

FAKE EXPERTS

→ Presenting unqualified individuals or institutions as sources of credible information.



Bulk fake experts
→ Citing large numbers of seeming experts to argue that there is no scientific consensus on a topic.



Magnified Minority
→ Magnifying the significance of a handful of dissenting scientists to cast doubt on an overwhelming scientific consensus.

Fake Debate
→ Presenting science and pseudoscience in an adversarial format to give the false impression of an ongoing scientific debate.



LOGICAL FALLACIES

Using arguments where the conclusion doesn't logically follow from the premises. Also known as a non sequitur.



False analogy
→ Assuming that because two things are alike in some ways, they are alike in some other respect.



Ambiguity
→ Using ambiguous language in order to lead to a misleading conclusion.



Jumping to conclusions
→ To make a wrong claim look logical by ignoring relevant information.



False Choice
→ False dichotomy: Presenting two options as the only possibilities, when in fact other possibilities exist.



Ad hominem
→ Attacking a person/group instead of addressing their arguments.



Red Herring
→ Deliberately diverting attention to an irrelevant point to distract from a more important point.



Strawman
→ Misrepresenting or exaggerating an opponent's position to make it easier to attack.

IMPOSSIBLE EXPECTATIONS

Demanding unrealistic standards of certainty before acting on the science.



Moving goalposts
→ Demanding higher levels of evidence after receiving requested evidence.

ANGER!

Misrepresentation
→ Misrepresenting a situation or an opponent's position in such a way as to distort understanding.

DISINFORMATION 101

The reality of global warming, the effectiveness of vaccinations or the health risks of car exhausts have one thing in common: the scientific basics get regularly distorted in political discussions.

It happens on Facebook, Twitter & Co., as well as on internet blogs, in parliamentary speeches or in personal discussions. For lay people the rhetorical tricks used to manipulate public opinion are often difficult to detect.

This graphic explains the often-used strategies employed by the fog machine of disinformation.

CHERRY PICKING

Skillfully selecting data that appear to confirm one position while ignoring other data that contradict that position.



Sloppy induction
→ Ignoring relevant evidence when coming to a conclusion.



Anecdotes
→ Using personal experience or isolated examples instead of sound arguments or compelling evidence.

CONSPIRACY THEORIES

Proposing that a secret plan exists to implement a nefarious scheme such as hiding a truth.

