



NEGATING DOESN'T THE DOWNSIDES OF REFUTATION

FRAMING SCIENCE BRIEF

By Michelle Munyikwa and Joe Grady

TOPOS Framing Science Briefs help communicators understand the social and cognitive science principles relevant to effective framing, and point them to academic sources where they can read more.



NEGATING DOESN'T: The downsides of refutation



In an experiment on how people understand advertising copy, different groups of subjects read that a toothpaste dispenser was either “not easy to use” or “not difficult to use” (Grant et al. 2004). Evaluating the product should be a no-brainer, right? We want the one that’s “not difficult.” The experiment showed, though, that unless subjects had just the right circumstances for focusing on the statements (enough time, highlighted position), they evaluated the “not easy” product more highly! What’s going on?

The short answer, according to the researchers, is that processing negative statements is more complex than processing positive ones, and it’s easy to mishear or misremember them—leading to interpretations that are exactly the opposite of what’s intended.

This Framing Science Brief focuses on the implications of this kind of research for issue advocacy—and more specifically, the insight that it can be unhelpful to repeat an opposition point, even if to refute it. The overall gist of the research discussed here is that negation often produces some undesirable effects: longer processing times, errors in recall (in particular, the replacement in memory of the negative with the positive), decreased comprehension and even rejection of the statement.

REPEAT AND REFUTE, OR NOT?

One of the most basic questions for communicators on public interest issues concerns how and whether to explicitly engage an opponent's arguments. Constructing effective discourse can involve a delicate dance: To what extent should messaging address the viewpoints, arguments and “lenses” of the opposition—or, on the other hand, ignore them? It is often tempting, and can even seem obligatory, to explicitly refute opposition points (“Social Security is not insolvent!” “Welfare recipients are not lazy.”). But is it really effective to refute the language of your opponents—in the process repeating it—or is it better to build alternative frames for issues, sidestepping alternative framings altogether?

In his popular book on political communication, *Don't Think of an Elephant*, linguist George Lakoff advises that,

“When we negate a frame, we evoke the frame”

and offers Richard Nixon as an example:

***“He stood before the nation and said, ‘I am not a crook.’
And everybody thought about him as a crook.”***

(Lakoff 2014, p.1).

As on other topics related to framing, there is substantial research to consider on the effects of explicitly refuting or denying an opponent's point, and we next turn to cognitive science findings related to negation—stating that something isn't true.

Numerous researchers have investigated how we process negation: How do human brains make sense of negative statements? Surprisingly, perhaps, the research suggests that processing negated concepts is very different from, and cognitively more complex than, dealing with affirmative ones (e.g. Giora 2006). More specifically, there is evidence of several particular ways in which negation can impede strong, clear communication.

Memory: Various studies suggest that negation can impact memory of what was said, in several different ways. For instance, researchers may find that what lingers in memory is (a positive version of) the content that was supposedly negated. To use an example from a provocative article on this effect, a person might hear or read the phrase “not a dead Arab,” yet what lingers in their mind isn’t “an alive Arab,” but “a dead Arab,” the opposite of what was said (Giora 2007).

In another study (Fiedler et al. 1996), participants had false memories of seeing objects in a video, *particularly if they themselves had previously stated that the given object was not there*. The act of thinking about and denying the presence of an object reinforced a mental image and made them recall having “seen” it.

In terms of a commonly used cognitive science concept, a negative statement may nonetheless be *activating* (in the mind/brain) the image that one is trying to deny, which means the concept may be reinforced and remembered.

Applied to issue or political discourse, it is clear that negating an opponent’s statements may have the paradoxical effect of *strengthening* the opposing side’s viewpoint in the minds of the audience, rather than combating it.

Other studies suggest that negation may impair memory of a statement overall:

For example, after seeing someone drink a glass of white wine, answering “no” to “was it red wine?” may lead one to greater memory loss of the individual drinking wine at all compared with answering “yes” to “was it white wine?” (Mayo et al. 2014, emphasis added).

In other words, something about negative language can inhibit the process of remembering and internalizing a statement, even a statement about something one saw with one’s own eyes.

Cognitive complexity: Some of the memory effects just discussed are known to happen even when people show *correct understanding* of the original (negative) statement. For instance, the participants in the toothpaste dispenser experiment sometimes made the “wrong” evaluations even when there was evidence they had initially understood the statement—they just remembered it wrong later.

But negations do lead to *misunderstanding* more easily than affirmative statements do. In various experiments, one of the measures is simply how often people interpret a negative statement accurately. Mayo et al. (2004) found that people misinterpret negative statements more often than positive ones—e.g. they see “Tom is not talented” but read it as “Tom is talented.” This is not a matter of misremembering later, since the results are based on immediate responses, measured in times between one and two seconds. Misinterpretation suggests that there is something cognitively challenging going on (at least, slightly more challenging than processing affirmative statements), and the researchers also found additional evidence of this complexity: It takes people *longer* to understand negative statements than positive ones.

Further reinforcing the idea that processing of negative statements may not be straightforward, researchers have found that strongly worded negations about the risks of vaccines can backfire: “Paradoxically, messages strongly indicating that there is ‘no risk’ [from a given vaccine] led to a higher perceived vaccination risk than weak negations,” seemingly because the stronger negations triggered greater mistrust (Betsch and Sachse 2013). In other words, negation can backfire to the extent the message or source is viewed with skepticism in the first place.

Negation and refutation aren't exactly the same—it is possible to refute a statement without using a negative:

“They claim this measure will hurt our community, but we say they are wrong.”

“The stereotype of ‘poor’ people who are not working is false and misleading.”

But the research reviewed in this Framing Science Brief still has important implications for communicators, and probably applies to ways of refuting beyond over-reliance on sentences that include “not.” (And by the way, there is at least some research showing that the kinds of effects discussed here occur even when “negation” is conveyed by other means, such as showing a statement against a certain color background—Mayo et al. 2004.)

Most basically, it is usually a mistake for communicators to rely on refuting, debunking and so forth as a primary rhetorical approach, since in the process they may be making their points harder to understand and remember—and worse, *they may well be reinforcing the points they are trying to knock down.*

Instead, communicators should focus on identifying the schema (frame, narrative, argument, etc.) that they want to *positively* promote, that offers a different way of understanding the issue—a point emphasized by Schul (2011) in a consideration of how to frame topics effectively.¹ As Lakoff (2010) points out, “[O]ne cannot avoid framing. The only question is, whose frames are being activated—and hence strengthened—in the brains of the public.” New frames can be made especially effective through tools like hyperbole and metaphor, which may be both compelling and challenging to refute (Burgers, Konijn, and Steen 2016). In the end, while there are exceptions to any guideline, attention to strong, clear, memorable ways of establishing one’s own perspective is likely to pay off much more than explicitly refuting opposing points of view.

¹“Consider a defense attorney who is trying to exonerate a client accused of a murder. The message ‘he is not a murderer’ would be less persuasive than the complementary claim by the prosecution ‘he is a murderer,’ because... *the seeds of believing in X are implemented by arguing that someone is not X...* To cope with such a handicap, the defense must provide an alternative schema [emphasis added] for interpreting the testimonies and summarizing the evidence. One useful strategy involves the introduction of the ‘He was framed’ schema.”

Betsch, Cornelia and Katharina Sachse. 2013. Debunking vaccination myths: Strong risk negations can increase perceived vaccination risks. *Health Psychology* (32): 146-155.

Burgers, Christian, Elly A. Konijn, and Gerard J. Steen. 2016. Figurative Framing: Shaping Public Discourse Through Metaphor, Hyperbole, and Irony. *Communication Theory* 26 (4):410-30. <https://doi.org/10.1111/comt.12096>.

Fiedler, Klaus, Eva Walther, Thomas Armbruster, Doris Fay, and Uwe Naumann. 1996. Do you really know what you have seen? Intrusion errors and presuppositions effects on constructive memory. *Journal of Experimental Social Psychology* (32)484-511.

Giora, Rachel. 2007. A Good Arab Is Not a Dead Arab—a Racist Incitement: On the Accessibility of Negated Concepts. *Explorations in Pragmatics: Linguistic, Cognitive and Intercultural Aspects*, 129-162.

Giora, Rachel. 2006. Anything Negatives Can Do Affirmatives Can Do Just as Well, except for Some Metaphors. *Journal of Pragmatics* 38 (7):981-1014. <https://doi.org/10.1016/j.pragma.2005.12.006>.

Grant, Susan Jung, Prashant Malaviya, and Brian Sternthal. 2004. The Influence of Negation on Product Evaluations. *Journal of Consumer Research* (31).

Lakoff, George. 2014. *The All New Don't Think of an Elephant!: Know your Values and Frame the Debate*. Chelsea Green Publishing.

Lakoff, George. 2010. Why It Matters How We Frame the Environment. *Environmental Communication* 4 (1):70-81. <https://doi.org/10.1080/17524030903529749>.

Mayo, Ruth, Yaacov Schul, and Eugene Burnstein. 2004. “I am not guilty” vs “I am innocent”: Successful negation may depend on the schema used for its encoding *Journal of Experimental Social Psychology* (40): 433-449.

Mayo, Ruth, Yaacov Schul, and Meytal Rosenthal. 2014. “If You Negate, You May Forget: Negated Repetitions Impair Memory Compared with Affirmative Repetitions.” *Journal of Experimental Psychology: General* 143 (4):1541-52. <https://doi.org/10.1037/a0036122>.

Schul, Yaacov. 2011. “Alive or Not Dead: Implications for Framing from Research on Negations.” *Perspectives on Framing*, 157-176.