Internet

1950s

Cold War

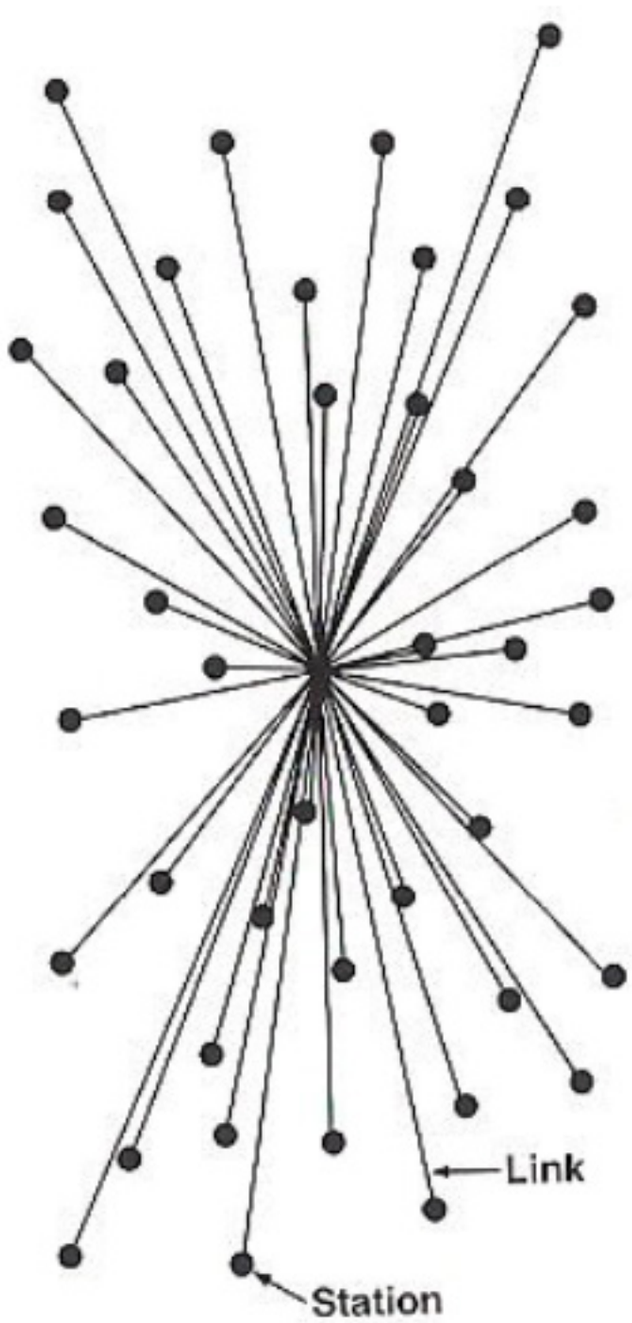
2001

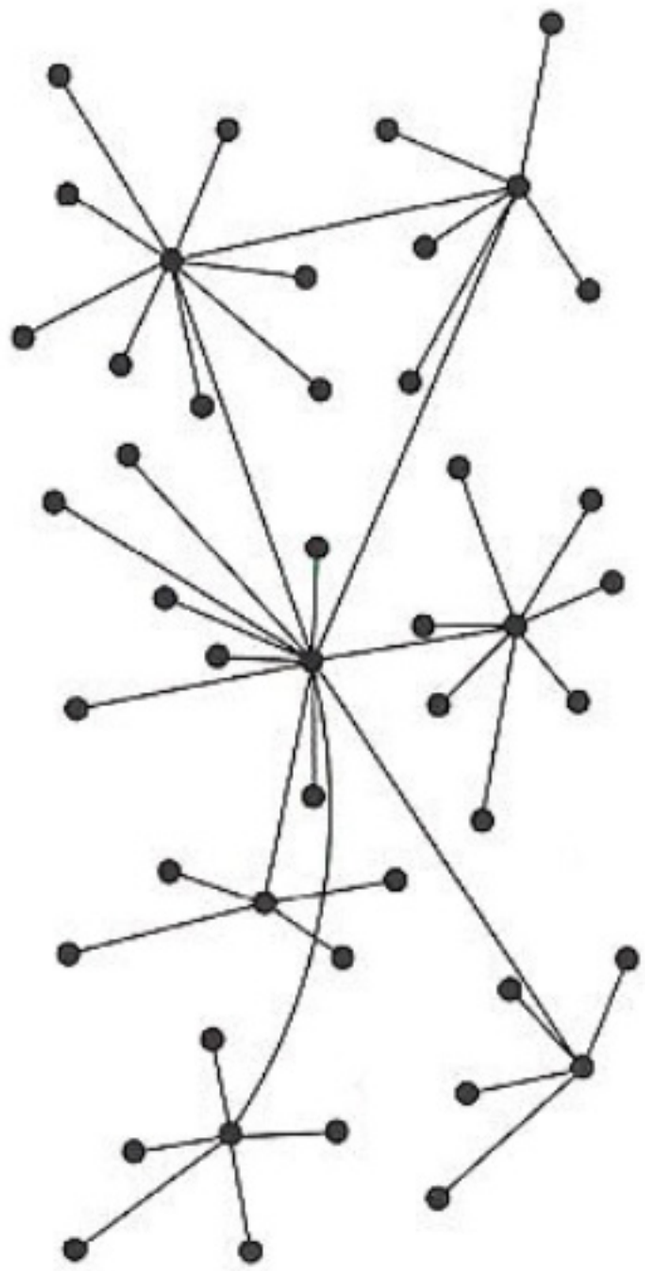
“While many have debated the origins of the Internet, it’s clear that in many ways it was built to withstand nuclear attack. The Net was designed as a solution to the vulnerability of the military’s centralized system of command and control during the late 1950’s and beyond. For, the argument goes, if there are no central command centers, then there can be no central targets and overall damage is reduced.”

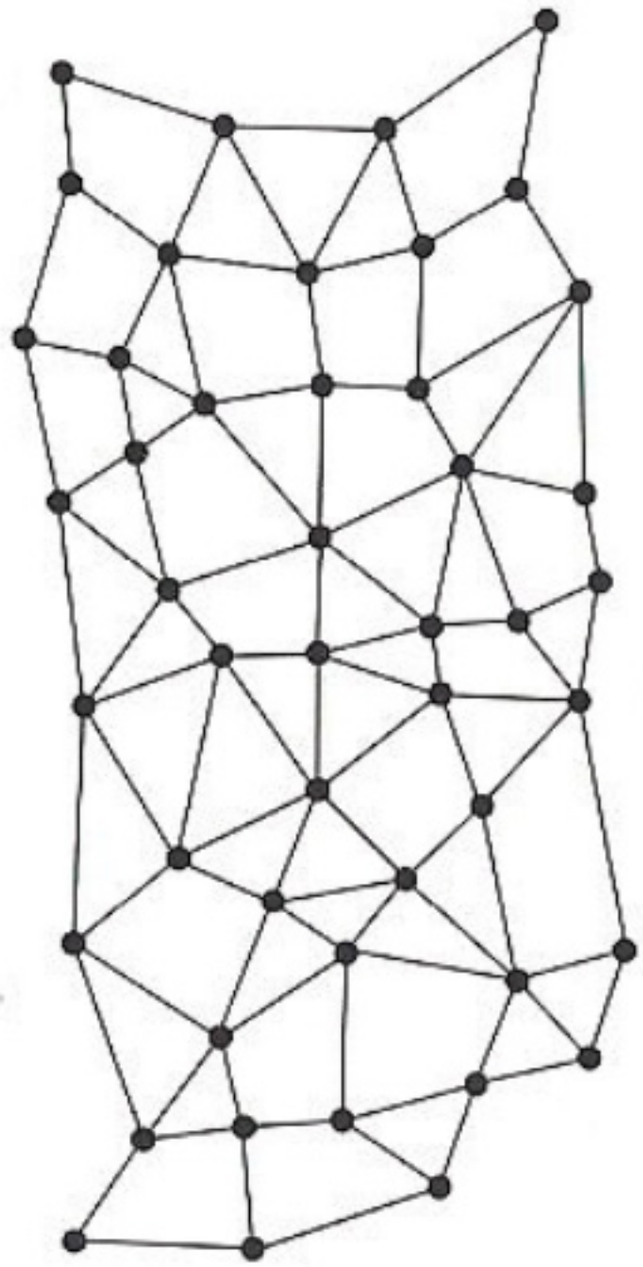
Alexander Galloway, *Protocol*

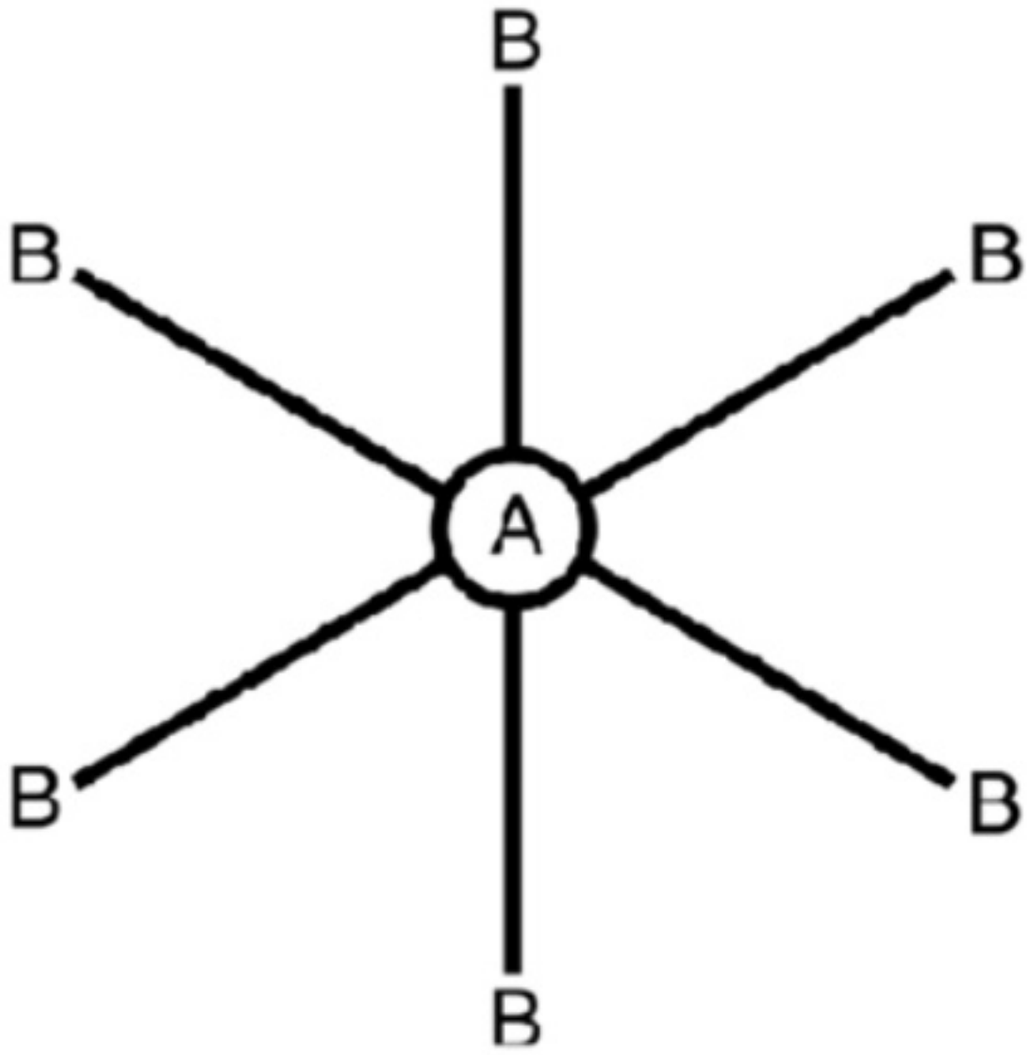
mid-1960s

Defense Advanced Research Projects Agency


Link
Station

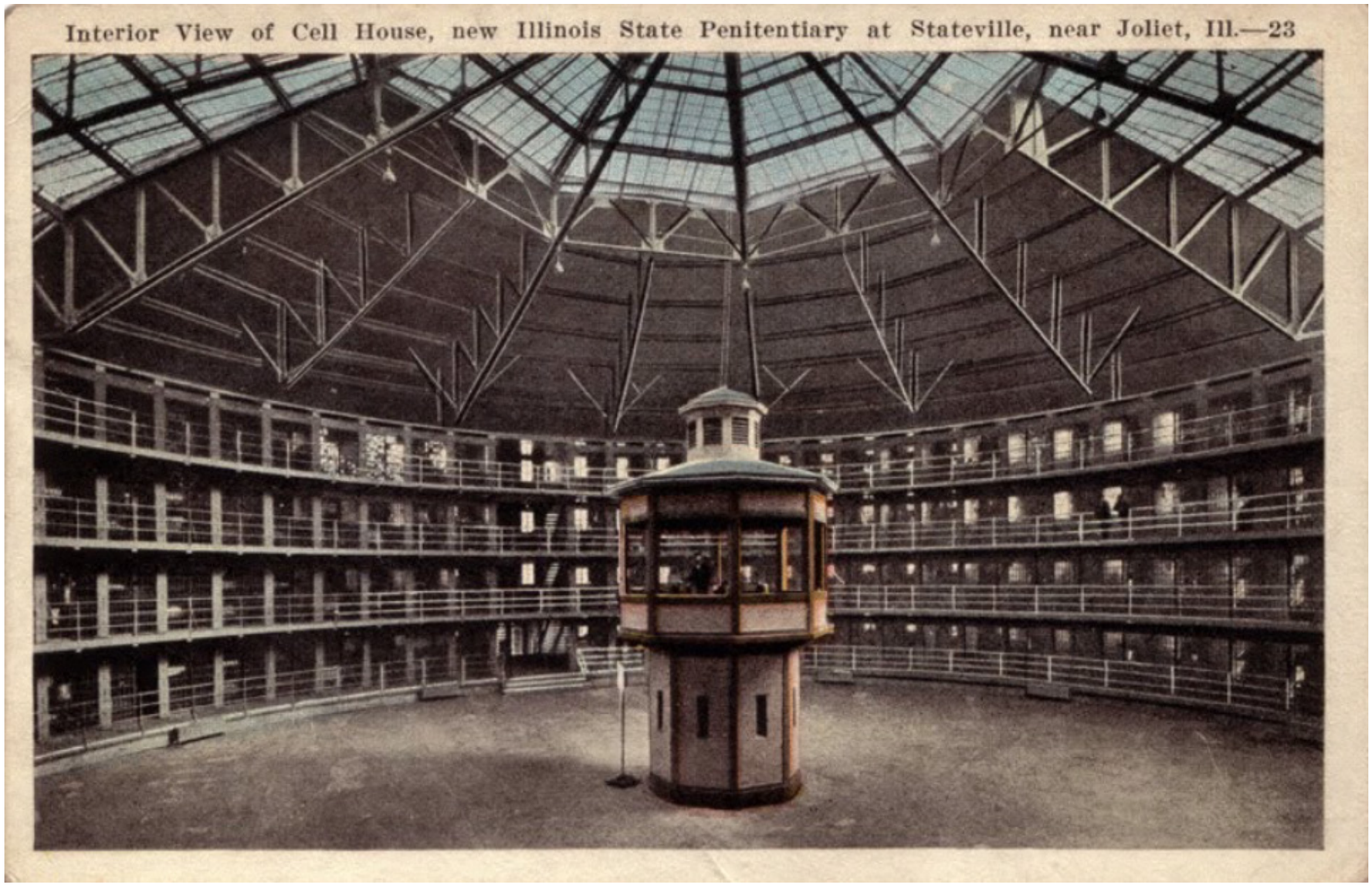




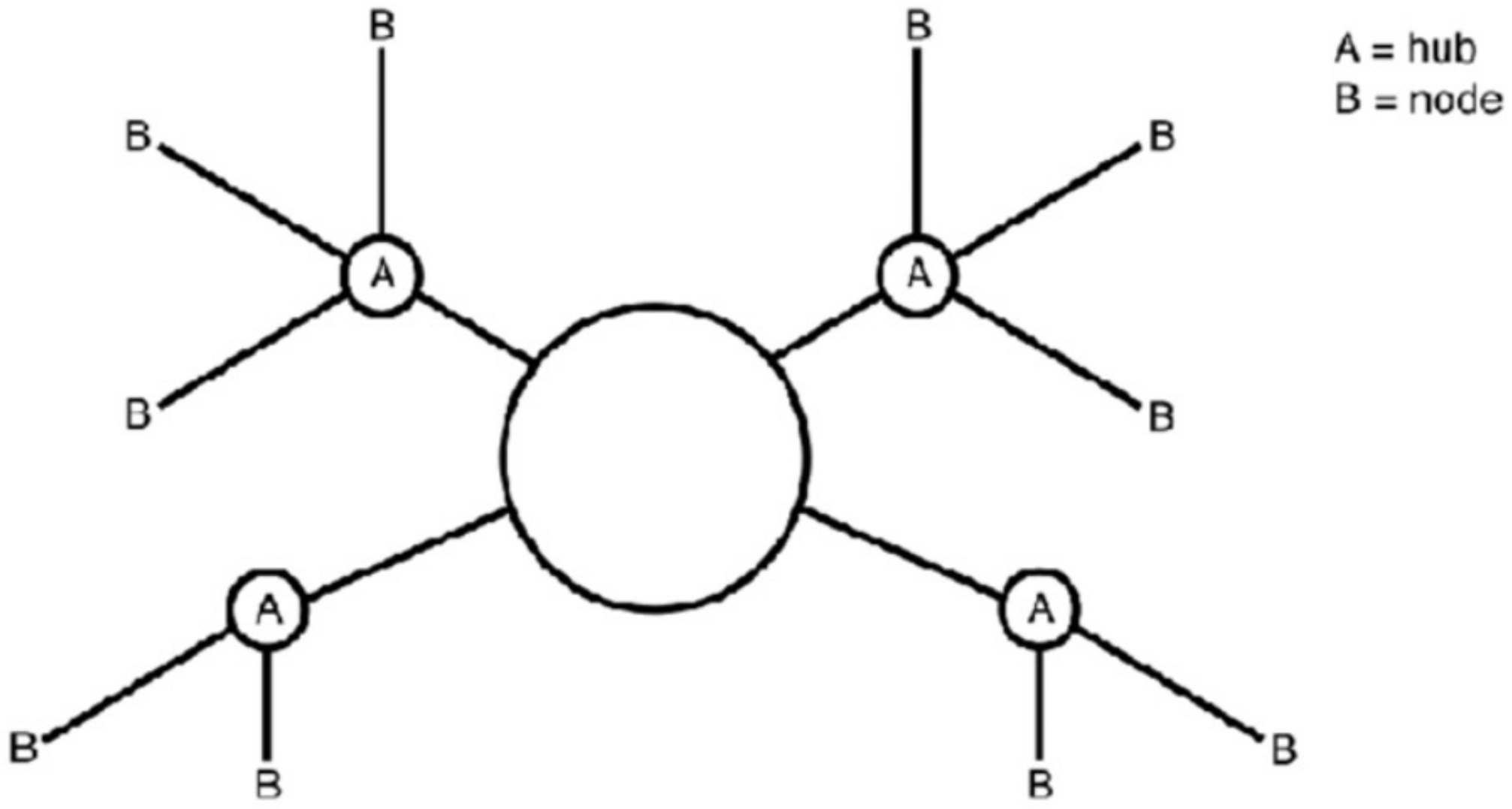


A = hub
B = node

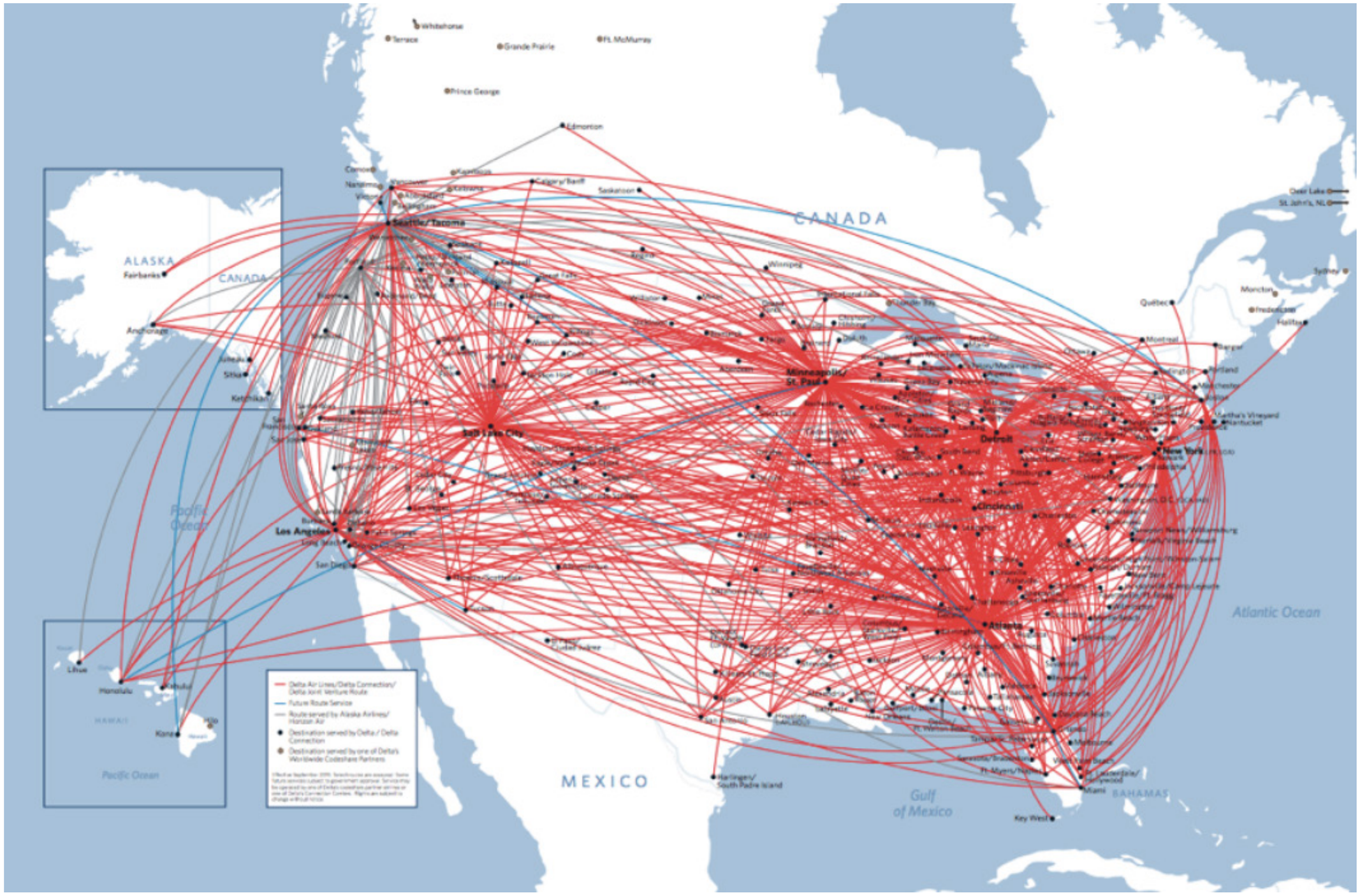
Centralized Network


Interior View of Cell House, new Illinois State Penitentiary at Stateville, near Joliet, Ill.—23

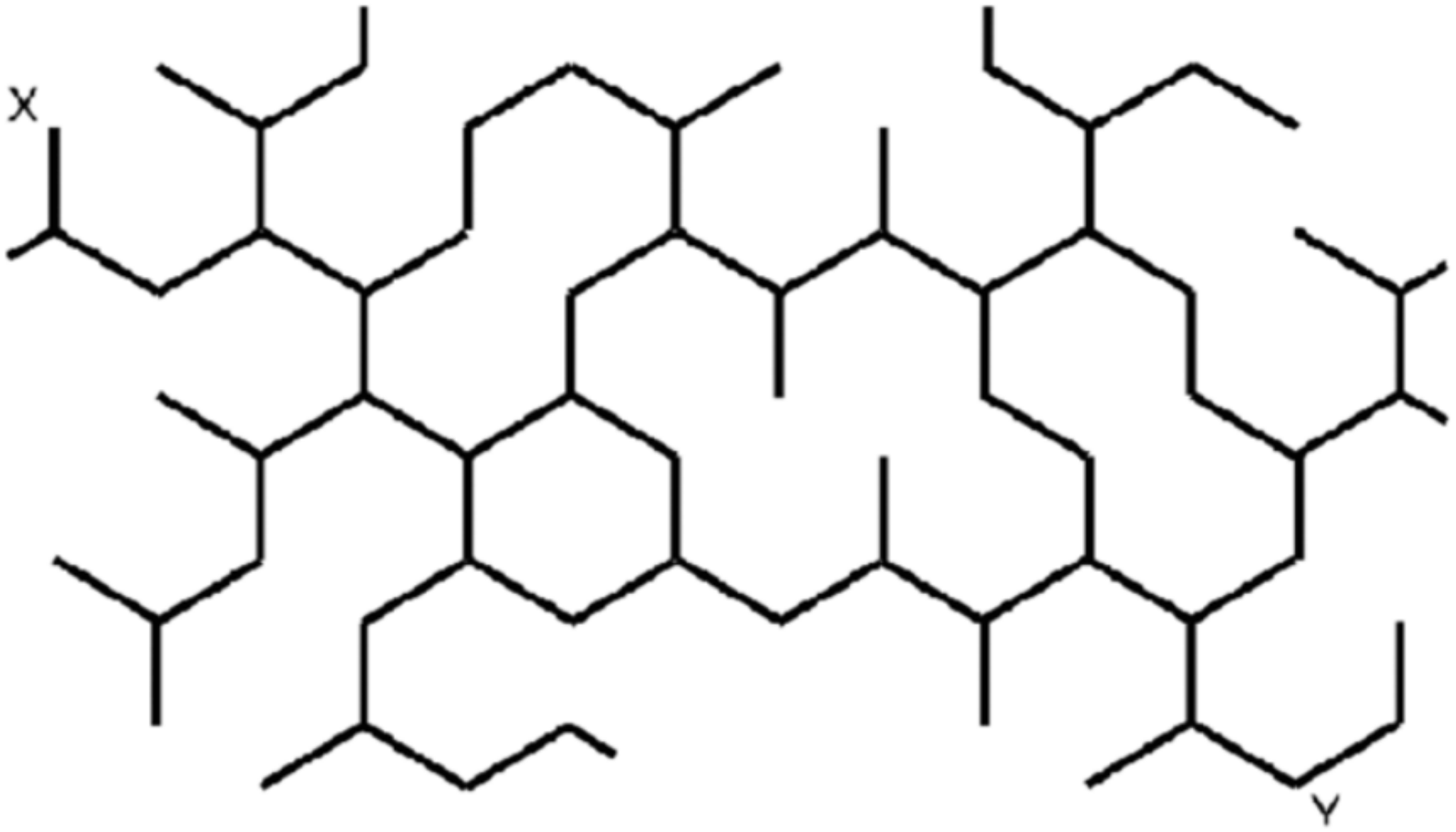
Panopticon



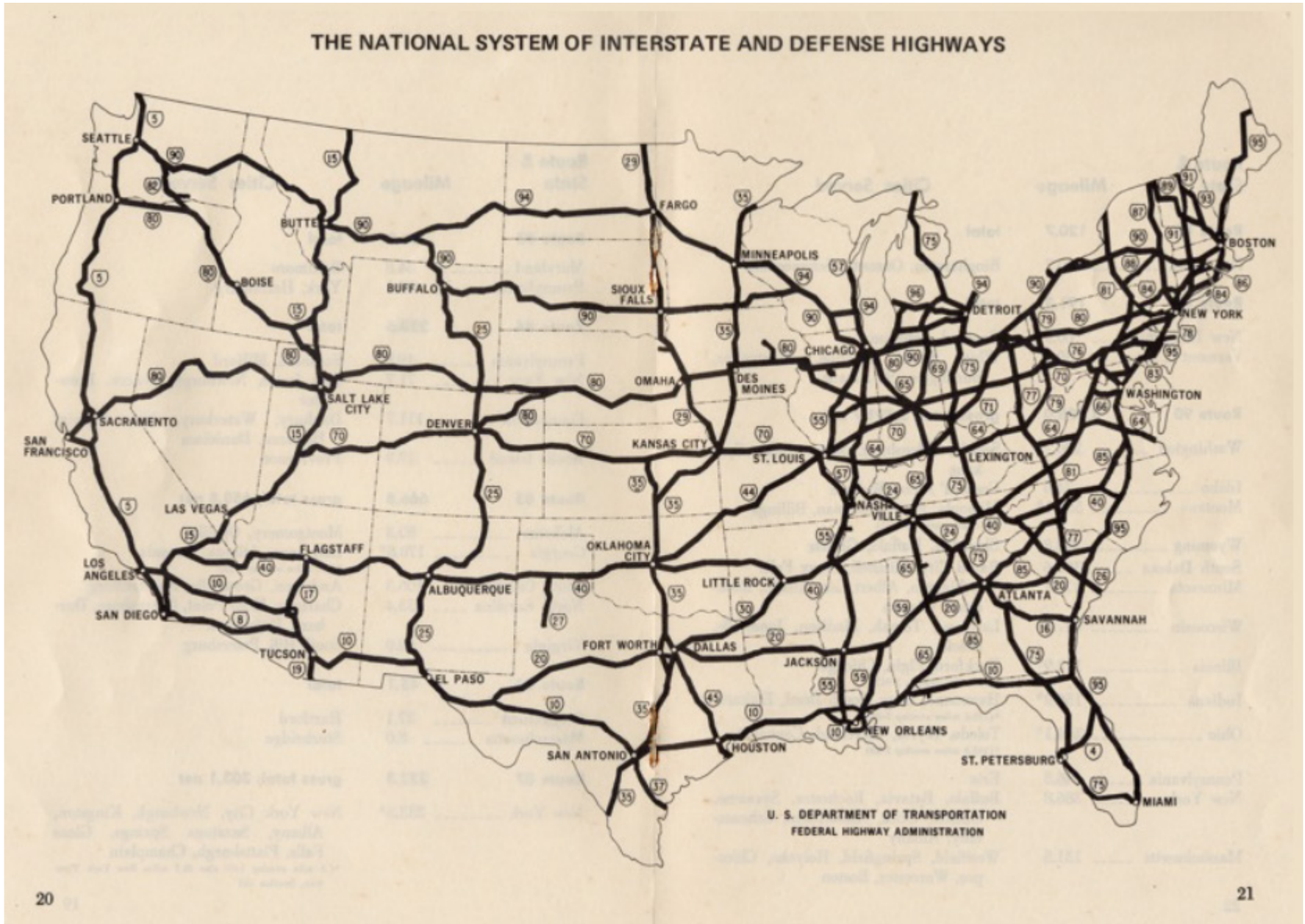
Decentralized Network



Air travel routes

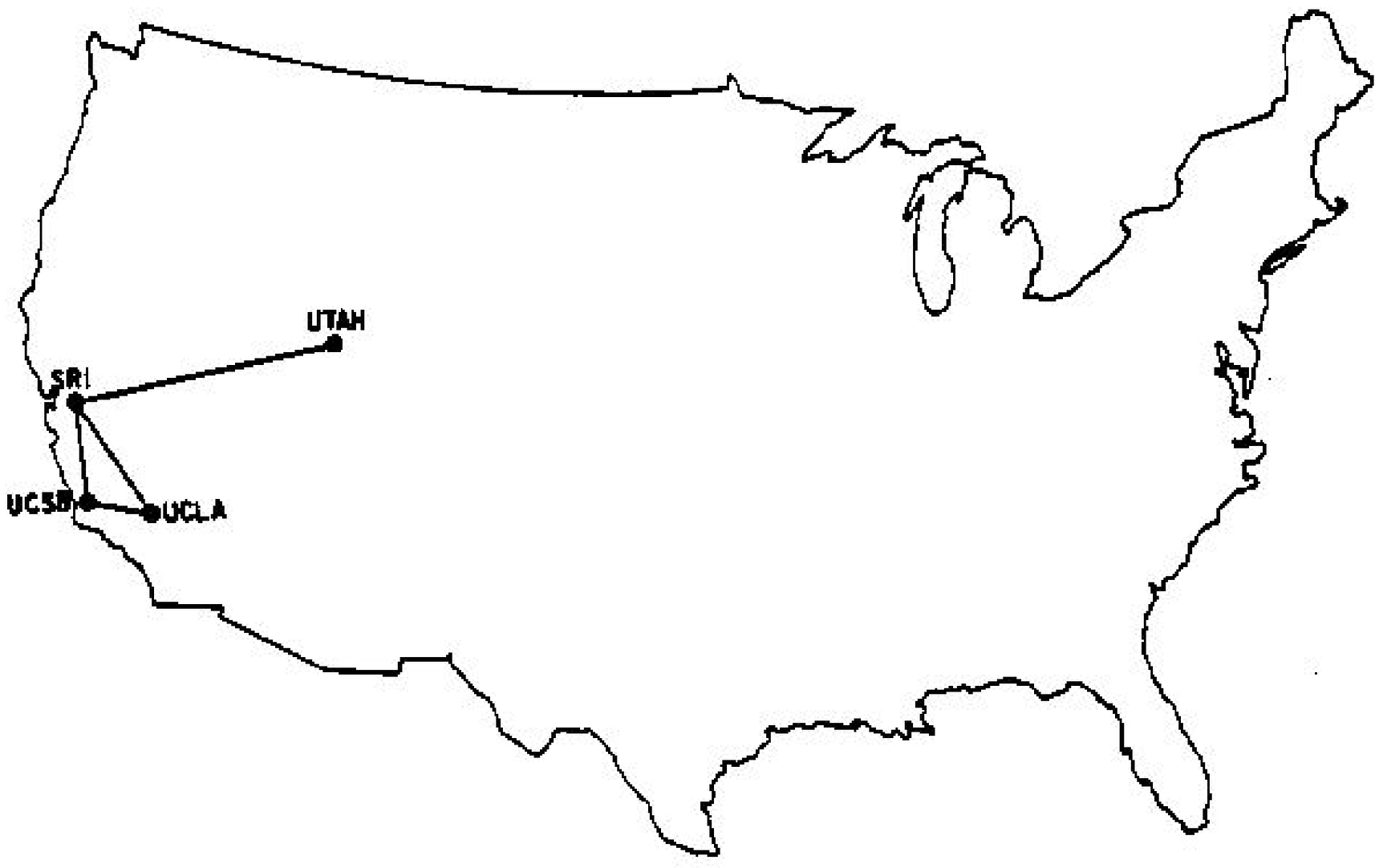


Distributed Network



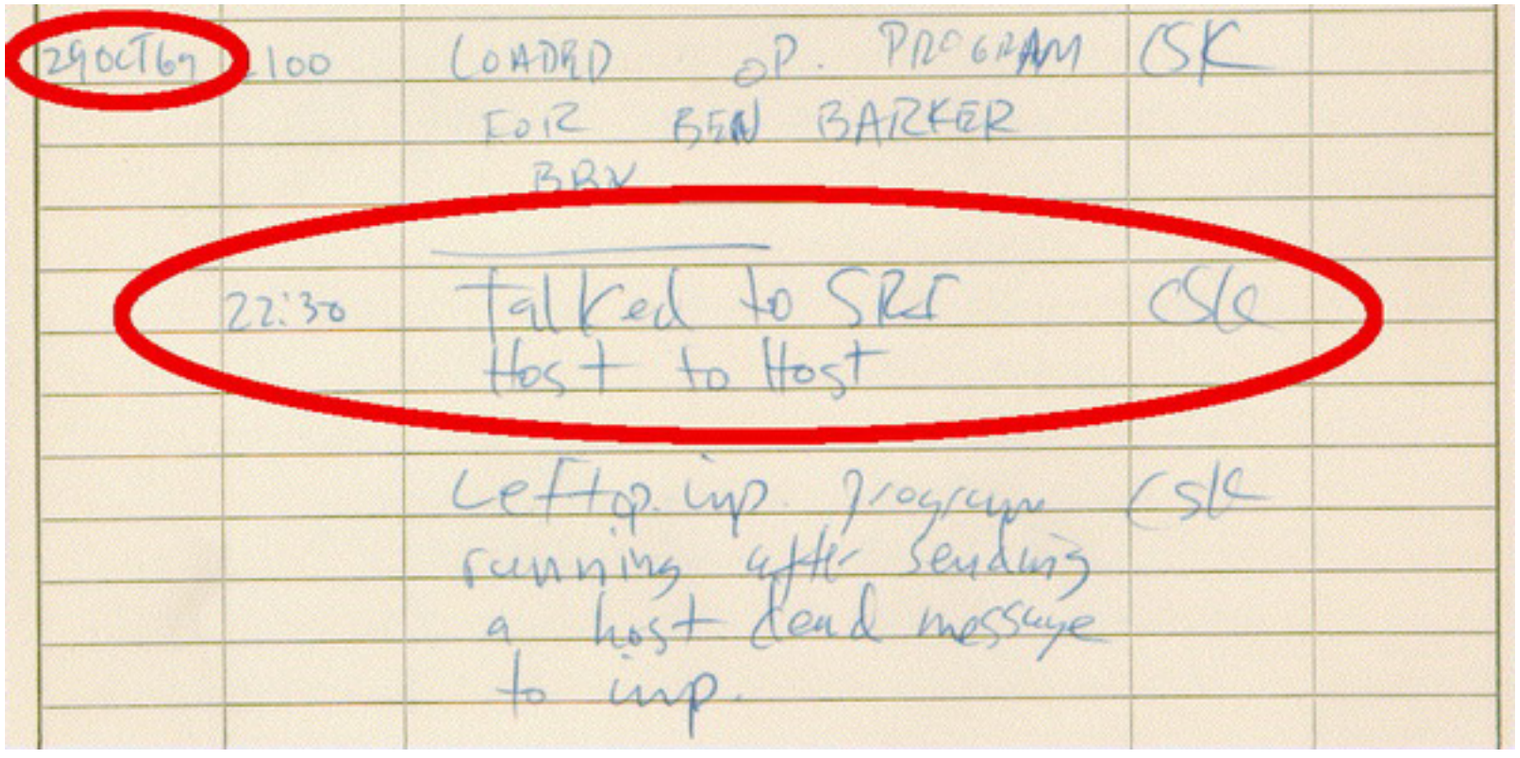
US Highway System

1969



ARPAnet

1969

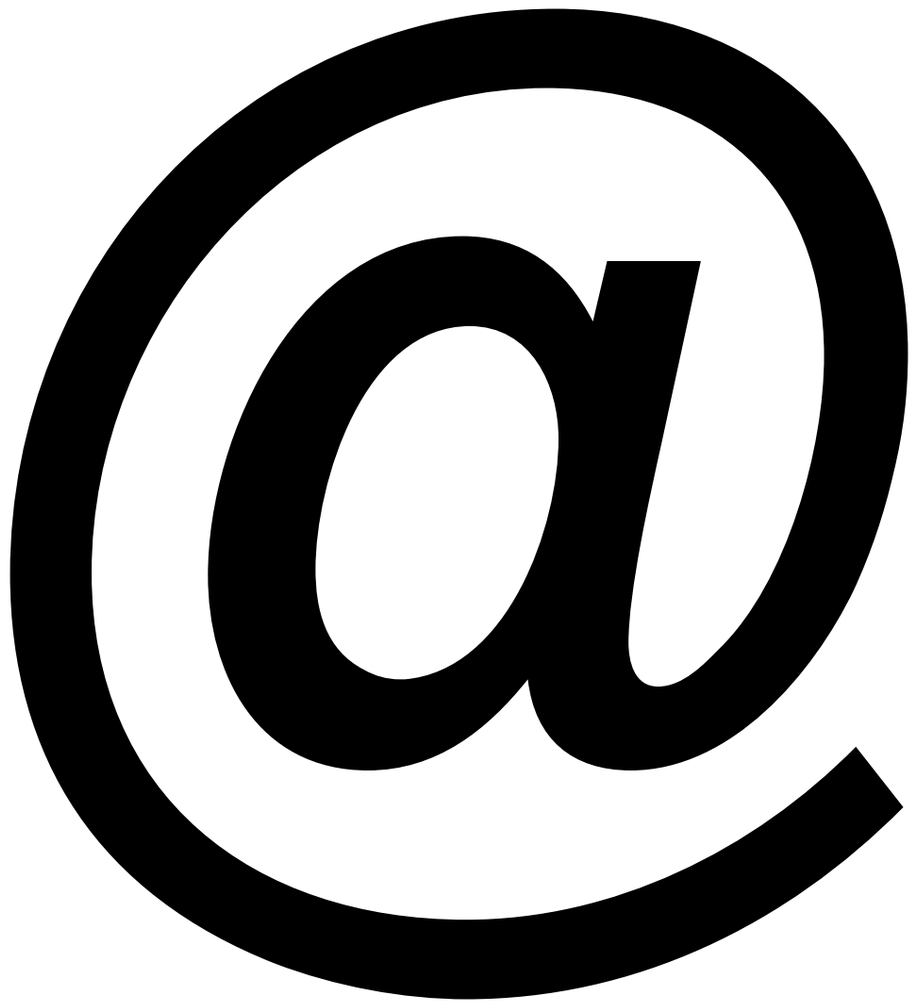

29OCT69
1100
LOADED OP. PROGRAM CSK
FOR BEN BARKER
BBN
22:30
talked to SRI CSK
Host to Host
Left op. imp. program CSK
running after sending
a host dead message
to imp.

LO

1971

Ray Tomlinson

1885



at

1970s

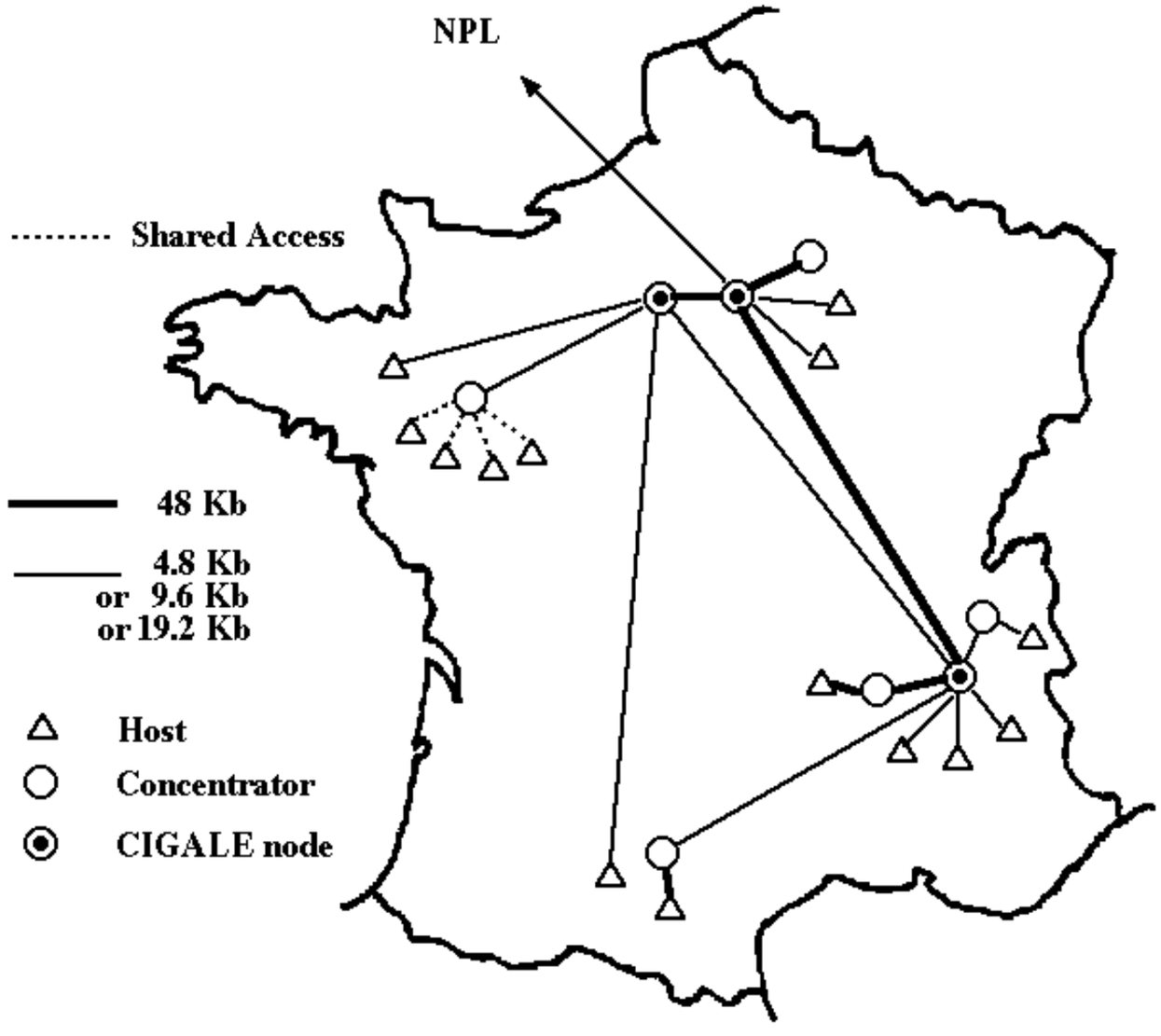
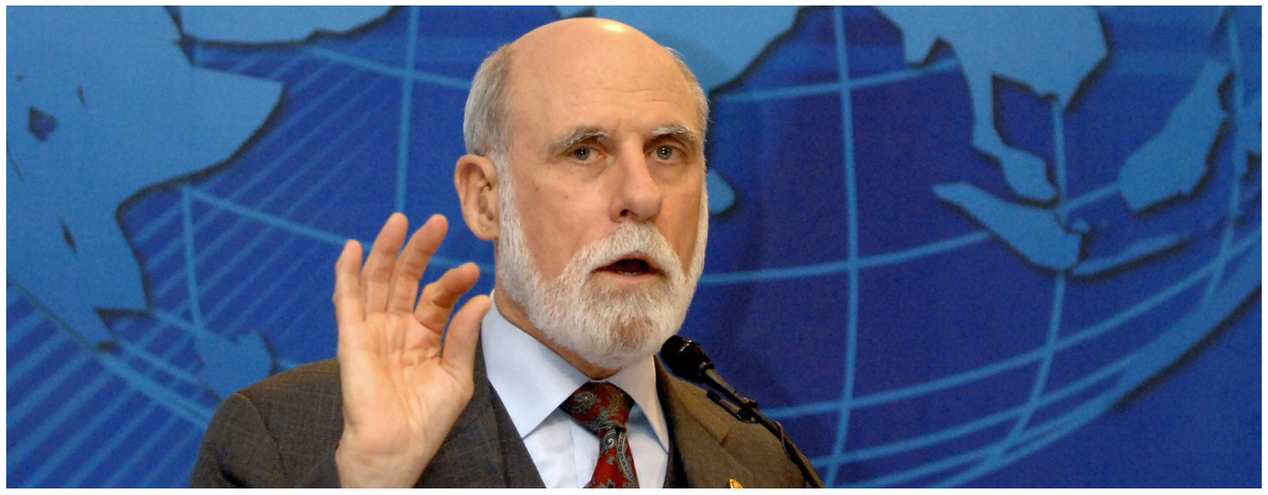


FIG. 1. - CYCLADES topology

Louis Pouzine & Cyclades Network

1971



Vinton Cerf

1980s

IP

Internet Protocol

1980s

TCP

Transmission Control Protocol

1990s

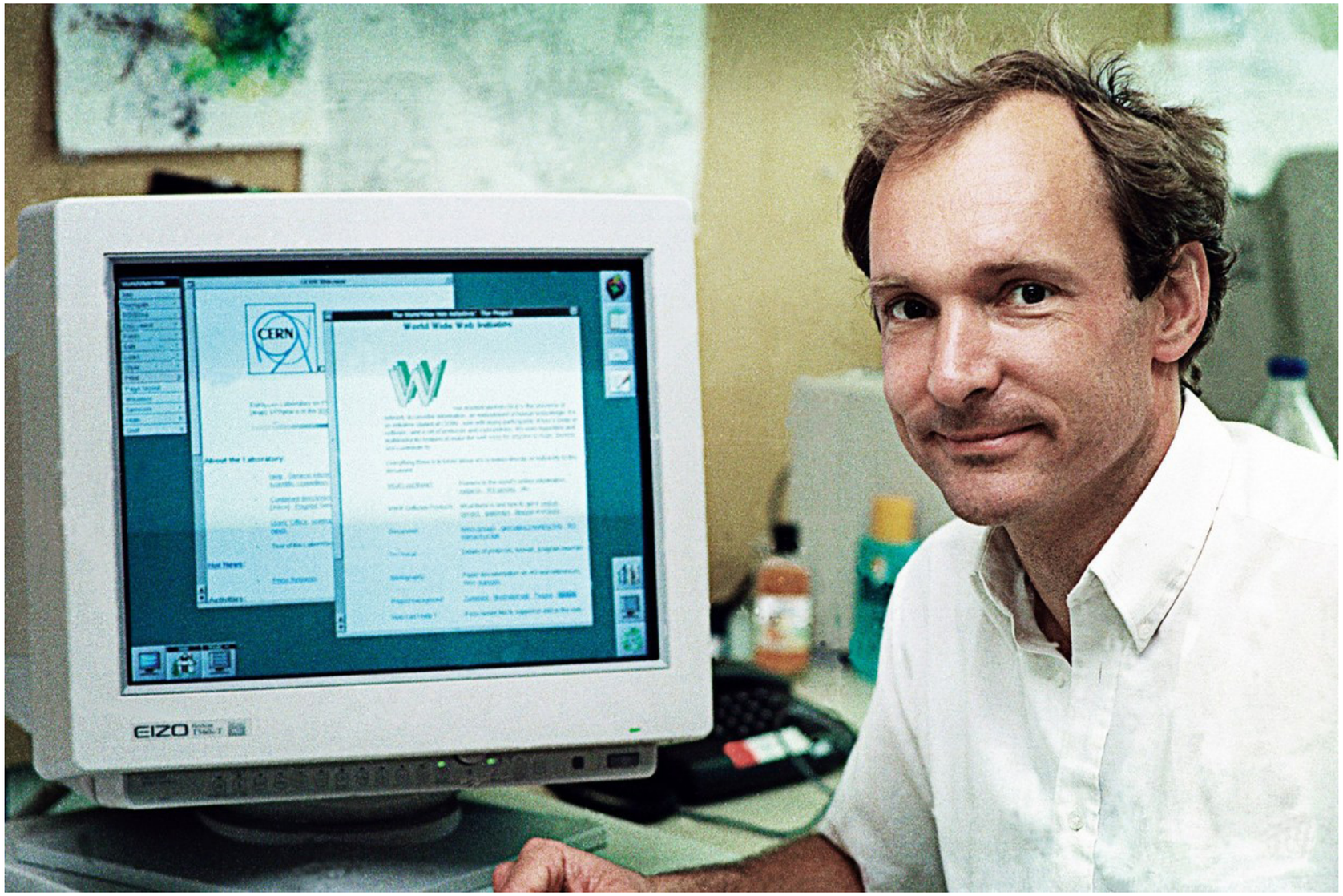
HTTP

Hypertext Transfer Protocol

1990s

Hypertext Transfer Protocol

1991



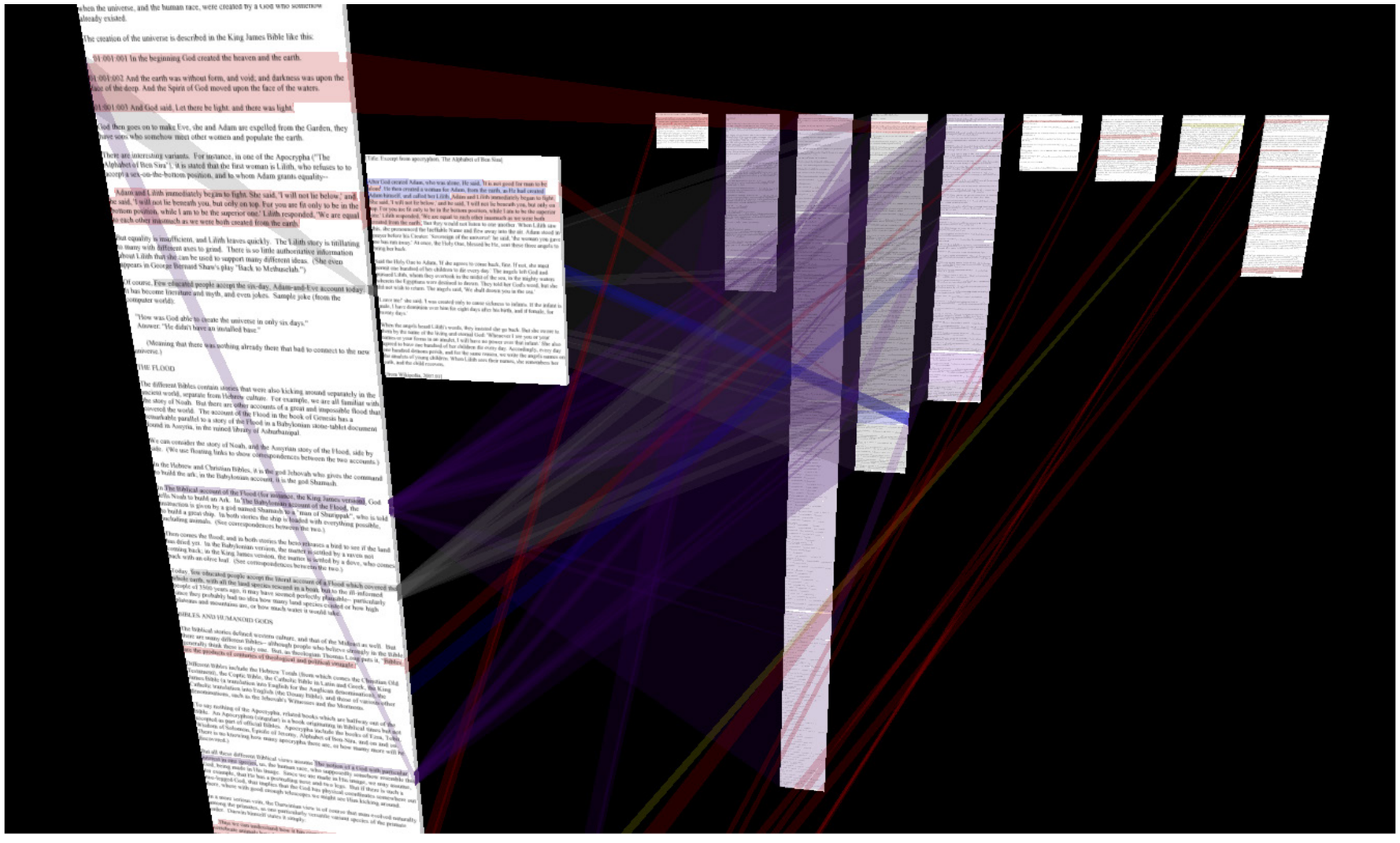
Tim Berners-Lee


THE CYCLE
LIVE
S&P ▲ 22.70
msnbc
TECH TALK
DAVID SHING
AOL "DIGITAL PROPHET"
Tim Berners-Lee
Web Developer

1960

Ted Nelson

1997



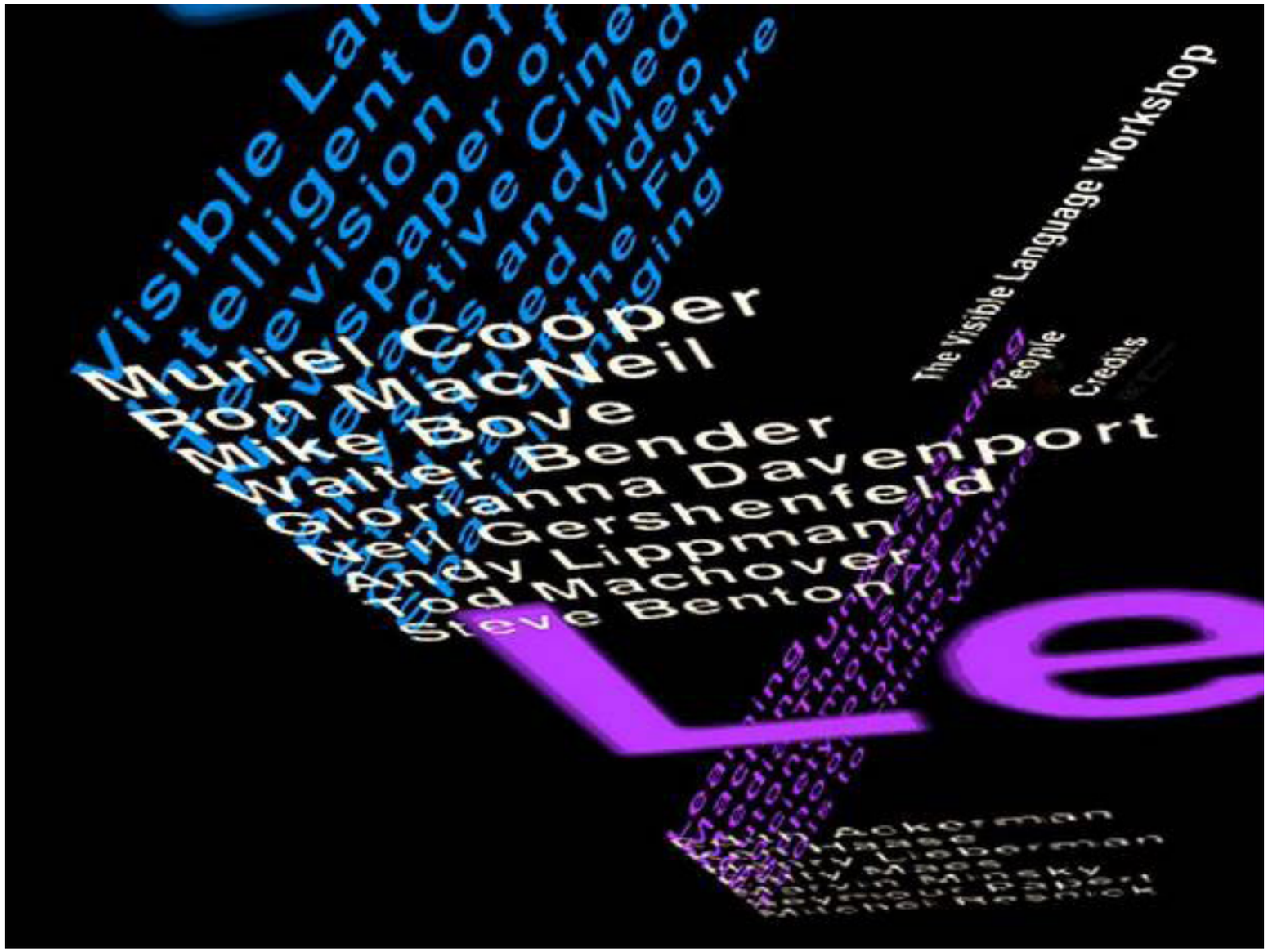
XanaduSpace

2014

“The computer world is not just technicality and razzle-dazzle. It is a continual war over software politics and paradigms. With ideas which are still radical, WE FIGHT ON. We expect vindication, the last laugh, and a redefinition of electronic literature—and at the least, that our format will join the others as a standard that does not imitate paper.”

Xanadu

1994



Muriel Cooper, Information Landscapes

1990s

America Online

1994

e-commerce

Key Terms

Host

A host is a computer on the network that can communicate with other computers. Think of it as a single node in the aforementioned diagrams.

When a host sends information, it's called a **server**.
When a host receives information, it's called a **client**.

Protocol

Protocol is a way in which information is passed from one computer to another. It's like the language that all hosts (computers on the network) speak.

HTTP — hypertext transfer protocol
FTP — file transfer protocol
IP — internet protocol
TCP — transmission control protocol

DNS

DNS stands for “Domain Name Service.” Every website is actually a number, but DNS lets us refer to these numbers with language.

example:
allmyfriendsatonce.com = 198.74.60.197

All websites need a...

1) Host (a computer always connected to the Internet)

Such as dreamhost.com, mediatemple.com, godaddy.com, etc.
We are using Github Pages! These are called “hosting providers.”

2) Domain (DNS)

Such as name.com, iwantmyname.com, namecheap.com, etc.
These are called “domain name registrars.”