

Tools for Trusting Information in a World of Information Overload

How to evaluate what you read, catch what you're being sold, and trust what you share

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The internet has vastly increased the speed and spread of information, connecting the world in ways never before thought possible. That is genuinely remarkable. The downside is that misinformation travels just as fast, is often indistinguishable from fact at a glance, and benefits from the same algorithms that reward engagement over accuracy.

The techniques in this article may already be familiar from your own research. The goal isn't to introduce entirely new ideas -- it's to make the habit of using them more automatic. You are encouraged to test and challenge these suggestions as well. That's the point.

TRUTH, FACTS, AND WHAT IT MEANS FOR SOMETHING TO BE TRUE

For this discussion, truth simply means whether a statement or claim is accurate or inaccurate. When we're reading the news or doing research, we generally want to know if the facts or arguments being presented are reliable.

Not everything is true or false

Some information can be neither. Feelings and opinions are real -- but they are subjective, not factual. Statements like 'Dave is ugly' or 'chocolate cake is better than carrot cake' tell us about how the speaker feels, not about facts.

Other things can be verified. Research statistics, historical events, measurements -- these can be checked. For something to be true or false, there must be some way to check it. You can find out whether chocolate cake has more calcium than carrot cake. You cannot find out which is objectively better. That is a matter of taste.

Something seeming true is not the same thing as it being true.

SOURCES: MOTIVATION, EXPERTISE, TRACK RECORD

One of the most useful things you can do when you encounter information is consider the source. Where did it come from? What is their possible motivation? What is their track record?

Some sources seek to educate. Others are motivated to convince you of something -- because they feel strongly about it, or because they have something to gain. If a speaker company publishes a report saying their new technology is better for your ears, you need to find someone who isn't trying to sell you speakers before you take that seriously.

EXAMPLE

Imagine two friends: one always tells the truth, the other sometimes makes things up. Now imagine both are honest -- but one has a physics degree and one has a journalism degree. Which one helps you win at billiards? Source reliability and relevant expertise are two different things, and both matter.

Primary and lesser sources

Primary sources -- major news outlets with fact-checking teams, peer-reviewed research, the CDC, WHO -- carry a higher baseline of reliability. Lesser sources -- anonymous blogs, forums, YouTube videos -- are not always wrong, but they lack the same vetting. When information comes from a lesser source, find the primary source it claims to reference. If it doesn't have one, be skeptical.

ANALYZING AND CHECKING INFORMATION

Check the date

Old information gets recirculated as new constantly. In fast-moving fields like medicine or technology, a story from several years ago may be significantly out of date. Always check when something was originally published.

Watch the language

Reliable information generally does not try to excite you -- it proves things to you by presenting facts. Words like 'unbelievable' or 'shocking' should make you slow down. So should specific statistics with no named source. Opinion pieces are fine, but reliable ones will tell you where their facts came from and make checking them easy.

Fact-check before you share

Click any links. If they go to primary sources you trust, you're done. If there are none, a quick search will either confirm the claim from reliable sources or reveal that nobody else is covering it -- which is itself informative. Very few real stories are covered by only one outlet.

GOOGLE TOOLS

Trends shows how long a topic has circulated. Reverse image search shows where a photo first appeared -- useful for catching images taken out of context. Both are free and take thirty seconds.

Reading research studies

Look first at who funded the research. A university and a private company with a product to sell are not equally reliable narrators of their own findings. Then look at the sample: size, diversity, and whether it actually represents the population the study claims to speak for. A hundred women in rural Ireland experiencing headaches tells you almost nothing about the average woman in the world.

Finally, check that any source citing the study actually matches what the study says. This is where most misinformation enters -- accurate data, misrepresented conclusions.

LOGICAL FALLACIES TO WATCH FOR

Accurate information can still be used to build a misleading argument. These are the most common ways.

Emotional appeals and confirmation bias

If something makes you feel angry, vindicated, or shocked, that is exactly when you need to slow down. Emotional responses reliably short-circuit critical evaluation. A graphic claiming '10 billion kids a year are kidnapped' is memorable and shocking -- and entirely made up. Anyone can put a number on an image.

Confirmation bias works the same way in the other direction. If information agrees with what you already believe, you are less likely to check it. That feeling of recognition is not evidence. Check it anyway.

Straw man arguments

A straw man misrepresents an opponent's position in a simplified, easy-to-attack form. If a study says oranges have more vitamin C than lemons, and a lemon farmer responds by saying the university wants to destroy the lemon industry -- that is not what the study said. Understanding a position requires engaging with what was actually argued.

False dichotomies

False dichotomies present two options as if they are the only two. 'You have to come out with me or you'll be bored at home' ignores everything else you could do. 'If you don't support candidate A you must love candidate B' ignores the full range of possible positions. These constructions are designed to pressure you into choosing a side rather than thinking through the actual complexity.

Correlation versus causation

Everyone who breathes air will eventually die -- that does not mean breathing causes death. When cause and effect are presented as linked, ask whether they might instead share a third cause, or simply co-occur

without any causal relationship. People with green eyes often have red hair; green eyes do not cause red hair. Both result from melanin levels.

Burden of proof

The burden of proof always belongs to the person making the claim. 'Aliens live among us in disguise. You can't prove they don't, so it must be true' is not how evidence works. If someone wants you to believe something, the work of proving it is theirs entirely.

BEFORE YOU SHARE: QUICK REFERENCE

- When was this originally published?
- Who is the source, and what is their motivation?
- What is their reputation and relevant expertise?
- Does the language try to excite me or prove something to me?
- Can I find this confirmed by two independent primary sources?
- Does the sample actually represent who it claims to?
- Is the cause-and-effect relationship actually supported?

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