National Governments in IG:

Fragmentation and the future of global Internet compatibility



Governments: not just another "stakeholder"



States are an alternative governance model that often competes or conflicts with the so-called multistakeholder model



What is the state?

- A monopoly...
- ...on the legitimate use of force...
- ...in a given territory



Sovereignty:

territorial fragmentation international anarchy



How do states cooperate?

- International law
- International treaties
- International organizations

- ➤ Applicable only to states
- Negotiated and binding only on states
- Members and funders are states



National governments as gatekeepers

- Regulate ISPs located in their territory
- Regulate content and hosting providers in their jurisdiction
- Regulate users in their jurisdiction
- Regulate control cross-border flows
 - Data
 - Equipment



Competing Internet governance models

Global

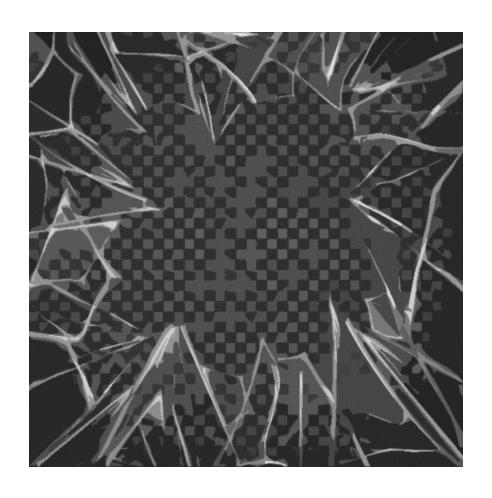
- Transnational perspective
- Multi-stakeholder
- Led by nonstate actors
- Commerce and innovation
- Market forces primary

National

- Territorial perspective
- Multilateral
- Led by state actors
- Security
- Political forces primary



Will the internet fragment?





What is fragmentation?

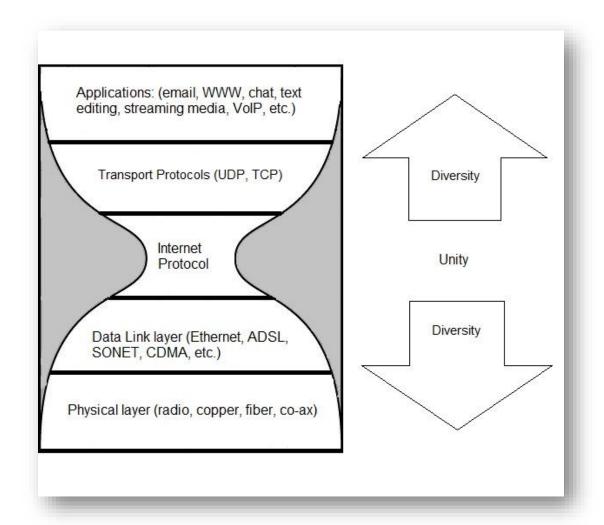
How to define it?

How would we know it when we see it?

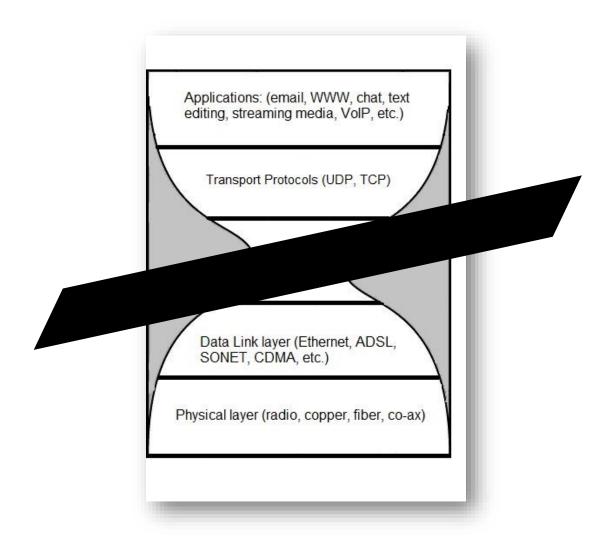


Layer 3 compatibility

The glue that holds the internet together



Fragmentation Defined



Fragmentation Alignment

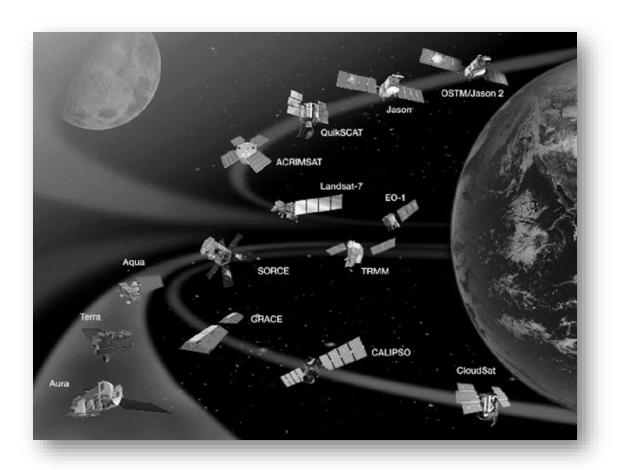


Sovereignty

Supreme authority
Territory

Domains without territorial sovereignty

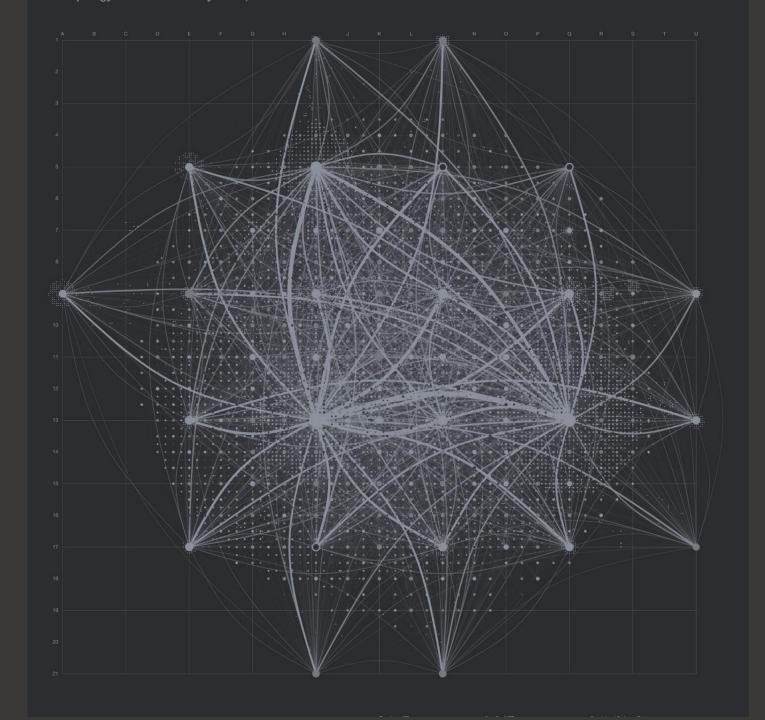
- Outer space
- The high seas
- Cyberspace

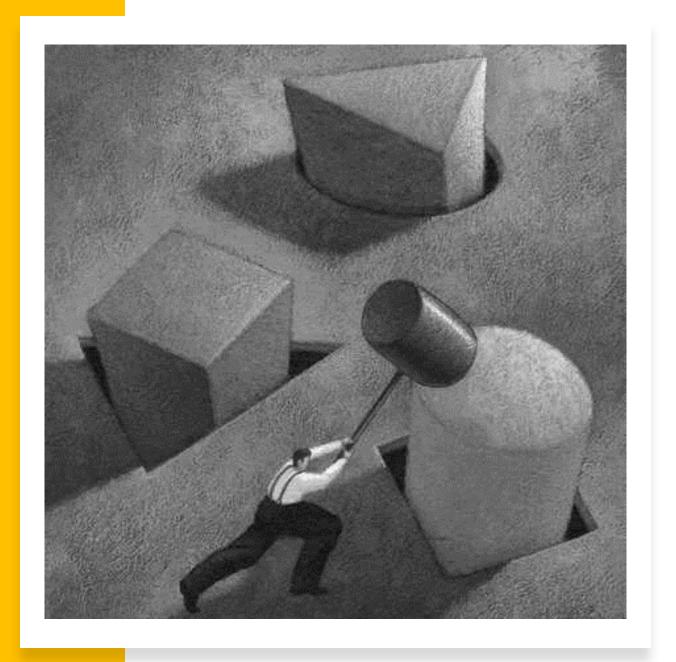




'Territory' in cyberspace

- Dots: large and small ISPs (AS), organization AS, NICs
- Hollow circle: IXPs

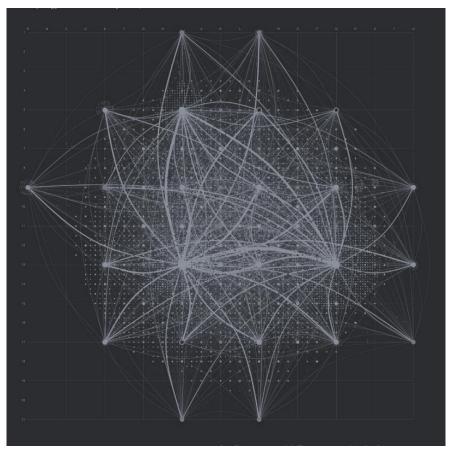




Alignment

One global cyber-sovereign







Digital islands

Recent challenges to global internet

- 1. Europe and data governance (GDPR)
- 2. U.S. China digital fracture
- 3. Other developments



1. GDPR and extra-territoriality



"the [GDPR] has had such a massive impact on data management practices globally that it has become the de facto global standard for privacy."



To comply with GDPR, ICANN reforms Whois

- "Emergency" Temporary Specification (May 2018)
 - Redacts sensitive data from open publication
- Expedited Policy Development Process
 - Make Whois (RDDS) compliant with GDPR, privacy principles
- Standardized System of Access/Disclosure (SSAD)
 - Reveal redacted data to requestors following law
- Dissent with threats to bypass ICANN and rely on legislation
 - US intellectual property interests
 - European Commission/Law enforcement interests



2. The U.S. - China Conflict





US building the wall

- Sanctions:
 - Entity list (Operating system forks)
 - Chip export controls (blockade)
- Denials of market access
 - CFIUS blocking investment
 - WeChat and TikTok blockages
 - FCC withdrawal of Sec 214 licenses for China Telecom and China Mobile
- Export controls
 - Cannot sell chips, software to China
- Industrial policy
 - Subsidies for 5G providers?
 - Subsidies for chips





China building the wall

- Great Firewall of China (intensified since 2014)
- 2017 Cybersecurity Law
 - Data localization
 - Restrictions on outgoing data flows
- Hong Kong National Security Law
 - Arrest of dissident newspapers
 - Online expression deemed illegal



3. Other developments

- Russian "Sovereign Internet" efforts
- Indian blocking of dozens of Chinese apps
- Senegal "data sovereignty"



Takeaways

- There is a mismatch between territorial governance and global internet governance
- The IG problems caused by this mismatch take place at the application layer, not the network layer
- Multistakeholderism is a way of overcoming the mismatch
- There is no sovereignty in cyberspace

