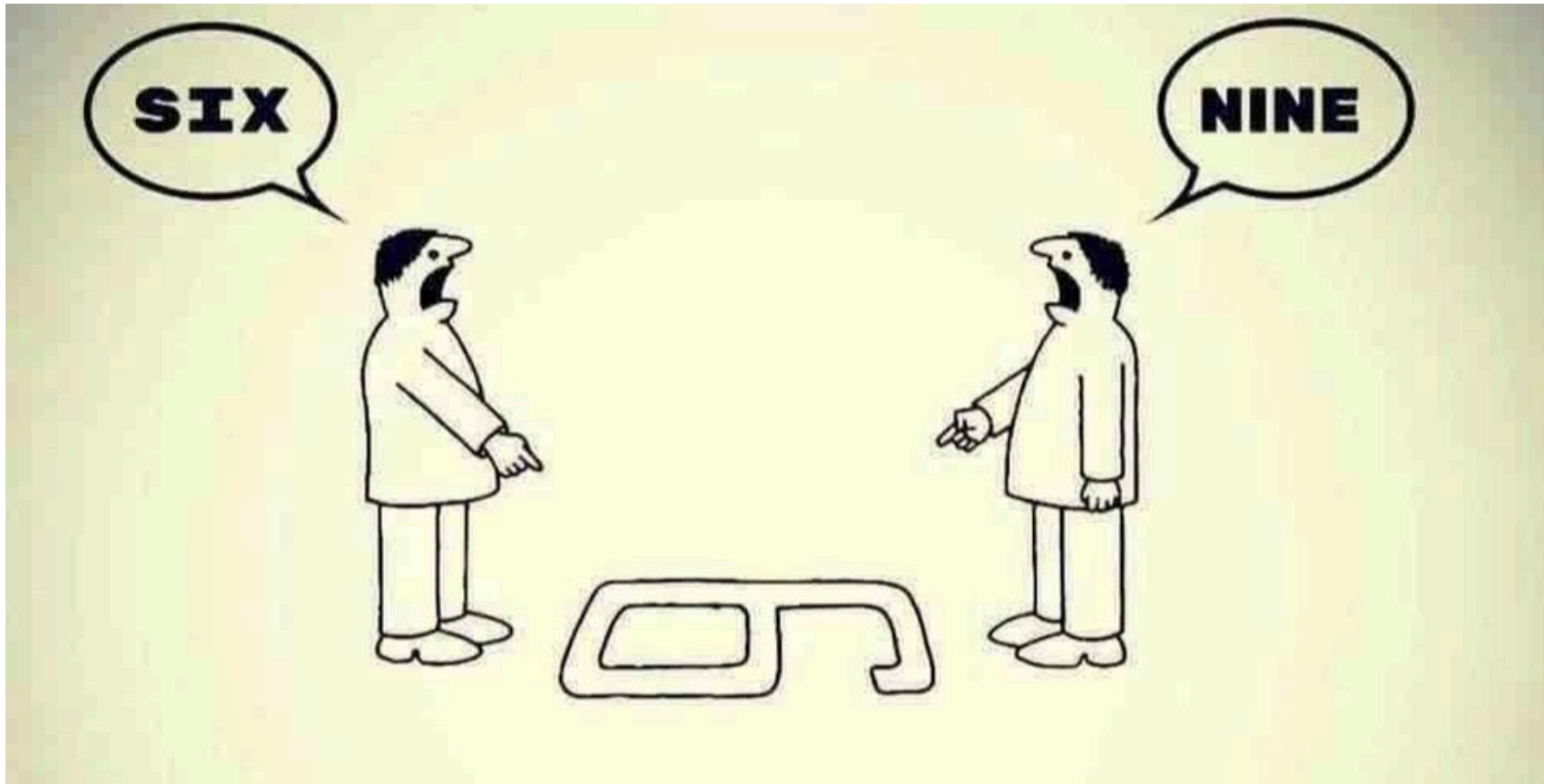


# Bias

Liking one idea better - not giving both ideas the same chance.

# Bias



# Bias in thinking and writing

*Bias in thinking:* When we let our own opinions and beliefs change the way we see, hear and understand information.

*Bias in writing:* When someone uses particular words or facts in a way that makes you want to agree with them.

- ▶ is positive or negative (e.g. "murderbikes" instead of "motorbikes")
- ▶ only shows part of the story
- ▶ stereotypes or discriminates

# Example of Bias:

When YouTube launched the video upload feature for their app, 5-10% of videos were uploaded upside-down, and Google developers were baffled.

Could such a large percentage of users be shooting their videos incorrectly?

“Incorrectly” was the key word.

Google engineers had accidentally designed the app for right-handed users! They never thought about how phones are usually rotated 180 degrees when held in a user’s left hand. [\(Eli Inc, 2016\)](#)



# The good news

As long as you can see the bias and understand it, you can decide whether you think the information is correct or not.

# The bad news

You have biases too - things you like or dislike.

Things you believe incorrectly or unfairly. People *always* have some kind of biases.

You are *definitely* biased. (We all are.)

# Why do we have biases?

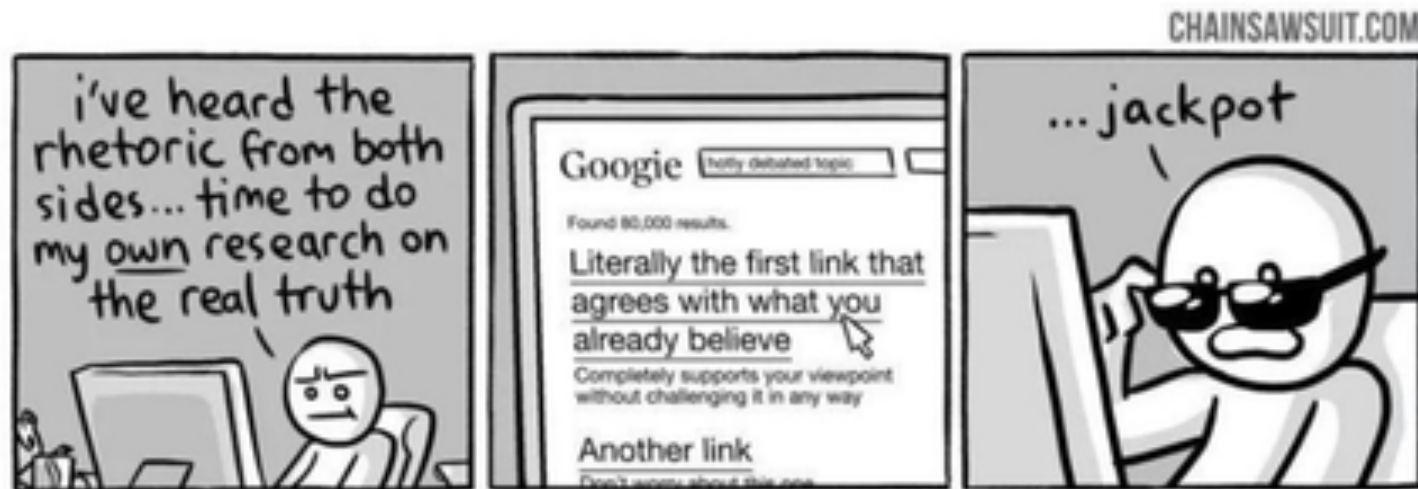
Our brain uses patterns to help us remember things and understand the world we live in. It helps us predict answers and make choices.

But our brains can make mistakes, guessing patterns is a shortcut that can backfire on us! (Sometimes, our guess is wrong!) When we make assumptions based on guesses or feelings, we don't always double check whether our guess was correct!



# Common biases

**Confirmation bias** is when we think we know the answer already. Instead of asking whether we are correct and looking for things that *disagree*, we read only things that agree with us, and use that as proof that we were right all along





# Common biases

**Self serving bias** is when we are kind to ourselves but harsh with others. We make excuses when we fail but we don't let others make excuses when they fail.

You succeed at a test = You studied hard and tried your best.

Others fail = They should have worked hard, like you did.

You fail = The test was too hard, you were too busy to study, the noises outside distracted you... (Not YOUR fault.)

# Common biases

The **Dunning Kruger effect** is a funny but scary one. Professor David Dunning and graduate student Justin Kruger heard about the story of McArthur Wheeler, a robber who thought that he would be invisible if he rubbed lemon juice on his face.

How could he believe that? It sounds so silly!

So they learnt more about him and studied people. They found that people who aren't good at things often think they are very good at things. And people who don't know much about a topic often think they know a lot about a topic.



# Common biases

## The Dunning Kruger effect:

Unfortunately, often, the worse people are at a skill, the more confident they feel.

People who know a little bit have started to understand how much *they don't know*, so they feel less confident.

And people who are bad, don't have the skills or knowledge to tell the difference between good and bad. So, they assume they're great!

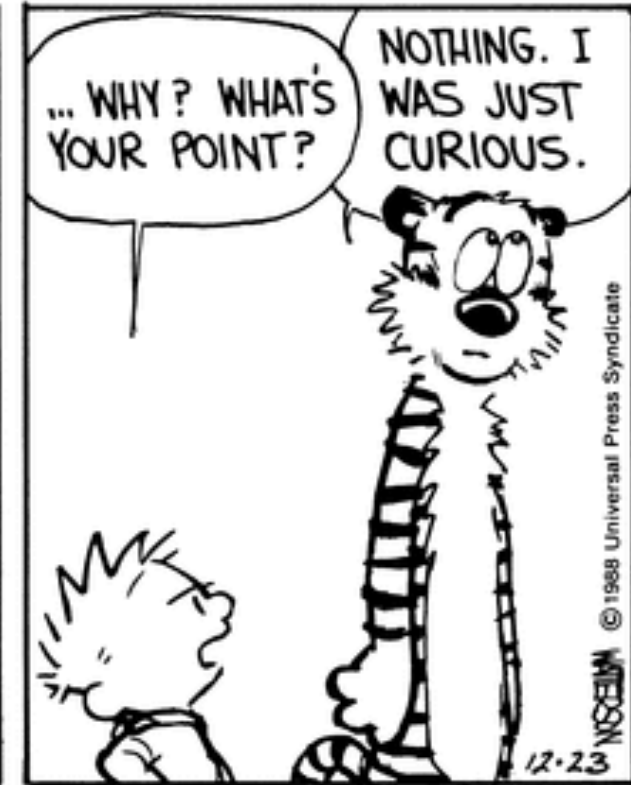
**So our brain doesn't always give us the right information!**  
(And also, sometimes we just don't want to admit we're wrong!)



# The Dunning Kruger Effect:



LOOK AT ME. I'M SMART! I DON'T NEED 11½ MORE YEARS OF SCHOOL! IT'S A COMPLETE WASTE OF MY TIME!



# Motorbikes are fantastic!

- ▶ They're fun!
- ▶ Easy to move through traffic
- ▶ Cheap - use less petrol than cars!

Motorbikes are:

- ▶ thrilling
- ▶ exciting
- ▶ relaxing
- ▶ convenient

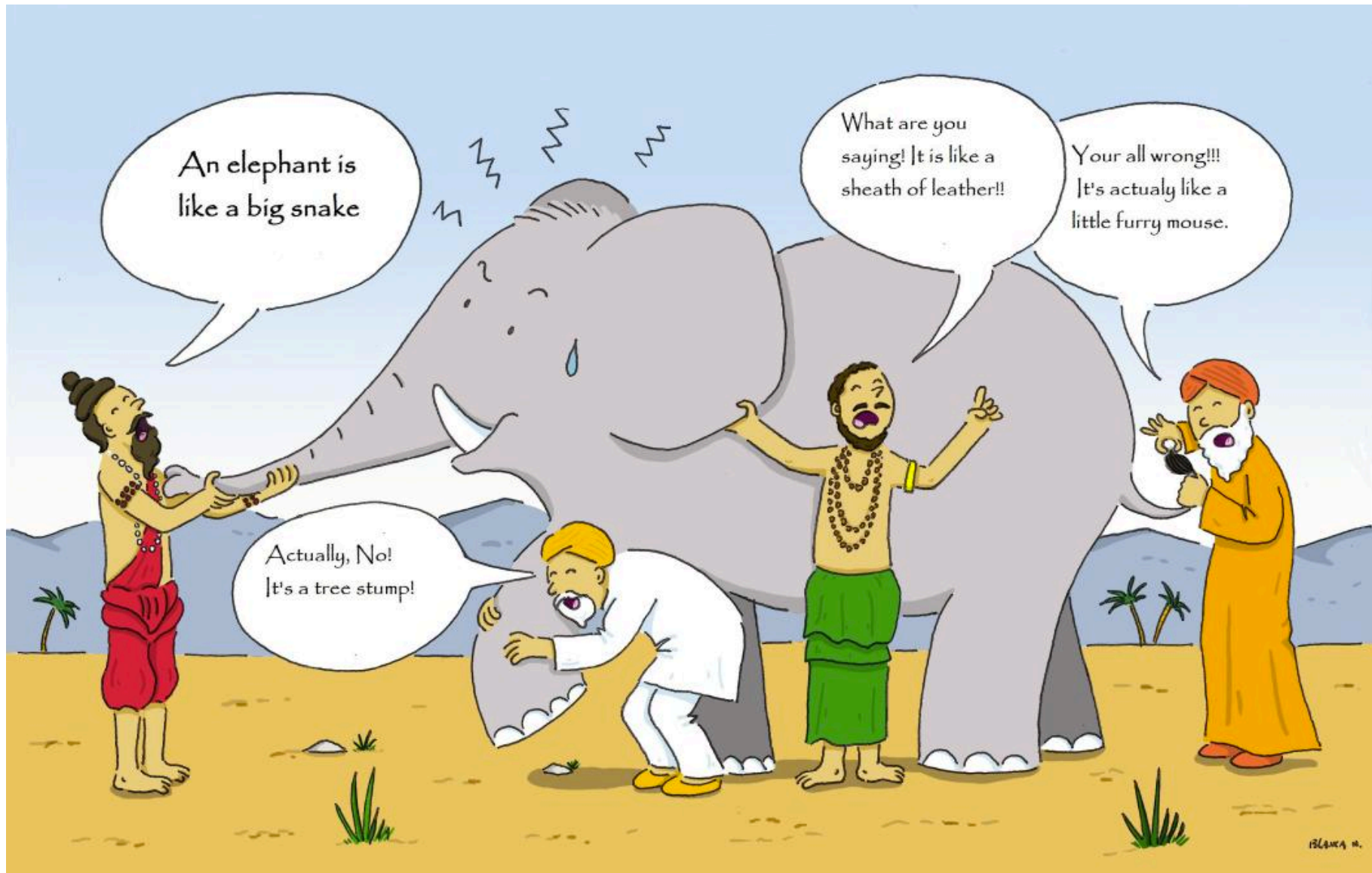


# Motorbikes are dangerous!

- ▶ They are unsafe!
  - ▶ They cause injuries
  - ▶ They lead people to their death!
- 
- ▶ Motorbikes are:
    - ▶ terrifying
    - ▶ unsafe
    - ▶ irresponsible
    - ▶ loud







*Image: A Buddhist tale tells of a group of blind men who try to describe an elephant. (Please note there are some grammar errors, including mistakenly using "your" instead of "you're".)*

# Two sides to the truth

## Two sides to truth

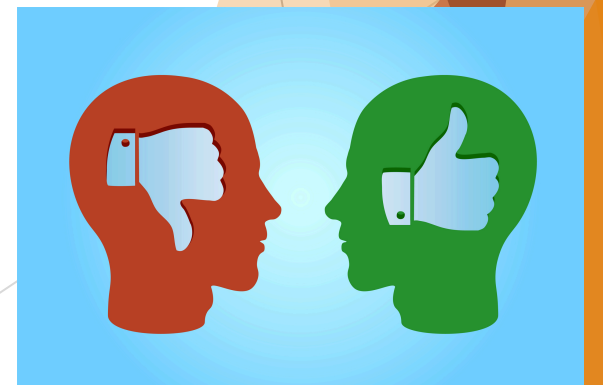
Sometimes people think: If it's a fact, it *can't* be biased. WRONG!  
Including some of the information, but not *all* of the information, can create false understanding. By getting only half of the picture, we don't have all of the information we need.

And the way I use statistics can show very different information:

Wow! 65% of students agree this is a nice school. What a fantastic result!

Oh no... only 65% of students think this is a nice school. That's terrible!

Same percentage - very different result!





# Two sides to the truth

## Ask yourself:

- ▶ Who is the author?
- ▶ What do they want you to think, and why?
- ▶ Have you looked at different perspectives?
- ▶ What do both sides say?
- ▶ Have you read the original study or statistics, to check if the facts are misrepresented?
- ▶ What's missing from this article?
- ▶ Are there any limitations?

## Examples:

Articles about how freedom of speech is impacted by laws against hate speech often don't mention how hate speech is linked to increases in violence. (They don't explain the reason hate speech is banned, so it looks unreasonable and unfair.)

# Connections

Connections like work or family can create bias.

## Questions:

- ▶ Who benefits if you believe this information?
- ▶ Are they part of an organisation or special interest group which could affect their opinion? (affiliations)
- ▶ Is the author linked to a political party?
- ▶ Does the person work at a related company?
- ▶ Do they have any family connections?
- ▶ Are they getting paid for this?
- ▶ Will there be any future benefits for them saying this?

If my brother's company sells more products, he will make more money. I want him to be successful, so I'll tell you all about how great his products are! (And if they're not very good, I'll probably just stay quiet - I don't want to say nasty things about my brother!)

# Perspectives/ Views

## Perspectives/ Views

Having only one perspective or view can create bias. Including multiple perspectives can prevent bias.

One thing to look for is perspectives: Are you seeing two (or more!) sides to the story? For many issues, it is important to see what both "sides" or views are and get as much information as possible when people or organisations disagree.

## Questions:

- ▶ How many different people are sharing their opinion?
- ▶ Are all those people being heard from?
- ▶ Is there diversity in perspectives?
- ▶ Are those perspectives in-depth and *accurate*?
- ▶ Are stereotypes being used?

Some biased sites only give one side to an argument, present false statistics, or if they include "two sides", they misrepresent the other side's argument.

# Perspectives / Views

When talking about the storage of nuclear waste in Australia, we might hear different opinions from:

- ▶ Government
- ▶ Nuclear Waste Storage Businesses
- ▶ Environmental experts
- ▶ "Average" Australians across the country
- ▶ Local people in the area
- ▶ Aboriginal traditional owners

When perspectives, especially minority perspectives, are being reported - are they *accurate*? Aboriginal people have often been misrepresented in Australian media.

Check "ignoring perspectives" too!

# Ignoring perspectives

Yes, we did just say to look at multiple perspectives... but there are some times when it is appropriate to ignore other perspectives, or inappropriate to include them!

There are times we decide we cannot justify listening to "the other side"- if it is *inaccurate, dangerous and harmful*. These usually include human rights issues, health issues, laws and social norms.

# Ignoring perspectives

## Ask yourself:

- ▶ Is this view acceptable today?
- ▶ What evidence is it based on?
- ▶ Is it harmful or dangerous, to you or to other people?
- ▶ Is it discriminatory?
- ▶ Why include it? Is there expertise?
- ▶ Would you feel confident saying this in public?
  - ▶ If yes, *should* you?
    - ▶ If yes, would the average person agree?

# Ignoring perspectives

## Examples:

- ▶ Nazis are bad.  
(Their views are not acceptable. Their views are never acceptable.)
- ▶ Racist ideas -  
(White superiority has been proven false scientifically many times, is dangerous to others and socially unacceptable.)
- ▶ Vaccines do not cause autism.  
(Scientifically proven false many times. No evidence vaccines are connected to autism. This lie is harmful and people can die because of it. It also suggests there is something wrong with people on the spectrum.)
- ▶ Non-experts cannot give expert advice There is a reason we go to a doctor when we are sick.  
(Don't include a non-expert to "balance" perspectives on important and complex problems! Imagine someone without any medical qualifications arguing with a doctor over health advice! And worse... people listening to the non-expert!)



**Shane Jay** Post about it on Facebook. In any case DO NOT take them to a medical doctor. Facebook is the MOST RELIABLE source of medical information - particularly when it comes to Vaccine Science. #GodBless



# Language choices

Where there is a lot of emotion, or something is written as good or bad, there is likely to be bias.

Even when language is more subtle, if a team loses the football game, is it called a loss, a 'close game' or a 'near-win'?

## Questions:

- ▶ Are personal opinions expressed?
- ▶ From whose point of view is the news reported from?
- ▶ Are you hearing "this is good" or "this is bad"? (If so, is there strong evidence this is correct?)
- ▶ What kind of names and titles are used?



# Language choices

## Questions:

- ▶ Are there double standards?  
(Treating one side more nicely than the other for the same thing- see [Kate v Meghan](#))
- ▶ Are stereotypes being used?
- ▶ Are there emotional words being used?
- ▶ Does it appeal to your emotions or does it make you think?
- ▶ Is there actual evidence, or are they just guessing?
- ▶ Are they misleading or lying?
- ▶ Does evidence provided confirm the main point of the source?

# Language Choices

## Examples:

Mrs Chau, an ex-con, says...

Mrs Chau, who served time for a minor offence, says...

There may be other unhealthy ingredients *lurking* in saturated fat-filled foods...

She's passionate and inspired about her organisation.

She's rash and stubborn about her organisation.

Asylum seekers will steal your jobs!

Asylum seekers are welfare cheats!

Asylum seekers are terrorists!

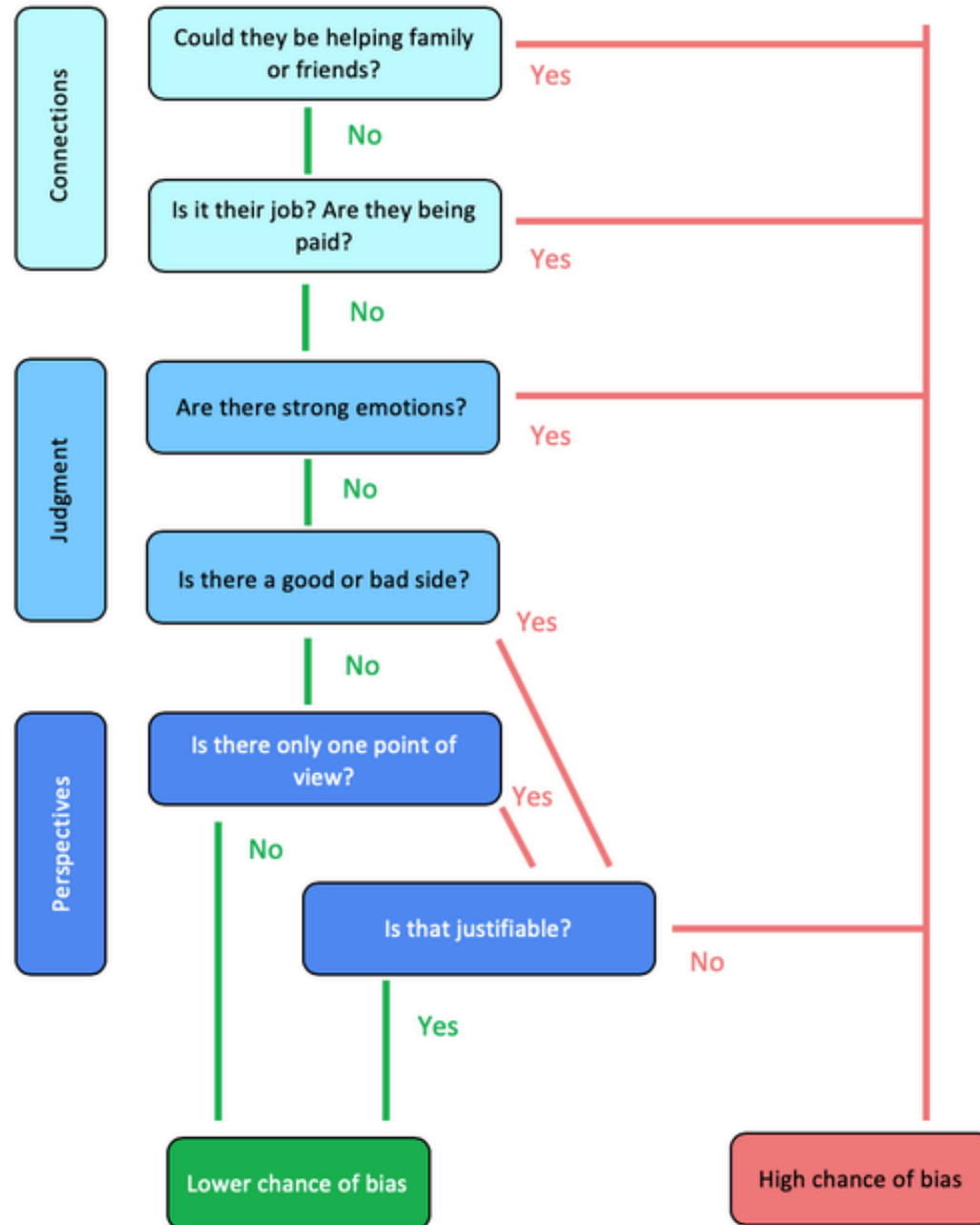
Asylum seekers are brave people just trying to live in peace.

Asylum seekers have better work ethic than most Australians.

It is *horrific* to think that... \*

\*There can be times when "horrific" is not about bias or drama, but used honestly to describe a situation. For example, it is not biased to say that the effect of dropping a nuclear bomb on Hiroshima was horrific. Everybody, no matter which "side" can recognise that a nuclear bomb is a horrifying thing.

## Could it be biased?



# What if my source is biased?

## What if my source is biased?

- ▶ Is this source the best source to use? Can you find a better source?
- ▶ Can you find better sources by looking at sources they cited?
- ▶ Have you looked for other perspectives?
- ▶ Have you ensured information is reliable using other, credible sites?

**Ideally, you will be able to find a source without bias.**

If you can't, then you will need to check the evidence for accuracy, reliability and look for missing information or perspectives. Where there is missing information, you will need to try and find that somewhere else.

# Try to:

Ask yourself who the author is, what they might want you to think, and why.

- ▶ Why was this source written?
  - ▶ To inform? To teach? To entertain? To persuade? To inflame (make things worse/make people angry)? Is the author affected by any bias?
- ▶ Political, social, economic, environmental, religious, cultural, personal or any other bias?
  - ▶ (Remember: People who are biased may not say they are. They might not even *know* they are biased!) Use informative pieces and scientific reports rather than opinion pieces and advertisements.
- ▶ Check sources cited by the article and ensure they are credible, valid, reliable and relevant.
- ▶ Find sources with strong evidence and check that the information has been checked for accuracy.
- ▶ Check that your source discusses multiple perspectives and gives plenty of evidence.
- ▶ Check that the sources give reason for the main point in the story:
  - ▶ Does the evidence *agree* with the article?
  - ▶ Where possible, read the original scientific study to ensure you're getting *all* the facts.
- ▶ Find articles written in a more objective way (less opinion)