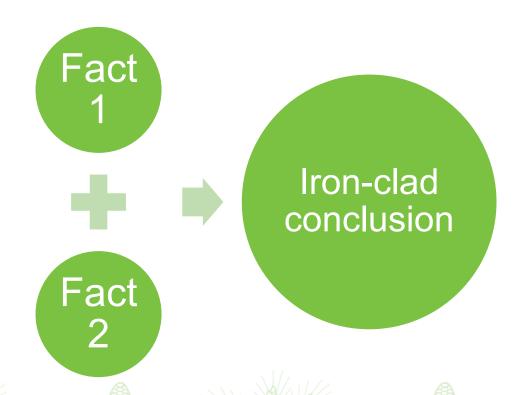


The elephant in the room

Improving the public conversation about agriculture

Making decisions about science

How we think we do it

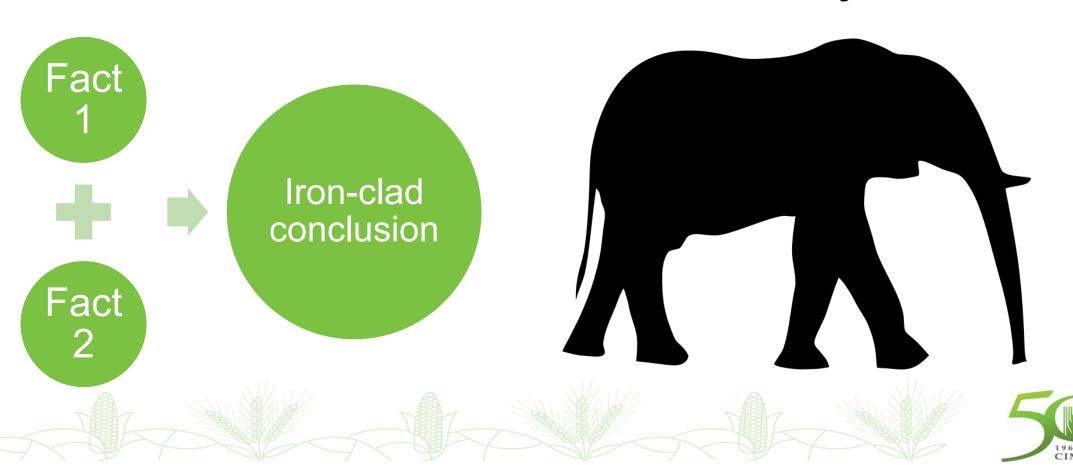




Making decisions about science

How we think we do it

How we really do it



How we make decisions

The elephant and the rider:

"We effortlessly and intuitively 'see that' something is true, and then we work to find justifications, or 'reasons why,' which we give to others."

Jonathan Haidt, The Righteous Mind





How we make decisions

System 1 and System 2:

- System 1 makes snap judgments, subconsciously
- System 2 deliberates and evaluates
- System 2 acts as an advocate for System 1's conclusion

Daniel Kahneman, Thinking Fast and Slow



How we make decisions

Reason is slave to the passions.

David Hume, 1711-1776





Confirmation bias rules the human psyche

- We seek sources of information that share our values, and confirm our views.
 - MSNBC or CNN? New York Times or Wall St. Journal?
 - Social media friends
 - Actual friends
- We find innovative ways to reject 'facts' we disagree with
 - Facts that contradict our views can actually strengthen those views: the backfire effect
 - We evaluate experts' credibility based on whether we agree with them

FACTS ARE NOT PERSUASIVE



Science doesn't protect you

"I'm not pro-GMO or anti-GMO. I follow the science, and go where it leads me."

- Kevin Folta, PhD, professor and chairman, horticultural sciences department, University of Florida





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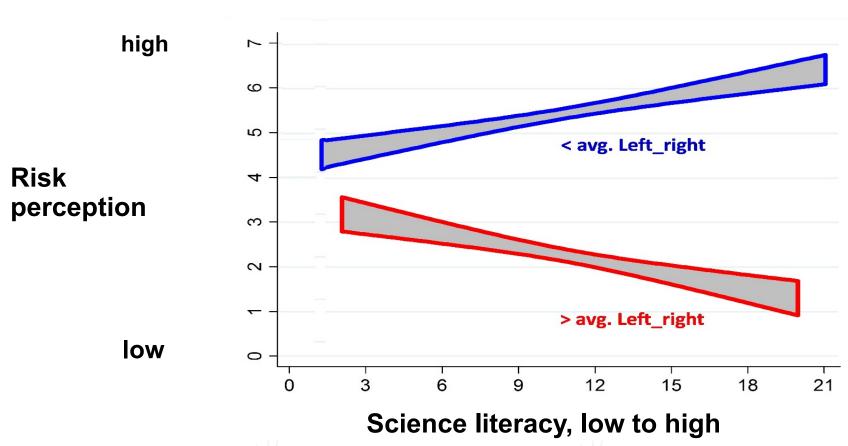
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- Doug Gurian-Sherman, PhD, senior scientist and director of sustainable agriculture, Center for Food Safety



Science doesn't protect you

Risk presented by climate change



Source: Cultural Cognition Project, Yale University

Education doesn't protect you

"Educated citizens possess the cognitive skills to reject facts inconsistent with prior dispositions....the most educated partisans are furthest apart in their factual understanding. Our primary concern resides with the inability of education to overcome powerful partisan motives; education intensifies those motives."

"Who Knows Best? Education, Partisanship, and Contested Facts (Joslyn and Haider-Markel, POLITICS & POLICY, 2014)



If facts aren't persuasive, how do we communicate about science?

A question for journalists, scientists, and readers

Be convinced. Elephant wrangling begins at home.





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- Reconsider 'bias.' We all have it.





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- Understand and appeal to values. Tell stories about people.



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- Acknowledge both risks and benefits.
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- Understand and appeal to values. Tell stories about people.
- Reach across the aisle.

