Internet Content Regulation: What it means in 2010

Illustration by John Ritter, The Atlantic Monthly

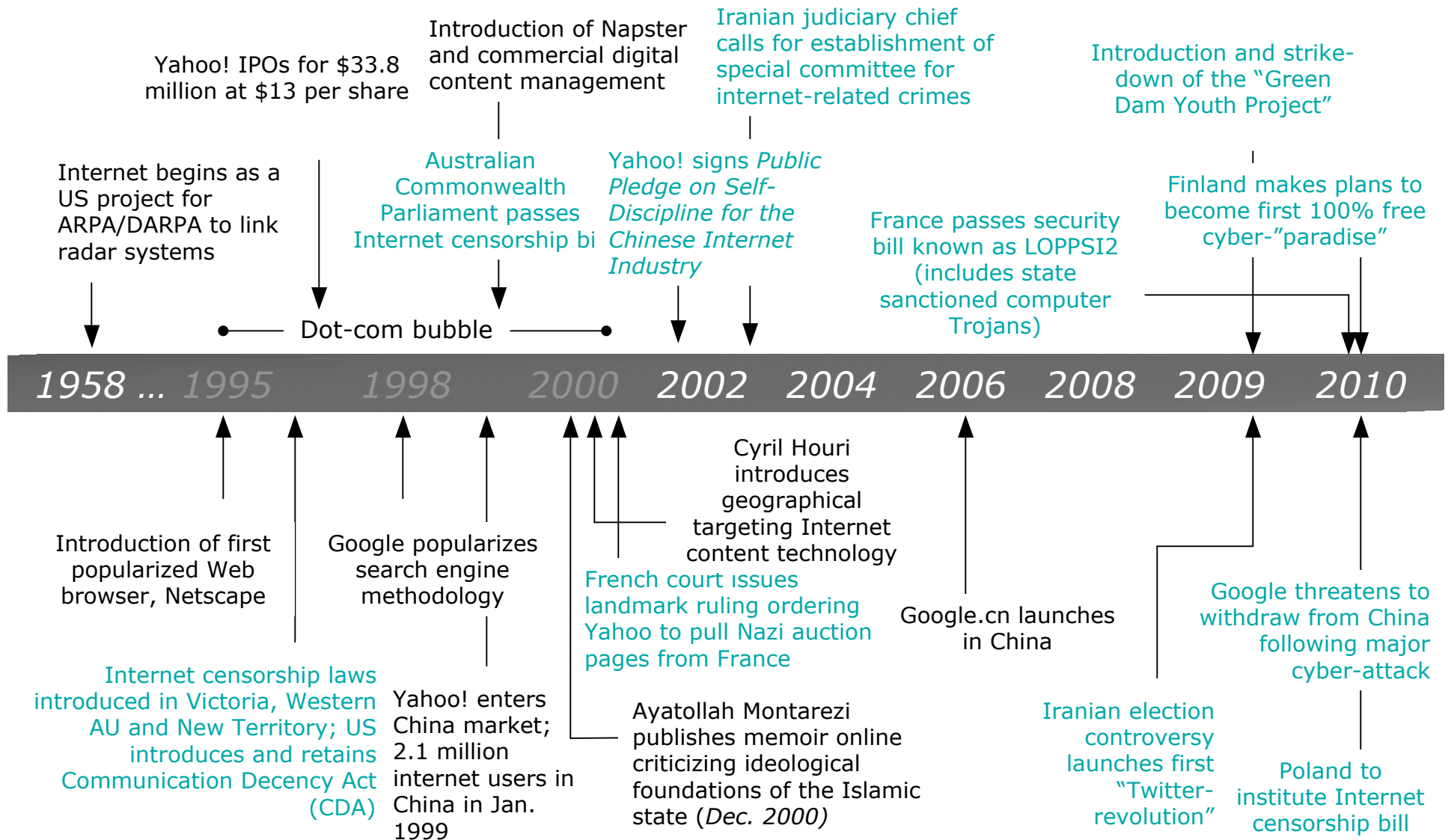Wendy Qi

Digital Markets Course -Professor Suzanne Scotchmer

Defining Internet Content Regulation

*"**Internet content regulation**" will be
defined as any sort of widespread
content restriction or monitoring as
mandated, either explicitly or otherwise,
by government or regulatory bodies*

The Internet: From a Regulatory Perspective

Yahoo! IPOs for $33.8 million at $13 per share

Introduction of Napster and commercial digital content management

Iranian judiciary chief calls for establishment of special committee for internet-related crimes

Introduction and strike-down of the "Green Dam Youth Project"

Internet begins as a US project for ARPA/DARPA to link radar systems

Australian Commonwealth Parliament passes Internet censorship bi

Yahoo! signs *Public Pledge on Self-Discipline for the Chinese Internet Industry*

France passes security bill known as LOPPSI2 (includes state sanctioned computer Trojans)

Finland makes plans to become first 100% free cyber-"paradise"

Dot-com bubble

1958 …   **1995**   **1998**   **2000**   **2002**   **2004**   **2006**   **2008**   **2009**   **2010**

Cyril Houri introduces geographical targeting Internet content technology

Introduction of first popularized Web browser, Netscape

Google popularizes search engine methodology

French court issues landmark ruling ordering Yahoo to pull Nazi auction pages from France

Google.cn launches in China

Google threatens to withdraw from China following major cyber-attack

Internet censorship laws introduced in Victoria, Western AU and New Territory; US introduces and retains Communication Decency Act (CDA)

Yahoo! enters China market; 2.1 million internet users in China in Jan. 1999

Ayatollah Montarezi publishes memoir online criticizing ideological foundations of the Islamic state (*Dec. 2000*)

Iranian election controversy launches first "Twitter-revolution"

Poland to institute Internet censorship bill

Overview | Regulatory Objectives | Regulatory Methods | Case Studies | Impacts

Which countries regulate Internet content?

According to RWB's definition, ~60 countries experienced some sort of Web censorship in 2009, up from 30 in 2008.

Complete Control

- Burma (Myanmar)
- Cuba
- North Korea
- Turkmenistan

Substantial Control

- China
- Egypt
- Iran
- Uzbekistan
- Syria
- Tunisia
- Vietnam

Moderate Control

- Australia
- Bahrein
- Belarus
- Eritrea
- Malaysia
- Pakistan
- Russia
- Singapore
- South Korea
- Sri Lanka
- Thailand
- Turkey
- United Arab Emirates

Partial Control

- Brazil
- Canada
- Czech Republic
- France
- Germany
- Indonesia
- Italy
- Japan

...

- New Zealand
- Pakistan
- Poland
- South Africa
- Spain
- United Kingdom
- United States

Which countries regulate Internet content?
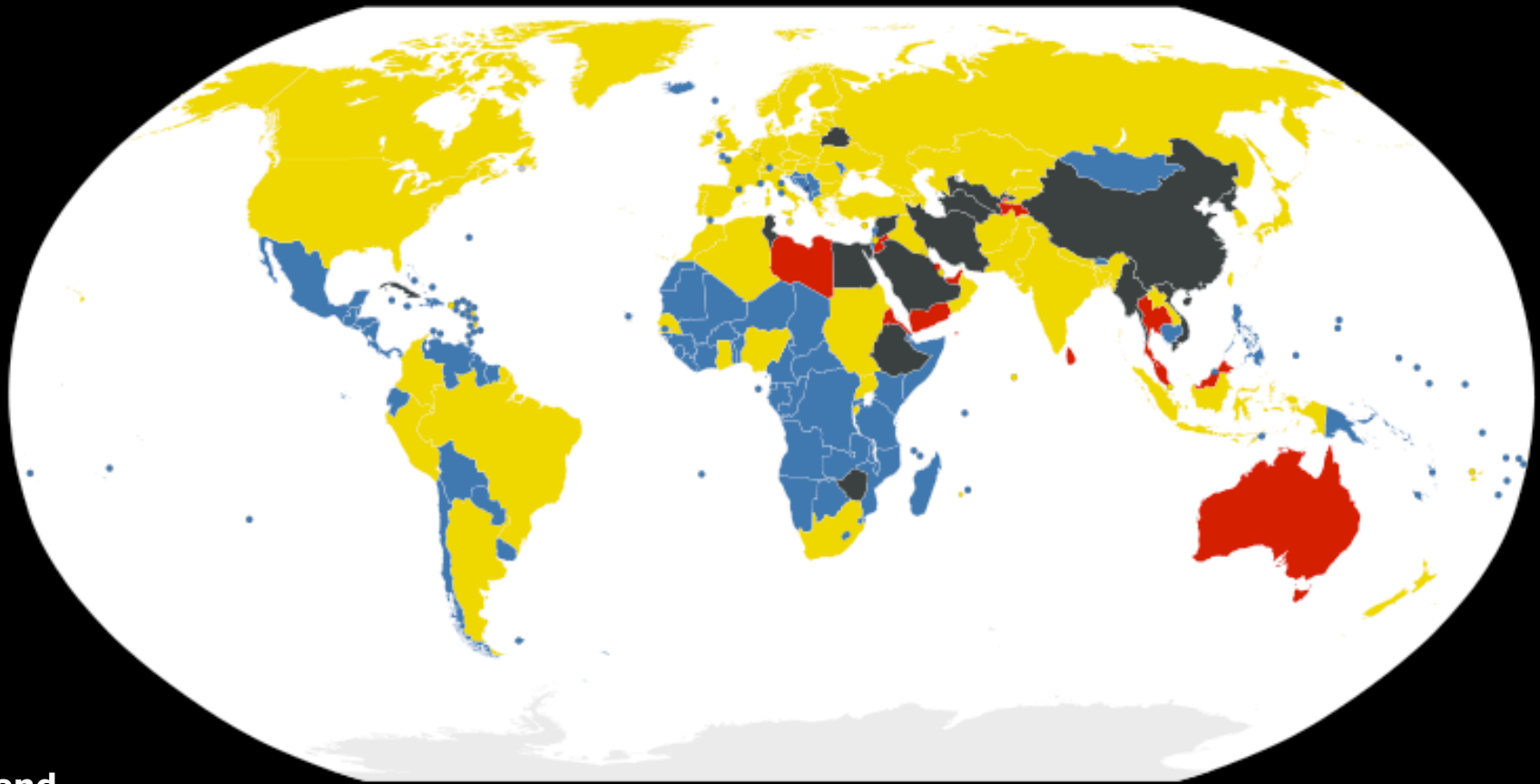
Reporters without Borders, August 2009

Legend

| Unknown | No censorship | Some censorship | Under surveillance | Heavy surveillance |

Why regulate the Internet?

Social
Values

Political
objectives

Economic
incentives
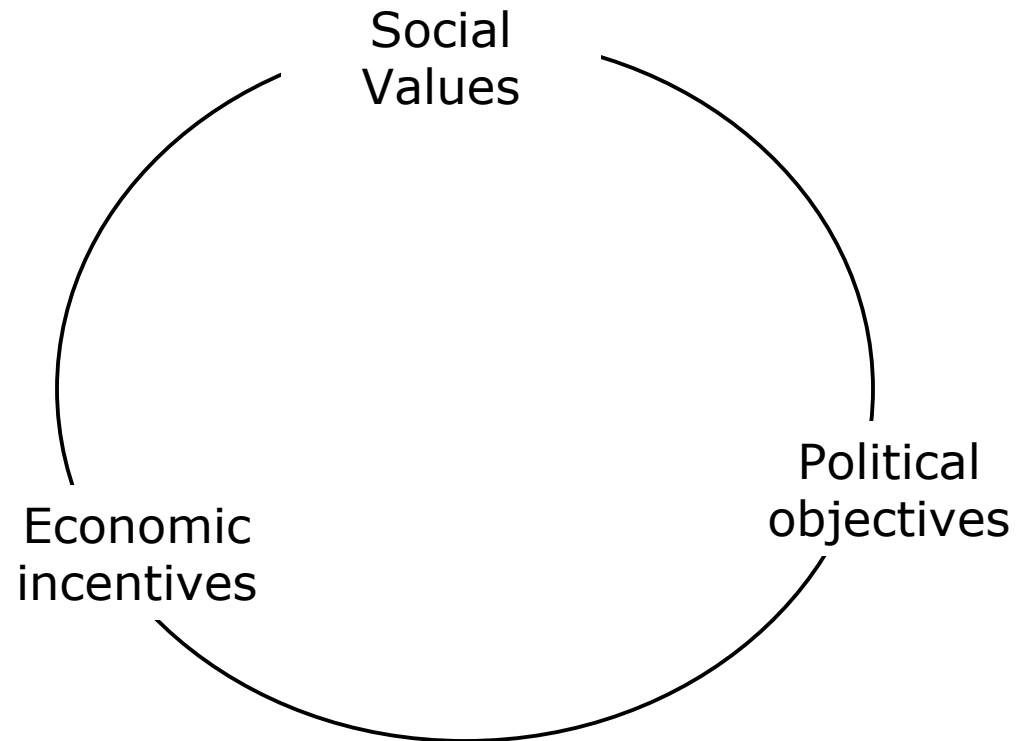
How is the Internet regulated?

Four Primary Modes - Lawrence Lessig

Creates virtual marketplace of information; offline laws of supply and demand reflected online
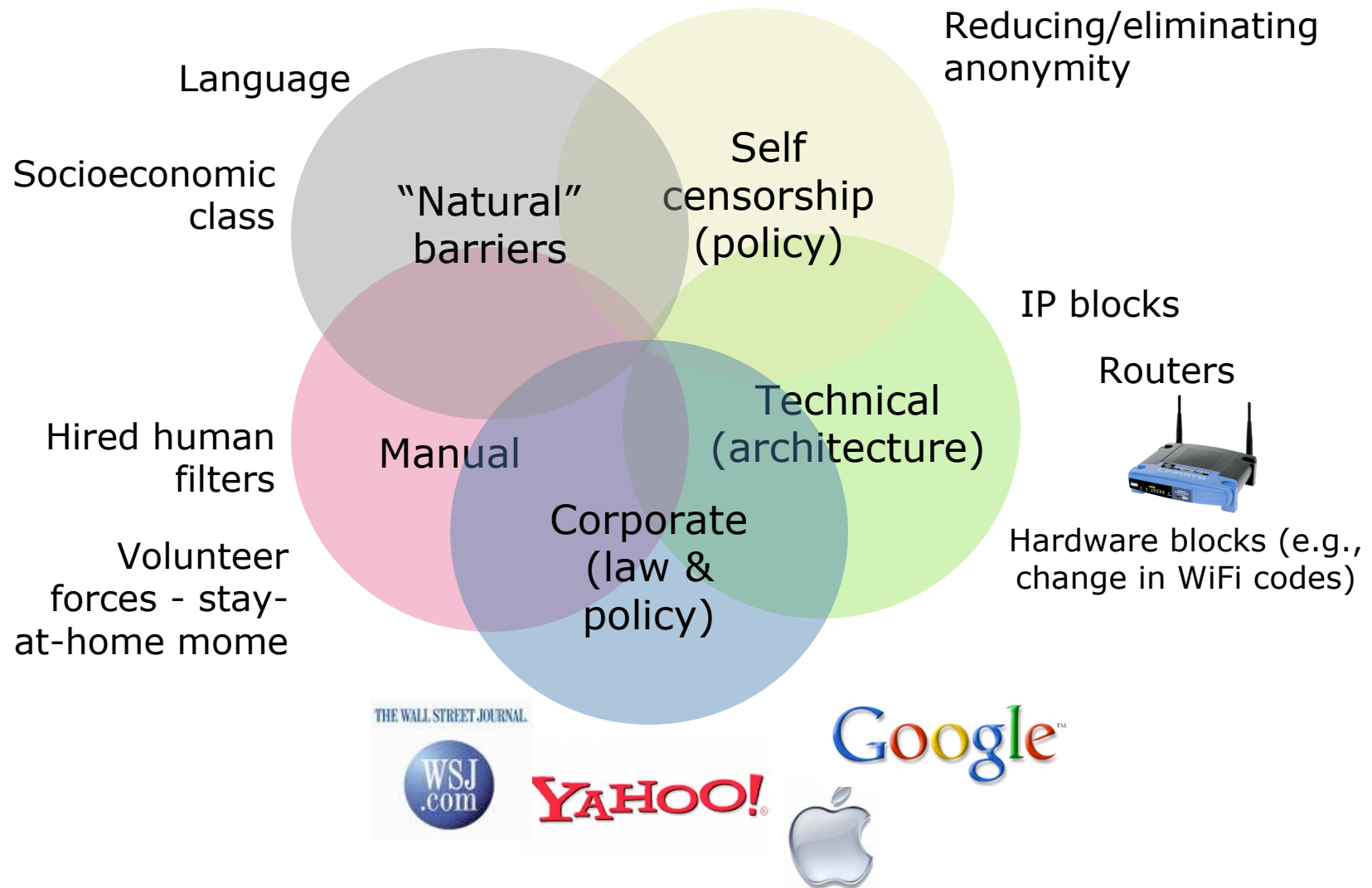
Markets

Norms

Offline social norms translate into online scenarios

"East Coast Code" Offline legal terms apply to online situations

Law

Architecture

"West Coast Code": Primarily technical means of regulating data

How is the Internet regulated?

Language

Socioeconomic class

"Natural" barriers

Self censorship (policy)

Reducing/eliminating anonymity

IP blocks

Routers

Hired human filters

Manual

Technical (architecture)

Volunteer forces - stay-at-home mome

Corporate (law & policy)

Hardware blocks (e.g., change in WiFi codes)

THE WALL STREET JOURNAL. WSJ.com

YAHOO!

Google

Where can the Internet be regulated technically?

Internet backbone	State-directed implementation of national content filtering schemes and blocking technologies affecting Internet access across entire backbone -- often done at "international gateway"
Internet service providers (ISPs)	Government-mandated filtering is most commonly implemented by Internet Service Providers (ISPs) using methods such as search result removals, take-downs, or technical blocking.
Institutions	Filtering of institutional level networks using technical blocking and/or induced self-censorship occurs in companies, government organizations, schools and cybercafés.
Individual computers	Home or individual computer level filtering can be achieved through the installation of filtering software that restricts an individual computer's ability to access certain sites.

Where can the Internet be regulated technically?

An example - Internet backbone

Search done on Google.cn

：：《新闻价值判断与表现》：培养对事实的新闻敏感：：

2003年8月5日 ... 能不能明确提出天安门事件完全是革命行动？经过反复斟酌，新华社领导和 ...
一"不寻常的信息"，从一个侧面说明在经历了"六·四"风波后，中国政局稳定、...

news.xinhuanet.com › 传媒在线 - 类似结果

据当地法律法规和政策，部分搜索结果未予显示。

"According to certain local laws, regulations, and policies, certain results of this search have been restricted."

Goooooooooogle ▶
1 2 3 4 5 6 7 8 9 10   下一页

六四天安门   Google 搜索

网页　图片　视频　地图　资讯　问答»　来吧»　购物　更多 ▼

Google

六四天安门

Google 搜索　高级

网页　➕打开百宝箱...

搜索 六四天安门 获得约 **922** 条结果，以下是第 **1-10** 条。 （用时 **0.15** 秒）

代工天王——王震干的成功传奇-中国台湾网
2009年6月15日 ... 这个事件就是六四天安门事件，当时盛传广州将发生暴动，当地许多台商老
板听到风声，连夜丢下台干跑回台湾。只有王震干一人没撤。 ...
www.chinataiwan.org/tsfwzx/.../t20090615_921252.html - 网页快照 - 类似结果

钱三强的忧思——老科学家临终前的肺腑之言---滨湖时代 合肥新闻网
2008年5月7日 ... 几个月后，"六四"天安门事件发生，出现了流血事件。 1987年2月6日，钱三
强给我写来短信："想起几个月前那次谈话，真是别有一番滋味在心头。 ...
www.ah.xinhua.org/hfnews/2008-05/07/content_13192750.htm

海外评述
日本是"六·四"政治风波后追随西方国家对中国实行经济制裁的唯一一个亚洲国家。 ... 日本对天
安门事件的最初反应反映出日本两大外交目标：通过强烈批评北京动用军队的 ...
cyc6.cycnet.com:8090/xuezhu/wenxue/content.jsp?n... - 网页快照 - 类似结果

六十年的天安门记忆:::博客精选:::
2009年9月18日 ... 新华网甘肃频道消息忽然从电脑里检出一张一九六四年在天安门前的合影。
那是共青团第九次代表大会闭幕之时，陕西代表团的同志们的合影。 ...
www.gs.xinhuanet.com/blog/2009-09/18/content_17736183.htm - 网页快照

注释--中国共产党新闻--中国共产党新闻-人民网
〔97〕四五运动，又称天安门事件，是一九七六年四月发生的反对"四人帮"的全国性群众 ... 一

Overview　|　Regulatory Objectives　|　**Regulatory Methods**　|　Case Studies　|　Impacts

Case Study | China

Population: ~1.34 billion (June 2009 est.)
Users Online: 384 million (29% of total population) - over 90% have broadband access
Level of online regulation: Very high

Credit: Associated Press

Regulation Filter Type	Degree of use	Examples
"Natural" barriers	Moderate	Articles critical of Chinese government published only in English/French; publications allowed only for certain socioeconomic groups
Technical	High/Pervasive	Sophisticated filters used to block potentially offensive sites be re-routing IP addresses; "Green Dam Youth Project"
Manual	High/Pervasive	Human censors will regularly comb forums and blogs to eliminate any offensive material
Corporate	High/Pervasive	Chinese government request cooperation of corporations such as Yahoo and Google as part of doing business in China
Self-censorship	High/Pervasive - Moderate	Uses selected, publicized arrests as a means of deterring potential offenders

Case Study | China

Credit: Associated Press

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WHY IT MATTERS

• China has the largest and fastest growing Internet population in the World

• Filtering is random and reasons not often transparent (e.g., sites like YouTube will be available one day and down the next)

• There had once been the belief that Internet would kill the censorship practices of the CCP

• Acting as an example for many other states (e.g., Iran)

• Going forward, there is an acute awareness amongst Chinese leadership to improve "soft power" by way of global public relations

"The question is no longer how the Internet will affect China. It is how China will affect the Internet."

- Professor Peter Yu, Drake University Law School

Case Study | Iran

Population: 66,429,284 (July 2009 est.)
Users Online: 32,200,000 (48.5% of total population)
Level of online regulation: Very high

Credit: Wikipedia

Filter Type	Degree of use	Examples
"Natural" barriers	Low	
Technical	High/pervasive	Increasing reliance on Iranian-developed ISPs that do not use Western technologies. Heavy surveillance continues to be widely practiced. All public Internet traffic is routed through proxy servers.
Manual	High/pervasive	The Iranian Revolutionary Guard protects Internet content standards; blogs written as part of the Iranian parliamentarian voluntary force (comparable to China's "fifty-cent" army)
Corporate	Moderate	Incidents where companies that sell mobile infrastructure network must also share how to monitor content (ex: Nokia)
Self-censorship	High/pervasive	Revolutionary Guard and arrests deter certain online behaviors

Case Study | Iran

Population: 66,429,284 (July 2009 est.)
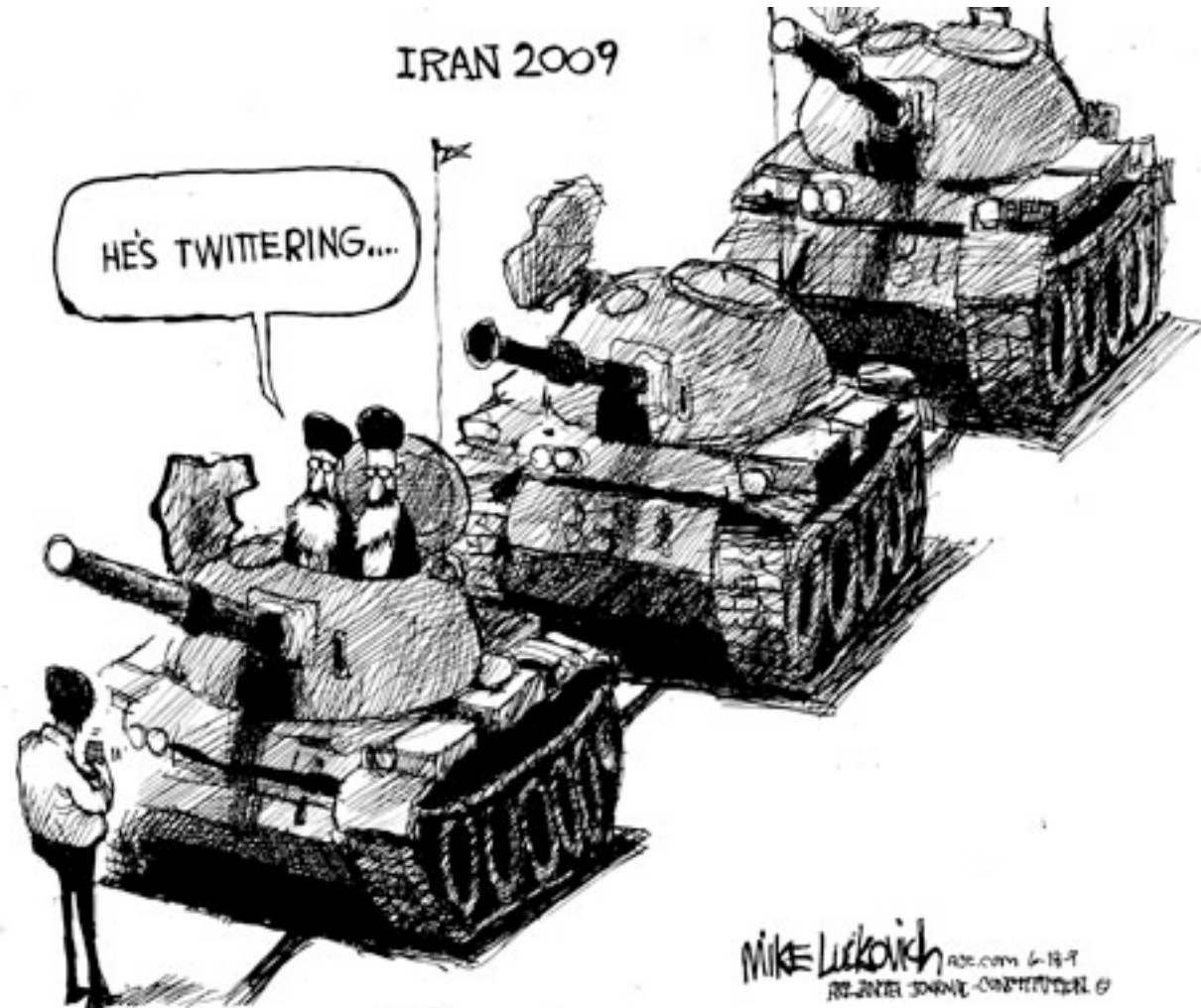**Users Online:** 32,200,000 (48.5% of total population)
Level of online regulation: Very high

WHY IT MATTERS

• Iran has one of the most regulated Internet censorship regimes despite being one of the Internet's largest proponents (second country in the Middle East to go online, first was Israel)

• History of using Internet as a political and social intermediary

•First "Twitter" revolution - Twitter delayed updates to site during election

  • Significance of this is multi-fold:

    • Gave journalists access they were otherwise denied

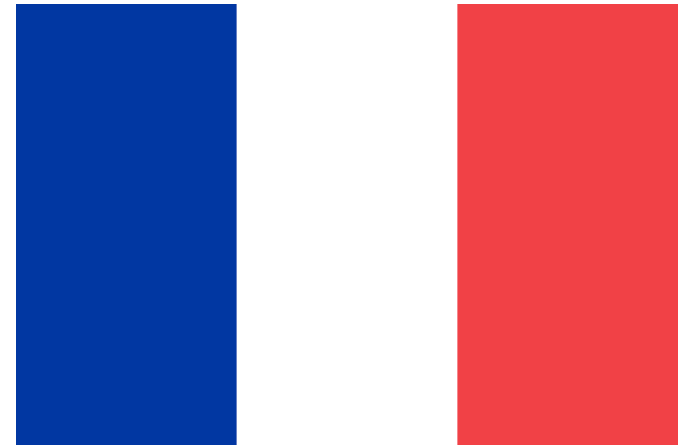   • Publicizied "Neda"

Case Study | Iran

Copyright © 2009 Creators Syndicate

Case Study | France

Population: 64,057,792 (July 2009 est.)
Users Online: 43,100,134 (69.3% of total population)
Level of online regulation: Low-Moderate

Credit: Wikipedia

Regulation Filter Type	Degree of use	Examples
"Natural" barriers	N/A	
Technical	High/pervasive	State-run computer trojans and requires ISPs to block certain sites on the government's blacklist
Manual	N/A	
Corporate	N/A	
Self-censorship	High/pervasive	Laws will allow for new database of citizen online activity

Case Study | France

Population: 64,057,792 (July 2009 est.)
Users Online: 43,100,134 (69.3% of total population)
Level of online regulation: Low-Moderate

Credit: Wikipedia

WHY IT MATTERS

• One of the first countries involved in cyber-related regulation cases

• One of the most regulated democratic governments in terms of online regulation

• Current legislation goes against long-standing privacy initiatives

• May be an example for other states in the region, particularly Germany

Policy

• How should governments regulate social content? Is online truly an extension of offline social interactions and norms?

• Is an Orwellian approach ever justified?

• Can policy reflect the preferences of its citizens?

• How can policy work with commerce and individuals to maximize social welfare?

• There are generally two camps of thought -- those who call for a completely free and open net and those who call for some regulation WHEN protecting certain social values

Policy

A case for country-based regulation and policy:

Suppose there are three nations each with 100 people. 51 want to ban online gambling in nation A, 75 want to ban in nation B, and 30, want to ban in nation C.

Global Regulation: 144 unhappy with policy, 156 happy with policy.

Country-based regulation: Nation A: Ban; Nation B: Ban; Nation C: Permit

Total: 196 happy with policy, 104 unhappy with policy

Public response

• Even in countries where government regulation is heaviest, there is a massive wave of tools aimed at circumventing these barriers

Some tools:

VPNs: Virtual private networks are especially popular in China, where 10 known foreign ones are widely used. Have rarely been shut down
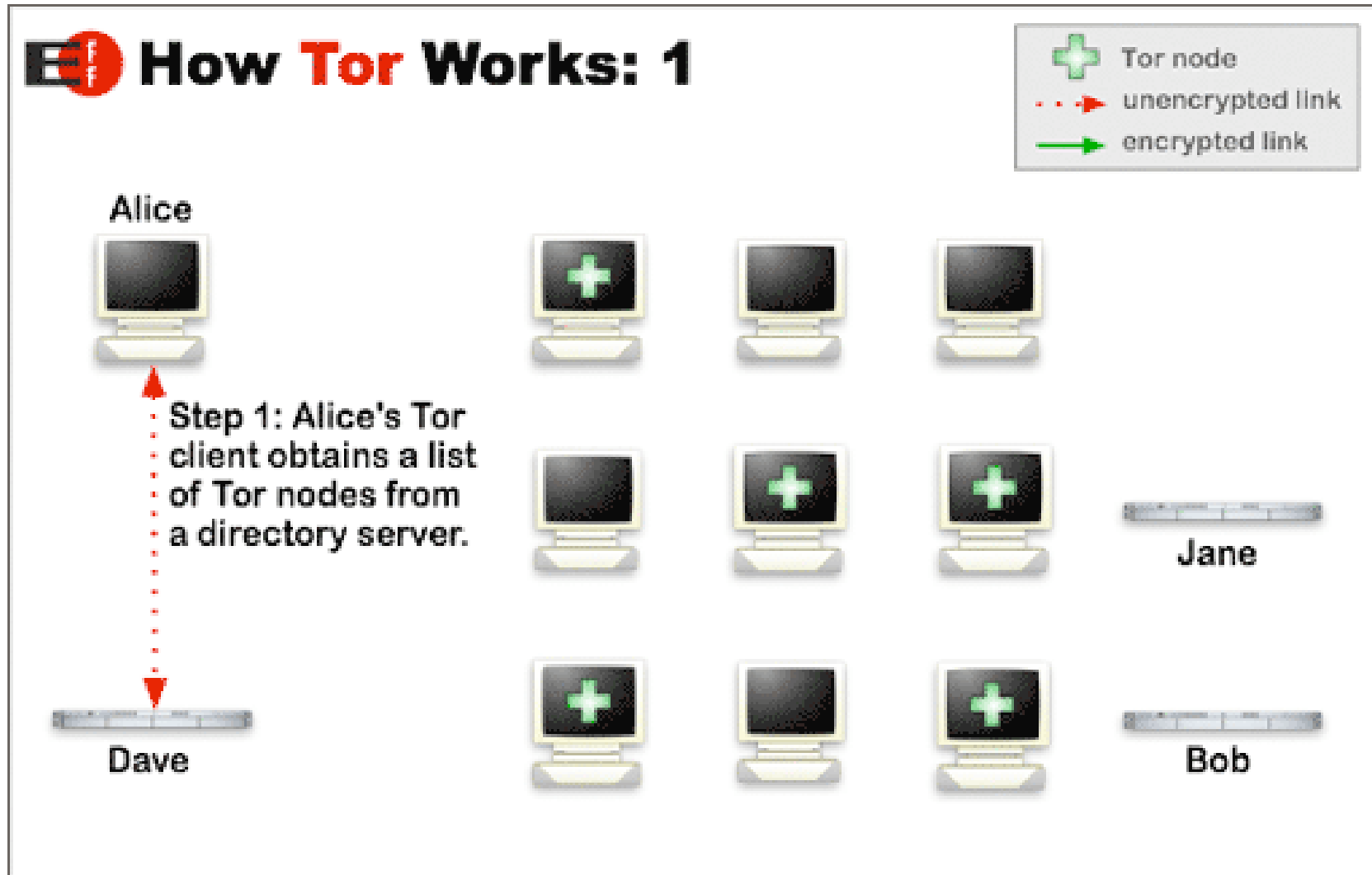
Proxies that act as an intermediary between user's computer and end site

Webplatfoms like **Tor** aim to protect users identity by erasing tracks of where users have been

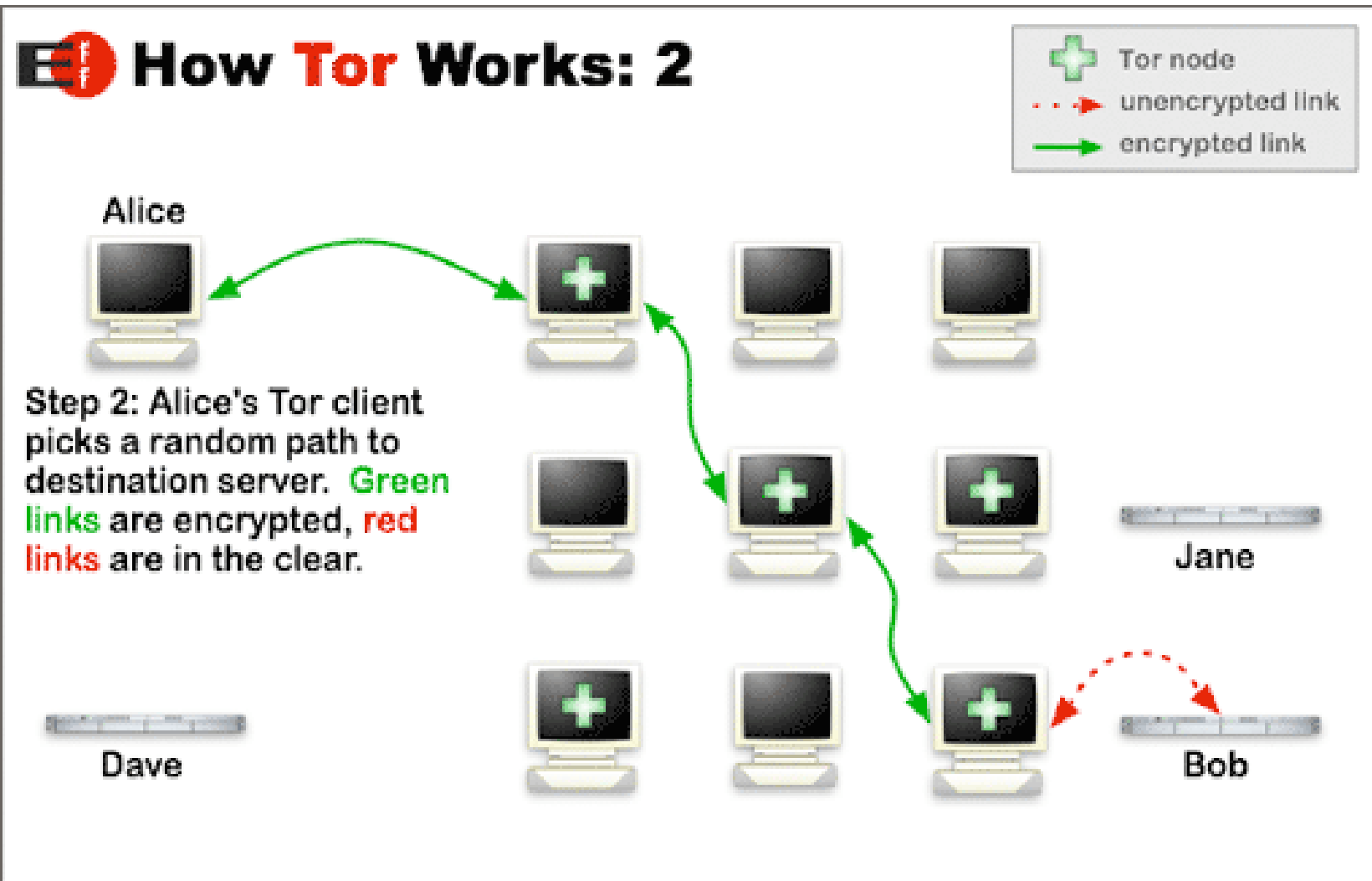Renewed my VPN last night, I'm ready for another #harmonious year in China.
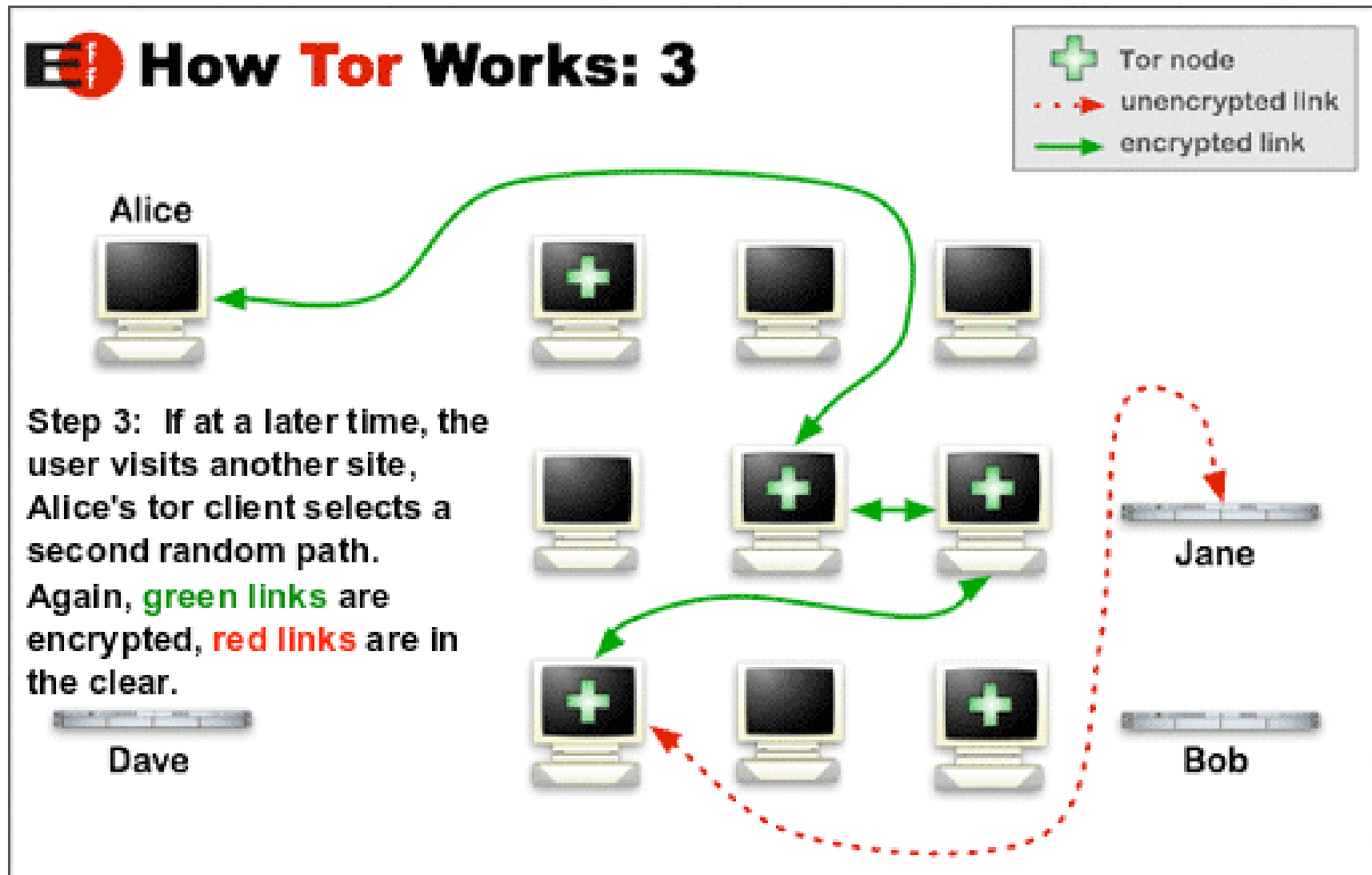7:24 PM Mar 15th via TweetDeck

How Tor Works

How Tor Works: 1

Legend:
- Tor node
- ···▶ unencrypted link
- ──▶ encrypted link

Alice

Step 1: Alice's Tor client obtains a list of Tor nodes from a directory server.

Dave

Jane

Bob

How Tor Works

How Tor Works

Economic implications

Trade barriers: Just as in offline markets, government regulation can result in trade barriers (e.g., protection of domestic Internet firms in China)

Black markets: Emergence of Internet usage in areas like the North Korean/Chinese border through Web-enabled phones running on Chinese services

Legal Implications

How are borders defined? Do we define border based on where the technology company is headquartered? Where servers are hosted? Or where the end user is?

Redefining of "market power" How can one government's laws reflect new business pratices? (*Example:* Microsoft dot-net-passport security and EU global privacy standards)

What are the effects?

• **Global village?** Early pioneers of the Internet we know today and many human rights groups see the Internet as an open space, a place of open information and self-governance

• Reality is oftentimes an amplification and **reflection of offline societies** and values

• Technologists like Bill Gates had proudly predicted the advent of **"unlimited broadband"** by 2010; today, we find quite the opposite - often limited not by network capabilities but by nation states

• In a borderless world, the issue of **borders** becomes more important than ever - where does the jurisdiction of one country begin and end?

• The number of nations implementing regulatory measures is increasing. Google cites that more than 25 governments have blocked its services since its inception, especially after 2002.