

Review: Dr. Jason Lisle, *A Pocket Guide To Logic & Faith,*
Answers in Genesis, Petersburg, Kentucky, 2011

Pages: 89

Sharpen Logic Skills

Astronomer Dr. Jason Lisle has written a handy book from a Christian world view containing enough information to grasp the basics of common logical fallacies: reification, question-begging epithet, equivocation, false dilemma, appeal to authority, ad-hominem and the straw man.

Learn to spot the above in other's arguments (they will be obvious) while at the same time maintain integrity by avoiding them.

The pretend strongman of atheism, reason, is shown to only have validity if immutable non-material laws of logic exist. Given this cannot be part of a materialist philosophy the atheist is put in a strange position having to borrow from theism to attack it.

The rational nature of the Creator is seen in His laws-biogenesis, planetary motion, chemistry, physics, mathematics and logic. These are only reliable (and science-enabling) with a Creator who never changes.

Understanding logic will strengthen confidence in putting forward beliefs with opposing rhetoric seen in its true light – something to be pitied.

Logic is concerned with the validity of chains of propositions (a simple concept) as opposed to arbitrary statements themselves (i.e. the individual propositions themselves).

There are two types of argumentation – inductive and deductive. Inductive can be either *weak* or *cogent*. A weak inductive argument leads from premise to conclusion, but the premise is unlikely. In a cogent inductive argument the premise is strong, e.g.

Premise: Road traffic increases during wet weather.

Statement: It is raining today.

Conclusion: Road traffic will be increased today.

In deductive reasoning the conclusion *must* follow from the premise if the argument is valid. If not it is invalid, e.g.:

Premise: Only God can create matter and energy. (true)

Statement: Jesus created matter and energy. (true)

Conclusion: Jesus is God. (valid and sound)

Most arguments seem to be of the inductive type due to conclusion uncertainty. It is pointed out that valid arguments need not necessarily be sound, as the truth or falsity of premises is irrelevant in a strictly academic sense, e.g.

Premise: Only God can create matter and energy. (true)

Statement: Jesus didn't created matter and energy. (false)

Conclusion: Jesus is not God. (valid but false)

Fallacies listed:

*Reification: Applying concrete characteristics to a non-living thing. Appeals to 'Mother Nature', 'Evolution' and 'Science' are reification fallacies since as concepts they have no power to do anything. What is implicitly being appealed to is a faith in materialism, which has *caused* the cumulative events behind the phenomenon in question.

Reification and begging the question also seem to go together, as the conclusion is assumed in the premise, e.g. "Mother Nature is the creator because one can see how nature works together in harmony."

On natural selection, reification is best shown up by the reality this phenomena merely explains why creatures *without* certain characteristics *do not* survive, as opposed to why certain animals developed how they did.

*Equivocation

Also called *bait and switch*, this is a popular tactic to generate confusion by beginning from a fair-sounding premise, e.g.:

Premise: Evolution means animals will be observed to change over time.

Statement: Animals have been observed to change over time.

Conclusion: Evolution is true.

The scope of the definition of evolution here is clearly larger than what the statement will admit, resulting in a false conclusion and invalid argument.

In the context of evolution, the switch is from change *in the* present, to an organism having developed from a common ancestor.

In the context of science, the switch is from using the established and falsifiable experimental method which operates in the present, to historical investigation of a single, non-repeatable event that happened in the past.

*Begging the question

Simply put, assuming what is to be proved. Anti-creation arguments often beg the question because of their materialism philosophy.

Strangely, this fallacy has a valid argument form as it affirms the antecedent. The problem is it is simply arbitrary and could be used to prove anything.

An example - "we know evolution is true because we are here."

*The Question-Begging Epithet

Often one-line statements that portray creationists in a bad light using emotionally charged language. Attaching *ism*, or placing words within quotation marks to cast doubt on authenticity are tactics.

A false accusation of a logical fallacy is itself a fallacy of this kind (why was it a fallacy?).

This fallacy is a type of *rhetoric*, which means 'empty words'.

*The Complex Question

The interrogative form of the question-begging epithet (i.e. placing multiple arguments in one question to add more power), e.g. “why wouldn't anyone believe in evolution as science proves it?”

This can often be spotted by an opening of “the fact is...” or some similarly authoritative sounding statement.

*False Dilemma

Setting up an argument that obscures the reality of alternatives, e.g. “faith picks up where reason gets off”. Popular ones include, “science versus religion”, “science versus the Bible”, “logic versus faith”, etc.

When there truly are only two options the law of the undistributed middle applies.

The key to detecting this fallacy is the mention of only two alternatives.

*Ad Hominem

To the man, this argument is a character attack and has psychological and popular power with the masses. Stooping to this level reveals the intellectually bankrupt nature of the arguer.

Surprisingly, a person's character has no bearing on the validity of an argument (even the devil argues validly) however the truth of it is another matter (e.g. a compulsive liar should not be trusted).

A type of ad hominem called circumstantial exists, whereby the person is attacked by circumstances outside of their control. E.g. you must be Christian because you were brought up in a Christian home.

Calling someone a liar is an ad hominem and begging the question, if it is pertaining to the truth of the argument itself.

*Faulty Appeal to Authority

An opposite to the ad hominem.

This occurs when someone outside their field of expertise is appealed to as proof of argument, e.g. Dr. X believes in evolution so it must be true.

When an expert is appealed to this is not fallacious but this may be question-begging as *how* does the expert know? If they exhibit extreme bias or have an antithetical world-view (e.g. a materialist scientist on evolution), if infallibility is given them (e.g. the pope)-the sole exception is God.

More powerful forms of this argument are appeal to the majority, and even greater appeal to the majority of experts (two fallacies don't make an argument!).

*Straw-Man Fallacy

Intentionally or otherwise misrepresenting an opponents argument, then proceeding to disprove it. A degree of liability always exists with the arguer as they have an obligation to do sufficient research.

Technically this is part of a wider group of logical errors known as the fallacy of the irrelevant thesis.

*Formal Fallacies

Named as they pertain the *form* an argument takes.

These appear when an argument includes a hypothetical premise (i.e. an *if then* statement). These arguments are called *hypothetical mixed syllogisms*.

Given two premises, an antecedent p (what comes before), and a consequent q (what comes after), there are 2*2 outcomes: pq, $\bar{p}q$, p \bar{q} , $\bar{p}\bar{q}$.

Argument forms which claim p is true given q has occurred are invalid as they are simply re-stating the consequent. This is called *affirming the consequent*. If the second premise states p is true the argument is valid, i.e. it is reinforcing belief in the first premise, thus it is known as *affirming the antecedent*. This is known as the 'method of affirming', or *modus ponens*.

If a syllogism's second premise has p as false and concludes the first premise must be false the fallacy of *denying the antecedent* exists. A false antecedent is assumed to result in a false consequent without cause. Conversely, if the consequent is false and a conclusion the premise is false is made this is valid, known as *denying the antecedent*, or the 'method of denying' (*modus ponens*). By the argument's logic, a true antecedent is a necessary condition for a true consequent so if the consequent is false the antecedent is denied.

Evolution arguments often commit this fallacy:

*If the Big Bang model (p) is true CMBR (q) will be detected. CMBR has been detected, therefore the model must be true. $q \rightarrow p$ so this is simply affirming the consequent.

*If evolution is true (p) human and dinosaur fossils will not be found together (q). No human and dinosaur fossils have been found together, therefore evolution must be true. $q \rightarrow p$ (“

Atheism is shown to be without foundation as it is based on materialism. Quite simply, laws of logic (e.g. the critical law of non-contradiction) are not material and are therefore unaccountable under an atheistic worldview.

Atheistic objections to this truth are dealt with:

- *That logic is a convention made by man, which would make it flexible.
- *That logic only exists in the brain's connections, which would make it subject to each individual's physiology.
- *That logic simply works, begging the question.
- *That logic is immaterial, which is a theistic belief.

These counters are good for memorisation.

Natural laws also seem to be powerful evidence of a law-giver:

- *Biogenesis: reinforced by Louis Pasteur as per Genesis.
- *Chemistry: atoms, the periodic table (where elements in the same group

have similar properties due to the same number of the electrons) and compounds all obey laws of quantum physics. Life requires chemistry (e.g. ATP synthase motor) as well as information, which is imprinted upon DNA as the substrate.

One interesting example is water. As a solid it forms a hexagonal crystal which due to holes allows it to float in its own liquid.

*Planetary motion discovered by Johannes Kepler. Derivable from Newton's laws, they include planets orbiting in ellipses (not circles), p (orbital period)²= a (distance to the sun)³, which relates the orbital period to distance from the sun and that planet velocity increases as it nears the sun in its orbital path. and the perimeter of a rotating body traces out an equal area in an equal amount of time.

*Physics: From the atomic to the sub-atomic, many are derivable from others, however it is likely some are fundamental¹. They include the propagation of light waves, $F=ma$ and energy transportation.

*Mathematics: Unlike Physics these are abstract, not part of the universe. In this way they are similar to laws of logic and require a supernatural source to account for them. Human discovery is often conflated with human creation.

*Logic.

*Uniformity of Nature: Without an orderly creator abiding by His laws of logic there is no reason to expect uniformity in nature and scientific investigation would be impossible. Without Him the creation would cease to exist, and without His will it would cease to operate correctly.

Faith versus reason is an old false dilemma as faith is a prerequisite. Unfortunately most Christians subscribe to the philosophy “faith takes over where reason departs” and leave their brains at the door.

¹At least one must be, otherwise there would remain a yet undiscovered fundamental law.