

Fallacies That We Will Explore Today

Anecdotal: The use of one specific event to prove a general topic i.e. telling a story instead of providing proof for an argument.

False Equivalence: A comparison between unlike things that leads to a false conclusion.

False Cause: An argument that states an incorrect causation, or uses incorrect causation as proof.

Appeal to authority: The use of the opinion of an authority figure as proof rather than use evidence.

Appeal to Inappropriate Authority: The use of a person's ideas as evidence, however, the person is not an authority on the subject matter.

Appeal to Popular Attitude and Emotion: The use of generally accepted ideas, beliefs & emotions in place of evidence.

False Dilemma: An argument that presents two (sometimes more) alternatives. These alternatives do not represent the full extent of possibilities. This is also called binary reasoning.

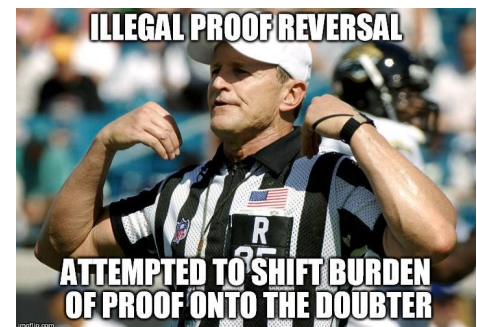
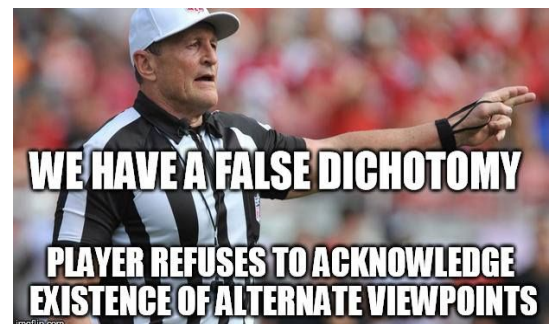
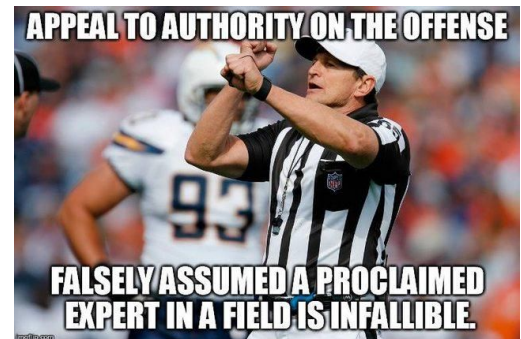
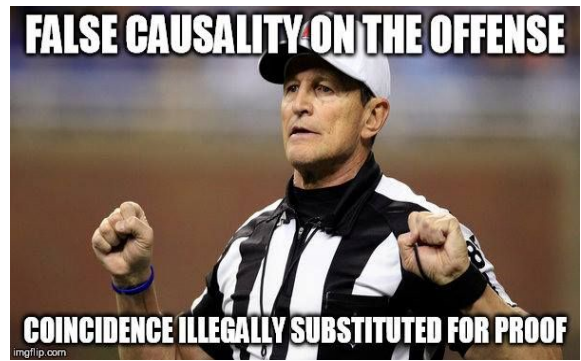
Ad Hominem: An argument against an individual rather than an argument.

Definitional Dodge: Changing a definition to either avoid a criticism or suit your means

Texas Sharpshooter: Bias that negatively impacts your which arguments you present. Similar to willful ignorance in law.

Argument from Ignorance: The belief that if an argument cannot be proven false, it must be true i.e. you can't prove there is no Loch Ness Monster

Shifting the Burden: Insisting opposition disproves your argument, rather than proving your own argument



Other Fallacies You May Wish to Explore

Argument from Incredulity: The idea that if an idea cannot be imagined, it must be false i.e. I cannot imagine anything existing before the Big Bang, therefore it came from nothing.

Argument from Silence: A conclusion is made from the absence of evidence

Inadequate generalization: Not enough evidence is provided to prove a claim, especially one that is grandiose or generalizes large groups of people.

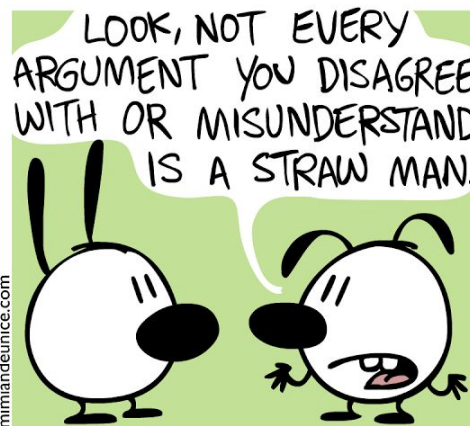
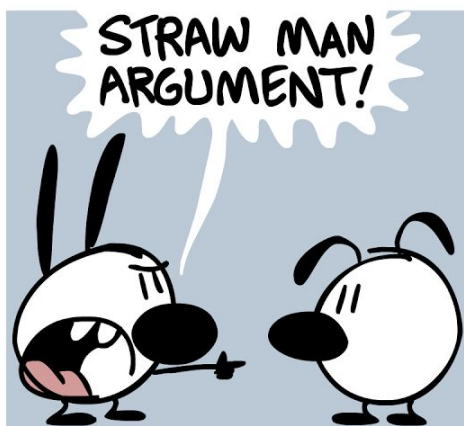
Divine Fallacy: The argument that the existence of something wondrous proves something beyond man. Ex.: pyramids are so great that humans could not possibly have built them, and so aliens must exist.

Poo Poing: Dismiss an argument because you do not like it.

The Fallacy Fallacy: Assuming that a conclusion is false because one argument that attempted to prove it was false

Strawman: Altering an argument in order to make it easy to attack

Slippery Slope: Insinuating that something will spiral out of control i.e. legalizing marijuana will eventually cause children to using hard drugs



Why Teacher's College Should be Five Years Long

For all the concerned parents, grandparents, siblings, and families, let me tell you now, we have a plan to fix children's education across our province. It is the simple solution, one which will cost taxpayers no extra money: more teacher training.

More training can only make better educators in the classroom. Through longer education, teacher candidates will get more education on how to teach their specific disciplines, and how to address the needs of their students.

If you don't believe me, then let's talk hockey. The best hockey players play in professional leagues from around the age of 18. Statistically, that same tier of great players peak offensively at 23. That is five years of professional training for an adult player to reach their top potential.

But players don't stop developing at 23; they continue to build defensive game and defensive awareness until 27 or 28. That's ten years after they enter their professional training that players learn to work within all aspects of the game!

If it takes adult professionals five to 10 years to reach their potential, how can we ask teachers candidates with two years experience to take over their own classrooms?

Lets consider our own experiences in classrooms: imagine the worst teacher you have ever had. What did that teacher do poorly? How did that teacher not cater to your needs as a student? And how much better would that teacher be if they were trained for an adequate amount of time?

I'll tell you about my worst teacher. For privacy's sake, we will call her Schmelsey Schmooper. Ms. Schmooper was not a strict teacher, and in my class there were a few students on their laptops. This behaviour distracted me and impaired my ability on tests. Imagine today's world of cellphones and iPads; how much worse is Ms. Schmooper's class is with every student distracted by technology.

Ms. Schmooper was also prone to tangents. She would start discussing a topic and let the class run with it, having students connect course work to the real world. These connections did not appear on tests and exams, and so the class time was wasted.

How much better would Ms. Schmooper be if she had adequate training? I'm sure she would tell you that teacher's college is too long, and that teachers learn on the job, but she, like many bleeding heart liberals who are not strict enough for her role, is only an educator for the salary and bloated benefits.

While longer educations would create better teachers, it would also weed out teachers that do not like children and are only in the classroom for the salary and benefits. A close source of mine, who is also an Ontario College of Teacher's prosecutor, told me that most teachers he meets do not adequately understand the four main duties of Ontario teachers, especially care. If these teachers do not care about our children, how can we expect them to care for our children.

For all the nay sayers I ask you this: prove to me that every teacher is great and that no teacher can benefit from more education, and we will stop scrutinizing the education system. Until then, as long as we are forced to choose between inadequate and uncaring teachers, or longer education times for teachers, we will not stand down and we will not stop fighting for longer teacher education programs.

The Real Reasons We Should All Read Shakespeare

When I first read *Twelfth Night* as a ninth grader, I did not like it. The language wasn't English (most of the time). The stories were weird and didn't relate to my life (despite my best efforts at black magic). Whole cities and societies don't exist anymore, and those that do have a drastically different culture. I didn't really see how it related to my education -- and how it would help me get a job in the future.

But education is more than getting a job; education is the process of developing critical thinking skills and building various forms of literacy. Education is suppose to be challenging, because in that challenge students learn to problem solve, develop deeper understandings, and create valid criticisms for our society. When we look at education from this lens, Shakespeare's poetry and plays become valid pedagogical tools.

First, Shakespeare's language is difficult. It is Early Modern English, a mixing of Old English and the Norman dialect of French. Many of the words have become archaic, and others are simply above the literacy *needs* of a functioning adult. Does this make his work irrelevant? By reading difficult language we learn to use context to understand meaning -- a skill which all adults both need, and routinely use to varying degrees of success. Difficult language also forces us to engage with the content on a deeper level, as per the academic discipline of Literary Criticisms known contemporarily as Russian Formalism. Finally, if you have a good teacher, learning Shakespeare will be complemented with learning sentence structure and grammar, skills which are too quickly breaking down thanks to Twitters and Instant Grams.

Second, and this is the most important element of Shakespeare, is that students learn about universal themes. Themes are the major topics and the stance the play takes on these topics; on the subject of family, a play might take on the theme that the patriarch always has the best intentions of the family at heart, despite how the members of the family perceive their situation. A universal theme is a theme that extends beyond Shakespeare's era and into the modern world; a topic can be love, and a theme can be that lust and passion, when mistaken for love, cause rash decisions which lead to unseen harm. Universal themes are equivalent to life experiences in that readers learn truths, values, and consequences within our society. If Shakespeare is taught with a focus on universal themes as opposed to regular themes, then the plays become relevant to our lives, and communicate many important issues to the young learners.

Shakespeare's poetry and plays are valid texts to read. And now schools are advocating removing them from curricula, media is dropping or bastardizing the stories, and parents are not introducing the content as valuable to children. If we continue down this path then we will lose Shakespeare entirely -- missing out on all the learning and development seen above. We now have a choice with Shakespeare: do we embrace the craft for its difficulties to develop better skills, *or* do we forget about Shakespeare and live in a world without proper communication skills and understanding about universal themes.

When Did the West Come to Dominate the World

My history teacher used to say that after the printing press was developed, it was inevitable that the West came to dominate the world. Her reasoning for this was that the printing press increased literacy to the extent that it allowed the Renaissance to flourish in Italy, which in turn spurred Renaissance movements across Europe, the reformation, and the scientific revolution. Once Europe had unlocked science, it developed technology that led to colonization and control of the entire planet.

There are two issues with this reasoning, of course: first, history is not a linear series of events, as argued and proven by Michel Foucault, and second, this interpretation of history -- the history learned from her textbooks and her university courses -- is based on the grandiose eurocentric tradition of history. This tradition has previously been used to justify slavery by arguing that non-whites did not have souls and could be treated like other beasts of burden. The continued teaching of this history only perpetuates that same discrimination into the modern era.

My literary criticisms professor always taught, when teaching the poetry of Margaret Cavendish, that the renaissance, reformation, and even the scientific revolution were Europe "playing catch up" with the Middle East. For most of history, the greatest collections of knowledge have existed in Palestine, Afghanistan, and Iraq, or even further into the many different Chinese dynasties. The Middle East had not only preserved the natural sciences and mathematics learning from Persia, Greece, and Rome, but developed all of these during Europe's regression period. Artistically, architecture and literature also excelled in the Middle East, and many of those architectural advances were merely copied in the European Renaissance.

If not the renaissance, then what caused European domination? One answer is economics, since the United Kingdom came to control exceedingly rich colonies -- China and India. Yet, the UK never conquered either; British rule in China begins with introducing heroin and other drugs to assert control over populations, and rule in India began with the creation of the East India Trading Company. More importantly, the UK never becomes an economic powerhouse in itself; India retained the status of greatest economic base of the world, even after British extortion of wealth.

Another argument is democracy, but this argument ignores the complex political history, which included a number of failed democracies, and the persistence of monarchies into the era where Europe is undoubtedly a global powerhouse (1850 c.e.). A better argument is meritocracy, since the Mongol Empire, the largest land based, fastest growing empire in all of history, was built exclusively on the ideals of meritocracy, but again a true European meritocracy would have to wait until the Second World War for white men, and still has yet to emerge for all in our modern society.

The most compelling reason for European domination comes from Capitalist economics. The rise of manufacturing and the increased focus on wealth helped to spur a more equal society than any before, which gave Europe its first technological edge in the nineteenth century. The separation of nation states spurred competition to develop and progress which did not exist in empires. The entire history of empires, from Greece and Rome, to Egypt, Persia, and Japan, is the history of consolidating power until there is no remaining nearby competition; without the need to continue developing, these societies then stagnate and fall to ruin.

If this is truly the reason that Europe came to dominate the world, through infighting and internal competition, then we should see this trend at later times in history. The fascism-democracy divide spurred

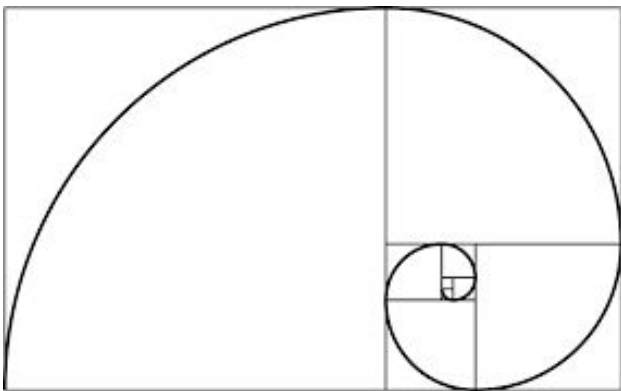
incredible technological advances, and created the most powerful modern empire in the Soviet Union. The United States, the source of competition for the Soviet Union, has seen less growth than the rest of the West in the years following the collapse of the USSR; they have stagnated and now have fallen behind with regards to personal liberty, human rights, and education, and health care.

Accepting that competition and personal merit lead the rise of new, powerful nations, then we have to see opportunity in the future; the fastest growth, most dynamic nations in the future all exist in Asia, and are already poised to take over economic domination of the world. We in the West have to accept one of two truths then; either we regress like so many powers before us and watch the rise of new markets, or we accept their growth and use it to spur our own, and in turn create a better, stronger world.

Math in the Natural World

Math in plants go hand and hand, or leaf and hand in this case! Plants have been using math to collect sunlight for millions of years, and we are only just now starting to understand the complexities behind it.

The first bit of math we see is the fibonacci sequence; the sequence where each number is the sum of the previous two. The first two digits are zero and one, which together add to one. One plus one is two, one plus two is three, three plus two is five, etc. The interesting thing about these numbers is that we can use them to make a perfect spiral. The more interesting thing about these numbers is that plants use them all the time when they sprout leaves; this spiral means each leaf receives light and no space is wasted! This spiral is often called the Golden Spiral.



The Golden Spiral in Mathematics



The Golden Spiral in Leaves on a Plant

We see this same sequence in other plants too. Pineapples follow the same pattern on their skin, and sunflower seeds are also arranged along the golden spiral. Plants use the Golden Spiral to be visually appealing to insects which then pollinate the flowers. The Golden Spiral is the best aphrodisiac we can find in the plant kingdom.

This spiral doesn't just exist in plants either! According to scientists, this spiral can be seen in outer space, and a mathematics Professor at the University of Ottawa even said that it is seen in meteorology!

The Golden Spiral also shows up in photography and art, so the next time you bring your camera on a hike, snap a few pictures of funky plants. And for all the naysayers, go out and see for yourself; take a non-fibonacci photo and submit it below!