# **EVALUATING INFORMATION**

by Jerry Stratton Copyright © 2011

http://www.hoboes.com/NetLife/Information/

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 published by the Free Software Foundation; with no Invariant Section, with no Front-Cover Text, and with no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License"

Important Questions	1
Who is presenting this information?	
What are their sources?	1
What are the stated facts?	2
What are their biases?	2
Evaluate everything	2
Weasel Words	
Everyone knows	3
Apples and oranges	
Playing doctor	
Tautological hand-waving	4
Blame conflation	
Popularity Contests	5
Case-Controlled Studies	
Telephone Tag	

Spam and Chain Mail	8
Computer Virus Myths	
Hey You Virus	
Mobile Phone Virus	9
Urban Legends	
Sites	10
Jane Fonda	10
Gordon Sinclair	11
Traditional Sources	12
Newspapers	12
Example	13
Television	
Acquiring Information	14
Search Engines	
Keywords	14
Discussion Groups	14
Subject Lines	15
The Message	15
Trust No One	
Open Source License	17
Gnu Free Documentation License	

## IMPORTANT QUESTIONS

Whenever you're looking at information, no matter how trivial it appears to be, or how authoritative it seems to be, you need to keep a critical mind.

#### Who is presenting this information?

The number one question to ask about any information you receive over any source is, *who* is saying this? Many items get passed along and passed along. Just because it appears in a newspaper doesn't mean that the newspaper investigated it. Just because it appears in an e-mail message from an IBM employee doesn't mean that IBM said it.

- 1. Who said it?
- 2. What is their job?
- 3. Who do they work for?
- 4. How does this relate to what they said?

#### What are their sources?

If they don't present sources, chances are good that the information is either made up, or twists the source material to an extent that it might as well be.

How do these sources stand in the professional community? Make sure you understand which professional community applies. "They're both doctors" applies to any profession. You wouldn't ask a podiatrist about heart disease. *Even though they're both doctors*. Should you trust a computer programmer about computer security? Should you trust a computer security professional about computer programming?

Which one is going to understand Y2K, for example? What kind of a problem is Y2K?

- 1. Where did this information originate from?
- 2. How much competent review has this information seen?
- 3. How does this affect the reliability of the information?

#### What are the stated facts?

What is actually being said in the information? Many times the same facts will be repeated over and over in different words to increase the 'amount' of fact. Or individual events will be presented as representative of general truths, without any evidence that the individual events are representative. And finally, many times perfectly good facts will be paired with completely erroneous conclusions.

- 1. What are the facts?
- 2. What are the conclusions?
- 3. Do the facts and the conclusions relate?

#### What are their biases?

That is, why are they presenting this information? That's what all of the above questions aim at. Everyone has biases. Sometimes they're aware of them, sometimes they aren't, sometimes they don't care. Biases do not invalidate information. But they do give you clues that can tell you where to investigate if you want to verify or disprove the information.

#### **Evaluate everything**

These questions should be asked of *any* information source, not just those on the Internet. The Internet merely made it obvious that information doesn't have to be true or relevant just because it's available.

Working out the social politics of who you can trust and why is, quite literally, what a very large part of our brain has evolved to do. For some batty reason we turn off this natural scepticism when we see things in any medium which require a lot of work or resources to work in, or in which we can't easily answer back—like newspapers, television or granite. Hence 'carved in stone.' What should concern us is not that we can't take what we read on the internet on trust, but that we ever got into the dangerous habit of believing what we read in the newspapers or saw on the TV. One of the most important things you learn from the internet is that there is no 'them' out there. It's just an awful lot of 'us'.'

<sup>1.</sup> http://www.douglasadams.com/dna/19990901-00-a.html

### WEASEL WORDS

I use "weasel words" as a catch-all phrase for any argument that is an attempt to hide a complete lack of knowledge on a subject or to hide or finesse around the facts.

#### **Everyone knows**

The classic weasel word is "everyone knows", after all, if "everyone knows" that the moon is made of green cheese, there isn't any need to provide proof. Variations on this are "common knowledge", and "common sense". Don't make the mistake of taking these phrases in lieu of actual proof or sources. The world's a pretty big place. Everyone does *not* know.

Other weasel words take the place of real statistical information. Even some numbers are not real numbers. Look out for "95%" or "99%" or "nine out of ten"; these are entering the lexicon as simply big numbers. Other phrases to look out for are "majority" and "more likely". Why did the claimant use that vague term rather than the exact number? Especially weasel-like are when those terms get modified in a way that's supposed to make them look more impressive. What does "vast majority" mean?

#### **Apples and oranges**

It seems to me that many statistics are blatant attempts to make one thing look important by comparing it to something nearly unrelated.

#### **Playing doctor**

Suppose you were talking to a doctor, and she told you that most of the children she'd seen in the emergency room who'd been playing on swing sets were seriously injured. You would, I hope, realize that it's to be expected: who else is your doctor friend going to see from the playground? Children who play on swing sets without getting injured?

But you see this sort of statement in newspapers and in political discussions. Sometimes it is as blatant as the above example. Other times such attempts hide behind a comparison such as:

A medical study yesterday found that 66% of playground injuries were suffered on swing sets.

According to new medical data, you are more likely to be killed by an intruder than to kill an intruder.

These statements are worthless except as argumentative tools. So 66% of playground injuries are the result of swing set injuries. Does this mean that swing sets are more dangerous than anything

# Click here to download full PDF material