



## Special area 2021

# Mistakes and Recoveries

## Introductory Questions (Avan)

Greetings Scholars! Yes this section was actually fully completed by Avan himself! Keep reading and you can probably detect my usual sarcasm, quips and general inner thoughts being portrayed in these notes.

- **When is the last time you made a mistake?**
  - Everyone makes mistakes in their life, some will claim to make them more than others and others will claim they've never made one without realising it beforehand. In terms of myself, the last time I made a mistake (relative to the time of writing) is probably when I decided to stay up late relaxing as opposed to getting a good night's rest and being able to contribute more to the website the next day. I know it isn't exactly a shocking revelation but it is something I regret doing.
- **When is the last time you told someone you made a mistake?**
  - See above.
- **How often do you reassure someone who made a mistake that it's okay? How often do you mean it?**
  - I practically almost always reassure my friend when they've slipped up that it's fine. Generally speaking I mean it almost all the time because what they've made a mistake on is something rather minor that can easily be rectified (i.e a typo on some document for schoolwork or even a misspelling on some text message they sent me). If they're aware that they made a serious error, then I won't tell them that it's okay instead I'll focus more on how to get them not to repeat it in the future before focusing my efforts on actually fixing the mistake.
- **What is the difference between a mistake and a failure? How about between a mistake and an error?**
  - This prompt is one of those more trivial yet somehow essential ones (something the WSC staff appear to be extremely good at slipping into the resources!). The difference between the two often lies in their intentions. A quick Google search for "mistake" and "failure" yields the following result: A mistake is defined as "an action or judgement that is misguided or wrong" whilst a failure is defined as "lack of success" or "the omission of expected or required actions". Thus whilst a mistake is an action undertaken under

misguided intentions or information, a failure is the finished result of that action being totally devoid of any success at all.

Take the following example: if I'm writing an essay about how amazing the World Scholar's Cup is (and let's be honest why wouldn't any of us?) and I mention that Dylan has a tendency to behead alpacas (surprise surprise), then it's a failure on the count that I've failed to succeed in convincing people of how amazing the WSC staff are (thus contradicting my initial intentions for the action). If however I write that Dylan has a tendency to always drink boost juice while decapitating alpacas, it's a mistake (yes he doesn't always drink that nectar of the alpaca gods while relieving Jerrys of their heads, at least not yet) on the count that a misjudgement of information led to the wrong action.

Now the difference between a mistake and an error is slightly less obvious (as if though it wasn't already!). When one searches on Google the word "error", the first definition is literally "a mistake", gee thanks Google; so much for your "all-encompassing knowledge". Thus the WSC staff once again force me to use my analytical skills (not for the first and last time on the program!) to come up with the following explanation: an error is essentially a more formal version of a mistake; in the sense that when one makes an error; they are breaching some pre-set rules by a higher body.

An example would be going over a word count on a school essay; the word count was already in place when you began so you should've intended to remain underneath it while writing the essay (admittedly I've been guilty of this before, yes I tend to write quite a bit, shocker). A mistake would be if you remembered this word count existed, but then forgot to check your document word count just before submitting it. Whereas with the error you were aware of the pre-set rules and broke it intentionally, with the mistake you merely forgot to comply with that rule to a slip of the mind.

- **Is it possible for no one to be blamed for a mistake? Can two or more people all be to blame?**

- Both are entirely possible. They have actually both happened in my life (and probably in yours at some time). The first of these is rarer but does occur nonetheless, it mainly involves blaming an object for a mistake rather than a person. Perhaps two people attempting to communicate with each other will be using a terribly walkie-talkie that muffles some of their speech and as such a misunderstanding occurs (fairly rare what with the speed of technology nowadays). Now with two or more people behind a mistake, that's where we really pick up the frequency and likelihood. Let's take an example from WSC itself: debating. If during a debate you slip up in your wording or mess up a point, the mistake is isolated to yourself. If however you mentioned a point that another teammate came up with and that point is flawed, then both you and the teammate are to blame (you for not analysing the point and delivering it, the teammate for not thinking it through before giving it to you). The general "chain of mistakes" if

you will really comes about when you're working on something with other people; general human trust and our ability to take people by their word can often lead to lots of people being blamed for a single mistake.

- **Is there such a thing as a “harmless” mistake—or is a harmless mistake not a mistake at all?**
  - Mistakes can be harmless or harmful. It just depends on what the impact of that mistake has on subsequent decisions or events. Failing to capitalise an i on a text message won't exactly land you in serious trouble (unless that person on the other side happens to be a grammar fanatic, but they're rare and few nowadays) but forgetting to turn in a school assessment might cause some serious trouble later on down the line. A harmless mistake is still a mistake, the consequences of a mistake does not make the action a mistake; it is merely the fact that an action was undertaken using misguided or false judgement.
- **Is there a difference between an “innocent” mistake and a harmless one? Can you ever fault someone for an innocent mistake?**
  - An innocent mistake usually means that the consequences of said mistakes, or indeed the mistake itself, is usually something that can be excused in light of how little impact it has on the grand scheme of things (big words there I know). Take for example the simple and entirely plausible act of dropping someone's boba tea on the floor (In my case I would gladly do so intentionally, I am not a fan of bubble tea; cue the outrage). You did not mean to cause any harm by that mistake and it was simply a slip of the hand and mind at the same time; so your friend cannot technically fault you for this mistake as you had no intention of it happening. Granted it isn't a harmless mistake, your friend will likely have to go back and pay for another drink and you'll have to clean up the somewhat large mess on the floor but all things considered it's still innocent in nature.
- **Do people make more mistakes as they grow older, or fewer?**
  - This is rather interesting and I'm rather certain you can find a few studies online explaining whether or not the phenomenon of “wiser with age” truly exists. As far as my preliminary Google searches go, adults and the elderly are generally capable of performing roughly the same as younger people when it comes to avoiding mistakes, but they tend to be less adept at recognising when they have made a mistake (that is, they falsely claim to have not made a mistake more than younger people do). Within the context of financial investments, [here's](#) a rather interesting article regarding a study that reveals why older adults tend to make more mistakes when it comes to putting their money into the right places than younger adults.

There are of course several theories behind why mistakes occur more or less frequently with age. Some might claim that the brain's decay as one grows older means it is more likely to make errors in judgement more frequently, whilst others might state that life experiences on the road to old age remind the brain what to and what not to do in certain situations to avoid making mistakes. The general takeaway however is that there is no general “fewer or more” mistake mechanism in humans as far as age is concerned

because the different parts of the brain and body required to make different mistakes cannot be put under one umbrella.

- **When do you need to apologize for a mistake? When don't you?**

- This is more of an ethical question rather than a statistical one (yet another mainstay of the WSC curriculum!) and it honestly comes down to your individual moral compass (whatever that may look like, mine is fairly unusual or so I've been told). Of course I can't even begin to describe what the entire world would normally do because there are so many different rules and ethical considerations in each culture that there is no universal "when to and when not to" guidebook for apologising. The general gist of it however is that if the mistake inconvenience any other person or harms anyone, an apology is generally required. If however the mistake remains personal and hardly does any damage (like a typo on a text message) then an apology is likely appreciated but not necessary. Now of course the degree to which one is "inconvenienced" by a mistake often varies from person to person, so this question is best answered by asking yourself the question scholars.

- **Just as mistakes come in many shapes and forms, so do apologies. How do apologies between friends differ from apologies made by public figures?**

- Apologies between friends will likely be far less formal than apologies made by public figures. A simple "sorry" will likely suffice for the simple mistakes your friends make but that won't do if you happen to be a person who millions of other people know (unless of course you're Donald Trump, in which case sorry is the safest option to even escape your mouth). Public figures will likely make their apologies much longer (especially if its a group they're apologising too, such as the Australian government and the aboriginals with the "Stolen Generations" from last year's curriculum) and far more formal to fully encompass their mistake and acknowledge the consequences of it.

- **How long does it take to become clear whether a decision was a mistake?**

- That again depends on the mistake. If its a minor slip-up it can often take anywhere from milliseconds to entire minutes before you realise you made a mistake. If however it's far more drastic (i.e you forgot to turn in an assignment or remind your friend to wake up in the morning) then it all comes down to how much time passes until someone reminds you of the mistake. Personally the longest I've ever had before realising a decision was a mistake was about several weeks for a minor mistake (poor option of a video game to spend money on) or even months for a major one (realising a failed opportunity to get closer to a girl who I liked).

- **Have you ever realized that you were making a mistake but had no choice but to follow through with it?**

- Yep. This usually happens to many of us and even though we'd like to turn back the clock and revert our decision to even begin making the mistake, we simply press on because current circumstances prohibit us from stopping. With regards to the World Scholar's Cup that often comes to us scholars either in the challenge (when we've got 5 minutes left and hurriedly colour in all 5 boxes for 20 questions) or the debate (when

you realise you've accidentally debated the wrong motion whilst you're 3 minutes into your speech).

- **Has anyone ever told you that you were making a mistake, only for you to disagree with them?**
  - Many people have told me I'm making a mistake and then watch me continue to make it (the smug grin or "I told you so" at the end is almost inevitable at times). The smallest example of this happening is probably my far-smarter friend telling me that I've made a mistake in my working on a math or science question, only for me to stubbornly continue attempting to work out an answer that will never be correct. The largest scale upon which this happened is (as far as memory serves) when those same friends attempted to make me realise that pursuing a love interest was hopeless, only for those same friends to watch fail again and again (yes the self-deprecating humour about my relationship status is back!).
- **Who do you know who makes the fewest mistakes?**
  - Probably my mother. She almost never makes mistakes and always manages to catch me whenever I make one around her.
- **Do you have a responsibility to admit your mistakes to other people?**
  - Ethical question once again. This depends on your own belief regarding mistakes and their consequences. Both need to be considered before any course of action can be decided upon. If you feel as though the impact of that mistake will negatively affect someone else, then that responsibility is yours as the party responsible for the negative consequences. If however that mistake was made in solitude and only affects you, then perhaps a responsibility to admit it to others might not be entirely present (especially if other people tend to mock you for your mistakes).
- **When do you have a responsibility to expose other people's mistakes?**
  - Again this depends on your own ethical considerations and moral compass (dear me we might as well call this section the "Philosophy of Mistakes" if this continues, wouldn't that be something?). If you believe that the mistakes of another person are their own business to deal with, then so be it. If you believe however that the mistakes of that person may soon reverberate on others (that is, it will cause them some harm in later on), then the decision is (as some millennials say) "in your ballpark".
- **Should people be punished for their mistakes—and by whom?**
  - This is certainly a topic we could delve into a little more and flesh out for the benefit of scholars. It combines history, philosophy and ethics into one neat (albeit somewhat long) package. There's also a little bit of politics involved for those among you curious.
    - Basically throughout human history, mistakes that have hindered the progression of a society or have caused serious harm to it are often the mistakes that we as humans have considered "punishable". Now of course as civilisations became more advanced and developed their own systems of justice, mistakes were often very central to the consideration taken into account when prosecuting an

individual or party. Perhaps when Neanderthals and their sub-species once roamed the Earth however, the punishment was far more primitive: nature itself. If an ancient human being failed to remain silent on the hunt or watch their step, they might alert a predator to their location and face some serious mutilation or even death as a consequence. Of course in later centuries, different cultural groups had different ways of dealing with offenders whose slip of judgement came at the cost of the larger collective. In the modern world mistakes is a term that needs to be established in court in order to determine whether or not prosecution of an individual can continue.

- Since mistakes are often non-intentional (except if you pretend you did it by “accident”) and have some sort of consequences, societies are going to deal with the offenders differently. A society that punishes in order to prevent the error from happening again will punish harder than a society that believes in learning from mistakes. For example, countries that have the death penalty have the ultimate goal of preventing mistakes at all costs. In contrast, societies that believe in rehabilitation (such as Northern Europe) believe that learning from the mistake is important regardless how grave the mistake is.
- **Can it be a mistake to tell someone they are making a mistake?**
  - Alright now the WSC staff are either having too much boost juice or attempting to break the very minds of the scholars themselves. In my personal opinion, one cannot certainly tell whether or not telling someone they are making a mistake will lead to further mistakes down the line themselves. Perhaps if one merely perceives that another individual is making a mistake when they are not actually and thus telling them leads to embarrassment and some awkwardness between both parties. If you do choose to tell your friends they are making a mistake, do so politely and provide a logical explanation, like that, even if you are wrong, you get to open a discussion and potentially learn something new.
- **Would it be a better world if we always forgave people for their mistakes?**
  - Not if those mistakes are going to cause some serious trouble to a fairly sizeable portion of the world down the line. Not everyone can be forgiven for mistakes which may alter the course of human history for the worse (then again, in recent memory Donald Trump has done it several times on his tweets and in real life so go figure). It really depends on what we believe counts as “forgivable mistakes” and what doesn’t fall into that category.
- **If a person has only bad choices, is it considered a mistake no matter which of them they choose?**
  - Not particularly in my opinion. Since they were only given the ability to choose those choices in the first place (or abstain entirely, which in of itself might be a mistake), then their misjudgement of information or course of action might be forced upon them. For example, let’s take the following (non-violent!....ish) thought experiment (yep those are coming back too!): Your entire collection of alpacas is going to be taken away and decapitated by Dylan before your very eyes unless you either undergo a process that deletes any memory of the World Scholar’s Cup (Science of Memory scholars don’t

protest, it's a hypothetical situation) or have to listen to Havana on repeat for the rest of your life (frankly that'd be preferable compared to Sample of My Pasta but meh that's my choice). In such a situation, every single outcome will soon be reflected upon as a mistake, but you can't blame yourself for it because it was guaranteed regardless.

- **What is the opposite of a mistake?**

- The opposite of a mistake would likely be a mrvegetable (cue groaning or confused scholars; get it? miss-steak?). Anyways back to the realm of reality, when one literally searches up “opposite of mistake” on the web the simplest answer is just “be right” (again Google has failed me here). Looking closer at the definition of a mistake, the opposite of one making an erroneous action based on false judgement or wrong information would be one making a correct action based on the wrong judgement (a sort of “reverse mistake” if you will).

## **The Psychology of Mistakes | Insights from the Cognitive Sciences (Blaithan)**

- **People seem hardwired to prefer easy answers; they want characters to be heroes or villains and choices to be absolutely right or clearly wrong. But is  $1+1=\text{ORANGE}$  less wrong than  $1+1=3$ ? Consider Isaac Asimov's essay "The Relativity of Wrong"—which asks you to weigh whether many things that we believe to be wrong are actually surprisingly close to right—and whether we need to find better ways to measure the magnitude of a mistake. Discuss with your team: do people actually want easy answers, or is that a mistaken assumption? What is something that your parents believe to be wrong which may be wrong but not that wrong?**
  - Asimov's essay discusses how an English Literature major sent him a letter lecturing him on how every century people claim that they finally understand the universe and every century they end up being wrong. He replied by saying “John, when people thought the earth was flat, they were wrong. When people thought the earth was spherical, they were wrong. But if you think that thinking the earth is spherical is just as wrong as thinking the earth is flat, then your view is wronger than both of them put together.” The whole essay uses the example of the shape of Earth with people believing it was flat in the early days of civilisation, then spherical at around 350BC, then to an oblate spheroid, and to having a pear-like deviation. Unlike what the English Literature major says, Asimov believes that no theory is considered wrong, but actually should be considered incomplete.

People tend to want the right answer to whatever it is that they are trying to find. They end up, however, usually accepting the answer that was the easiest to find as they may not have the tools to get the real answer at that time. To assume that people want easy answers is rather wrong in most cases as usually the principle of their answer is the same as the actual answer, it just needs to be refined at a different time when they have the resources available to do so. I can think of a lot of things that my parents told my brother

and I was wrong which actually wasn't as bad as they made it out to be. There were things like "taking a cookie from the cookie jar is wrong" or "it's wrong to not hold scissors properly when moving" that they told them but in reality, if I took a cookie without anyone knowing or held scissors by the handle when walking I am not going to be hearing police sirens outside as they've come to take me away.

There is definitely a scale as to how right or wrong something is and most of the actions you take in your life would be able to be measured using this. With our society changing so rapidly, it is easy for different views to become outdated over time (like women in the workforce) and move along the scale.

- **Research suggests that when people think back to past experiences, they [focus on their mistakes](#) more than on their successes. What are the positive and negative impacts that this tendency might have on their decision-making?**
  - To know how focusing on our previous mistakes impacts our decision-making, we've got to know why we focus on them in the first place. When we are young and learning, we do many things which have bad consequences. Whether it be dropping a glass, touching an iron, or drawing on the windows, our parents punish us after seeing what we have done in the hopes of preventing us from doing it again. Although this does work, after a number of punishments we begin to believe that if we make a mistake, we will be punished. This makes us scared of making mistakes, as when we do something wrong we anticipate pain, guilt, or regret which, as humans, we want to avoid, hence why we focus on our mistakes rather than our successes.

Now this can have both positive and negative impacts on our decision making. If we didn't think back to our mistakes, then we wouldn't learn what to do and what not to do in certain situations. For example, if someone accidentally touched an iron and burnt themselves, the next time they used it they would think back to their mistake and know not to touch the soleplate. This allows us to try and avoid any punishments that may occur. However, because we are afraid of making mistakes, we may avoid doing some things due to our fear of making a mistake and the possibility of being punished.

The author of the article that held this view was Richard Michael Hui.

- **Some psychologists argue that people who are reluctant to admit mistakes suffer from [fragile egos](#). Discuss with your team: what is the best way to handle someone who refuses to accept they have made a mistake, even when the facts are indisputable?**
  - The article tells us how many people who repeatedly refuse to accept that they have made a mistake are psychologically fragile. These people believe that by standing their ground and not admitting they are wrong that they are showing signs of strength, when in reality, it is actually a sign of weakness. They are not doing this because they choose to, they are doing this because they are afraid that they will bruise their fragile ego, so they decide to ignore the facts and lie.



When there is hard evidence that they are wrong and they still will not admit it, handling them is difficult. One thing the article tells us not to do is “consider their persistent and rigid refusal to admit they’re wrong as a sign of strength or conviction.” By doing this, we are only encouraging them to continue being stubborn instead of facing the facts.

To handle them, it would be best to sound calm and relaxed instead of aggressive as it only causes them to insist that they’re right and criticise anyone who tries to argue otherwise. This way, they may begin to see that their mistake was not that bad and may admit that they were wrong to begin with.

- **We’ve all made mistakes, but what does [the way you react to them](#) say about you? Discuss with your team: what is the best way to respond to a mistake—and does your answer differ for different kinds of mistakes? How important is it that people feel guilty for their mistakes?**
  - When a person makes a mistake, they should respond to this by wanting to learn from it. Studies show that people who think they can learn from a mistake do better after making a mistake than ones who don’t think they can. This can be reflected in our day-to-day lives where if someone does make a mistake, they learn from it and grow more as a person compared to someone who gets frustrated and lets it ruin their day.

All kinds of mistakes should be responded to by learning from them, no matter how extreme it is. If it is only a minor mistake, people should not feel guilty about it as it has no real effect in the long-run. However, if it is a mistake that majorly impacts someone’s life in a negative way then the person should feel guilty for it, but respond by learning from it and apologising.

- **Consider [this argument](#) that “Western” and “Eastern” cultures treat mistakes at school differently. Discuss with your team: is the author making the mistake of overgeneralizing? Based on her findings, should the lowest-scoring scholars on the Challenge be required to retake the test in front of other teams?**
  - The author of this article has made the mistake of overgeneralising a very small aspect of a large culture. The examples used cannot be related back to the population as they are only taken from a small group of people. She only looks at smaller aspects of education in big cultures and has not taken into account a wider range of examples. We can see this when she talks about how “Eastern” cultures see struggle as a sign of strength, when in actuality, she cannot be making this assumption as she only provides evidence from Japan and Taiwan in the article, not data from all of Asia.

From her findings, it would seem silly to have the lowest-scoring scholars on the Challenge retake the test in front of others as it is not the same problem. In her article, a man named Jim Stigler talks about how a child in a fourth-grade Japanese math class who couldn’t draw a three-dimensional cube on paper was made to try and draw it at the front of the class. The rest of the students would judge his cube every few minutes until he managed to draw it correctly. This problem did not require the student to learn and

remember a lot of information, they instead just had to draw a cube using trial-and-error until it was right.

The Challenge, however, is a test of knowledge, so making the scholars who did not do well in it do it again would not change their results largely. Even if they were in front of others, they do not learn from their mistakes unless they know what they did wrong, which defeats the entire purpose of a test. So when they only know their score out of 120, they don't gain any new knowledge which they can use to improve their score in the Challenge.

- **The way someone judges the mistakes of other people—or their own—may be influenced by their upbringing. In one family, a child might be taught that overeating is wrong; in another, that leaving food on one's plate is wasteful. Discuss with your team: are there things perceived as mistakes in one culture that are celebrated in another? To what degree should people adopt the customs of others when they are traveling?**
  - There are many things that are perceived as mistakes in some cultures but celebrated in another. A common one is how people introduce themselves. In some cultures, it may be appropriate to shake one's hand whereas in others it is polite to bow. Because all cultures have different values and beliefs, when someone does something to oppose them, it is considered a mistake and may be offensive to them, even if the person had polite intentions. When travelling, one should do their research and find out any actions that may offend the people who live where they are going. You should adopt these customs as you do not want to insult their culture unintentionally and ruin the trip for yourself and others.
- **Joe Biden recently referred to the president of the United States as Donald Hump; Donald Hump recently declared that he “will stop defrauding all of the people of this country.” People often misspeak; sometimes, as here, they misspeak in ways that suggest they are exposing a thought they would prefer to keep hidden. Learn more about these so-called [Freudian slips](#) (also referred to as parapraxis) and the arguments for and against their revealing true thoughts, feelings, and desires. Discuss with your team: are Freudian slips examples of when it is a mistake to tell the truth? Are there other times when dishonesty is socially preferable?**
  - Freudian slips are believed to be mistakes made when someone is speaking that may disclose something they do not want to reveal. There are many people who believe that these mishaps are Freudian, however there is also a handful of people that doubt the existence of such slips. Obviously Freudian slips are a mistake, but whether they tell the truth is up for debate.

In the experiment with the three groups of men (one that was normal, one that had a provocatively dressed lab assistant in the room, and one which was told there was a 70% chance that they would get an electric shock during the test), the slips they made do show us what they were actually thinking with mistakes such as “fast passion” instead of “past fashion” and “cursed wattage” instead of “worst cottage.” Some slips, however,

may not be Freudian but instead are just mistakes in which letters are mixed up when words are accessed in the brain. These are merely mistakes and do not reveal any subconscious feelings, so are not to be confused with Freudian slips.

There are many times when dishonesty is socially preferable, depending on what the truth is. There are many times when being dishonest is socially preferable, the main one being if you have someone's best interest at heart. Lying to someone with the intention to benefit them has been shown to improve trust and relationships as people care less about your dishonesty and more about your good intentions. If you are going to say something that may be offensive or insulting to people, then it may be best to be dishonest as to not hurt their feelings and possibly start a conflict.

This phenomenon can be even more obvious when multiple groups are interacting. If you ever watched a football game, you see that the different teams try to convince the judge that a player did or did not push another, even though the truth is obvious. Telling the truth that would reward the other team would be socially unacceptable, but some fans would applaud the truthful player for their honesty.

- **Considerable evidence suggests that men and women in positions of leadership are judged differently for their mistakes, although not all studies concur. Discuss with your team: is there any truth to this argument, and, if so, should we take steps to address the discrepancy? For instance, should the media (or teachers) be required to spend extra time discussing the successes of female leaders?**

- There is definitely truth to the argument that men and women in positions of leadership are judged differently for their mistakes as we can see it all throughout society today, with women being treated more harshly for their errors. The experiment done in the first article clearly shows that women who make the same mistakes as men in the same roles are oppressed more than their male counterparts, with the female's ratings dropping around 20 percent more than the male's.

When we look at the study that contradicts this, we can see that even the author isn't fully convinced by the results. Though it does combat the first experiment, the study done had responses from around 300 undergraduate students (averagely ageing from 18-24) who most likely have significantly more open minds than the older generation. Because of this, the study is forgetting a whole lot of people who have their own opinions and are usually the ones who treat the females in higher positions more harshly. We should be addressing this and celebrating the successes of female leaders more than we put them down for their mistakes.

- **How might social factors such as race or class factor into the way we interpret other people's mistakes?**
  - Race, class, and other discriminatory factors play a large role in the way we interpret other people's mistakes. People that are open-minded and do not discriminate against others because of social factors tend to interpret most people's mistakes are the same.

People who are the opposite, however, will criticise people's mistakes more if they are discriminatory against their class, race, sex, or anything else.

This is why female politicians have a harder time getting elected into government as there are a lot of people that still think men are better suited for that position than women. The mistakes of lower-class people are usually responded more harshly than those of higher-class as they are deemed to be less educated so people think that they have more power over them and can punish them more than they deserve to be. From this, we can tell that if someone is discriminated against because of a social factor, such as race or class, then their mistakes are more likely to be interpreted in a way that is worse than it should be.

- **The science of signal detection theory explores the way people perceive and interpret the information around them—but that detection process is not perfect. Research the [basics of SDT](#) and consider: are some of us more prone to perceptual mistakes? How often do you perceive things incorrectly, such as hearing your name when no one said it? Can missed or misinterpreted signals, lead to serious mistakes?**
  - Signal detection theory (SDT) shows us how we make decisions and their outcomes depending on an event in the world that we are trying to detect. If the signal is present and we respond that it did happen, then we call that a hit; if there is no signal but we respond that it did happen, then that is called a false alarm. In the case that there is a signal but we think that there wasn't, then that is a miss; and if there is no signal and we believe there wasn't then that is a correct rejection.

The false alarm and miss are the two negative outcomes of this decision making process. A false alarm tends to occur when someone is paranoid about something, which increases their chance of believing an event occurred. A miss usually happens when someone ignores the signal and thinks that it is not a problem. This can be the case in some occasions, but there are times when the signal should be recognised to prevent any bad outcomes. Hearing your name when no one said it would be an example of a false alarm as there was no signal but you thought that there was.

Missed or misinterpreted signals can lead to serious mistakes such as not hearing an order given to you, disturbing something because of a false alarm, or not hearing something that alerts you, such as a fire alarm. This is why many workplaces do not allow people to distract themselves by listening to music or something similar as they need to be able to respond to any signals given to avoid disaster.

## Everyday Mistakes (Xavier)

- **Not all mistakes shatter the world. Think about the ones people make at home and in school as part of their everyday lives. As you can see, they are often [quite trivial](#). Discuss with your team: what kinds of mistakes are worth worrying about? How often is it okay to**

**misplace your keys or forget to feed the dog? When should you intervene in someone else's everyday mistakes?**

- Everyday mistakes are some of the most common mistakes, but most of them are not worth worrying about. In the above article, some of the 'mistakes' include eating too much gum, sleeping on your back and using a wooden chopping board. Of course, we must worry about life threatening mistakes, or those that endanger or disadvantage others.

However, most everyday mistakes do not directly endanger you, or those around you, as they are mostly inconveniences rather than national disasters. However, making these mistakes regularly can cause harm. If, for example, you continued forgetting to feed your dog, you would begin to endanger it, and that is where everyday mistakes become a risk and require intervention. When an everyday mistake truly begins to occur every single day, then it is now a destructive behaviour, rather than a mistake.

- **With that said, some of these mistakes may start to affect other people. Consider the following examples of technology-related mistakes. Can you think of any others like them? How might they impose real burdens on others—or on you?**

- **pocket dialing | accidental "Reply All" | email storm**
  - **Pocket Dialing:** Also known as butt dialing, this is where your movement causes your phone (in your pocket) to have pressure applied to buttons (on non-smart phones) or if the screen is facing towards you, to have it detect your clothing as if you were touching the screen. This then causes a call to occur, most likely to the last person you called or to 911.
    - Of course, this can cause high amounts of embarrassment if the recipient of the call overhears conversations that weren't relevant to them, but it can also use your phone's call time, wasting money. Pocket Dialing is certainly one of the most annoying things about owning a cell phone.
    - Pocket Dialing has even caused criminal prosecution! In the state of Nevada, a whistleblower (Investigator Joseph Morgan) heard confidential information about corruption within the Las Vegas taxi business, and is now being tried for leaking the information.
  - **Accidental "Reply All":** There is nothing like the feeling of filling out an email, sending it off, and realising you've sent it off to many, many other people who it wasn't relevant to. The Reply All button causes you to send your reply to every single person who received that particular email, can be rather disastrous. Whether it's insulting someone who you have now sent the email too, or releasing information in a workplace that lower level workers shouldn't know, Reply All can be chaotic at the very least.
  - **Email Storm:** Adding on to Accidental Reply Alls, Email Storms are when Reply Alls begin to spiral out of control. They generally begin with a misdirected message, and then ramp up when people begin to hit reply all, generally saying that they wish to be taken off of this email chain and not have these emails sent

to them. However, the real email storm begins when people begin to Reply All, asking people to stop replying to everyone (rather counterproductive), which then results in more people asking others to stop replying and it continues on and on.

- For example, when a contractor for the UK NHS (National Health Service) sent out a 'test' email in 2016 to the 840,000 staff, he received between 200 - 500 million emails in the email chain! This is how things like reply emails can easily get out of control, and can actually cause monetary losses due to email servers going down because of such a burden on the server. Be careful when you reply all next time, you don't want to start a storm.

- **Note From Shaurya:** This is literally how most group chats work

- **sleep calling/texting | closing without saving**

- **Sleep Calling/Texting:** This is a sleep disorder, also known as a Parasomnia, which causes people to use their phone, either calling or texting, whilst asleep. Most often, this will occur when you receive an audible notification whilst in a state of partial consciousness, during which you will attempt to compose a reply or phone somebody.
  - Generally, the texts are either nonsensical or complete gibberish, causing some entertainment to those who receive it. However, some researchers believe that it is more similar to drunk texting / calling, in that those who do it may send / say more raw and unfiltered information. The easiest solution, put your phone outside your bedroom and turn off fingerprint lock.
- **Closing without Saving:** These everyday mistakes are starting to feel like 'disadvantages of technology.' It can be rather limited, such as forgetting to save an email you were going to send to a friend, or as drastic as not saving your project that you started the night before it was due. The main burden that this imposes on us is extra work. The amount may vary, but extra work due to a slight misclick is truly infuriating.

- **succumbing to phishing | insecure passwords | not backing up**

- **Succumbing to Phishing:** Phishing is the practice of sending emails, pretending to be reputable companies in order to receive private details or download malware onto your device. Phishing emails most commonly will lead to professional looking websites, replicated to look like the original, and will then steal this information using a credential-stealing script.
  - These scripts and replicated pages can actually be bought and sold online! By falling victim to a phishing scam, you may simply lose access to your email account. However, it can be much more drastic than that, such as when the Hillary Clinton 2016 presidential campaign emails were leaked due to a phishing scam against the campaign chair.
- **Insecure Passwords:** Despite the constant pressure that we are under to change our passwords, we often end up using easily crackable passwords that a few minutes of work can discover. For example, the three most commonly used passwords are '123456', 'password' and '123456789.' Not exactly unbreakable.

- In fact, even our passwords that we regularly make are easily guessable by computers, as simply adding numbers and symbols doesn't make much of a difference. In fact, ideal passwords are simply long strings of characters, numbers and symbols with random capitalisation. Ideally, we should also use different passwords for every single account. However, we often don't do so, and thanks to this we have major leaks, with Verizon finding that major data breaches within companies are caused by poor passwords 81% of the time!
- **Not Backing Up:** Imagine forgetting to save, but your entire laptop. Welcome to not backing up! We often depend on our laptops, with them being filled with memories, accounts and schoolwork (as well as WSC Notes). Therefore, when we inevitably find that they stop working due to damage, overuse or, worst case scenario, we find that it's been stolen (!) we'd better hope that we have a backup.
  - One horror story involves backups is in regard to Toy Story 2, by Pixar. Someone accidentally deleted a large portion of the film, and the backups hadn't been working for the last month, so it was thought that the film was gone! Luckily, the technical director had been making copies of the film, but it just shows how crucial it is to back up everything!
- **Just because certain mistakes are common doesn't mean they are inconsequential. Many people make decisions that can lead to difficulties down the line. Consider the following examples, then discuss with your team: how can (and when should) you help someone whom you see making these kinds of mistakes?**
  - **overspending | undersaving | credit card debt**
    - **Overspending:** Overspending is spending more money than you can afford, or when the money that you earn is less than the amount that you spend. Thanks to bank loans and credit cards, overspending is becoming increasingly common. The causes of overspending include low income and high, one off expenses.
      - Savings do assist with overspending, but many households have little to no savings. In the end, the only way to help those who overspend is to show them the problem, assist them in managing their money and help them in the creation of a budget. Those who are overspending should be helped when it is beginning to be destructive towards them.
    - **Undersaving:** Due to our love of instant gratification, we often do not save even close to enough of our money, as we would much rather buy a new phone, or a new car. Retirement plans never sound exciting or crucial until you need to retire and don't have enough money. Undersaving can be a lot harder to recognise than overspending, as we don't see people not saving money. However, if you ever encounter someone who is undersaving, once again, assisting them in money management, as well as setting up saving plans where a certain percentage of pay goes into their account is a great idea.
    - **Credit Card Debt:** Credit Cards are such a useful part of the economy, as having cash on hand at all times with 'no limit' seems pretty ideal. However, the average rate of credit card interest, at least in the US, is 17.14%, which results in a

vicious cycle of compound interest. Compound interest is basically interest on the amount in any account as well as interest on any past interest. This results in the money owed going up very quickly with credit card debt, and it can have disastrous consequences, with people having to take out more credit cards to pay off credit card debts, simply plunging them further into debt.

- Some key signs that someone may have credit card debt include using credit cards for nearly all payments, missing payments on credit cards and a low amount of money in a savings account. Of course, money management is crucial if you wish to get out of credit card debt, as well as ensuring that you are paying off one card at a time.
- **Note By Shaurya:** Overspending and undersaving is particularly interesting to those of you interested in economics, and is a useful point in debates. Most economists believe higher spending helps the economy, while some believe saving is the vehicle for investment, as there's more money in banks for businesses to loan. This is an example of a 'mistake' that is controversial in its character.
- **poor diet | reckless driving | procrastination**
  - **Poor Diet:** There are many different forms of poor diet, including over-eating, under-eating, eating too much sugar, too much fat, or consuming too much of the same food. However, all of these start rather small and have a negligible effect on your health. Often, poor diet is caused by the fact that it's 'more convenient' to get fast food, and take out foods rather than cooking healthy meals.
    - However, these foods are high in fat and sugar, and therefore can easily result in obesity, leading to many other health issues. However, even though right now is the easiest time to eat unhealthily, we also have access to healthy food! By eating a more plant based diet (fruit, vegetables, nuts, beans), you can drastically decrease your health problems. The main issue is that these foods can sometimes be more expensive, but spending more money for your health should be worth it.
  - **Note To All Scholars:** Xavier is vegan! Do not trust his advice! He is biased >:(
  - **Reckless Driving:** Reckless Driving is a major traffic violation, generally thought of as a mental state where you show disregard for the road rules, often causing crashes and damage to others. The definition of what constitutes reckless driving varies from country to country, but some common ones include driving over the speed limit, running red lights, racing other vehicles, and driving while intoxicated.
    - Leaving for events early as well as removing distractions can both assist with stopping reckless driving. If you ever feel that someone is driving recklessly, you should tell them about it as soon as you can, as the damage that they can cause if they crash is immense.
  - **Procrastination:** World Scholar's Cup is really looking for issues that affect the scholars. Procrastination is the putting off of a task with a specific deadline, whether it be learning a piece of music, finishing a school assignment or finally writing those WSC notes that you're sure you'll get round to eventually.



- There are many different causes of procrastination, but it's generally thought that if you are indecisive and / or easily distracted, you're more likely to procrastinate. Other people procrastinate out of a fear of getting something wrong, or because they're not confident in their abilities. The easiest solution is forward planning and scheduling, as well as the use of pomodoros (see [here](#) for more info).

## Epic Mishaps of History (Avan)

- **Some mistakes in military history are apocryphal—the stuff of legend. The city of Troy probably didn't naively admit past its gates a horse full of enemy soldiers. But many turning points in history did hinge on one side making a fateful error. Napoleon didn't need to invade Russia in the winter. The North Korean army didn't need to pause its conquest of South Korea for three days, allowing the United Nations time to regroup. France should have realized Nazi Germany could just bypass its northerly fortifications and blitz in through the Ardennes to the south; it fell to Hitler in six weeks. If history is written by the victors, then surely the victors would want to publicize the mistakes of the defeated—but there can be a tension between detailing your enemy's mistakes and not making them sound as if they were too easy to defeat. Discuss with your team: if you were writing about winning a debate at the global round, would you emphasize that your opponents never studied and forgot to charge their laptops—or would you focus on your own preparations?**
  - Now we can have some fun! Scholars if you've been on this website before, you know I take great pleasure at detailing the historical aspect of practically any related concept, however I shall explain the examples listed on the prompt above below with the other cases so fret not, you won't need to read through 1034849 words of historical lecturing by yours truly.

Instead I'll focus on the actual question this prompt poses to us. Personally if I was writing about winning a debate at the global round, I would study every single mistake and detail leading up to the event itself before concluding which factor played a greater role in the outcome. Simply emphasising that the opposing team failed to prepare properly means little if our team also failed to do so as well.

- On the other hand, our team preparations beforehand may have been extremely thorough compared to the opposition, but their natural talent afforded them this oversight. As a self-styled historian I am obliged to investigate every possible viewpoint that may have first contributed to the outcomes of the event before deciding upon which was the “final straw” if you will in influencing the events. So with that out of the way let us move on to the military blunders and tactical mishaps that plagued entire nations for decades (and continue to do so today in some cases!).
- **Research these examples and those below. Were actual mistakes made, and, if so, by whom?**

- **Napoleon's Invasion of Russia | Fall Gelb**

- **Napoleon's Invasion of Russia:** Perhaps the second most widely investigated military action involving Russia after the German invasion during the Second World War; the Napoleonic Invasion of Russia is seen as a dark time for the French Empire whose brilliant military leader had led them to become the virtual masters of Europe in the late 18th century. After the Battle of Friedland in 1807 (as part of the Napoleonic War), Napoleon made peace with the Russian Emperor at the time, Alexander I. Yet even though both nations had a formal alliance between them, relations in the immediate aftermath of the Treaty of Tilsit (signed by both leaders to end the war) began to heat up once again.

The first reason for this was traditional: Napoleon had created a Duchy of Warsaw, leading the Russian government to fear the creation of an entirely independent Polish state (for centuries Russia and Poland have been thorns in each other's sides). Then Napoleon offered to marry Alexander's sister, Grand Duchess Anna Pavlovna in order to cement the alliance (rather typical of the time) but the Romanov dynasty - which both were a part of - hated the idea and refused his offers for a whole year (and I thought I was persistent at failed love attempts!).

Then in 1810 the Duchy of Oldenburg, then ruled by Alexander's sister's father-in-law (confusing European royal family ties indeed!). Yet perhaps worst of all was the Franco-Russian fallout over the Continental System, the economic blockade attempted by Napoleon and his allies to starve Britain (then the Emperor's worst enemy). The hugely unpopular trade restrictions as a result were disastrous to the Russian economy in a time of economic crisis.

Soon Napoleon discovered what would have been inevitable, illegal trade occurring between Russia and Britain. Furious at this breach of the system, the two emperors began to call each other out for "bad faith" on the part of the Treaty of Tilsit. Preparations for war soon began shortly thereafter.

Napoleon was about to undertake the greatest campaign of his military career. Russia's sheer scale and manpower was an enemy he had known all too well in previous battles and invading the largest country in Europe required the largest army Europe had ever seen (fight fire with fire type move there). Calling upon his allies across the Continent, Napoleon gathered 600,000 men of French, Prussian, Polish, Saxon, Westphalian, Bavarian, Italian, Spanish, Dutch, Portuguese, Swiss, Croat and Austrian nationality to launch the largest invasion ever seen. On the 24th of June 1812, this colossal army crossed the Niemen river into Russian territory; thus beginning the bloodiest and costliest chapter in Napoleon's saga of military genius.

In reality the WSC staff have it slightly wrong: Napoleon didn't invade Russia in winter time. As a matter of fact, the Summer steppes were still scorching when Napoleon crossed with his army into Alexander's land. Granted he wished to avoid fighting in winter, knowing full well the inhospitable conditions of the Russian motherland, but in no way did he plan his invasion to take until that long (rather like the Wehrmacht in WW2).

- **Fall Gelb:** German for "Case Yellow", Fall Gelb refers to the military plan of the Wehrmacht (the German armed forces during the Second World War) to push through the Ardennes forest north of the vaunted Maginot Line (a series of heavily fortified bunkers and emplacements along the French-German border constructed in the interwar period) (also the WSC staff made a mistake on their prompt the Ardennes is north of France). During the interwar period, French military tacticians believed that such heavy defenses would deter the Germans from attempting any invasions along the Meuse River just as they had attempted in World War I. Instead they hoped that the Maginot Line would be able to hold the German troops off long enough for French reinforcements to plan a counterattack.

During planning the Ardennes forest was ignored by French commanders, who believed that the Germans would not dare risk placing so many troops in such a forested area due to lack of mobility. In fact during planning for Fall Gelb, German mechanized divisions took advantage of the forest to conceal themselves and slip past the Maginot line undetected. Initial French estimates assumed the Germans would take at least 15 days to cross the forest, whilst in reality forces under General Heinz Guderian managed to cross the area in 2 days (yeah nice estimation) and gain direct access to the Meuse river on May 16th 1940.

In reality the French could've been able to anticipate the German utilising the Ardennes, as they were aware of advances in armoured technology that would allow the rapid deployment of troops through such a heavily forested area and were well acquainted with the new tactic of Blitzkrieg (Lightning War), in which German divisions would target weak points in the enemy line to outmanoeuvre and encircle.

- **Battle of Karansebes | Great Emu War | "Mokusatsu"**

- **Battle of Karansebes:** This is honestly probably the most hilarious one out of the entire lot and yet is so unbelievably ridiculous at the same time. The Battle of Karansebes (now located in modern day Romania) was an imaginary battle that took place between the forces of the Austrian Army, it is one of the largest friendly fire incidents in history. Taking place during the Austro-Turkish War of 1787-1791, the "Battle" was a series of unfortunate events and mistakes that began a domino effect with insanely tragic consequences.

It began on the night of the 17th of September 1788 and involved (of all things) a serious lust for alcohol (some mistake that was!). On that night the Austrian army was camping in Karansebes, believing that an Ottoman attack was imminent. During the night, cavalry (then known as hussars) of the army scouted across a bridge over the Timis river to see if they could spot any of the Turks. Whilst no enemy forces were located, a group of Romani people offered to sell alcohol to the men; which they happily accepted. Thus began a night of heavy drinking.

Soon some infantrymen also scouting encountered the Austrian cavalrymen deep in their festivities and when denied access to the Schnapps, began a fistfight with some shots being fired. Back in the town of Karansebes the wary and sober troops mistook these shots as approaching Ottoman forces and began to yell “Turks, Turks!” to alert the 100,000 garrison.

Across the river, the men who were involved in the brawl heard the cries and began to rush back to aid their fellow comrades. Unfortunately, in the dark, they could not be identified as friendly and thus the garrison in the town began firing at them. The approaching hussars and infantry, believing that Karansebes had already been overrun by the Turks who were now occupying the town, began to fire back in response.

In the confusion, some German commanders attempted to make sense of things by ordering a halt to the firing, but due to the multilingual nature of the Austrian force (made up of Polish, Austrian, German, French, Czech and Serbian soldiers) their cries of “halt!” were misheard as “Allah!” (the battle cry of the Islamic Ottoman soldiers who they believed they were firing at).

By the time morning came to the town, the Austrians had realised their blunder and retreated from the city, with thousands either wounded or missing from the original force. Two days later the Turkish troops arrived in the city expecting serious resistance, only to find many dead Austrians already lying in the city streets and the defenses seriously undermanned.

- **Great Emu War:** Ah surely you’ve heard of this one, scholar. There are so many memes and jokes about this hilarious bit of warfare that you could probably fill a whole page with mockery about it. Anyways let’s get into it then: the “Great Emu War” wasn’t actually that great in the sense that it was a blunder of rather epic proportions. Here’s how it went: during the Great Depression, Australia was hit hard by the economic crash, causing the government to encourage soldier-settlers (ex-WW1 veterans who had been given land to farm upon their return) to grow wheat. Yet when the promised subsidies to help manage the farms and finance this agricultural effort failed, the stakes began to mount on the government.

This wasn't helped at all by the arrival of 20,000 emus, which migrated to the rural Southern farmlands (particularly around Chandler and Walgoolan) to feast on the wheat crops. Enraged by these difficulties, the farmer-soldiers went to the government and demanded that something be done. In response, the minister of defense: Sir George Pearce, provided the farmers with 2 Lewis machine guns and 10,000 rounds of ammunition to deal with the pests on the following conditions: the guns were only to be used by military personnel, the transport would be financed by the Western Australian Government and that the farmers would provide food, accommodation and payment for the ammunition.

On the 2nd of November 1932, Major G.P.W Meredith of the Seventh Heavy Battery of the Royal Australian Artillery led two other soldiers into the "war" against the emus. What ensued was 6 days of blunder after blunder, in which the flocks of emus learned to respond to the machine gunners by simply scattering in all directions. The farmers failed to herd the emus and many rounds of ammunition were shot to no avail. On the 8th of November, Pearce withdrew the machines guns and soldiers after negative media coverage noted that only "a few" emus had actually been killed. Estimates as to the death toll range between 200-500 birds killed for the use of 2,500 rounds of ammunition. All in all a fairly useless campaign, as the birds continued to devastate wheat crops for the soldier-settlements well into the 1930s.

A second attempt was launched on the 13th after further requests for aid from the farmers, this time slightly greater success was found: the soldiers under Meredith killing approximately 100 emus per week. By the end of the campaign on the 10th of December 1932, Meredith cited his report as having killed 986 birds with 9,860 rounds used; a rate of 10 rounds per kill (fairly large for a bird, even a 6ft pest!). The farmers continued however to be pestered by the emus, until the inclusion of exclusion barrier fencing later on became far more effective at keeping out the pests. All in all a fairly pointless war with no actual gain for the Australians.

- **Shaurya's Link for a tl;dr:** <https://www.youtube.com/watch?v=QOPZQHTNUs0>
- **"Mokusatsu":** Right now we're getting into the more serious and heavy-hearted mistakes in history. This term is different from the previous ones in two main ways: firstly, it's a word and secondly it honestly had far reaching consequences that affected thousands. "Mokusatsu" or 黙殺 is a Japanese word that roughly means "ignorance", "take no notice of" or "treat with silent contempt." It's a term actually used by those reviewing international politics to refer to problems the Japanese have faced with misinterpretations of their language.

The most infamous example of this (and also the most tragic on this list in my opinion) was during the Second World War, when the Japanese Prime Minister Suzuki Kantaro commented on the Potsdam Declaration (a statement by the Allies demanding the unconditional surrender of all Japanese armed forces to end the war) on June 28th 1945 by using the word in the press (the specific statement published by the Asahi is as follows: “帝国政府としては、米・英・重慶三国の共同声明に関しては、何等重大なる価値あるものに非ずしてこれを黙殺するであろう” ) This roughly translates to “The Imperial Government will silently reject the U.S., UK and Chongqing Joint Statements without any material value.” It was the use of Mokusatsu at the end of the statement that really ruffled some heads.

See in the Japanese version, the statement basically says that the Prime Minister is “withholding comment” on the matter. However, as can be seen in the Google translation above (and just like what happened in real life with the American translation), the word “Mokusatsu” was believed to translate to “reject” or “consider beneath contempt” .

This outrageous denial of the Potsdam Declaration then, at least as far as the Allies believed it to be one, in some part prompted the deployment of the atomic bombs on Hiroshima and Nagasaki 10 days afterwards. In a startling translation error, whomever erred to add a footnote on the official dispatch document that “Mokusatsu” could mean “refraining from commenting” may be held somewhat responsible for the deaths of nearly 355,000 innocent civilians combined. It is a sad tale and a mistake which few remember for its trivial nature, after all, who cares about a mishap in translation?

- **Napoleon’s Retreat from Moscow | Charge of the Light Brigade**
  - **Napoleon’s Retreat from Moscow:** Perhaps one of the most infamous failures in the saga of Napoleon Bonaparte, Emperor of France. Continuing on from our “brief” introduction to his Russian campaign of 1812, Napoleon’s invasion of the Eastern Colossus is already floundering. The summer heat and disease-plagued steppes of Russia are wreaking havoc on the troops of his own army and those of the other nations supporting his invasion.

After fighting the costliest battle of his time at Borodino on September 7th (in which an estimated 35,000 soldiers of the Grande Armée perished); he entered Moscow on September 15th. Expecting to be greeted by dignitaries and emissaries from Tsar Alexander’s court, he is instead greeted by a city that is quite literally a ghost of its former self. 90% of the population has fled, and the city itself was burning by the time Napoleon arrived.

Count Fyodor Rostopchin, the city’s governor, had ordered that Moscow be allowed to burn rather than have the French tricolour fly over it. 4 days after

entering the city, two thirds of it had been destroyed and no word had been received from the Russian tsar about any form of surrender. Napoleon, well aware that his troops were now suffering from the fatigue of an 83 day long campaign, made the fatal decision to remain in Moscow until the very last possible moment.

Only when the first snow fell on October 13th did Napoleon realise he would have to scrap all plans of his army spending the winter in the city. To guarantee the safety of his supply routes and the survival of his troops, Napoleon ordered all 100,000 men with him to march back to Smolensk, a major supply depot 20 days march southwest of Moscow. On the 19th of October, his entire procession, some 10 miles long, abandoned the Russian city they had fought so brutally for; signalling the beginning of a retreat which would forever be immortalised in history.

Napoleon had initially planned for his troops to withdraw via Kaluga, as opposed to the barren landscapes of Vyazma (where his army couldn't forage for supplies of food). But after the Battle of Maloyaroslavets on October 24th, Kutuzov (the Russian commander who was Napoleon's counterpart) now stood between him and Kaluga. Fearing the outright elimination of his troops, Napoleon decided to retreat the way they'd arrived to Moscow: along the Smolensk-Vyazma road.

By October 29th, the temperatures had dropped below freezing; with the consequences being disastrous for the army. Its horses died en masse, the starving and sick were literally dumped by the side of the road by wagon trains seeking their own survival and Napoleon himself had taken to wearing a vial of poison around his neck after a close shave with Russian Cossack horsemen (the 1812 equivalent of guerilla troops). On the 9th of November, with temperatures already dropping to -20°C, Napoleon and the remnants of his army reached their supposed winter quarters in Smolensk.

But after raiding the supply depot and leaving nothing for the rear guard troops, Napoleon realised that if he allowed his troops to stay there; they would never see the first thaw of spring. So 5 days later, he orders the army out of Smolensk and the retreat continues. Hampered by freezing winds and with the temperature reaching -30°C, the Grande Armée becomes a shadow of its former self.

Only after a desperate and bloody battle at the Berezina River on November 23rd, did the retreat finally fall apart. Napoleon abandoned his men on December 5th, leaving the remaining 20,000 or so still able to fight (from an original contingent of 124,000) at the mercy of the Russian winter and the vengeful Cossacks. Spirited away to Paris in just shy of 2 weeks, the Russian campaign is

viewed and mocked by his enemies (not least the British!) as the worst decision he'd ever made.

- **Charge of the Light Brigade:** “Theirs not to reason why/Theirs but to do and die.” is a chilling line from British poet Alfred Lord Tennyson, describing the loyalty and duty to which the 670 casualties of the British Light Brigade carried out their orders during the Battle of Balaclava. On October 25th 1854, British and Turkish forces clashed against Russian troops attempting to seize the port city of Balaclava on the Crimean Peninsula in the Crimean War.

After initially repulsing the main Russian attack, Lieutenant General George Bingham (with whom overall command of British cavalry forces resided) received an order from army commander Lord Raglan directing his light cavalry forces to pursue retreating Russian forces attempting to carry away naval artillery on the reverse side of the Causeway Heights (a nearby ridge).

However, when the order was verbally delivered by Captain Louis Edward Nolan to the commander of the Light Brigade, Major General James Brudenell; its ambiguity prompted Brudenell (who is more commonly referred to as the Earl of Cardigan) to ask what “guns” Raglan was referring to.

Nolan then responded with a wide sweep of his arms in the incorrect direction, not to where a disorganised mass of retreating Russian forces was, but instead to a mass of Russian guns (50 of them to be precise!) manned and accompanied by 20 battalions of supporting infantry (Nolan had in effect, pointed to the entire Russian army on site!).

Cardigan and his 670 men, realising the semi-suicidal nature of their mission, made no protests and carried it out with the same loyalty and duty that any military formation should have. Charging headlong into Russian artillery and musket fire, the horses were cut down, their soldiers often going down with them.

By the end of the day, the Charge of the Light Brigade had ended in disaster, but their actions had immortalised them in the pantheons of both military and literary legends. Alfred Lord Tennyson’s famous poem commemorating their courage and valour in the face of overwhelming odds is one of the most cited phrases from that time period.

- **Wounded Knee Massacre | Battle of Changping**

- **Wounded Knee Massacre:** Ah brilliant, a terrible military mistake by American forces at last (I’m not going to be very nice to them here, given my past likelihood to berate any terrible actions or people from that nation). The Wounded Knee Massacre is a tragic tale of colonial hysteria and new-world old-



world clashes of the past. Simply put, in the late 1800s American westward expansion into “their continent” had often brought them into clashes with the Native American tribes (colloquially known as “American Indians” from the time of Christopher Columbus).

To ensure the peaceful coexistence of both groups, the federal government often set out “reservations”, plots of land where the Native tribes could live in peace without being interfered with or invaded by the “white man settlers”. Yet the Sioux tribe, with whom the Americans and Europeans had clashed the most; were despairing at the abrupt change of their once peaceful and prosperous lifestyle.

Within this tribe, the Lakota sub-sect were beginning to follow a spiritual leader named Wovoka, who preached that peace and coexistence were the way towards the eventual reunification of the living and the dead. To that end, many Lakota tribes people began to congregate at Wounded Knee Ridge in the Pine Ridge Reservation (located in modern-day South Dakota) to take part in the “Ghost Dance”, a ritual of this newly formed spiritual belief.

Yet the American military and government in the area began to see the dance as preparations for war (admittedly to foreigners the dance may have seemed like a war chant or a wild “hype-up” if you will). The killing of Sitting Bull, the great Sioux chief who had up until then led an armed resistance against forced relocation policies, spurred Lakota chief Big Foot to move his 350 tribesmen to a small valley in the Ridge.

On December 29th 1890, a detachment of US Cavalry, supported by 4 Hotchkiss machine guns, fired into the valley of the Lakota. The ensuing chaos and massacre claimed the lives of 300 of the 350 Lakota, Chief BigFoot among them. It is often remembered as a terrible legacy in the history of Native American - Western hostilities.

- **Battle of Changping:** This mistake is slightly less of a laugh than some of the previous ones on the list, as it resulted in one of the costliest military campaigns in history. It also takes place at the earliest moment of all these events on here, 256BC to be precise. We find ourselves in China, then splintered into multiple kingdoms or “states” (hence the name, “Warring States Period”).

The Qin invade the Han kingdom during this year, with the intention of taking the province of Shangdang, the next four years saw the Qin army practically sweep through the countryside and decimate the fortresses in the province. Then the Han, in an amazing act of political survival, gifted the province to their neighbours - the Zhao - on the condition that they first help to rid it of the Qin.

The Zhao king, Xiaocheng, accepted the prize and sent an army under Lian Po to quell the Qin threat. Three years later however, with no results and the public mocking Lian Po (all part of a Qin plot actually!), the king replaced him with Zhao Kuo, whose father had famously uttered that his son never be allowed to command an army (yeah well done king, great listening there).

Zhao Kuo's command of 400,000 forces went as his father believed it would: terribly.

In ordering a bold attack on the main Qin camp, Kuo's forces fell into a trap set by the masterful Qin tactician Bai Qi. Besieged on a hillside for 46 days, the ill-appointed general led his finest troops in a desperate attempt to break out and return to safety. He was cut down along with his men.

Of the remaining men, Bai Qi executed all but 240 of the youngest (gee, a bit harsh but his fears were justified). All in all, 650,000 men lost their lives in this single Battle, making it one of the costliest in human history. All because a king failed to listen to the words of his loyal general on his deathbed.

- **Failure of the Spanish Armada | Battle of Adwa**

- **Failure of the Spanish Armada:** Europe, 1588. Two powers of the age are at odds with each other. On one side, the great colonial empire of the Spanish, their new possessions in South America making them one of the richest countries in the world. On the other, the small island nation of England, still trying to find its place in this game of empires.

Religious divisions along the Protestant - Catholic lines also lay beneath the motivations for the two states: with Elizabeth I (no not the mother of the current English queen that'd be a ridiculously long life even for her) attempting to provoke a Protestant revolt in Spain.

With the full support of Pope Sixtus V, Spanish king Philip raises a massive invasion fleet to take out England once and for all. All told, 151 ships with 18,000 soldiers aboard set sail from Lisbon on May 29th 1588. They were first headed to the Netherlands (then under Spanish rule) to pick up a contingency of 30,000 more Spanish troops before finally heading for the shores of England.

Poor weather however, hampered the Spanish fleet in the Channel to the point where they hadn't even reached the middle of their journey when the English scouts spotted them on July 19th. The English ships that sailed out to meet the threat, under the command of "sea-dogs" such as the legendary sailor-explorer Sir Francis Drake; were greater in number and skill than the Spanish, who were being commanded by Sidonia, Duke of Medina.

July 21st saw the two forces collide, but inconclusive action meant that no one side could claim victory... yet. Several days later, the English once again brought their guns to bear on the Spanish ships, keeping them from rendezvousing with the 30,000 troops on land (now moving towards the French port of Dunkirk).

On the night of July 28th, the English launched their deadliest weapon: fire ships. Packing eight ships full of flammable material and letting the wind drift them towards Spanish lines, where the ensuing chaos allowed the English to gain the upper hand in the next day's battle. The Spanish Armada, no longer able to fight effectively, was forced to retreat. Yet the route they followed home to avoid poor weather forced them to round the British isles via Ireland and then back down into Spain.

Gale-force winds and the lack of overall unity mean that more ships were floundered on the rocks off the Irish coast than were lost in action against the enemy. By the end of the campaign, only 67 ships with less than 10,000 men arrived back home. It signalled the beginning of the end for Spanish hegemony in Europe and the rise to power of the English (and later British) nation.

- **Battle of Adwa:** Ah Italy, your military achievements are already rather lackluster as is (there's no end to the "changing sides" memes for your WW2 performance and the 104984 battles of the Isonzo river you failed to win in WW1). Yet surprisingly perhaps your worst military performance is almost forgotten to many contemporary memers and historians: The Battle of Adwa.

We find ourselves this time in Ethiopia during the first Italo-Ethiopian War of 1895-1896. Then known as Abyssinia, Ethiopia aimed to remain free of European colonisation efforts; as it and Liberia were the only two remaining countries in Africa to not be part of any European nation's empire. Italy had been eyeing the country for quite some time, not least because of its advantageous position on the Horn of Africa.

In 1896, a series of Ethiopian insurgent incursions into Italian Eritrea prompted immediate retaliation by the Italian government back in Rome. An expeditionary force of 20,000 men was sent to eliminate the Ethiopian threat, they were commanded by Oreste Baratieri. Mistakes plagued the group from the beginning: they were horribly outnumbered by the Ethiopians, with Emperor Menelik II having assembled a massive force of 200,000 troops to smash the Italian invasion.

They were also (believe it or not) less well-equipped than the Abyssinians, who had received modern munitions and even artillery from Russia (surprise surprise,

Italy always forgets the supply situation). On the dawn of March 1st 1896, Baratieri divided his troops into 3 wings that were meant to converge on the nearby hill to the city of Adwa and have their fire converge upon the Ethiopians for maximum effect.

In reality however, Baratieri had underestimated the strength and positioning of his opponents. By day's end, the battle had not really been an equal match but more of an absolute thrashing by the Ethiopians. Casualties for the Italians stand at approximately 7,000, whilst the Abyssinians took 3,700. The Battle marked the symbolic victory of Pan-African unity and determination against European colonisation and would ensure the European powers allowed Ethiopia to mind itself for the next 40 years.

- **Note by Shaurya:** Until the Abyssinian Crisis, where the League of Nations embarrassed themselves by proving their legendary courage by doing nothing.
- **Abraham Lincoln probably shouldn't have gone to the theater, but it would be hard to call it a mistake; he didn't know the play would end badly. Other historical figures, however, have engaged in activities that seem to have been poorly thought-out. Consider the [Aaron Burr Conspiracy](#), [Richard Nixon's bugging of his own White House](#), and [the antics of John McAfee](#), then explore this research into "[the psychology of stupid mistakes](#)". Are powerful people especially prone to facepalm-worthy choices?**
  - Now this is actually quite an interesting study and one I wholeheartedly recommend you read in your own time scholars (not to worry I'll still summarise it here for you, this isn't art and music just yet).

Basically the study uses some of the examples mentioned above to demonstrate "three varieties of stupid mistakes". The first is when a person's confidence outstrips their skill, basically when they believe that just thinking they'll be able to pull something off when they don't have the ability to do so leads them to make the mistake. This is also known as the Dunning-Kruger effect, in which people who are really bad at something believe that they're actually great at it because their confidence prevents them from seeing the error in their thinking.

The second type of stupid mistake is something slightly biological: impulses. Our behaviour can sometimes seem out of control and in no arena is this mistake more viewable than in politics (especially American ones, go read the examples on the article they're quite... interesting).

The final and perhaps most forgivable of the three reasons why "face meets palm" is simply lapses in human attention. The article itself quotes several notable sporting incidents (American football of course) in which the concentration to the game caused athletes to lose their attention for a brief yet decisive moment.

Powerful people aren't always prone to face-palm moments, but because of how much authority and trust has been invested into them; it certainly makes them more susceptible to falling to the Dunning-Kruger effect and impulses because they believe they've got a "get out of jail card" to deal with any mistakes they make (as history and Donald Trump right now will remind us, such a card does not exist for those in power).

- **When an accident happens, at first people rally to help the victims—but eventually the finger-pointing begins. Research the following tragedies. Were mistakes made that people should have caught? Was anyone held responsible for them, if so?**
  - **Halifax Explosion | Chernobyl | The Titanic**
    - **Halifax Explosion:** December 6th 1917, the quiet suburb of Richmond in Halifax Nova Scotia quite literally blows apart in an explosion whose sheer power made it the largest man-made explosion at the time. Iron rails, trees and entire districts were destroyed and 2,000 people lost their lives in the incident. It remains one of the darkest single accidents in Canada's maritime history. But what had caused it? Therein lies a tale of tragedy in a time of panic.
      - Halifax had, during the years of the First World War became an important naval base for the Entente powers as it occupied a crucial resupply and refueling station for cargo and military vessels en route to the theatre of operations in Europe. Under maritime law during the war, all neutral ships were required to dock in the harbour for inspections before continuing on their journey either west to America or east to Europe.
    - In 1917 it was two of these ships that caused the Halifax Explosion. The first of these ships was a Norwegian vessel, SS Imo, it had been chartered by the Commission for Relief in Belgium (then a war zone) to pick up relief supplies in New York Harbour before proceeding onto Europe. Initially meant to depart on the 5th of December, she was delayed due to refuelling issues and was instead given clearance to depart on the 6th.
    - As she made her way down The Narrows (a strip of water connecting the harbour to the Bedford Basin), her captain intended to make up for lost time by going over the 5 knot (9 kilometers or 5.8 miles per hour) speed limit. As a result of Imo's holds being empty and her structure, the ship began to take a course of the starboard (right) side of The Narrows, in line with the regulation that all ships should pass each other on the port (left) side.
    - However, she encountered SS Clara making her way up the port on the wrong side, so Imo agreed to move to the left side of the port, effectively making her travel on the wrong side out of the harbour. She continued along this trajectory regardless, until trouble arrived in the form of SS Mont Blanc. Mont Blanc was a French vessel that had been ordered to pick up munitions for the war effort in New York and then proceed onwards to Bordeaux.

- She had already had her deadly cargo of 2,925 tonnes of explosives along with highly flammable benzol gas on her deck loaded when she arrived at The Narrows. Mont Blanc was travelling into the harbour, attempting to rendezvous with a convoy bound for Europe that had been gathering in Halifax. When the captain onboard spotted the Imo, he signalled to her that she was on the wrong side of the port.
- The two ships both refused to make way for the other, with Imo's captain being propelled by the delay and Mont Blanc's adamant he was following the right rules. A collision occurred at 8:45 AM, with the number one hold of Mont Blanc having been hit by Imo at the seemingly slow speed of 1.2 knots. But the damage had already been done; with the benzol disturbed and sparks from the collision igniting the vapours, Mont Blanc caught on fire.
- Her crew immediately abandoned ship, whilst a crowd of onlookers gathered to see what was going on. Desperate efforts made by nearby vessels to put out the flames or tow the ship out to deeper waters away from the shoreline.
- At 9:04 AM however, the explosives onboard Mont Blanc were set alight by the fire. The resulting shockwave is the largest explosion in history, until the Trinity test of a bloody nuclear bomb in 1945. The damage done is disastrous. Halifax as a city is devastated, with the entire working district of Richmond practically annihilated as if it never existed.
  - In the official inquiry that took place after relief efforts helped to repair the damage done by the explosion, the court found that the crew of the Mont Blanc were guilty for negligence of their duties as a munitions vessel. Their captain did not fly the tell-tale red flag indicating that his cargo was of explosive nature, nor did he attempt to put out the benzol fires before disaster struck.
  - Yet in the years after the incident, the official statement has been adjusted to recognise that the Imo's captain was also at fault for not having reverted his course to be on the right side of the channel. It is a tragic tale nonetheless of how a series of delays, miscommunications and mistakes led to a tragic incident.
- **The Titanic:** The "Unsinkable Ship" of legend and myth itself. RMS Titanic was the world's largest ocean liner at the time of her commissioning in 1912. Yet on her maiden voyage, she would make headlines and shock the world as she and 1,500 of her 2,244 passengers met their icy and tragic end in the North Atlantic Ocean, just days from completing her first trip to New York.
  - The story is one I'm sure you're aware of, hampered by poor visibility at night and the speed at which she entered "Iceberg Alley", RMS Titanic struck an iceberg (what else are you going to hit in a place called Iceberg Alley?) at 23:40 local time on Sunday April 14th 1912. In the immediate aftermath of the sinking,

both a British and American inquiry looked into the incident; one of the worst peacetime maritime disasters in history.

The US inquiry began under the direction of Senator William Alden Smith, whilst the British inquiry reported to Lord Mersey. Both reached broadly similar conclusions: Captain Edward John Smith and his officers could not take the blame for the majority of the disaster, they could be given some flak for steaming into an iceberg-infested danger zone at the high speed of 22 knots (40 kilometers per hour) and having ignored the multiple iceberg warnings that were issued to them upon entry to the area

In terms of regulations, both committees did not accuse the IMM (International Mercantile Marine Co., which was the umbrella company of the Titanic) or the White Star Line that owned the ship to be at fault of negligence. Instead both committees found issues with lifeboat regulation at the time, stating that in future lifeboats should be designed to carry all of a ship's passengers off in the case of a sinking.

Both inquiries also gave severe attention to Captain Stanley Lord of the SS Californian, a passenger liner who was much closer to the Titanic when she sunk and may have even been able to save hundreds more had she responded to the distress calls. Whilst Captain Lord had seen the distress rockets and morse code lights calling for help upon Titanic's sinking, he did not respond to either until RMS Carpathia had already picked up all of the survivors.

- **Note by Shaurya:** Scholars should look up the "SS Californian", as it's a ship that made a serious error in this event which could've been the cause of thousands of deaths.
- **Chernobyl:** Ah, this is the big one (quite literally). If you've ever watched any nuclear history documentaries or anything regarding disasters, chances are you've heard of reactor number 4 at the Chernobyl nuclear power station in Ukraine. I will divert slightly here from the explanation and highly recommend you watch any Youtube videos about the event along with the Chernobyl miniseries from HBO (it really is as amazing as critics say it is!). Those can do a far better job of detailing the scientific (and it is very scientific and somewhat complex in explanation!) aspect of the disaster. As for the mistake aspect, there is something I've had ingrained in my brain thanks to HBO.
  - In the immediate aftermath of the disaster, the blame immediately fell upon the three men whose job it was to regulate the Chernobyl reactor and oversee its operations on the fateful night of the explosion: Anatoly Dyatlov, the deputy chief engineer; Aleksandr Akimov, the unit shift chief; and Viktor Brukhanov, director of the Chernobyl energy plant.
  - These three men had their own part to play in the chain of events leading up to 1:23:45AM on Saturday April 26th, 1986. Yet in the official inquiry which later

took place, Valery Legasov took a bold stand and defended these men, stating that the Soviet Union had failed to inform its operators that what they were operating was in essence a nuclear bomb waiting to go critical.

- In this particular scene from [Chernobyl](#), Valery Legasov claims that the Soviet state had failed to inform the power plant operators one key thing: that the boron control rods which they activated to regulate the reactivity within the reactor were tipped with graphite, essentially turning them into huge metal detonators in the circumstances present at Chernobyl.

## • **The Crash on Tenerife | Challenger Explosion**

- **The Crash on Tenerife:** 40 years ago, air travel was the way to travel around the world. It was becoming safer and more affordable and new planes were rolling out which stood as testaments to the human ability to beat natural boundaries. Yet sometimes, as has been proven in recent air crash accidents, nature reminds us not to be too cocky or prideful of our achievements; for she after all is still in control of our Earth and the systems which govern it.

On March 27th, 1977 the gravest reminder of our place was dished out on Tenerife Island just off the coast of Morocco. Two Boeing 747 passenger jets (yes the original double decker plane you probably dreamed of flying as a kid) belonging to Pan Am and KLM Airlines collided on the runway. The resulting fireball claimed the lives of 583 people, making it the worst air crash disaster in history.

On that day, a terrorist incident at the nearby Gran Canaria Airport had forced authorities to divert many flights, among them KLM Flight 4805 and Pan Am Flight 1736, both of which had been bound for Gran Canaria from Amsterdam and Los Angeles respectively. The collision occurred when dense fog shrouded the main runway of the congested airport, meaning that neither pilots nor ground controllers could see the parties involved in the impending disaster. The congestion also played an unusual role in dictating the route of the Pan Am plane.

Normally at this airport, planes would use a taxiway to turn in to the end of Runway 30 and then take off. Yet with the increased number of planes blocking the taxiway, Pan Am Flight 1736 was forced to taxi down the runway itself before turning left on exit way 3 to make room for the KLM Flight to take off. That was meant to be how events went, but it never transpired that way.

The KLM pilots, having reached the end of the runway, assumed that an ambiguous message from ground control that read “OK, stand by for takeoff, I will call you.” a phrase that was ambiguous, poorly worded and misheard by the pilots as clearance to begin their takeoff. It wasn’t until the planes were within a few meters of each other did the KLM pilot finally realise what had happened. The resulting fireball explosion and carnage was forever immortalised in photographs and news reports from that fatal day.



- **Challenger Explosion:** I'll just link [this](#) video here that truly encapsulates how tragic this simple mistake was for the development of America's space program and also the world's horror at the disaster.
- **Sometimes, companies make mistakes in the release of new products; they fail to catch on with consumers for reasons that seem obvious in retrospect. Consider the following examples, and then discuss with your team: where did these companies go wrong, and did they respond effectively to the poor reception for their products?**
  - **New Coke | Ford Pinto | Samsung Galaxy Fold**
    - **New Coke:** April 23rd, 1985. A day which lived in corporate infamy. Coca-Cola, the giant of the soft-drink industry beloved by millions both in the US and abroad, announced that it would be scrapping the original 99 year old soda formula for a newer, sweeter taste that it nicknamed "New Coke" (they could've at least waited another year to make it a neat 100). Despite the fact that in blind taste tests, consumers stated they preferred New Coke over the old version and even Pepsi, the corporate heads had severely underestimated the level of sentimental attachment that the American nation had developed towards this soft drink of theirs.
    - In many ways, Coca Cola was and remains an integral part of the American identity and the arrival of this "New Coke" greatly upset the market. After being flooded with public backlash in all forms (letters, emails, phone calls and even news broadcasts), Coca-Cola gave in and reintroduced the classic Coke formula just three months after releasing the newer version. It is a cautionary tale of overestimating how willing your customers are to detach from a beloved product to a new one without transition time.
    - **Ford Pinto:** Ah Ford, that classic car company we all know and (somewhat) love. Whether you've actually studied motoring history or not, chances are you've heard of this giant of a brand whose products were aimed (in something that was revolutionary for their time) at the average citizen, not a wealthy business person or whatnot.
    - In 1971, the Ford Pinto was the latest iteration of that maxim, eschewing a sense of quality without compromising the price point to be unaffordable to average Americans. Yet when it first debuted, the Pinto was also a bid by Ford to outdo the Japanese manufacturers such as Honda and Toyota whose cars were beginning to flood the US market. The sub-compact machine was light, affordable and performed decently; so it makes sense that not much attention was paid to it when it first rolled off the production lines.
    - But just 6 years later, an anonymous Ford employee leaked to Mother Jones newspaper that the Pinto had a deadly flaw hidden inside it: the fuel tank. In its early design and development stages the Ford designers had realised that mounting a fuel tank on the rear of a car led to dangerous consequences if said car got involved in a rear-end crash (namely those consequences included all the

fuel leaking out and the possibility of a fire). Measures were proposed to combat the safety issue, but the Ford executives would have none of it.

- They estimated that the cost of adjusting this minor fuel tank issue would be more than double the cost of damage payouts for possible injuries sustained. The Pinto rolled off the production lines with the niche capability of killing its owners if their fuel tanks were hit in a crash. In 1978, after multiple court cases against the Pinto and complaints from the consumers, the Pinto was finally recalled and upgraded with the shielding it so desperately should've been developed with earlier on.
- The dark days of the Pinto were a double stab for Ford, with customers flocking to buy the much safer Japanese models rather than purchase a car from a company who neglected consumer safety in the interest of profit.
- **Samsung Galaxy Fold:** This is rather funny. Simply put, Samsung thought that it would be ideal to release a folding phone (I know revolutionary technology and all) to the world without first ensuring that said phone could actually fold up without breaking the screen and cracking the hinges. As of now the "New" Samsung Fold claims to have solved those problems, but it was kind of hilarious to witness a [video](#) in which the company suggested users handle their \$1,000+ phones with some seriously ridiculous precautions (I'm sorry how on earth am I going to stop every single particle of dust from getting on my phone without the ability to use a screen protector?)
- **Google Glasses | Apple Maps | Windows Phone**
  - **Google Glasses:** Well done Google, you've successfully proven that sometimes tech companies don't exactly care about a little thing called "privacy issues" when it comes to new products.

In layman's terms, the Google Glass was a product that Google first unveiled in 2013 before going public in 2014. In 2015, amidst serious allegations and concerns over privacy laws, Google announced it would no longer be manufacturing said item. I seriously wonder how these tech company meetings go, do they seriously ignore the person who says "umm I'm not sure how glasses that let you record and photograph people without their consent is a good consumer product"

- **Apple Maps:** There's a reason why iPhones these days still use Google Maps despite having practically every other basic utility replaced with their own version of it; the story of Apple Maps. When it was first launched (rather hastily) in September of 2012, the backlash and criticism from the public were so vocal that the CEO of Apple himself, Tim Cook, had to publicly apologise for the multitude of bugs and errors in the map (it couldn't support public transport options, continually got route information wrong and was just plain annoying to use).

Three months later when Google Maps launched (I know right? Surprising release order!) it became the most widely downloaded free application on the Apple App Store (ouch, that's some serious loss there Apple). As of now Apple Maps has been patched and fixed to become better than when it launched, but it still remains a dark chapter in Apple's history of software development. Speaking of software development, Apple's competitor wasn't exactly good at product development itself...

- **Windows Phone:** This [video](#) probably explains it a lot better than I ever can, especially seeing as it's a rather interesting yet sad tale of poor company project handling

## Courting Errors | Mistakes in the Judicial System

- **Judges are human; they make mistakes. Sometimes these mistakes can be [harmless](#), but other times they might require cases to be reopened. Discuss with your team: should judges who make more mistakes be assigned to simpler cases?**
  - A harmless error, within U.S. Law, is defined as an error by a judge during a trial that did not damage the defendant's right to a fair trial. These could include technical errors or an error that was corrected. However, humans can still make mistakes, as we see by the large number of miscarriages of justice (punishing someone for a crime they didn't commit) that still occur today.

If a judge makes these minor mistakes regularly, then it's more likely they will make a major mistake in the future, and therefore it might be better for them to be assigned to simpler cases. In the end, all we can demand is that those who are in the taxing and difficult job of judges do the best that they can, and making minor mistakes is something that all humans do.

- **Canadian law professor Alice Woolley argues that [when judges decide a case immorally](#), their decisions aren't just wrong—they're wrongful. Discuss with your team: who should judge the judge? Should judges consider [changing public values](#) in making their decisions?**
  - Alice Woolley discusses a Canadian Case which occurred in 2015 known as R vs Wagar. This case dealt with the sexual assault of a homeless woman, and in the end, the judge declared the defendant who had assaulted the homeless woman innocent. However, further study showed that the judge was incredibly bias, injecting his own views into definitions, as well as reinforcing gender stereotypes and restricting the defendant's (homeless woman's) evidence that they were able to deliver.

Generally, if it is believed that a court decision is unfair, it could be brought to a higher court, such as the State Court, or the National Court. However, when you reach the national court, if there are still biases that result in wrongful decisions, there is currently nothing we can do. However, by that point judges of a high enough level have already overturned the case.

Changing public values are definitely considered in cases currently, but they shouldn't be entirely based on this. Public values are generally slow to change, and it is rather obvious when major public values are changing. When this occurs, it should at least be taken into account with decision making.

- **Sometimes new evidence comes to light after a case has already been decided. Since 1973, 166 prisoners convicted and sentenced to death in the United States have been freed, largely through the introduction of [new DNA evidence](#). Even in countries without the death penalty, some number of people are probably being imprisoned for crimes they did not commit. Discuss with your team: if a justice system is currently convicting too many innocent people, should we make it harder for people to be convicted—even if this would allow more guilty people to go free?**
  - This is an incredibly difficult question that will largely hinge on your political beliefs. Some people believe that putting a low number of innocent people in jail is a small price to pay for being guaranteed a higher level of safety. At the very least, we need to create a more thorough justice system. Though, of course, this will use more resources and make it more difficult to convict people due to time, it would result in less innocent people being convicted for crimes they didn't commit. In the end, we should attempt to ensure that innocent individuals are not prosecuted, but it is likely that some people will still slip through the cracks.
- **In the 1857 case [Scott v. Stanford](#), the United States Supreme Court ruled that African-Americans should not be considered citizens of the United States. [The Rivonia Trial](#) in South Africa saw 16 leaders of the African National Congress jailed for “fermenting violent revolution”. Today, decisions like these are almost universally seen as egregious mistakes. Discuss with your team: are there similar decisions happening today that will be seen as mistakes in the future?**
  - Within the U.S. supreme court, discussion this year which will likely be looked back on may focus on issues such as gerrymandering, as well as controversial issues such as women's reproductive rights. Globally, I expect that we will look back on decisions against reproduction rights, as well as LGBTQ+ rights as mistakes, but we are not able to quite predict the future. The important thing is to try not to make these mistakes now, and look to the future.
    - **Case Summaries By Shaurya:**
      - **Scott v. Stanford** - Dred Scott was an enslaved man owned by the Blow family, in Alabama, and then Missouri. In 1832, Peter Blow (his original owner) died.
      - Dr. Emerson bought him, and moved to Illinois, a free state. Scott met Harriett Robinson, another enslaved woman, and married her.
      - Harriet's owner gave her to Emerson. There was some moving around, but eventually Emerson died and his new wife - Eliza Sanford - refused to let Scott and his family (now with 2 children) buy their freedom.

- Scott sued Sanford, with help from his church, abolitionists, and the Blow family. He lost his case twice, until it went to the SCOTUS. It was a big deal by this point, but eventually he still lost the case.
- Roger Taney was a judge that basically said that African Americans aren't citizens of the US. He hated slavery, and actually swore in Lincoln, so it's implied that he made the judgement because of his strong belief in states' rights. (A concept that happens to always support the wrong side of history for some reason. Hmm...)
- **Rivonia Trial:** Mandela and his colleagues were charged with 221 counts of sabotage designed to “foment violent revolution”. hilariously enough, the punishment provided to them was under the “Suppression of Communism Act” (RIP Avan). Not very hilarious, though, is that the punishment was the death penalty

Unamused by the farce of a judicial system that was trying him, Mandela gave a speech on why he was “ready to die” for a better South Africa. The UNSC decided to condemn the trial and impose sanctions, and most of us know the rest.

## Mistakes in Medicine and the Sciences (Xavier)

- **One morning in December 1799, retired American president George Washington woke up with a sore throat and a high fever; doctors treated him by draining him of over forty percent of his blood. The practice of [bloodletting](#) was widespread for centuries. It also probably killed him. Discuss with your team: why would something that seems like such an obvious mistake today have been such a popular medical treatment for so long? What practices common in medicine today do you think our descendants will look back at with similar disdain?**
  - Bloodletting, which is an obvious mistake, was commonly used in the Middle Ages and accidentally killed a lot of people. The idea began in Ancient Greece, due to a belief in what was known as the four ‘humors.’ These do not relate to comedy in any way, instead being supposed systems that regulated human behaviour. The four systems were phlegm, black bile, yellow bile and of course, blood. If you were ill then you had an imbalance of these four humors, and therefore must have some removed.

Each of them was ‘tied’ to a particular part of the body that may be ill, with them being focused on the lung, spleen, gallbladder and heart. In the early ADs, Galen of Pergamon, a Greek physician and surgeon, declared blood the most important humor, which resulted in bloodletting remaining a practice long after the idea of humors had disappeared. Though by the 16th and 17th Century, research had been released showing that bloodletting wasn't effective, it persisted until nearly the 19th.

The reason for this was primarily due to societal, economic and intellectual pressures, as those who practiced it were generally rather high up in the medical world, as well as the fact that there was a societal expectation that bloodletting would be carried out.

In the future, I expect that one common day practice that will be thought of with disdain will be chemotherapy, as cancer treatments are continually developing. Chemotherapy destroys normal cells as well as cancer cells, and can therefore be incredibly destructive. In the future, we will likely have much more efficient techniques, and chemotherapy will be thought of as a thing of the past.

- **Another widely discredited medical treatment is the frontal lobotomy. Many psychiatric patients would have the fronts of their brains scraped away, either in a hospital setting or, to save time, right at home, with [icepicks through their eyes](#). The result: zombie-like individuals reduced to fragments of their former selves. Consider the movement [to strip the Nobel Prize from the doctor](#) who first championed frontal lobotomies. Do you agree with those who would punish him, or with those who defend him as someone whose work was well-intentioned? Discuss with your team: when new information comes to light, should historical awards be reevaluated?**

- Lobotomies were carried out by removing the frontal lobe, an area of the brain that allows humans to plan, dream and take action, as well as many other characteristics that make us human. Those who had lobotomies performed on them would most often become docile and withdrawn, a shadow of their former selves.

Though many relatives of those who were lobotomised believe that the Nobel Prize that Egas Moniz - a major champion of lobotomies - received should be taken away, I truly do not see the point in doing so. At the time, his work was well intentioned, and considered a medical advancement, but we now understand that it was a step in the completely wrong direction.

The removal of the reward will not change the past, and if we remove the reward, we risk losing the social and historical context from that time period that caused the Nobel Prize to be awarded to Moniz in the first place. Because of this, I do not believe that in this case the historical award should be reevaluated. In other situations, such as when evidence comes out showing someone cheated, it may be worth reevaluating the award, but that decision must be made based on the information that comes to light.

- **Note By Shaurya:** Nobel Prizes are often controversial, see “Henry Kissinger” if you want to be angry at the committee.
- **Historical medical mistakes tended to be based on misunderstandings and incomplete knowledge of new technologies. Consider these additional examples, and discuss with your team: was anyone to blame for these mistakes, or were they justified in their historical context?**
  - **X-Rays at the Shoe Store**
    - The X-Ray was discovered in Wilhelm Roentgen in 1895, and immediately began revolutionising the medical industry. However, in 1920, Dr Jacob Lowe created the Shoe-fitting fluoroscope. Clarence Keller has also claimed that they created the device, but the patent for it was granted to Lowe. This device was

used in shoe stores to tell whether shoes fit children, as the X-Ray would show the toe bones and how far away they were from the end of the shoe.

Viewing portholes were used to look in, with the customer as well as two other people being able to look into the fluoroscope. When shoe-fitting fluoroscopes were first released, the impacts of long term radiation exposure were largely unknown, and people were not aware that the shoe-fitting fluoroscopes resulted in incredibly high exposure to radiation.

However, post WWII, after the dropping of the Atomic Bombs on Japan, more research began into the long term impacts of radiation exposure. This found that the rate of exposure of shoe-fitting fluoroscopes per second (0.005Gy) was greater than the recommended exposure per week (0.003Gy). In fact, if a child tried on multiple pairs of shoes and used the fluoroscope multiple times, they could receive up to 1.16Gy.

After this, reports of injury, such as skin burns and stunted bone and cartilage growth began to come out. Throughout the 1950s, the public began to question the use of fluoroscopes, with 33 U.S. states banning it by 1970, and the other 17 imposing incredibly strict restrictions on its use. In the case, no one was to blame for this mistake, as the long term impacts of radiation exposure hadn't even been considered in 1920, resulting in shoe-fitting fluoroscopes definitely being justified in its historical context.

- **Radioactive Cosmetics**

- Once again, we come to the issue of radiation. In 1898, Marie and Pierre Curie were the first to discover a radioactive element, being Radium. However, at the time little was known about the effects of radiation, and people immediately began to place Radium in their products, advertising it as having a 'vitalising' effect on the human body. Radium was placed in pills, chocolates, toothpaste, cigarettes, boot polishers, fertilisers and most importantly, cosmetics.

This most commonly occurred in France, as this was where Radium was first discovered, though they were also popular in England, as well as somewhat popular in the United States. The first major company that created radioactive cosmetics was Radior, a London based company, creating products such as soap, rough, hair tonic and face powder, beginning in 1917. However, their most popular product was their 'assorted pads' that could supposedly be strapped to the face and remove wrinkles.

Other major brands include Tho-Radia (founded 1933), a French brand that sold toothpaste, skin cream, lipstick and rouge, all containing a mix of Thorium Chloride and Radium Bromide, as well as Artes (1933) who created rejuvenating

creams. Another popular use included mud treatments, in which an individual was coated in mud, either from the Carpathian Mountains (which was supposedly radioactive) or created by mixing radioactive material with complexion clay.

What made all of these awful is not just that they were radioactive, but that they were radioactive and in constant contact with your skin. Once again, we can say in hindsight this was an awful idea, but the research had not been done at this time, and we didn't know enough about the long term effects of radiation exposure.

- **Note by Shaurya:** Easily the most famous example of this are the "Radium Girls", look them up if you want to flinch.

- **Insulin Shock Therapy**

- Firstly, let's explain what Insulin is, for those who don't know. Insulin is a hormone that allows the body to use glucose (from sugar) as an energy source, or to store it for future use. In 1927, Manfred Sakel began using small doses of insulin to treat drug addicts. After one patient entered a coma and then came out saying that they had a high amount of mental clarity, Sakel began wondering if it could be used for treating schizophrenia.

Treatment was then tested, and it was then taken up by other psychiatrists. In Insulin Shock Therapy, high doses of insulin were used to induce a coma in a schizophrenic individual, with seizures often accompanying it, as the blood sugar level dropped rapidly. However, many doctors believed that these seizures were therapeutic. These comas that they entered would then be terminated by intravenous glucose or naso-gastric tube.

This would then be repeated roughly 60 times (!) over the next two months, before those who had received Insulin Shock Therapy would leave. Success would supposedly occur in 80% of cases (or at least, that's what Sakel claimed). The consequences of Insulin Shock Therapy after it had completed included sweating, extreme restlessness, a chance of further convulsions known as 'aftershocks,' and even death in 1% - 5% of cases.

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Needless to say, in the 1940s and 50s, Insulin Shock Therapy began to decline in use, due to the lack of scientific evidence behind it. It is believed that the reason Insulin Shock Therapy was so successful is because the 'patients' were so terrified of receiving it again, that they didn't react again. It was also proven, in a 1958 study, that the Insulin Induced Coma wasn't helping to cure schizophrenia, though a coma still may have an effect.

However, today we can see that this was truly horrific, and abused the patients who received it. I feel that in this case, Sakel is to blame for this, as the consequences of it



were so severe and the inducing of someone into a coma, as well as all of their ill results after the 'curing' was complete, should have indicated that this was not successful. However, once again they could be justified in the historical context, though it would be a stretch to do so.

- **Cocaine-enhanced medicine**

- Cocaine is an addictive drug that is incredibly high risk. It was first synthesised from Coca Leaves in 1855, though it didn't really begin to be used in medicine in 1880. The first ever use of cocaine in 'medicine' was in 1863, when Angela Mariana released Vin Mariani and Elixir Mariani, which he marketed as a stomach treatment, pain reliever and appetite suppressor. This contained both alcohol and cocaine, and was popular across Europe and the U.S, with supporters including Thomas Edison, H.G.Wells and the King of Spain.

In 1880 was, however, when cocaine use in medicine truly began to kick off. It was first advertised as a cure for morphine addiction. It was then promoted by Austrian neurologist, Sigmund Freud, where he said that he took it regularly to cure his depression and indigestion. Cocaine was then used in many medicines and medical processes throughout the United States, including numbing of eyes for cataract surgery, toothache drops, cocaine lozenges, depression and even to cure hayfever.

- **Note By Shaurya:** The original Coca Cola (as mentioned before) contained coca-leaf extract too, and it was known to give a sort of "rush" to those that drank it. An interesting link in the curriculum in my opinion.

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However, in 1914 the Harrison's Narcotics Act was passed, which banned the sale of any products containing cocaine. Today, cocaine is still used in a small number of medical procedures as an anaesthetic, primarily whilst dealing with the nose or mouth. There is no one in particular to blame for this, though both Nieman (who synthesised cocaine) and Freud (the main promoter of it) would be partially to blame. The reason why it is understandable in this historical context is because cocaine addiction was not known about when it was first used in medicine, and our knowledge of this developed as we used it.

- **Even today, medical professionals can still make [mistakes](#)—from surgeries on the wrong body part to babies switched at birth. More seriously, patients may be misdiagnosed, especially when they are suffering from rare conditions, delaying treatment until it is too late to help them. Discuss with your team: who should be held responsible for such mistakes? With so many hospitals and so many patients in the world, do we need to accept that [some mistakes are inevitable](#)?**

- The mistakes mentioned in the first article are ones that can generally be solved rather easily, with most solutions just being double checking with doctors and nurses that they know what they are doing or doing rather simple things, such as checking a doctor's credentials or calling your GP whilst in the car to the emergency room.

When people are diagnosed with something incorrectly, there is no one in particular to blame. Rare conditions are rare, and are therefore more difficult to identify and so we cannot blame doctors who may not be specialised to know about them. We definitely need to accept that some mistakes will always occur, as even doctors are human, and humans make mistakes. Until we have robots performing surgeries, we must accept that.

- **Note By Shaurya: Brilliant Link By Shaurya!** - Psych student here! Type 1 errors are when doctors say there is an illness, but there isn't one (false positive), and Type 2 are when they say there is no illness, but there is one (false negative). This is directly related to Signal Detection Theory's misses and false omissions.
  - **Actual Note By Shaurya:** Nevermind. They talked about it in the next link. Kill me.
- **Medical tests can sometimes lead to incorrect [results](#), including false positives. Discuss with your team: should doctors emphasize to all patients that test results may be inaccurate, or would this undermine public confidence in medicine?**
  - False positives are when a test result indicates that someone has a particular condition or disease when they really don't, whilst false negative tests indicates that someone doesn't have a particular disease when they do. I think that these days, most people understand that test results might be inaccurate, but it should definitely be something that people are educated about. You would expect your teacher would let you know if you wouldn't pass a class, so you would definitely expect someone to tell you if this test, trying to figure out if you have a life threatening condition, may not be successful.

## He Who Gaffes Last (Xavier)

- **Famous people make infamous mistakes; some can cost lives, but others just damage (or utterly ruin) political prospects. Days before the 2008 American presidential primary in New Hampshire, a debate moderator asked then-Senator Hillary Clinton how she felt about concerns that she wasn't as likeable as also-then-Senator Barack Obama. "That hurts my feelings," she said. "I don't think I'm that bad." Obama offered his own words of support: "You're likeable enough." Obama had just committed a classic political gaffe—mispeaking in a way that would cost him dearly. He went on to lose New Hampshire. Although he recovered to win other states, he would [commit other gaffes](#) along the way.**
  - Firstly, let us define what a gaffe is, in particular a political gaffe. The term refers to a politician saying something rather embarrassing that they wouldn't normally say publicly but that they do privately believe. The reason that they wouldn't normally say it publicly is because of how politically damaging saying it could be.

The gaffe in the above article describes how Obama angered small town, midwestern voters by saying, 'they cling to guns or religion or antipathy towards people who aren't like them or anti-immigrant sentiment or anti-trade sentiment as a way to express their frustrations.' This comment caused a lot of distrust and anger from midwestern voters,

due to the sweeping negative generalisations that Obama made towards them. This resulted in many of these people voting against him during the Michigan Democratic Party Presidential Parties. However, this did not stop him from winning the nomination and becoming President of the United States.

- **Michael Kinsey has described gaffes as a kind of unintended honesty, a moment when a politician (or other public figure) “accidentally reveals something truthful about what is going on in his or her head.” Discuss with your team: are we unfairly punishing politicians for their unfiltered honesty? Or are gaffes the best insight we have into someone’s true nature?**

- If a gaffe is revealing what’s going on inside someone’s head, isn’t that a good thing? Wouldn’t we want to know if a political figure was just putting up a facade and didn’t believe what they were saying? A gaffe’s ability to give insight to someone’s nature is why they are so reported, such as Trump’s ‘Small loan of one million dollars.’ That comment showed us that he didn’t truly understand the value of money, and that most Americans never even get close to achieving that amount of wealth. By looking at these gaffes, we can understand the individuals who wish to represent us, and therefore make better decisions in who we elect.

- **Note By Shaurya:** Someone’s personal character may not necessarily be the right metric to assess their professional character, and thus politicians might leave private predilections behind when in office. I think the issue of “character vs policy” is the real debate this question ignites.

- **Look into the following gaffes, and evaluate whether those who committed them experienced lasting damage. Are they examples of “accidental honesty” or something else? How would you have advised each person involved to handle the aftermath of his or her gaffe?**

- **Cheryl Thomas & “Brainwashing Stations”**

- Cheryl Thomas was running as a Liberal Party Candidate for Victoria, British Columbia, when she suddenly resigned after Facebook comments from her past came back to haunt her. This included the fact that mosques were used as ‘places of education for hundreds of years,’ but are now used as ‘brainwashing stations.’ Needless to say, the outcry from the Liberal party (the furthest left major political party in Canadian politics) and its supporters was immense, and Thomas stepped down from the race less than a week before the vote.

These comments couldn’t be described as accidental honesty in any way, as it would be considered a deplorable political view. In terms of handling the aftermath, this form of gaffe (in which comments the individual has said in the past have been dug up) is rather difficult to respond too, with the only two decent options being to step down or to say that you’ve changed and become a better person.

- **Scott Morrison & “The Two Left Feet”**

- A slightly more comedic gaffe, this occurred when Scott Morrison (the current Prime Minister of Australia) was running his reelection campaign last year. When they had taken a family photo, intended to be used on his new website, his staff realised that he was wearing incredibly dirty shoes, and so decided to photoshop them out and replace them with cleaner ones.

However, they made the mistake of replacing his right foot with a left foot, leaving him with two left feet! This rather comedic gaffe didn't drastically affect his campaign, with Morrison joking on Twitter that the staff should have improved his thinning hairline as well. I believe that the actions he took in an attempt to reduce the impact of the gaffe were relatively successful. In the end, he ended up being re-elected, though he has more recently come under an immense amount of criticism within Australia.

- **Moon Jae-In & “Good Afternoon”**

- Moon Jae-In is the President of South Korea, and whilst visiting Malaysia at a Press Conference with the Malaysian Prime Minister he used the phrase ‘salamat sore’ which translates to ‘good afternoon.’ The blunder came about in the fact that ‘Salamat sore’ is an Indonesian phrase, not Malay, resulting in him speaking in the incorrect language.

This was then repeated again at 8:00pm, adding insult to injury by saying ‘Good Afternoon’ in the evening at a major diplomatic dinner. This was seen as an absolute diplomatic disaster in South Korea, with The Korea Times saying that it showed a ‘serious lack of professionalism and ethics.’ The foreign minister ended up apologising to the government, admitting her ministry had made ‘a painful mistake.’ However, when the Malaysian President’s Office was contacted, they said that ‘Salamat Sore’ was a completely usable phrase in Malaysian.

They also said that they were ‘happy and amused when the President said it,’ and that it was a ‘non issue.’ Therefore, we must consider, is a gaffe actually a gaffe if the group that it supposedly will offend is not offended in any way? This definitely wasn't an example of accidental honesty, and can best be described as a human error in translation. No one should be blamed for this very minor mistake that, in the end, caused no harm.

- **Pope Francis & the Hand-Slap**

- On New Year’s Eve, 2019, Pope Francis was walking towards a nativity scene at the center of Vatican City. As he was walking through St Peter’s Square on the way to the center, he greeted many people who had gathered along the side, shaking their hands. However, as he moved away from this crowd, a woman grabbed the Pope’s hand and yanked him towards her. He then slapped the woman’s hand and began to move away, looking visibly annoyed.

The next day, he apologised for what he'd done, saying 'Love makes us patient. So many times we lose patience, even me, and I apologise for yesterday's bad example.' I do think that this apology is genuine. Based on the fact that he immediately addressed the issue also, it shows that he wished to set a good example. This gaffe likely did reveal some accidental honesty, as it shows how the Pope's job is incredibly stressful, but his apology and response make up for it, and show his desire to be better.

- **Michael Dukakis & the Tank**

- Michael Dukakis was the Democratic nominee for the United States Presidency in the 1988 Presidential Election. However, Dukakis was considered rather reserved and soft on defense issues by the American Public, as he planned to weaken the missile defense programme that was being proposed. In an attempt to counteract this, Dukakis went for a photo-op at the General Dynamics Land-Systems Plant in Michigan, taking photos of him in a tank. This was meant to show he wasn't as anti-war as many people believed.

However, the photo op was then used in ads by the Republican Nominee George H. W. Bush which promoted the fact that he was unfit to be in command of the United States' Military. The very relaxed manner he had in the tank photo-op resulted in his election campaign completely failing, with Bush receiving the nomination with 426 out of the 537 Electoral Votes. The main issue with this gaffe was that Dukakis was attempting to be someone who he wasn't, and by doing so left himself open to be attacked by his opponents. There was no easy way to combat the ad created by Bush's campaign, and it goes down as one of the greatest political gaffes in history.

- **Some errors seen as gaffes may be the result of misinterpretation or of technical issues beyond a person's control—such as the microphone that recorded the “[Dean Scream](#)” in 2004 while muting the audience noise around him, exactly as it was meant to do. Discuss with your team: if you were Howard Dean, how would you have responded to the situation? Would you have explained to the public that the microphone was to blame?**

- Howard Dean was a presidential candidate in the 2004 Democratic Primary, who had just come 3rd in the Iowa Caucus. In an attempt to rally up his fans, he started a powerful, energetic speech about where they would go next, finishing in the iconic 'Dean Scream,' a loud YEAAH! This was one of the first ever political memes (of which there have been many), and many believed that it doomed his campaign.

This is because with the microphone set-up, the almost deafening cheers and screams of the audience were not picked up by NBC, instead with it sounding like Howard Dean just energetically screamed. The media played the clip of the Dean Scream over 600 times in the four days following it. There's also the misconception that the scream actually doomed the campaign. Those who worked on the campaign have said that it was the gaffes beforehand that resulted in them losing the presidential nomination, not the

Dean Scream.

However, the Dean Scream lives on, in late night talk shows, song remixes and political comedy videos. I believe that Howard Dean responded incredibly well, as in an interview he said he was ‘a little sheepish... but I’m not apologetic.’ He conceded that he looked slightly ridiculous due to the Dean Scream, but continued to run nevertheless. The main issue that would have been faced if Dean, or anyone else, had blamed the microphone is that people would have claimed they were making excuses, even though we now know that it is true. It probably would have been worth explaining it to the public, but it wouldn’t have made the best news story, possibly discouraging the media from promoting it as well.

- **Politicians are not the only people who can commit gaffes; any source that is supposed to be unbiased or reliable is particularly vulnerable to them, as when CNN accidentally identified Russian President Vladimir Putin as a [hostage-taking British terrorist](#), or when the Chicago Tribune [announced the wrong winner](#) in the 1948 United States presidential election. Discuss with your team: should news sources that make mistakes be required to pay reparations to those affected? What about news sources that intentionally spread false information?**
  - There are not many gaffes as major as accidentally putting Vladimir Putin on screen whilst discussing a Jihad John, a masked terrorist who had been recently identified, or a mistake as large as announcing that Dewey had defeated Truman in the 1948 election, when it was actually the other way round. I do not believe they should have to pay reparations to those affected, but there must be some form of recognition that they made a mistake, hopefully a front page headline rather than something at the back. The issue comes from a news source that spreads false information. If, for example, CNN had continued to state that Jihad John was actually Vladimir Putin, there should have been some form of fine against them (at least in my opinion). This information is a falsehood, and should be treated as such.
- **In 2012, New York Magazine offered its own take on the “[taxonomy of gaffes](#)”, dividing them into five different kinds. Does their classification seem reasonable to you—or does it seem agenda-driven in some way?**
  - The six different kinds of gaffes that the New York Magazine describes are,
    - The Glaring Factual Error Gaffe: Very common gaffes, where candidates make ridiculous mistakes, such as referring to a candidate by the wrong name. These are not very impactful, as most voters find it entertaining, and then it’s forgotten. (For example, Scott Morrison photoshopping his dirty shoes, or Don Quayle saying that the air on Mars would be breathable because there used to be water there)

**Note By Shaurya:** AKA the “Donald Trump Gaffe”

- The Out-of-Context Gaffe: Phrases which make sense within the context of a particular speech, but when taken out of context can paint the candidate in a

negative light.

**Note By Shaurya:** AKA the “Pewdiepie Gaffe”

- The Kinsley Gaffe: This is the gaffe described by the WSC, in which a politician accidentally tells the truth during a public presentation, revealing something about themselves and their views. (For example, Hillary Clinton calling Trump supporters a ‘Basket of Deplorables’)

**Note By Shaurya:** AKA the “Other Pewdiepie Gaffe”

- The Hot Mike Gaffe: This is similar to the Kinsley Gaffe with the main difference being that the information shouldn’t have been heard by the public, and was ‘leaked out’ by the press.
- The Undisciplined Surrogate Gaffe: This one isn’t truly a gaffe, but is considered one. Undisciplined surrogate gaffes occur when supporters and endorsers of a candidate say that they disagree with specific policies (which makes sense, considering we all have different views), with the public then forgetting that the individual agrees with the other policies.

**Note By Shaurya:** AKA the “You Had One Job Gaffe”

- The Narrative Gaffe: These are the most famous gaffes, and are gaffes that play into a pre existing narrative, such as them being out of touch with the middle class or the impoverished, that political opponents are trying to convey. These are also the hardest gaffes to get rid of, and are therefore the most impactful.

**Note By Shaurya:** AKA the “Ben Shapiro Criticizes Rap Gaffe”

- I do believe that this article is agenda-driven, as the examples given seem biased towards Obama and against Romney. The article seems to be promoting Obama, as he has committed less of these gaffes and less severe ones, at least according to the article.
- **Eight years later, in a world which has grown accustomed to interacting on social media, is oversharing the newest kind of gaffe?**
  - In a world where more and more people are becoming technologically literate and are using social media more and more, it’s definitely a mistake to interact in social media in an incorrect way. Candidates who have previously had social media presences and continue to do so during a campaign can expand their own, but forced social media presences (such as Hillary Clinton’s attempt at using Vine) can go horribly wrong, and reduce the chances that younger people will vote for you, as it seems like you’re unable to relate to them. The question is whether it’s a gaffe, and I would say that oversharing definitely is, as you’re accidentally telling everyone you have no idea how social media actually works. They should use the platforms to promote themselves and keep people informed, they just shouldn’t take it too far.

- **Some say that in today's world gaffes will go viral more quickly, others that they will be forgotten sooner. Discuss with your team: which is it, or are both true? Is the best way to manage the aftermath of a gaffe different today than it would have been a decade ago? And, do gaffes even matter? [Some studies](#) suggest that the people who pay the most attention to them already have the most resolute opinions anyway.**
  - Both of these statements can certainly be true. Thanks to the advent of the internet, gaffes can immediately be on news sites (and memes) before they get published in newspapers or discussed on T.V. However, due to the fact that we now have access to so much more knowledge and are able to constantly learn about politicians and candidates by using Social Media such as Twitter and Instagram, gaffes are often replaced with whatever new piece of knowledge we find.

Because of the immediate virality of gaffes, as long as it isn't a Narrative Gaffe, the best thing to do these days is to admit you were wrong, and then play along with the gaffe. This gets more voters to pay attention, hopefully drawing more into your campaign. Whatever you do, you must admit your mistake.

The real question, do gaffes matter? The above study shows that those who saw gaffes were no more likely to change their opinions than those who didn't. In the end, the people who will be seeing most gaffes will be those who are already interested in politics, and likely will already have an opinion on the candidate in question. Gaffes can reinforce these opinions, but only the most drastic of gaffes (such as Michael Dukakis and the Tank) can completely change opinions. In the end, gaffes do not make a huge impact on the political sphere as a whole, but there are a few gaffes that will forever be remembered. You don't want your gaffe to be one of those.

## **But Can a Droid Underestimate? (Xavier)**

- **Computers are often seen as infallible—cold, calculating, and unerring. However, they often don't work exactly as intended, leading to unintended outcomes that range from harmless glitches to disastrous miscalculations.**
- **A “bug” is a flaw in a system which results in unexpected and often incorrect behavior. In one famous case, the bug was actually a [bug](#). Consider the following bugs, and discuss with your team: how could they have been best avoided, and who should bear the responsibility for them?**
  - **[Mars Climate Orbiter](#) | [Ariane 5](#) | [Therac-25](#)**
    - **Mars Climate Orbiter:** In 1999, the Mars Climate Orbiter had been launched and was going to be the first ever weather observer on another planet. It had cost \$125 million to build and launch, and was going to provide information on the Climate of Mars. However, as it approached the planet and attempted to enter a stable orbit, contact was lost.

Later inquiries by NASA found that the issue was a translation error in units.



Lockheed Martin (the contractor for the Mars Climate Orbiter) worked in pounds of force per second (lbf / s) whilst NASA worked in Newton's per second (N / s), which is the standard SI Unit. However, no one at NASA realised that this translation was occurring, resulting in approximately 4.5 times the force being delivered per second. This sent the extremely fragile spacecraft into the Mars atmosphere, burning it up.

This was simply a communication error, and the issue could have been identified right at the start of the mission if it was discussed with Lockheed Martin. There were also indications that something wasn't right throughout the mission, as they had to make 10 - 14 more course corrections than expected. In the end, NASA said that they were the ones to blame, as they hadn't made the appropriate checks and tests that would have revealed it. Since then, NASA have been much more cautious about minor errors.

- **Ariane 5:** Ariane 5 was a rocket developed by the European Space Agency, and it had its first test flight on 4th June, 1996. However, this flight was a failure, with the rocket self destructing 37 seconds after launch. The issue came about because the programme attempted to convert a 64 bit floating integer (basically a number in base 2 that uses scientific notation) was converted into a 16 bit integer.

However, there's a max number size that a 16 bit integer can be, which is 32,767. The number that they attempted to convert would be larger, and so the conversion failed, resulting in the inertial reference system having an error within it and failing. The reason that the error occurred is because that portion of the software was ported over from the Ariane 4, which resulted in the error occurring. The main way that this could have been prevented is by checking the software before it was ported over, as well as enabling the code that would have handled the conversion error. The group who are to blame are likely those who ported over the code for the inertial reference system.

- **Therac-25:** The Therac-25 was a radiation therapy machine developed by Atomic Energy of Canada Limited (AECL) that was used to remove tumors and other cancerous growths. The Therac-25 had two separate modes, being electron mode, where the radiation was spread out across a large area using scanning magnets, and x-ray mode, which produced x-ray photons. A mirror could also be used to position the ray into the right spot. However, throughout 1986 and 1987, four people died and two were severely injured after the Therac-25 provided lethal overdoses of radiation. Previously, AECL had designed the Therac-6 and Therac-20 to have manual modes as well as computer ones, and also hardware interlocks to prevent someone from doing something dangerous. For example, if you wanted to use a high power electron beam and you didn't have the X-ray target in place, a fuse would blow and the radiation would not be fired. However,

in an attempt to decrease setup time, AECL decided to go with computer control only for the Therac-25. Fritz Hager, the chief of staff at one hospital affected by the Therac-25, was able to figure out what the issue causing it was, with it relating back to the computer control only. The computer console allowed the particular prescription of radiation to be entered using the up and down keys to move the cursor. If you selected X-Ray mode, started the machine and in the 8 seconds of set up before it began sending high powered X-Rays, used the arrow keys to change it to Electron mode, the turntable within the machine that regulated the mode would switch to an unknown position, resulting in an incredibly high dose of radiation. This is a rather tiny bug, but investigations into AECL found out that the code for the Therac-25 was primarily written by someone who had little experience coding for real time systems. This coder was 'to blame' for the error, but should not be held responsible for this, as it's also the fault of AECL for employing someone who had very little experience in this area of coding.

- **MCAS** | [Tesla Autopilot Crashes](#) | [MissingNo.](#)
  - **MCAS:** In 2017, the Boeing 737 Max was designed, as a competitor to the Airbus a320neo. When it was first designed, Boeing realised that it would generate extra lift compared to previous models. Though this seems like a positive, Boeing wanted it to similar to fly like its previous 737 models so that it could receive a 'common type certification', as then pilots would not have to receive detailed training if they had previously flown similar Boeing planes, and more could be bought. This lift would primarily be generated when there was a high angle of attack (the angle between the angle of the air and a reference line on the wing). In an attempt to counteract this lift that would be generated, Boeing installed MCAS, a system that would use an angle of attack sensor to detect when an airplane was climbing steeply, and then activate the 'pitch trim' system, which stabilizes the aircraft and makes it easier to control, bringing it to a normal level. However, if there is a malfunction in the AoA sensor, it can send the plane into a dive towards the ground. There's also only one sensor at a time on the plane, so if any form of malfunction or error occurs, there's no easy way of reversing it, besides not being in manual flight, which is mandatory at multiple points. Unfortunately, this malfunction occurred twice, to Lion Air Flight 610 and Ethiopian Airlines Flight 302. Both of these planes crashed, killing all on board. The MCAS also forced the nose of the plane down greater than in the design specifications (0.6 degrees at a time or 2.5 degrees). The main way that this could have been prevented is never installing MCAS in the first place, as it was only necessary to make it receive a common type certification. Boeing are to blame for these deaths, and most aviation authorities have since grounded Boeing 737 Max Aircraft to ensure the safety of the passengers.
  - **Tesla Autopilot Crashes:** Tesla Autopilot is a relatively system. A combination of inputs from 8 cameras, radar and ultrasonic sensors combine to allow Tesla

Cars to automatically center themselves, change lanes and navigate autonomously in some areas. However, to do so it requires constant driver supervision and attention, asking the driver to apply pressure to the steering wheel at some points while autopilot is on. Basically, it's a rudimentary form of self-driving cars. However, it has since caused many accidents, and some people have died in car crashes whilst Tesla Autopilot is in use, primarily due to driver negligence. The question is, are Tesla to blame for drivers not using Autopilot in a safe manner? The issue is that humans easily get bored, and if the car can do most functions itself, then we get distracted and stop paying attention. Tesla could have got rid of this 'bug' by not using Autopilot in the first place, but there's debate over whether there's a bug in the first place. Some studies have shown that Tesla Autopilot decrease the number of crashes whilst other studies have shown the opposite. In any case, if it is a bug for these crashes to occur, the easiest way to solve it would be for Tesla to not release the technology until it's been more fully developed and is completely self-driving.

- **MissingNo:** Pokemon is currently the highest grossing media franchise of all time, with a T.V. show, multiple movies, a Trading Card Game and of course, the video games. In 1996, the first Pokemon games were released, being Pokemon Red and Blue (with yellow following soon after). There are many glitches within these early Pokemon games, and I would recommend that you watch glitched speedruns of this game, as what these runners find they can exploit in the game's code is insane. However, one of the most famous Pokemon glitches within this game is 'MissingNo,' (standing for missing number) a glitched Pokemon that can only be encountered under very specific circumstances. Firstly, you must enter the catching tutorial in Viridian City, then fly to Cinnabar Island and have a Pokemon that knows surf use it on the Eastern Coastline. Then, you just continue generating encounters until you find a MissingNo. This is caused by the fact that the encounters are generated by placing values into a piece of data, with the number depending on which area you were in. However, Cinnabar Island doesn't have data assigned to it, using the data last generated. By doing the Catching Tutorial, it creates glitched data which inputs your player name as values, causing MissingNo to be encountered. Another side effect of encountering MissingNo is that the 6th item in your inventory is duplicated, with it adding another 128 of that item. It's believed that MissingNo is actually a variety of Pokemon, being the incomplete Pokemon that were never added to the final game but were considered in beta. The scenario under which MissingNo can be encountered is so limited, that it's surprising it was even found, and therefore no one should be to blame for it. The only way that it really could have been found is more and more double checking of the code, looking for these limited circumstances. At the end of the day, MissingNo is an interesting piece of gaming that provides entertainment and intrigue to many.

- Up until the 1990s, many computers were designed to store dates with two digits for the year: 97 meant 1997, 06 meant 1906. People eventually realized that this approach would pose a problem in the year 2000: software might think the digits 00 meant 1900. This “[Y2K Bug](#)” gained worldwide notoriety, and many (though not all) countries invested tremendous sums in trying to fix it before time ran out. Discuss with your team: was it a mistake for programmers not to foresee this bug earlier? And, given that 2000 came and went without any major incident, was it a mistake for the world to focus so much attention on it—or was this level of attention the reason nothing dire happened?
  - When people realised what may occur due to Y2K, the world began to react, with companies employing people to fix programmes that depended on dates, such as banks (mortgages and interest rates), airlines (scheduled flights) and power plants (routine checks).. The ‘bug’ stems from a lack of forward thinking, but also likely due to the limits of technology. When we were first programming, if we didn’t have those two digits, it was a slight amount more processing power. I believe that the reason why no major incidents occurred is because of how much effort and attention was put into minimising the damage done by Y2K, as many of these results would have been drastic. Though few problems did occur, the fact that we knew so little about it means that it was worth trying to solve, as we don’t know what the impacts may have been if we didn’t recode these systems to realise the year was actually 2000.
- **Explore the world of software testing and quality assurance. What methodologies have engineers come up with to minimize bugs?**
  - **fault | failure | error | debugging | logic error**
    - **Fault:** Within software testing, a fault is a mistake within the code, causing the programme to behave in an unexpected way. Faults are introduced into software due to errors. Faults are also often referred to as defects or bugs.
    - **Failure:** A failure is the inability of software to perform a required task within the specified performance requirements. Basically, when an incorrect result is produced or the correct action isn’t taken. These are caused by faults, but it often takes multiple faults for a failure to occur.
    - **Error:** An error is the mistake of a human developer / programmer, that then produces an incorrect result, which may cause a fault to occur. For example, This turn is rather interchangeable with ‘mistake.’
    - These three above terms are rather easy to confuse, so let’s use one of the bugs in the curriculum to explain what they are. With the MissingNo glitch, the error is that when you do the catching tutorial, the game will use your Player Name as the encounter value. This on its own wouldn’t do anything, but when combined with the fault that Cinnabar Island encounters when surfing are generated using the last encounter value, the player will then encounter MissingNo, which is a failure as the game is producing an incorrect result. Make sure you know the difference between these! WSC will probably be making you tell the difference between them in the challenge...

- **Debugging:** Debugging is the process of removing errors from software. The term originates from Admiral Grace Hopper, as she removed a moth from a computer, calling it 'debugging,' and the term stuck. Debugging is generally a process that occurs throughout software development, rather than at a specific point. Often, the process follows the stages 'code, test, debug, repeat.' Testing is different from debugging in that testing is looking for bugs whilst debugging is fixing them.
- **Logic Error:** A logic error is an error (or bug) within the code that causes it to produce an undesirable / incorrect result without it crashing. For example, if you were using code to add do basic maths, a logic error would be  $a + b / 2$ , which produces the result of  $b/2 + a$ . In actuality, the code that you wanted should have said  $(a + b) / 2$ , as this follows BEDMAS. Logic Errors are often more difficult to debug, as it's not technically incorrect, it just isn't producing a desirable result. Because of this, you may have to spend a long time looking for a particular logic error.
- **bugs vs. glitches | race condition | off-by-one**
  - **Bugs vs Glitches:** A bug is basically defined as a fault (see above), which results in the functionality of the code being broken in a major way. However, a glitch is much more slight, and often is only temporary. For example, MissingNo would be considered a glitch, as by resetting your encounter value by travelling to a different area after doing the catching tutorial (see above) you are unable to encounter MissingNo. Both a glitch and a bug come under the definition of a fault. Basically, a glitch is a lesser fault whilst a bug is a more major one.
  - **Race Condition:** A Race Condition occurs when a device attempts to perform two operations at the same time. For example, a particular piece of code might say 'read the value in Position A' whilst another might say 'write this value in Position A.' When both of these operations occur at the same time, it may result in the data being read whilst it is also being overwritten, causing a computer crash or an error. The easiest way to get around this is to use what is known as a 'serialization of memory.' This means that if commands, such as 'read' and 'write,' are received at the same time, one is given priority over the other and is executed first.
  - **Off-by-one:** An off by one error is basically when a computer performs a particular task a number of times (known as a loop) and is meant to do it 'n' times. However, it does it either 'n - 1' or 'n + 1' times instead. A way to explain how computers make this mistake is to see how humans make it. Here's a pretty simple question. You have a straight fence 100m long, and you put posts every 10m along it. How many fence posts will you need? You probably thought there would be ten fence posts, but there are actually eleven, also known as  $n + 1$ . This is because there are posts at both ends, one of which you won't consider adding (logically). You can get 'n' fence posts if the fence forms a loop, or 'n - 1' fence posts if the fence is attached to a wall at each end. You can easily see how

humans make mistakes in programming that result in off by one error. These off by one errors can result in unpredictable behaviour, infinite loops and could result in memory corruption or crashes.

- **software testing | black-box | white-box | unit testing**
  - **Software Testing:** An activity to check whether the actual results match the expected results and to ensure that the software system is defect free. It involves execution of a software component or system component to evaluate one or more properties of interest. Software testing also helps to identify errors, gaps or missing requirements in contrary to the actual requirements. It can be either done manually or using automated tools.
  - **Black-Box:** Testing technique in which functionality of the Application Under Test (AUT) is tested without looking at the internal code structure, implementation details and knowledge of internal paths of the software. This type of testing is based entirely on software requirements and specifications. In BlackBox Testing we just focus on inputs and output of the software system without bothering about internal knowledge of the software program.
  - **White-Box:** Testing of a software solution's internal structure, design, and coding. In this type of testing, the code is visible to the tester. It focuses primarily on verifying the flow of inputs and outputs through the application, improving design and usability, strengthening security. White box testing is also known as Clear Box testing, Open Box testing, Structural testing, Transparent Box testing, Code-Based testing, and Glass Box testing. It is usually performed by developers.
  - **Unit Testing:** A level of software testing where individual units/ components of a software are tested. The purpose is to validate that each unit of the software performs as designed. A unit is the smallest testable part of any software. It usually has one or a few inputs and usually a single output. In procedural programming, a unit may be an individual program, function, procedure, etc. In object-oriented programming, the smallest unit is a method, which may belong to a base/ super class, abstract class or derived/ child class. (Some treat a module of an application as a unit. This is to be discouraged as there will probably be many individual units within that module.) Unit testing frameworks, drivers, stubs, and mock/ fake objects are used to assist in unit testing.
- **Consider the saying: “[it’s not a bug, it’s a feature](#)”. If an unintended feature makes its way into a system but has no major impact on the user, is it still a mistake?**
  - Technically, this would be defined as a mistake, in that the product isn’t perfect, but the question we must ask is whether it actually matters. The impact that it has on the system is what truly matters, and if the impact on the user doesn’t detract from the user’s enjoyment, then it isn’t a mistake.
- **Explore the concept of [error fares](#), in which airlines sell tickets for much lower than their intended price. Sometimes, people (and companies) are expected to honor their mistakes; in fact, there was a time when the United States government forced airlines to do so. Does**

**the fact that error fares can now be disseminated over the Internet in a matter of minutes affect whether airlines should be obligated to let people keep the underpriced tickets they have booked?**

- Also known as mistake fares, these are very rare occurrences where an airline makes a mistake, either due to human error, technological errors or issues in foreign currency conversions. They pop up roughly once every 4 - 6 weeks, and can be as cheap as \$242USD for New York to Rome! They can be bought, just as normal, and then either have your money refunded by the airline or have it accepted, and have a cheaper flight than normal! However, there are now websites, such as the one linked above, which have the purpose of alerting individuals to mistake fares, which results in people no longer having to search for them. I think that the airlines were never obligated to let people keep the underpriced tickets that they had booked, and that there is even less of an obligation now that they can be spread so quickly. A few people realising that there's a cheap flight isn't a huge deal to the airline, but an entire flight of cheap seats selling out is.
- **Many apparent bugs are the result of user error. Discuss with your team: should programmers be held responsible for the errors their software permits users to make—and do they have a duty to predict all reasonable uses and misuses? Is there such a thing as an unpredictable misuse?**
  - Humans are unpredictable creatures, and so the misuse of software is inevitable. This will of course result in user error. The user must be at least partially held responsible for errors that they make, as these are generally uncommon. However, what should be done is these errors should immediately be fixed in the next update (if this is a software that is updated). If it is not updatable software, then yes, the programmers should bear the majority of the responsibility. There's definitely such a thing as unpredictable misuse! We just have to look at how software is getting patched and updated all the time in an attempt to remove bugs that previously, the programmers didn't know were in the system.

## **Is it Too Late Now to Say I'm Sorry? (Xavier)**

- **The Internet is full of self-help articles on how to apologize. Discuss with your team: why is it so hard to apologize effectively? What strategies do you find most effective?**
  - The main reason that we find it hard to apologize is due to power structures. The act of apologising results in you having to give some power and control to the person that you're apologising to. Humans, in our very nature, dislike yielding this power. Also, there are so many little words that can make apologies seem incomplete or insincere. Statements such as 'If I hurt you, I'm sorry' are much less impactful than 'I'm sorry that I hurt you.' Finally, the vulnerability that comes from apologising is often a rather terrifying prospect to most people.
  - I personally can't think of the best strategies to apologise effectively, but some of the most agreed upon and sensible ones include,

1. Accepting responsibility yourself and not putting the blame onto others.
  2. Never say 'but'
  3. Offer to help the individual in the future to show you're trustworthy.
  4. Ensure that it won't happen again, and make sure it doesn't.
  5. Clearly say, that you're sorry.
- **In 2015, Volkswagen was caught rigging its vehicles to reduce emissions during testing. Some have criticized the company's initial apology as unconvincing. Discuss with your team: when is an apology not an apology? Do apologies need to be coupled with corrective actions, or can an expression of regret sometimes suffice?**
    - The Volkswagen Apology was considered unconvincing due to the fact that it was at an official launch party for one of Volkswagen's new cars, and immediately after apologising, the representative introduced the new music act that would be performing. This felt like a distraction, in an attempt to make sure people didn't realise how weak the apology was. An apology is not an apology when those who are at fault refuse to accept responsibility, and instead are only apologising so that they can move on from the incident. Other common characteristics of non-apologies include minimizing accountability for the incident by using 'if apologies' and 'but apologies.' Apologies don't necessarily require corrective action, but definitely need to assure that a repeat offence of the mistake will not occur. Sometimes, this may require corrective actions as well, but an expression of regret will almost never suffice, as saying that you are sorry about it doesn't mean that it won't occur again.
  - **Consider the following apologies. Discuss with your team: which ones were the most effective, and what could those whose apologies were less effective have done differently?**
    - **Lance Armstrong - doping | Justin Trudeau – Brownface | Cho Hyun-ah – nut rage**
      1. **Lance Armstrong - Doping:** Lance Armstrong was an American triathlete who then turned to professional cycling, being relatively successful from 1991 - 1996. During this time, his achievements included winning the World Road Race and coming 12th at the Olympic Games. After a battle with cancer, he returned to cycling in 1998, winning the 1999 Tour de France, one of the most respected cycling races in the world. He then followed this up by winning it not once, not twice but four more times! He also won a Bronze medal at the 2000 Olympics during this time. However, in June - August of 2012, the U.S. Anti-Doping Agency found that Armstrong had taken Performance Enhancing Drugs throughout his career, resulting in him being stripped of all of the titles he received between 1998 and 2012.

Armstrong disputed the findings, but finally came clean in the above interview with Oprah Winfrey, during which he said that 'he felt invincible, truly believed that he was invincible' and said that he still felt this way, but he wanted to get rid of that part of him, and he was committed to getting rid of it. He also said that he had a lot of people he had to apologise to, including a lot of prominent figures within the cycling community, and that whenever they were ready, he will give



them an apology. I believe that this apology does seem sincere, and it would have been an incredibly hard thing to apologise about. His admittal of responsibility and his desire to change who he was make the apology rather effective. However, to make the apology more effective, instead of saying he would give apologies to the prominent figures within the cycling community, such as Greg LeMond, when they were ready, he should have just outright apologised to them. His remorse and tone also make him seem apologetic, making this a relatively successful apology.

2. **Justin Trudeau - Brownface:** Justin Trudeau is the current Prime Minister of Canada and the Leader of the Liberal Party, the major Left Wing Party of Canada. Needless to say, when a picture of him wearing Brownface makeup from 2001 emerged, he was drawn into a sea of controversy. The photo was taken at a Gala Dinner at West Point Grey Academy, the school that Trudeau was a teacher at, with the theme 'Arabian Nights.' There were also other documented cases of Trudeau wearing Brownface, including once at a high school talent show and once at another event.

When he apologised, he said "I shouldn't have done that. I should have known better but I didn't and I'm really sorry. I take responsibility for my decision to do that. I shouldn't have done it. I should've known better, It was something that I didn't think was racist at the time, but now I recognize it was something racist to do, and I am deeply sorry." His apology came out very quickly, within two hours of the photo being published, and seems both genuine and also shows that he believes he has now changed. He doesn't put the blame on anyone else, and I believe this apology should almost certainly be accepted.

3. **Cho Hyun-ah - Nut rage:** Cho Hyun-ah (also known as Heather Cho) was the Vice President of Korean Air, and was also the daughter of the Chair of Korean Air, got into a large amount of controversy after a flight from NYC to Incheon, South Korea. She was travelling first-class, and after being given a macadamia nuts in a closed bag rather than on a plate, she began to yell at the flight attendant and the Cabin Crew Chief, who was also apparently beaten on the knuckles with a digital tablet. The plane was then taxied back to the gate, where the Cabin Crew Chief was kicked off. When this information became public, she was put on trial and received 5 months in prison, followed by a 10 month suspended sentence. She also resigned from her job as Vice President.

She said that she would apologise in person to the cabin crew chief and flight attendant and visited the homes of the two individuals. She found that they weren't at home. Instead of doing what would have been the expected thing to do, she left notes at their doors, at didn't return. Her father also apologised on her behalf, saying that it was a 'foolish act.' The fact that she didn't apologise in person and she actually had her father apologise on her behalf show this was not

a successful apology. The lack of responsibility taken, as well as the lack of effort put into the apology make this an ineffective one, and it's no surprise that the number of passengers on Korean Air dropped 6.6% across the next year.

- **Segolene Royal - Nutella | James Gunn – racist tweets | Naspers - apartheid**

1. **Segolene Royal - Nutella:** Seglone Royal was the French Ecology Minister in 2015, and on live T.V. she said that French people should stop eating Nutella, as it contained Palm Oil. She then argued that these palm oil plantations resulted in deforestation and caused 'considerable damage to the environment.' However, what she didn't realise was that Nutella acquires all of its palm oil from sustainable forests, which they reaffirmed. Royal then apologised in a tweet, saying 'A thousand apologies for the row over Nutella. Okay to show progress.' This apology was semi-effective, due to the statement about 'a thousand apologies,' but wasn't fully effective due to the sentence 'Okay to show progress,' as this implied that it was partially the fault of Nutella, as they had used non-sustainable palm oil in the past.
2. **James Gunn - Racist Tweets:** James Gunn is a director, most well known for the hit Marvel films Guardians of the Galaxy Vol. 1 and Vol. 2, in my opinion, containing some of the best cinematography, themes and characters in the whole Cinematic Universe. He was well known for being very critical of Donald Trump and the Republican Party, and so in 2018, an alt-right conspiracy theorists dug up into his past and found a series of tweets joking about very serious topics such as rape. Because of this, Disney fired him from his role as Director of Guardians of the Galaxy Vol. 3, and cut all ties with him. He then posted an apology, stating that when he first started his career, he regularly made jokes that were considered 'outrageous and taboo', and since then has made efforts to make his work rooted in love not anger. He also mentions that in the past, he has apologised for these jokes, and he truly feels sorry for the pain he caused people through them. He says that he has changed, and is no longer the person who made those jokes. This apology seems to have been very effective, as he only puts the blame on himself, not placing any blame on Disney whatsoever. In March of 2019, James Gunn was brought back to direct Guardians of the Galaxy Vol. 3, showing that his apology was well received.
3. **Naspers - Apartheid:** Naspers is the largest media group in South Africa, and it played a key part in upholding the system of Apartheid. At the Centenary Celebration of Naspers in 2015, CEO Esmare Weideman said 'We acknowledge complicity in a morally indefensible political regime and the hurtful way in which this played out in our newsrooms and boardrooms.' Basically, we're sorry that we were complicit to apartheid and how it may have affected the way we create the news. However, Naspers have been criticised for this apology, firstly because it was at their 100th Anniversary Celebrations, incredibly late compared to most apologies. In 1996, Naspers were given a chance to confess their involvement in the promotion of apartheid and being incredibly biased towards

the government. Naspers helped to normalise this form of racial segregation, but refused to confess it in 1996, with over 120 individual reporters instead defying the company and confessing their involvement in upholding apartheid. Other criticism comes from the fact that Naspers didn't apologise about defending and underreporting racial segregation within South Africa. Overall, this was a rather weak apology, as it doesn't seem truthful and came at the wrong time

- **Grigory Rodchenkov – whistle-blowing | Stephen Harper - Komagata Maru**
  1. **Grigory Rodchenkov - whistle-blowing:** Grigory Rodchenkov was the head of Russia's Anti-Doping Laboratory. However, it was later found out that he was involved in State Sponsored Doping and use of Performance Enhancing Drugs to over 1000 athletes across multiple years. He would request money from athletes to conceal tests that showed performance enhancing drugs were present and to destroy urine samples. Rodchenkov fled to the United States when the scandal hit International news, carrying information that was crucial to the removal of multiple medals from the Russian Olympic Team and acting as a whistleblower. Rodchenkov gave a public apology in 2018 to 'all of the clean athletes we cheated.' Despite the fact that Russia denies that the doping was state sponsored, Rodchenkov still claims that the Russian government is 'lying and denying.' His apology, combined with his actions, seem to demonstrate that he's truly apologetic about what he has done.
  2. **Stephen Harper - Komagata Maru:** The Komagata Maru was a ship that sailed into Vancouver Harbor in 1914, as a group of primarily Sikh Indians were attempting to migrate to Canada. However, the Canadian government refused to allow almost all of these individuals to migrate into the country, leaving them sitting in the harbor for two months before they turned around and returned to Calcutta, where 20 of them were shot by police upon their arrival. Stephen Harper (the Prime Minister of Canada from 2006 - 2015) apologize on behalf of the government in Surrey, British Columbia. However, when he left the stage his apology was denounced by Sikh Members of this community, asking it to be presented on the floor of Parliament, as had previously been done for apologies to the Native Aboriginal Community and Chinese-Canadian citizens whose ancestors had immigrated to Canada. To the Sikh and Indian community within Canada, these apologies truly didn't seem like enough.
- **Last year, the University of Wisconsin faced a public relations crisis when it released a promotional video for a homecoming celebration. Nearly every student in it was [white](#). The university quickly apologized and released a revision featuring more diversity—but critics noted that this update glossed over the university's actual lack of minority students. Discuss with your team: were the university's apology and new video the best way forward under the circumstances, or were they [potentially counterproductive](#)? Can it sometimes be a mistake to present things as they are rather than as they should be?**
  - The university's video may not have been the best way forward, as it seems rather passive aggressive and as if it's trying really hard to prove there is diversity on their

campus. It almost feels like an act of tokenism, as mentioned in the second article, where it seems as if they are only making a symbolic effort to publicise their non-white community. Present things in the way that they are can definitely be a mistake, politics is built around not presenting things how they are! In all seriousness, though it isn't ideal, people will often choose the side of the story that seems to fit them best, and present it in that manner, rather than what may be the most fair. In this case, by actually showing the primarily white student-base rather than the minority students, they presented things as they actually were, but received a lot of hate in the process.

- **Recently, the phenomenon of “[cancel culture](#)” has grown more prevalent not just in entertainment but across [many industries](#). Explore the origins of cancel culture and discuss with your team: are these public reactions justified? When does a statement or action cross the line from a recoverable mistake to an unforgivable misdeed?**
  - The word ‘cancel’ has taken on a new use in recent years, meaning to stop the support of public figures. People can become cancelled when they share a questionable / unpopular opinion or it surfaces that they’ve behaved offensively in the past. This ‘cancelling’ results in many members of the celebrity’s own fan base boycotting them, causing massive declines in the celebrity’s popularity. However, the actions that those boycotting can take are often considered incredibly toxic and damaging to the celebrity themselves. Cancel culture can be related to many forms of entertainment and many industries as a whole, but one area where it’s particularly large is on Youtube, where scandals such as James Charles vs Tati occur semi-regularly. Cancel Culture likely originated from call-out culture, which started in early Tumblr Blogs. The public reactions that occur within cancel culture are often considered almost witch-hunt like, and I can understand why, due to the toxic and aggressive behaviour of many of these once fans. The line between a recoverable and an unforgivable mistake is a very blurry one. Most people are able to recover from ‘being cancelled,’ as their actions are not normally as drastic and awful as they are portrayed to be. However, we would likely consider something unforgivable is when a statement or action makes us feel betrayed by this individual. This lack of forgiveness is particularly relevant if you know these people personally, but can also relate to a fanbase feeling betrayed. In the end, you will have to decide for yourself whether something is unforgivable or recoverable.

## Concluding Questions (Xavier, Harry, Jutin)

- **Some mistakes are small misunderstandings; others are global catastrophes. Work with your team to design a scale to measure mistakes. Would it be similar to that for a natural disaster such as a hurricane or earthquake, or more like one used in a field such as economics?**
  - We would hope that a scale to measure mistakes span the entire set of mistakes, from inconsequential to life threatening. Because of this, using a structure similar to the Richter Scale may be useful, where an increase of one in the scale represents the earthquake being 10x stronger than the previous number. In terms of mistakes, this could range from a 0 (inconsequential mistakes that hardly affect a single individual, such as

dropping a pencil as you pass it over to a friend) all the way up to a 10 (mistakes that may threaten humanity's existence as a whole, such as scientists forgetting to report that an life-threatening asteroid is hurtling towards the Earth).

- **An ant scrambling about because it can't find its nest, a duckling imprinting on a human as its mother, a cat running away from a vaguely snake-like cucumber. Animal mistakes can make for cute viral moments, but are they really mistakes at all, or are mistakes unique to humans?**
  - Animals can certainly make mistakes! The mistakes that they make are generally more relevant to their survival, rather than to minor errors that will hardly affect them. It may be a mistake to humans but all the above examples are based around animal's survival instincts and are therefore not wrong, as the animal believed there was a threat and then acted in an appropriate way. These simply stem from an animal's desire to protect itself.
- **The artist Bob Ross once said, "we don't make mistakes; just happy little accidents". Can you find examples of historical mistakes that have had happy consequences—and, if so, why were they still considered mistakes? You might ponder whether accidental discoveries (such as penicillin) would qualify.**
  - A mistake is simply something that is misguided or wrong, the impact that it makes does not affect whether it is a mistake or not. This is the reason why all of these events/discoveries are able to be considered mistakes. Some historical mistakes that had happy consequences include, the tearing down of the Berlin Wall, caused by a politician's misspoken line and causing higher amounts of freedom for those who inhabited both East and West Germany, as well as many accidental discoveries. These accidental discoveries were 'wrong' according to the original goals of many of these experiments, and therefore would be considered mistakes. These "mistakes" can include the invention of penicillin, the microwave, Kevlar, and most importantly, potato chips (or crisps). You can find more information about these accidental discoveries [here](#).
- **In film and television, when an actor messes up a line, the director sometimes starts the scene over; other times, the mistake [makes it into the final cut](#). What makes some mistakes more usable than others?**
  - Mistakes in movies and television, more commonly known as bloopers, may be misguided in regard to the original intent that the director / scriptwriter had, but the ones that are usable, though not what was originally intended, add onto the film in a way that naturally fits. If an actor, for example, forgets a line but then improvises something new (what we would consider a mistake), it would be considered more usable if it fits with the intent of the film and doesn't come out of nowhere.

A great example of when a mistake was made it into the final cut would be a scene in *Pretty Woman* where Julia Roberts accidentally has her hand lightly clamped on by a necklace box by her co-actor and she burst out laughing because it was a surprise. It added more charm and character to the protagonist Roberts was playing that it made it into the final cut. The iconic "Here's Johnny!" from *The Shining* wasn't scripted either (it almost didn't make the final cut either!)

- **In science, mistakes are an accepted part of the scientific method. Would you say, then, that those astronomers who first identified Pluto as a planet made a mistake, given its later declassification? If so, do they owe anyone an apology? Does the admission of mistakes in science make it easier for critics to question the value of science in general?**
  - The crucial concept to understand here is that, at the time, the identification of Pluto as a planet wasn't a mistake. It was neither wrong nor misguided, with the information that scientists had available at the time, to consider Pluto a planet. However, as scientists learned about the size of other celestial bodies within the solar system, they realised that they were wrong, and therefore a mistake had been made. At the time of discovery, it was not a mistake, but after the discovery of more information, it was deemed a mistake. An apology may be in order for mistakes such as these, but what is needed more is an explanation to the public as to why the mistake occurred within the first place. This would result in more people having an understanding of the scientific method as a whole, and hopefully decrease the number of science critics in the world (woo! go science education!)
- **We've come to expect some films (and television shows) to include blooper reels, but they only first began appearing in the late 1970s. What about them do audiences find entertaining, and are they more appropriate for certain genres than for others? Put another way: would we be more likely to post Instagram stories of bloopers of the [Scholar's Bowl](#) or of the Flag March?**
  - The reason why audiences find bloopers so entertaining is that movies are professional endeavours, and so seeing mistakes that occurred within the film reassures us that we are not alone in making mistakes. If a famous actor, such as Robert Downey Jr, forgets a line whilst he's on the set of Avengers Endgame, seeing him do so makes us feel less embarrassed about the time we forgot a line during the school play. The genres that this is more appropriate for are those built on fiction. If we see a blooper occur during a documentary, though it is still entertaining, we do not see one of the best parts; the actors breaking character. This is why films with higher amounts of fiction have more entertaining bloopers, as we no longer suspend our disbelief when we see one. Films with higher amounts of fictional content (such as those set in a fictional universe) therefore result in a drop in suspended disbelief when we see a blooper. Seeing Instagram stories of Scholar's Bowl and Flag March Bloopers is certainly something that could become a reality, as we are seeing rehearsed events go wrong, which we find entertaining. If this question is asking which of the two events would we be more likely to find bloopers of, I would have to say the Scholar's Bowl, due to the higher amount of fame that WSC staff have compared to most scholars.
- **What kinds of factors free someone of responsibility for their mistakes? Is someone addicted to opioids making a mistake when they continue to take them, or does making a mistake require a degree of discretion that addicts may no longer have?**
  - You could say that the initial choice to partake in drug use was a mistake but, at some point, the continual use of a drug becomes beyond the user's individual choice. Addiction blurs the line between want and necessity because of the drawbacks it gives to

its users; the withdrawals symptoms can be so unbearable, with effects such as nausea and vomiting, insomnia, diarrhea, anxiety, abdominal cramping, muscle aches, that it is no longer a simple “craving”. Painful withdrawal symptoms is what causes users have a physical dependency. In addition to that, many of these drugs are often very chemically addictive as well, making it even harder for drug abusers to quit even if they wanted to.

- **A misprinted Pokemon trading card recently [sold for \\$18,000](#) on eBay. In the world of trading cards, why are misprints worth so much—and are they worth more than an intentionally rare card? Discuss with your team: would misprinted textbooks, restaurant menus, or airport signage be valued in a similar way?**
  - The reason that misprints are worth so much in the world of trading cards is due to the idea of uniqueness. People will pay more for something that is rare and collectible, and therefore misprinted trading cards, due to the fact that they are less common than the regular card, will be worth more money. Often, intentionally rare cards, such as those given out as prizes at competitions, are worth more due to the story behind them. For example, the Pikachu Illustrator Card has an estimated worth of \$90,000+, both due to the fact that there are only 39 and existence and because each of could only be obtained by being a winner in a Japanese Pokemon Art competition. This story behind the artwork results in it having more value to those who may collect Pokemon memorabilia, as it also feels more purposefully rare.

Misprinted textbooks, restaurant menus and airport signage are generally not valued in the same way due to the important uses of these. Whilst a misprinted Pokemon Card may not be usable in a tournament, a misprinted airport sign may direct people in the wrong direction, resulting in them missing their flights. This results in them not being worth more money, as they are not a novelty; they now cause monetary losses to individuals and possibly the airport as well. In the same way, misprinted textbooks may result in failed exams and misprinted restaurant menus may result in allergic reactions. Of course, these are all maybes, but these risks must be considered when discussing the value of an item.

- **When it comes to recovering from a mistake, is there a difference between an apology and an act of redemption? If so, what kinds of mistakes require redemption? Would publishing outlines late in 2019 require redemption in 2020?**
  - Let us begin with the time honored tradition of using dictionary definitions to get an idea of what we are doing. An apology is defined by dictionary.com as “a written or spoken expression of one's regret, remorse, or sorrow for having insulted, failed, injured, or wronged another” whilst an act of redemption is defined as “an act of redeeming or atoning for a fault or mistake.” From this we can see that the main difference between an apology and an act of redemption is the fact that an apology is simply saying that you are sorry whilst an act of redemption involves making up for this mistake by doing something to redeem oneself.
  - Really, the only mistakes that require redemption are drastic ones that have caused harm to others. When we consider redemption arcs within media, we do not think about a

redemption arc because you spilled some water on your friend's shirt, we think about redemption arcs because you failed to protect a friend, resulting in their death. Because of this, I think that we can assume that redemption is only required in circumstances where a drastic mistake was committed. Publishing outlines late in 2019 is certainly a mistake, and World Scholar's Cup have rectified this in 2020 by getting the curriculum out quickly, at least most of it... However, this probably wouldn't be considered 'redemption,' as not many scholars found that this was a drastic mistake. Instead, redemption may have been required if World Scholar's Cup hadn't got the curriculum out at all last year, a drastic mistake that many scholars would consider highly damaging to their attempts at studying. Luckily, it appears that this will not be occurring now, or any time soon.

- **Final Note By Shaurya:** The real mistake was cancelling debate showcase at ToC. This definitely requires redemption. I suggest a special Staff Debate to decide the ultimate "WSC Staff Debate Champion". (That's a pun on WSDC, if you know, you know)

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