The Merchants of Confusion - Vaccines

Most studies
affirming vaccine
safety are funded by
the pharmaceutical
industry itself

Vaccination is just a backdoor to have our choices being taken away in the name of public health

Since the vaccine was introduced, there's been more reports of rare health problems

Honest medical professionals are not afraid to debate vaccine skeptics, only pharma shills are

Vaccine skeptics are attacked just because they advocating for safer, more thoroughly tested vaccines.

Millions of people are now questioning the long-term safety of these vaccines



The one-sided Litigators

Manipulating through "Information asymmetry"

Information asymmetries pose a risk for opportunism in business, management and human relationships (Bergh D., 2018). Media manipulators can hijack information asymmetries in public understanding of science by providing only one-sided and select examples or anecdotes in support of false claims or hypotheses. This works because we tend to rely on a cognitive bias known as the availability heuristic to evaluate a claim's merit (Tversky & Kahneman, 1973)

A related tactic is to pronounce the (supposed) absence of any counter-evidence as evidence for a claim, which might mislead individuals to accept *prima facie* implausible claims or not reject them to preserve cognitive consistency (Vu L., et al., 2023)

The slippery slope Scaremongers

Manipulating through "Hyperbolic Horror"

A slippery slope argument claims an initial action will trigger a series of other events and lead to an extreme or undesirable outcome. However, these arguments are often fallacious because they imply inevitability, causality and necessity between individual stages.

Media manipulators use slippery slope arguments to instill horror in their audience by presenting (hypothetical) extreme consequences as inevitable (Jefferson A., 2014, Nikolopoulou K., 2023), thereby abusing our inherent aversion to loss or perceived threats at the expense of logical reasoning (Lerner & Keltner, 2001). Shared fears can also be abused to guide collective behaviors, socially reinforcing false beliefs about risks (Kasperson et al., 1988).

The false-cause Fabricators

Manipulating through "Illusory Patterns"

Humans have an innate desire to understand causality. Our pattern-recognition ability evolved to help us understand and predict our environment, but also imbued us with a **tendency to overfit data to patterns**, and perceive connections between random things (<u>Fyfe S. et al., 2008</u>, <u>van Prooijen, 2017</u>).

Media manipulators can abuse this predisposition to prompt us to falsely attribute causal relationships to events that correlate in time, or take advantage of our desire to shape scattered facts into coherent stories (Taleb, 2007). Collective memories and shared narratives can also amplify these false causalities, especially if they align with broader cultural stories or beliefs (Wertsch JV., 2021, Erll A., 2022).

The exclusionary
Scotsmen

Manipulating through "Special Pleading"

When confronted with scientific information that contradicts our beliefs, we experience discomfort and cognitive dissonance (Harmon-Jones et al., 2009). To resolve these contradictions, we often fall into **special pleading** (Dim Y., 2018) by setting different standards for different arguments to unjustly reject inconsistencies.

Media manipulators can foment special pleading with <u>appeals to purity</u>, identity or <u>moral credentialing</u> of their in-group. By claiming that "no true scientist" would ever act or speak in a dissenting way to their beliefs (<u>Manninen TW</u>, <u>2018</u>), they aim to assert their group's moral superiority (<u>Monin & Miller</u>, <u>2001</u>) and give citizens license to disregard or devalue inconvenient counterexamples.

The "Strawman" Architects

Manipulating through "Misrepresentation"

We have an innate tendency to view members of out-groups as more similar to each other than members of ingroups (Quattrone & Jones, 1980, Judd et al., 1991). We also judge probabilities through a representativeness heuristic by comparing an event to a prototype or stereotype that we already have in mind (Gilovits & Savitsky, 2012, Balia S., 2015)

Media manipulators play into these tendencies by treating the complex positions of out-group members as if they are monolithically simple and representative of a flawed or extreme stance. These oversimplified strawmen arguments are more easily processed (Kahneman, 2011) and can be pompously debunked to persuade and reinforce "in-group" solidarity (Harwood J., 2020).

The *ad populum*Propagandists

Manipulating through "Desire to Belong"

We often do things because many other people are doing them, regardless of our own beliefs or supportive evidence. This bandwagon effect (Bindra S. et al, 2022) is innate to social beings influenced by pressures and norms of groups, from wisdom of the crowd (Suroweicki, 2004) to social proof (Cialdini, 1984).

Media manipulators abuse our tendency to look to others by appealing to the popularity of an unsubstantiated position (McCrew BW., 2018) or taking advantage on the individual's fear of being isolated or ostracized (Williams KD et al., 2022).

A related tactic is **to invoke common practice or tradition** to asserts that a premise must be right because people have always believed or practiced it (Michaud N., 2018).