

Chapter 1
Why We Need Critical Thinking

A Precious Thing

- Have any of your beliefs changed over the past five years? Which ones?
- Why did they change? Was this a good thing?
- Have you had a belief change that was bad?

Changing Our Minds

- Being able to change our minds is an amazing human quality often taken for granted
- False beliefs cause many problems
 - Confuse discussion
 - Make poor choices
 - Limit opportunities



Changing Our Minds

- Not a natural and easy process to come to *justified beliefs*, requires practice
- If we neglect this, we get worse at it
- This and our *confirmation biases* combine to show why we need **critical thinking**

Critical Thinking

- Being able to approach issues in the way that gives us the best chance of reaching the most *justified* conclusion
- A skill that requires nurturing and exercising
- But why should we strive for that?

Knowledge and Empowerment

- Consider these statements
 - It's relatively easy to fool someone who doesn't understand the topic under discussion
 - It's unlikely that the average person will have enough specific knowledge to be equipped to judge the truth of many scientific claims

Knowledge and Empowerment

- You can easily find yourself having to either
 - Explain something to someone who knows less than you do
 - Being explained something by someone who knows way more than you do
- In either situation, trust is vitally important to ensure that you aren't fooling or fooled

Knowledge and Empowerment

- *Knowledge* cannot be separated from *power*
 - Abuses of power can suppress true knowledge, or spread false knowledge
- Luckily, we can use critical thinking skills to help avoid such abuses by evaluating the *justification* of beliefs and ideas

Justification

- If you care about truth, then any opinion you hold should be justified
- From science to morality to aesthetics, beliefs across all areas of life can be more or less well justified

“Agreeing to Disagree”

- Does everyone have a right to their own opinions?
- What do we actually mean when we say “Well, you’re entitled to your own opinion”?
- Is this a useful phrase or attitude?

“Agreeing to Disagree”

- If everyone cared about having well-justified beliefs, you would be more likely to say:

“No, not everybody is equally entitled to an opinion. I’ve thought about my opinion for a long time, and can offer you reasons for my opinion being a better one than yours. So in this case, when discussing this issue, I’m very happy to say that I am more entitled to holding an opinion than you are, or at the least that my opinion is the superior one.”

Relativism

- We are increasingly a global people, being exposed to different people, culture, and religions more so than any time in history
- Have to make sure not to take a relativistic view of “truth”
 - Truth is relative to you and your particular situation, rather than universal

If Actions Matter, Beliefs do Too

- Caring about *what* we believe is critical
- Action is typically motivated by thought and beliefs
- What we believe, and what other people believe, have real-world impacts

Opinions, Beliefs, and Knowledge

- Everyone makes dozens and dozens of decisions each day, some consequential and some less so
- Making the best decision possible requires being as well-informed as possible
- This means both a) having facts available and b) treating them responsibly

Being Informed

- Synchronization between what's inside and outside of your head
- You believe those things that are true and disbelieve those that are false
- But we often act as if the world should match our beliefs, not vice versa

Unshared Definitions

- What do we actually mean when we use the following words? Can this cause miscommunication?
 - Belief
 - Opinion
 - Fact
 - Truth
 - Knowledge



Beliefs Matter

- If I believe one thing, and you another, that will change how we interact with the world
- For example:
 - That a gender or race is superior to others
 - That the MMR vaccine causes autism



Evidence for Beliefs

- Should certain beliefs be exempt from having to show that they correspond to evidence?
- If so, which ones? How do we choose?
- We need to have some way distinguish between such beliefs, and *consistency* provides just that

Consistency for Beliefs

- When there is not good evidence to support a belief, how should it be treated?
- Consistency demands we do one of two things
 - Treat all similarly be respecting all
 - Be skeptical about all unsupported beliefs

Consistency for Beliefs

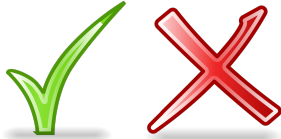
- Skepticism is *not* the same as believing something is false, but instead being open to the chance that it is
- If you are prepared to believe things on the basis of little or no evidence, you increase your chances of believing things that are false

Opinions & Beliefs

- Beliefs can be treated as meaning the same thing as opinions
- Some of our opinions/beliefs could be true and others could be false
- We can hold varying degrees of commitment to our own beliefs/opinions

Opinions & Beliefs

- Beliefs inform both subsequent beliefs and our actions
- So, we should care about holding true ones over false ones




Knowledge

- Should be reserved for things that are both factual and known, not strongly held beliefs
- Something is knowledge if
 - a) You believe it for good reasons
 - b) It is actually true
- “Justified true belief”

If in a dream the Grey Squirrel tells you that you will win the lottery, and you then do, is that knowledge?



If there's not evidence for a belief, then that belief is irrational... even though it might be true!



Justification

- Relates to the evidence we have for holding a belief
- Different types of evidence is appropriate to different sorts of beliefs
 - “This candidate will be the best president!”
 - “There is life on other planets!”


Justification

- Beliefs can be justified *only to the extent of the information available to us*
- If you claim something as true, it is up to you to build enough evidence to justify that belief
- If you haven't done the homework, why should anyone else believe you?

So, what's the point of critical thinking, anyway?


High-ground answer

- Not everything needs to serve a pragmatic purpose
- It is rewarding and interesting for it's own sake
- Makes the mind stronger and more flexible



Middle-ground answer

- What we think is a key contributor to what we do
- We care about what people do, so we should care about how they think



Low-ground answer

- People can be manipulated to do terrible acts, often because they were encouraged to just believe, not to think
- Critical thinking is the best antidote to the sleep of reason, and should be cultivated



Conclusions

- Justification is the most important element in terms of our being able to claim that we “know” something
- Even for moral or ethical claims, there are still better or worse justified claims and beliefs
- We need critical thinking to help us arrive at the best, most true, most justified, beliefs
