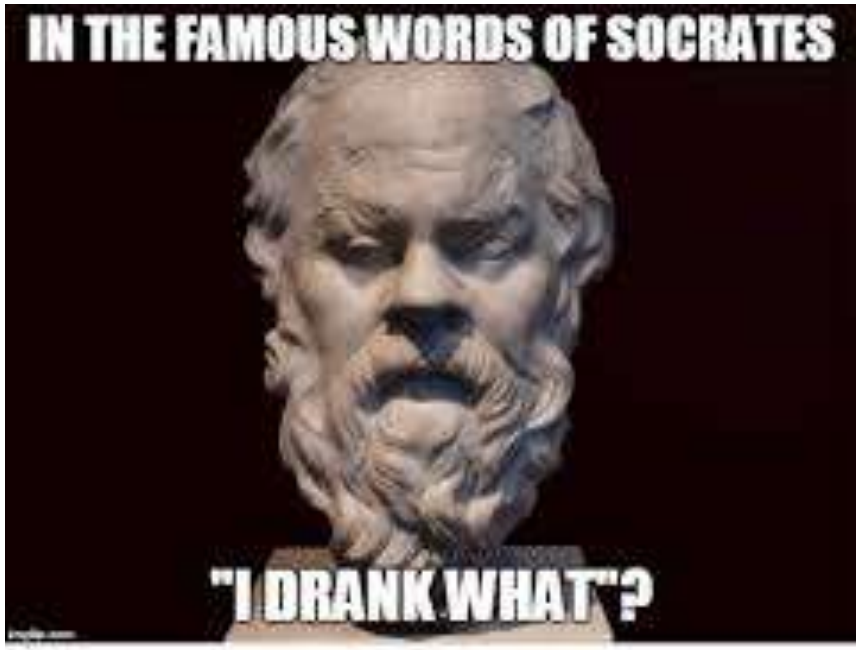
The most ignorant man in Athens…



Socrates last words

William Kingdon Clifford (1835-1879)
“The Ethics of Belief”

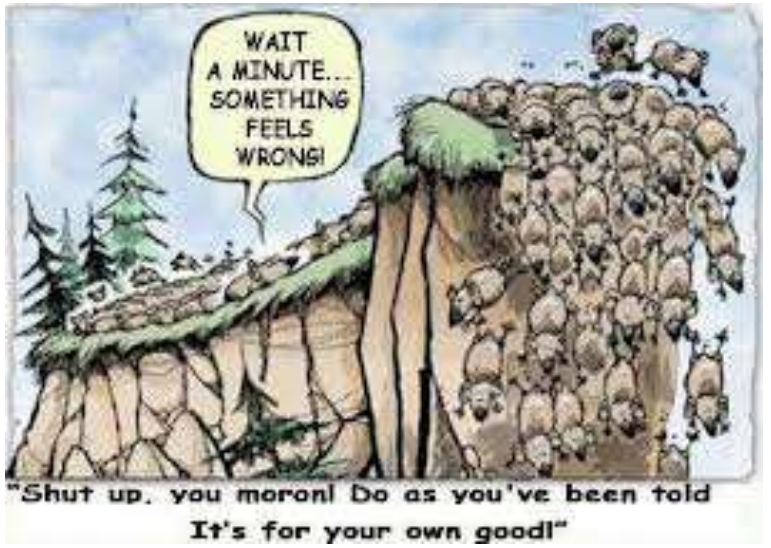
- The Ethics of Belief
- Background:
  - Extremely promising mathematician
    - He is considered a forefather of relativity theory
    - Saw obscurantist religion as extremely bad for individuals and societies
    - “Ethics…”
    - In the context of conflict between Darwinism and Christian theology

The parable of the ship owner

- Is worried that his ship is not sound
  - Has received complaints
  - It has weathered many storms
- Convinces himself that the ship is seaworthy without real investigation
  - He really believes this…
  - There is a storm, and the ship goes down
  - The owner is responsible for every life onboard (even though s/he ‘believed’ that the ship was sound)…

The Ethics of Belief

- We each have a responsibility to constantly investigate (and if necessary update) our beliefs
  - Applies to all areas of thought (including religion)
  - Acknowledges that this is extremely difficult to do
    - After all—I believe my beliefs are true…
  - But I'm not perfect—so I know that at least some of my beliefs are wrong

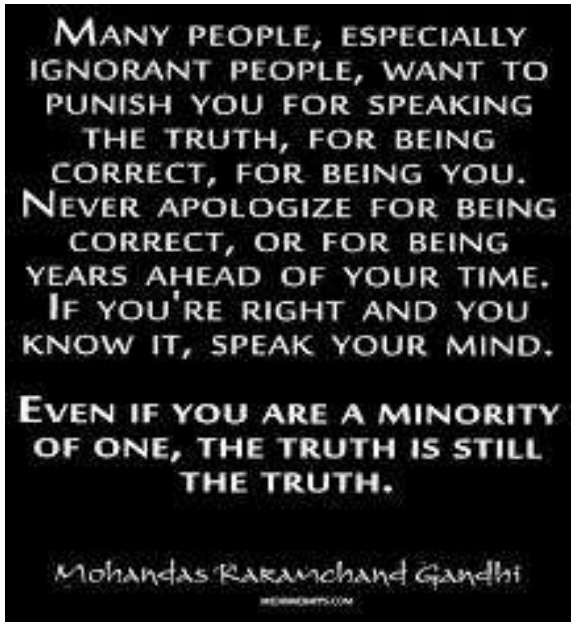


The Ethics of Belief: it is wrong to believe something without serious research…

But why?

- My beliefs are my own, aren't they?
- Who cares what I think?
- Don't I have a right to believe as I wish?

What you consent to believe in matters:



- You are a member of a community
- Your ideas and beliefs are not merely personal, they affect others
- Your ideas on:
  - Immigration
  - Politics
  - Gender
  - Sex
  - Global Warming
  - Etc…
    - Have practical consequences…
- Therefore: It is our duty to constantly question our beliefs and ideas about the world
  - Not just to ourselves, but to others as well

A deeper look at these issues: Scientism vs. Detractors?

David Barash's *Paradigms Lost (or "why lots of not-stupid people mistrust science…")*

- Barash—science is one of our great human achievements
  - Most people agree with this
  - Think about what it can help us to do…

But science is in crisis!

- Yes—scientific knowledge often leads l
  ambiguous discoveries
  - Nukes
  - Overpopulation
  - Environmental destruction
  - Destruction of pre-modern lifeways and l
    in favour of monoculture
- The crisis: lack of public regard for science/distrust
  - 33% of Americans do not accept evolution
  - Climate change denial
    - "Well, I'm not a scientist, but…" does not absolve us from the facts
    - 39% 'trust' information from climate scientists

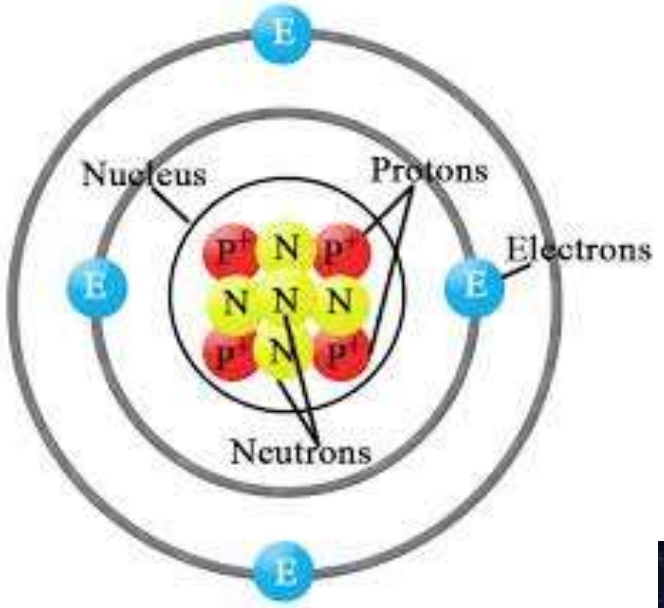
    http://www.pewinternet.org/2016/10/04/public-views-on-climate-change-and-climate-scientists/
  - Anti-vax…only 83% of Americans think vaccines are safe for children

So how can this amazing thing (science) be mistrusted by so many people?

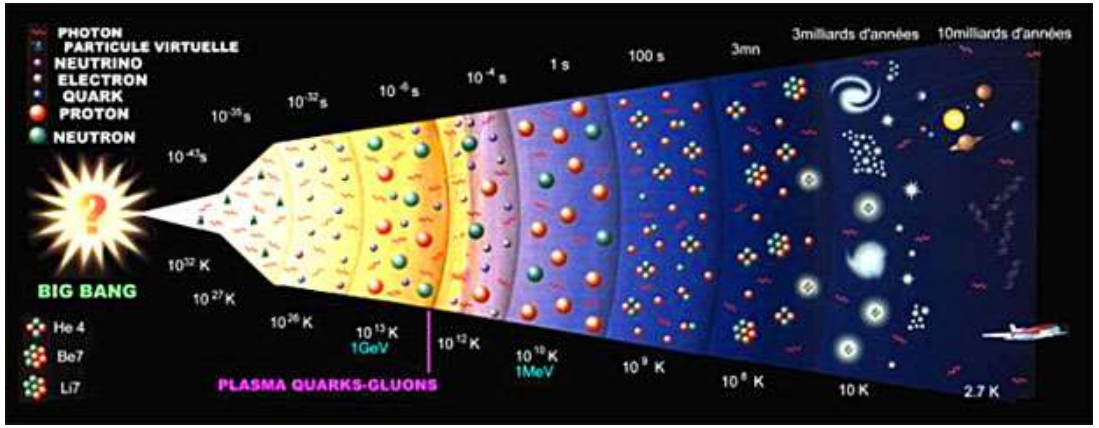
- Often, science conflicts with literalist religious beliefs
- Often a conflict between scientific facts and short-term economic benefits
  - Ie: Many climate deniers are funded by CO2 emitting corps...
- Predispositions/stubborn anti-establishment attitudes
  - Ie: ‘truthers’ of any persuasion

Public mistrust: some deeper issues…

- Many scientific findings *defy* common sense
  - No real solid objects (atomic level)
  - Sun does NOT revolve around the earth
- Hard to imagine/conceive non-everyday experiential scales
  - Solar temperatures
  - Timescales
  - Speed of light
- The more we learn, the less important we seem in the grand scheme of things…



One often overlooked problem: scientific knowledge changes often…all the time…



- This is actually a good thing—a source of science's strength
  - But constant upgrades to knowledge make the public upset/uneasy/confused
- Human beings (including scientists) want concrete, unchanging facts
- Science is cumulative…but also great leaps forward…
- Scientific Revolutions/Paradigm shifts…
- OUR INSIGHTS ARE CONSTANTLY 'EVOLVING'…
  - Although the nature of reality itself doesn't appear to change much…

A good paradigm is a tough thing to lose

- Scientific mindset is really about being intellectually open-minded…in addition to being curious
- Think about the various paradigms that are tough to lose:
  - Newtonian physics
  - Ptolemaic astronomy
  - Animals don't have minds/consciousnesses
  - Bad air to bad microbes to maybe microbes not so bad for us…
  - Homosexuality a mental illness (until 1974)
  - Nutrition science (basically everything—it will change tomorrow)
  - The loss of any paradigm can be difficult
    - Loss of power of entrenched elites
    - Loss of sense of permanence
    - Humility
    - The use of 'conflict' in science by some people who sow doubt (ie: climate change, evolution, etc…)

So relax…perhaps science isn't about certainty but about challenging assumptions

Okay, so let’s press a bit deeper…is science the ONLY way to know the world?

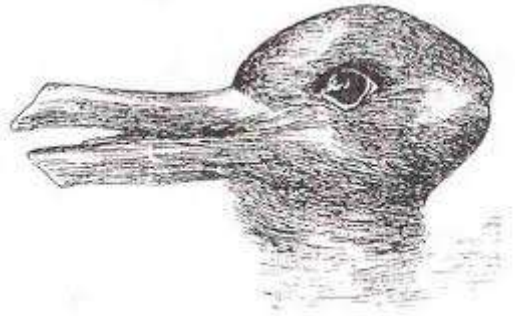
“Science as Truth” (1995)

- Peter Adkins, “Science as Truth”
- https://www.youtube.com/watch?v=Xlu98jypPg0
  - Unlike the tangled webs of philosophy or theology, science gives us truth, or the closest thing we have to it
  - Provides knowledge-base for technological advances
  - Science is free of irrational prejudice
  - Inevitably leading toward knowledge of the universe (teleological)
  - Science is transnational and globalizing
  - Provides most comprehensive and consistent way of understanding the world

“The Folly of Scientism” (2012)

- Science is great, but we should be careful not to turn it into blind faith/superstition
- *Scientism* is the belief that science can answer ALL human questions (to the exclusion of other ways of knowing)
  - Political dimension to this?
  - It still has not answered basic philosophical questions pertaining to:
    - Metaphysics
    - Epistemology
    - Ethics

Paradigm shifts: What do you see?



- Kuhn's 2 central questions:
- The Structure of Scientific Revolutions (1962)
- Philosophical considerations
  - There exists only the current and past paradigms
  - No higher authority to 'decide' exists
  - There is no absolute 'truth'—furthermore, science doesn't need truth: only successful problem-solving within a given paradigm
  - Science progresses, even if only in terms of predictive capacities (not toward greater truth)