

Designed for democracy:
**pattern di interferenza tra codici giuridici
e codici informatici
nei recenti casi di censura
online e offline**

Alberto Cammozzo

cammozzo.com



tagmenot.info



e-privacy 2011 - Cloud computing e Privacy
2-4 giugno 2011
Firenze, Palazzo Vecchio

“The internet is the new frontier, a **territory** to conquer. But it cannot be a Wild West. It cannot be a **lawless** place, where people are allowed to pillage artistic works with no limits”

@Sarkozy
#eG8



code is law



The cyberspace is not a new space to conquer. It does not exist to be colonized nor civilized. The cyberspace is a space of civilization, and has been since its founding. This is an undeniable fact, because it is built and inhabited by men and women.

We oppose states **abandoning the protections they own their citizens.**

We oppose states violating the right to privacy in the cyberspace.

<http://owni.eu/2011/06/01/manifesto-for-cyberspace/>
#eG8

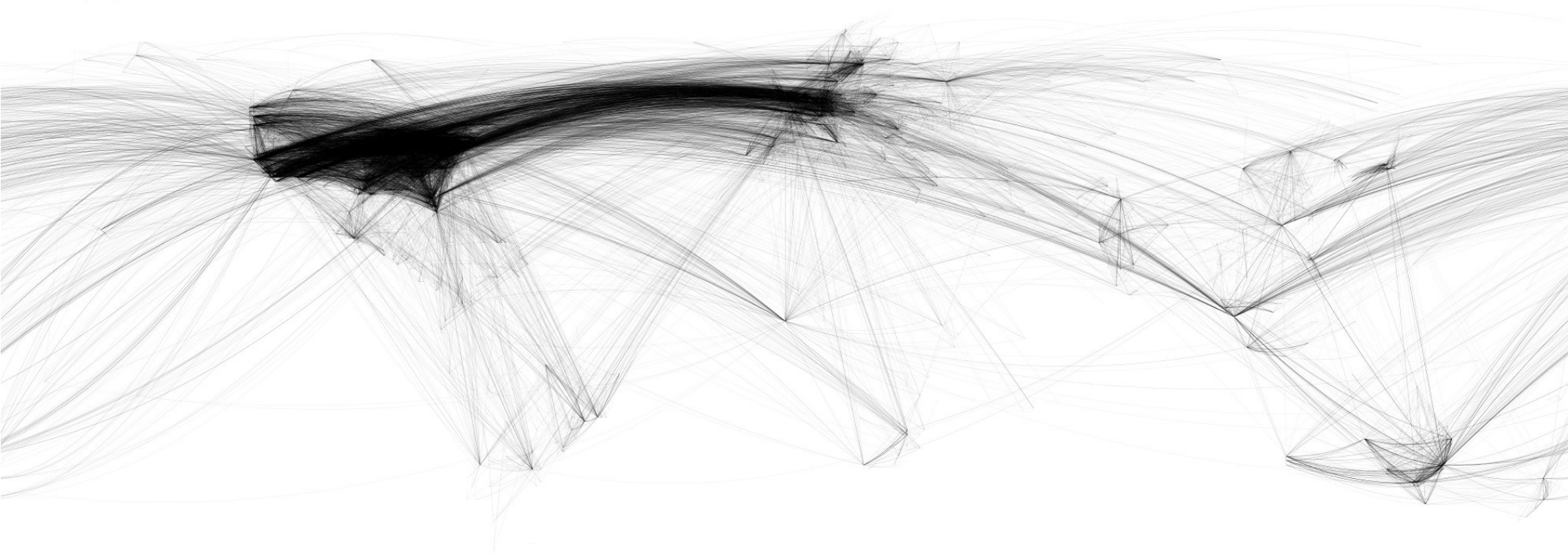
- Cosa intendiamo per censura nel cyberspace?
- Come si manifesta?
- Come può essere contrastata?

/Space/ ?



Palazzo del Podestà	17 Castel novo	33 la Rosa Palazzo	Santo frum.
Corte del Capitano	18 S. Agostino	34 S. Bernardino	34 la Donna et Christ
la Chiesa del Duomo	19 S. Benedetto	35 S. Bernardino	la Santa mole
S. Agata	20 S. Maria minor Duca	36 S. Barbara grande	35 il Corso de S. Agostino
S. Luca	21 S. Antonio et Scola	37 S. Lorenzo	36 S. Iustina Minore
S. Maria del Duomo	22 S. Maria Magdalena	38 S. Agostino d'	37 S. Bernardino nuovo
S. Maria	23 S. Niccolò frum.	39 S. Antonio	38 la Chiesa vecchia
S. Marone	24 S. Giovanni	40 S. Stefano	39 S. Maria della
la Chiesa de Dio	25 S. Giovanni frum.	41 S. Agostino	Grande
S. Maria	26 S. Giovanni et S. Stefano	42 S. Francesco frum.	40 S. Giovanni
S. Andrea	27 S. Giacomo	43 S. Paolo nuovo	41 S. Giorgio
S. Sordani	28 S. Giovanni frum.	44 S. Sordani et Scola	42 S. Daniele
il S. Spirito	29 S. Donato Pellegrin	45 S. Sordani parochia	43 S. Maria del Duomo
la Chiesa Vecchia	30 S. Leonardo	46 Chiesa de S. Iustina	44 S. Maria del Duomo
Castello Vecchio	31 S. Niccolò Scola	47 S. Caterina	45 Castello de S. Leonardo
il Castello novo	32 S. Giovanni frum.	48 S. Antonio	46 S. Michele

Internet Map
city-to-city connections



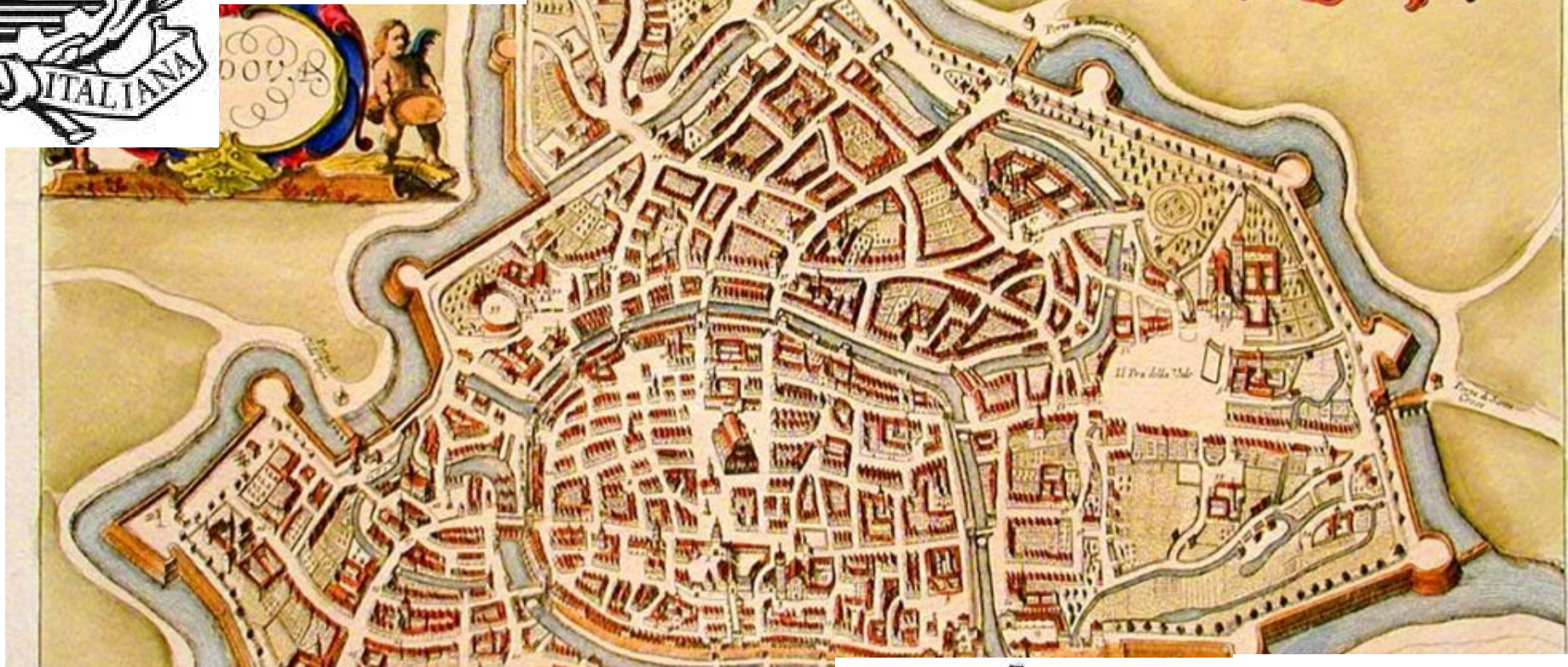
ChrisHarrison.net

© Christian Harrison

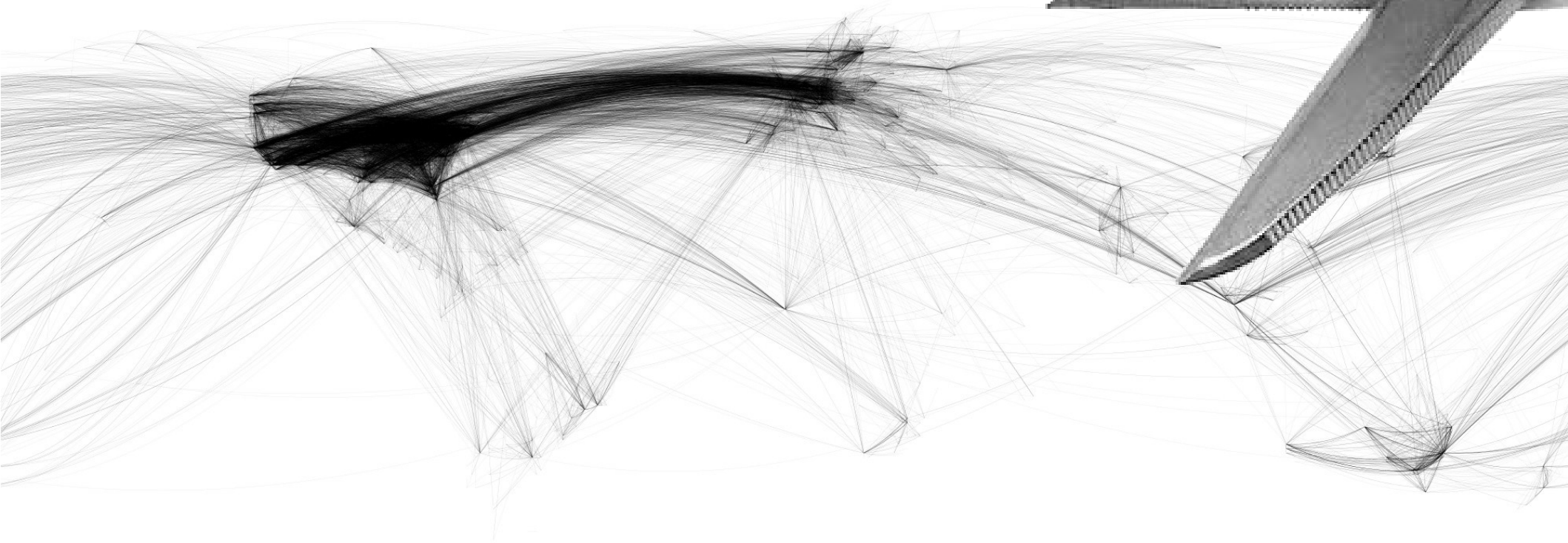
<http://chrisharrison.net/projects/InternetMap/medium/worldWhite.jpg>



Registro.it



Internet Map
city-to-city connections



ChrisHarrison.net

© Christian Harrison

<http://chrisharrison.net/projects/InternetMap/medium/worldWhite.jpg>

THE INTERNET'S "BLACK HOLES"

Belarus, Burma, China, Cuba, Iran, Libya, Maldives, Nepal, North Korea, Saudi Arabia, Syria, Tunisia, Turkmenistan, Uzbekistan and Vietnam



Fifteen countries are black holes in the World Wide Web. News is not free to circulate there. These enemies of the Internet are nonetheless here in Tunisia and are talking without any shame about freedom of expression. www.rsf.org

**REPORTERS
WITHOUT BORDERS**
FOR PRESS FREEDOM

Infosphere

- *new environment as a world of data, information, knowledge and communication*
- *What we need to do is to fight any kind of destruction, corruption, depletion (marked reduction in quantity, content, quality, value) or closure of the infosphere, what shall be referred to here as information entropy.*

L Floridi - *Ethics in the Infosphere*,
2001 – The Philosophers' Magazine 6

- *information environment*
- *subjective world of information*

L Floridi - *Ethics and Information Technology*,
2002 – Springer



subjective information environment



Censorship

destruction, corruption, depletion

(marked reduction in
quantity, content, quality, value)

of the subjective information environment

Destruction: supporto, canale, segnale,
emittente/ricevente

Corruption: messaggio, codici, introduzione di rumore

Depletion: saturazione banda (DoS)



US-Google

Google [Advanced Search](#) [Preferences](#)

white pride

Web Images Groups Directory News

Searched the web for **white pride**. Results 1 - 10 of about 2,1

[Stormfront White Pride World Wide](#)
 ... This site last updated . Current time is . **White** Nationalist Community Discussion Board. ... Texts library Archived articles of interest to **White** Nationalists. ...
 Description: **White** supremacist organization seeking to advance Western culture and ideals, and freedom of speech...
 Category: [Society](#) > [Issues](#) > ... > [White](#) > [Organizations](#)
[www.stormfront.org/](#) - 20k - 3 Sep 2003 - Cached - Similar pages

[Yahoo! Directory White Pride and Racism](#)
 White Pride and Racism Directory > Society and Culture

Censored Google Germany

Google [Erweiterte Suche](#) [Einstellungen](#)

white pride

Suche: Das Web Deutschland

Web Bilder Groups Verzeichnis News Neu!

Das Web wurde nach **white pride** durchsucht. Ergebnisse 1

[Yahoo! Directory White Pride and Racism](#) -
 [[Diese Seite übersetzen](#)]
 White Pride and Racism Directory > Society and Culture > Cultures and Groups > **White Pride** and Racism, Search the Web just this category. ...
[dir.yahoo.com/Society_and_Culture/Cultures_and_Groups/White_Pride_and_Racism/](#) - 13k - 3. Sep 2003 - [Im Cache](#) - [Ähnliche Seiten](#)

[Yahoo! Groups](#) - [[Diese Seite übersetzen](#)]
 ... Yahoo! Groups. Top > Cultures & Community > Groups > **White Pride** and Racism

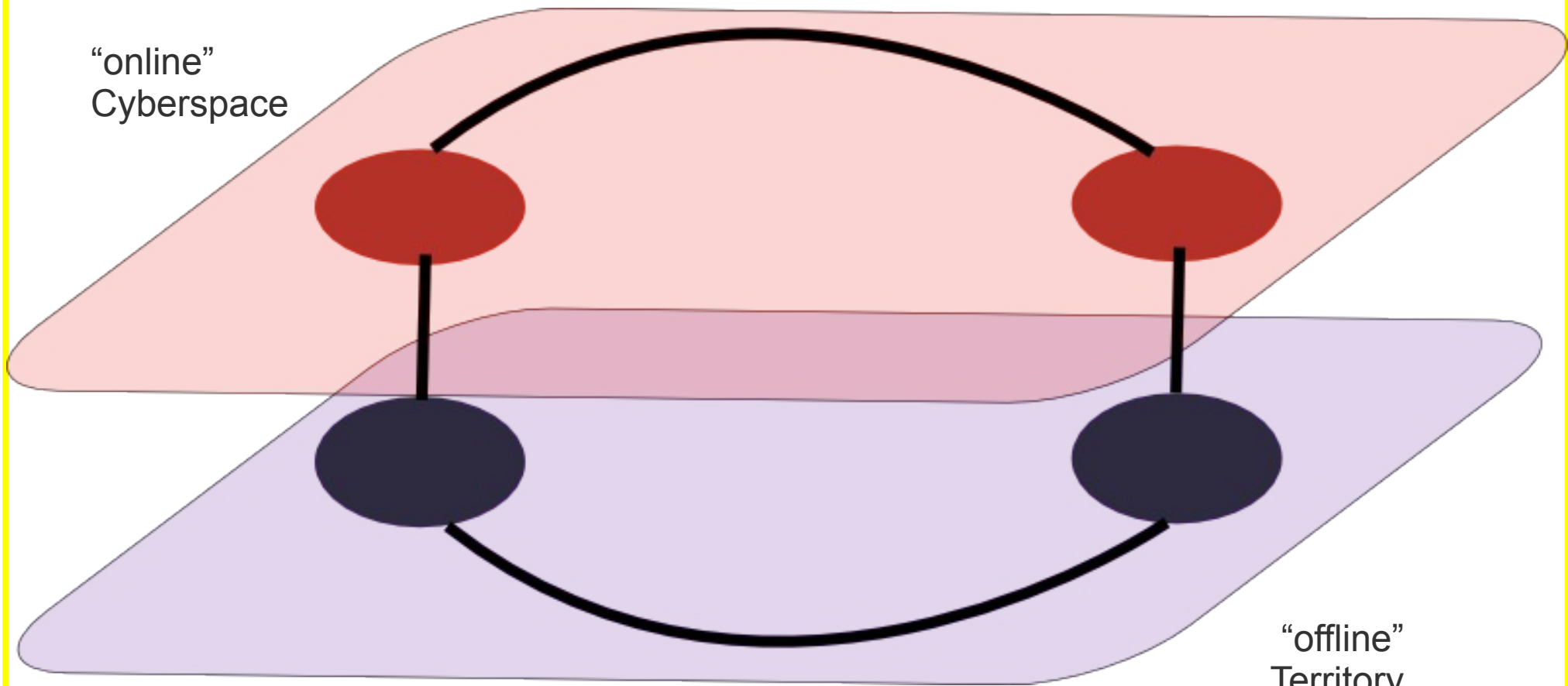
http://blogscoped.com/archive/2003_09_04_index.html
<http://cyber.law.harvard.edu/filtering/google/results1.html>



2 faces of information space



“online”
Cyberspace



“offline”
Territory

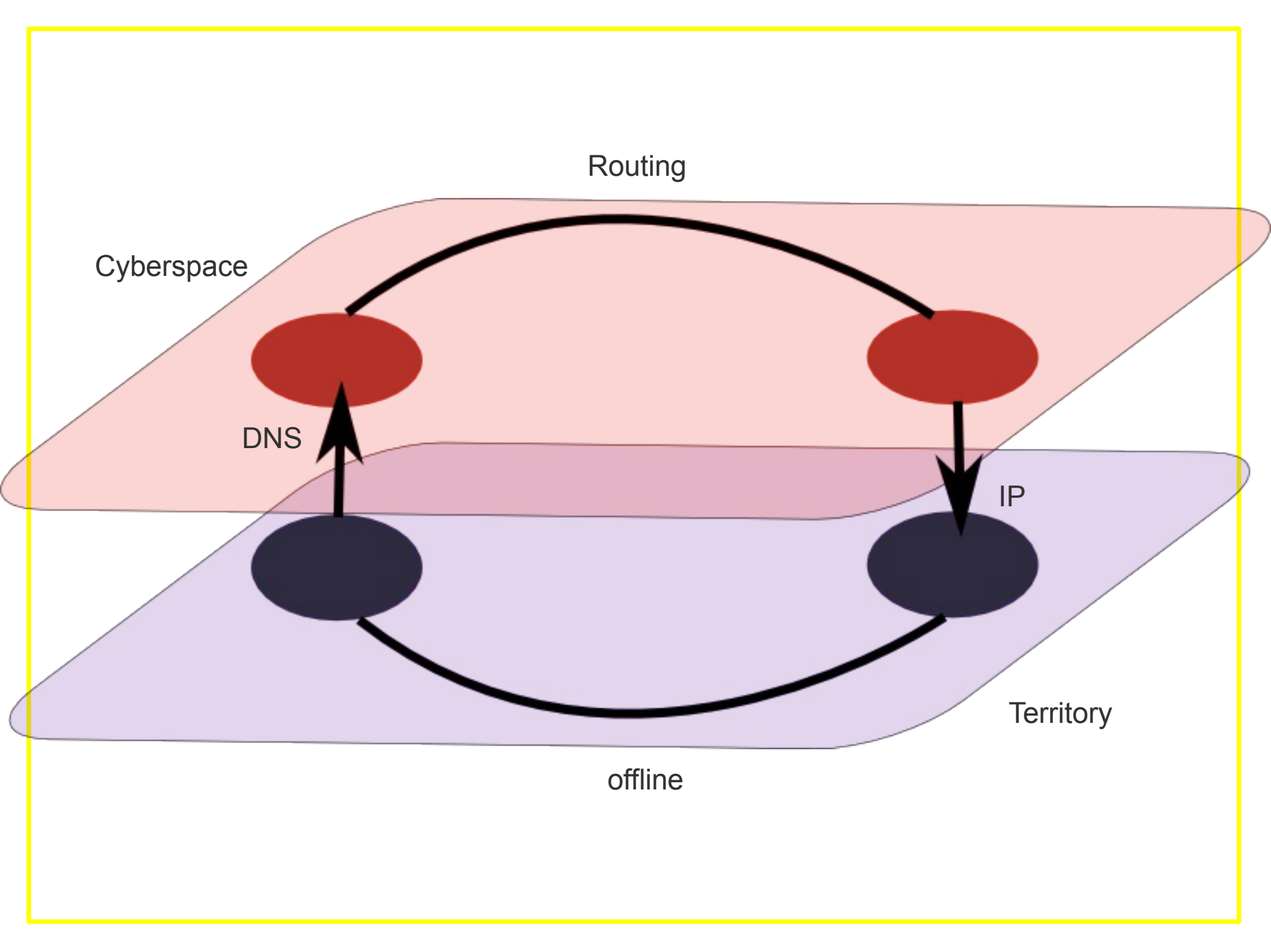


***Reality is that which,
when you stop believing in it,
doesn't go away.***

– P.K.Dick, 1978
*How to Build a Universe
That Doesn't Fall Apart
Two Days Later*

***Offline is that which,
when you run out of batteries,
doesn't go away.***

– me, 2011



Da → A	Territorio	Cyberspace
Territorio	[offline]	<i>Deterritorializzazione</i> [DNS]
Cyberspace	<i>Riterritorializzazione</i> [IP]	[routing]

Deleuze, Gilles, and Félix Guattari. *Capitalisme et schizophrénie*. Éditions de minuit, 1980.
 Galloway, Alexander R. *Protocol*. MIT Press, 2004.



This webpage is not available



The server at **wikileaks.net** can't be found, because the DNS lookup failed. DNS is the web service that translates a website's name to its internet address. This error is most often caused by having no connection to the internet or a misconfigured network. It can also be caused by an unresponsive DNS server or a firewall preventing Chromium from accessing the network.

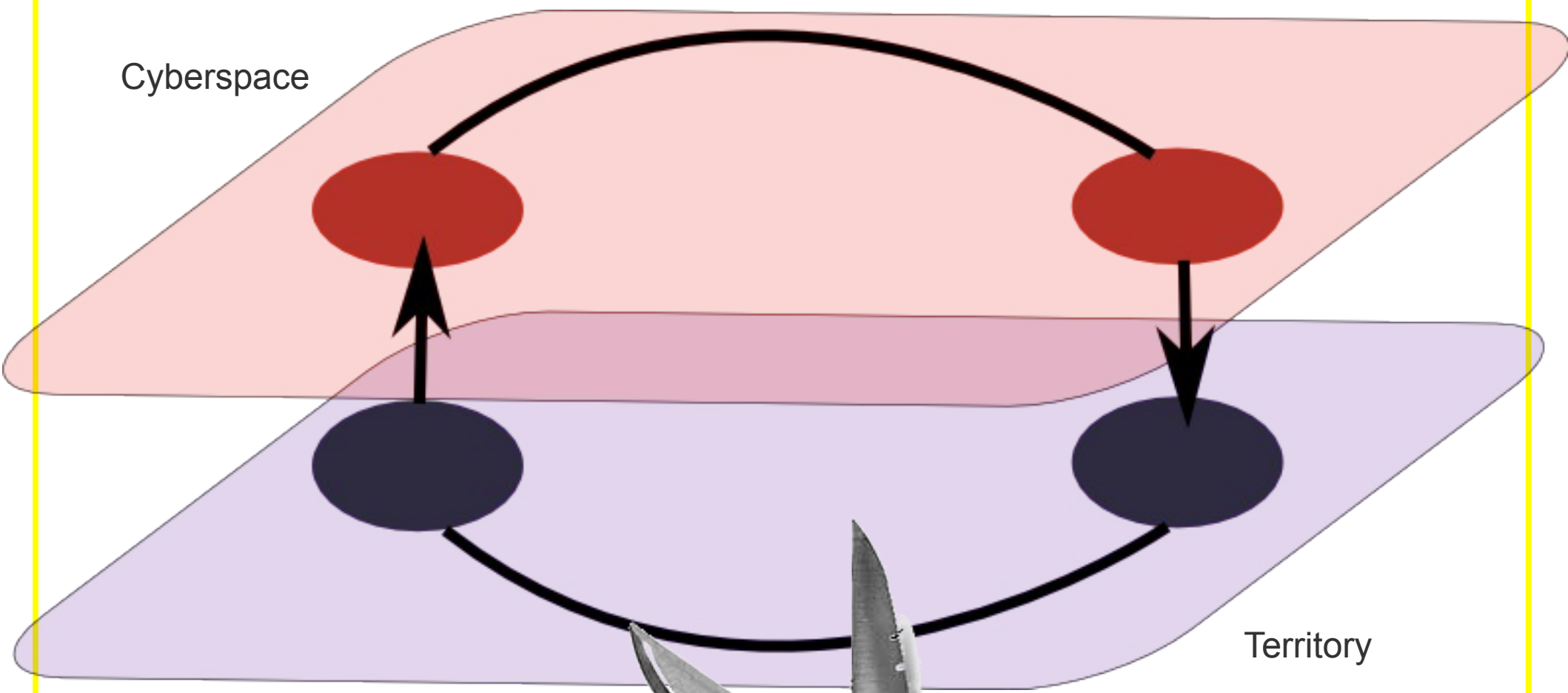
Here are some suggestions:

- [Reload](#) this web page later.
- Check your internet connection. Reboot any routers, modems, or other network devices you may be using.
- Check your DNS settings. Contact your network administrator if you're not sure what this means.
- Try disabling DNS prefetching by following these steps: Go to **Wrench menu > Preferences > Under the Hood** and deselect "Use DNS pre-fetching to improve page load performance."
- Try adding Chromium as a permitted program in your firewall or antivirus software's settings. If it is already a permitted program, try deleting it from the list of permitted programs and adding it again.
- If you use a proxy server, check your proxy settings or check with your network administrator to make sure the proxy server is working.
- If you don't believe you should be using a proxy server, try the following steps: Go to **Wrench menu > Preferences > Under the Hood > Change proxy settings** and make sure your configuration is set to "no proxy" or "direct."

Error 105 (net::ERR_NAME_NOT_RESOLVED): Unable to resolve the server's DNS address.

Cyberspace

Territory



Territorio-Territorio

- Comunicazione faccia a faccia, di persona ...
- Censura: soppressione/confinamento della fonte/destinatario
- Wikileaks, Egitto, Libia:
 - minacce di morte/rapimento/detenzione di Julian Assange/cittadini
- Codici: “sovranità dello Stato” vs “libertà”

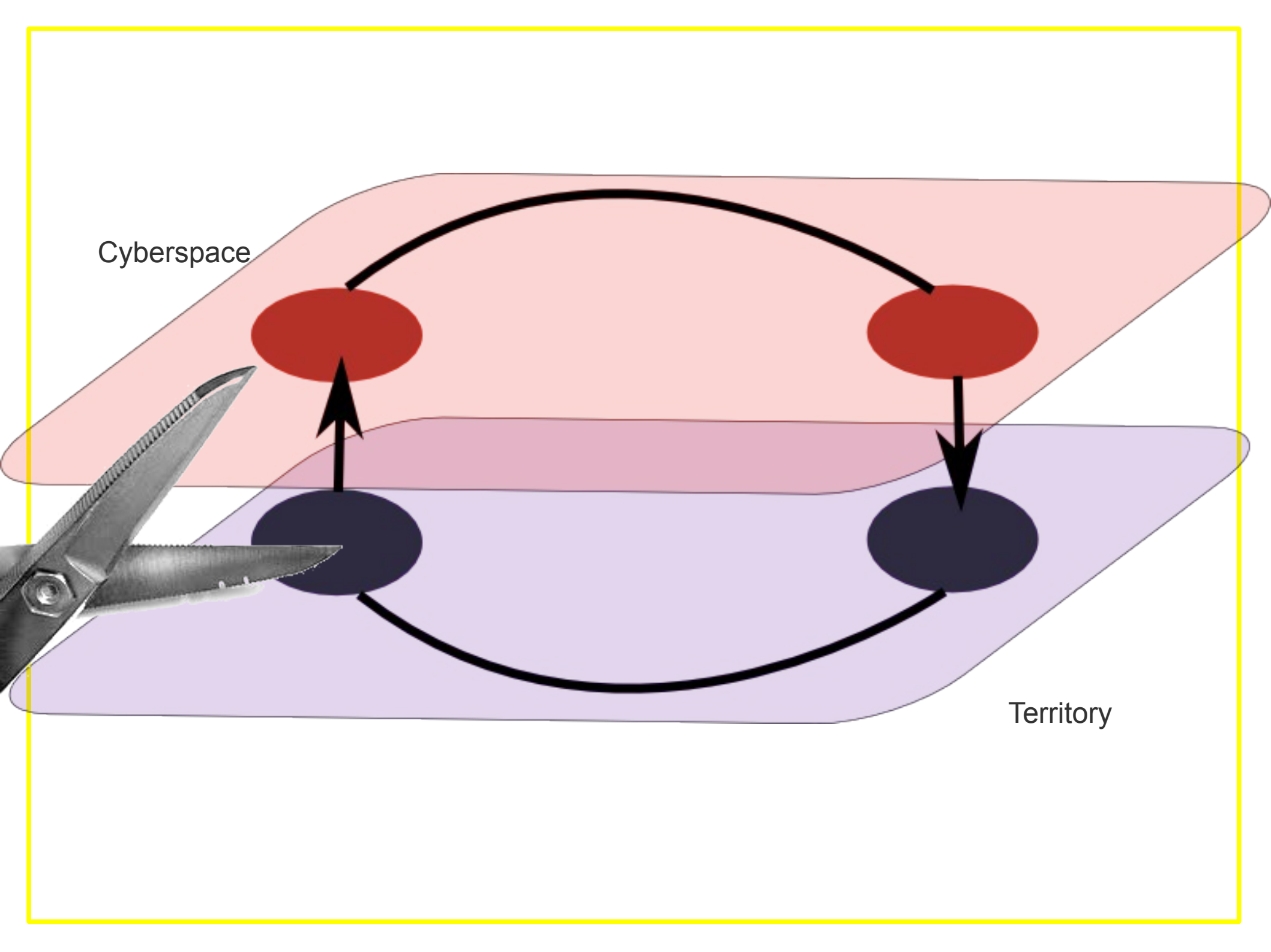
The Washington Times

Mr. Assange is not a journalist or publisher; rather, he is an **enemy combatant** - and should be treated as such.

Instead, the administration should have pressured **Australia** to take decisive action against the leaker. It also should have issued an **international arrest warrant** and demanded that he be extradited to the United States to face charges of aiding terrorists.

At a minimum, back in the summer, the administration could have launched a devastating **cyber-attack** against the WikiLeaks website, shutting it down.

By **Jeffrey T. Kuhner**-The Washington Times ; December 2, 2010



Territorio-Cyberspace

deterritorializzazione

Dati locali → Indirizzi IP (geolocalizzati) → Internet

- Censura: rimozione/blocco IP, rimozione dei dati
- Wikileaks:
 - USA: Amazon interrompe il servizio per Wikileaks per timore di attacchi informatici,
 - giustificato da *Acceptable Use Policy* (soft Law)
 - Facebook, Twitter, Google non fanno nulla
- Risposta: replicazione dei dati
 - FR: OVH si rifiuta di interrompere il servizio su pressioni governative, che ritiene ingiustificate
 - SE, CH, ... : replicazione massiccia dei siti



There have been reports that a government inquiry prompted us not to serve WikiLeaks any longer. That is inaccurate.

There have also been reports that it was prompted by massive DDOS attacks. That too is inaccurate. There were indeed large-scale DDOS attacks, but they were successfully defended against.

Amazon Web Services (AWS) rents computer infrastructure on a self-service basis. AWS does not pre-screen its customers, but it does have terms of service that must be followed. WikiLeaks was not following them. There were several parts they were violating. For example, our terms of service state that "you represent and warrant that you own or otherwise control all of the rights to the content... that use of the content you supply does not violate this policy and will not cause injury to any person or entity." It's clear that WikiLeaks doesn't own or otherwise control all the rights to this classified content. Further, it is not credible that the extraordinary volume of 250,000 classified documents that WikiLeaks is publishing could have been carefully redacted in such a way as to ensure that they weren't putting innocent people in jeopardy. Human rights organizations have in fact written to WikiLeaks asking them to exercise caution and not release the names or identities of human rights defenders who might be persecuted by their governments.

We've been running AWS for over four years and have hundreds of thousands of customers storing all kinds of data on AWS. Some of this data is controversial, and that's perfectly fine. But, when companies or people go about securing and storing large quantities of data that isn't rightfully theirs, and publishing this data without ensuring it won't injure others, it's a violation of our terms of service, and folks need to go operate elsewhere.

We look forward to continuing to serve our AWS customers and are excited about several new things we have coming your way in the next few months.

— Amazon Web Services

Amazon Web Services™ Acceptable Use Policy

Updated May 23, 2011

This Acceptable Use Policy (this "**Policy**") describes prohibited uses of the web services offered by Amazon Web Services LLC and its affiliates (the "**Services**") and the website located at <http://aws.amazon.com> (the "**AWS Site**"). The examples described in this Policy are not exhaustive. We may modify this Policy at any time by posting a revised version on the AWS Site. By using the Services or accessing the AWS Site, you agree to the latest version of this Policy. If you violate the Policy or authorize or help others to do so, we may suspend or terminate your use of the Services.

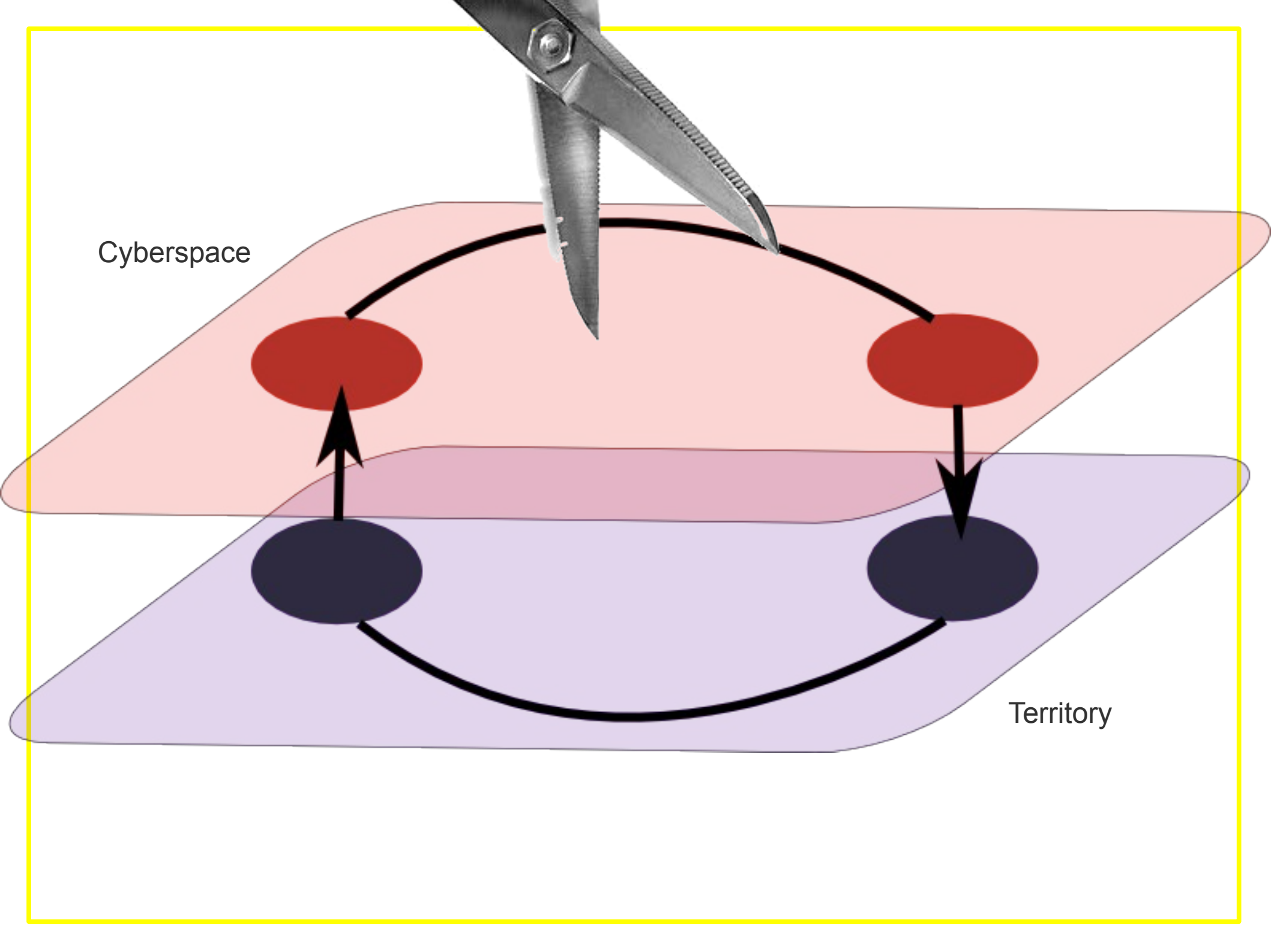
No Illegal, Harmful, or Offensive Use or Content

You may not use, or encourage, promote, facilitate or instruct others to use, the Services or AWS Site for any illegal, harmful or offensive use, or to transmit, store, display, distribute or otherwise make available content that is illegal, harmful, or offensive. Prohibited activities or content include:

- **Illegal Activities.** Any illegal activities, including advertising, transmitting, or otherwise making available gambling sites or services or disseminating, promoting or facilitating child pornography.
- **Harmful or Fraudulent Activities.** Activities that may be harmful to others, our operations or reputation, including offering or disseminating fraudulent goods, services, schemes, or promotions (e.g., make-money-fast schemes, ponzi and pyramid schemes, phishing, or pharming), or engaging in other deceptive practices.
- **Infringing Content.** Content that infringes or misappropriates the intellectual property or proprietary rights of others.
- **Offensive Content.** Content that is defamatory, obscene, abusive, invasive of privacy, or otherwise objectionable, including content that constitutes child pornography, relates to bestiality, or depicts non-consensual sex acts.
- **Harmful Content.** Content or other computer technology that may damage, interfere with, surreptitiously intercept, or expropriate any system, program, or data, including viruses, Trojan horses, worms, time bombs, or cancelbots.

Cyberspace

Territory



Cyberspace-Cyberspace

NB

Gli eventi sono sempre localizzati sempre in qualche territorio,
ma vengono percepiti attraverso la rete e ivi “localizzati”



th3j35t3r

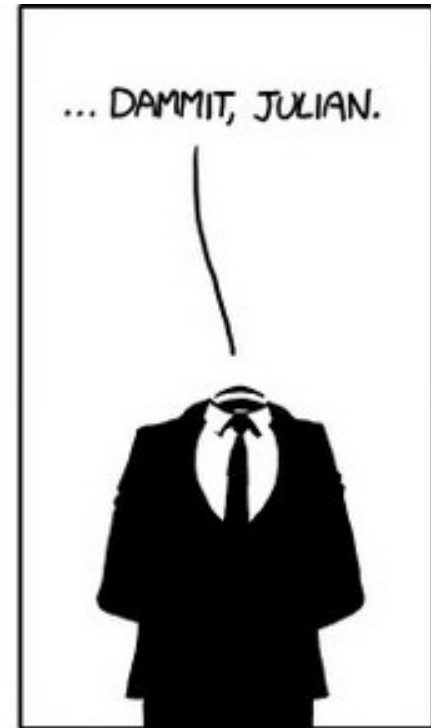
www.wikileaks.org - TANGO DOWN -
for attempting to endanger the lives of
our troops, 'other assets' & foreign
relations [#wikileaks](#) [#fail](#)

less than 5 seconds ago via web

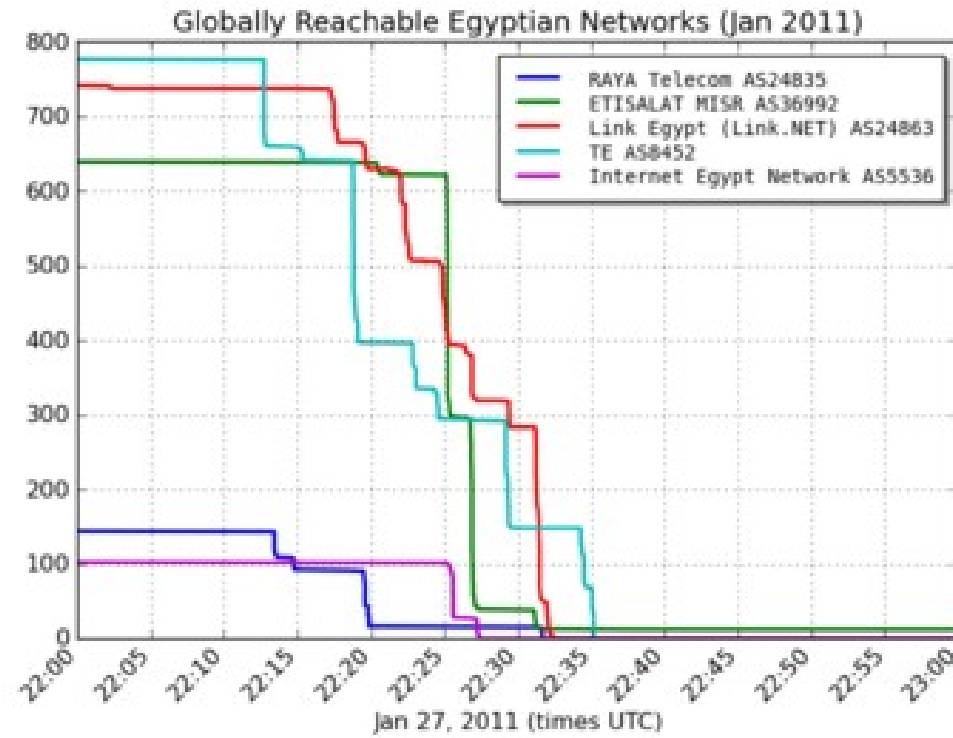


ANONYMOUS

We are Legion. We do not Forgive. We do not Forget.



Egypt:
BGP routes
withdrawal



<http://www.renesys.com/blog/2011/01/egypt-leaves-the-internet.shtml>

YouTube, Libya Traffic Divided by Worldwide Traffic and Normalized



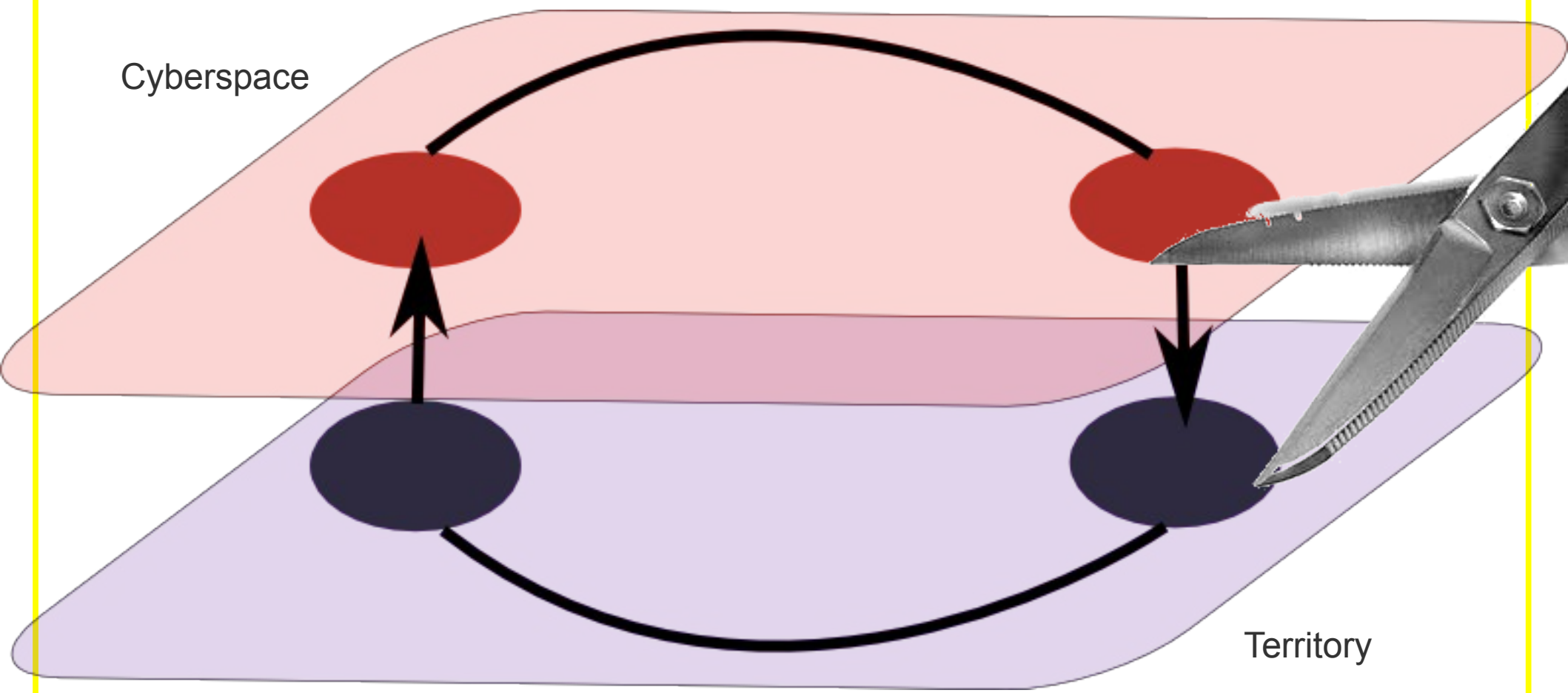
<http://www.renesys.com/blog/2011/03/what-libya-learned-from-egypt.shtml>

Libya
“warm standby mode”:
Unique State ISP
First chokes traffic
Then withdraws
BGP routes

Risposte

- Wikileaks:
minaccia implicita di anonymous a chiunque
attacchi Wikileaks
- Egitto:
operatori occidentali lasciano linee telefoniche
aperte verso Internet
- Libia:
kit “da campo” con hotspot wifi

Cyberspace



Territory

Cyberspace-Territorio

rilocalizzazione

- da una risorsa potenzialmente delocalizzata a una localizzata attraverso un indirizzo IP:
Domain Name System: wikileaks.org → Indirizzo IP.
- Censura: dirottamento a un altro IP / cancellazione nome a dominio
- Wikileaks:
 - EveryDNS cessa il servizio per WL, per una serie di errori di WL stesso
 - Alcuni servizi pubblici USA (Libreria del congresso) censurano gli accessi verso i nuovi indirizzi di Wikileaks
 - Paypal, Visa, Mastercard bloccano i canali di finanziamento a Wikileaks
- Risposta:
 - Ridondanza dei nomi: wikileaks.fr, ch, ...
 - uso di indirizzi IP “nature” distribuiti via twitter e altri canali “manual DNS”

Censura

Da → A	Territorio	Cyberspace
Territorio	Reclusione, sequestro, minaccia, intimidazione, aggressione, distruzione di supporti	Rendere irraggiungibile l' <i>IP address</i> o i dati presso ISP
Cyberspace	Dirottamento DNS presso DNS server	Isolamento delle rotte presso ISP

Lezioni apprese

- Ridondanza offre delocalizzazione
- Delocalizzazione offre resilienza
- *Civil liberties sites are an easy target*

“Distributed Denial of Service Attacks Against Independent Media and Human Rights Sites”
Ethan Zuckerman, Hal Roberts, Ryan McGrady, Jillian York, John Palfrey
The Berkman Center for Internet & Society at Harvard University December 2010

- “Regulate locally, Think globally”

Interferenze di Codici

- Codici **informatici**: i sw per costruire cloud sono sempre più disponibili, ma anche quelli per cyberattack sofisticati
- I codici **giuridici** forti (le leggi), vigono se gli ISP li invocano a tutela dei clienti. La *soft law* è un facile pretesto per cedere alle pressioni politiche.
- Codici **sociali**: reciprocità brutale (“occhio per occhio”) a difesa delle risorse nel cyberspace
- Codici **economici**: chi ha soldi può difendersi meglio

Designed for democracy

- TT: Crittografazione
- CT: Ridondare e rendere migrabili dati *e applicazioni*
- CC:
Difesa dal DDOS
Nuovo *statuto giuridico* delle reti?
- TC: Alternative decentrate al DNS

Prospettive

- Ridondanza:
 - Applicazioni aterritoriali, che possono migrare da server a server
- Policentrismo:
 - Servizio DNS che non rinuncia all'autoritatività ma che non sia centralizzato: eg *P2P DNS*
 - Applicazioni che possono migrare a caldo: eg *Unhosted*
- Statuto giuridico/ontologico di Internet:
 - risorse infrastrutturali globali e sovranità statale coesistono?

Grazie

<http://twitter.com/mmzz>

<http://tagmenot.info>

<http://cammozzo.com>

Proposta

Se ancora non si è capito che tipo di “Spazio” è Internet...

“The exploration and use of **outer space**,[...] shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the **province of all mankind.**”

Outer Space Treaty 27 gennaio 1967

Against the weaponization of cyberspace, let's declare the Internet "province of all mankind", as Outer Space has been since 1967!