



1

Question:

How do our *group identities* influence our ability to ...

- acquire true beliefs?
- make wise decisions?
- think for ourselves?

core  
*critical  
thinking*  
values

2



3



4



# The problem with facts

Tim Harford on how today's politicians deal with inconvenient truths

[Save](#)

MARCH 9, 2017 by: **Tim Harford**

Just before Christmas 1953, the bosses of America's leading tobacco companies met John Hill, the founder and chief executive of one of America's leading public relations firms, Hill & Knowlton. Despite the impressive surroundings — the Plaza Hotel, overlooking Central Park in New York — the mood was one of crisis.



**Francis Fukuyama surveys the West's new political terrain – and sees a wilderness of uprooted institutional landmarks.**

Read – and keep – this and all of the 24 commentaries by world leaders and top thinkers featured in *Fatal Attraction* – *The Year Ahead, 2017*. [Order here.](#)

## The Emergence of a Post-Fact World

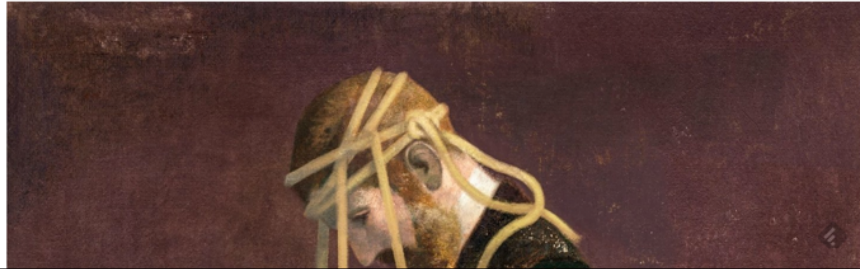
One of the more striking developments of 2016 was the emergence of a “post-fact” world, in which virtually all authoritative information sources are challenged by contrary facts of dubious quality and provenance. In a world without gatekeepers, there is no reason to think that good information will win out over bad.

BOOKS  
FEBRUARY 27, 2017 ISSUE

# WHY FACTS DON'T CHANGE OUR MINDS

*New discoveries about the human mind show the limitations of reason.*

By Elizabeth Kolbert



7

# This Article Won't Change Your Mind

The facts on why facts alone can't fight false beliefs

John Garrison

JULIE BECK | MAR 13, 2017 | SCIENCE

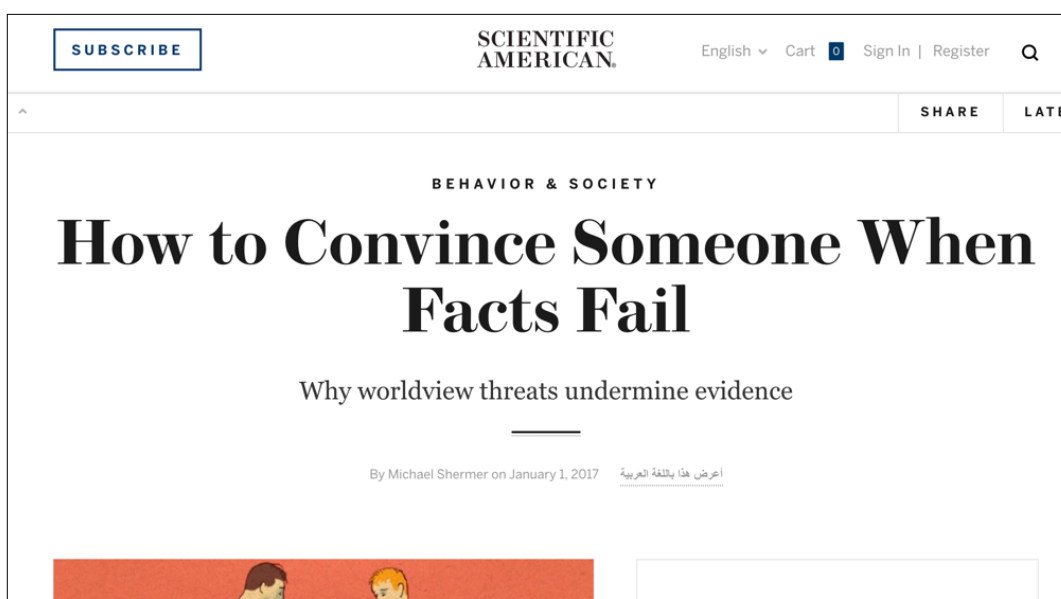


"I remember looking at her and thinking, 'She's totally lying.' At the same time, I remember something in my mind saying, 'And that doesn't

8



9



10

## Op-Ed We're rarely rational when we vote because we're rarely rational, period



Kaitlin McKeown / Associated Press

By **Robert M. Sapolsky**

11



### Christopher Witt

Communication Matters

## Public Speaking and Persuasion in a Post-Truth World

Christopher Witt — November 22, 2016 — 2 Comments

# Post-Truth

The US presidential campaign dragged on seemingly forever. And it was—even by political standards—ugly, dirty, and mean spirited. I'm glad it's over.

I wish I could draw some positive lessons about public speaking and persuasion from either of the

12



# Stanford SOCIAL INNOVATION REVIEW

*Informing and inspiring leaders of social change*

SOCIAL ISSUES

SECTORS

SOLUTIONS

MAGAZINE

MORE

Advocacy

## Persuasion in a “Post-Truth” World

To make progress on ideologically or politically sticky issues, social sector organizations must reshape their messaging to do more than cite facts; they must use smart storytelling and craft solutions that don't require those they want to reach to sacrifice their values.

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PRINT

ORDER REPRINTS

By **Troy Campbell, Lauren Griffin, & Annie Neimand** | Jan. 25, 2017

TAI

# WIN BIGLY

PERSUASION IN A WORLD WHERE  
FACTS DON'T MATTER

**SCOTT ADAMS**

Bestselling author of *THE DILBERT PRINCIPLE*



The New York Times

Opinion

The Retreat to Tribalism



By David Brooks

Jan. 1, 2018



1308



The Plum Line • Opinion

In Trump's America, tribalism reigns



Most Read

1 of

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3 of

# A Time Of Tribalism

By ROD DREHER • April 27, 2018, 12:29 PM

Like 17 Share Tweet G+



17

## Question:

How do our *group identities* influence our ability to ...

- acquire true beliefs?
- make wise decisions?
- think for ourselves?

core  
*critical*  
*thinking*  
values

18



I started exploring these questions in a series of “sketchbook” videos

19



20





21

https://kevindelaplante.com/the-dangers-of-tribalism/

### "Us vs Them" Psychology

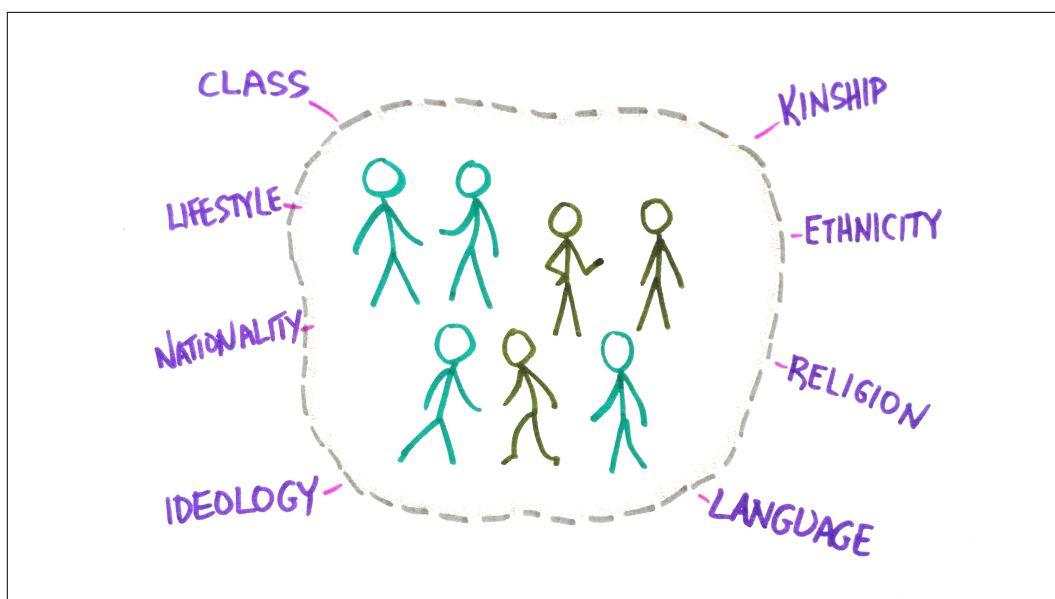
- There's a large and diverse literature on the psychology of in-groups and out-groups, the social character of identity, and how our moral and political psychology is tuned to group identities.
- Henri Tajfel's pioneering work on social identity and group categorization, elaborated later by himself and his students as "self-categorization" theory.
  - So-called "minimal group studies" show that in-group favoritism can occur even when the grouping is completely arbitrary (e.g. using a coin toss to split participants into a 'heads' group and a 'tails' group).
- The psychology of in-groups and out-groups: in-group favoritism, out-group derogation, group polarization, group homogeneity ...
- The biology and neurochemistry of "Us vs Them" thinking
- The biological and cultural evolution of human "groupishness"
  - Joe Henrich, *The Secret of Our Success*

**You can find  
extensive  
notes and links on  
the accompanying  
blog posts over at  
kevindelaplante.com**

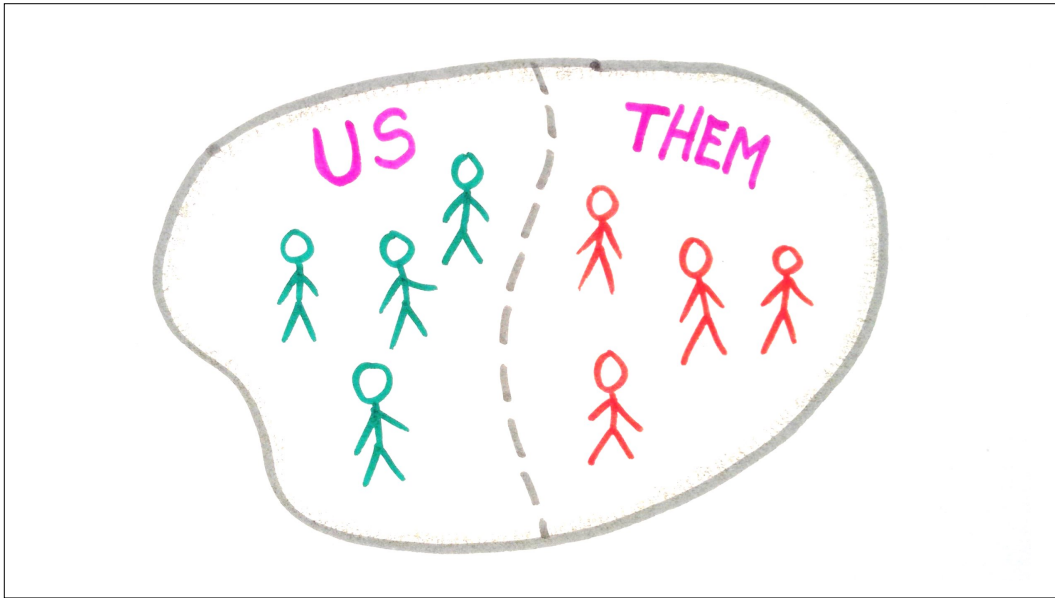
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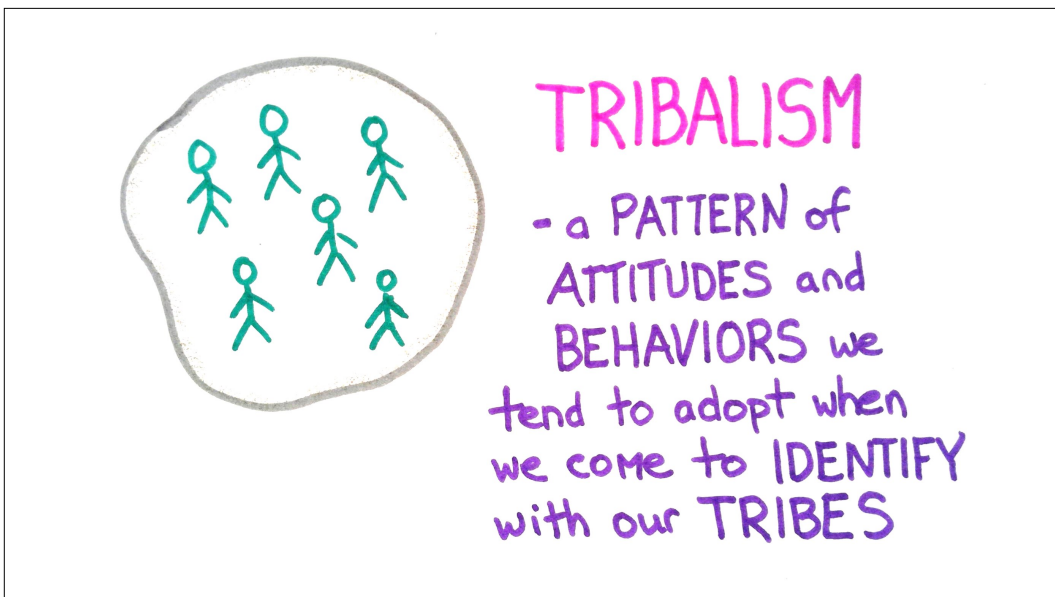
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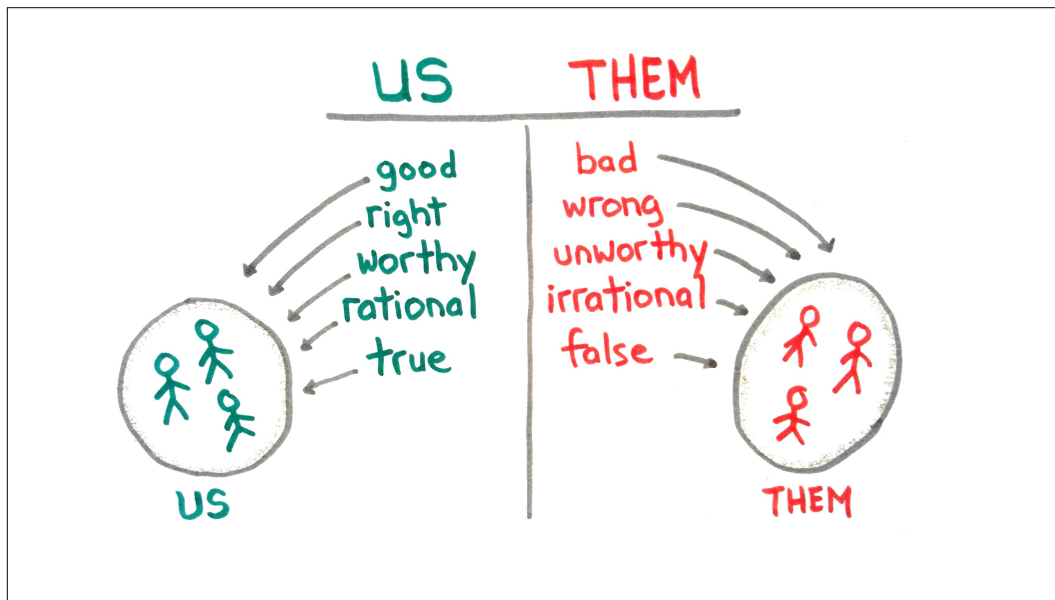
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27

## EPISTEMOLOGY:

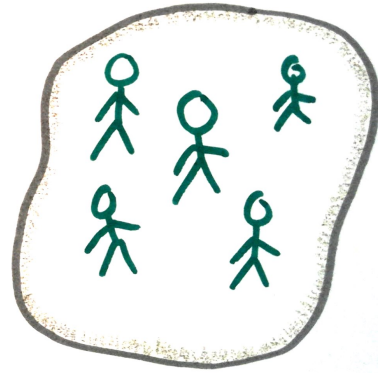
- study of the origins and nature of KNOWLEDGE
  - "epistemological" "epistemic"
- ADJECTIVAL FORMS

28



Our tribal psychology is both

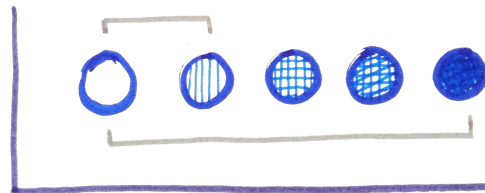
**MORAL**  
and  
**EPISTEMIC**



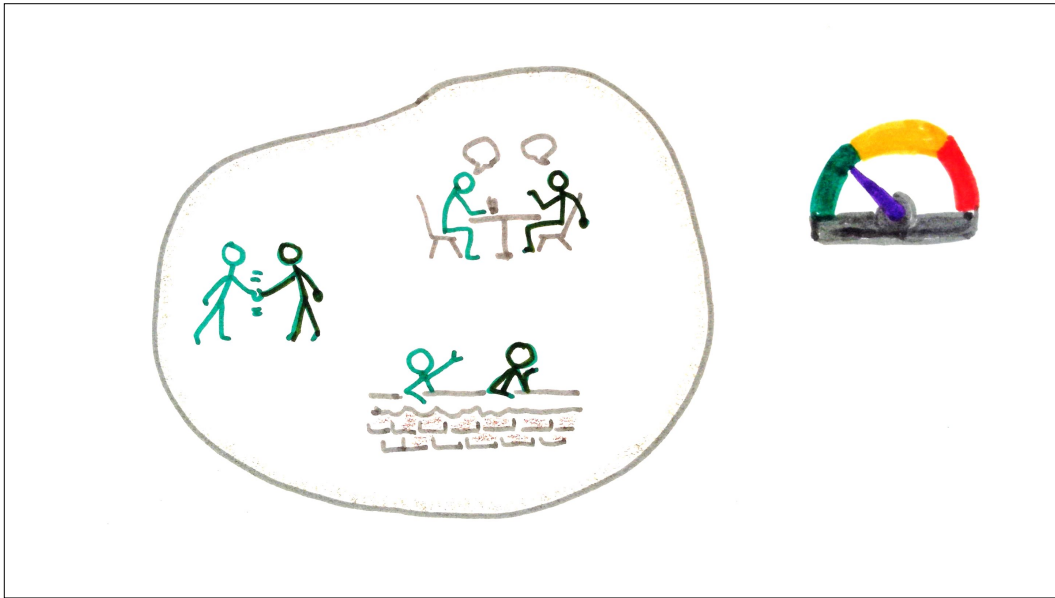
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## **POLARIZATION**

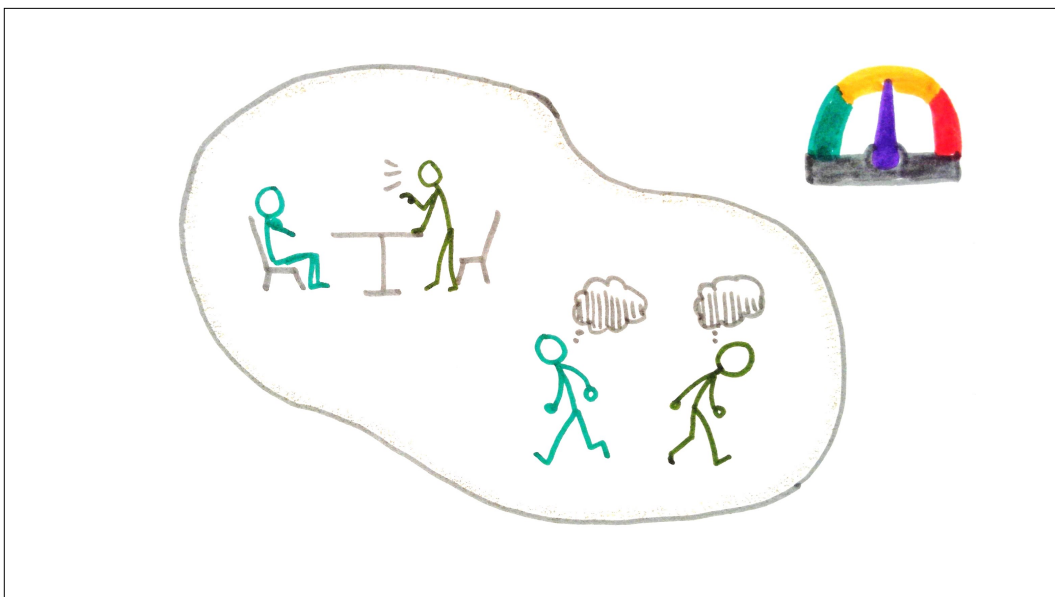
How **LARGE/STRONG** the  
(real or perceived) **DIFFERENCES** are



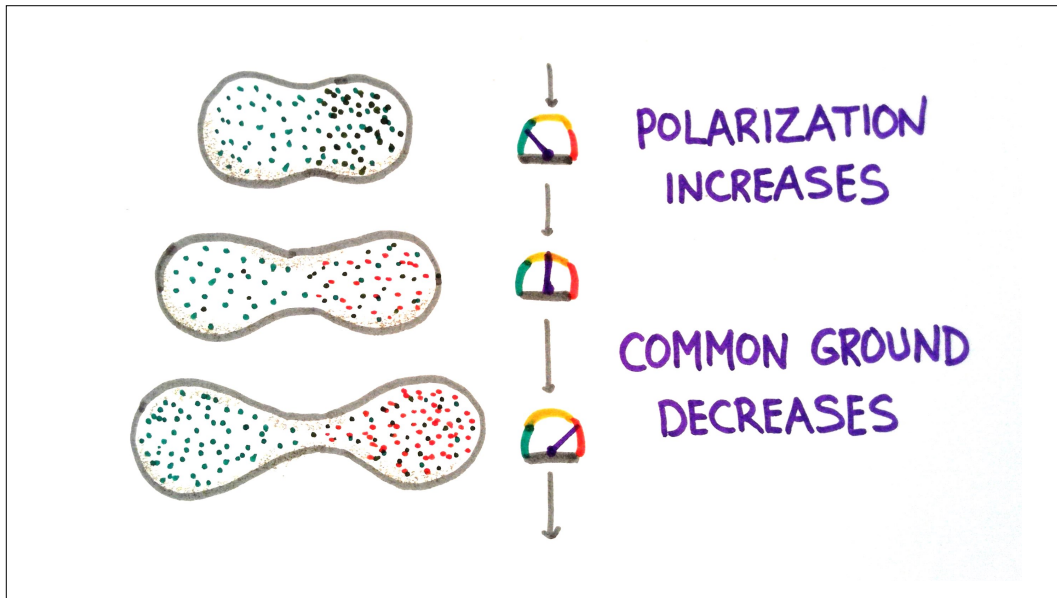
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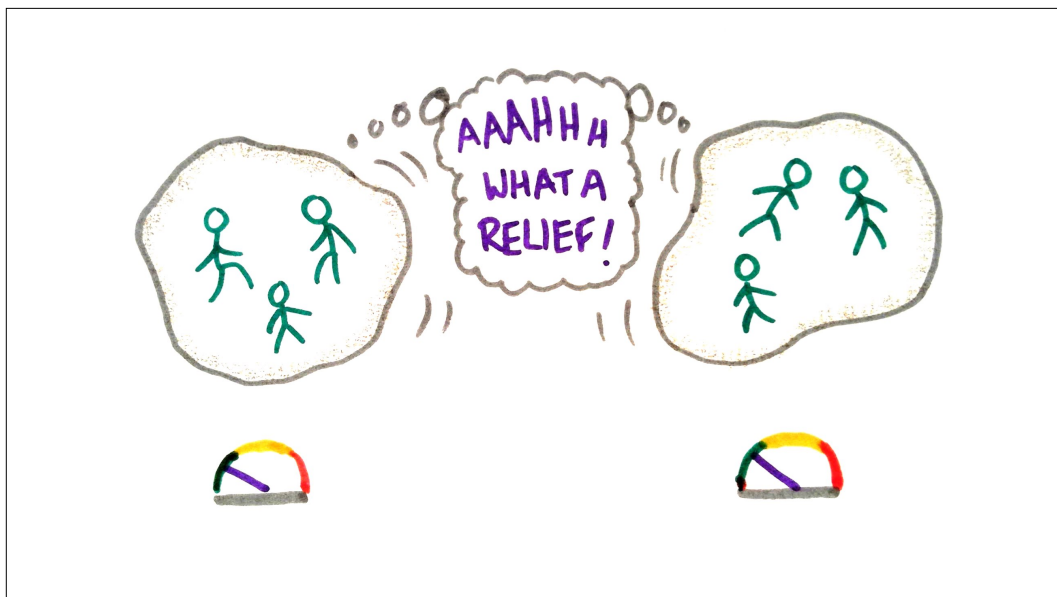
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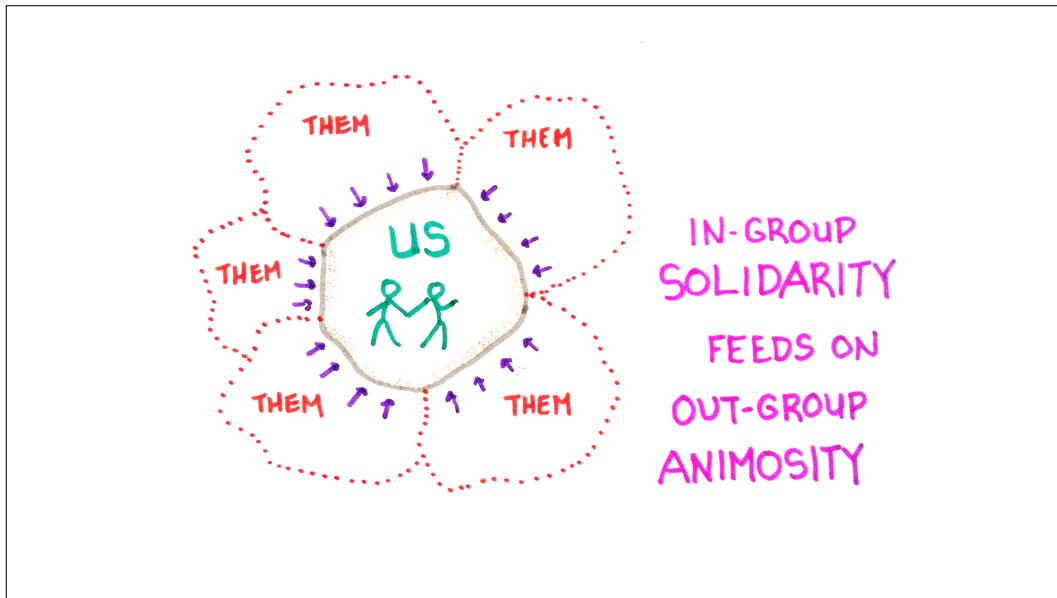
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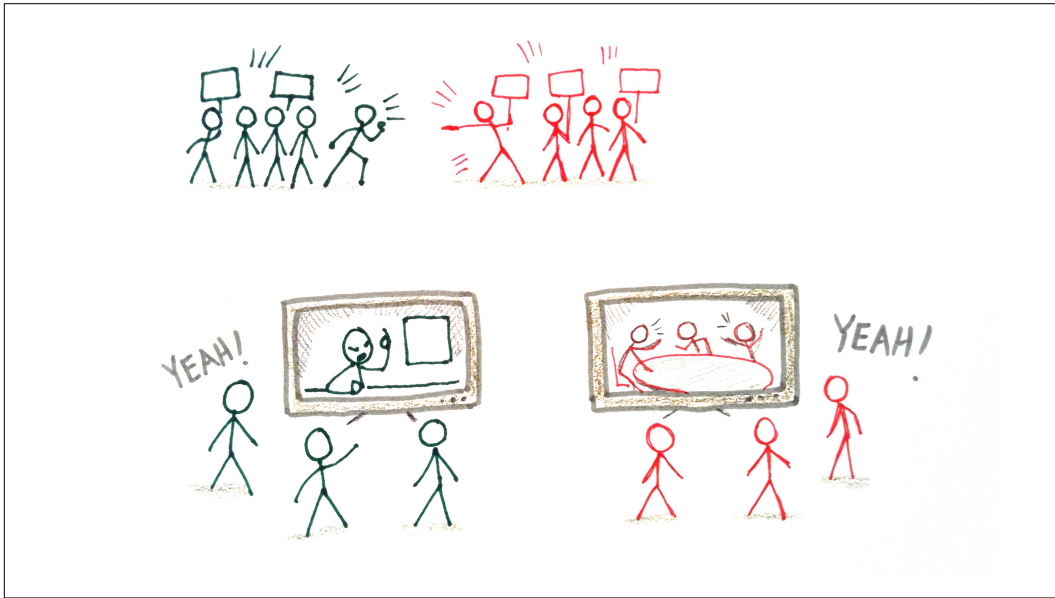


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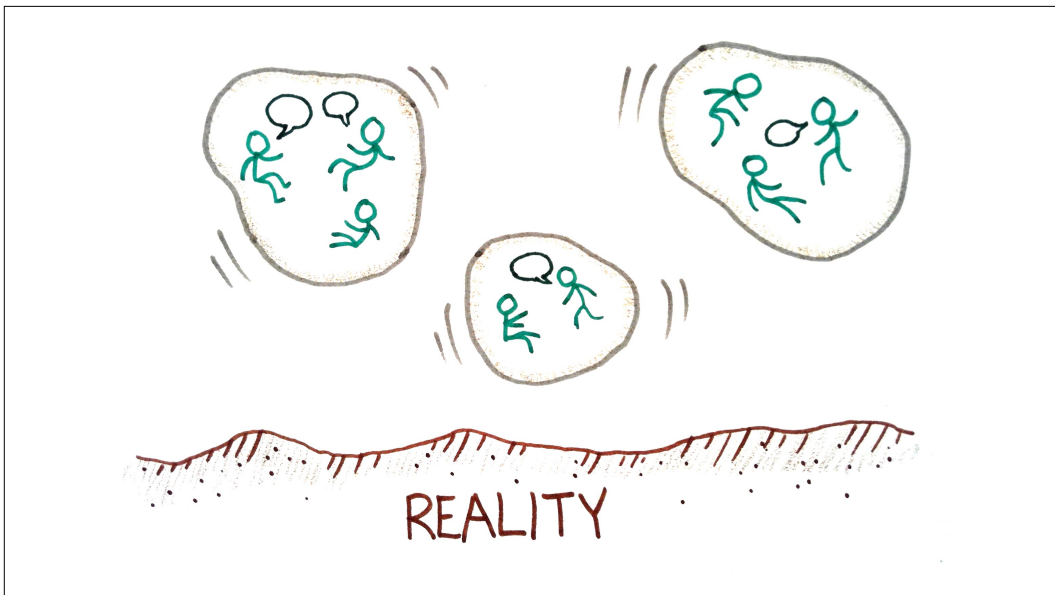


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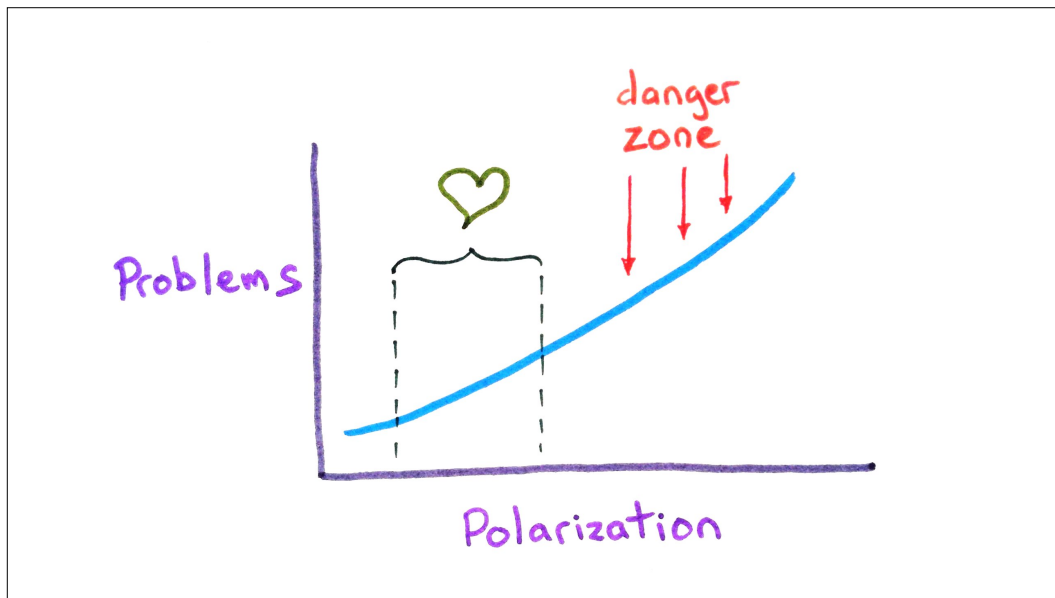




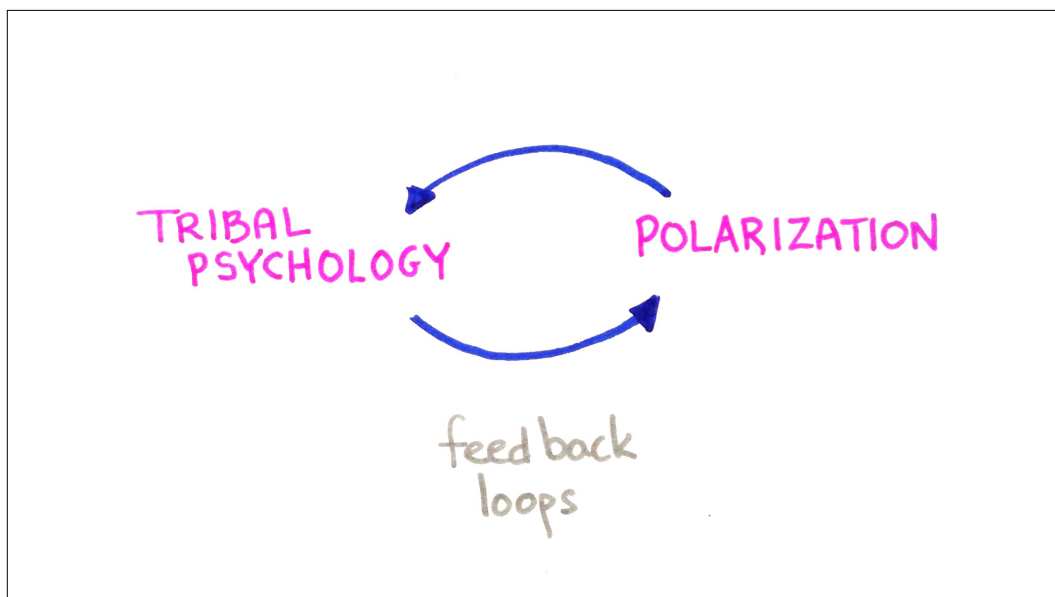
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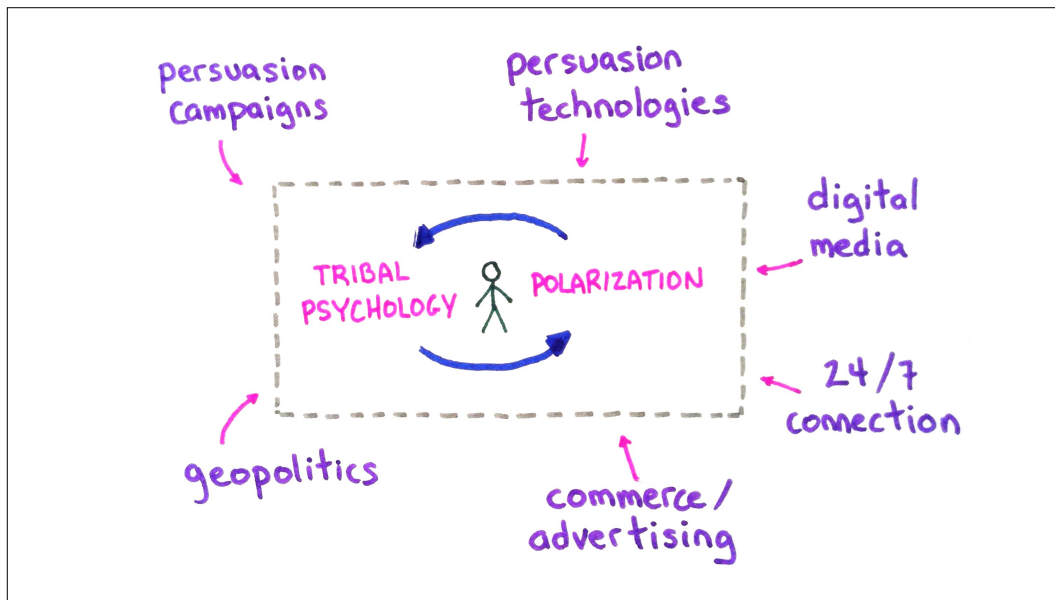
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41

## “Dangers of Tribalism”: take-aways

- tribal psychology is both a moral psychology and an epistemic psychology, and they are closely intertwined
- tribalism *per se* is not the real problem; tribalism in *increasingly polarized environments* is the real problem

42

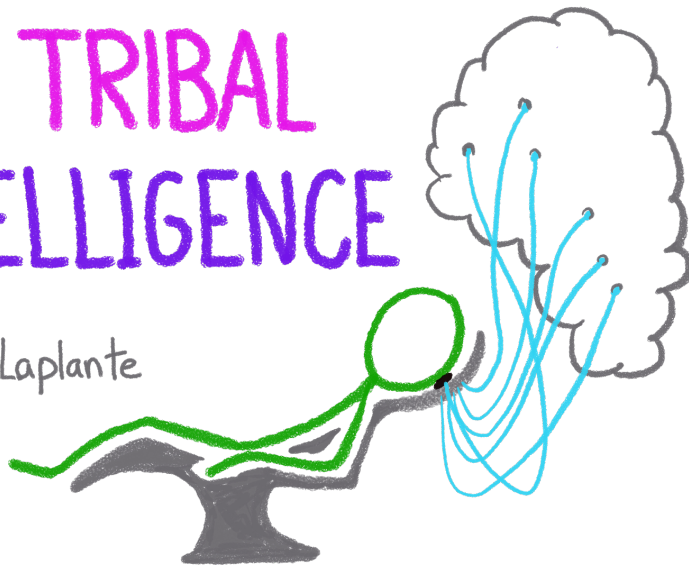
## “Dangers of Tribalism”: take-aways

- from a diagnostic standpoint, our focus should be on exploring the factors that have lead to increased polarization
- this is a big project ... more complete explanations will be multi-level and multi-factorial

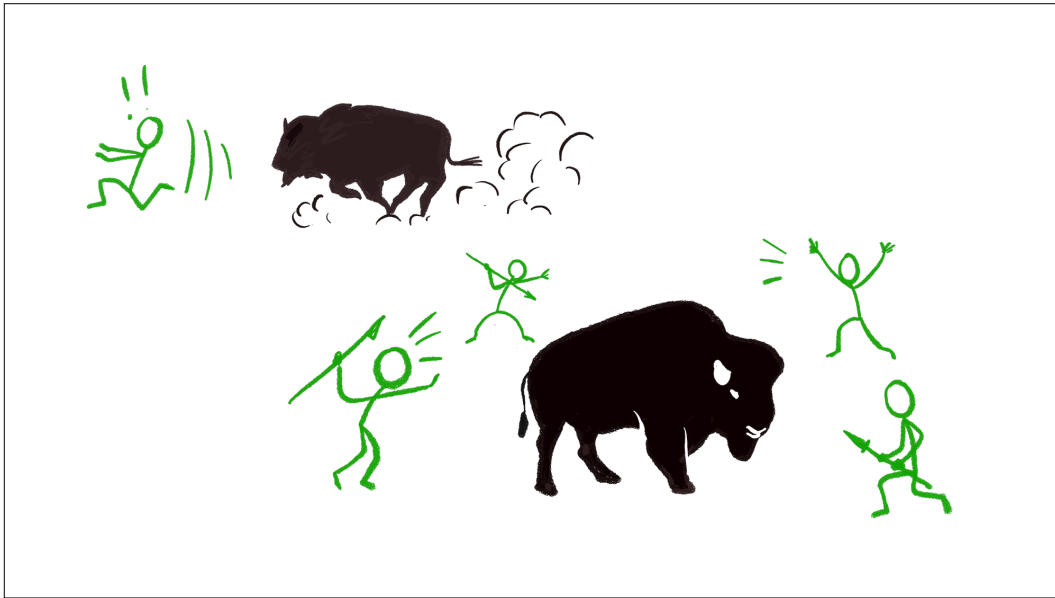
43

## OUR TRIBAL INTELLIGENCE

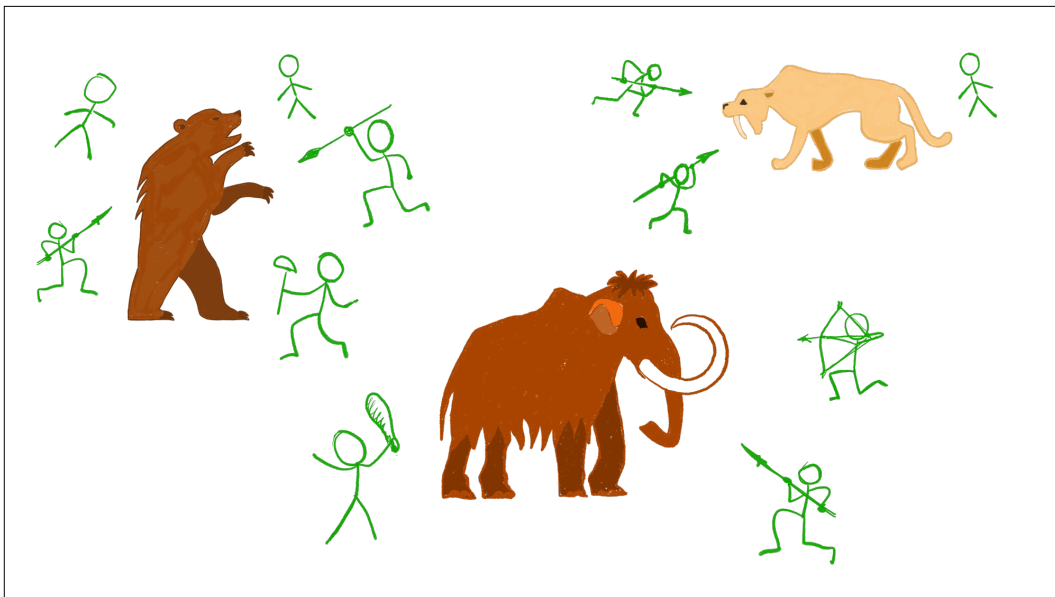
Kevin deLaplante



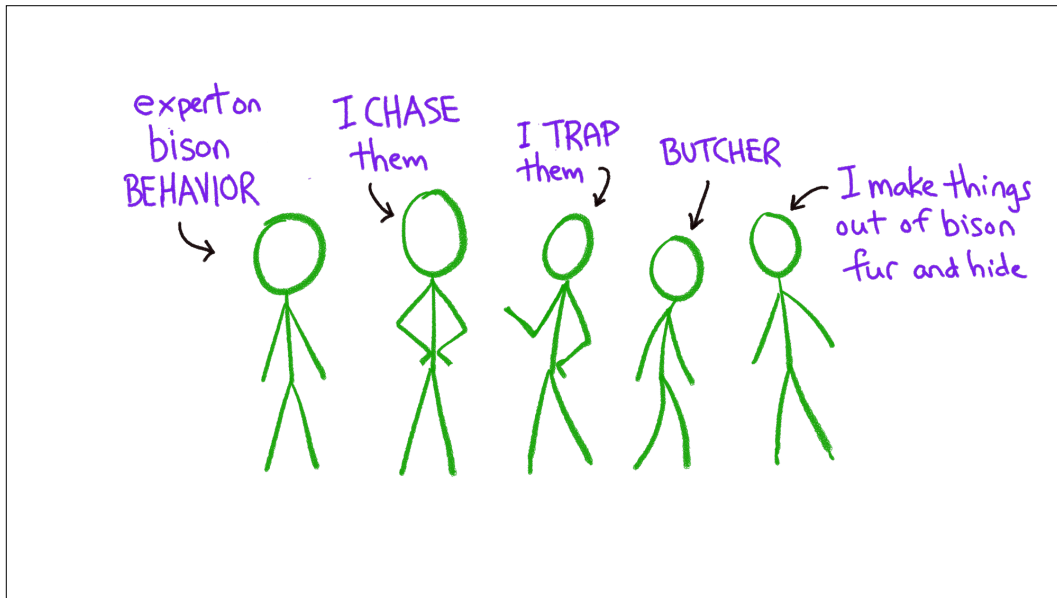
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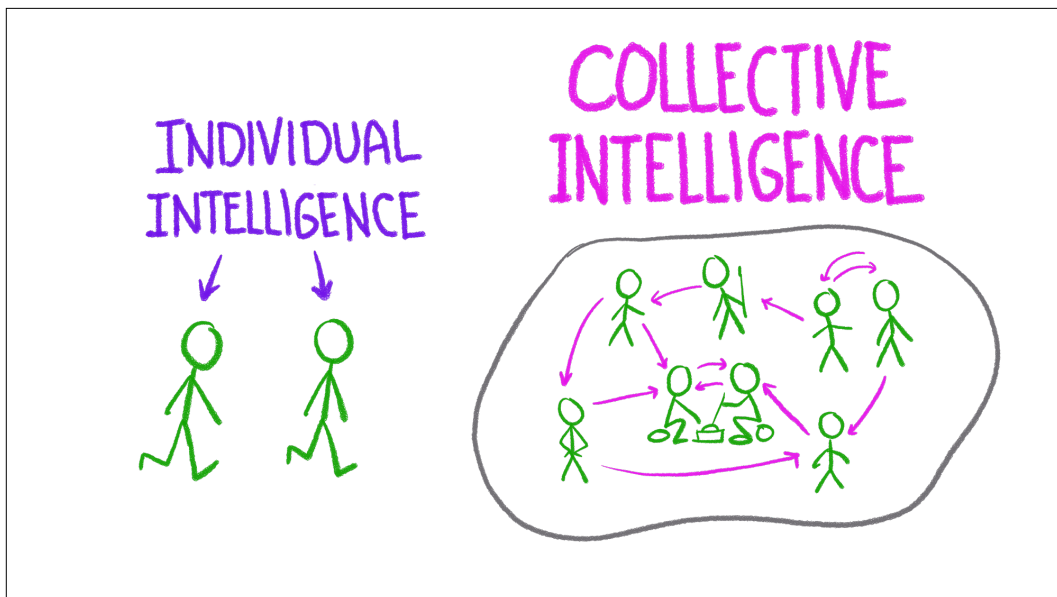
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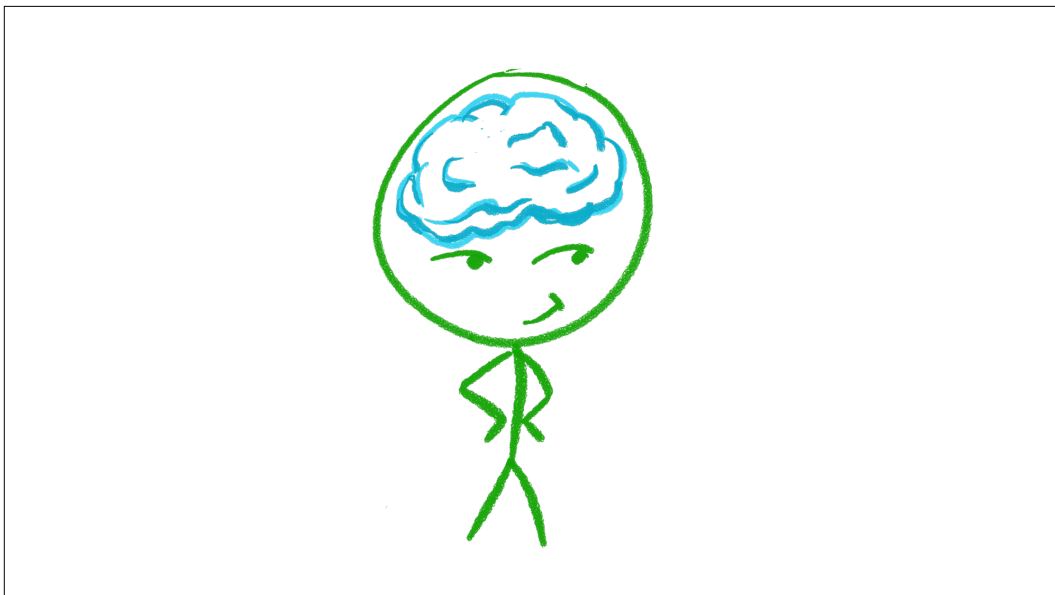


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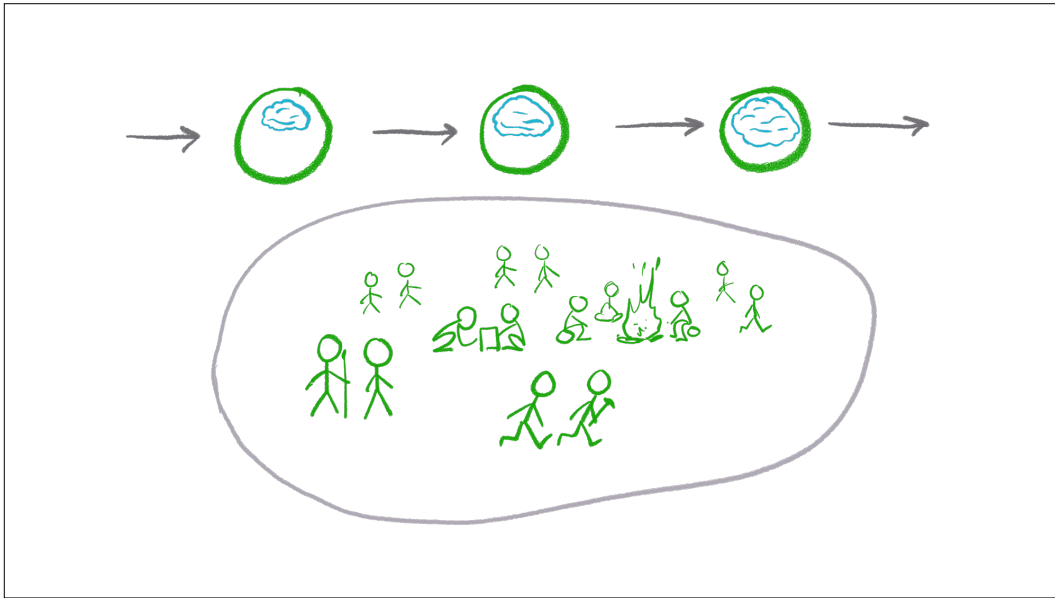




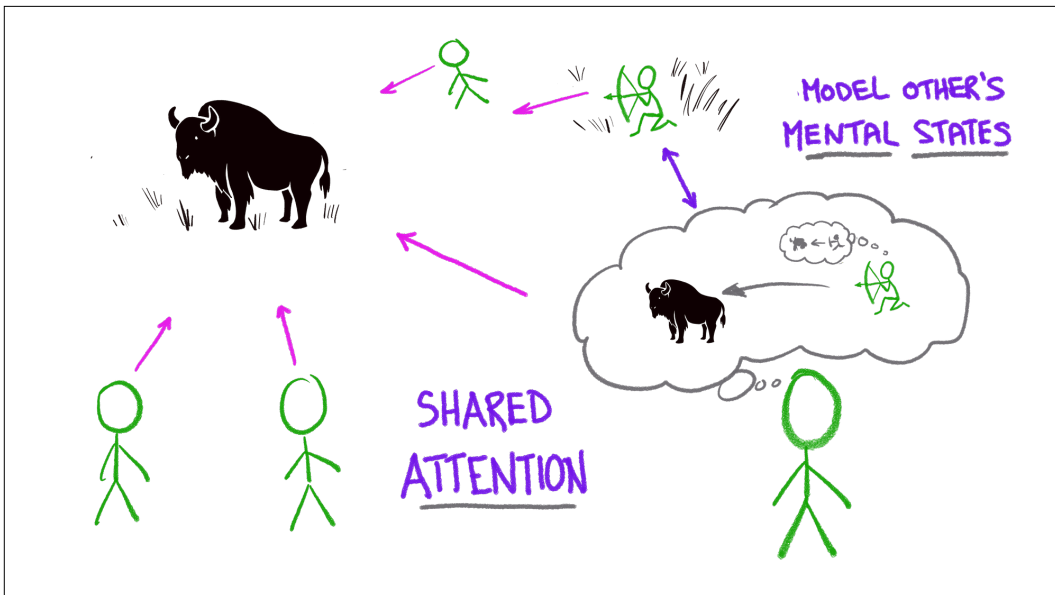
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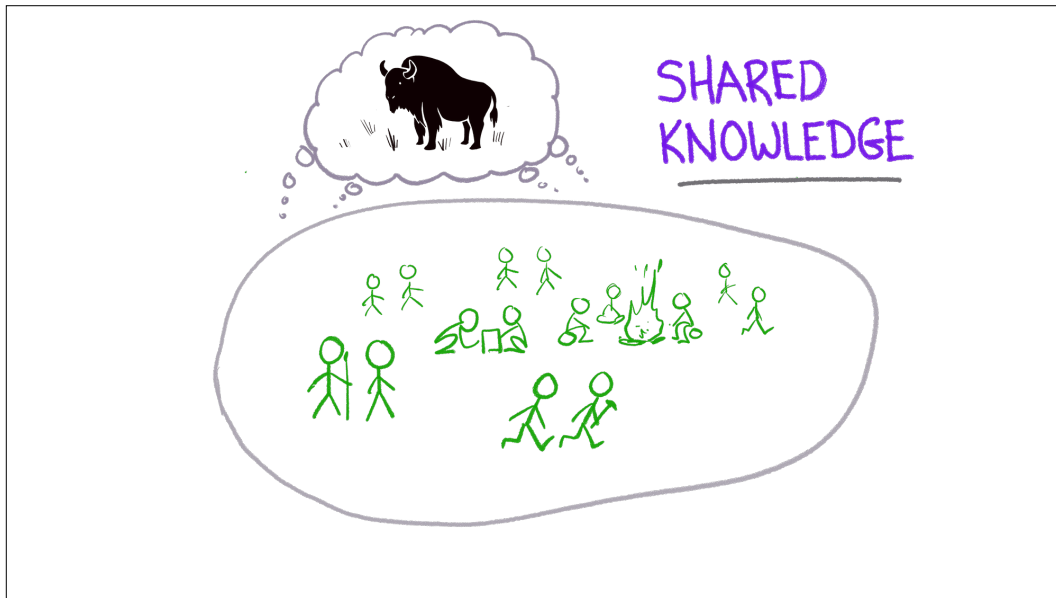
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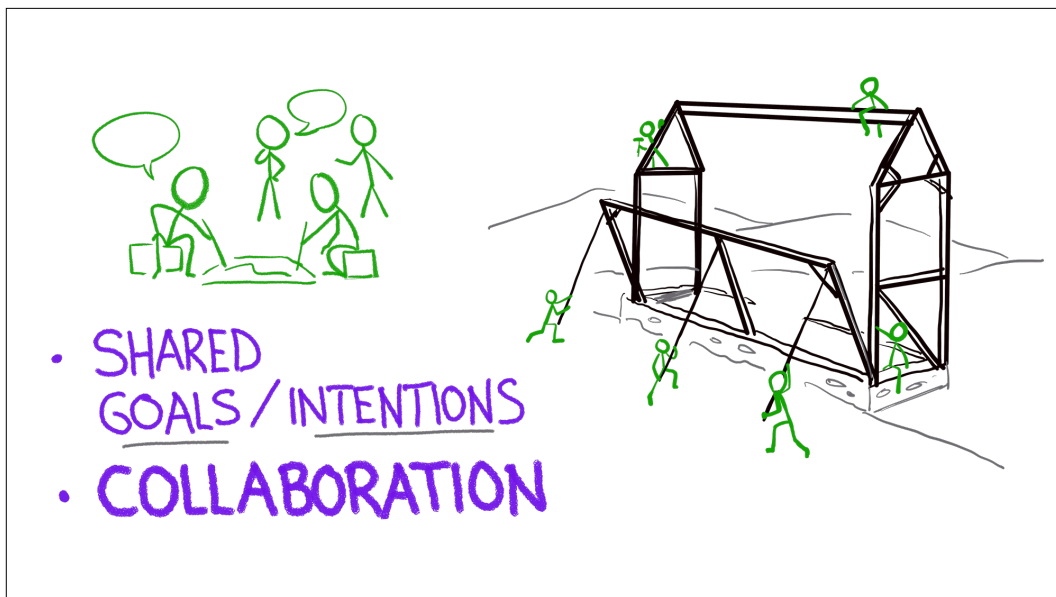
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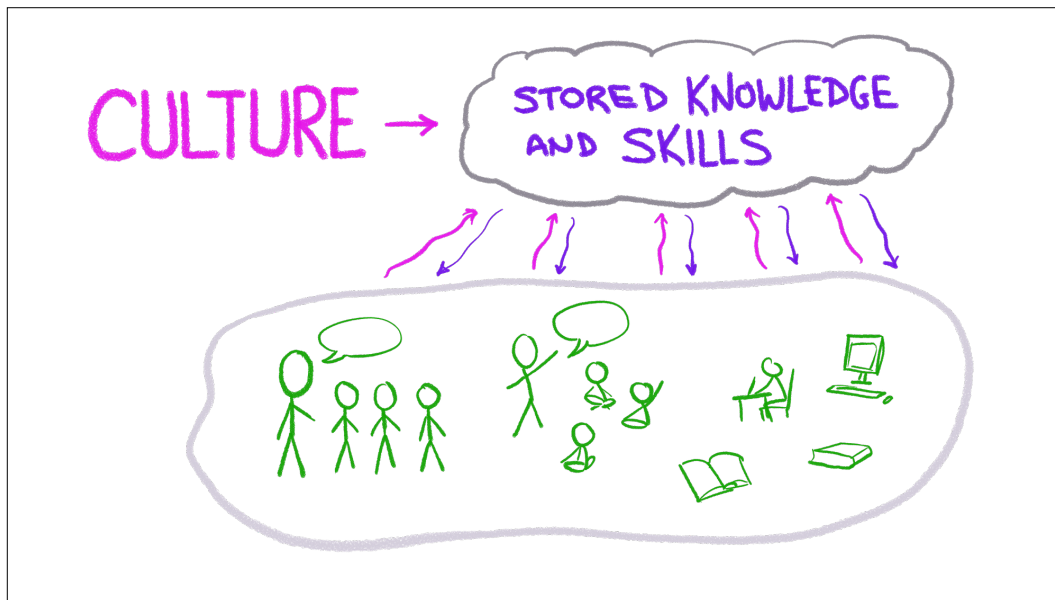
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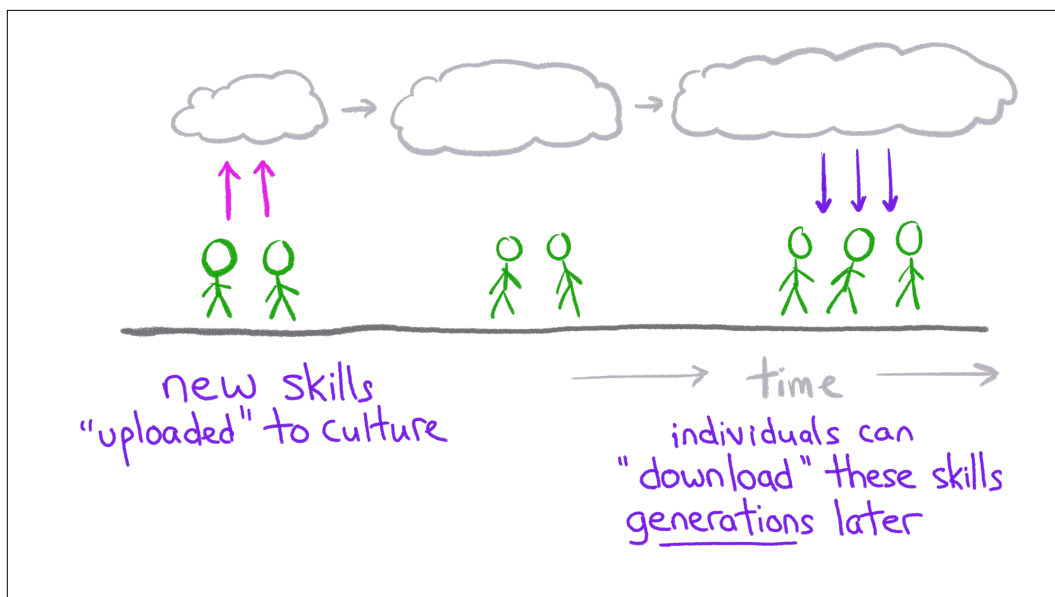
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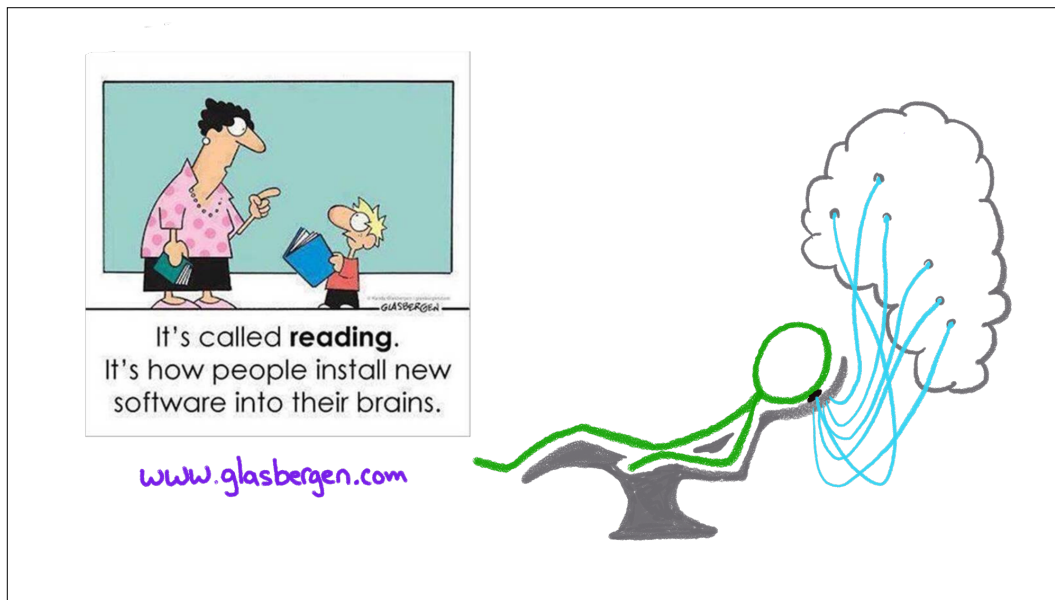
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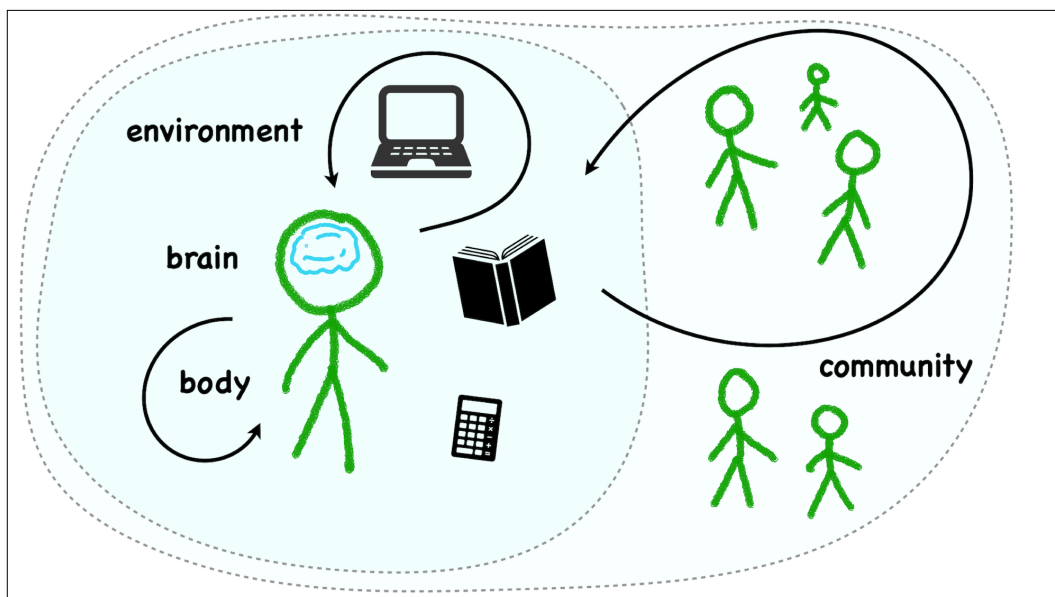
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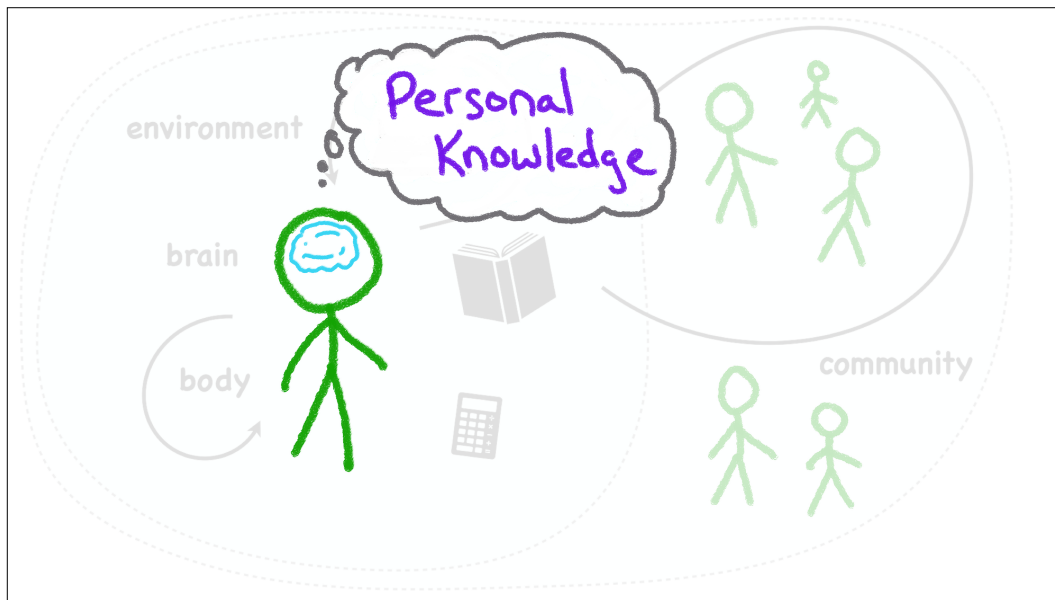
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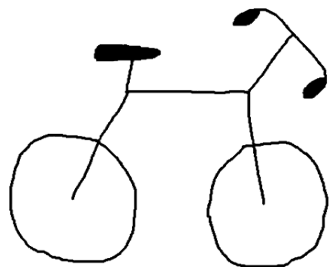
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Do you know  
how a bicycle  
works?

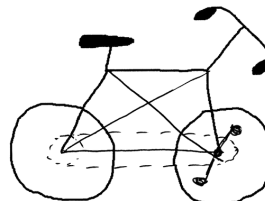
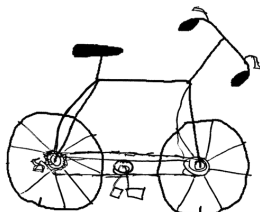
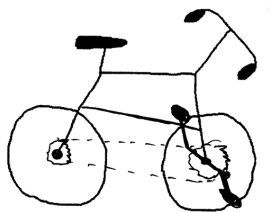
1	2	3	4	5	6	7
---	---	---	---	---	---	---

On a scale of 1 to  
7, how well do you  
understand how  
bicycles work?

60



Frame ———  
 Pedals ———  
 Chain - - - - -







63

## **IMPORTANT:**

The point is **NOT** that  
we're ignorant.

The point is that we're  
**MORE** ignorant than we  
**THINK** we are.

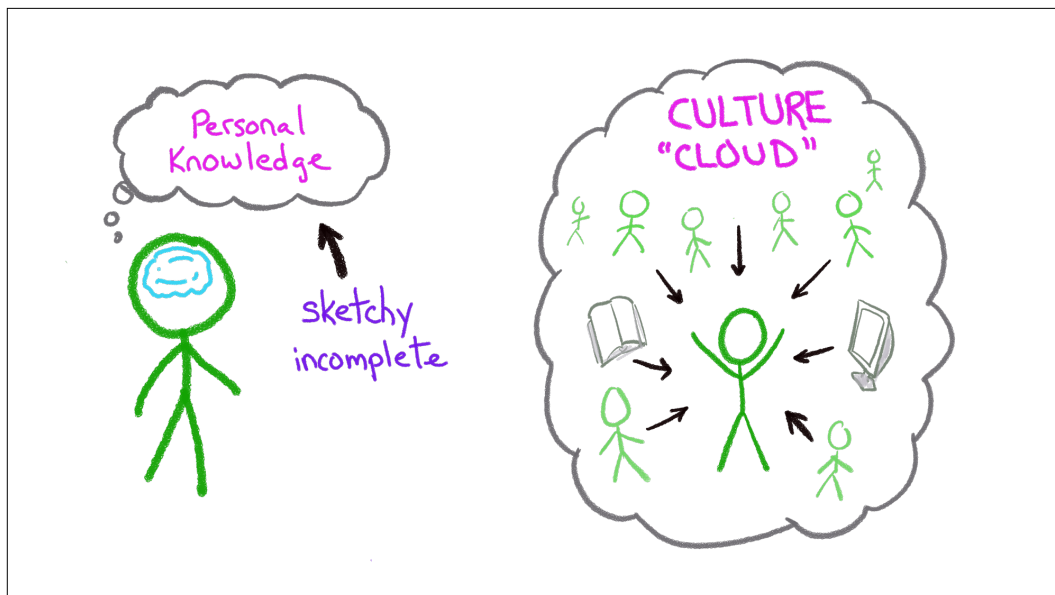
64

# THE "ILLUSION OF EXPLANATORY DEPTH"

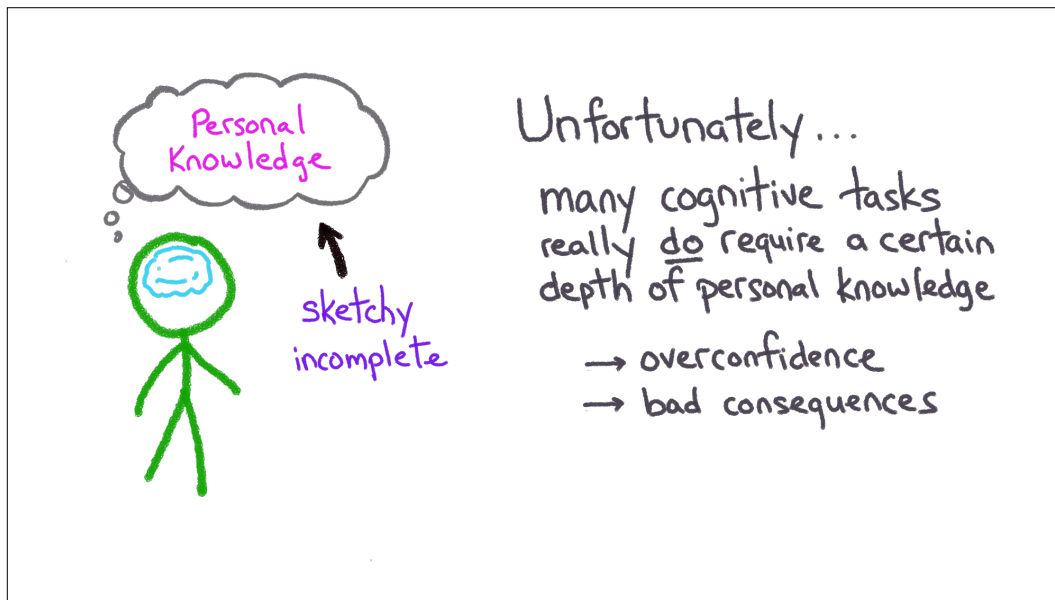
ROZENBLIT L, KEIL F. The  
misunderstood limits of folk  
science: an illusion of explanatory  
depth. Cognitive Science. 2002 26(5)  
521-542.

COMPOUND INTEREST  
GMOs  
STRUCTURE OF ATOMS  
GREENHOUSE EFFECT  
SIGNS & SYMPTOMS OF DEPRESSION  
⋮

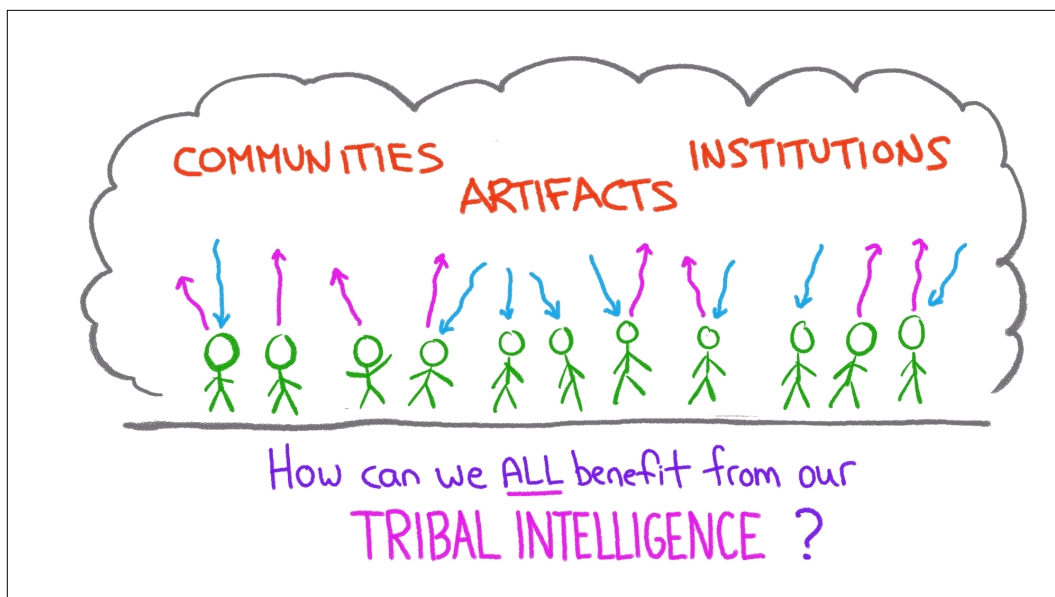
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67



68

## “Tribal Intelligence”: take-aways

- human “ultrasociality”, and our distinctively human intelligence, is a product of the co-evolution of human brains and human culture, within groups, to enable cooperation and collaboration

69

## “Tribal Intelligence”: take-aways

- division of cognitive labor is central to human intelligence and problem-solving

70

## “Tribal Intelligence”: take-aways

- we’re prone to various OVERCONFIDENCE biases that cause us to overestimate the extent and depth of our personal knowledge
  - the “knowledge illusion”  
(or, the “illusion of explanatory depth”)

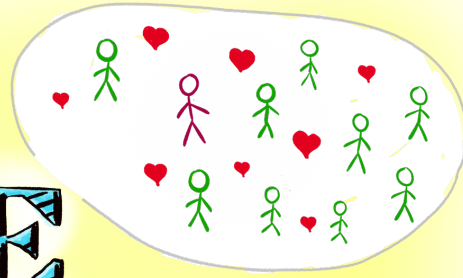
71

## “Tribal Intelligence”: take-aways

- ethics and critical thinking issue:
  - the knowledge stored in the “culture cloud” is an important *epistemic resource*, and (*I would argue*) a *public good*
  - if we care about critical thinking, we need to work to give *more people greater access* to this epistemic resource

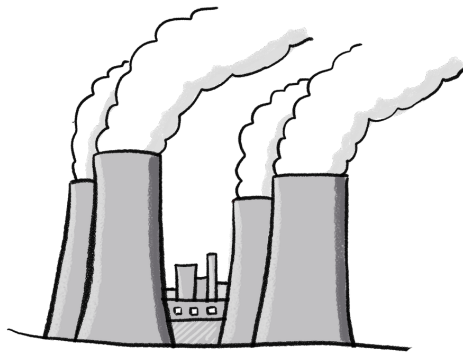
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# IN OUR TRIBE WE TRUST



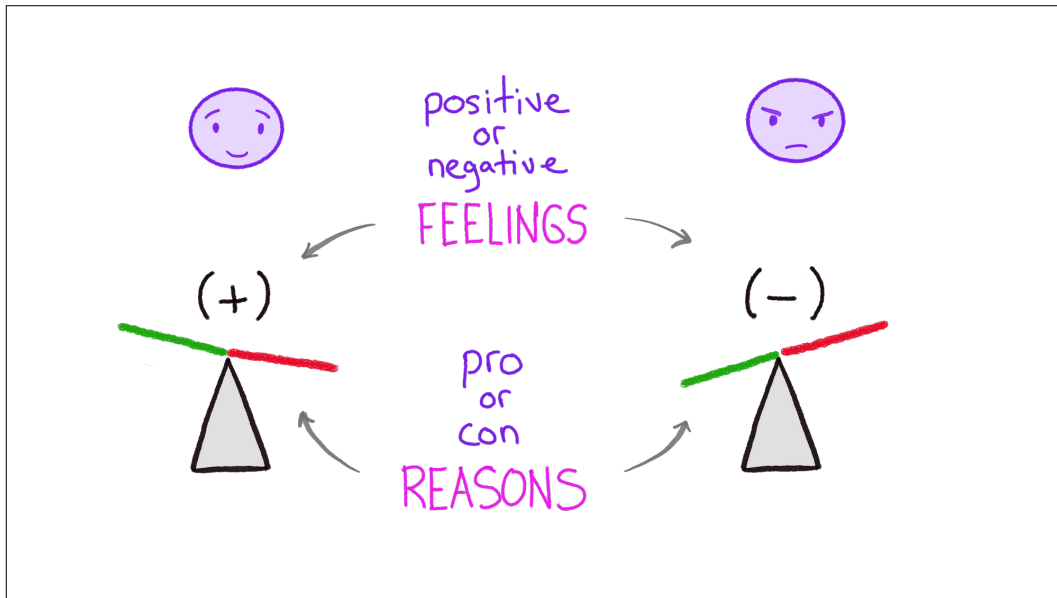
*Kevin deLaplante*

73

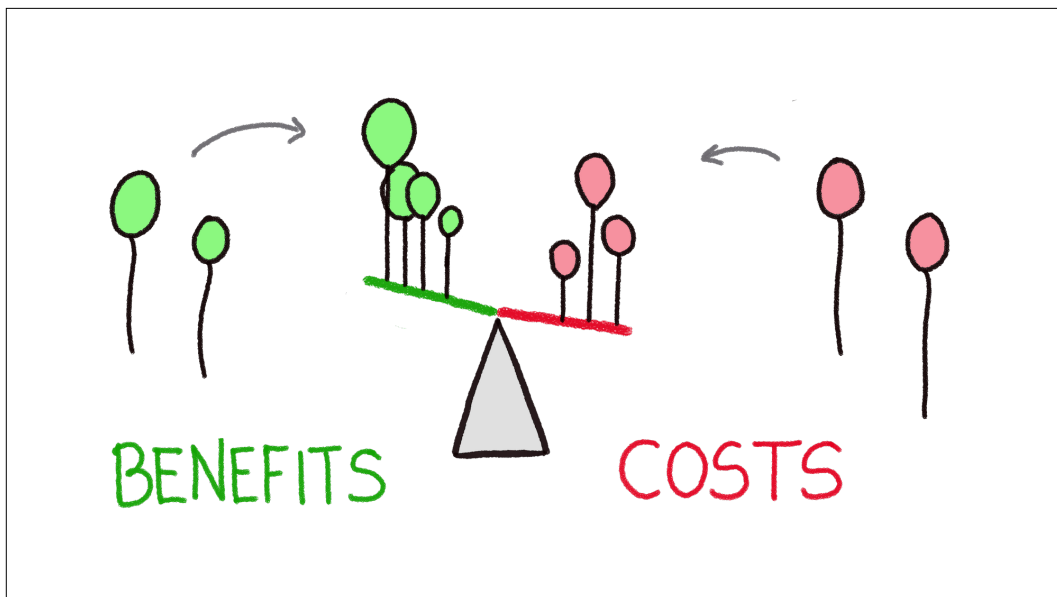


"Nuclear power should  
play a larger role in  
meeting our energy  
needs."

74

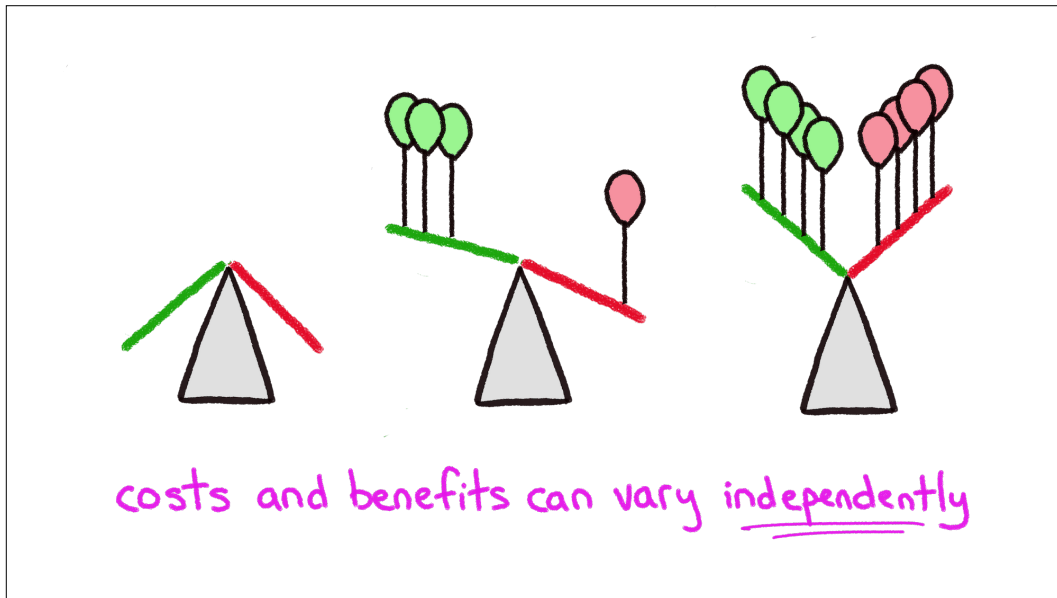


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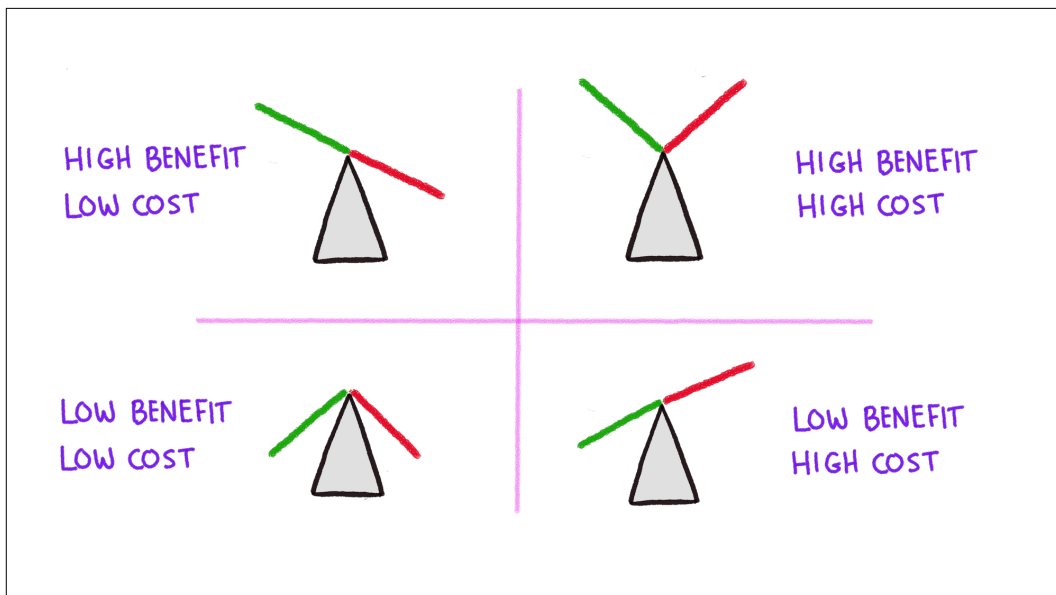


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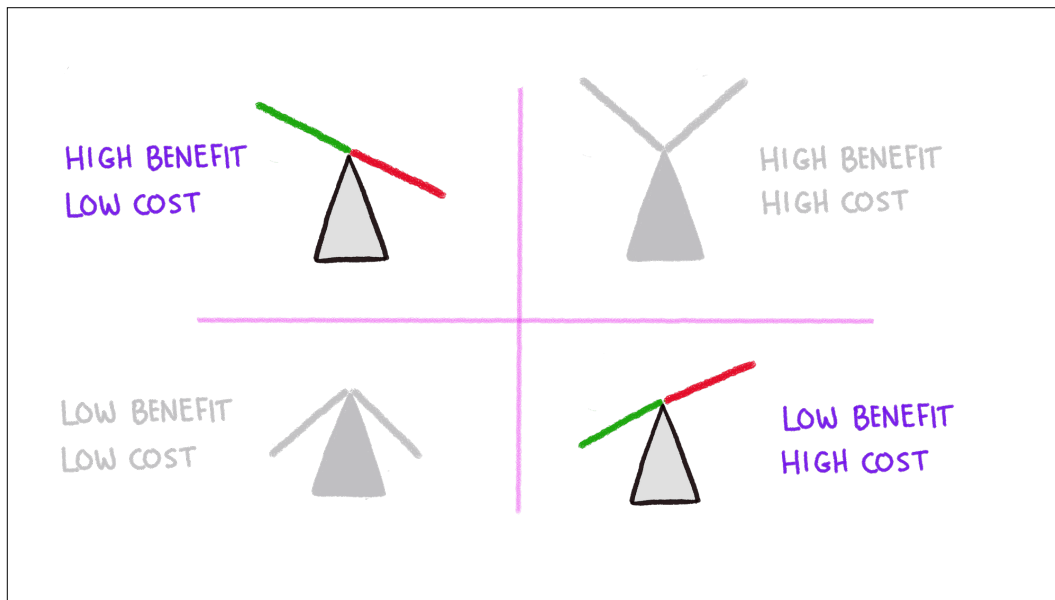




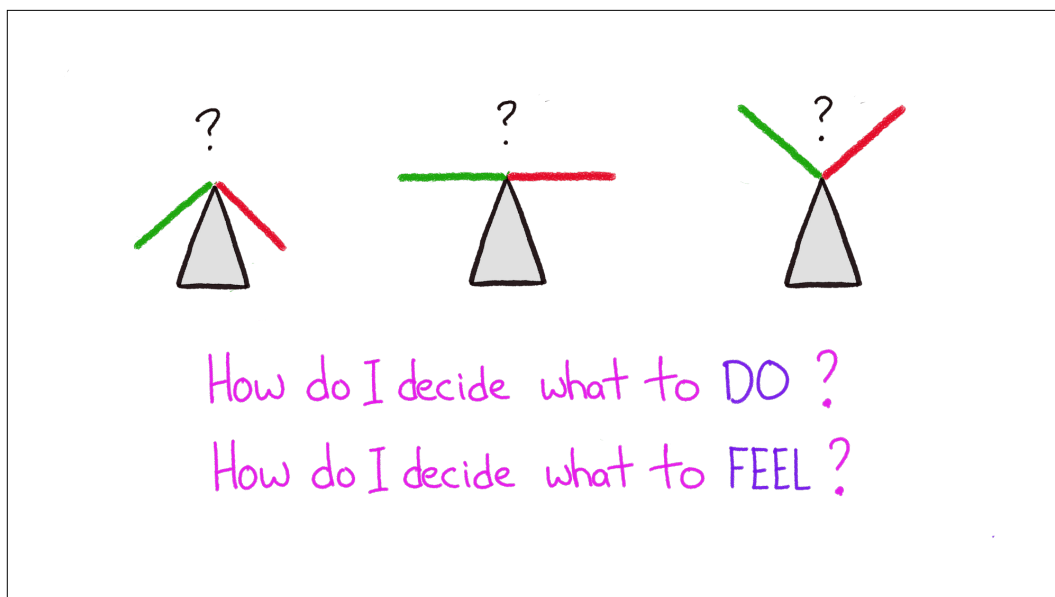
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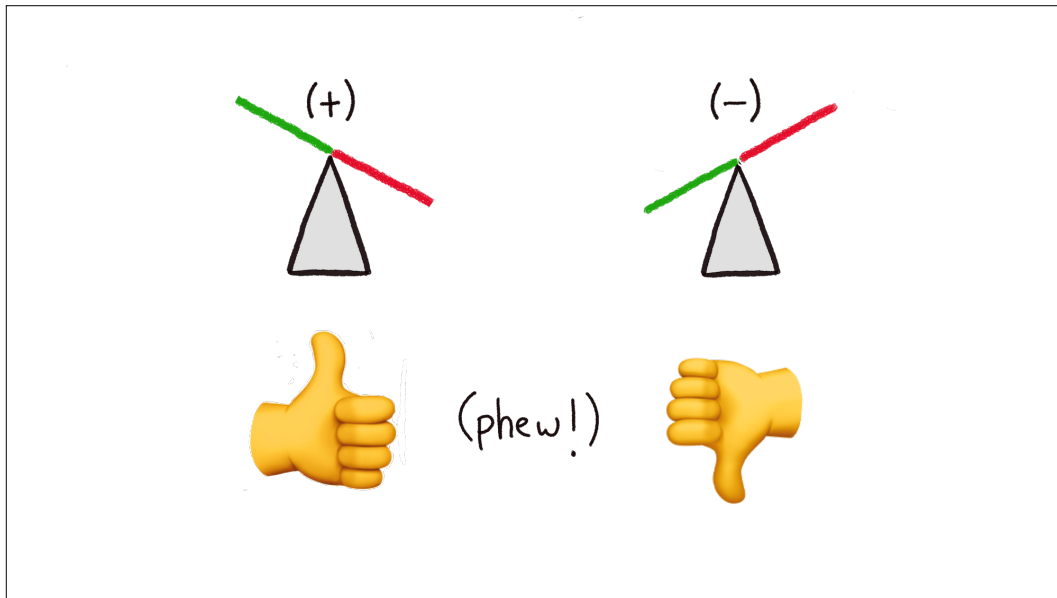
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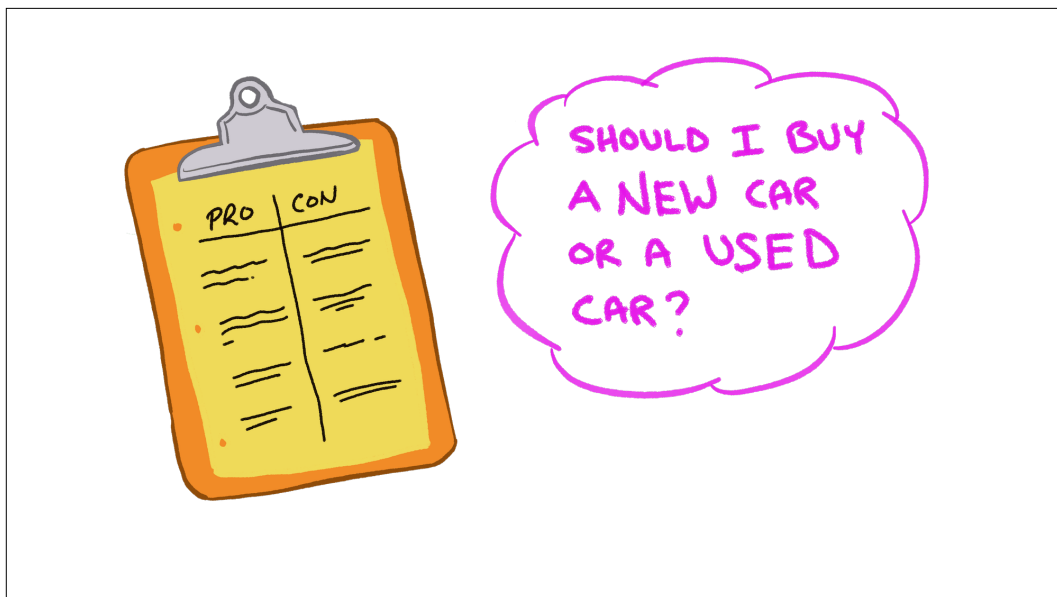
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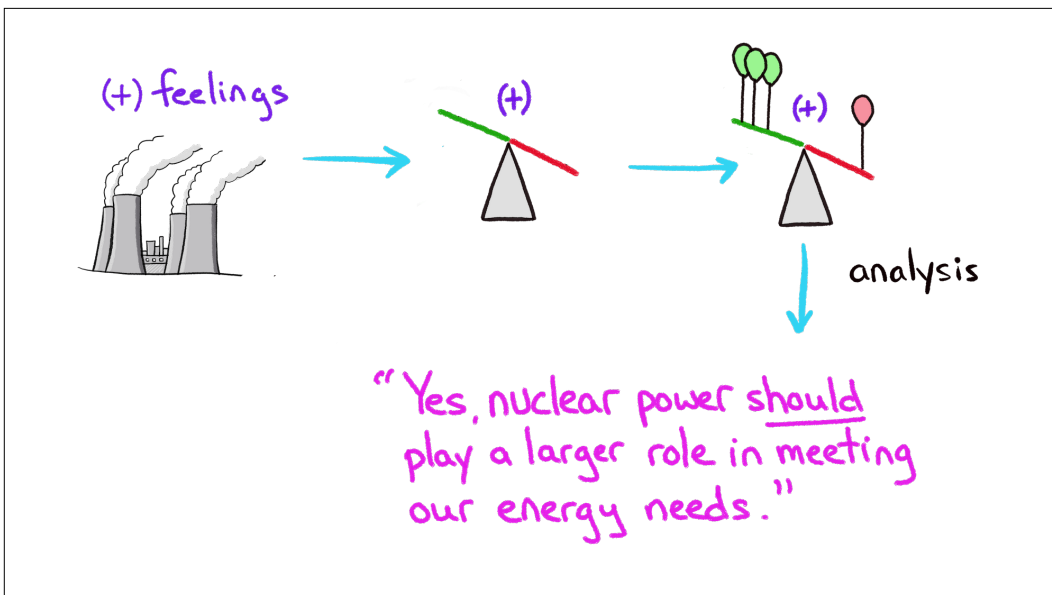
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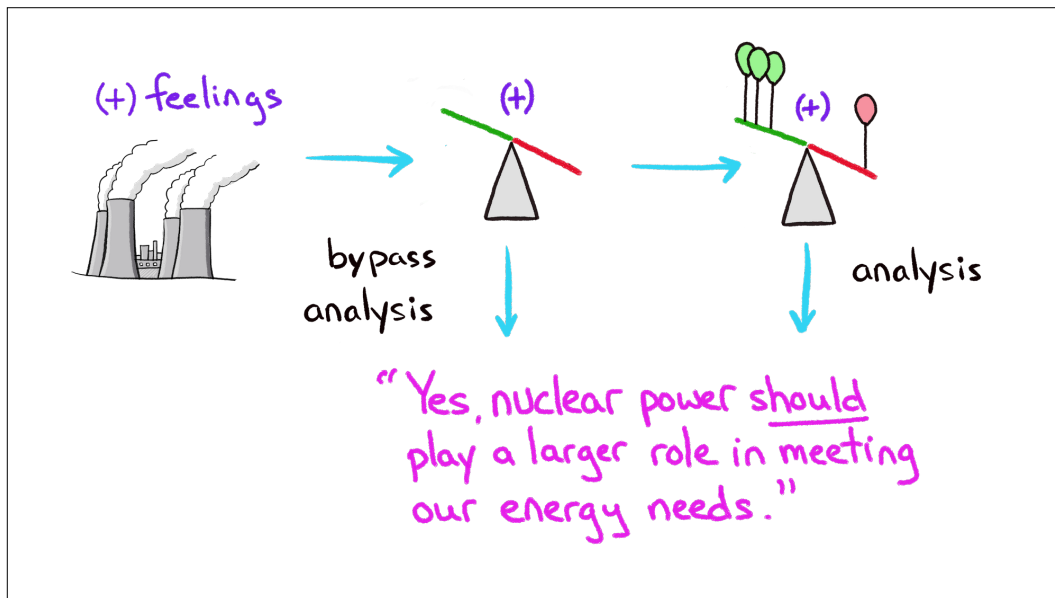
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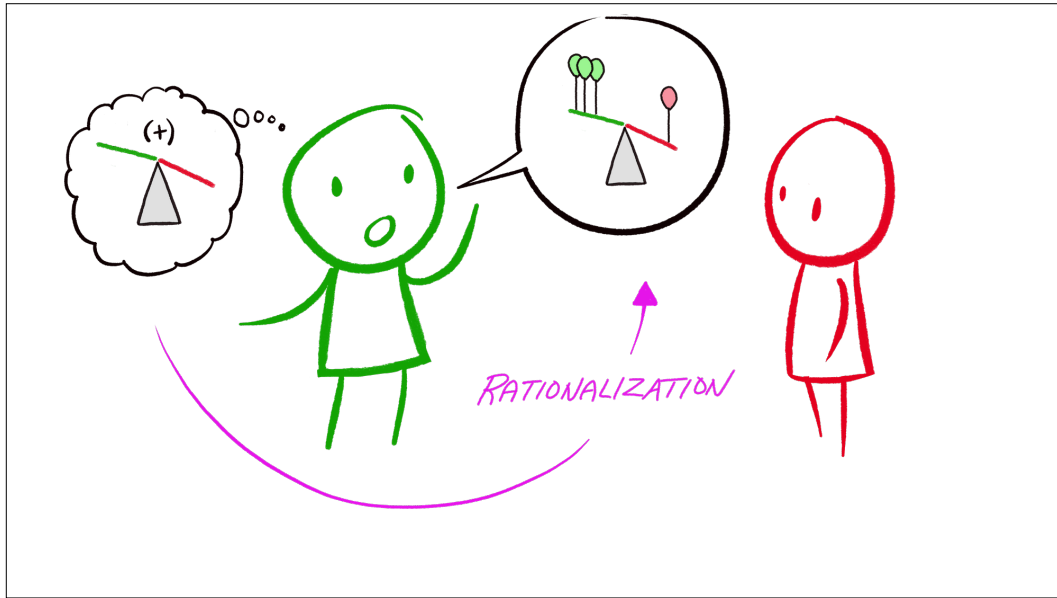
## SUBSTITUTION



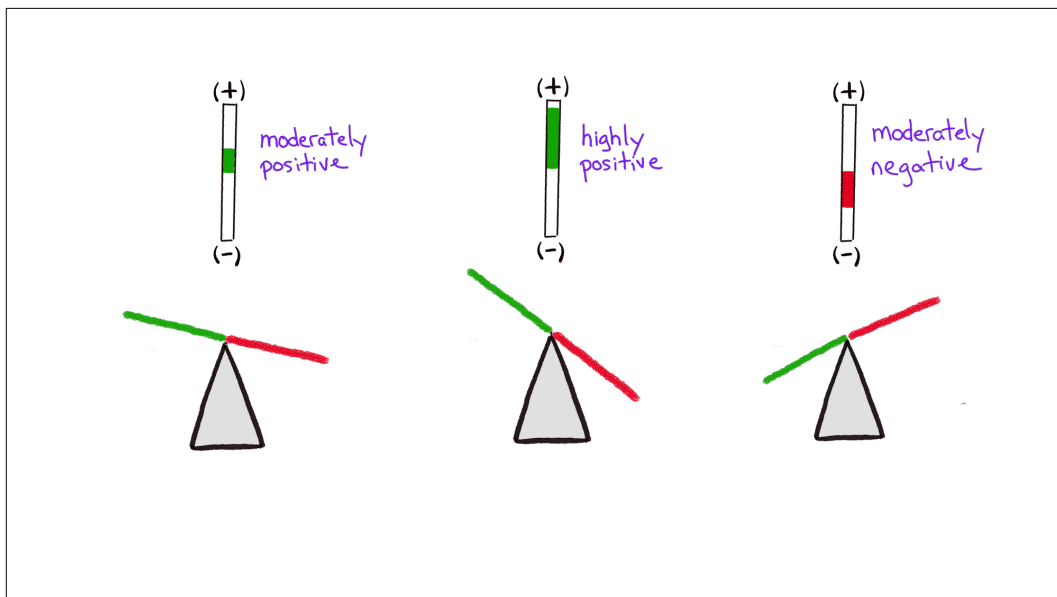
Hard Question :  
"Should nuclear power play a larger role in meeting our energy needs?"

Easy Question :  
"What do I FEEL about nuclear power?"

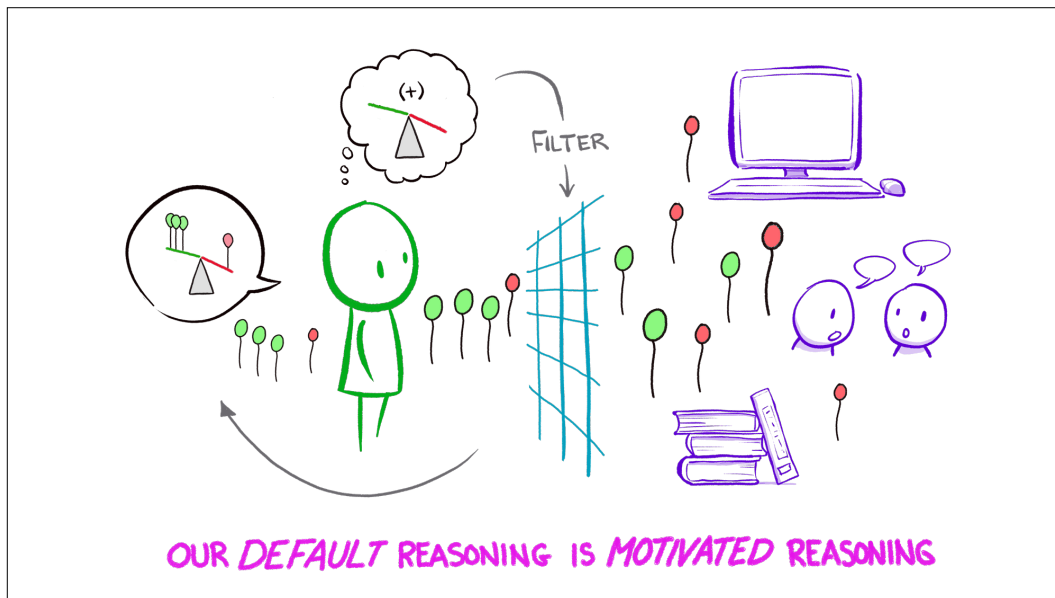
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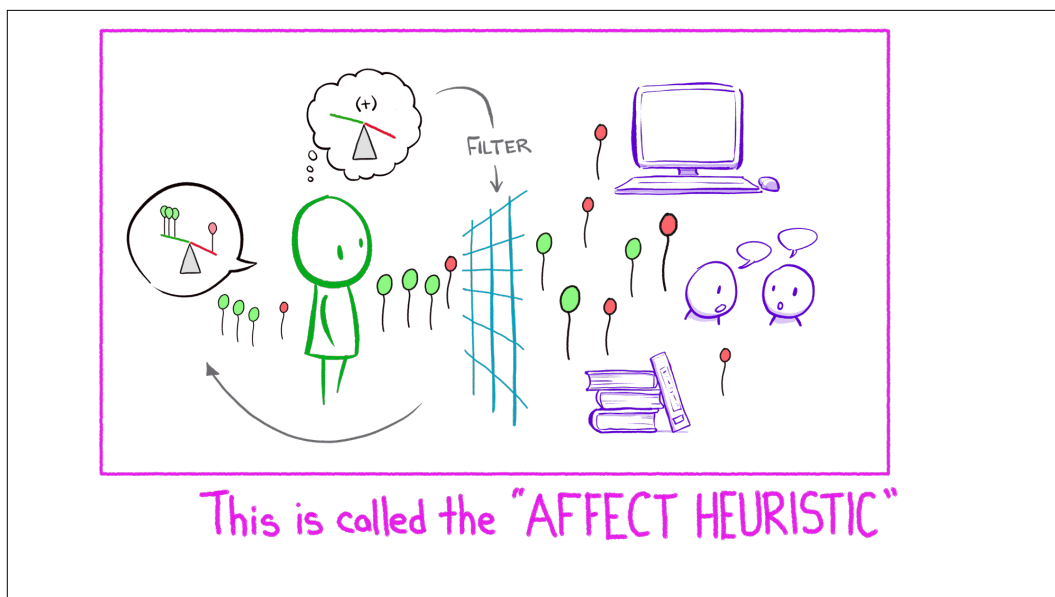
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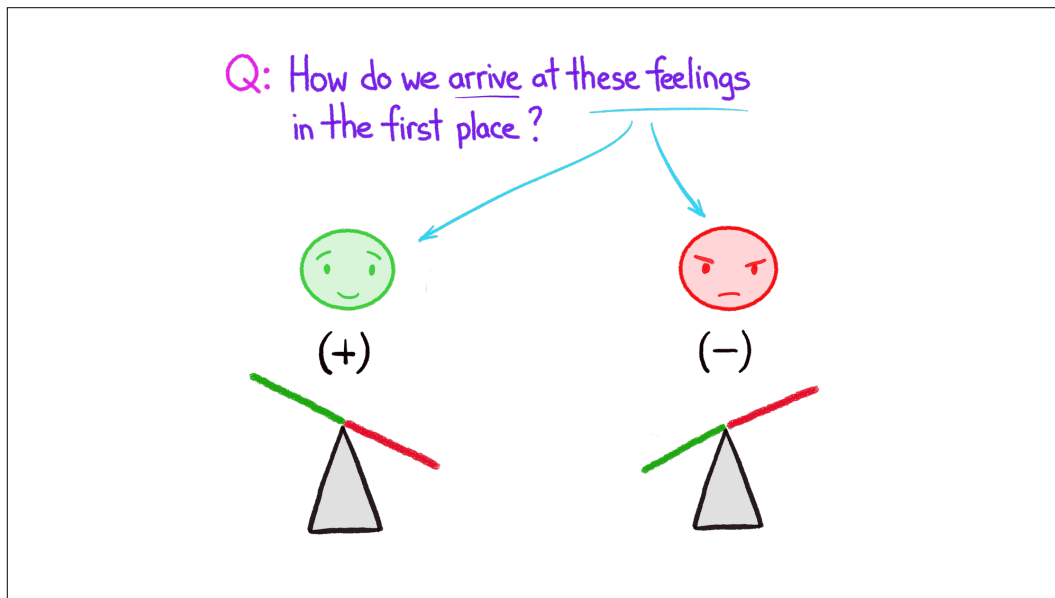


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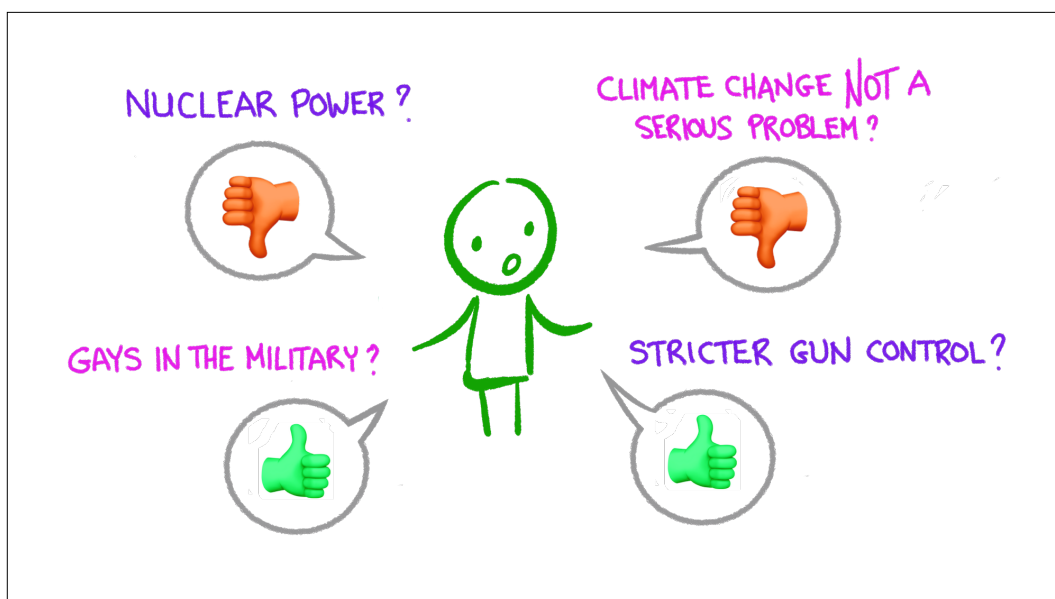


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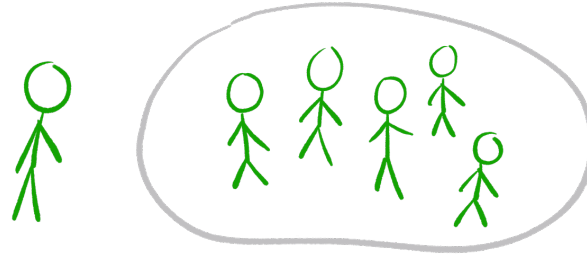
91



92

Where do these attitudes come from ?

A: Our GROUP affiliations  
Our TRIBAL identities



93

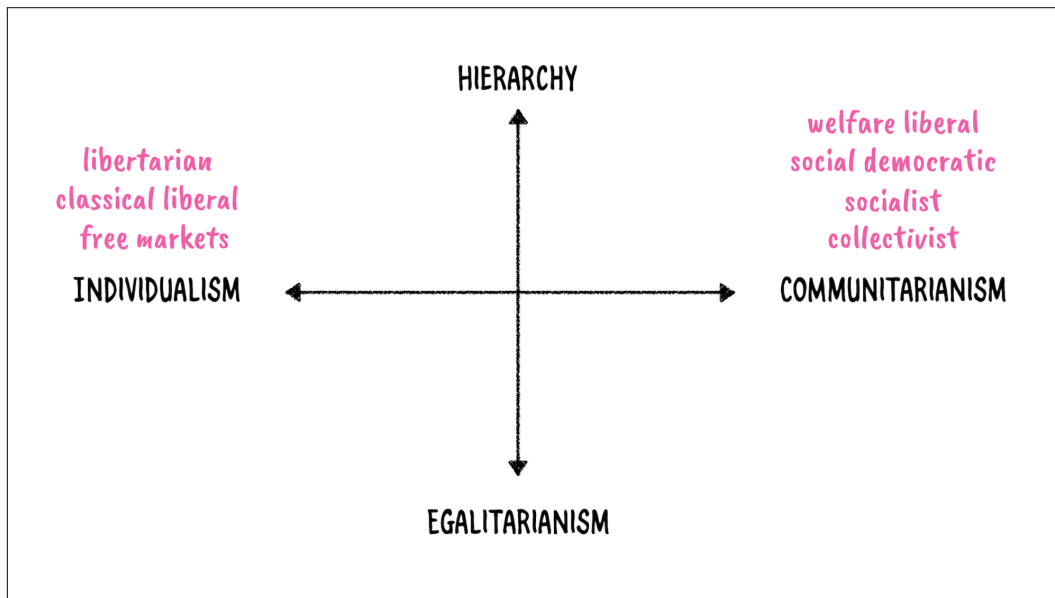
## "CULTURAL COGNITION"

We look to the prevailing views  
within our cultural group to  
help us think about and shape  
our attitudes toward social  
and political issues

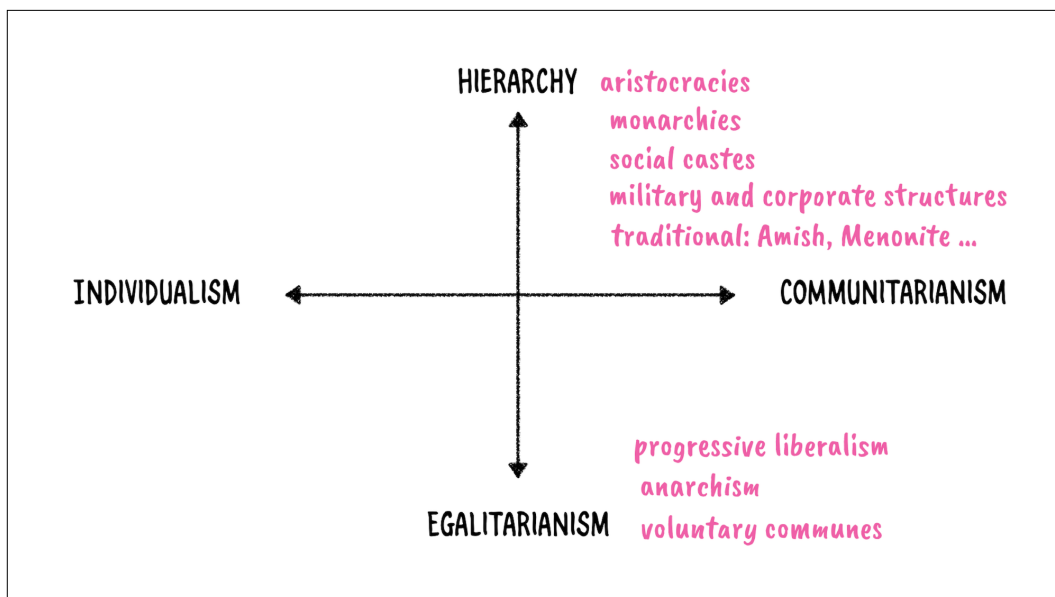


DAN KAHAN

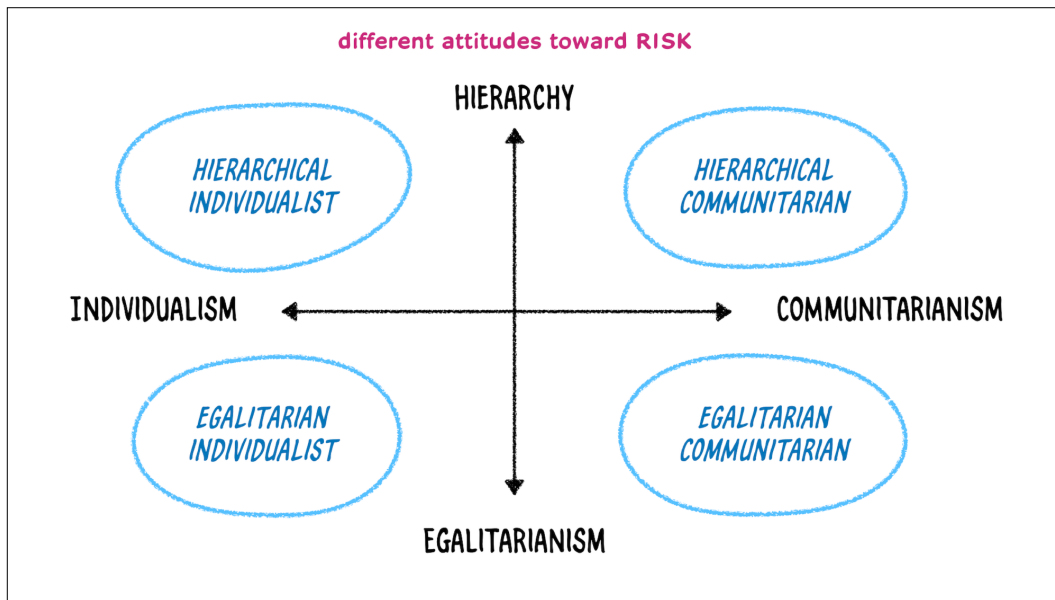
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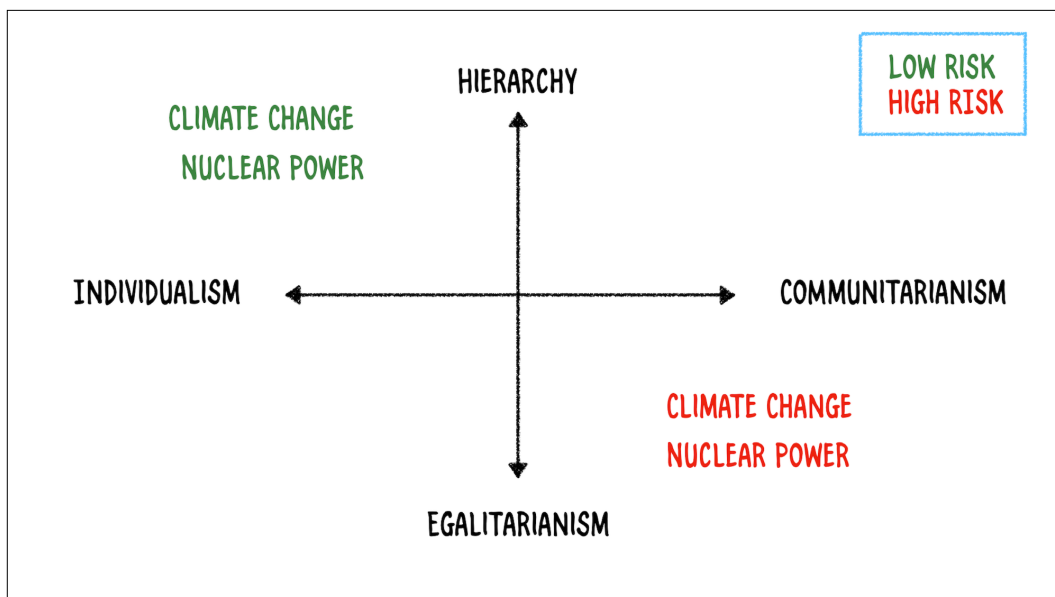
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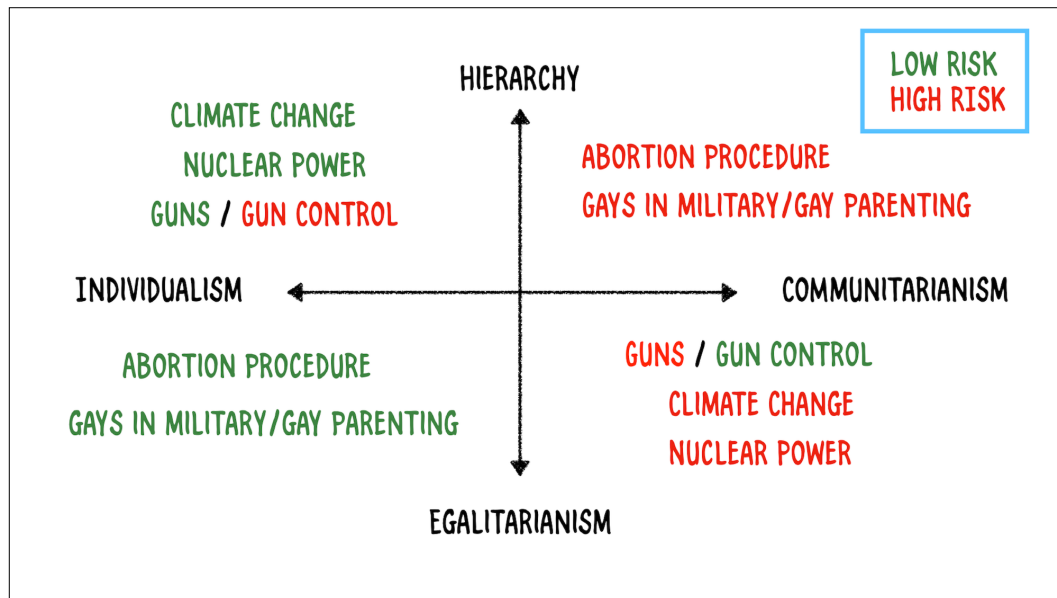
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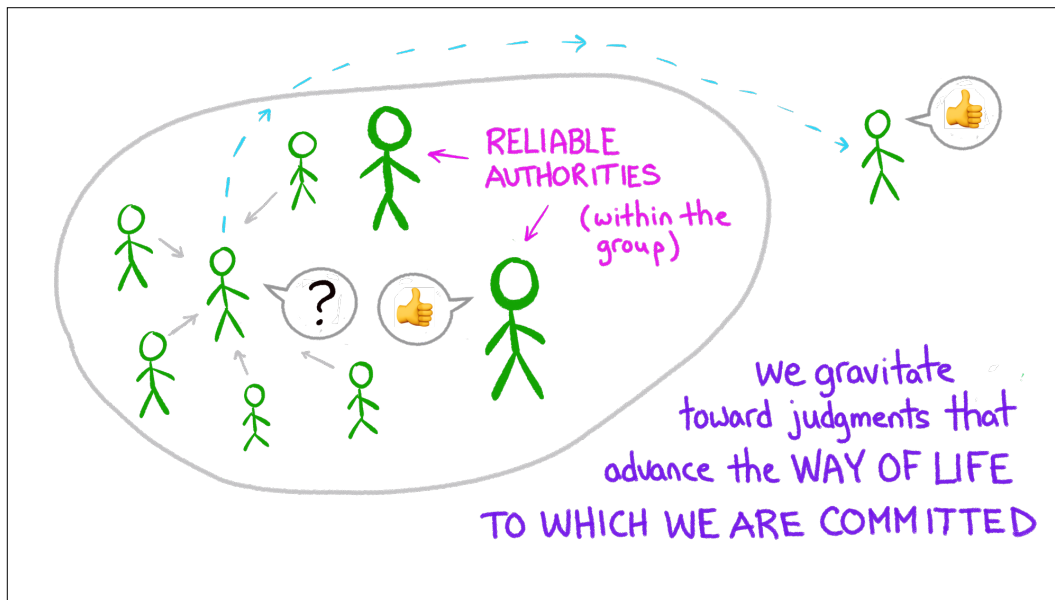


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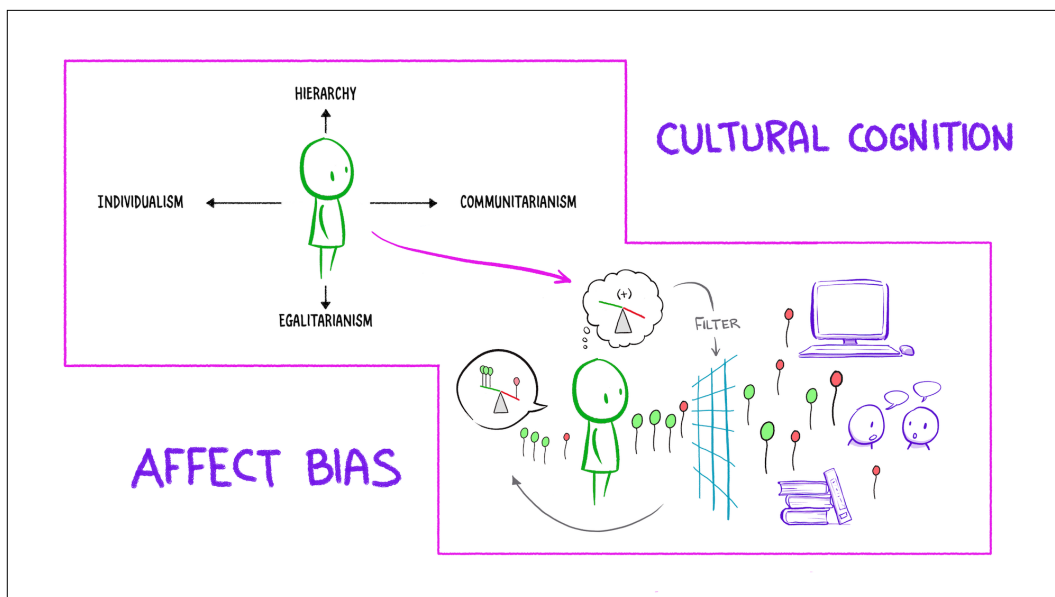
Your cultural group identity is a stronger predictor of your attitudes toward these issues than

- race
- gender
- socio-economic status
- region of the country
- political party affiliation

100

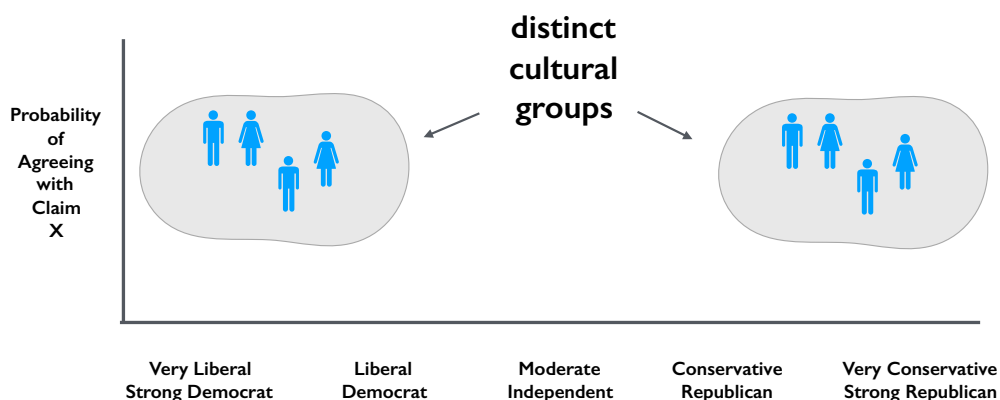


101



102

## Standard Left-Right Surveys Work as Well



103

**Important: We also use cultural cognition to judge who is a reliable authority**



Robert Linden

**Position:** Professor of Meteorology,  
Massachusetts Institute of Technology

**Education:** Ph.D., Harvard University

**Memberships:**

- American Meteorological Society
- National Academy of Sciences

**Question:**

**Is this scientist an expert on  
global warming?**

**Position:** Professor of Meteorology, MIT

**Education:** PhD, Harvard

**Memberships:**

- American Meteorological Society
- National Academy of Sciences

104

**Important: We also use cultural cognition to judge who is a reliable authority**



Robert Linden  
**Position:** Professor of Meteorology,  
Massachusetts Institute of Technology  
**Education:** Ph.D., Harvard University  
**Memberships:**

- American Meteorological Society
- National Academy of Sciences

**Now: Give some subjects a claim that the expert endorses ...**

**“It is now beyond reasonable scientific dispute that human activity is causing global warming and other dangerous forms of climate change ...”**

**... and ask them to answer whether they think he’s an expert or not.**

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**Important: We also use cultural cognition to judge who is a reliable authority**



Robert Linden  
**Position:** Professor of Meteorology,  
Massachusetts Institute of Technology  
**Education:** Ph.D., Harvard University  
**Memberships:**

- American Meteorological Society
- National Academy of Sciences

**And give another group of subjects a different quote ...**

**“Judged by conventional scientific standards, it is premature to conclude that human CO<sub>2</sub> emissions — so-called greenhouse gases — cause global warming ...”**

**... and ask them to answer whether they think he’s an expert or not.**

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## Result: Judgments of expertise are determined by the cultural norms of the group

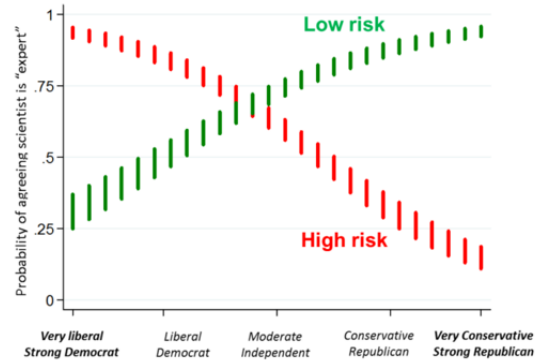
Is this scientist an “expert” on global warming?



Robert Linden  
Position: Professor of Meteorology,  
Massachusetts Institute of Technology  
Education: Ph.D., Harvard University  
Memberships:  
• American Meteorological Society  
• National Academy of Sciences

**“High risk”**  
“It is now beyond reasonable scientific dispute that human activity is causing ‘global warming’ and other dangerous forms of climate change. . . .

**“Low risk”**  
“Judged by conventional scientific standards, it is premature to conclude that human CO<sub>2</sub> emissions—so-called ‘greenhouse gasses’—cause global warming. . . .

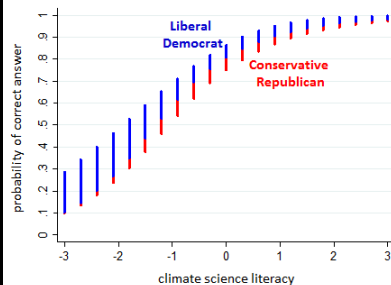


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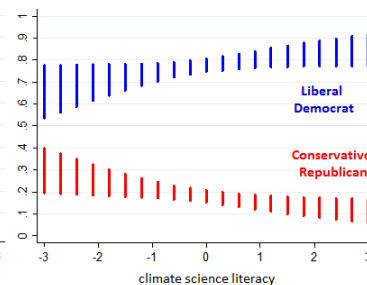
## Important: These judgments are not due to ignorance or lack of scientific literacy.

### “Climate science literacy”: item response theory

“What gas do most scientists believe causes temperatures in the atmosphere to rise? Is it [hydrogen, helium, carbon dioxide, radon]?”



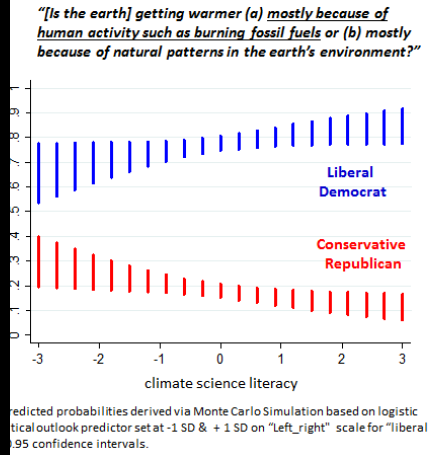
“[Is the earth] getting warmer (a) mostly because of human activity such as burning fossil fuels or (b) mostly because of natural patterns in the earth’s environment?”



Annenberg Center for Public Policy & Cultural Cognition Project.  $N = 1,769$ . Predicted probabilities derived via Monte Carlo Simulation based on logistic regression. Nationally representative sample, April/May 2014 (YouGov). Political outlook predictor set at -1 SD & +1 SD on “left\_right” scale for “liberal democrat” and “conservative Republican”, respectively. Colored bars reflect 0.95 confidence intervals.

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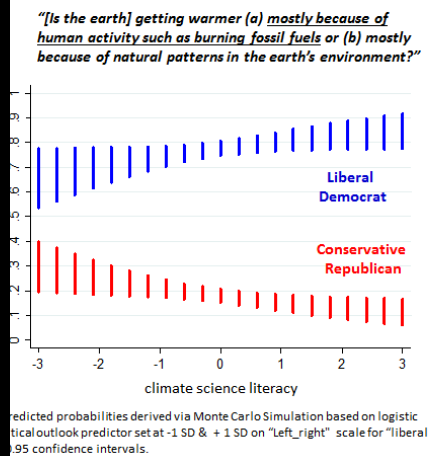
Important: These judgments are not due to ignorance or lack of scientific literacy.



In fact, increasing climate science literacy **MAGNIFIES** the **POLARIZATION!**

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Important: These judgments are not due to ignorance or lack of scientific literacy.

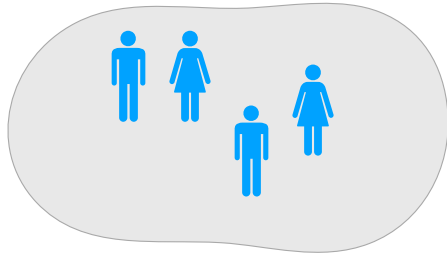


Indeed, simply asking people to be **objective and use reason ...**

**... MAGNIFIES THE POLARIZATION!**

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## Cultural Cognition: Upshot



When a claim becomes **entangled or coupled** with the core beliefs of a cultural group's **identity**, it becomes **highly resistant to change** by traditional "rational" means:

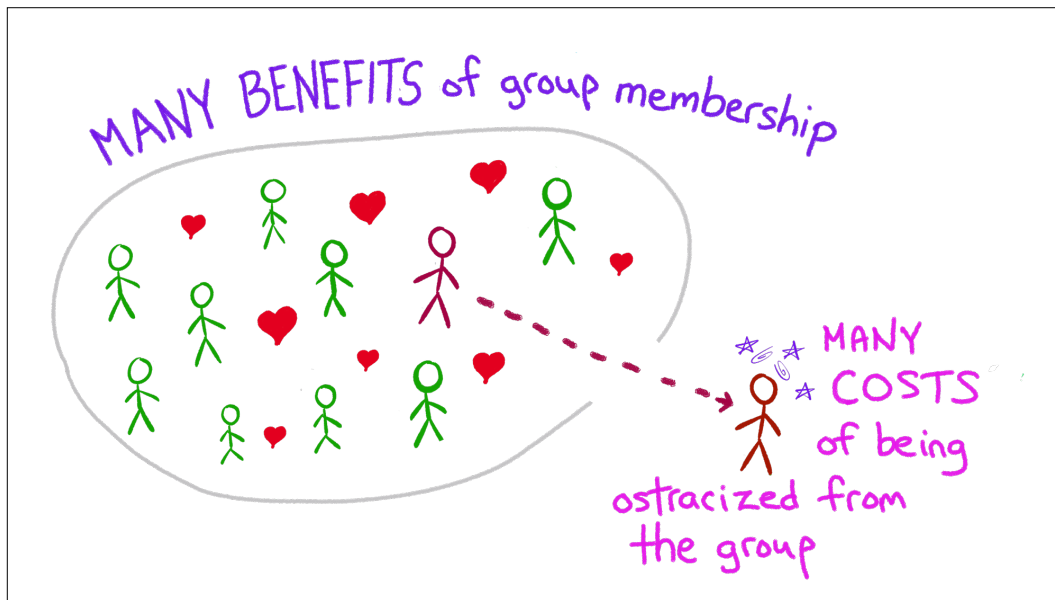
- facts
- evidence
- argument
- statements of consensus opinion

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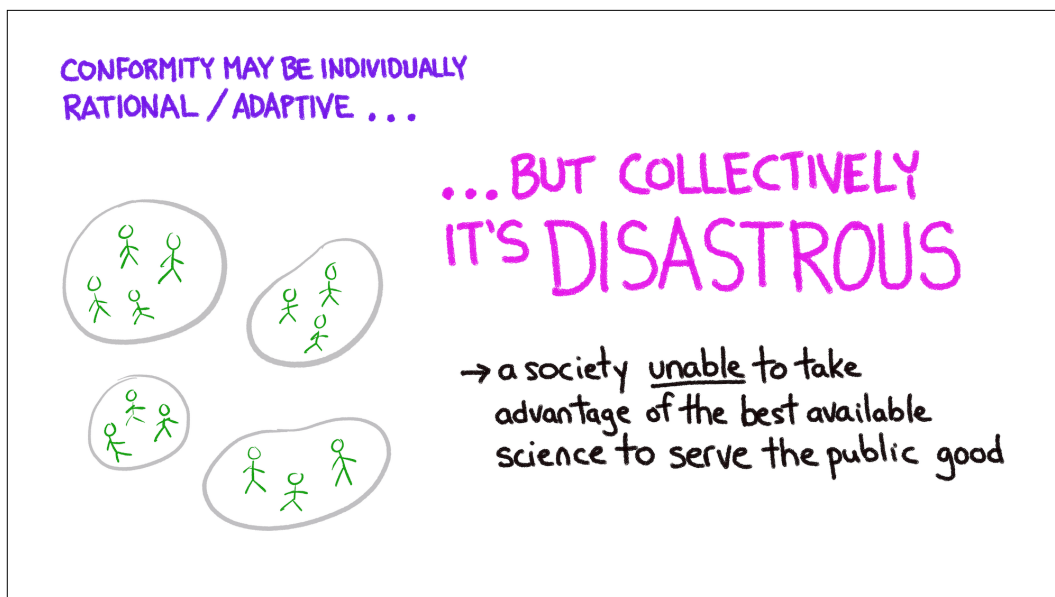
Why is our psychology structured this way ?

A: It's an adaptive strategy (at the individual level) if we take human "groupishness" seriously

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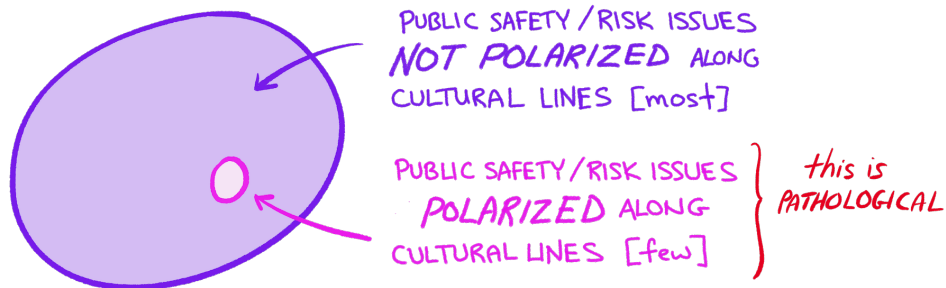


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## MOST public safety issues AREN'T attached to a political or cultural worldview

- are medical X-rays safe?
- is second-hand smoke dangerous to your health?
- are genetically modified foods safe?
- is it safe to use nanotechnology in consumer products?

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Q: • WHAT DETERMINES WHICH ISSUES BECOME BONDED TO A CULTURAL OR TRIBAL WORLDVIEW?

• HOW DOES THIS BONDING HAPPEN?

Q': • CAN WE PREVENT THIS FROM HAPPENING?

• CAN WE DISENTANGLE WHAT IS ALREADY ENTANGLED?

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## “Tribal Trust”: take-aways

- our *default* reasoning is MOTIVATED reasoning
- *affect bias*: our FEELINGS influence our judgments of benefit and risk
- *cultural cognition*: our CULTURAL IDENTITIES and VALUES influence *how we feel* and *whose judgment to trust*

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## “Tribal Trust”: take-aways

- not all issues are coupled to cultural worldviews (in fact, relatively *few* are)
- but once they are, they’re very hard to decouple
- there are people working on this “decoupling” problem

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These ideas are  
important  
elements of a  
21st Century  
**CRITICAL  
THINKING  
TOOLBOX**

**Q & A**

