

1.

Metaphors

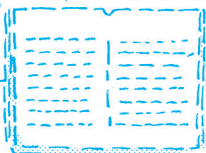
The internet is sometimes described as a **space or dimension separate** from ours,

a characteristic imagined in the **science fiction** of the **early internet**.

"Somehow I knew that the notional space behind all of the computer screens would be one single universe."

William Gibson popularized the term "**cyberspace**" in the 1984 novel, **Neuromancer**,

describing a space both **digital** and **mental**.



"Cyberspace.

A consensual
hallucination
experienced
daily

by billions of
legitimate
operators,
in every
nation,

by children
being taught
mathematical
concepts...

A graphic
representation
of data
abstracted

from the
banks of
every computer

in the
human
system.

Unthinkable
complexity.

Lines of light

ranged
in the
nonspace
of the
mind,

clusters and
constellations
of data.

Like city lights

receding...

—W. GIBSON,
Neuromancer

The **metaphors** we use often reflect our **bias**.

For example, when described as a **transportation infrastructure**,

THE INFORMATION SUPERHIGHWAY

with on-ramps

and online traffic,

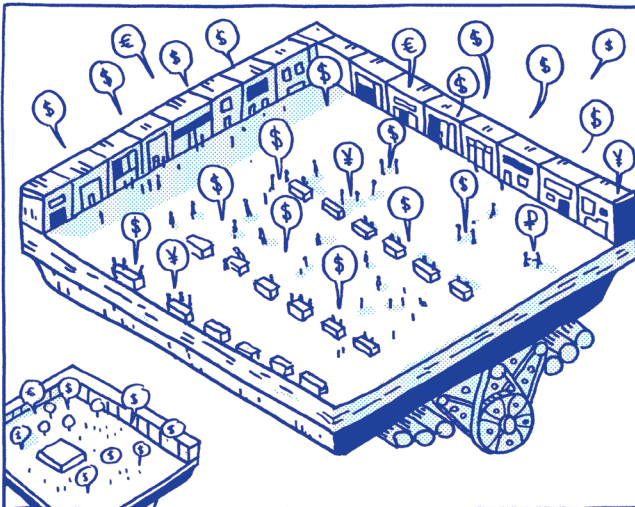
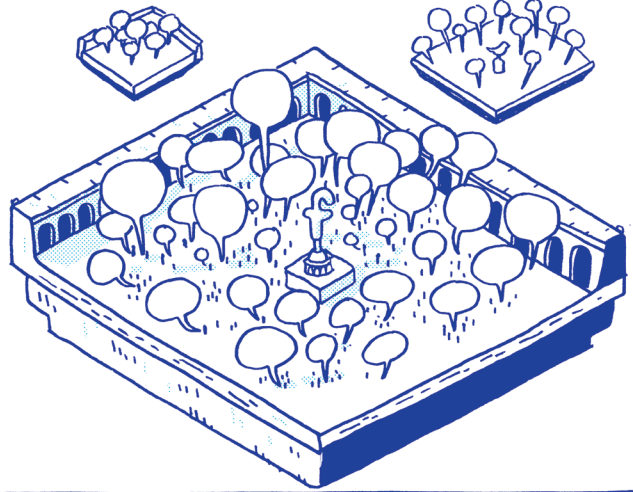
fast lanes and slow lanes,



the internet becomes a system to be **built, maintained, and regulated** for public use.

When we talk about using the internet to **connect and communicate**,

we refer to "**town squares**" or a collection of "**virtual communities.**"



With an **economic agenda**,

the internet is a **marketplace** of commerce and ideas, or an **engine** of growth.

As a space free from government interference,

the internet is a **frontier**,

lawless like the Wild West

and self-regulating like an **ecosystem**.



Sometimes, this frontier is described as an ocean of data,

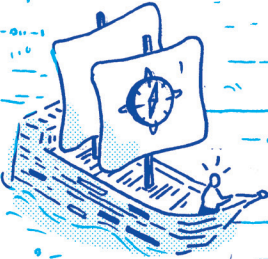
with a **surface web**

and a **deep web.**

It's navigated by **internet explorers**

and surfed by the **aimlessly curious.**

pillaged by pirates,



When talking about **access** to the internet, it's a **resource,**

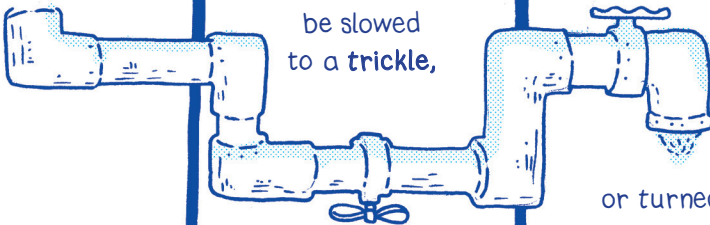
like a **"stream of data"**

carried through a **"series of tubes."**

Data can **flow** unhindered,

be slowed to a **trickle,**

or turned off.



Using "the cloud" as a metaphor suggests that data is an ephemeral layer of information,

blinking and bouncing around

somewhere in the atmosphere,

providing an ideal, lightweight solution

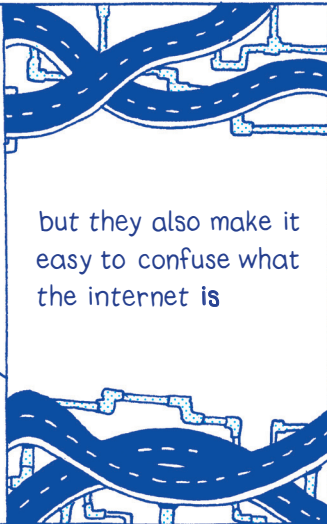
to sharing and storing our data.

In reality, the internet is almost entirely the opposite.

Our metaphors for the internet can be useful,



but they also make it easy to confuse what the internet is



with what we use it for,

hiding the history and geography

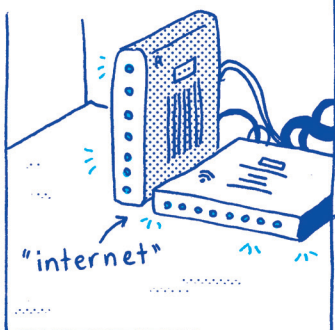
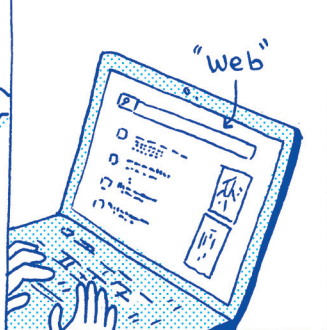


of how our world is wired.

We tend to use the words "internet" and "web" interchangeably,



but the **internet** is the mostly **physical infrastructure** we use to access the web and move our data from place to place.



Every day,
we're faced with
issues about how
the internet
works,



Net neutrality
changes could
alter the basic
premise of the
internet.



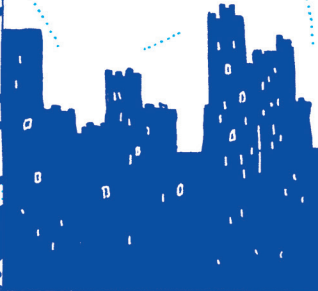
how it
affects us
personally



Recent breaches
by hackers leave
consumers concerned
about the safety
of their data.



and as
a society.



Experts warn
that an advanced
cyberattack could
be catastrophic.



But to understand
the **problems** with the
internet,



we should
understand
what it
really is,



where it
came from,

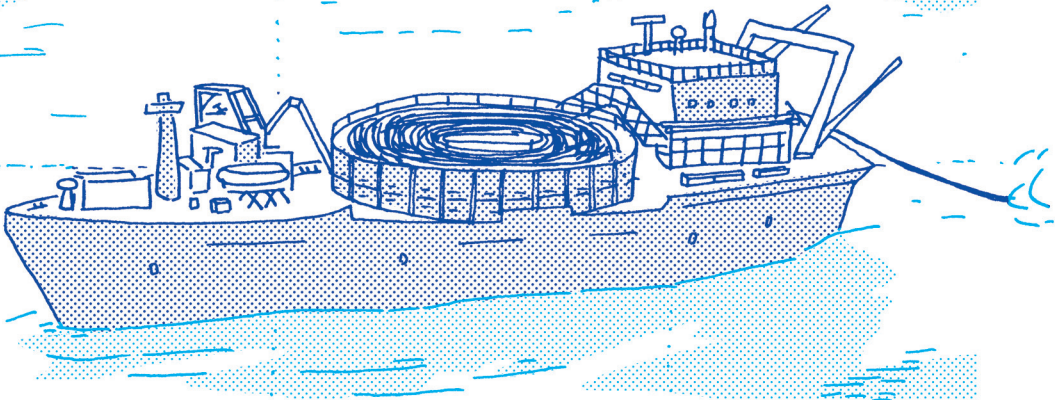


and what's
secretly happening
every time we **post**,
read, or **watch**
something online.

2.

Cables

The way we talk about the internet makes it seem like it **travels** through the air.



cable-laying ship,
pacific ocean