THE PHILOSOPHY CLUB

Collaborative inquiry and dialogic argument with young people

www.ThePhilosophyClub.com.au

A PRETTY GIANT UNKNOWN

Reasoning through mysteries – workshop 2

Facilitator's runsheet for a 100-minute workshop about how reality is constructed

[0:00] Welcome and introduction

We're going to pick up where we left off at the end of our last workshop with one final segment inspired by the mystery of Havana Syndrome, and after that we'll move on to a new activity.

In this very short clip, science journalist Dan Hurley is weighing up the mass psychogenic illness hypothesis, which (as you'll recall) is collective stress response based on a belief, leading to real symptoms, despite there being no physical cause of illness. Let's have a listen.

[0:01] > Play 'Havana Syndrome' clip 6 [1] (1 min) - *our brains shape our reality*

Transcript of clip 6:

So in the end we're left with a pretty giant unknown here. We can locate that unknown outside the brain, but we can also locate it within the brain itself.

"I don't understand how my brain works. Nobody understands how our brain works."

He's only slightly exaggerating.

"How does your brain right now create the impression that you are here, that this is your body, that that's the clock on the wall. You know where you are, who you are… Your brain is this incredible organ that creates your reality. It creates your reality. So maybe it's created a reality that isn't consistent with the physical body. You know, we need to be humble in our appreciation of what we don't know about the brain."

[1] This clip uses audio excerpted from 'Unexplainable' podcast (episode 'Havana Syndrome'), featuring science journalist Dan Hurley

© Michelle Sowey, The Philosophy Club 2024

[0:02] SLIDE: Our constructed social reality

Introduce activity [2]

We heard in that clip that your brain creates your reality.

In a similar vein, neuroscientist and psychologist Dr Lisa Feldman-Barrett has said that we live "in a real world of serious make-believe".[3] Our constructed social reality has an astonishing level of influence on our lives, shaping our beliefs, living circumstances, and destinies.

Most of the time, social reality is constrained by physical reality. I mean, we *could* all agree that we can fly through the air by flapping our arms, or that it's healthy to eat glass. But mere agreement won't change the physical nature of things and make these absurd ideas true.

From time to time, though, social reality becomes completely untethered from physical reality, leaving our social reality fragile and vulnerable to manipulation. As an example, take the communities of people who believed that the Covid-19 pandemic was a hoax. Within those communities, the agreed-upon social reality *that Covid wasn't real* dramatically departed from the physical reality that Covid was a serious infectious disease. And failing to recognise it as such gave momentum to the anti-mask and anti-vaccination movements, leading to a dangerous worsening of the pandemic.

[0:04] Card sorting activity

Establish two categories on the floor/board with headers 'Inconsistent with physical reality' and 'Consistent with physical reality'.

Distribute the following cards among students in pairs/small groups. For instance, if you have a 10–12 students participating in the workshop, divide them into three small groups and give approximately three cards to each group.

Consider the following examples of constructed social reality. Which of them are *consistent* with physical reality, and which of them are *inconsistent?*

- Shaking hands is a form of greeting.
- Girls are bad at maths.
- There is value in the bits of paper and metal that we call 'money'.
- National borders are imaginary lines in the dirt. Being born inside those lines gives a person rights of citizenship.
- The mullet (haircut) is currently out of fashion.
- The earth is flat.
- Making and tallying little marks on ballot papers at election time determines democratic leadership.
- Children become adults at a particular age.
- The moon landing was faked.
- In 2016, staff at the US embassy in Havana were under attack by a foreign adversary.

[2] Note: This introduction is adapted from the BBC Science Focus article 'The bizarre science behind how our brains shape reality' by Dr Lisa Feldman-Barrett.

[3] Lisa Feldman-Barrett (23/03/2023), The bizarre science behind how our brains shape reality. *Science Focus.*

© Michelle Sowey, The Philosophy Club 2024

[0:09] Placement of cards, justification of placement and wider group discussion

Respond to the students' reasoning.

Consider weaving the text below into the discussion. This is an excerpt from an article by Robert Bartholomew, an expert in mass psychogenic illness (MPI) who believes that MPI is the best explanation of Havana Syndrome:

> "confirmation bias [is] the tendency to seek out information that reinforces our pre-existing beliefs and stereotypes. Confirmation bias is a major driver of conspiracy theories because when people go down the rabbit hole and embrace beliefs on the margins of science, they often seek out books and websites that support their own views, giving them a distorted picture of the world… A key component of confirmation bias is "belief perseverance"—that's when people continue to adhere to a belief despite compelling evidence to the contrary…
>
> With the release of the new Havana Syndrome report, some politicians and journalists who spent years making the case that symptoms were due to a secret weapon from a foreign adversary are refusing to accept the findings… History is replete with examples where scientists have advocated for a particular position, only to have their claims discredited. But instead of admitting this, perhaps out of concern for their reputations or embarrassment, they refused to accept the consensus of the scientific community and stubbornly continued to double down on their original claims."[4]

[0:22] <u>SLIDE: Houston, we no longer have a problem.</u>

Now for a bit of fun, I'm going to read you a quirky little news article.[5]

Narrate:

> It might have remained one of the greatest mysteries of the universe, destined never to be solved, until a freak discovery by the crew of the International Space Station.
>
> The subject? A tomato grown from seed in microgravity by astronaut Frank Rubio as part of an agricultural experiment. Rubio was accused of having eaten the tomato when it inexplicably disappeared more than eight months ago during a harvesting operation. But the tiny specimen has now been found.
>
> NASA astronaut Jasmin Moghbeli told the media: "Our good friend Frank Rubio has been blamed for quite a while for eating the tomato. But we can exonerate him. We found the tomato."
>
> News of the discovery would come as a relief for Rubio, who returned to Earth after spending more than a year in space.
>
> At his post-landing briefing he lamented the loss of the tomato, which was cultivated as part of a in-space salad-growing experiment designed to advance knowledge of how to sustain astronauts during lengthy missions. Rubio said he feared that he would be forever branded a tomato thief.
>
> "Hopefully somebody will find it someday, a little shriveled thing," he said.
>
> "I was pretty confident that I Velcroed it where I was supposed to Velcro it. And then I came back, and it was gone", he continued, adding that he had spent 20 hours searching for it in the many crevices of the International Space Station.

---

[4] Bartholomew, R. (20/03/2023), What We Can Learn From the 'Havana Syndrome' Fiasco. Psychology Today. https://www.psychologytoday.com/au/blog/its-catching/202303/what-we-can-learn-from-the-havana-syndrome-fiasco

[5] Lightly adapted from Richard Luscombe's 'Lost in space no more', *The Guardian*, 10/12/2023.

© Michelle Sowey, The Philosophy Club 2024

SLIDE: Tomato image and text: 'NASA and space jocks alike…'

Discussion

[0:24]

There are a couple of things in this story that I think are philosophically interesting:

SLIDE: "I was pretty confident that I Velcroed it…'

- Rubio said: "I was pretty confident that I Velcroed it where I was supposed to Velcro it".

  What is the relationship between being confident that you know something, and actually knowing it? Is the perception of confidence an adequate guide?

(OPTIONAL SLIDE: Dunning-Krueger effect)

[0:28]

SLIDE: 'Our good friend Frank Rubio…'

- "Our good friend Frank Rubio has been blamed for quite a while for eating the tomato", a fellow astronaut said. This is a situation in which evidence is altogether elusive. There's a missing tomato, but no clues about what happened to it. There's no 'smoking gun', as it were.

  Was it right for the other astronauts to blame Rubio for eating the tomato? Can we reasonably hold someone accountable for an action in the absence of direct evidence?

  How compelling is *circumstantial evidence* – in other words, evidence that doesn't directly prove a fact, but allows you to draw an inference about the fact? *(In criminal investigations, fingerprints, bloodstains and footprints are all examples circumstantial evidence.)*

    Before the tomato was found, what sort of circumstantial evidence might there have been to support the accusation that Rubio ate the tomato? How would you judge the persuasiveness of this evidence?

    Are there plausible alternative explanations? Do they weaken the persuasiveness of the circumstantial evidence pointing to Rubio being the tomato thief? How would you judge the persuasiveness of these alternative explanations?

[0:35] **Vinland Map Exercise by Richard Farr (created for PLATO), Part 1 (with SLIDE: Vinland Map reproduction)** – *see attached document*

[0:38] **Vinland Map Exercise by Richard Farr (created for PLATO), Part 2** – *see attached document*

[0:39] **Individual or pair work –** *rank the stories from most to least believable*

[0:58] **Report back** *(pairs share their respective rankings with the group)*

[1:03] **5-minute break**

[1:08] **Wider group discussion of rankings**

[1:30] **Creative response time**

[1:40] **End of workshop**