

# LOVE THE LORD WITH ALL YOUR MIND: A STUDY IN LOGICAL THINKING



## PART THREE LOGICAL FALLACIES



**TRUTH ON THE  
WEB MINISTRIES**

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JOSEPH 6:17 AND TAKE...THE SWORD OF THE  
SPIRIT WHICH IS THE WORD OF GOD

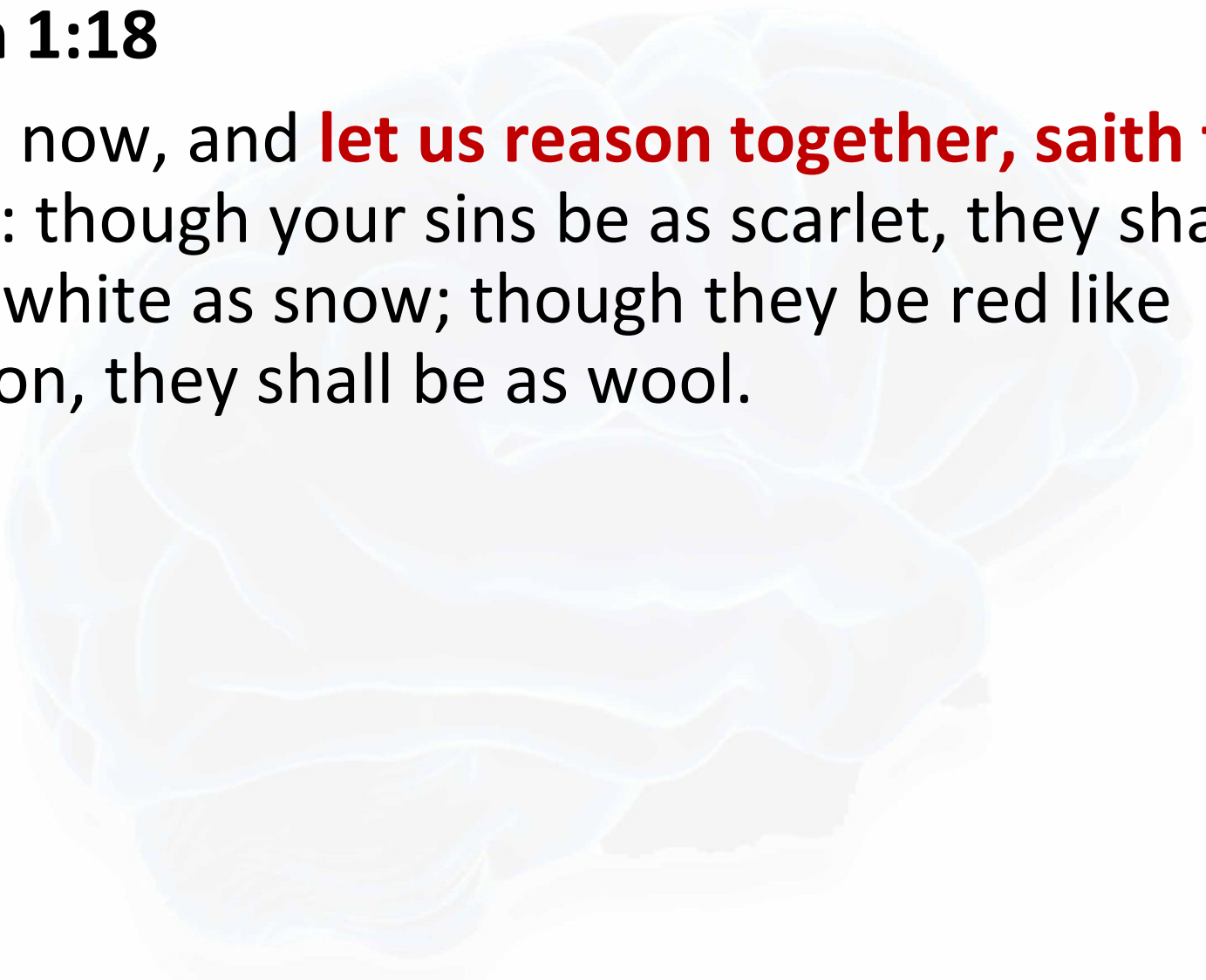
A CHURCH OF GOD IN WOODSTOCK, ILLINOIS





## Isaiah 1:18

Come now, and **let us reason together, saith the LORD**: though your sins be as scarlet, they shall be as white as snow; though they be red like crimson, they shall be as wool.





## Review of Terms

**Argument:** a coherent series of reasons, statements, or facts intended to support or establish a conclusion.

**Propositions:** true / false statements that, when taken together, constitute an argument. There are two basic types of propositions.

**Premises:** true propositions that support the conclusion.

**Conclusion:** the truth that logically follows the premise(s).



**DO NOT ANSWER A FOOL ACCORDING TO HIS FOLLY** (Prov. 26:4)



**LEST THOU BE LIKE UNTO**

**ANSWER A FOOL ACCORDING TO HIS FOLLY** (Prov. 26:5)



**LEST HE BE WISE IN HIS OWN**



*“Education is not the learning  
of facts but the training  
of the mind to think ”*

*– Albert Einstein*



## Review of Terms

### **Empiricism**

The philosophy that knowledge is based solely on what can be confirmed with the senses.

### **Rationalism**

The philosophy that knowledge is based on valid reasoning without any requirement that this be directly confirmed with the senses.

### **Falsifiable**

A statement, hypothesis or theory is falsifiable if it can be contradicted by an observation.



## Review of Terms

**Enthymeme:** An argument in which one of the premises or the conclusion is *not* explicitly stated. Usually, this is because the unstated claim is obvious.

### Enthymeme Examples

**Valid argument:**

The light is green, therefore, go!

**Invalid argument:**

There are many religions, Therefore, Jesus is not the only Way.





# Fallacy

Reasoning that is logically invalid, or that undermines the logical validity of an argument.

Because of their variety, fallacies are challenging to classify. They can be classified by their structure (formal fallacies) or content (informal fallacies).

The use of fallacies (*intentional or otherwise*) is common when the speaker's goal of achieving **common agreement** is more important to them than utilizing sound reasoning. When fallacies are used, the premise should be recognized as not well-grounded, the conclusion as unproven (but not necessarily false), and the argument as unsound.



# Red Herring

Attempting to redirect the argument to another issue to which the person doing the redirecting can better respond. The red herring is a deliberate diversion of attention with the intention of trying to abandon the original argument.

**Example:** Mike asks Bob, since it is morally wrong to cheat on your spouse, why on earth would you have done that? Bob responds 'But what is morality exactly?' Mike answers, It's a code of conduct shared by cultures. Bob responds, but who creates this code?...



## Ad Hominem

Attacking the person making the argument, rather than the argument itself, when the attack on the person is completely irrelevant to the argument the person is making.

Ad hominem attacks can take the form of overtly attacking somebody, or more subtly casting doubt on their character or personal attributes as a way to discredit their argument. The result of an ad hominem attack can be to undermine someone's case without actually having to engage with it.





## Ad Hominem (Abusive)

Attacking your opponent's character or personal traits in an attempt to undermine their argument.

**Example:** Tony wants us to believe that the origin of life was an “accident”. Tony is a godless heathen who has spent more time in jail than in church, so the only information we should consider from him is the best way to make license plates.





## Ad Hominem (Circumstantial)

Suggesting that the person who is making the argument is biased or predisposed to take a particular stance, and therefore, the argument is automatically invalid.

**Example:** Of course, your minister says he believes in God. He would be unemployed otherwise.





## Ad Hominem (Tu quoque)

Claiming the argument is flawed by pointing out that the one making the argument is not acting consistently with the claims of the argument.

**Example:** Jimmy Swaggart argued strongly against sexual immorality, yet while married, he has had several affairs with prostitutes; therefore, sexual immorality is acceptable.



# LOGIC

## Ad Hominem (Guilt by Association)

When the source is viewed negatively because of its association with another person or group who is already viewed negatively.

**Example:** My opponent for office is headquartered on Main street, right next door to the *'Puppy Haters of America'*. Is that the sort of person (a puppy hater) you want to vote for?





# Strawman

Misrepresenting someone's argument to make it easier to attack.

By exaggerating, misrepresenting, or just completely fabricating someone's argument, it's much easier to present your own position as being reasonable, but this kind of dishonesty serves to undermine honest rational debate.

**Example:** Paul and his cronies talk about God all the time, but they also say that we should do evil that good will come.





## Personal Incredulity

Because something is difficult to understand (or you don't want to believe it), you assume it's probably not true.

Complex subjects, such as Biblical historicity and archeology, require some amount of understanding before one can make an informed judgement about the subject at hand.

**Example:** The Bible's teachings can't possibly be true. I don't see how Jesus could have literally been God in human flesh—much less, born of a virgin. Do you really expect me to believe all that?



## False Cause

Presuming that a real or perceived relationship between things means that one is the cause of the other.

Many people confuse correlation (things happening together or in sequence) for causation (that one thing actually causes the other to happen). Sometimes correlation is coincidental, or it may be attributable to a common cause.

**Example:** Pointing to a fancy chart, Roger shows how gas prices have been rising over the past few decades, whilst at the same time the number of public payphones have been decreasing; thus, the more payphones, the lower gas prices will be.





# Appeal to Emotion

Attempting to manipulate an emotional response in place of a valid or compelling argument.

It's important to note that sometimes a logically coherent argument may inspire emotion or have an emotional aspect, but the problem and fallacy occurs when emotion is used instead of a logical argument, or to obscure the fact that no compelling rational reason exists for one's position. Appeals to emotion are a very common and effective argument tactic, but they're ultimately flawed, dishonest, and tend to make one's opponents justifiably emotional.

**Example:** Luke didn't want to eat his sheep's brains with chopped liver and brussel sprouts, but his father told him to think about the poor, starving children in a third world country who weren't fortunate enough to have any food at all.



# Appeal to Authority

Using the opinion or position of an authority figure or institution of authority in place of an actual argument.

It's important to note that this fallacy should not be used to dismiss the claims of experts, or scientific consensus. Appeals to authority are not valid arguments, but nor is it reasonable to disregard the claims of experts who have a demonstrated depth of knowledge unless one has a similar level of understanding and/or access to empirical evidence. However, it is entirely possible that the opinion of a person or institution of authority is wrong; therefore the authority that such a person or institution holds does not have any intrinsic bearing upon whether their claims are true or not.

**Example:** Not able to defend his position that abortion isn't murder, Javier said that, in his state, murder was illegal, and abortion is legal, therefore abortion isn't murder.





# The Fallacy Fallacy

Presuming that because a claim has been poorly argued, or a fallacy has been made, that the claim itself must be wrong.

It is entirely possible to make a claim that is false yet argue with logical coherency for that claim, just as it is possible to make a claim that is true and justify it with various fallacies and poor arguments.

**Example:** Recognizing that Amanda had committed a fallacy in arguing that we should eat healthy food because a nutritionist said it was best, Alyse said pooh-pooh, we should therefore eat double cheeseburgers every day.



## Matthew 7:1–5

**Judge not, that ye be not judged.** For with what judgment ye judge, ye shall be judged: and with what measure ye mete, it shall be measured to you again. And why beholdest thou the mote that is in thy brother's eye, but considerest not the beam that is in thine own eye? Or how wilt thou say to thy brother, Let me pull out the mote out of thine eye; and, behold, a beam is in thine own eye? Thou hypocrite, first cast out the beam out of thine own eye; and then shalt thou see clearly to cast out the mote out of thy brother's eye.





# Slippery Slope

Arguing that if we allow A to happen, then Z will eventually happen too, therefore A should not happen.

The problem with this reasoning is that it avoids engaging with the issue at hand, and instead shifts attention to hypotheticals. Because no proof is presented to show that these hypotheticals will in fact occur, this fallacy has the form of an appeal to emotion fallacy by leveraging fear. In effect the argument at hand is unfairly tainted by unsubstantiated conjecture.

**Example:** Ron argued that if he allowed even one person to bring a pickle into his home, it would lead to everyone bringing pickles every time they visited!



# Special Pleading

Moving the goalposts or making up an exception when your claim was shown to be false.

Rather than appreciate the benefits of being able to change one's mind through better understanding, many will invent ways to cling to old beliefs. One of the most common ways that people do this is to post-rationalize a reason why what they thought to be true must remain to be true. It's usually very easy to find a reason to believe something that suits us, and it requires ***integrity and genuine honesty with oneself*** to examine one's own beliefs and motivations without falling into the trap of justifying our existing ways of seeing ourselves and the world around us.

**Example:** When Joe's wife pointed out that *'not paying the bills in a timely fashion allowed the money to accrue more interest in their account'* didn't make sense since the late fees totaled more than the interest earned, he switched tactics stating that the big companies deserved to wait longer for their money!





## Loaded Question

Asking a question that has presumptions built into it so that it can't be answered without appearing guilty.

Loaded question fallacies are particularly effective at derailing rational debates because of their inflammatory nature - the recipient of the loaded question is compelled to defend themselves and may appear flustered or on the back foot.

**Example:** Grace and Helen were both romantically interested in Jim. One day, with Jim sitting within earshot, Grace asked in an inquisitive tone whether Helen was still having problems with her drug habit.





# Burden of Proof

Believing that the burden of proof lies not with the person making the claim, but with someone else to disprove.

The burden of proof lies with someone who is making a claim, and is not upon anyone else to disprove. The inability, or disinclination, to disprove a claim does not render that claim valid, nor give it any credence whatsoever. However it is important to note that we can never be certain of anything, and so we must assign value to any claim based on the available evidence, and *to dismiss something on the basis that it hasn't been proven beyond all doubt is also fallacious reasoning.*

**Example:** Bertrand declares that a teapot is, at this very moment, in orbit around the Sun between the Earth and Mars, and that because no one can prove him wrong, his claim is therefore a valid one.





# Ambiguity

Using a double meaning or ambiguity of language to mislead or misrepresent the truth.

Politicians are often guilty of using ambiguity to mislead and will later point to how they were technically not outright lying if they come under scrutiny.

**Example:** When the judge asked the defendant why he hadn't paid his parking fines, he said that he shouldn't have to pay them because the sign said 'Fine for parking here' and so he naturally presumed that it would be fine to park there.





# Ambiguity

## Oversimplification / Mischaracterization

Transported to a surreal landscape, a young girl kills the first person she meets and then teams up with three strangers to kill again.



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# Bandwagon

Appealing to popularity or the fact that many people do something as an attempted form of validation.

The flaw in this argument is that the popularity of an idea has absolutely no bearing on its validity.

**Example:** Shamus pointed a drunken finger at Sean and asked him to explain how so many people could believe in leprechauns if they're only a silly old superstition!





# Composition/Division

Assuming that one part of something has to be applied to all, or other, parts of it; or that the whole must apply to its parts.

Often when something is true for the part it does also apply to the whole, or vice versa, but the crucial difference is whether there exists good evidence to show that this is the case.

Because we observe consistencies in things, our thinking can become biased so that we presume consistency to exist where it does not.

## Examples:

- If someone stands up out of their seat at a cricket match, they can see better. Therefore, if everyone stands up, they can all see better.
- If a runner runs faster, he can win the race. Therefore, if all the runners run faster, they can all win the race.
- Since every part of a certain machine is light in weight, the machine as a whole is light in weight.





## No True Scotsman

Making what could be called an appeal to purity as a way to dismiss relevant criticisms or flaws of your argument.

In this form of faulty reasoning one's belief is rendered unfalsifiable because no matter how compelling the evidence is, one simply shifts the goalposts so that it wouldn't apply to a supposedly 'true' example. This kind of post-rationalization is a way of avoiding valid criticisms of one's argument.

**Example:** Angus declares that Scotsmen do not put sugar on their porridge, to which Lachlan points out that he is a Scotsman and puts sugar on his porridge. Furious, like a true Scot, Angus yells that no *true* Scotsman sugars his porridge.





## Bifurcation / Black-or-White

Presenting two alternative states as the only possibilities, when in fact more possibilities exist.

Also known as the false dilemma, this tactic has the appearance of forming a logical argument, but under closer scrutiny it becomes evident that there are more possibilities than the either/or choice that is presented. Binary, black-or-white thinking doesn't allow for the many different variables, conditions, and contexts in which there would exist more than just the two possibilities put forth. It frames the argument misleadingly and obscures rational, honest debate.

### Examples:

- The light is either red or green
- You either have faith or you are rational





# Anecdotal

Using a personal experience or an isolated example instead of a sound argument or compelling evidence.

It's often much easier for people to believe someone's testimony as opposed to understanding complex data and variation across a continuum. Quantitative scientific measures are almost always more accurate than personal perceptions and experiences, but our inclination is to believe that which is tangible to us, and/or the word of someone we trust over a more 'abstract' statistical reality.

**Example:** Since Bob the Drunk never got drunk one single time until after he started drinking, he assumed the cause of his drunkenness was taking the first drink. Bob also found others that had the same experience.



# Middle Ground

Saying that a compromise, or middle point, between two extremes must be the truth.

Much of the time the truth does indeed lie between two extreme points, but this can bias our thinking: sometimes a thing is simply untrue and a compromise of it is also untrue. Half way between truth and a lie, is still a lie.

**Example:** Holly said that Jesus was the only way to Salvation, but her atheist coworker Caleb said that there was no God nor any need for salvation. Another coworker, Alice, offered a compromise saying there may or may not be a God – who can know? So both points of view have some merit.





# Begging the Question

Presenting a circular argument in which the conclusion was included in the premise.

This logically fallacious argument often arises in situations where people have an assumption that is very ingrained, and therefore taken in their minds as a given.

## Examples:

- Circular reasoning is bad mostly because it's not very good.
- Chevys are the best cars because they aren't Fords.
- The Bible is true because it says it is.



## Colossians 2:6-9

As ye have therefore received Christ Jesus the Lord, **so walk ye in him: Rooted and built up** in him, and stablished in the faith, as ye have been taught, abounding therein with thanksgiving. Beware **lest any man spoil you through philosophy and vain deceit**, after the tradition of men, after the rudiments of the world, and not after Christ. For in him dwelleth all the fulness of the Godhead bodily.





## Homework

- Select three fallacies
- For each of the three fallacies, find examples from your past where you have used them (intentionally or not) and explain the circumstance(s).
- Examples in the Biblical realm preferred.

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Example: Ad Hominem (guilt by association). When I first started observing the 7<sup>th</sup> day Sabbath, I closed my ears to almost everything 'Sunday keepers' had to offer.

Send responses to **ron@totw.org**



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REST OF THE  
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PART THREE  
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