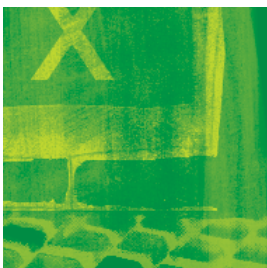
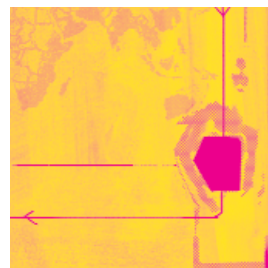
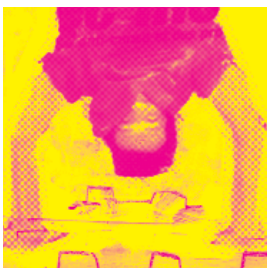


# HANDBOOK FOR **BLOGGERS** AND **CYBER-DISSIDENTS**

## REPORTERS WITHOUT BORDERS



SEPTEMBER 2005



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HANDBOOK  
**FOR BLOGGERS**  
AND  
**CYBER-DISSIDENTS**  
**REPORTERS WITHOUT BORDERS**

SEPTEMBER 2005



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## BLOGGERS, THE NEW HERALDS OF FREE EXPRESSION

By Julien Pain

**B**logs get people excited. Or else they disturb and worry them. Some people distrust them. Others see them as the vanguard of a new information revolution. One thing's for sure: they're rocking the foundations of the media in countries as different as the United States, China and Iran.

It's too soon to really know what to think of blogs. We've been reading newspapers, watching TV and listening to the radio for decades now and we've learned how to immediately tell what's news and what's comment, to distinguish a tabloid "human interest" magazine from a serious one and an entertainment programme from a documentary.

We don't have such antennae to figure out blogs. These "online diaries" are even more varied than the mainstream media and it's hard to know which of them is a news site, which a personal forum or one that does serious investigation or one that's presenting junk evidence. It's difficult to separate the wheat from the chaff.

Some bloggers will gradually develop their own ethical standards, to become more credible and win public confidence. But the Internet is still full of unreliable information and people exchanging insults. A blog gives everyone, regardless of education or technical skill, the chance to publish material. This means boring or disgusting blogs will spring up as fast as good and interesting ones.

But blogging is a powerful tool of freedom of expression that has enthused millions of ordinary people. Passive consumers of information have become energetic participants in a new kind of journalism – what US blog pioneer Dan Gillmor calls "grassroots journalism ... by the people, for the people" (see chapter on "What ethics should bloggers have?").

Bloggers are often the only real journalists in countries where the mainstream media is censored or under pressure. Only they provide independent news, at the risk of displeasing the government and sometimes courting arrest. Plenty of bloggers have been hounded or thrown in prison. One of the contributors to this handbook, Arash Sigarchi, was sentenced to 14 years in jail for posting several messages online that criticised the Iranian regime. His story illustrates how some bloggers see what they do as a duty and a necessity, not just a hobby. They feel they are the eyes and ears of thousands of other Internet users.

Bloggers need to be anonymous when they are putting out information that risks their safety. The cyber-police are watching and have become expert at tracking down “trouble-makers.” This handbook gives advice on how to post material without revealing who you are (“How to blog anonymously,” by Ethan Zuckerman). It’s best of course to have the technical skills to be anonymous online, but following a few simple rules can sometimes do the trick. This advice is of course not for those (terrorists, racketeers or pedophiles) who use the Internet to commit crimes. The handbook is simply to help bloggers encountering opposition because of what they write to maintain their freedom of expression.

However, the main problem for a blogger, even under a repressive regime, isn’t security. It’s about getting the blog known, finding an audience. A blog without any readers won’t worry the powers-that-be, but what’s the point of it? This handbook makes technical suggestions to make sure a blog gets picked up by the major search-engines (the article by Olivier Andrieu), and gives some more “journalistic” tips about this (“What really makes a blog shine,” by Mark Glaser).

Some bloggers face the problem of filtering. Most authoritarian regimes now have the technical means to censor the Internet. In Cuba or Vietnam, you won’t be able to access websites that criticise the government or expose corruption or talk about human rights abuses. So-called “illegal” and “subversive” content is automatically blocked by filters. But all bloggers need free access to all sites and to the blogosphere or the content of their blogs will become irrelevant.

The second part of the handbook is about ways to get round filtering (“Choosing circumvention,” by Nart Villeneuve). With a bit of common-sense, perseverance and especially by picking the right tools, any blogger should be able to overcome censorship.

The handbook has technical advice and tips about how to set up a good blog. But a successful one is harder to ensure. To stand out in the crowd, you must be original and post news or opinions neglected by the mainstream media. In some countries, bloggers are mainly worried about staying out of jail. In others, they try to establish their credibility as a source of reliable information. Not all bloggers have the same problems, but all of them, in their different ways, are on the frontline in the fight for freedom of expression.

Julien Pain is head of the Internet Freedom desk at Reporters Without Borders.



#### A “BLOG” (OR “WEBLOG”) IS A PERSONAL WEBSITE :

- containing mostly news (“posts”).
- regularly updated.
- in the form of a diary (most recent posts at the top of the page), with most of the posts also arranged in categories.
- set up using a specially-designed interactive tool.
- usually created and run by a single person, sometimes anonymously.

#### A BLOG’S POSTS :

- are usually text (including external links), sometimes with pictures and, more and more often, sound and video.
- can be commented on by visitors.
- are archived on the blog and can be accessed there indefinitely.

#### SO A BLOG IS MUCH LIKE A “PERSONAL WEBPAGE, EXCEPT THAT IT :

- is easier to set up and maintain and so much more active and more frequently updated.
- encourages a more open and personal style and franker viewpoints.
- greatly encourages discussion with visitors and other bloggers.
- sets a standard worldwide format for blogs, involving similar methods (two or three-column layout, comments on posts and RSS (Really Simple Syndication) feed).

# THE LANGUAGE OF BLOGGING

By Pointblog.com

## BLOG

Short for Weblog. A website that contains written material, links or photos being posted all the time, usually by one individual, on a personal basis.

## (TO) BLOG

Run a blog or post material on one.

## BLOGGER

Person who runs a blog.

## BLOGOSPHERE

All blogs, or the blogging community.

## BLOGROLL

List of external links appearing on a blog, often links to other blogs and usually in a column on the homepage. Often amounts to a "sub-community" of bloggers who are friends.

## BLOGWARE

Software used to run a blog.

## COMMENT SPAM

Like e-mail spam. Robot "spambots" flood a blog with advertising in the form of bogus comments. A serious problem that requires bloggers and blog platforms to have tools to exclude some users or ban some addresses in comments.

## CONTENT SYNDICATION

How a site's author or administrator makes all or part of its content available for posting on another website.

## MOBLOG

Contraction of "mobile blog." A blog that can be updated remotely from anywhere, such as by phone or a digital assistant.

## PERMALINK

Contraction of "permanent link." Web address of each item posted on a blog. A handy way of permanently bookmarking a post, even after it has been archived by the blog it originated from.

## PHOTOBLOG

A blog mostly containing photos, posted constantly and chronologically.

## PODCASTING

Contraction of "iPod" and "broadcasting." Posting audio and video material on a blog and its RSS feed, for digital players.

## POST

An item posted on a blog. Can be a message or news, or just a photo or a link. Usually a short item, including external links, that visitors can comment on.



## RSS (REALLY SIMPLE SYNDICATION)

A way of handling the latest items posted on a website, especially suited for blogs because it alerts users whenever their favourite blogs are updated. It can also "syndicate" content by allowing other websites (simply and automatically) to reproduce all or part of a site's content. Spreading fast, especially on media websites.

## RSS AGGREGATOR

Software or online service allowing a blogger to read an RSS feed, especially the latest posts on his favourite blogs. Also called a reader, or feedreader.

## RSS FEED

The file containing a blog's latest posts. It is read by an RSS aggregator/reader and shows at once when a blog has been updated.

## TRACKBACK

A way that websites can communicate automatically by alerting each other that an item posted on a blog refers to a previous item.

## WEB DIARY

A blog.

## WIKI

From the Hawaiian word "wikiwiki" (quick). A website that can be easily and quickly updated by any visitor. The word has also come to mean the tools used to create a wiki (wiki engines). Blogs and wikis have some similarities but are quite different.



## CHOOSING **THE BEST** TOOL

By Cyril Fiévet and Marc-Olivier Peyer, pointblog.com

**B**logs owe a lot to the growth of dynamic publishing tools that greatly simplify the business of updating websites.

A tool for use with a blog must provide a user-friendly interface (easily accessible through an Web navigator) and dynamically manage its content, with such things as archives and searches.

A blog has two Internet addresses that don't change after it's been set up:

- l'its address for public access.
- l'its administrative address, protected by a password belonging to the person who runs it.

You can set up a blog by either joining a blog community or using a blog tool with your own server.

### **BLOG COMMUNITIES**

(See the chapter on "How to set up and run a blog: the Civiblog system")

Setting up a blog in an existing community usually takes just a few minutes. You pick a user-name and password and with a few clicks the blog is up and running. Some communities charge, some don't.

This method is best if you want to set up just a "view only" blog. It doesn't cost much (at most a few euros a month) and is straightforward and quick and you benefit from the traffic the community generates or from it being already well-known.

But snags include often limited options for layout and sophisticated features, as well as community-run ads and the risk of the community closing.

**CHOOSING THE BEST TOOL****CHOOSING THE BEST TOOL****USING BLOG TOOLS**

These are programmes that are installed on a server, using scripts to run the site automatically and a database to store posted material. Once installed, it operates through a standard online navigator. No special expertise, such as using HTML, is needed to set up and run a blog, but installing and configuring it is sometimes tricky (setting access criteria, creating a database and arranging FTP loading).

This solution is for people already familiar with blogs and has the advantage that it entirely belongs to you and you can therefore adapt, configure and alter it whenever you want. But it does require some technical skill, is also more exposed (to spam comments) and you have to store the contents yourself.

**HOW TO CHOOSE A BLOG COMMUNITY ?**

It's not always easy to move from one blog community to another, so it's important to make a good choice in the first place.

Before choosing one, consider these points:

**OTHER BLOGS IN A COMMUNITY**

Some communities group Internet users according to interests or age. Have a look at several dozen other blogs in a community to see if it has a "typical" group.

**WHAT THE BLOG LOOKS LIKE**

Though the choice is often small, communities (platforms) usually have a fair range of colours, fonts and home-page layouts to choose from. You can get a good idea of the possibilities there too by looking at some of the community's sites at random. Many free-of-charge communities require all blogs to carry ads on all pages. Also check options for the blog's address, which could be <http://myblog.thecommunity.com>, <http://www.thecommunity.com/myblog> or <http://www.thecommunity.com/mynumber>.

**FEATURES ON OFFER**

Check these to see if you'll be able to redesign the blog, bring in other contributors, post images or sound, post things by phone or restrict access (totally or partially) to registered users. Also find out if posted material can be easily forwarded to another community and if you can insert paid ads to make money.

**HIDDEN COSTS**

Some communities are free but have to be paid for after a certain point, especially according to the amount of data stored and the bandwidth used. Check this beforehand.

**INTERNATIONAL PLATFORMS**

Blogger - <http://www.blogger.com>

Free.

Set up in 1999, bought by Google in 2003 and the biggest one of all, with eight million blogs. Easy to use but features rather limited.

LiveJournal - <http://www.livejournal.com>

Free or paid (about \$2 a month).

One of the oldest platforms, with six million blogs, mostly young people.

MSN Spaces - <http://www.msnspace.com>

Free.

Microsoft platform, set up in late 2004. Lots of features, some beyond the blog (photo-sharing, Messenger link). Must be aged at least 13 to register a blog.

**FRENCH-LANGUAGE PLATFORMS**

20six - <http://www.20six.fr>

Free or paid (€3-7 a month).

Lots of features, some quite sophisticated and including basic version.

Over-Blog - <http://www.over-blog.com>

Free.

Well-designed and easy to use.

Skyblog - <http://www.skyblog.com>

Free (with ads).

The biggest platform in France, very popular with young people, though features sometimes limited.

TypePad - <http://www.typepad.com/sitefr>

Paid (€5-15 a month, according to number of features).

Very professional with good range of features.

A free version can be had through blog communities set up by third-parties, such as Noos (<http://www.noosblog.fr>) or Neuf Telecom (<http://www.neufblog.com>).

ViaBloga - <http://viabloga.com>

Free for non-profit associations, or €5 a month.

Original and dynamic, with some unusual features.



## CHOOSING THE BEST TOOL

### MAJOR BLOG TOOLS

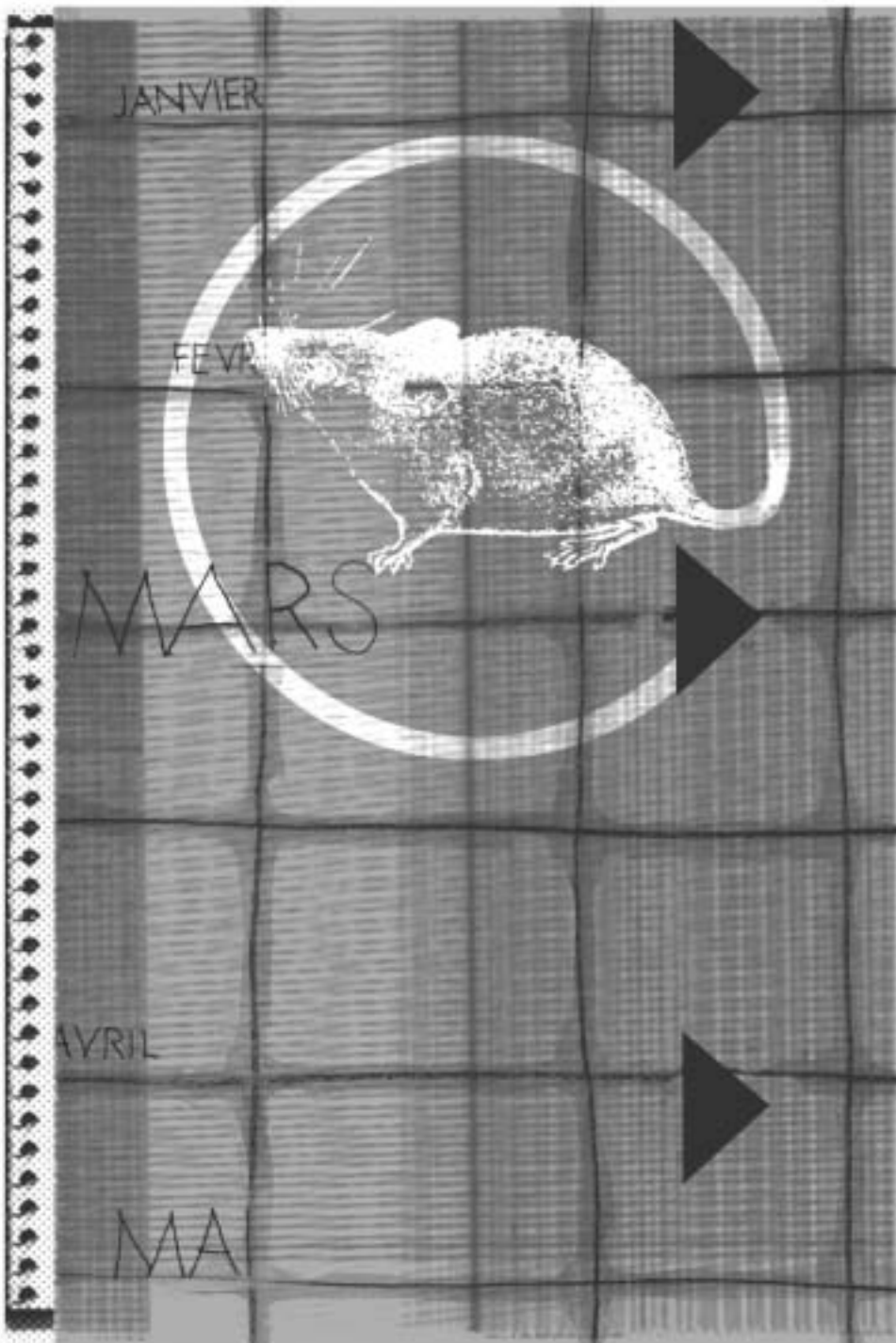
DotClear - <http://www.dotclear.net>

MovableType - <http://www.movabletype.org>

Wordpress - <http://www.wordpress.org>

pointblog.com aims to highlight the meaning and extent of this key modern Internet revolution. The site is for beginners, experienced users or just visitors and consists of a blog and several independent sections. It is run by the firm Pointblog SARL, co-founded and headed by Christophe Ginisty and Cyril Fiévet.





GETTING GOING AND KEEPING UP TO DATE

## HOW TO SET UP AND RUN A BLOG

The Civiblog system ([www.civiblog.org](http://www.civiblog.org))

**A** blog is much easier to maintain and update than a normal website. Blog platforms (or servers) have slightly different posting methods, but the principles are the same. This article aims to help users of Civiblog, a platform used by members of civil society everywhere, but the advice applies to all such servers. Civiblog uses the Blogware platform that the firm Tucows has provided free of charge.

First let's look at some of the things that've made blogging so popular.

An important technical key to the "blogosphere" is RSS (Really Simple Syndication) feeds. An RSS item is an XML (eXtensible Markup Language) file automatically generated by a blog and that another website or blog can link to. When you "syndicate" an RSS feed, it puts the headings of the posts on the blog into your news reader (in mail programmes such as Outlook or Thunderbird) or directly onto your website or personal blog. When a blog is updated, the RSS feed is too, so information spreads very quickly and automatically. Bloggers have to master this technology to efficiently pass on material.

The other technical key to blogging is "trackbacks," which show the origin of blog material and are used by most platforms.

When a posted item is based on or taken from another blog, a trackback can be added to it to automatically notify and enable the site in question to list all the sites that have reproduced or commented on its posts. This sounds complicated but it's really very simple and rewarding, as it's always nice to know that someone has mentioned your own material. It's also very useful for getting material more widely known and generating discussion between blogs.

## HOW TO SET UP AND RUN A BLOG

So take the time to get familiar with this technology when you set up your own blog.

### THE CIVBLOG HOMEPAGE



The RSS feed is on the right and is automatically updated whenever a community member-site posts a new message.



### SIGNING UP

You have to register before you set up a blog. Most blog platforms make it very simple. Civblog requires just basic details, but has to check that the blogs it hosts are genuine civil society

groups and not just personal blogs for family or friends. It takes about 24 hours from sign-up for a blog to appear online. Access codes needed to launch the blog are e-mailed to the blogger.

## HOW TO SET UP AND RUN A BLOG

### ADMINISTRATION LOG-IN

A blog has a “front end” (the page where visitors go) and a “back end,” from where it’s updated, monitored and run and which is accessed with the user-name and password you get when you sign up.



### DASHBOARD

Most blogs have a “dashboard,” where you can see at a glance everything happening on the blog, including the latest posts, comments and trackbacks. You can access all the blog’s features from here and change how it looks, increase bandwidth, edit old posts and manage your users and their permissions, such as their right to post comments.



### HOW TO POST

One of the big differences between a blog and a normal webpage is that it’s easier to update a blog. Most platforms allow you to type posts in plain text without bothering about layout. With newer ones such as Civblog, you can change fonts, sizes and colours and insert links and pictures.

You post something by:

1. Logging in.
2. Clicking on “post”
3. Giving your post a name and typing the content in.
4. Formatting the text by using the interface.



**HOW TO SET UP AND RUN A BLOG**

5. Giving the post a category (so it can be grouped with similar ones) or creating a new category.
6. Clicking on "save" at the bottom of the page.

That's all. With a bit of experience, you can start using other features such as trackbacks, pings and keywords.



**TRACKBACKS**

It's easy to add a trackback to your post. You just add the permanent URL of the site you're referencing in the right-hand box marked "trackback URLs to notify" and the trackback will automatically be sent to the site when you save the post.

**RSS SYNDICATION**

Syndicating the RSS feed of another web-site or blog is also very easy:

1. Log n to the "back end" of the blog.
2. Click on "favourites."
3. Click on "RSS Headline Components"
4. Follow the instructions and insert the URL (ending in .xml, .rdf or sometimes .py or .php) of the RSS feed you want to syndicate.
5. Give the feed a name and click on "add feed."
6. Now the feed is created, insert it into the blog's layout.
7. Click on "look and feel."
8. Click on "layout."
9. Click on "RSS: your feed" ("your feed" being the name you gave it in step 5) and drag the feed over to the column where you want it to appear.
10. Click on "save" at the bottom of the page and that's it.



**HOW TO SET UP AND RUN A BLOG**

Some of the many sites that explain the intricacies of blogging :

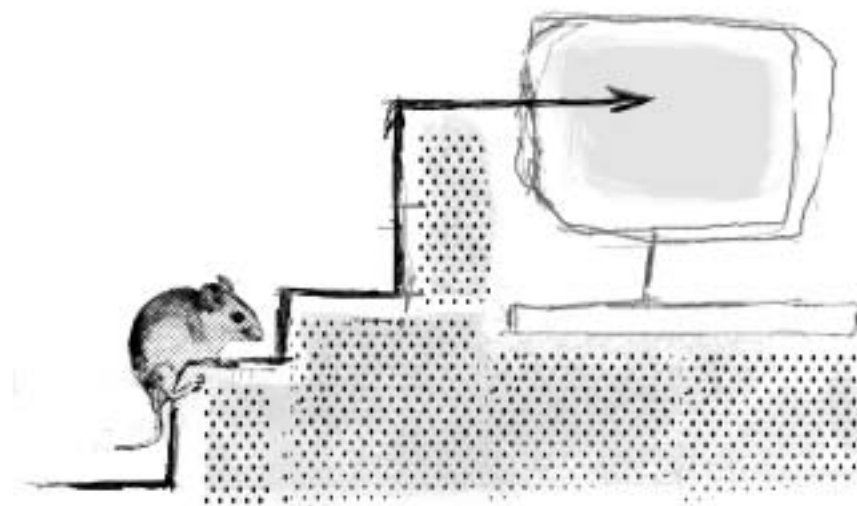
Civiblog Central Resources Blog:  
<http://central.civiblog.org/blog/BloggingResources>

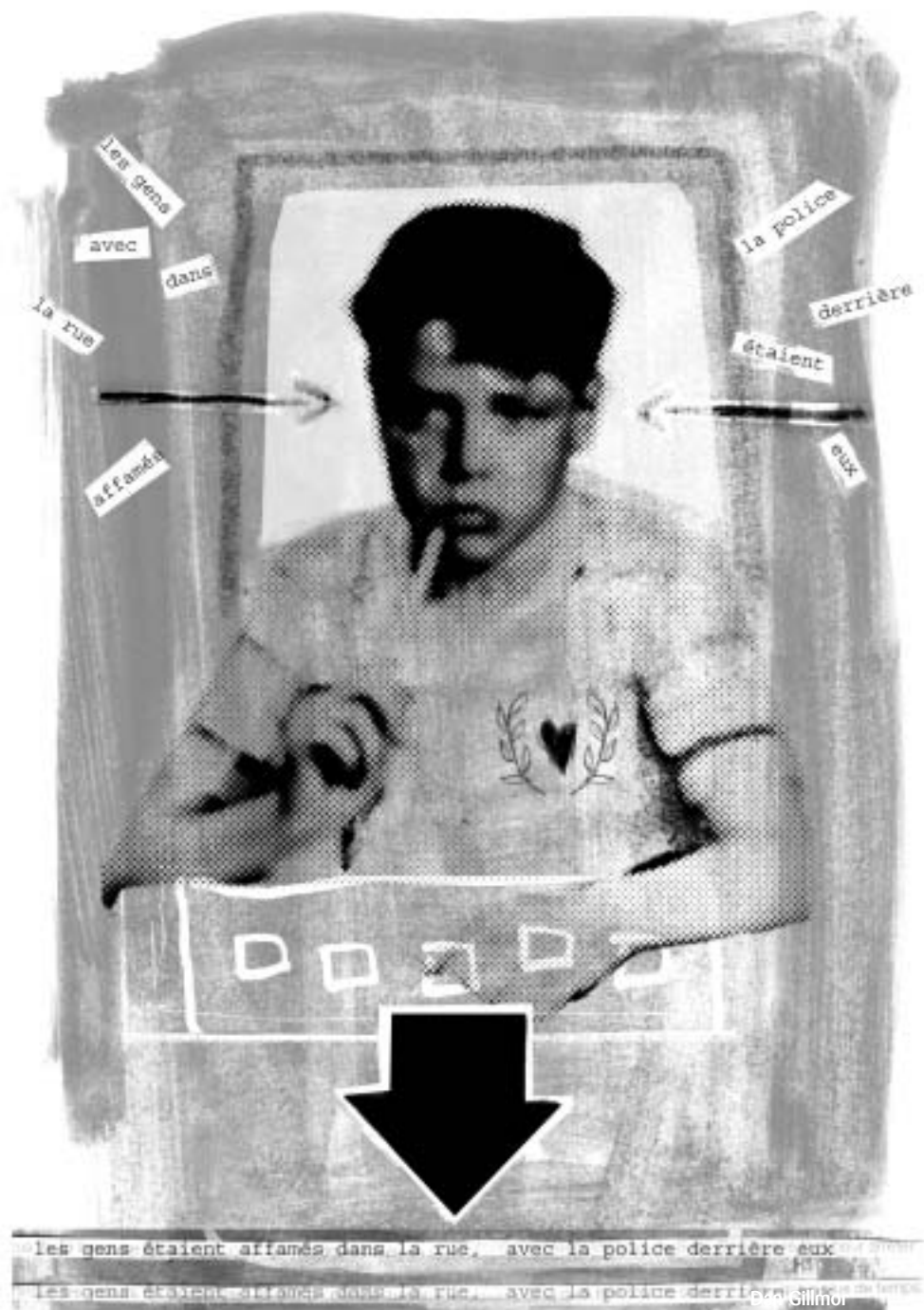
How to blog:  
[http://blogging.typepad.com/how\\_to\\_blog](http://blogging.typepad.com/how_to_blog)

The blogosphere:  
<http://blog.lib.umn.edu/blogosphere>

The Weblog Workshop:  
<http://cyber.law.harvard.edu:8080/globalvoices/wiki/index.php/WeblogWorkshop>

Blogging 101:  
<http://www.unc.edu/%7Ezuiker/blogging101/index.html>





The people were hungry in the streets and the police were after them

## WHAT ETHICS SHOULD BLOGGERS HAVE?

By Dan Gillmor

**N**ot all bloggers do journalism. Most do not. But when they do, they should be ethical.

Does this mean they must subscribe to some kind of ethical code? Not necessarily.

The professional journalism world is awash in ethics codes. Some are longer than the United States Constitution, trying to anticipate every possible breach. Others are short and succinct, offering more positive guidance. The cyber-journalist Website has adapted for bloggers an ethics code (<http://www.cyberjournalist.net/news/000215.php>) from the Society of Professional Journalists, an American group. It is a solid and worthy effort.

All ethics codes are created for one essential purpose: to instill trust. If a reader (or viewer or listener) cannot trust the report, there is usually little reason to bother in the first place. The exception, of course, is looking at material that is known to be unethical, as much for instructional purposes – we can learn a great deal from watching unethical people's behavior – as to gain true knowledge.

For me, ethics is about something quite simple: honor. Within that word, however, is a great deal of territory. But unless we act with honor we cannot expect people's trust.

In American journalism, trust is often associated with a standard we call "objectivity" – the idea that an article should offer balance and nuance, giving the reader the chance to make up his or her own mind. I believe objectivity is a worthy but unattainable goal, because we all bring our own biases to everything we do.

In a world of new journalism, where we shift from a lecture to much more of a conversation, ethical journalism depends less on codes of ethics than the values and principles that are a foundation for honorable journalism.

There are pillars of good journalism: thoroughness, accuracy, fairness, transparency and independence.

**WHAT ETHICS SHOULD BLOGGERS HAVE?**

The lines separating them are not always clear. They are open to wide interpretation, and are therefore loaded with nuance in themselves. But I think they are a useful way to approach ethical journalism, and they are notably easier to achieve in an online setting. Let's look at each.

**THOROUGHNESS**

When I was a reporter and, later, a columnist, my first goal was to learn as much as I could. After all, gathering facts and opinions is the foundation of reporting. I liked it best when I felt I had left 95 percent of what I'd learned out of the final piece. The best reporters I know always want to make one more call, check with one more source. (The last question I ask at all interviews is, "Who else should I talk with about this?")

Today, thoroughness means more than asking questions of the people in our address books, real or virtual. It means, whenever possible, asking our readers for their input, as I did when I wrote a book on grassroots journalism in 2004 (and as other authors are beginning to do in theirs). Competitive pressures tend to make this a rare request, but I'm convinced that more journalists will adopt it.

**ACCURACY**

Be factual.

Say what you don't know, not just what you do. (If the reader/listener/viewer does know what you don't, you've just invited him/her to fill you in.)

Accuracy means correcting what you get wrong, and doing it promptly. This is much easier online, where we can mitigate or at least limit the damage from our errors for new readers.

**FAIRNESS**

This one is as difficult, in practice, as accuracy is simple. Fairness is often in the eye of the beholder. But even here I think a few principles may universally apply.

Fairness means, among other things, listening to different viewpoints, and incorporating them into the journalism. It does not mean parroting lies or distortions to achieve that lazy equivalence that leads some journalists to get opposing quotes when the facts overwhelmingly support one side.

Fairness is also about letting people respond when they believe you are wrong, even if you do not agree. Again, this is much easier online than in a print publication, much less a broadcast.

Ultimately, fairness emerges from a state of mind. We should be aware of what drives us, and always be willing to listen to those who disagree. The first rule of having a conversation is to listen – and I know I learn more from people who think I'm wrong than from those who agree with me.

**WHAT ETHICS SHOULD BLOGGERS HAVE?****TRANSPARENCY**

Disclosure is gaining currency as an addition to journalism. It's easier said than done, of course.

No one can plausibly argue with the idea that journalists need to disclose certain things, such as financial conflicts of interest. But to what extent? Should journalists of all kinds be expected to make their lives open books? How open?

Personal biases, even unconscious ones, affect the journalism as well. I'm an American, brought up in with certain beliefs that many folks in other lands (and some in the United States) flatly reject. I need to be aware of the things I take for granted, and periodically challenge some of them, as I do my work.

Another way to be transparent is how we present a story. We should link to source material as much as possible, bolstering what we tell people with close-to-the-ground facts and data. (Maybe this is part of accuracy or thoroughness, but it seems to fit here, too.)

**INDEPENDENCE**

Honorable journalism means following the story where it leads. When media are consolidated into a few big companies or are under the thumb of governments, this cannot happen.

It is simple to be independent online. Just start a blog. But no one should imagine that the same pressures from businesses and governments will not apply when a blogger tries to make a living at his or her new trade.

Jeff Jarvis, a prominent American blogger (buzzmachine.com), adds several other ideals. Bloggers must value the ethic of the conversation. He notes what for me is a bottom line of this new world: that conversation leads to understanding.

In a conversation, the first rule is to listen. Ethics requires listening, because it is how we learn.

Dan Gillmor is founder of Grassroots Media Inc., a company aimed at enabling grassroots journalism and expanding its reach. Its first site is Bayosphere.com in the San Francisco Bay Area. He is author of "We the Media: Grassroots Journalism by the People, for the People" (O'Reilly Media, 2004).

His blog:  
<http://bayosphere.com/blog/dangillmor>



Elisabeth Fall, for O'Reilly Media

USEFUL TIPS

# GETTING YOUR BLOG PICKED UP BY SEARCH-ENGINES

By Olivier Andrieu

**B**logs are websites themselves, so they're picked up by search-engines like Google, Yahoo! Search or MSN Search. To be successful, a blog has to get good visibility on their results pages through major keywords. So a site has to be designed from the start to react to the mechanical classification criteria these engines use.

Blogs have several built-in characteristics that get them often picked up by search-engines, well-listed and placed in a prominent position on results pages.

- Because they are personal diaries (at least at the beginning), they usually have a lot of text which helps them get picked up. Search-engines don't pick up sites with a lot of graphics or Flash animations but not much text.
- Each "post" usually occupies a single page, accessible through a "permalink" and dealing with a single subject, and is much more often picked up by search-engines than long pages about many different topics (such as archives or a blog homepage).
- The heading of a post is usually reproduced in the page heading or the URL (address). For example, on the Radio Free Nepal blog, at <http://freenepal.blogspot.com>, each post is on a page of its own, such as <http://freenepal.blogspot.com/2005/04/state-vandalism-in-nepal.html>:

GETTING YOUR BLOG PICKED UP BY SEARCH ENGINES



The heading of the post (State Vandalism in Nepal) occurs not just in the page URL but also in the heading of the document, as follows :

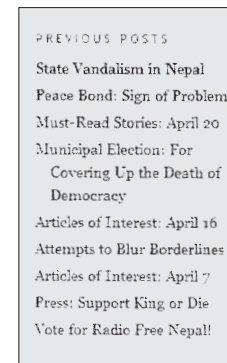


So the post heading has been added after the blog's name, which appears alone on the blog's homepage (<http://freenepal.blogspot.com>).

The presence of descriptive keywords in the page headings (the content of the <TITLE> tag in HTML language) and in the URLs of these documents are key criteria for search-engines, so it's very important to choose post headings carefully to ensure they get picked up.

- Links are automatically created, especially to archives, and are text (see examples on the right of the Radio Free Nepal pages).

This is very good for getting picked up because the text content of the links (called "anchors") is key to the relevance of pages the links point to from the search-engines. So in the example here, the presence of the words "State Vandalism in Nepal" in the first link or "Radio Free Nepal" in the 9th boosts the relevance of the page indicated by the link for these terms. Also, the page with these links (the clickable text is detected as important by search-engines) and the page indicated by them will be considered relevant.



HOW TO GET A BLOG PICKED UP MORE

## GETTING YOUR BLOG PICKED UP BY SEARCH ENGINES

Blogs have many inbuilt advantages to get them picked up frequently. Once a search-engine has “found” the blog, either by it being submitted manually or by search-engine “spiders” following links, a blog will have much more chance than a standard website of being displayed prominently because of its natural advantages. But you should try to increase this visibility by going a bit further.

Here are some tips on how to do this, using major keywords drawn from the topic of your blog.

### 1. Focus on technology that helps getting picked up

If your site isn't yet online, be careful what technology (such as Blogger, Dotclear, BlogSpirit, Joub and many others) you use to put it there. Choose the one that includes the maximum details for getting picked up:

- The heading of the post must be fully reproduced in the page heading (the <TITLE> tag) as well as in its URL (which isn't always done, since in the address some tools truncate the post heading after a certain number of characters).
- Creation of “permalinks” (links to a page containing a single post) must be possible.
- The technology chosen must allow you to do as much as possible in the design and personalisation of your site, such as using your own graphics and personal style-sheets. You must learn how to do as many technical things as possible so you can use the maximum number of factors to help the site get picked up.

To check all these points, have a look at sites using the technology you're considering (you can always find a big enough sample there) and see how they're displayed. You'll learn quite a lot this way.

### 2. Choose the best headings for your posts

This is very important. The heading of your post will be reproduced in the heading of the single pages displaying your posts, in their URLs and in the text of links that point to them – three key places for search-engines. So the post headings must contain, in a few words, the most important terms, to allow them to be picked up. Avoid headings such as “Well said!” “Welcome!” or “Great!” The heading should describe or sum up in less than five words what can be found in the post that follows. Think of the words you'd like a search-engine to pick up from it and put them in the heading. Not so easy, perhaps, but very effective.

### 3. Provide the text

Search-engines love text, so provide it for them. You can post all the photos you want as long as they go with text. Try to make each post at least 200 words long so it'll have a good chance of being easily spotted by search-engines. Also avoid having several very different topics in the same post, as search-engines don't like that. The golden rule is one topic, one post.

### 4. Pay attention to the first paragraph of your posts

## GETTING YOUR BLOG PICKED UP BY SEARCH ENGINES

The position of important words in the text is also crucial. Take great care with your first paragraph. If you want to be picked up with the words “release hostages,” for example, put them among the first 50 in the post. The same goes for all the keywords you choose. A page with them at the beginning always gets better search-engine results than if they're at the end (all other things being equal). Stress these words, by putting them in bold for example. This signals to the search-engine that they're important.

### 5. Avoid duplicate content in a post

All search-engines have ways to detect duplicate content and if two pages are over-similar, only one of them will be spotted and the other rarely displayed on a results page. Google, for example, displays this message:

(( In order to show you the most relevant results, we have omitted some entries very similar to those already displayed. If you like, you can repeat the search with the omitted results included. ))

This often happens with blogs, as the pages containing each post can appear very similar.

For example, if you have an identical introduction on each page, either put it at the bottom or just on the home page, so as to make all your pages very different from each other.

### 6. Don't give your blog a title that's too long.

The best title (the content of the tag <TITLE>) for search-engines is between 5 and 10 words long, not counting “stop words” such as “the” or “and.” The page heading of a blog usually has two parts:

- The general title of the blog
- A repeat of the heading of the post.

So as not to exceed 10 words in the general heading of pages presenting each post, you should use no more than five words for the general title of the blog and five for the heading of the post. That's not very much, but being concise as well as informative is one of the keys to getting picked up easily by search-engines.

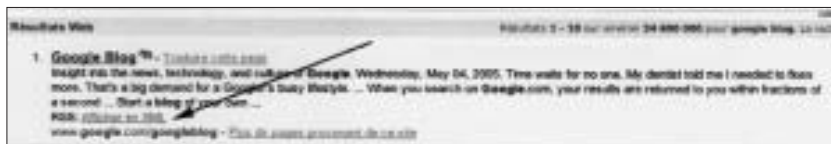
If you can (not all technologies allow you to do it), put the heading of the post at the top and the general title of the blog afterwards, rather than the other way round.



## GETTING YOUR BLOG PICKED UP BY SEARCH ENGINES

### 7. Syndicate your blog

Most blog tools allow you to create an “XML thread” or “RSS feed” with which users can pick up your posts in suitable software format. You can offer this facility on your blog (it only takes a few minutes to install). You’ll not only get more visitors but on Yahoo!, it’ll be indicated prominently as shown: (( View as XML )).



So make use of this.

### 8. Keep your links updated

Links are very important for search-engines because they allow them to compile a popularity rating (called PageRank by Google) of webpages. So build up the number of links to your blog by:

- Inserting it in directories (see below).
- Looking for “cousin sites” that aren’t rivals but offer material on the same topic. Exchanging links between blogs in the same area of interest should be sought as quickly as possible (this is quite frequently done and approved of in the blogging community, which is another advantage of blogs). Blogs are also well-suited for this, as the margin is often empty and they can be posted there.

## FEATURING IN TOPIC DIRECTORIES

Featuring in general-interest search-engines (such as Google, MSN, Yahoo! and Exalead) and directories (such as Yahoo! Directory and Open Directory) is very important but getting featured by topic is too because it:

- generates more focused visitors.
- increases the number of links to your blog, which is good for your popularity.
- gets you known by other blog publishers who might want to exchange links with similar sites.

## GETTING YOUR BLOG PICKED UP BY SEARCH ENGINES

Among the many search tools (search-engines and directories) that pick up blogs, are:

<b>English-language</b>	Blogwise :	<a href="http://www.blogwise.com/">http://www.blogwise.com/</a>
	Daypop :	<a href="http://www.daypop.com/">http://www.daypop.com/</a>
	Feedster :	<a href="http://www.feedster.com/">http://www.feedster.com/</a>
	Technorati :	<a href="http://www.technorati.com/">http://www.technorati.com/</a>
	Waypath :	<a href="http://www.waypath.com/">http://www.waypath.com/</a>
	Blogarama :	<a href="http://www.blogarama.com/">http://www.blogarama.com/</a>
	Syndic8 :	<a href="http://www.syndic8.com/">http://www.syndic8.com/</a>

<b>French-language</b>	Blogonautes	<a href="http://www.blogonautes.com/">http://www.blogonautes.com/</a>
	Blogolist	<a href="http://www.blogolist.com/">http://www.blogolist.com/</a>
	Weblogues	<a href="http://www.weblogues.com/">http://www.weblogues.com/</a>
	Blogarea	<a href="http://www.blogarea.net/Links/">http://www.blogarea.net/Links/</a>
	Pointblog	<a href="http://www.pointblog.com/">http://www.pointblog.com/</a>
	Les Pages Joueb	<a href="http://pages.joueb.com/">http://pages.joueb.com/</a>

A bigger list is at :

[http://search-engines.blogs.com/mon\\_weblog/2005/05/les\\_search-engines\\_de\\_.html](http://search-engines.blogs.com/mon_weblog/2005/05/les_search-engines_de_.html)

Also have a look at the directories of each technology provider, such as :

<http://www.canalblog.com/cf/browseBlogs.cfm>

<http://www.dotclear.net/users.html>

[http://www.blogspirit.com/fr/communautes\\_blogspirit.html](http://www.blogspirit.com/fr/communautes_blogspirit.html)

## CONCLUSION

A blog has all the elements for getting easily picked up by search-engines. With the tips given here, you should get very good results and increase your blog’s visibility. So off you go – and remember that “content is king.”

Olivier Andrieu is a freelance Internet consultant specialising in getting sites picked up by search-engines. He also runs the website [www.abondance.com](http://www.abondance.com).



Make oneself stand out

## WHAT REALLY MAKES A BLOG SHINE

By Mark Glaser

**O**n the billions and billions of words posted by the millions of blogs worldwide, what makes one particular blog stand out from the teeming mass? What puts the blog writer into a special class, makes readers return day after day and brings accolades from the media?

It's connection. Successful bloggers are those who connect with their readers, whether 10 or 10,000 people, by entertaining or enlightening them. Many people like to draw boundaries between bloggers and other writers (journalists, novelists, marketers) but their goals are similar: grab people by the collar and don't let go.

Some of the bloggers writing in this handbook – Bahrain's Chan'ad Bahraini, Hong Kong's Yan Sham-Shackleton and Iran's Arash Sigarchi – blog in countries where the government is watching their words very carefully. And the world is watching them as well, to learn about stories the press in their countries dare not tell. In these places, freedom of speech and freedom of the press are in danger, and bloggers' voices online are an important link to the reality on the streets of their towns. The photos they take and the stories they tell are vital.

But what makes these and other noteworthy blogs shine? Here are some of their main attributes, the things that set them apart from all those millions of other blogs.

### A UNIQUE AND PERSONAL VOICE

The best bloggers talk in their own voice, celebrate their unique identity and tell the stories that are real to them. Weblogs come from the idea of an online journal, a personal journal, so it's important to remember that journaling is not like academic writing, not like impersonal writing for a wire service. Chan'ad Bahraini is the pseudonym of an Asian blogger located in the mainly Arab country of Bahrain, giving him an unusual perspective on events there. Yan Sham-Shackleton is a performance artist who has lived all over the world and helped run a protest against China blocking the TypePad blog sites – after several years earlier herself helping the Chinese authorities to filter the Net.

**WHAT REALLY MAKES A BLOG SHINE**

**WHAT REALLY MAKES A BLOG SHINE**

**KEEP IT CURRENT**

The biggest problem with the vast majority of blogs is that they are stale. Because most people are not paid to blog, it takes a while to integrate blogging into their daily routine. Many people start to blog, try it out, and then never have the time to update it. To be successful, bloggers must keep writing posts on a regular basis and stay up on the topics that interest them, including current affairs. That doesn't mean they have to post 12 times every day, but a few weeks off can kill a blog's audience.

**CONNECT WITH AND EMPOWER READERS**

One of the distinguishing features of blogs is interactivity. There are many ways to engage your readers, involve them in the conversation and utilize their feedback. You could run an online poll, or give them your e-mail address, or just enable comments under each posting. Jeff Ooi was threatened by the Malaysian authorities because of a comment made by one of his readers. Rather than take all comments off his blog, Ooi decided to moderate comments to make sure readers stayed on topic and would stand by their words. He also started up a Chinese-language blog called "The Ferryman" as a way to build a bridge between the Malaysian and Chinese blogospheres.

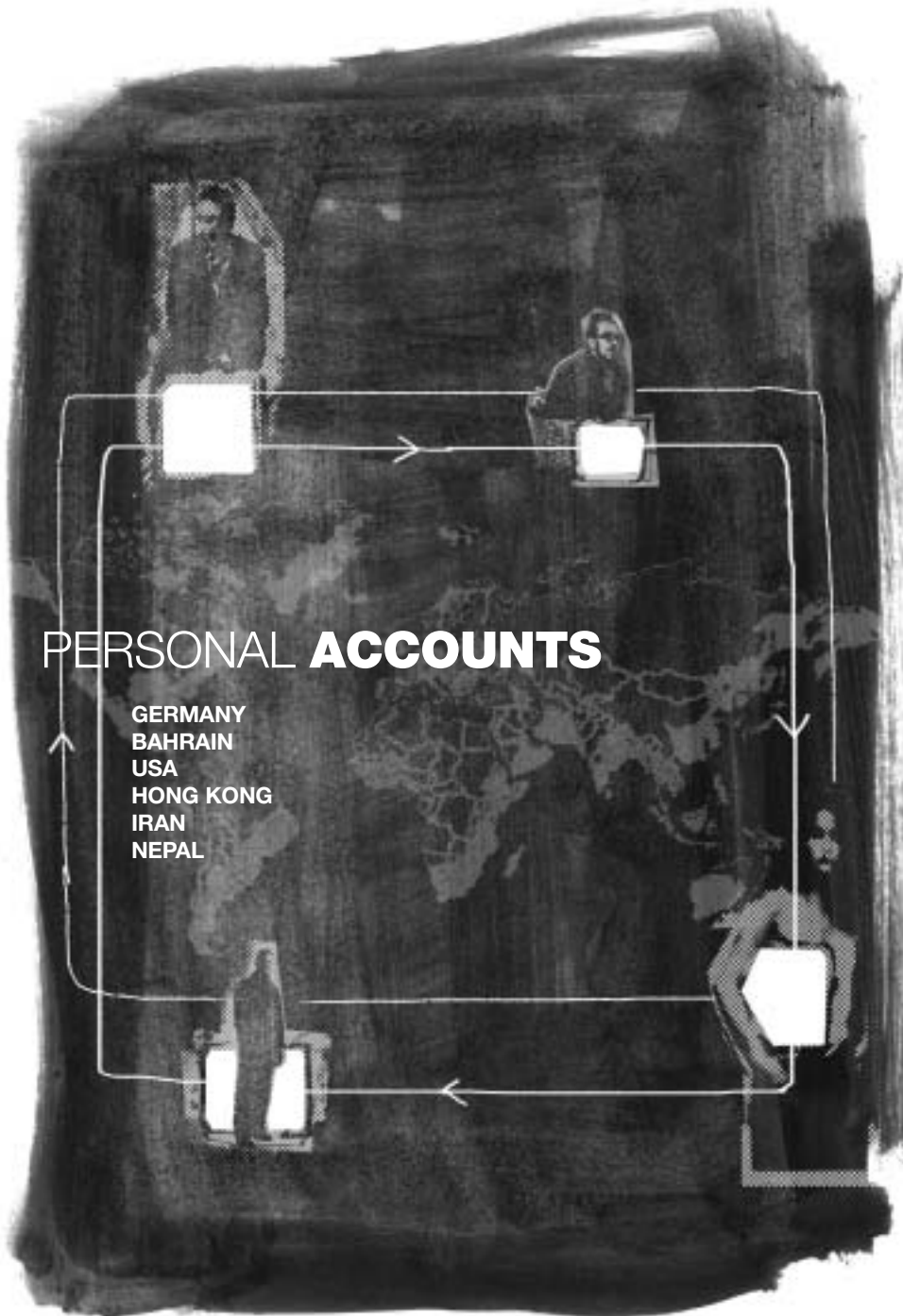


**TELL TRUTH TO POWER**

While many blogs include commentary, some also include original old-fashioned reporting. There's no right way to do it, but having either original reporting or an original angle on a story helps set your blog apart. Chan'ad Bahraini offered photos and audio of protests in Bahrain when an activist was jailed in November 2004. And blogger Arash Sigarchi was arrested in Iran and sentenced to 14 years in prison for criticizing the hard-line regime's arrests of other journalists. He was later freed after paying a fine, but his case is under appeal. The key is that these bloggers and so many others have spoken truth to power, and had the courage to stand up as a collective blogosphere to authorities that would rather hide the truth.

Mark Glaser is a columnist for Online Journalism Review ([www.ojr.org](http://www.ojr.org)), a publication produced by the University of Southern California's Annenberg School of Communication. He is a freelance writer based in San Francisco. You can reach him at [glaze@sprintmail.com](mailto:glaze@sprintmail.com)





## PERSONAL ACCOUNTS

GERMANY  
BAHRAIN  
USA  
HONG KONG  
IRAN  
NEPAL

## PERSONAL ACCOUNT

# GERMANY

“WE PROMOTE CIVIL AND HUMAN RIGHTS”

By Markus Bechedahl  
Netzpolitik.org

**A**t the end of the 1990s, when I was 20, I became an activist and lobbyist for a free and open information society. With some friends, I founded the digital rights NGO “network new media.” For five years we have been promoting civil and human rights in the digital sphere. We organise conferences and are engaged in a range of campaigns and NGO networks. For example, we coordinate the “German Civil Society Coordination Group to the WSIS” and devote a lot of energy to preparation for the World Summit on the Information Society (WSIS).

In the first years of my political engagement I was primarily using mailing lists in networks. I sent out some 5,000 news articles and announcements about netpolitics. But these lists were reaching a small and static number of users. Blogs, on the other hand, are open and transparent and offer many more opportunities to share my knowledge and report about my work.

My first blog started in 2002 in the first phase of the WSIS. I came to the UN PrepCom in Geneva equipped only with my sleeping bag and a notebook. I needed an infrastructure to report quickly without having to use HTML. In the past, it often took me too much time to publish news with the overhead of HTML. I wrote about my impressions doing politics at UN-level in a blog called “Backpacking to world politics”. That was my first blog.

I started my most recent blog, netzpolitik.org, in spring 2004. I tried a range of applications before settling on Wordpress, a free software with a huge community behind it. Weblogs offer me fast and convenient content generating, editing and publishing. Most important for me is an interface allowing focus on the essential work – writing text instead of wasting time on HTML markup. I want easy-to-use interfaces to gather and compile information, write it up and then click one button to publish. All of this greatly simplifies my work. Also appealing is the combined “push-pull” technology. Most of my readers subscribe to the RSS feed and follow my articles in feed readers. Others find me using web browsers or search-engines.

Being part of several political communities, I try to collect and deliver all news of importance in netzpolitik.org: About Civil and Human Rights, the Open Source World, Free and Open Access to Knowledge, an inclusive information society and balance in the field of copyright. Free speech and freedom of expression are crucially influenced by copyright law and digital rights management. But few people understand these are important issues, so I'm raising awareness to help citizens defend their rights. Civil rights are in danger worldwide, including Germany. Greater security measures go along with more and more surveillance, but so far the public is hardly aware that this implies a loss of freedom.

Free software (such as the operating system Linux) offers a great potential to convey and incorporate freedom of expression, pluralism and sustainability in the digital age. Of course all my computers run on Linux. I also write about new developments in free software and about their political dimension and explain how first-time users can use these systems. I closely follow the growth of the online encyclopedia Wikipedia, as well as creative commons (CC) licences. My content is offered under a CC licence and I actively encourage copying and circulating my work for non-commercial purposes, when quoted as source.

Another important issue is how the Internet can be used productively by civil society organisations and campaigns. I used to work as a project leader and consultant for political communication on the Internet and eCampaigning and eDemocracy have an extra category in the blog. I analyse free tools for collaboration and activism and focus on the various aspects of social software, how to collectively and socially generate knowledge with wider coverage.

In netzpolitik.org, I also collect information and data about forthcoming conferences, lectures, and meetings about the information society. I report from conferences and give my views on them. Each day there is a news review with lots of hyperlinks and I comment on the development of new laws and point out NGO activity in these areas. My blog continuously develops into a node within German-speaking civil society and networks, providing material to large numbers of social multipliers. I also ask blogging friends to write about key issues as well as spreading the news faster. I use my RSS news reader to compile topics for the review very quickly. In the first 10 months, I managed to publish more than 800 articles just with a little help from friends.



To my surprise, an average 2,500 people read my blog every day. I get nice feedback especially from younger people who I encourage to start their own blog.

Fortunately Germany has laws to protect freedom of speech. No-one will send me to prison for criticising the government. I admire the courage of people who live under dictatorships and risk their lives updating their blogs.

Markus Beckedahl, 28, runs is executive-manager of "newthinking communications," an agency for open source technologies and strategies, and co-founder and chairman of the German digital rights NGO Netzwerk Neue Medien. His blog is: [www.netzpolitik.org](http://www.netzpolitik.org)

# BAHRAIN

## “WE’VE BROKEN THE GOVERNMENT’S NEWS MONOPOLY”

By Chan’ad Bahraini

I set up my blog for two main reasons: (i) it's fun to write without any formal restrictions, deadlines, or requirements, and (ii) to try to contribute to and encourage the discussion of topics in Bahrain that rarely get proper treatment in the local mainstream media.

Currently, Bahrain's only TV and radio stations are run directly by the government, so there is no reporting or discussion of issues that are even distantly related to the local political situation. All of the local newspapers are privately-owned, so they enjoy relatively more freedom than the broadcast media. Yet even in the written press, the situation is not much better because editors do not dare to openly criticize certain influential individuals, such as members of the government, or the royal family (particularly the king and his uncle the prime minister).

The Internet however provides a means for individuals to freely express their opinions in public, without facing the scrutiny of the government. Although the Bahraini government does have a history of monitoring and blocking political websites, it seems to have become more relaxed in the past one or two years, though the situation has deteriorated recently. Moreover, the ease with which someone can set up a website and write anonymously (like myself) makes it difficult for the government to take any action against the writers.

So for these reasons I felt there was a real need to have free and frank discussions on all issues (including politics) somewhere – especially as the country attempts to make a transition to democracy – and the Internet was the obvious choice for where I could share and discuss my opinions. I was encouraged to see that Mahmood ([www.mahmood.tv](http://www.mahmood.tv)), the pioneer of Bahraini bloggers, had been blogging for about a year prior to my start, without any issues with the government.

One of the main aims of my blog has been to discuss and analyze events in Bahrain. But because of the limited amount of first-hand information available, I've been trying to do some pseudo-journalism myself. This means that whenever possible I try to personally attend events (especially protest demonstrations) and then write about them on my blog and provide photographs.

There are now several bloggers in Bahrain and the effect of this has been quite positive. A space has been created where a wide range of topics are discussed with honesty. I have certainly learned a great deal of information from the other Bahraini blogs that I would never have been able to learn anywhere else. And this community is not only online, as many of the Bahrain bloggers meet up once a month to discuss in person the various issues that we blog about.

However, most of the online activity in Bahrain takes place at the many Arabic-language online discussion forums that have been around for much longer (e.g. [bahrainonline.org](http://bahrainonline.org)). Blogging has not yet caught on as a mainstream phenomenon in Bahrain, however our sites are more and more assuming the role of “bridge blogs” (as defined by Hossein Derakshan: <http://hoder.com/weblog/archives/013982.shtml>). Because most bloggers in Bahrain write in English, we are able to communicate (in both directions) with people around the world, so they look to us as a source of information about what is “really” happening in Bahrain.



So for example, when the three moderators of Bahrainonline.org were arrested in February 2005, we wrote about it on our blogs so the news of this spread around the world even faster than it did within Bahrain. Reporters Without Borders had issued a statement about the case within a day of the arrests. I believe that all the international attention that was generated probably played some role in the government's eventual decision to release the three a couple weeks later. More generally, our blogs have broken the monopoly of the government in communicating news about Bahrain to the outside world.

Generally, bloggers in Bahrain have not faced any repercussions from the government regarding what we write, but this has been changing since the start of this year. As noted, three moderators of an online discussion forum were arrested in February for messages posted that supposedly "incited hatred towards the government". One of the moderators, Ali Abdulemam, also maintained his own blog. Also, in April, the government announced it would now oblige all website owners to register with the ministry of information or face legal action. This shows the government still does not fully understand the Internet (and blogs) and does not know how to handle the situation when it feels threatened by online writers.

Originally from southeast Asia, Chan'ad Bahraini is now living in Bahrain, where he has set up his blog <http://chanad.weblogs.us>. He chooses to remain anonymous.



## USA

### "NOW I CAN WRITE WHAT I THINK"

By Jay Rosen  
Press Think

**W**hen I started asking around about how to do a weblog, I got many kinds of answers. The one piece of advice everyone gave was: you must write in short posts. That's the style, some said. That's what works, said others. And, most suspicious of all, that's what busy, Web-cruising readers expect. They don't have time for your long and thoughtful analysis, I was told. By everyone.

This made me suspicious. I didn't set out to write long, 2000-word posts; but that is what happened as I tried to turn my ideas into posts that said something others weren't saying, and got some notice. (And I can do short, when I want to). I set out to be unrestricted: free to figure out for myself what works, what PressThink wants to be.

"People don't have time for..." reasoning was meaningless to me, and I didn't trust it. That kind of advice would restrict my freedom to write what I think, but the whole purpose in starting PressThink was liberation: "Wow, now I have my own magazine. Now I can write what I think." My interest was users who did have time for depth, in whatever number they may prove to exist, ocean to ocean, post to post.

My approach was: this is my magazine, PressThink... If you like it, return. In a tiny and abstract way, perhaps, my blog is part of the media marketplace, competing for eyeballs with game shows, football, and re-runs of Law and Order. But not really. PressThink, a free citizen in a voluntary nation, doesn't have to behave like a market actor. Thus my experiment in long form blogging.

One has to remember that the Web is good for many opposite things. For quick hitting information. For clicking across a field. For talk and interaction. It's also a depth finder, a memory device, an instant library, a filter. Not to use a weblog for extended analysis because most users won't pick that option is Web dumb, but media smart. But I am not the media! What's strange is that I try to write short, snappy things, but they always turn into long ones. A certain number of readers show up to complain about it ("too many words spent on the wrong subject!" would be typical) and that gets amusing after a while.



Every good blog asks the Web a question at the start: is there any demand out there for an original... for me? But you have to do the blog for a while before you find out what it is supposed to be.

The title PressThink derives from terms like “group think,” but the group is the press. The title is also short for press thinking or doctrine, the philosophy journalists live by – one might say the religion of the press. These are subjects that interest me. Press think is what I do myself, as a critic and writer. I’m also engaged in it when I operate my blog.

The idea is to lift the press think part from passing events that involve the press. And then examine it, or get others to do the same. So that is what the title means. The blog is “about” press think; it’s also a contraption for making more press think. I think some bloggers don’t put enough thought into the title of their blog. In my case, not until I had the right title was I ready to start my weblog.

I try to leave ideologically-charged press critique to others – individuals and organizations – that do it eagerly, do it well. PressThink is not a media watch site, although I have written about media-watchers. PressThink is not a “bias” hunter, in the usual sense, but I have written about bias-hunting. I don’t support George Bush, but I do write about his press think. As I wrote in the introduction to my weblog: “I try to discover the consequences in the world that result from having the kind of press we do.”

Someone once asked me if I have a blogging “method.” I read the press, watch the news, click around in my blogroll, and hunt for something juicy, current, interesting. Then I collect links, and start writing. Or someone e-mails me something and it leads to a post. Often something happens and I know my readers will want to know what I think about it, so I have to do a post. What I have instead of a firm method is a kind of style sheet, which has self-imposed instructions for how to do a PressThink post.

In a typical PressThink post like this one, “Laying the Newspaper Gently Down to Die”... [http://journalism.nyu.edu/pubzone/weblogs/pressthink/2005/03/29/nwsp\\_dwn.html](http://journalism.nyu.edu/pubzone/weblogs/pressthink/2005/03/29/nwsp_dwn.html)

There are five fields that get filled in: the title, the subtitle, the essay, the “after matter” (with notes, reactions and links) and the comments. Each requires of me a different kind of writing. The title condenses what the post is about, and arrests attention. The subheading explains the argument, previewing the “story” in the essay. The essay is an essay – usually 1,500 to 2,500 words – but with 20 to 30 links, which are a gesture unto themselves. The “after” section edits and tracks the wider discussion in the blog sphere, including reactions to my post. The comments begin the dialogue.

A successful PressThink post is when all five parts talk to each other as they are read against one another. A PressThink entry is not “done” until the after matter, trackbacks and comments come in, which sometimes takes more than a week. That’s one cycle in the turning of a weblog. When it works (always a hit and miss thing), the post at some point turns into a forum on the subject that occasioned the post – and the forum is what “thinks.” Of course, I didn’t know about this stylesheet and the posting logic it enforces until after I had stumbled on it through trial and error. That’s why you have to do your weblog for a while before you know how to do it well.

Before I started PressThink I had to pass all my ideas about journalism and journalists through the very gatekeepers in the press I was writing about. But now that I have my own magazine I don’t have to do that, and the gatekeepers come to my blog and read what I think. That’s a big difference. I finally have intellectual freedom.

Jay Rosen teaches journalism at New York University, where has been on the faculty since 1986. From 1999 to 2005 he served as chair of the Department. He lives in New York City. Rosen is the author of PressThink, a weblog about journalism and its ordeals ([www.pressthink.org](http://www.pressthink.org)), which he introduced in September 2003: <http://journalism.nyu.edu/pubzone/weblogs/pressthink>







PERSONAL ACCOUNT

## HONG KONG

“I KEPT MY PROMISE TO THOSE WHO DIED”

By Yan Sham-Shackleton

It is 12:23 am, in the early morning of June 4. Today is the 16th anniversary of the Tiananmen Square Massacre in Beijing. When the event happened in 1989 I was sitting in a tunnel outside the Xinhua News Agency office in Hong Kong where hunger strikers had set up. We were supporting the students in China. We wanted democracy for them and for ourselves. We no longer wanted to be colonial subjects of Britain and we did not want to be subjects of the Communist Party either. We wanted to be free.

About two, maybe three hours later, I heard the first shots coming through the radio, followed by the sound of singing, screaming and tanks reverberating through the walls, and we looked at each other and saw tears streaming down our faces.

We all know now that China will use tanks against those who seek democracy, but until then we did not. I think it was at that moment that *Glutter* was born in my head, when I heard the ending of the 1989 Democratic Movement on the radio, in a tunnel, with bright fluorescent lights. I was 15.

If not at that moment, it was soon afterwards. I would make promises only young women with no experience in the world could make with as little doubt as I did :

“I will not forget. I promise to remember forever. I will live my life better and for all of us because I am alive and you are no longer. I won't let this happen again. I will remind the world for you, the students of Tiananmen Square. My Heroes. My Big Brothers and Sisters.”

I made those promises in haste, in fear, in naivety. It never occurred to me how something like that was to be achieved or if it was even possible. I only knew that it sounded right, and all the adults were yelling those things out of loudspeakers.

It is only tonight that I'm thinking that all this writing, all the photos and artwork I have done in the name of democracy, the cyber-protest I organized, the interviews I agreed to, and the stories I published in the name of free speech are not only because I fervently believe



in it but also because it is a way to placate my subconscious. Blogging allows me to keep my promises to the dead.

I write this because I think people should know that's why I have managed to create *Glutter*, not because I followed any rules, or copied anybody else. Not because I wanted attention or wanted to make a name. I often prefer it best when it is quiet and will let the blog

die a little when I feel there is too much attention focused on it because then I can just write what I want, and tell the story that needs to be told in the way I like without pressure.

My advice to those interested in starting a blog is: don't listen to anyone except yourself. Don't read anyone else's blog and try to emulate it. Don't sit down with a list of "musts" and try to achieve it. I broke so many rules because I didn't know there were any and I did just fine.

All you need to create a blog is the will to start.

All you need to keep one going is a will to record what you have to say.

Each of us experienced a moment of political awakening, a trigger that made us understand a kind of injustice that needed to be fixed. Otherwise you would not be an activist with an idea to create something. Let that realization guide you. I hope you can convey enough of your conviction to remind and inspire others to fight for change. That's all the wisdom I can impart tonight.

It is now 2:33am. I can hear gunshots. Put, put, put. I hear them every year at this time. I was 15. Probably too young to have experienced the events the way I did. But others were too young to die.

Yan Sham-Shackleton wants you to know she spent six weeks writing six versions of this article where she tried to record all she knows about blogging until she realized the beauty of the medium is that you can be yourself.

On her blog, [glutter.com](http://glutter.com), she talks about art as well as politics. Her outspokenness and stands in favour of true democracy in Hong Kong mean that she is regularly censored inside China.

## IRAN

### "WE CAN WRITE FREELY IN BLOGS"

By Arash Sigarchi

**T**oday we understand Marshall McLuhan's observation that "the world is a global village" better than he did. The invisible lines of the Internet mean that if something happens in Asia, the Americas, Europe or a remote island off Africa, we will get to know about it.

For years journalism has been faced with restrictions, but these can now be removed by technology.

I am a journalist in a country where restrictions prevent me from doing my job. In addition to "inter-organizational" factors that exist in most media of the world, "out-of-organization" elements such as legal restrictions, the influence of government and individuals, one-sided support of news resources, pressure groups and owners of capital have greater influence than in advanced countries. So I have to think about the independence of my country and its reflection in true news and my analysis of news. One of my solutions for breaking through the hindrances was a blog.

We can freely write in blogs. Since they do not involve printing or expressing news in audio-visual media, writing in them provides news and points of views more quickly. Blogs can be seen as small news or comment agencies where the writer is both a correspondent and editor-in-chief.

Some say blogs should focus less on news. People like to record their daily activities there. These amateur writers have fewer readers, often just friends and relatives.

But the blogs of noted journalists and artists, and political, economic, social and sports personalities, even if they just write about their daily lives, are noticed because of their news value and fame. These people have a lot of subjects to write about and attract readers.

I believe each blog attracts its own readers depending on their interests, so no restriction is required on blog writing.



I have chosen two methods for blog writing. In the first, I express unofficially (colloquially) my views on current issues. In the second, I write news, analyses, interviews, reports, or essays. So I can have both groups of readers: those who want to know what I am doing these days and those who want me to express my views more precisely as a journalist, writer and poet.

A blog as an on-line media provides the writer with an opportunity to have the frank views and criticism of readers and reply to them or improve himself. In this close relationship with the readers, the blogger has the opportunity to guide his reader directly with his views and write the things that readers enjoy more.

As I have already mentioned, if you want to print a book, poem, story, or even newspaper or magazine in Iran, you have to obtain permission from the authorities. Very many writers and journalists are affected by this.

But if you want to publish a story, poem or essay in a newspaper or magazine, it will be censored. So many Iranian writers publish their views in blogs, at less cost and they are not forced to censor themselves. So the government, as in China and elsewhere, restricts Internet use.

Internet journalism could advance freedom of expression and wider viewpoints. Although I have been convicted by Iranian courts, I have not lost hope and I am sure that in coming years the rulers of my country will have to respect the free flow of information and expression freedom.

Journalist and blogger Arash Sigarchi was born in 1978, during the revolution that eventually overthrew the Shah, and began doing journalism in 1993, aged only 15. When reformist President Mohammad Khatami was elected in 1997, he joined the reformist press. After this media was shut down in April 2000, he went to live in northern Iran, where he edited a 12-page daily paper, *Gilan Emrouz* (now *Gilan*).

He began blogging in 2001 on a collective blog called *Gileh Mard* ("The Man from Gilan"). In 2002, he started up his personal web site, *Panjereh Eltehab* ("The Window of Hope") ([www.sigarchi.com](http://www.sigarchi.com)).

In early 2005, he was held for two months by the information and security ministry and then sentenced to 14 years in prison. He is free pending an appeal.



## NEPAL

### “WE TELL THE OUTSIDE WORLD WHAT’S HAPPENING”

Radio Free Nepal (RFN) <http://freenepal.blogspot.com>

**F**ebruary 1, 2005. Nepal's King Gyanendra took over the power which was informed to general public via a television speech. After the speech was concluded, I wanted to know the international reactions of the move and tried to open the dial-up connection. But it said there is no phone line attached. I understood that the phone line has been cut off. In an attempt to quash any possible outflow of information criticizing his move, the King has ordered the army not only to lock up the ISPs but also to stop telecommunication services.

During that time, people were talking about all sorts of consequences – some of them praising the move. At my newspaper office, everybody was foreseeing a glum future with the army personnel invading into the television newsroom to censor. I thought at that time it would be appropriate to note down the daily events and people's thought as a diary. I did that on my computer.

On February 8, basic telecommunication services and internet services resumed. I was asked by many to explain what had happened in Nepal through emails. At the time, I thought my diary would best explain the situation here. Some friends at United States of America suggested me to blog the diary in back dates. Since I was a bit novice in blogging matters, they set up the site and entered the entries for me. It was decided that I would remain anonymous and ask other friends to write on blogs anonymously, which would save us from possible harassment and prison.

Heavy censorship in earlier days in media and free flow of information on RFN gave the popularity to the site, with Blogger.com recommending a visit. My friends in USA did their best to popularize the site. Within weeks, it was pretty much popular.

The decision to start RFN was taken so that people around the world can understand how individuals are feeling about the King's direct rule. Under heavy censorship, media would be forced to write what the King wants and would be all but insufficient to represent people's true voices. RFN despite being an effort of an individual with entries from a few people would best represent the common voices without the censorship and fear of harassment.

Earlier entries in RFN were mostly diary type daily event describers. Later entries are more thoughtful and analysis of various events. In the political situation of Nepal where the King has assumed direct power bypassing the people's choices, RFN is much more relevant because it carries the thoughts of a common person.

What actually I thrive for is democracy in the country because I believe that's the only way where the country will prosper and my career as journalist would carry meanings. Writing under censorship is something like drinking coffee without sugar – there is no taste. As journalists we come to know many things that never made to the papers like one that was published in RFN - the King acquiring personal properties in an inappropriate way. Many journalists knew that, criticized that, laughed at the King but couldn't write it.

The other purpose RFN served was to spread Nepal's situation among many people around the world. Nepal's situation could have gone unheard of by many thousands of people if there hadn't been RFN. This I think is good for making conscience among the world population to think about the country.

Electronic advancement has given so much for our society. I write freely without fear because I believe the way I am doing the blogging, writing them and emailing them to a friend in US to post, is not traceable without some heavy measure. When democracy will return to my country giving us 'air to breathe freely' I will be proud of myself as I would feel I have contributed a little for that.

Many questioned me through the email what is the credibility of the posts. I told them a mere name can't be a measure of credibility. I didn't want to publish name because until democracy dawns in Nepal, the situation can go even further wrong and I could be forced into prison for blogging. I do not fear prison but I want to continue RFN to provide information about Nepal to the world. I also told them I would give them my name when the ordeal of the King's rule will be over.

Until then, thank you to all for your support`.

**RFN BLOGGER, NEPAL**  
wewantdemocracy@gmail.com

Radio Free Nepal is a blog that defies King Gyanendra's direct assumption of power and censorship of media. Working for restoration of democracy, RFN is a site that carries firsthand information about Nepal to the world. Its contributors post anonymously as there is a threat from the authorities.

## HOW TO BLOG ANONYMOUSLY

By Ethan Zuckerman

**T**his is a quick technical guide to anonymous blogging that tries to approach the problem from the angle of a government whistleblower in a country with a less-than-transparent government. It's not intended for cypherpunks, but for people in developing nations who are worried about their safety and want to take practical steps to protect their privacy. The Electronic Frontier Foundation's guide, "How to Blog Safely" (<http://www.eff.org/Privacy/Anonymity/blog-anonymously.php>), also offers some very good advice on this.

**SOMMAIRE**    Introducing Sarah  
                     Step 1 - Pseudonyms  
                     Step 2 - Public computers  
                     Step 3 - Anonymous proxies  
                     Step 4 - This time it's personal!  
                     Step 5 - Onion Routing through Tor  
                     Step 6 - MixMaster, Invisiblog and GPG  
                     How much anonymity is enough? How much hassle is too much?

### INTRODUCING SARAH

Sarah works in a government office as an accountant. She becomes aware that her boss, the deputy minister, is stealing large amounts of money from the government. She wants to let the world know that a crime is taking place, but she's worried about losing her job. If she reports the matter to the minister (if she could ever get an appointment!), she might get fired. She calls a reporter at the local newspaper, but he says he can't run a story without lots more information and documents proving her claims.

So Sarah decides to put up a weblog to tell the world what she knows about what's happening in the ministry. To protect herself, she wants to make sure no one can find out who she is, based on her blog posts. She needs to blog anonymously.

**HOW TO BLOG ANONYMOUSLY**

There are two major ways she can get caught when trying to blog anonymously. One is if she reveals her identity through the content she posts – for instance, if she says: "I'm the assistant chief compliance accountant to the deputy minister of mines," there's a good chance that someone reading her blog is going to figure out who she is pretty quickly.

The other way Sarah can get caught is if someone can determine her identity from information provided by their web browsers or email programs. Every computer attached to the internet has – or shares – an address called an IP address - it's a series of four numbers from 0-255, separated by dots – for instance: 213.24.124.38. When Sarah uses her web browser to make a comment on the minister's blog, the IP address she was using is included on her post.

With a little work, the minister's computer technicians may be able to trace Sarah's identity from this IP address. If Sarah is using a computer at home, dialing into an Internet service provider, the ISP likely has records of which IP address was assigned to which telephone number at a specific time. In some countries, the minister might need a subpoena to obtain these records; in others (especially ones where the ISP is owned by the government), the ISP might give out this information very easily, and Sarah might find herself in hot water.

There are a number of ways Sarah can hide her identity when using the Internet. As a general rule, the more secure she wants to be, the more work she needs to do to hide her identity. Sarah - and anyone else hoping to blog anonymously – needs to consider just how paranoid she wants to be before deciding how hard she wants to work to protect her identity. As you will see, some of the strategies for protecting identity online require a great deal of technical knowledge and work.

**STEP ONE - PSEUDONYMS**

One easy way Sarah can hide her identity is to use a free webmail account and free blog host outside her native country. (Using a paid account for either email or webhosting is a poor idea, as the payment will link the account to a credit card, a checking account or Paypal account that could be easily linked to Sarah.) She can create a new identity – a pseudonym – when she signs up for these accounts, and when the minister finds her blog, he'll discover that it belongs to "A. N. Ymous", with the email address [anonymous.whistleblower@hotmail.com](mailto:anonymous.whistleblower@hotmail.com).

Some providers of free webmail accounts:

- Hotmail
- Yahoo
- Hushmail - free webmail with support for strong cryptography

Some providers of free weblog hosting:

- Blogsome - free WordPress blogs
- Blogger
- Seo Blog

**HOW TO BLOG ANONYMOUSLY**

Here's the problem with this strategy. When Sarah signs up for an email service or a weblog, the webserver she's accessing logs her IP address. If that IP address can be traced to her - if she's using her computer at home or her computer at work – and if the email or weblog company is forced to release that information, she could be found. It's not a simple matter to get most web service companies to reveal this information – to get Hotmail, for instance, to reveal the IP Sarah used to sign up for her account, the minister would likely need to issue a subpoena, probably in cooperation with a US law enforcement agency. But Sarah may not want to take the risk of being found if her government can persuade her email and weblog host to reveal her identity.

**STEP TWO - PUBLIC COMPUTERS**

One extra step Sarah could take to hide her identity is to begin using computers to make her blogposts that are used by lots of other people. Rather than setting up her webmail and weblog accounts from her home or work computer, Sarah could set them up from a computer in a cybercafé, library or university computer lab. When the minister traces the IP used to post a comment or item, he'll find the post was made from a cybercafé, where any number of people might have been using the computers.

There are flaws in this strategy as well. If the cybercafé or computer lab keeps track of who is using what computer at what time, Sarah's identity could be compromised. She shouldn't try to post in the middle of the night when she's the only person in the computer lab – the geek on duty is likely to remember who she is. And she should change cybercafés often. If the minister discovers that all the whistleblower's posts are coming from "Joe's Beer and Bits" on Main Street, he might stake someone out to watch the cybercafé and see who's posting to blogs in the hope of catching Sarah.

**STEP THREE - ANONYMOUS PROXIES**

Sarah's getting sick of walking to Joe's cybercafé every time she wants to post to her blog. With some help from the neighborhood geek, she sets up her computer to access the web through an anonymous proxy. Now, when she uses her webmail and weblog services, she'll leave behind the IP address of the proxy server, not the address of her home machine... which will make it very hard for the minister to find her.

First, she finds a list of proxy servers online, by searching for "proxy server" on Google. She picks a proxy server from the [publicproxyservers.com](http://www.publicproxyservers.com) list, choosing a site marked "high anonymity". She writes down the IP address of the proxy and the port listed on the proxy list.

Some reliable lists of public proxies:

- [publicproxyservers.com](http://publicproxyservers.com) - anonymous and non-anonymous proxies.
- Samair (<http://www.samair.ru/proxy/>) - only anonymous proxies, and includes information on proxies that support SSL.
- rosinstrument proxy database (<http://tools.rosinstrument.com/proxy/>) - searchable database of proxy servers.

**HOW TO BLOG ANONYMOUSLY****HOW TO BLOG ANONYMOUSLY**

Then she opens the “preferences” section of her web browser. Under “general”, “network” or “security” (usually), she finds an option to set up a proxy to access the Internet. (On the Firefox browser, this option is found under Preferences – General – Connection Settings.)

She turns on “manual proxy configuration”, enters the IP address of the proxy server and port into the fields for HTTP proxy and SSL proxy and saves her settings. She restarts her browser and starts surfing the web.

She notices that her connection to the web seems a bit slower. That's because every page she requests from a webserver takes a detour. Instead of connecting directly to hotmail.com, she connects to the proxy, which then connects to Hotmail. When Hotmail sends a page to her, it goes to the proxy first, then to her. She also notices she has some trouble accessing websites, especially those that want her to log in. But at least her IP isn't being recorded by her weblog provider.

A fun experiment with proxies: Visit noreply.org, a popular remailer website. The site will greet you by telling you what IP address you're coming from: “Hello pool-151-203-182-212.wma.east.verizon.net 151.203.182.212, pleased to meet you.”

Now go to anonymizer.com, a web service that allows you to view (some) webpages through an anonymous proxy. In the box on the top right of the anonymizer page, enter the URL for <http://www.noreply.org> (or just click [\[http://anon.free.anonymizer.com/http://www.noreply.org this link\]](http://anon.free.anonymizer.com/http://www.noreply.org).) You'll note that noreply.org now thinks you're coming from vortex.anonymizer.com. (Anonymizer is a nice way to test proxies without needing to change your browser settings, but it won't work with most sophisticated web services, like webmail or weblogging servers.)

Finally, follow the instruction above to set up your web browser to use an anonymous proxy and then visit noreply.org to see where it thinks you're coming from.

Alas, proxies aren't perfect either. If the country Sarah lives in has restrictive Internet laws, many websurfers may be using proxies to access sites blocked by the government. The government may respond by ordering certain popular proxies to be blocked. Surfers move to new proxies, the government blocks those proxies, and so the circle continues. All this can become very time-consuming.

Sarah has another problem if she's one of very few people in the country using a proxy. If the comments on her blog can be traced to a single proxy server, and if the minister can access logs from all the ISPs within a country, he might be able to discover that Sarah's computer was one of the very few that accessed a specific proxy server. He can't demonstrate that Sarah used the proxy to post to a weblog server, but he might conclude that the fact that the proxy was used to make a weblog post and that she was one of the few people in the nation to use that proxy constituted evidence that she made the post. Sarah would do well to use proxies that are popular locally and to switch proxies often.

**STEP FOUR - THIS TIME IT'S PERSONAL**

Sarah starts to wonder what happens if the proxy servers she's using get compromised. What if the minister convinces the operator of a proxy server - either through legal means or bribery - to keep records and see whether anyone from his country is using the proxy, and what sites they're using? She's relying on the proxy administrator to protect her, and she doesn't even know who the administrator is. Though the proxy administrator may not even know she's running a proxy – proxies are often left open by accident.

Sarah has friends in Canada - a country less likely to censor the Internet than Sarah's own country - who might be willing to help her maintain her blog while protecting her identity. Sarah phones her friend and asks him to set up “Circumventor” on his system. Circumventor is one of dozens of proxy servers a user can set up to allow people to use his computer as a proxy.

Sarah's friend Jim downloads Circumventor (<http://www.peacefire.org/circumventor/simple-circumventor-instructions.html>) from Peacefire.org and installs it on his Windows system. It's not an easy install - he needs to install Perl on his system, then install OpenSA, then Circumventor. And he now needs to keep his computer connected to the Internet constantly, so that Sarah can use it as a proxy without previously asking him to turn it on. He gets the software set up, calls Sarah's cellphone and gives her a URL she can start using to surf the web through his proxy, or post to her blog. This is especially convenient, because Sarah can use the proxy from home or from a cybercafé, and doesn't have to make any changes on her system.

While Sarah's very grateful for Jim's help, there's a major problem with the arrangement. Jim's computer – which runs Windows – reboots quite often. Whenever it does, his ISP assigns a new IP address to the machine. Each time this happens, the proxy stops working for Sarah. Jim needs to contact Sarah again and tell her the new IP that Circumventor is associated with. This rapidly gets expensive and frustrating. Sarah also worries that, if she uses any one IP address too long, her ISP may succumb to government pressure and start blocking it.

**STEP FIVE - ONION ROUTING THROUGH TOR**

Jim suggests that Sarah experiment with Tor, a relatively new system that provides a high degree of anonymity for websurfing. Onion routing takes the idea of proxy servers – a computer that acts on your behalf – to a new level of complexity. Each request made through an onion routing network goes through two to 20 additional computers, making it hard to trace what computer originated a request.

Each step of the Onion Routing chain is encrypted, making it harder for the government of Sarah's country to trace her posts. Furthermore, each computer in the chain only

**HOW TO BLOG ANONYMOUSLY**

knows its nearest neighbors. In other words, router B knows that it got a request for a webpage from router A, and that it's supposed to pass the request on to router C. But the request itself is encrypted - router B doesn't actually know what page Sarah is requesting, or what router will finally request the page from the webserver.

Given the complexity of the technology, Sarah is pleasantly surprised to discover how easy it is to install Tor (<http://tor.eff.org/cvs/tor/doc/tor-doc-win32.html>), an onion routing system. She downloads an installer which installs Tor on her system, then downloads and installs Privoxy, a proxy that works with Tor and has the pleasant side benefit of removing most of the ads from the webpages Sarah views.

After installing the software and restarting her machine, Sarah checks [noreply.org](http://noreply.org) and discovers that she is, in fact, successfully "cloaked" by the Tor system - [noreply.org](http://noreply.org) thinks she's logging on from Harvard University. She reloads, and now [noreply.org](http://noreply.org) thinks she's in Germany. From this she concludes that Tor is changing her identity from request to request, helping to protect her privacy.

This has some odd consequences. When she uses Google through Tor, it keeps switching language on her. One search, it's in English - another, Japanese. Then German, Danish and Dutch, all in the course of a few minutes. Sarah welcomes the opportunity to learn some new languages, but she's concerned about some other consequences. Sarah likes to contribute to Wikipedia, but discovers that Wikipedia blocks her attempts to edit articles when she's using Tor.

Tor also seems to have some of the same problems Sarah was having with other proxies. Her surfing slows down quite a bit, as compared to surfing the web without a proxy - she finds that she ends up using Tor only when she's accessing sensitive content or posting to her blog. And she's once again tied to her home computer, since she can't install Tor on a public machine very easily.

Most worrisome, though, she discovers that Tor sometimes stops working. Evidently, her ISP is starting to block some Tor routers - when Tor tries to use a blocked router, she can wait for minutes at a time, but doesn't get the webpage she's requested.

**STEP SIX - MIXMASTER, INVISIBLOG AND GPG**

Surely there's a solution to the blogging problem that doesn't involve a proxy server, even one as sophisticated as Tor.

After spending quite a long time with the local geek, she explores a new option: Invisiblog (<http://www.invisiblog.com/>). Run by an anonymous group of Australians called [vigilant.tv](http://vigilant.tv), it's a site designed for and by the truly paranoid. You can't post to Invisiblog via the web, as you do with most blog servers. You post to it using specially formatted email, sent through the MixMaster remailer system, signed cryptographically.

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It took Sarah a few tries to understand that last sentence. Eventually, she set up GPG (<http://www.gnupg.org/>) - the GNU implementation of Pretty Good Privacy, a public-key encryption system ([http://en.wikipedia.org/wiki/Public-key\\_cryptography](http://en.wikipedia.org/wiki/Public-key_cryptography)).

In two sentences: Public-key encryption is a technique that allows her to send messages to a person that only she can read, without her needing to share a secret key with you that would let you read messages other people send to her. Public key encryption also allows people to "sign" documents with a digital signature that is almost impossible to forge.

She generates a keypair that she will use to post to the blog - by signing a post with her "private key", the blog server will be able to use her "public key" to check that a post is coming from her, and then put it on the blog. (see also the chapter on "How to ensure e-mail is truly private")

She then sets up MixMaster, a mailing system designed to obscure the origins of an email message. MixMaster uses a chain of anonymous remailers - computer programs that strip all identifying information off an email and send it to its destination - to send email messages with a high degree of anonymity. By using a chain of 2 to 20 remailers, the message is very difficult to trace, even if one or more of the remailers is "compromised" and is recording sender information. She has to "build" MixMaster by compiling its source code, a project that requires a great deal of geek assistance.

She sends a first MixMaster message to Invisiblog, which includes her public key. Invisiblog uses this to set up a new blog, with the catchy name "[invisiblog.com/ac4589d7001ac238](http://invisiblog.com/ac4589d7001ac238)" - the long string is the last 16 bytes of her GPG key. Then she sends future posts to invisiblog, by writing a text message, signing it with her public key and sending it via MixMaster.

It's not nearly as fast as her old style of blogging. The misdirection of MixMaster mailers means that it takes anywhere from two hours to two days for her message to reach the servers. And she has to be very careful about looking at the blog - if she looks at it too often, her IP address will appear in the blog's log frequently, signaling that she's likely to be the blog author. But she's reassured by the fact that the owners of Invisiblog have no idea who she is.

The main problem with the Invisiblog system is the fact that it's incredibly difficult for most people to use. Most people find GPG a challenge to set up, and have difficulty understanding the complexities of public and private keys. More user-friendly crypto tools, like Ciphire, have been set up to help the less geeky of us, but even they can be tricky to use. As a result, very few people - including those who might really need it - use encryption for most of their email.

MixMaster is a true technical challenge for most users. Windows users can use an early DOS version of the program by downloading it here: [http://prdownloads.sourceforge.net/mixma\\_er/mix204b46.zip?download](http://prdownloads.sourceforge.net/mixma_er/mix204b46.zip?download). I downloaded and tested it, and it doesn't



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appear to work... or perhaps my email is still being remailed back and forth between remailers. Anyone wanting to use the newer version, or wanting to use the program on Linux or Mac, needs to be able to compile the program themselves, a task beyond many expert users. It's possible that Invisiblog would become more useful if it accepted messages from web-accessible remailers, like riot.eu.org but for now, I can't see it as being particularly helpful for the people who need it most.

There are other problems with strong encryption in repressive countries. If Sarah's computer is seized by the government and her private key is found, it would constitute strong evidence that Sarah had authored the controversial blog posts. And, in countries where encryption is not widely used, simply sending out MixMaster messages – mail messages wrapped in strong encryption – might be enough to cause Sarah's Internet activity to be watched closely.

**HOW MUCH ANONYMITY IS ENOUGH? HOW MUCH HASSLE IS TOO MUCH?**

Is Sarah's solution – learning enough about cryptography and software to use MixMaster – your solution? Or is some combination of steps 1-5 enough to let you blog anonymously? There's no single answer. Any path towards anonymity needs to consider local conditions, your own technical competence and your level of paranoia. If you're worried that what you're posting could put you at risk and you're capable of installing it, posting to a blog through Tor is a very good idea.



And remember not to sign your blog posts with your real name !

Ethan Zuckerman is a fellow at the Berkman Center for Internet and Society at Harvard Law School where his research focuses on the relationship between citizen journalism and conventional media, especially in the developing world. He's a founder and former director of Geekcorps, a non-profit organization that focuses on technology training in the developing world, and was one of the founders of webhosting company Tripod.

# TECHNICAL WAYS TO GET ROUND CENSORSHIP

By Nart Villeneuve

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**INTERNET CONTENT FILTERING**

Filtering technology allows controls to be placed on access to Internet content. Although the initial focus of such technology was on the individual level – allowing parents to restrict children's access to inappropriate content – filtering technology is now being widely deployed at institutional and national level. Control over access to Internet content is becoming a priority for a number of institutional actors including schools, libraries and corporations. Increasingly, filtering technology is being deployed at national level. Access to specific Internet content is being blocked for entire populations, often with little accountability.

Content filtering technologies rely on list-based blocking, often in conjunction with blocking techniques that use keyword matching, to dynamically block Internet content. Lists of domain names and URLs are compiled and categorized then loaded into filtering

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

software which can be configured to block only certain categories. When users try to access a web page, the filtering software checks its list database and blocks access to any web page on that list. If keyword blocking is enabled, the software will check each web page (the domain, URL path and/or body content of the requested page) and dynamically block access to the web page if any of the banned keywords are present.

Filtering systems are prone to two inherent flaws: over-blocking and under-blocking. They often block access to wrongly classified content and often do not block all access to the content they intend to block. But the key issue is the secrecy surrounding the creation of lists of websites that are blocked by filtering technologies. Although there are some open source lists (focusing mostly on pornography), commercial filtering lists and lists deployed at national level are secret. Commercial lists of categorized domains and URLs are the intellectual property of their manufacturers and not made public. Despite the fact that some filtering software manufacturers make online URL checkers available, the block lists as a whole are secret and unavailable for independent scrutiny and analysis.

Often countries will build on commercial filtering technology lists adding specific websites pertinent to their respective countries. Blocked sites most often include opposition political parties or newspapers, human rights organizations, international news organizations and content critical of the government. Most countries focus on local language content, as opposed to English sites, and increasingly target interactive discussion sites such as web blogs and web forums.

### CIRCUMVENTION TECHNOLOGIES

In response to state-directed Internet filtering and monitoring regimes, many forms of circumvention technologies have emerged to allow users to bypass filtering restrictions. There are numerous projects to develop technologies that would enable citizens and civil society networks to secure themselves against, or work around, Internet censorship and surveillance. These tools are referred to as "circumvention technologies." In general, circumvention technologies work by routing a user's request from a country that implemented filtering through an intermediary machine that is not blocked by the filtering regime. This computer then retrieves the requested content for the censored user and transmits the content back to the user. Sometimes, these technologies may be specifically designed for a particular filtering situation or customized for a specific country. Other times, users may simply adapt existing technologies for circumvention purposes even though that may not be the original purpose of the technology.

Some of these technologies are developed by private companies, others by ad-hoc groups of hackers and activists. They range from small, simple scripts and programs to highly-developed peer-to-peer network protocols. Given the range of the technologies involved it is necessary for potential users to be able to weigh the strengths and weaknesses of specific techniques and technologies so as to choose the appropriate circumvention technologies that suit their needs.

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

There are two users of circumvention technologies: the circumvention provider and the circumvention user. The circumvention provider installs software on a computer in a non-filtered location and makes this service available to those who access the Internet from a censored location. Thus successful circumvention relies on meeting the specific needs of both users.

This paper aims to inform users who have made the decision to use circumvention technologies of the available options and how to assess which is best suited to the specific needs of the user. This is done by determining the needs and capacity of the users involved – those using as well as those running the circumvention technology – while balancing the appropriate level of security with the technologies' usability by the end-user. Effective, secure, and stable circumvention is achieved by matching the right technology with the right user.

### DETERMINING NEEDS AND CAPACITY

Circumvention technologies often target different types of users with varying resources and levels of expertise. What may work well in one scenario may not be the best option in another. When choosing a circumvention technology it is important for the potential circumvention provider and user to ask these questions :

What is the number of expected users and the available bandwidth? (for the circumvention provider and the user).

Where is the primary point of Internet access for the expected user(s) and what will they be using it for?

What is the level of technical expertise? (for the circumvention provider and the user).

What is the availability of trusted out-of-country contacts for the end-user?

What is the level of expected penalty if the user is caught using circumvention technology ?

- Does the end-user properly understand the potential security risks of using the specific circumvention technology?

### NUMBER OF USERS AND AVAILABLE BANDWIDTH

The circumvention provider needs to estimate the number of users the circumvention technology is intended for and balance that with the available bandwidth. The end-user must also take into account their bandwidth as circumvention technology will slow their Internet use.

People interested in running public proxies need to consider that their circumventor may be used by persons who are not in censored locations. For example, circumventors may be used to download entire movies which will use a lot of bandwidth. Therefore you may wish to restrict access to your circumventor or how much total bandwidth you'd like to circumventor to be restricted to. Different available technologies provide some or all of these options.

**TECHNICAL WAYS TO GET ROUND CENSORSHIP**

**PRIMARY POINT OF ACCESS AND USE**

There will be varying options of applicable circumvention technologies depending on where the end-users access the Internet and what services they need to run through the circumvention system. For example, users who access the Internet from public computers or Internet cafés may not be able to install any software and will be restricted to web-based solutions. Others may want to use applications besides Web browsing (HTTP), such as e-mail (SMTP) and file transfers (FTP), and thus may want to install software on their computer workstation and to tweak their computer's settings. Of course, this requires a certain level of technical skill on the part of that user.

**LEVEL OF TECHNICAL EXPERTISE**

The greater the level of technical expertise (and limited number of users) the more circumvention options increase. The barriers to non-technical users include the installation and set-up process as well as any configuration changes or extra steps that must be taken when actually using the circumvention technology. This applies to both the circumvention provider and the end-user. The incorrect use of circumvention technology may put users at avoidable risk.

**AVAILABILITY OF TRUSTED CONTACTS**

End-users can greatly enhance their circumvention options if they know and trust persons outside their country. If a user does not have a trusted contact then their options are limited to publicly available systems and if the user can locate these systems so can those implementing the filtering and blocking. With a trusted contact the end-user can consult with the circumvention provider to find a solution that meets their specific needs and can be kept private to avoid detection. Successful, long-term and stable circumvention is greatly enhanced by having a trusted contact in a non-filtered location.

**THE EXPECTED PENALTY**

It is extremely important to know the penalty users face if they are caught using circumvention technology. Depending on the severity, options will vary. If the legal environment is lax and the expected penalty low, users can choose from a variety of options which, while effective at circumvention, are not very secure. If the environment is extremely dangerous, care must be taken to implement technologies that are both discreet and secure. Some may even be used with a legitimate cover story or other forms of obfuscation.

**TECHNICAL WAYS TO GET ROUND CENSORSHIP**

**SECURITY RISKS**

Too often users are encouraged to use circumvention technology without being properly informed of the potential security risks, which can be minimized by deploying the right technology in the right place and used correctly by the end-user.

**WEB-BASED CIRCUMVENTORS**

Web-based circumventors are special web pages that contain a web form that allows users to simply submit a URL and have the web-based circumventor retrieve the content of the requested web page and display it to the user. There is no connection between the user and the requested website,

and the circumventor transparently proxies the request allowing to user to browse blocked websites seamlessly. Web-based circumventors also re-write the links in the requested web page to point back through the circumventor itself so that the user can continue web surfing normally. When using a web-based circumventor, the end-user does not have to install any software or change any of their browser settings. All the end-user has to do is visit the URL of the circumventor, enter the URL they wish to visit in the form located on the circumventor page and press the submit button. (Web-based circumventors may look different from one another but the basic functionality is the same). Thus no level of expertise is required and it can be used from any point of access.



Proxy servers / change the navigator settings



**TECHNICAL WAYS TO GET ROUND CENSORSHIP**

**Advantages :**

Web-based circumvention systems are easy to use and no software needs to be installed at the end-user level.

Public web-based circumvention services are available to users who do not have a trusted contact in an unfiltered location.

Private web-based circumvention systems can be customized to meet the specific circumvention needs to users and are less likely to be found by the filtering authorities.

**Disadvantages :**

Web-based circumvention systems are often restricted to web traffic (HTTP) and may not be accessible by encrypted access (SSL). Web services (such as web-based email) that require authentication may not be fully functional.

Public web-based circumvention services are generally well known and may already be blocked. Most of these services are already blocked by commercial filtering software.

Private web-based circumvention systems require that a user have a contact in an unfiltered location. Ideally, the two parties must be able to communicate in some way that isn't easily monitored.

**PUBLIC WEB-BASED CIRCUMVENTION SERVICES**

There is publicly available web-based circumvention software as well as services. Most provide free service while some have more options, such as encrypted access, available with a paid subscription. Some are operated by companies, others by volunteers as a public service. A few examples:

<a href="http://www.anonymizer.com/">http://www.anonymizer.com/</a>	<a href="http://www.guardster.com/">http://www.guardster.com/</a>
<a href="http://www.unipeak.com/">http://www.unipeak.com/</a>	<a href="http://www.webwarper.net/">http://www.webwarper.net/</a>
<a href="http://www.anonymouse.ws/">http://www.anonymouse.ws/</a>	<a href="http://www.proximal.com/">http://www.proximal.com/</a>
<a href="http://www.proxyweb.net/">http://www.proxyweb.net/</a>	<a href="http://www.the-cloak.com/">http://www.the-cloak.com/</a>

Since the web addresses of these services are widely known, most Internet filtering applications already have these services on their block lists as do many countries that filter at national level. If the web addresses of these services are blocked they cannot be used. Also, many public web-based circumventors do not encrypt the traffic between the circumventor and the end-user. Any information transmitted by the user can be intercepted by the operator of the circumvention service.

*Public Web-based circumvention services are best suited for users in low security risk environments who are without trusted contacts in non-filtered locations and have temporary or ad-hoc circumvention needs and who do not need to transmit sensitive information.*

**TECHNICAL WAYS TO GET ROUND CENSORSHIP**

**WEB-BASED CIRCUMVENTION SOFTWARE**

Installation of web-based circumvention software can require some level of technical expertise and appropriate resources (a web server and bandwidth). With a private circumventor, the location is only made known to the intended users whereas public circumventors and anonymity services are known to both users and those implementing filtering (and are on most commercial filtering software's blocklists). The chances of private circumventors being detected are blocked and lower than that of public circumvention services.

Private circumventors can be set up with some level of customization tailored to the specific needs of the end-user. Some common customizations are changing the port number that the web server runs on and implementing encryption. Secure Sockets Layer (SSL) is a protocol for transmitting content securely over the Internet. It is often used by websites to securely transmit information, such as credit card numbers. SSL-enabled websites are accessed with "HTTPS" instead of the normal "HTTP".

Another option when using SSL is creating an innocuous web page at the root of the web server and concealing the circumventor with a random path and file name. Although an intermediary may be able to determine the server the user is connecting to, they will not be able to determine the requested path because that part of the request is encrypted. For example, if a user connects to "https://example.com/secretcircumventor/" an intermediary will be able to determine that the user connected to example.com but they will not know that the user requested the circumventor. If the circumventor operator places an innocuous page at example.com, then even if any monitoring is occurring the circumventor will not be discovered.

- CGIProxy: A CGI script acts as an HTTP or FTP proxy.  
<http://www.jmarshall.com/tools/cgiproxy>
- Peacefire's Circumventor: An automated installer program that makes it much easier for non-technical users to install and configure CGIProxy.  
<http://www.peacefire.org/circumventor/simple-circumventor-instructions.html>
- pHproxy: An experimental, highly configurable web-based circumventor.  
<http://ice.citizenlab.org/projects/phproxy>
- Psiphon: An SSL-enabled webserver with built-in web-based circumventor.  
<http://soon to be released>

*Private web-based circumventors, with encryption enabled, are best suited for users that require stable circumvention services for web traffic and have trusted contacts in non-filtered locations that have sufficient technical skills and available bandwidth to set up and maintain the web-based circumventor. This is the most flexible circumvention option available for simple web traffic and is least likely to be discovered and blocked.*

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

## WEB-BASED CIRCUMVENTION: SECURITY CONCERNS

Circumvention systems do not necessarily provide anonymity. Although the end-users identity is shielded from the operators of the websites visited. If the session between the user and the web-based circumventor is in plain text (HTTP), as with most free services, the content can be easily intercepted and analyzed by an intermediary such as an Internet service provider (ISP). So although circumvention may be successful, the authorities can still track the fact that the user has visited and used a web-based circumventor. Moreover they can determine what content, including what websites the user visited, was exchanged between the web-based circumventor and the end-user.

Web-based circumventors that operate in plain text mode (non-encrypted) sometimes use URL obfuscation to counter filtering conducted by looking for key words in Uniform Resource Locators (URL). For example, using a simple technique such as ROT-13, where the current letter is replaced by the one 13 characters ahead of it in the alphabet, the URL <http://ice.citizenlab.org> becomes [vggc://vpr.pvgvmrayno.bet](http://vggc://vpr.pvgvmrayno.bet). In effect, the text of the URL is encoded so that the key words the filtering technology is scanning for will not be present in the requested URL. However, the content of the session can still be sniffed even if the circumvention was successful.

There are also risks concerning the use of cookies and scripts. Many web-based circumventors can be configured to remove cookies and scripts, but many sites (e.g. webmail sites) require the use of cookies and scripts. Care should be taken when enabling these options. Another related risk, especially when using services that require logins/passwords, is accessing the circumventor through a plaintext connection and then using it to request information from an encrypted server. In this scenario, the circumventor retrieves the request information from the SSL-enabled server through an encrypted transmission, but then sends the contents in plain text back to the user, thus exposing the sensitive information to possible interception.

Some of these security issues can be solved by using web-based proxies through an encrypted connection. Some web-based proxies are configured to be access using SSL (HTTPS), which encrypts the connection between the end-user and the web-based circumventor. In this scenario, intermediaries can only observe the fact that the user has connected to the web-based circumventor and cannot determine the content of the session. It is highly recommended that users ensure they use SSL-enabled web-based circumventors if the security risks are high.

However, although the end-user's connection to the web-based circumventor may be secure, any information passing through a web-based circumventor can be intercepted by the owner of the web-based circumventor. An additional security concern is the records that the circumvention provider keeps. Depending on the circumventor's location, or the location of their server, authorities may have access to their log files.

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

There are still some concerns that users should be aware of, even when using SSL-enabled web-based circumventors. One is that using encryption may draw extra attention to the users' circumvention activities, and the use of encryption may not be legal in all locations. Also, it may be possible for the filtering authorities to determine what websites a user visits through a web-based circumventor, even when using SSL encryption using techniques known as HTTPS fingerprinting and Man-In-The-Middle (MITM) attacks. However, pages with dynamic content or circumventors that add random amounts of decoy text or images to requested content can reduce this technique to a level of insignificant risk. If users are provided with the "fingerprint", or security signature, of the SSL certificate they can manually verify that the certificate is in fact authentic, thus avoiding the MITM attack <sup>(1)</sup>.

## PROXY SERVERS

A "proxy server" is a server that is situated between a client, such as a web browser, and a server, such as a web server. The proxy server acts a buffer between the client and the server and can support a variety of data requests including web traffic (HTTP), file transfers (FTP) and encrypted traffic (SSL). Proxy servers are used by individuals, institutions, and states for a variety of purposes including security, anonymity, caching and filtering. To use a proxy server, the end-user must configure the settings of their web browser with the IP address or hostname of the proxy server as well as the port number that the proxy server is running on. While this is fairly simple, it may not be possible to modify browser settings in public Internet access locations such as libraries, Internet cafés and workplaces.



<sup>1</sup> For more on potential attacks on circumvention systems, see Bennett Haselton's article ("List of possible weaknesses in systems to circumvent Internet censorship") at <http://peacefire.org/circumventor/list-of-possible-weaknesses.html> and a reply by Paul Baranowski at: [www.peek-a-booty.org/pbhtml/downloads/ResponseToLopwiscic.pdf](http://www.peek-a-booty.org/pbhtml/downloads/ResponseToLopwiscic.pdf)

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

### Advantages:

There are many software packages to choose from that can transparently proxy traffic in addition to web traffic (HTTP) and can be configured to operate on non-standard ports. There are many publicly accessible proxy servers.

### Disadvantages:

Most proxy servers are not enabled with encryption by default, therefore the traffic between the user and the proxy is not secure.

The user must have the necessary permissions to change the browser settings, and if ISP's require that all traffic go through the ISP's proxy server it may not be possible to use an open proxy server.

The scanning for and use of publicly accessible proxy servers may be illegal and these proxies may become unavailable to the user at any time.

### PROXY SERVER SOFTWARE

Proxy server software can be installed by trusted contacts with some degree of technical expertise located outside of the country that filters. Proxy server software should be installed in locations where there is plenty of available bandwidth and should be configured to use encryption technology. It is especially useful for situations in which an office or small organization is in need of a stable circumvention solution. After users in the filtered locations configure their browsers to point through the proxy server they can transparently surf the Internet. While not the most stealthy circumvention solution, private proxy servers are a more robust solution than web-based proxy systems. Proxy servers are better than web-based proxies at seamlessly proxying sites that require authentication and cookies, such as web mail sites. The proxy servers can also be customized to meet the specific needs of the end-user and adapt to the local filtering environment.

- Squid is free proxy server software and can be secured with Stunnel server.  
<http://www.squid-cache.org>  
<http://www.stunnel.org>  
<http://ice.citizenlab.org/projects/aardvark>
- Privoxy is a proxy with advanced filtering capabilities for protecting privacy.  
<http://www.privoxy.org>
- Secure Shell (SSH) has a built-in socks proxy (\$ ssh -D port secure.host.com)  
<http://www.openssh.com>
- HTTPport/HTTPhost allows you to bypass your HTTP proxy, which is blocking you from the Internet.

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

*Private proxy servers with encryption enabled are best suited for groups or users in an office environment that require a permanent, stable circumvention solution and have trusted contacts with sufficient technical skills and available bandwidth outside the country to install and maintain the proxy server.*

### PUBLICLY ACCESSIBLE PROXY SERVERS

Open proxies are servers that are intentionally or otherwise left open for connections from remote computers. It is not explicitly known if open proxy servers have been set up as a public service or if they have been just badly configured to inadvertently allow public access.

WARNING: Depending on the interpretation of local law, the use of open proxy servers may be viewed as 'unauthorized access' and open proxy users may subject to legal penalties. The use of open proxy servers is not recommended.

### Locating open proxies

Many websites maintain lists of open proxy servers, but this not a guarantee that the proxy service is still available. Nothing guarantees that the information on these lists, especially information concerning anonymity level and geographical location of the proxy, is accurate. Be aware that you are using these services at your own risk.

#### Open proxy list websites:

<http://www.samair.ru/proxy/>  
<http://www.antiproxy.com/>  
<http://tools.rosinstrument.com/proxy/>  
<http://www.multiproxy.org/>  
<http://www.publicproxyservers.com/>

#### Software: ProxyTools/LocalProxy

<http://proxytools.sourceforge.net>

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

### Open proxies: uncommon ports

Some countries that filter at national level block access to standard proxy ports. A “port” is a logical connection location used by specific protocols. Different Internet services pass data through on particular port numbers. Certain port numbers are assigned, by the Internet Assigned Numbers Authority (IANA), to specific protocols or services. For example, port 80 is reserved for HTTP traffic. When you access a website in your browser you are actually connecting to a web server running on port 80. Proxy servers also have ports that are assigned to them by default. Therefore many filtering technologies will not allow access to these ports. Therefore successful circumvention may require use of a proxy that has been configured to operate on a non-standard port.

<http://www.web.freerk.com/proxylist.htm>

### PROXY SERVERS: SECURITY CONCERNS

The configuration of proxy servers is extremely important because it controls the security or anonymity of a connection. In addition to the lack of use of encryption, proxy servers may pass information about the end-user to the server the content has been requested from that can be used to identify the IP address of the computer initiating the request for content. Moreover, all the communication between you and the proxy server may be in plain text, thus easily intercepted by upstream filtering authorities. And any information passing through the proxy server can be intercepted by the owner of the proxy server.

The scanning for and use of publicly accessible proxy servers is not recommended. Open proxy servers are often used due to their availability but they do not provide any security despite the fact that they may be able to successfully circumvent Internet filtering.

As with web-based proxies, proxy servers are subject to the same security concern. Harmful scripts and cookies will still be transmitted to the end-user and even if used in conjunction with encryption technology, proxy servers can also be subject to MITM and HTTPS fingerprinting attacks. It should also be noted that some browsers will leak sensitive information when using a socks proxy, a particular type of proxy server capable of handling other types of traffic in addition to web traffic. When making a request for a website the domain name is translated into an IP address. Some browsers do this locally so the process is not directed through the proxy. In these cases, the request for the blocked website’s IP address will be handled by Domain Name System (DNS) servers in the country that implements filtering (2).

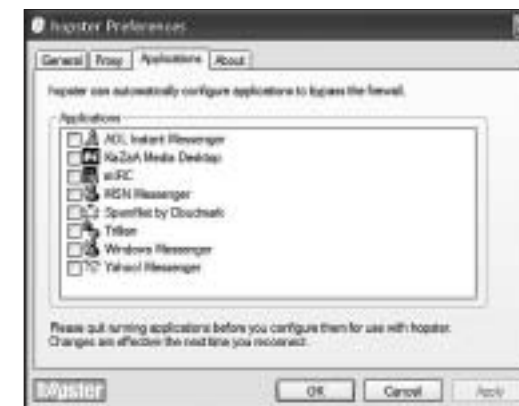
<sup>2</sup> For more, see the Tor site: <http://tor.eff.org/cvs/tor/doc/CLIENTS>

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

*The use of open, publicly accessible proxy servers is not usually advisable and should only be used by people in low security risk environments with temporary or ad-hoc anonymity needs and who do not need to transmit sensitive information.*

### TUNNELING

Tunneling, also known as port forwarding, allows one to encapsulate insecure, unencrypted traffic within an encrypted protocol. The user in a censored location must download client software that creates a tunnel to a computer in a non-filtered location. The normal services on the user’s computer are available, but run through the encrypted tunnel to the non-filtered computer which forward the user’s requests and their responses transparently. Various tunneling products are available. Users with contacts in a non-filtered country can set up private tunneling services while those without contacts can purchase commercial tunneling services, usually by monthly subscription.



Tunneling software

When using free tunneling services users should note that they often include advertisements. Requests for the advertisements are conducted through plain text HTTP requests which can be intercepted by any intermediary who can then determine that the user is using a tunneling service. Moreover, many tunneling services rely on the use of socks proxies which may leak domain name requests.

<http://www.http-tunnel.com/>  
<http://www.hopster.com/>  
<http://www.htthost.com/>

#### Advantages:

Tunneling applications provide encrypted network transfer. Tunneling applications generally have the ability to securely proxy many protocols, not just web traffic. There are existing commercial services that users who do not have contacts in non-filtered countries can purchase.

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

### Disadvantages:

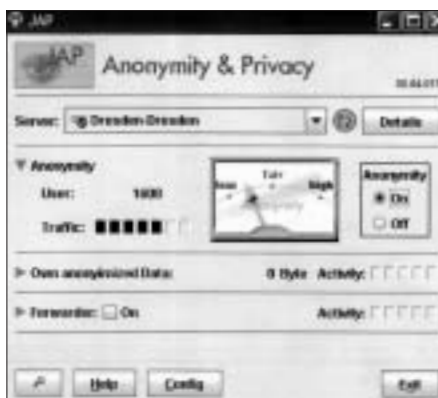
Commercial tunneling services are publicly known and may already be filtered. Tunneling applications cannot be used by users in public access locations where users cannot install software, such as Internet cafés or libraries. Use of tunneling applications may require a higher level of technical expertise than other circumvention methods.

Tunneling applications are best suited for technically capable users that require secure (but not anonymous) circumvention services for more than just web traffic and do not access the Internet from public locations. Commercial tunneling services are an excellent resource for users in censored countries that do not have trusted contacts in non-filtered locations.

## ANONYMOUS COMMUNICATIONS SYSTEMS

Circumvention technologies and anonymous communications systems are similar and often inter-related but operate under distinctly different criteria. Anonymous communications systems focus on ensuring the privacy of the user by shielding the identity of the requesting user from the content provider. In addition, advanced systems employ a variety of routing techniques to ensure that the user's identity is shielded from the anonymous communications system itself. Circumvention systems do not necessarily focus on anonymity. Instead, the focus is on secure communications to bypass specific restrictions imposed on the users' ability to send and receive Internet communications. Bypassing content restrictions requires secure communications technology and often a degree of stealth but not necessarily anonymity.

Anonymous communications systems are often used for circumvention. One advantage of them is that there are several existing networks that can be immediately tapped into and used to bypass content restrictions with the added benefit of being able to do so anonymously.



The use of anonymous communications systems for circumvention is restricted to computers on which the user has the appropriate permissions to install software. Persons who access the Internet through public terminals, libraries or Internet cafés will most likely be unable to use such systems for circumvention. They may also slow down connection speeds.

## TECHNICAL WAYS TO GET ROUND CENSORSHIP

Users seeking to bypass Internet filtering at national or ISP level may find the filtering authorities take steps to block the use of anonymous communications systems. If the system being used operates on a static port, filtering software can easily be configured to deny access. The more well-known the anonymous communications system, the greater the risk that it will be blocked. In addition, to combat systems that rely on the use of peers or publicly known nodes the filtering authorities can simply deny access to these hosts. The filtering authorities may operate a node of their own and attempt to monitor users who try to connect to it. In some restrictive environments where traffic to these well-known systems is monitored, the use of such systems may draw attention to users (3).

### Advantages:

They provide both security and anonymity. They generally have the ability to securely proxy many protocols, not just web traffic. They often have a community of users and developers who can provide technical assistance.

### Disadvantages:

They are not specifically designed for circumvention. They are publicly known and may be filtered easily. They cannot be used by users in public access locations where users cannot install software, such as Internet cafés or libraries.

- Tor is a network of virtual tunnels that allows people and groups to improve their privacy and security on the Internet. It also enables software developers to create new communication tools with built-in privacy features. Tor provides the foundation for a range of applications that allow organizations and individuals to share information over public networks without compromising their privacy.  
<http://tor.eff.org>
- JAP makes it possible to surf the Internet anonymously. Instead of connecting directly to a web server, users take a detour, connecting with encryption through several intermediaries, so-called mixes.  
o [http://anon.inf.tu-dresden.de/index\\_en.html](http://anon.inf.tu-dresden.de/index_en.html)
- Freenet is free software which lets you publish and obtain information on the Internet without fear of censorship. It is entirely decentralized and publishers and consumers of information are anonymous.  
<http://freenet.sourceforge.net>

**3** For more on potential attacks on circumvention systems, see Bennett Haselton's article ("List of possible weaknesses in systems to circumvent Internet censorship") at <http://peacefire.org/circumventor/list-of-possible-weaknesses.html> and a reply by Paul Baranowski at: [www.peekbooty.org/pbhtml/downloads/ResponseToLopwistcic.pdf](http://www.peekbooty.org/pbhtml/downloads/ResponseToLopwistcic.pdf)



**TECHNICAL WAYS TO GET ROUND CENSORSHIP****CONFIDENTIALITY**

*Use of such systems may require quite a high level of technical expertise. Anonymous communications systems are best suited for technically capable users who require both circumvention and anonymity services for more than just web traffic and do not access the Internet from public locations.*

**CONCLUSION**

The decision to use circumvention technology should be taken seriously, carefully analyzing the specific needs, available resources and security concerns of the end-user. There is a wide variety of technologies available for users who want to circumvent Internet filtering. However, using them for successful and stable circumvention service depends on a variety of factors, including the user's level of technical skill, potential security risk, and contacts available outside the censored country. Governments may also take counter-measures to effectively block specific circumvention technologies.

The keys to successful and stable circumvention capability are trust and performance. Circumvention systems need to be targeted to users in specific circumstances or be readily adaptable to the needs of the end-user. They need to be secure, configurable and often stealthy. Trust should be established between circumvention provider and the end-user by understanding the specific legal and political environment in which the end-user operates and being up-front about the limitations of circumvention technologies.

Nart Villeneuve is the director of technical research at the Citizen Lab, an interdisciplinary laboratory based at the Munk Centre for International Studies at the University of Toronto. As both a software developer and academic, he is currently working with the OpenNet Initiative (ONI), documenting Internet content filtering and surveillance practices worldwide. He has also been working on documenting and evaluating existing circumvention technology as well as developing circumvention technology. In addition to Internet censorship, his research interests include hacktivism, cyberterrorism and Internet security. Nart Villeneuve is a recent graduate of the University of Toronto's Peace and Conflict Studies program.

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**ENSURING YOUR  
E-MAIL IS TRULY PRIVATE**

By Ludovic Pierrat



Most governments now have the means to spy on electronic messages. The “cyberpolice” in repressive countries use it to spot and arrest political opponents and many Internet users have been thrown in prison for sending or even just forwarding an e-mail. A political dissident in the Maldives was given a 15-year jail sentence in 2002 for corresponding by e-mail with Amnesty International. An Internet user in Syria has been in prison since February 2003 for forwarding an e-mail newsletter.

So here are some tips on how to ensure your e-mails remain private.

Using the e-mail account supplied by your Internet service provider (ISP), such as AOL, Wanadoo or Free, or by a firm doesn't guarantee any e-mail confidentiality. The owners of the networks your messages pass through can very easily intercept them. When the authorities in any country want to investigate Internet users, they usually go through their ISP to read their e-mail.

A “webmail” account (such as Yahoo! or Hotmail) is more secure because it doesn't use the servers of a local ISP. To read webmail messages, you have to force your way in or intercept messages as they're being transmitted, which is technically more difficult. Unfortunately this protection is only relative, since police experts or hackers can easily look at your webmail.

Encryption (writing protected by a code) is the main way to really ensure the privacy of your messages. There are two kinds.

**CLASSIC ENCRYPTION**

Ann and Michael want to exchange secret messages, so they agree on an encryption and decryption code and a key. Then they exchange messages using them.

The snag with this method is that if a third person intercepts the messages in which Ann and Michael exchange their key, that person can see it and use it, perhaps to send bogus e-mails to Ann and Michael. So Ann and Michael have to exchange their key when nobody else can see it, by meeting in person, for example.

## ENSURING YOUR E-MAIL IS TRULY PRIVATE

### ASYMMETRIC ENCRYPTION

The best way to fix the problem is to use “asymmetric” encryption. Two keys are needed for this, one to encrypt, the other to decrypt. Details of the encrypting key (the “public key”) can be exchanged without risk over the Internet because it can’t be used to decrypt messages. The decrypting key (the “secret key”) must never be communicated.

With asymmetric encryption, Ann has her own pair of keys (a public key that she gives out and a secret one that she keeps). Ann sends her key to Michael, who uses it to encrypt his messages to her. Only Ann, with her secret key, can then decrypt Michael’s messages. Michael, with his own pair of keys, in turn sends his public key to Ann, who can then reply to his messages in complete privacy.

But since the public key is exchanged over the Internet without special protection, it’s best to check its validity with its owner. Each key has a “fingerprint” (a short string of characters), which it’s easy to communicate in person or over the phone.

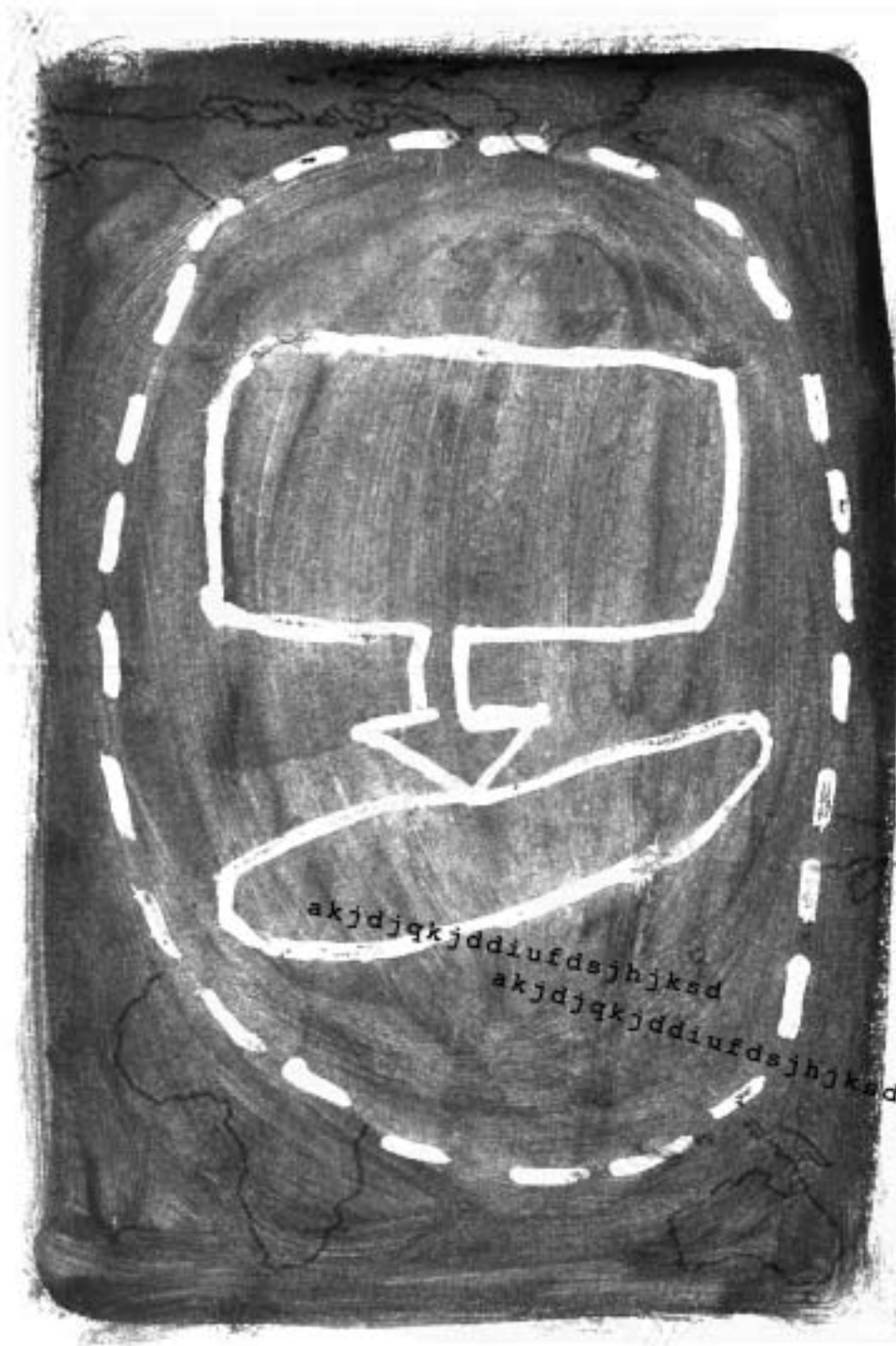
An unverified key may be a false one issued by a third person with evil intent, making the encryption totally useless. The reliability of asymmetric encryption depends entirely on protecting the secret key and checking the public key of the other person.

OpenPGP (Open Pretty Good Privacy) is the standard asymmetric encryption. The most popular software to create and use a pair of keys and manage the public keys of its correspondents is GnuPG (GNU Privacy Guard), which can be used both with mail programmes such as Thunderbird or Outlook, with webmail or with instant messaging.

Download GnuPG at : [www.gnupg.org](http://www.gnupg.org)

Download special version for Windows at : [www.winpt.org](http://www.winpt.org)

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## INTERNET-CENSOR WORLD CHAMPIONSHIP

By Julien Pain

**M**ost of the world's authoritarian regimes are trying to control what their citizens read and do online. They're getting better and better at blocking "objectionable" material, usually with technology bought from US firms. China is far and away the world champion. But it's felt the heat of competition in recent years. Each country in this far from complete list has its own style and tactics but they all have one purpose, to keep ahead of the game.

### CHINA, THE WORLD CHAMPION

China was one of the first repressive regimes to realise it couldn't do without the Internet and so it had to be brought under control. It's one of the few countries that've managed to block all material that criticises the regime while expanding Internet facilities. What's the big secret? A clever mix of investment, technology and diplomacy.

Beijing has spent tens of millions of dollars on the most sophisticated Internet filtering and surveillance equipment. The system is based on a constantly-updated blacklist of websites. Access to "subversive" ones – a very broad notion that includes pornography, political criticism and sites that are pro-Tibet or favour Taiwanese independence – is then blocked at the level of the country's Internet "backbones" (major connection nodes). But censorship doesn't stop there and the regime can automatically bar access to sites in which "dubious" keywords, or combinations such as "tianamen" + "massacre," are spotted.

The regime can also censor online discussion forums almost instantly. State-of-the-art software and a cyber-police thought to number tens of thousands have enabled it to gut online forums (very active in recent years) of virtually all political dissent. A call for free elections, for example, has a maximum online life of about half an hour. The ministry of industry and information has also zeroed in on blogs and done a deal with China-based blog platforms to censor users. So a post about the Dalai Lama will appear online full of automatically-inserted blank spaces in place of "illegal" words.

## INTERNET-CENSOR WORLD CHAMPIONSHIP

But how did China get hold of such advanced and effective censorship equipment when only a decade ago the country had no major Internet firms? With the help of big US companies, led by Cisco. These firms, to get a slice of the enormous Chinese market of already more than 100 million people online, have closed their eyes to how their technology is being used. Some have probably worked directly with the regime to set up filters and surveillance.

Beijing has even got the world's major search-engines to go on bended knee. Yahoo! agreed a few years ago to remove all material offensive to the regime from its Chinese version. For a long time, Google refused but now seems to be moving in the same direction.

The country's police and courts also treat very harshly website editors who don't obey the rules laid down by the governing Communist Party. 75 cyber-dissidents are currently in prison for trying to post independent news online, some of them serving sentences of more than 10 years.

So before you set up a blog in China, it's best to find out what the rules are. Bloggers living in the country holding the world online censorship title have to be cautious and crafty.

## VIETNAM: A VERY TOUGH TEAM

Vietnam faithfully follows China's example, but though it's more ideologically rigid, it doesn't have its neighbour's economic and technological capacity. It has a cyber-police that filters "subversive" material out of websites and spies on cybercafés. But it cracks down just as hard on cyber-dissidents and bloggers. Three have been in prison for more than three years for daring online to speak up in favour of democracy.



President Zine el-Abidine ben Ali

## TUNISIA: "MODEL" PLAYERS

President Zine el-Abidine Ben Ali, whose family has a monopoly on Internet operations in Tunisia, has set up a very effective system to censor online activity. Access to all opposition websites is banned and users also can't see quite a few news sites, such as the French daily paper *Libération*. The regime also tries to dissuade people from using webmail, which is harder to spy on than standard e-mail systems such as Outlook Express. Getting on to Yahoo! mail in a Tunisian cybercafé can take 20 minutes, often ending before then with a "timed out" or "page not found" message. The Reporters Without Borders website can't be read from inside the country.

## INTERNET-CENSOR WORLD CHAMPIONSHIP

Yet the international community seems to approve how Tunisia locally runs the Internet, since the UN-affiliated International Telecommunication Union (ITU) has chosen the country to host the November 2005 World Summit on the Information Society (WSIS). The idea that Tunisia is a model of Internet development is a chilling one.

## IRAN: A VICIOUS SQUAD

Online censorship isn't only done by communist regimes in Asia. Filtering systems in Iran have greatly improved in recent years and the information ministry boasts that it currently blocks access to hundreds of thousands of websites. The country's mullahs especially target all content dealing in any way with sex but also they also don't tolerate independent news sites.

The regime is capable of the worst censorship and also set a record in 2005 by throwing nearly 20 bloggers in prison over the preceding 10 months. Three of them were still there on 1 August 2005.

## CUBA: THE "LEGEND"

The Cuban regime is well-known for its phone tapping expertise but it's also very good at censoring the Internet. The Chinese model of encouraging online activity while controlling it is too expensive, so President Fidel Castro has plumped for an easier way – simply keeping the Internet out of reach of virtually all Cubans. Internet access in Cuba is the privilege of a tiny few who have to get express permission from the ruling Communist Party. Even when you do get online, often illegally, you find a heavily-censored version of the Internet.

Few people know that Cuba is one of the least Internet-connected countries in the world and that online material is as tightly controlled as in the traditional media. Why don't people know this? Perhaps because of the still-powerful myth of the Cuban revolution.



Fidel Castro

**INTERNET-CENSOR WORLD CHAMPIONSHIP****CREDITS****SAUDI ARABIA: RECORD GOALS**

The Saudi authorities openly admit they censor the Internet. No “page not found” like in China. When you try to go to a banned site, you’re told straight out it’s been blocked by the government’s filters. The official Internet Service Unit (ISU) is proud to tell you it’s barred access to nearly 400,000 sites and has even posted a form online for users to suggest new websites that could be blocked. The ISU says it filters sites to shield citizens from offensive material violating Islamic principles and social norms.

It’s also interesting to note that a US firm, Secure Computing, sold the regime its online filtering system.



King Abdallah Ben Abdel Aziz al-Saud

**UZBEKISTAN: DUMMY PASS EXPERTS**

“There’s no way to censor the Internet in this country,” the Uzbek information minister said in June 2005. An odd statement when all the country’s opposition websites can’t be accessed and when online journalists are regularly threatened and physically attacked.


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