

---

# Freedom of Speech: Transborder Issues



---

“On the Internet, the Bill of Rights  
is a local ordinance.”

---

## The Rest of the World

- The US has very strong protections for certain kinds of content
- Attitudes in the rest of the world are different, often much different
- How is the Internet regulated? How should it be?

---

## US Law

- The First Amendment is paramount
- Truth is an absolute defense against libel; burden of proof is on the plaintiff
- Few privacy protections
- No political topics off-limits
- But—the US is much more conservative about sex than, say, Europe

---

## Libel Law

- Britain is a democracy with a fair court system—but the defendant has to prove the truth of statements
- Other countries have—let’s say “different standards”
- Whose law should prevail?

---

## Libel Tourism

- While in the US, British doctor Peter Wilmshurst made statements critical of an American firm
- An American online medical news publication posted a story on this
- NMT Medical sued Wilmshurst—in England
- Wilmshurst spent hundreds of thousands of pounds defending himself—but won by default when the company suddenly went out of business
- (In 2013, British libel laws were changed to provide more protection to defendants, especially foreign ones)

---

# Singapore

- Singapore is often accused of using libel laws to punch or silence political opponents
- The *International Herald Tribune* (now the *International New York Times*) was found liable in courts there for saying “some Asian leaders relied “on a compliant judiciary to bankrupt opposition politicians”” (non-Internet case); Singapore was not mentioned by name
- Whose law should prevail?

---

## Australia

- An article in *Barron's* (published by Dow Jones) allegedly said nasty things about Joseph Gutnick, a resident of Australia
- The article was published on the Barron's web site, on a server located in New Jersey
- The High Court of Australia ruled for Gutnick
- Among other things, it noted that Rule 7.01(1)(j) provides for jurisdiction if “(j) the proceeding is brought in respect of damage suffered wholly or partly in Victoria and caused by a tortious act or omission wherever occurring”.
- Since Gutnick was only citing damage to his reputation in Australia, the case was held to be within Australian jurisdiction
- (The opinion is also notable for its extensive use of American law)



---

## It's Not Just Libel

- Most democracies value the right to a fair trial
- How is this balanced against freedom of speech?
- Different countries have different rules
- The Internet has made life more complex

---

## US Law

- In *Irvin v. Dowd*, 366 U.S. 717 (1961) and *Sheppard v. Maxwell*, 384 U.S. 333 (1966), the Supreme Court ruled that publicity before and during a trial could indeed bias jurors
- (N.B.: Many people believe that the TV series and movie *The Fugitive* was based on that second case.)
- But—it violates the First Amendment to bar press coverage
- Permissible solutions include questioning possible jurors, gag orders on the attorneys, sequestering jurors, and changes of venue

---

## Canadian Law Differs

- Canadian law puts more stress on balancing rights
- “The *Canadian Charter of Rights and Freedoms* guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society.”
- The Internet (and cross-border radio and television) lead to conflicts
- In a 1993 murder investigation, a Canadian judge barred publication of some testimony, to protect the right to a fair trial
- American media covered it anyway

---

## What is “Publication”?

- If a Canadian posted the information on a Canadian web site, it’s clearly publication within Canada
- What about hyperlinks to a posting in the US?
- What about enough information to let Google find the posting?
- What if an American newspaper—say, the Wall Street Journal, which charges and hence knows more about its subscribers—carries the story and knows it has Canadian readers?

---

## The Right to be Forgotten

- The Internet never forgets—but should it?
- Should occasional indiscretions—by private citizens—be held against them forever?
- The “right to be forgotten” is seen by some as a *privacy* right—but it’s in tension with the right to free speech
- The US has a constitutional guarantee of free speech but no explicit guarantee of a right to privacy

---

## The Right to be Forgotten in the EU

- EU courts have upheld a “right to be forgotten”—Google must, on request, remove links to articles about the requester unless the article is of public interest
- (The underlying web site isn’t affected.)
- It applies only to Europeans—but how?
- Originally: delist results from Google.fr, Google.de, etc.
- Newer: delist if query comes from Europe
- But—France now says that the right to be forgotten must be enforced globally, for all queries
- Under US law, Google could not be compelled to do that—but which jurisdiction should control what happens elsewhere?

---

# Tor

- Belarus has announced plans to block Tor, VPNs, etc.
- Russia plans to do the same
- Some websites will also be blocked

---

## Other Examples

- In 1995, Bavarian prosecutors indicted CompuServe for permitting access to allegedly-obscene Usenet newsgroups
- In response, CompuServe originally blocked access to those groups worldwide
- France charged EBay with carrying listings for Nazi memorabilia



---

# The Great Firewall of China

- China values “stability”
- To achieve this, they do not want certain outside information coming in
- But—they cannot cut off the Internet entirely; it’s too important economically

---

## How the Great Firewall Works

- Pressure on ISPs
- DNS interception—remap host names
- Block some IP addresses
- Deep Packet Inspection (DPI) to look for certain words

---

## China's Use of Deep Packet Inspection

- Look at the *content* of packets, not just the headers
- Expensive—but it's important enough to China
- Look for certain keywords, e.g., “Falun Gong”
- If they appear, send TCP RST packets to tear down the connection

---

## Work-Arounds—and China’s Responses

- VPNs
- Tor
- China blocks Tor nodes and known commercial VPNs
- China also probes “suspicious” nodes to see if they seem to be forwarders

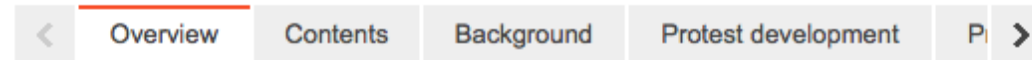
---

# Tiananmen Square: Bing in the US

666,000 RESULTS    Any time ▾

## [Tiananmen Square protests of 1989 - Wikipedia, the free ...](https://en.wikipedia.org/wiki/Tiananmen_Square_protests_of_1989)

[https://en.wikipedia.org/wiki/Tiananmen\\_Square\\_protests\\_of\\_1989](https://en.wikipedia.org/wiki/Tiananmen_Square_protests_of_1989) ▾



The Tiananmen Massacre of 1989, commonly known as the June Fourth Incident or '89 Democracy Movement in Chinese, were student-led popular demonstrations in Beijing which took place in the first half of 1989 and received broad support from city residents, exposing deep splits within China's political leadership. The protests were forcibly su...

[See more on en.wikipedia.org](https://en.wikipedia.org) · Text under CC-BY-SA license

## [Tiananmen Square massacre takes place - HISTORY.com](http://www.history.com/this-day-in-history/tiananmen-square-massacre...)

[www.history.com/this-day-in-history/tiananmen-square-massacre...](http://www.history.com/this-day-in-history/tiananmen-square-massacre...) ▾

On this day in History, **Tiananmen Square** massacre takes place on Jun 04, 1989. Learn more about what happened today on History.

## [Tiananmen Square - Wikipedia, the free encyclopedia](https://en.wikipedia.org/wiki/Tiananmen_Square)

[https://en.wikipedia.org/wiki/Tiananmen\\_Square](https://en.wikipedia.org/wiki/Tiananmen_Square)

**Tiananmen Square** is a large city square in the centre of Beijing, China, named after the Tiananmen gate (Gate of Heavenly Peace) located to its North, separating it ...

[History](#) · [Panorama](#) · [Configuration](#) · [Events](#) · [Access](#) · [Gallery](#)

# Tiananmen Square: Bing in China

提示:当前显示为 全部结果 | [En](#) 英文搜索 | [仅中文](#)

[Tiananmen Square](#) - Wikipedia, the free encyclopedia [翻译此页](#)



**Tiananmen Square** is a large city square in the centre of Beijing, China, named after the **Tiananmen** gate (Gate of Heavenly Peace) located to its North, separating it ...

[https://en.wikipedia.org/wiki/Tiananmen\\_Squ...](https://en.wikipedia.org/wiki/Tiananmen_Squ...) ▾ 2016-3-6

[Possible Nova Scotia Protesters? No Tiananmen square, but a prote...](#) - 相关话题

**最佳答案**

I know a Future Political headline, Mayor and Town Councillors lose election in a landslide and run for cover as they are publicly run out of town on a rail. [详情](#)

[www.bing.com/knowns/tiananmen\\_square?mkt=zh-cn](http://www.bing.com/knowns/tiananmen_square?mkt=zh-cn) · 2014-05-06

["tiananmen square"的图片](#)



[查看 "tiananmen square" 的更多图片](#)

---

# Major Issues

- Jurisdiction
- Responsibility

---

## Jurisdiction

- Law of the Sea—the original 3 mile limit was the range of shore-based cannon in the early 1800s
- Now it's 12 miles, with a 200 mile “exclusive economic zone”
- What is the Internet equivalent? A 3 millisecond limit?



---

## No Natural Borders in Cyberspace

- Before the 1980s, international telecommunications was tightly regulated by all countries
- Most countries had *PTTs*—*Postal, Telegraph, and Telephone* departments of the government
- Even in the US, the right to set up foreign links was restricted
- Much of that was swept away in a world-wide push towards deregulation

---

## The Internet is Different

- The first commercial ISPs were organized when deregulation was at its height
- They were not subject to any such restrictions (partly because they were under the radar and weren't facilities-based)
- The Internet's topology is dictated by commercial and technological concerns, not regulation

---

# Internet Routing

- IP addresses are divided into host and network numbers, but the boundary is variable
- `www.cs.columbia.edu` (128.59.23.26) is on network `128.59.16.0/21`—there are 21 bits in the network number
- One of my machines, `barsoom.cs.columbia.edu`, is `128.59.21.109`, on network `128.59.16.0/21`
- From the outside, though, CU is `128.59.0.0/16`.
- Why the difference? To accommodate different sizes of networks, while conserving space in routing tables
- Routing is to the *longest prefix* matched

---

## Autonomous Systems

- Internet routing is organized into *autonomous systems* (AS)
- Routing within an AS is cheapest by metric
- Inter-AS routing is by AS hop count (with a healthy dose of policy)
- AS's use this policy to accomplish their own traffic engineering goals, often overriding *hot potato routing*
- ISPs may be one or several AS's, depending on their network engineering philosophy

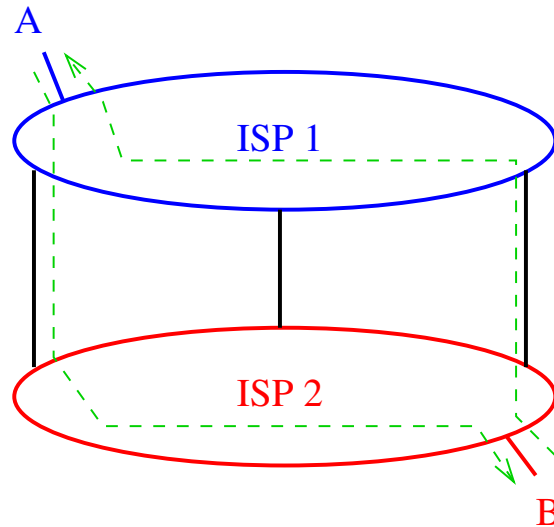
---

## Many Interconnections

- Many different ISPs have international links—they only have to buy bandwidth from a telco; they don't need to lay physical cables
- ISPs interconnect at many different points
- The same pair of ISPs will interconnect at many points

---

# Hot Potato Routing



Routing is asymmetric! Suppose there's an international border somewhere? What traffic will cross it? Who controls that? (Does the physical route of the fibers matter?)

(Intra-Canadian traffic often flows through the US, because fiber is cheaper here.)

---

## Cost

- Routers try to find the *cheapest* path towards the destination
- Note: no global knowledge; routers make a decision based on local knowledge
- What is “cheap”?
- Within an AS: set administratively
- Inter-AS: AS hop count (with complications)

---

## The Middle Doesn't Know

- Senders (usually) can't control the path
- Intermediate routers don't know the content, and hence cannot apply content-dependent policy
- It can *sometimes* be done within an ISP, but not inter-ISP



---

## What's a Border?

- In general, routers do not know if a border will be crossed
- They therefore cannot avoid them
- Even if knowledge is configured, paths can change

---

## Routing: Dresden to Munich



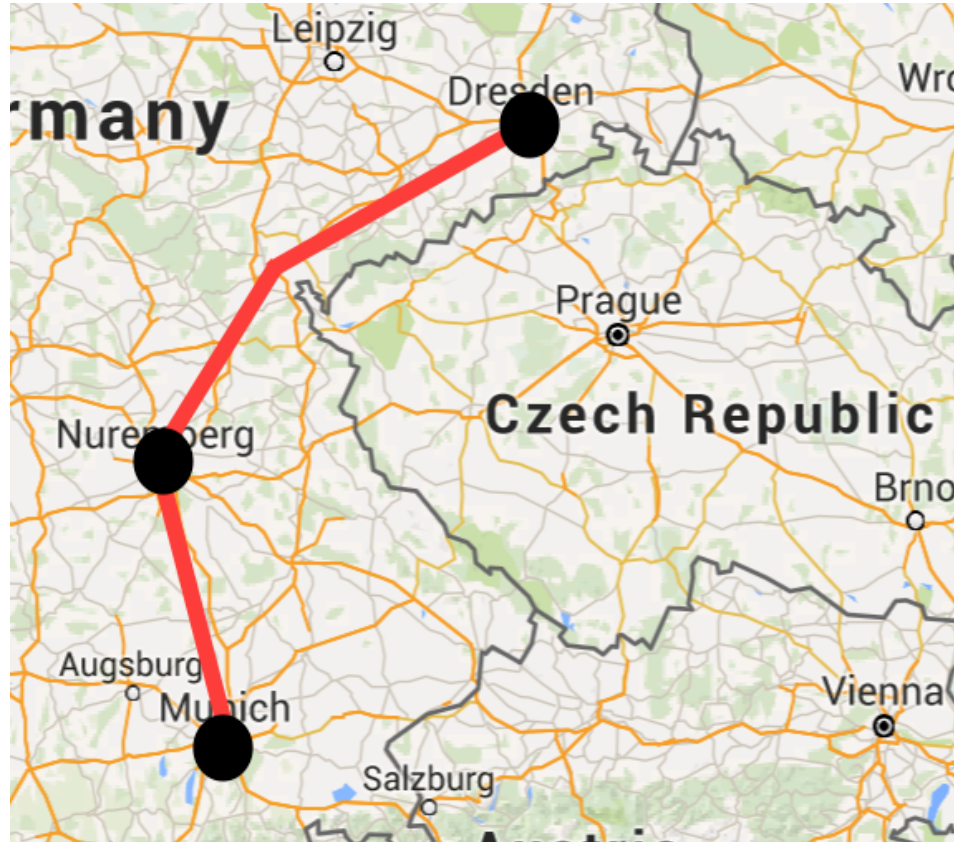
The packets seem to cross the border

## Routing: Dresden to Munich



What is the actual path of the fiber?

## Routing: Dresden to Munich



If there's a router in Nuremberg, it's a two-hop path

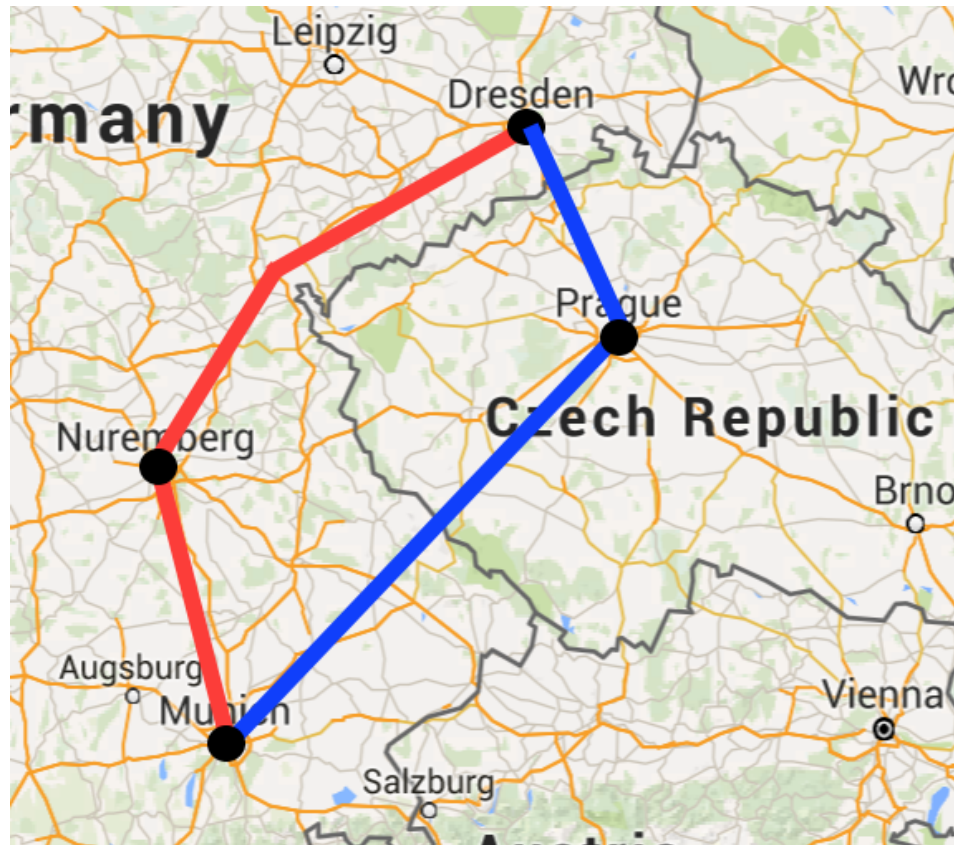
## Routing: Dresden to Munich



Is there a direct path that's fewer hops?



## Routing: Dresden to Munich



Both paths are two-hop paths—which will be used?

## Routing: Dresden to Munich



What if the preferred link is cut?

---

## Jurisdiction

- Countries have *always* asserted as much jurisdiction as they can get away with
- The US has seized people overseas; the courts have held that to be legal under certain circumstances (e.g., *U.S. v. Fawaz Yunis*, 924 F.2d 1086 (1991))
- But an Italian court has convicted some CIA agents in an arrest—abduction—in Italy, and some Italian intelligence agents were charged in the case
- It seems unlikely that the Internet will change these behavior patterns (e.g., the Gutnick case and the explicit court rule)
- Yes, this can lead to problems. . .



---

## How Does China Do It?

- Strict regulation of fiber paths
- Strict regulation of ISPs
- Impose controls at all gateways—easier because there are fewer of them
- Use the regulatory model that the US and Europe abandoned in the 1980s, but for different reasons
- Other countries with strict rules—Iran, Saudi Arabia, Singapore, more—do the same thing
- France et al. instead use legal processes against multinationals

---

## Who is Responsible for Content?

- The viewer?
- The viewer's ISP?
- The transit networks?
- The source ISP?
- The creator/poster?
- At different times, all have been asked to censor traffic

---

## The Viewer

- (Mostly) current US policy
- In court arguments on the Communications Decency Act, the benefits of filtering software were mentioned
- Schools and libraries are required to use filtering software

---

# ISPs

- ISPs are easier to go after
- Countries (Thailand, Turkey, Iran, Pakistan, many others) sometimes order their ISPs to filter sites or networks that they don't like
- The US has indicted an ISP because (it is alleged that) the ISP promotes online gambling
- A Pennsylvania law required ISPs to block child pornography (struck down because it blocked many other things besides)

---

## Extremist Sites

- In the wake of the *Charlie Hebdo* attack, France is considering a bill to make websites responsible for “extremist content”
- Hollande: “The big operators, and we know who they are, can no longer close their eyes if they are considered accomplices of what they host”
- Washington would like major US social network sites to do the same
- How should sites know?
- (France already has a law that permits the government to block jihadist web sites.)

---

## The Creator

- Ultimately, the creator is the one liable
- But—there are those messy cross-border issues
- US law usually shields the creator's ISP—*if* it responds promptly to complaints
- But that isn't universal; see Google's trial in Italy because of user-uploaded YouTube content
- If there is no safe harbor provision, what happens to Web 2.0?
- But if the creator has to be liable, what happens to anonymity?

---

## Whose Standards Should Govern?

- The Internet was not designed for this sort of content control
- Should one set of standards control, world-wide? Whose?
- Or should the Internet be re-engineered to permit more control?
- The IETF doesn't want to—but there is more and more Chinese participation in the IETF. Could that change?
- What should technologists do? Whose values should the Internet embody?