proposal

Abstract

This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a solution based on a distributed hypertext sytstem.

Keywords: Hypertext, Computer conferencing, Document retrieval, Information management, Project

“...a solution based on a distributed hypertext system”

—Tim Berners-Lee
Information Management: A Proposal

ENQUIRE

Hypercard

Memex

NLS

Xanadu

Mesh

The Information Mine

World
Wide
Web

WHERE THE
WEB
WAS BORN
In the offices of this corridor, all the fundamental technologies of the Wor
Wide Web were developed.
Started in 1990 from a proposal made by Tim Berners-Lee in 1989, the effo
was first divided between an office in building 31 of the Computing ar
Networking Division (CN) and one in building 2 of the Electronics ar
Computing for Physics Division (ECP).
In 1991 the team came together in these offices, then belonging to EC
It was composed of two CERN staff members, Tim Berners-Lee (GB) ar
Robert Cailliau (BE), aided by a number of Fellows, Technical Student
a Coopérant and Summer Students.
At the end of 1994 Tim Berners-Lee left CERN to direct the WW
Consortium (W3C), a world-wide organization devoted to leading th
Web to its full potential. The W3C was founded with the help of CERN
the European Commission, the Massachusetts Institute of Technolog
(MIT), the Institut National pour la Recherche en Informatique et e
Automatique (INRIA), and the Advanced Research Projects Agency (ARPA).
In 1995 Tim Berners-Lee and Robert Cailliau received the ACM Software Syster
Award for the World Wide Web. In 2004, Tim Berners-Lee was awarded the firs
Millenium Technology Prize by the Finnish Technology Award Fouridation.
The CERN Library
June 2004

HTTP

URLs

HTML

WWW

HTML

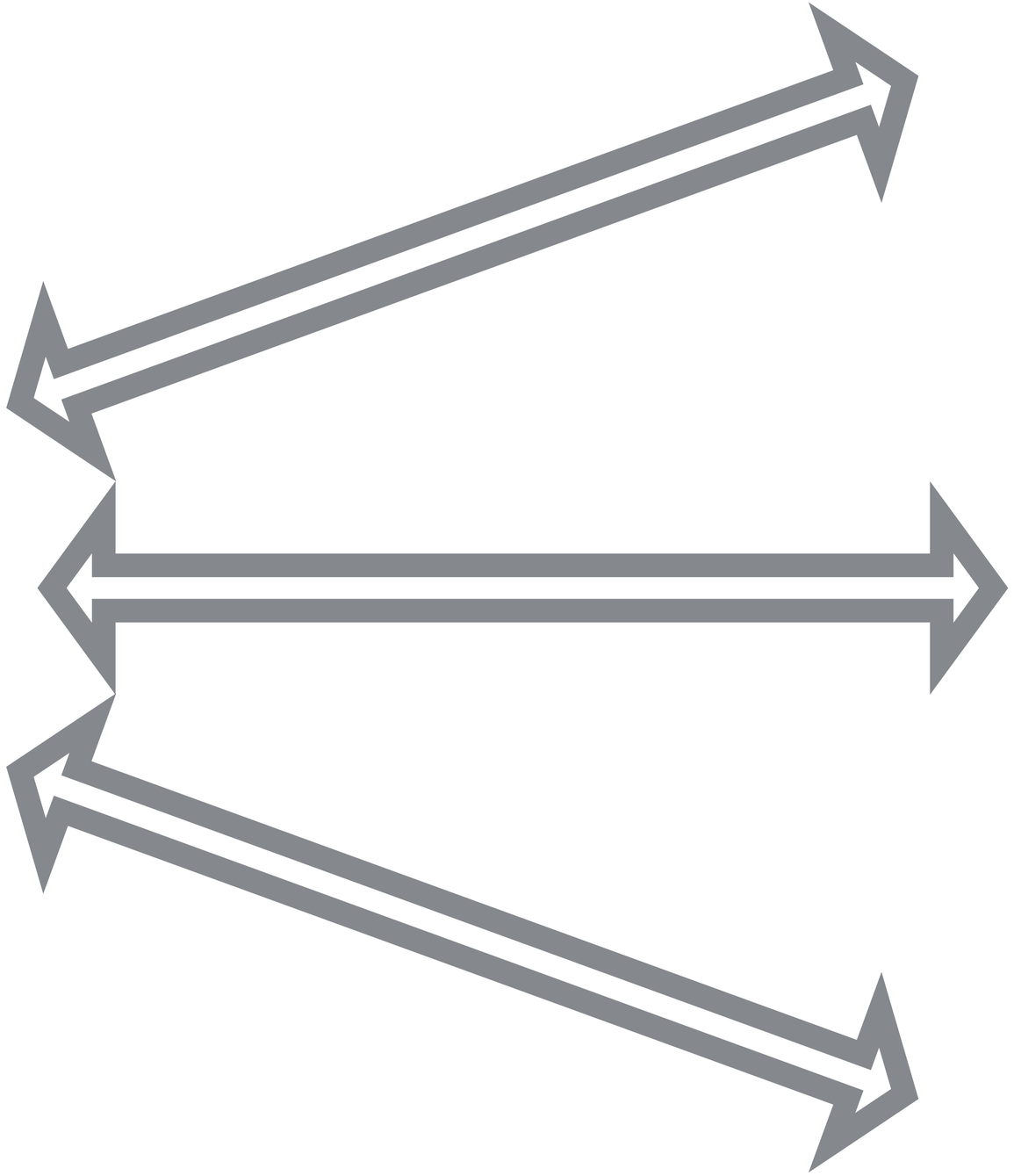
HTML Tags

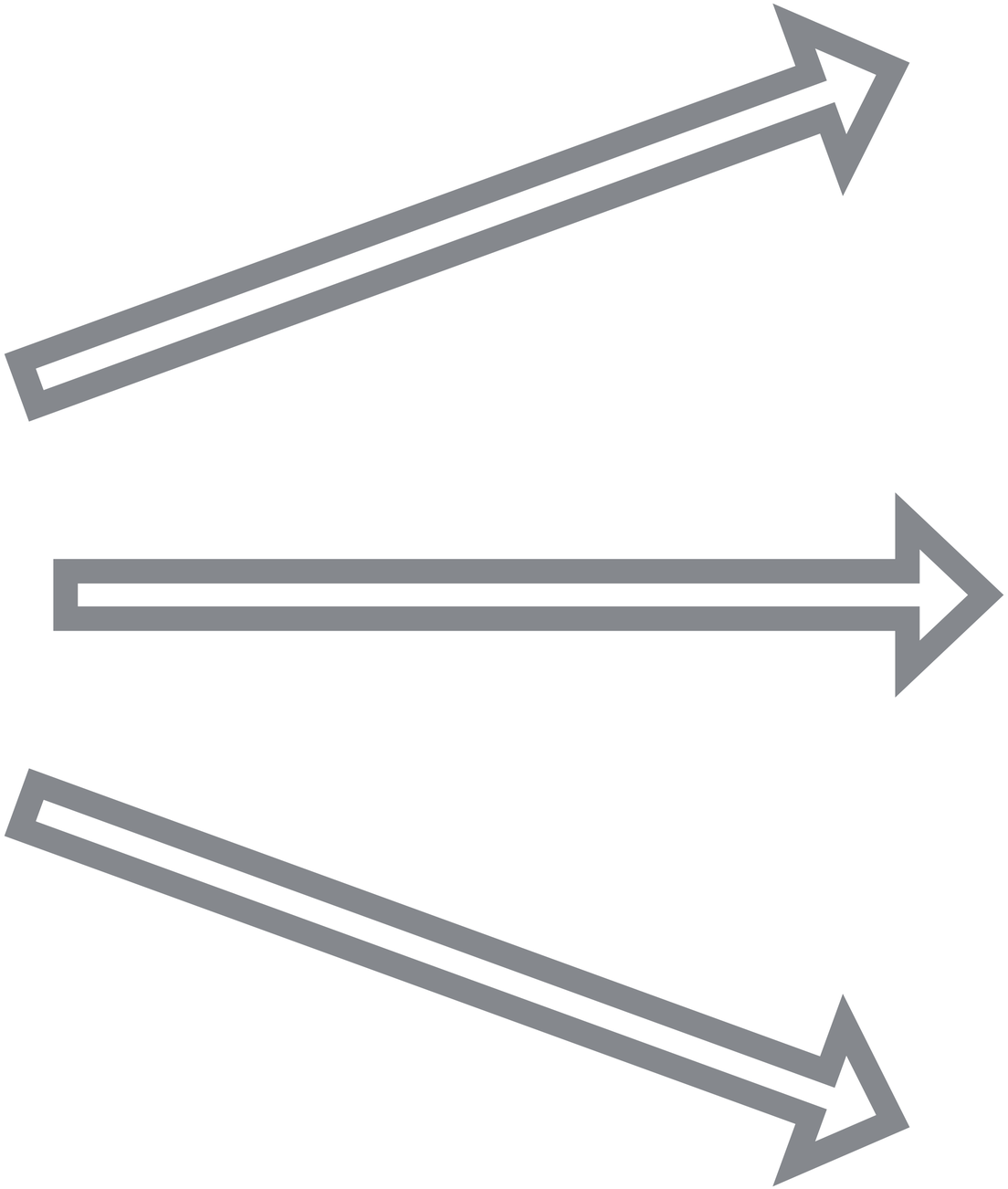
21 elements

<A>

"Today's one-way hypertext—the World Wide Web—is far too shallow. The Xanadu project foresaw world-wide hypertext decades ago, and endeavored to create a much deeper system. The Web, however, took over with a very shallow structure."

—Ted Nelson
The Xanadu Model





<a href="..."
rel="...">

<a href="..."
rel="prev">

<a href="..."
rel="next">

<a href="..."
rel="author">

<a href="..."
rev="...">

<a href="..."
rev="prev"
rel="next">

vote-links

<a href="..."
rev="vote-for">

```
<a href="..."
rev="vote-against">
```

XHTML Friends Network

http://gmpg.org/xfn/

```
<a href="..."
rel="friend">
```

http://gmpg.org/xfn/

```
<a href="..."
rel="colleague">
```

http://gmpg.org/xfn/

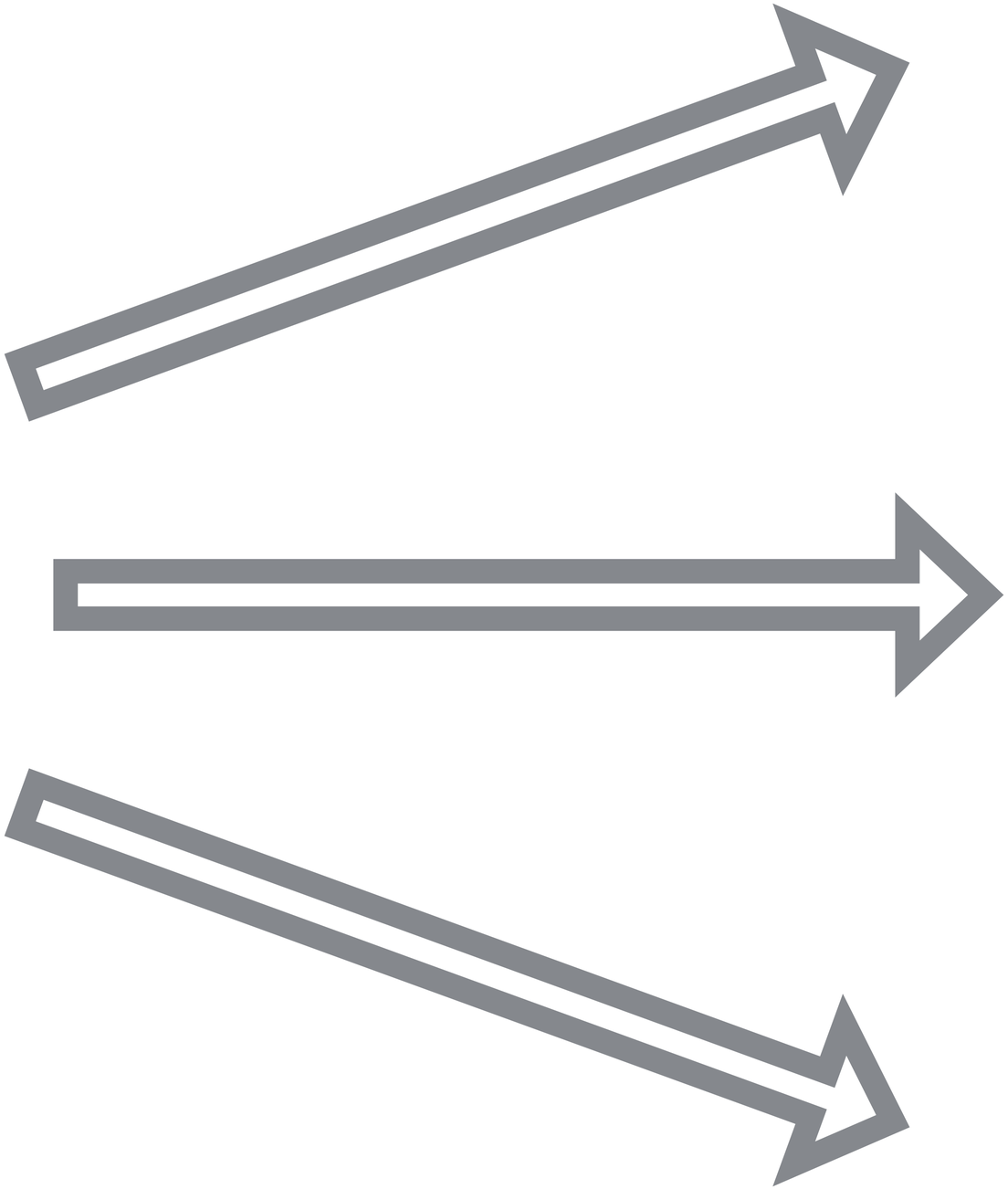
```
<a href="..."
rel="friend colleague">
```

http://gmpg.org/xfn/

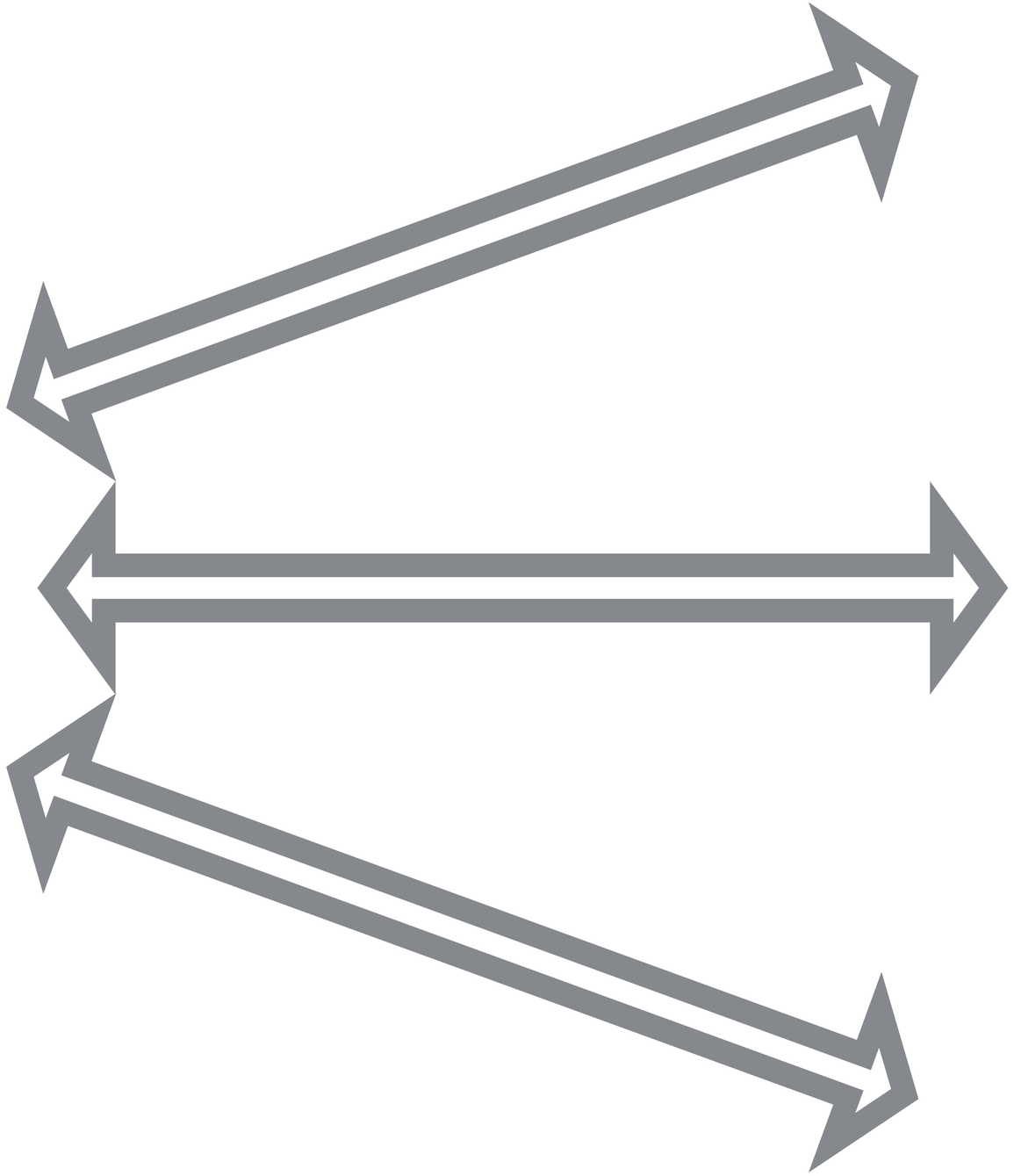
<a href="..."
rel="me">

adactio

```
<a rel="me" href=
"https://twitter.com/adactio">
<a rel="me" href=
"https://github.com/adactio">
<a rel="me" href=
"https://flickr.com/adactio">
```



<a rel="me nofollow" href=
"https://adactio.com">



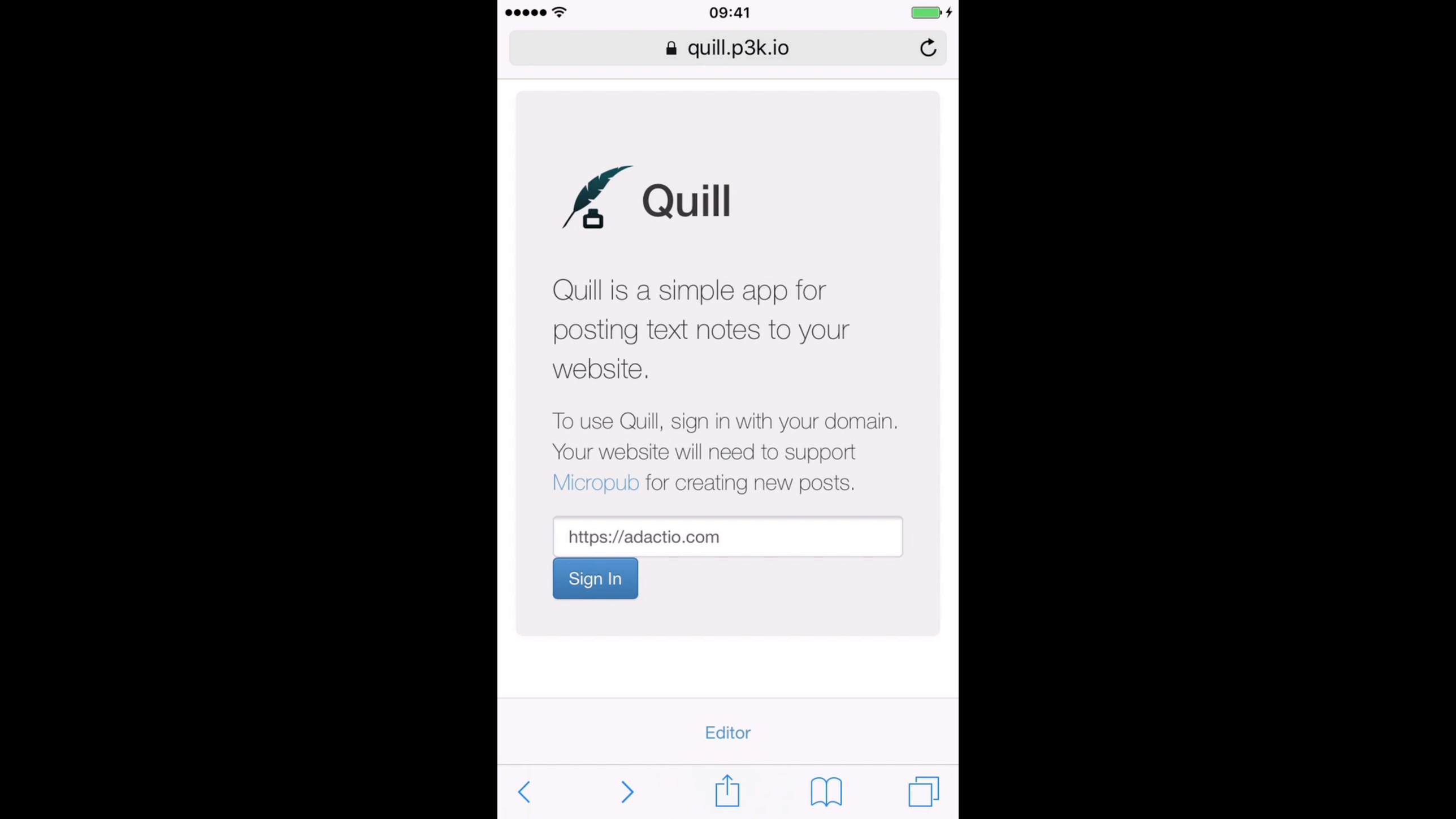
authentication

09:41
indieauth.com
IndieAuth.com

IndieAuth: Sign in with your domain name

What is IndieAuth?

IndieAuth is a way to **use your own domain name** to sign in to websites. It works by linking your website to one or more authentication providers such as Twitter or Google, then entering your domain name in the login


09:41
quill.p3k.io
Quill
Quill is a simple app for posting text notes to your website.
To use Quill, sign in with your domain. Your website will need to support Micropub for creating new posts.
https://adactio.com
Sign In
Editor

https://indiewebcamp.com

https://brid.gy/

Got a web site?
Want replies and likes on your site?
Want to post and tweet from your site?
Bridgy is for you. More...

Get started:

facebook twitter Google Instagram flickr

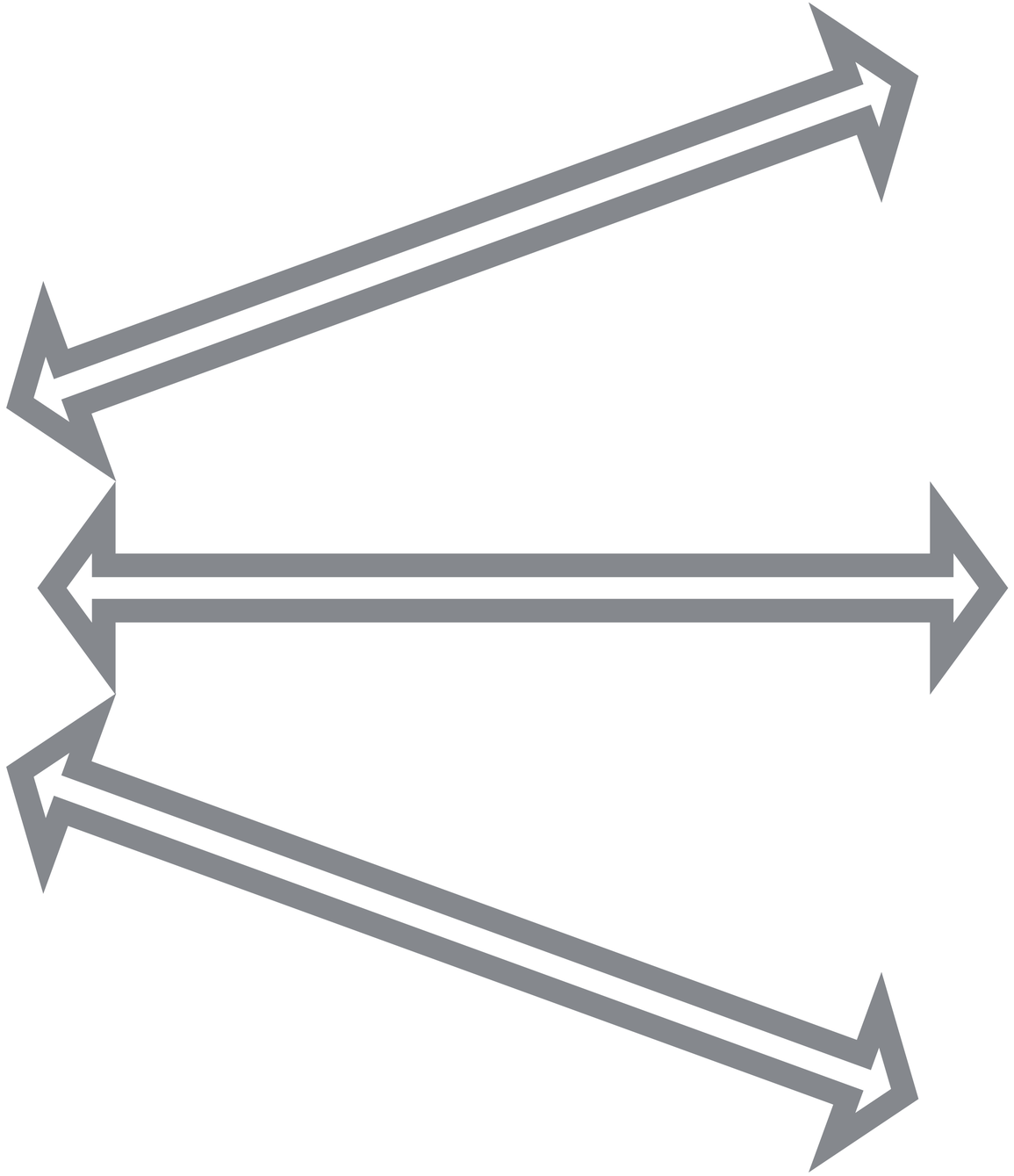
Using one of these? Click to add webmentions:

tumblr + WordPress.com Blogger

Already signed up? Find your user page here.

3,106 users, 4,290,530 responses handled, 1,312,140 links analyzed, 459,810 webmentions sent, 13,104 posts published, 27,340 blog posts processed and counting...

About / FAQ | Bugs | Source | #IndieWeb



<a rel="me" href=
"https://twitter.com/adactio">

TO THE GARDEN

The Garden of Forking Paths

"The world exploded into a whirling network of kinships, where everything pointed to everything else, everything explained everything else."

—Umberto Eco
Foucault's Pendulum