Loving God With All Your Mind: Logic and Creation

JONATHAN D. SARFATI

ABSTRACT

Logic and reason are far from being incompatible with Biblical Christianity. Rather, they are essential. Without them it is impossible to deduce anything from the true propositions of the 66 books of Scripture, the Christian's final authority. This applies to creation, one of the foundational doctrines of Christianity. Examples of valid and fallacious reasoning are discussed, with emphasis on showing how logical reasoning can support the truth of Biblical creation, and demonstrate the fallacies in many evolutionist's arguments.

Logic is the science of the relations between propositions. Logic can tell us what can be inferred from a given proposition, but it cannot tell us whether the given proposition is true in the first place. All philosophical systems rely on logical deductions from starting assumptions — **axioms** — which, by definition, cannot be proven from prior assumption. For our axioms, it is rational to accept the propositions revealed by the infallible God in the 66 books of the Bible.

SCRIPTURAL CONSIDERATIONS

Martin Luther correctly distinguished between the magisterial and ministerial use of reason.[1]

The magisterial use of reason occurs when reason stands over Scripture like a magistrate and judges it. Such 'reasoning' is bound to be flawed, because it starts with axioms invented by fallible humans and not revealed by the infallible God. But this is the chief characteristic of liberal 'Christianity'. It is refuted by Scriptural passages such as Isaiah 55:8-9:

'"For my thoughts are not your thoughts, neither are your ways my ways", declares the Lord. As the heavens are higher than the earth, so are my ways higher than your ways and my thoughts than your thoughts.'[2]

Note that this does not say 'My logic is higher than your logic'. If so, then if we believed 2+2=4, God could believe 2+2=5. What it does mean is that God knows every true proposition, while we know only a part. Another passage is Romans 9:19-21:

'One of you will say to me: "Then why does God still blame us? For who resists his will"? But who are you, O man, to talk back to God? Shall what is formed say to him who formed it, "Why did you make me like this?" Does not the potter have the right to make out of the same lump of clay some pottery for noble purposes and some for common use?'

The ministerial use of reason occurs when reason submits to Scripture. This means that all things necessary for our faith and life are either expressly set down in Scripture, or may be deduced by good and necessary consequence from Scripture.[3]

Many Scriptural passages show that Christians are not supposed to leave their brains at the church door, but to use their God-given minds in subjection to God's Word. For example, Isaiah 1:18:

'"Come now, let us reason together", says the LORD. "Though your sins are like scarlet, they shall be as white as snow; though they are red as crimson, they shall be like wool".'

Matthew 22:36-38:

'"Teacher, which is the greatest commandment in the Law?" Jesus replied: "Love the Lord your God with all your heart and with all your soul and with all your **mind.** This is the first and greatest commandment".'

Romans 12:2:

'Do not conform any longer to the pattern of this world,

but be transformed by the renewing of your mind.
Then you will be able to test and approve what God's
will is — his good, pleasing and perfect will.'

I Corinthians 2:16:

'"For who has known the mind of the Lord that he
may instruct him?" But we have the mind of Christ.'

Note — mind of Christ, not feelings or emotions of Christ.

Much confusion arises when some people disparage
'head knowledge'. For example, Geoff Smith, pastor of
the large Auckland Bible Church (New Zealand), has
pointed out that in some churches, anything that has to do
with rational thinking is suspect and strongly discouraged.[4]
Rational thinking is branded as something coming from
the flesh. People of the Spirit won't try to understand
what's happening — they will simply accept the 'blessing'.
The catch words are unmistakable: 'Don't try to understand
this', 'Don't try to analyse this', and 'Don't try to figure
this out with your mind.'

In such thinking there is no real understanding that
faith is always built on knowledge. The prophet Isaiah
asks repeatedly, 'Do you not know, have you not heard?'
(Isaiah 40:21; 40:28).

Jesus repeatedly asks, 'Have you not read ... ?', and
tells the Sadducees that they are in error because they 'do
not know the Scriptures or the power of God' (Matthew
22:29).

In his letters Paul constantly shows that true, functional
faith is always built on knowledge. Conversely, deficient
faith is traced back to its unmistakable cause — deficient
knowledge. Paul repeatedly asks the question, 'Don't you
know ...' (Romans 6:3, 16; 11:2; I Corinthians 3:16; I
Corinthians 5:6; I Corinthians 6:2, 3, 9, 15, 16, 19; I
Corinthians 9:13,27). Notice also the same question being
asked by James (James 4:4). Philip asked the Ethiopian
eunuch, 'Do you understand what you are reading?' (Acts
8:30).[4]

Part of the confusion lies in the misunderstanding of
the word 'heart' in the Bible. Some people make a false
contrast between 'head-knowledge' and 'heart-trust'.
When interpreting Scripture, it is important to work out
what the authors meant by the term. In this case, one
should work out what 'heart' meant to ancient Semites,
not what it means in Hollywood pop-psychology. In the
Bible, the word 'heart' is used 75 per cent of the time to
mean the mind or intellect. However, the Bible frequently
contrasts the heart and the lips — sincerity vs. hypocrisy.
For example, Genesis 6:5:

'The LORD saw how great man's wickedness on the
earth had become, and that every inclination of the
thoughts of his heart was only evil all the time.'

Psalm 14:1:

'The fool says in his heart, "There is no God". They
are corrupt, their deeds are vile; there is no one who
does good.'

The New Testament concept of faith is compatible
with reason. The Greek word for 'faith' is *pistis,* which is

related to the verb *pisteuo* (to believe). It never has the
connotation of 'believing six impossible things before
breakfast', but 'is being sure of what we hope for and
certain of what we do not see' (Hebrews 11:1). Many
non-Christians have a misconception of Biblical faith, and
unfortunately some Christians have accepted this.[5]

LOGIC IN BIBLICAL PREACHING AND WITNESSING

Christ's chief apostle, Peter, commanded us (I Peter
3:15):

'But in your hearts set apart Christ as Lord. Always
be prepared to give an answer to everyone who asks
you to give the reason for the hope that you have. But
do this with gentleness and respect.'

The word translated 'answer' in I Peter 3:15 is in fact
απολογια *(apologia).* The Greek term is derived from
the Greek words meaning 'out of logic/reason', so refers
to a reasoned defence that would be given in a court of
law. The classic example is Plato's **Apology,** Socrates'
defence against the charges of atheism and corrupting the
youth. The word also appears in the negative in Romans
1:20 — unbelievers are αναπολογητος *(anapologetos)*
(without excuse/defence/apology) for rejecting the
revelation of God in creation.

The word for 'reason' above is λογος *(logos),* in this
context meaning evidence that provides rational
justification for one's belief.

Christ's half-brother, Jude, commanded in verse 3 of
his epistle:

'. .. earnestly contend for the faith which was once
delivered unto the saints.'

This implies a real intellectual battle to convince people
of something righteous and true. Paul elaborated on this
in II Corinthians 10:4-5:

'The weapons we fight with are not the weapons of
the world. On the contrary, they have divine power
to demolish strongholds. We demolish arguments and
every pretension that sets itself up against the
knowledge of God, and we take captive every thought
to make it obedient to Christ.'

Of course, evolution is the major anti-God pretension of
our age, so we must make great efforts to demolish it.

ACCURATE DEFINITIONS OF WORDS

It is impossible to have a logical discussion with people
if there is no agreement on meanings of words, or with
those who are dishonest with their terminology. Socrates,
in Plato's **Phaedo,** stated succinctly: *'To use words
wrongly and indefinitely is not merely an error in itself, it
also creates evil in the soul'*

Many cults, and liberal Christianity,[6] often use Biblical
terminology, but invest the words with entirely new
meanings.[7] They resemble Humpty-Dumpty, who replied

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scornfully to Alice's ignorance of what he meant: *' When I use a word, it means just what I choose it to mean — neither more nor less,'*[8]

Some prize examples of semantic 'gymnastics' can be found in the ramblings of liberal Christian churchmen. Since they are being paid to defend doctrines they don't believe, they re-define them instead. That way, they can pretend they are not violating their ordination vows. For them, God is not the Creator, but the 'ultimate concern'; 'Jesus is risen' means that His influence continued after His death; 'Christian faith' need not consist of holding any doctrines, although the New Testament states that those who forsake orthodox Christian doctrine are said to have departed from the faith (I Timothy 4:1, 5:8, 12:2; II Timothy 3:8; cf Ephesians 4:5).

These are all examples of **stipulative definitions.** This fallacy is common among evolutionists who contrast 'scientists' and 'creationists'. A creationist would respond by producing evidence that there are thousands of practising scientists who believe in Biblical creation. But some evolutionists respond that such people cannot be true scientists because no true scientist can accept a creationist explanation, regardless of his qualifications or research experience.[9] This becomes essentially a circular argument: all who are qualified in science and practice science and reject creation are opposed to creation.

Equivocation

The worst example of intellectual dishonesty is **equivocation,** that is, switching the meaning of a single word part-way through an argument. This deceitful practice is used by many evolutionary propagandists when defining the word 'evolution'.

Evolution really means the development of all living things from a single cell, which itself came from non-living chemicals. This directly contradicts the Bible and has **no** scientific support. But many propagandists define evolution as 'change in gene frequency with time' or 'descent with modification', and use Darwin's finches and industrial melanism in the peppered moths as clinching proof of 'evolution' and disproof of creationism! An example is the atheist Eugenie Scott, Executive Director of the pretentiously named National Center for Science Education, the leading US organisation devoted entirely to evolution-pushing.[10] She approvingly cited a teacher whose pupils said after her 'definition': *Of course species change with time! You mean that's evolution?!*[11]

Of course, no creationist disputes that changes occur through time, but creationists disagree that the type of change required for molecules-to-man evolution occurs, that is, changes that **increase information content.**

TRUTH AND FALSITY

A simple definition of truth and falsity goes back at least as far as Aristotle (384-322 BC): *'If I say of what is that it is, I speak the truth. If I say of what is not that it is, I speak falsely'.* That is, a statement is true if it corresponds to the facts, and false otherwise.

This should be obvious, but the atheistic anti-creationist Ian Plimer wrote: *'In my view, the Bible is not true. However, it is the Truth.'*[12]

Of the many crass blunders he makes in logic, mathematics, science and exegesis, which are well documented on the *Answers in Genesis* website,[13] this is the worst.

REASONED ARGUMENTS[14]

In logic, an **argument** is defined as a sequence of statements comprising premises that are claimed to support a conclusion. As shown above, Scripture teaches that Christians are to argue in this sense. This is not the same as being **argumentative,** or arguing just for the sake of arguing.

Arguments can be either **deductive** or **inductive.** Deductive reasoning is reasoning from the general to the particular. **Inductive** arguments reason from a finite set of examples to a general rule. Deductive arguments are the most important, so I will concentrate on them below.

A **syllogism** is a common type of deductive argument with two premises and a conclusion.

(1) Validity

A valid argument is one where it is impossible for the premises to be true and the conclusion false, that is, the conclusion follows from the premises. Note that validity does not depend on the truth of the premises, but on the **form** of the argument.

One example of a valid argument with true premises is:-
(1) All whales have backbones;
(2) Moby Dick is a whale;
Moby Dick has a backbone.

An example of a valid argument with a false premise and false conclusion is:-
(1) All dogs are reptiles;
(2) All reptiles have scales;
All dogs have scales.

An invalid argument with a true premise and true conclusion is:-
(1) the Sun is larger than the Earth;
polytheism contradicts the Bible.
This is invalid because the conclusion contains terms not contained in the premise. It is important to recognise valid forms of argument, and use them.

Many invalid arguments can be found in the works of politicians. On the astute British television political satire **Yes, Prime Minister,** a civil servant character illustrated one politician's fallacy:-
(1) We had to do something;
(2) That was something;

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We had to do that.

This is just as invalid as:

(1) My cat had to go to the vet;
(2) My dog had to go to the vet;

My dog is my cat.

(2) Soundness

A sound argument is a valid argument with true premises. The conclusion of a sound argument must be true. So, to prove the conclusion of a valid argument, it is sufficient to prove all premises are true. For example:

(1) Abortion is intentional killing of a fetus;
(2) A foetus is an innocent human being;
(3) Intentionally killing an innocent human being is murder;
(4) Murder is forbidden by God;

Abortion is forbidden by God.

The form of the argument is valid, premises (1) and (3) are true by the normal definitions of words, (2) can be proven by science and Scripture (Genesis 25:22 and Luke 1:41 use the same words for unborn and born children), and (4) is proven by Genesis 9:6, Exodus 20:13, Romans 13:9, so the argument is sound.

(3) Contradiction

A contradiction is defined as the conjunction of the affirmation and denial of a premise, in the same time, place, and sense (that is, p and not-p, or in symbolic form, p.~p). For any pair of contradictory premises, one must be true and the other false. The **Law of Non-Contradiction** prevents both premises being true, while the **Law of Excluded Middle** points out that a pair of contradictory premises exhausts all possibilities. Another way of putting it is: a proposition must be either true or false — not both true and false, nor in some limbo state in between truth and falsity. This can be useful in listing all possible alternatives, and refuting all of them but the correct one.

C. S. Lewis's famous **Trilemma** argument is a good example.

Jesus Christ is reported to have claimed to be God. The reports are either true or false.

(1) If the reports are false, the reporters either knew they were false or they did not.
  (a) If they knew they were false, they were liars — but who would die for what they knew is a lie?
  (b) If they did not know, then it is a big problem to explain how legends could accumulate around an historical figure in such a short time.
(2) If the reports are true, then Jesus was either speaking falsely or truly.
  (a) If Jesus spoke falsely, he either knew it or he did not.
    (i) If He knew, he was a liar,
    (ii) If He knew not, then He was a lunatic, since a claim to be God is the most absurd claim a mere creature can make.

(b) If Jesus spoke truly, then He really is God.

Anti-Christians often charge the Bible with contradicting itself, as they realise that if the charge were proven, it would show that it affirms at least one false statement, thus disproving divine authorship. But most of these sceptics are ignorant of the above definition of a contradiction.

For example, Matthew 20:29 ff. which states that Christ healed two blind men does not contradict Mark 10:46 ff. which states that Bartimaeus was healed, as the latter does not say **only** Bartimaeus was healed.

Some other alleged contradictions can be resolved by showing that words are being used in different senses. For example, John 1:18 versus Exodus 24:9-10. In the former, Jesus states:

> 'No man has seen God [in His full glory as Sovereign of the Universe] at any time; the only begotten God [Jesus] … has explained Him.'

In the latter, Moses was clearly beholding a veiled presence of God, metaphorically referred to as 'under His feet'. In Exodus 33:18-23, a distinction is also made between beholding God's full glory ('face') and God's veiled presence ('back').

Although many cults claim that the Biblical doctrine of the Trinity is self-contradictory, it is not. The oneness and threeness of God refer to **different aspects.** The three eternal and co-equal Persons of the Godhead (Father, Son and Holy Spirit) are the same in essence but distinct in **role** — three Persons (or three centres of consciousness) and one Being.

An important aspect of contradiction is **self-refutation.** Many statements by anti-Christians might appear reasonable on the surface, but when the statement is turned on itself, it refutes itself. Some common examples are:-

(a) 'There is no truth' — this would mean that **this** sentence itself is not true.
(b) 'We can never know anything for certain' — so how could we know **that** for certain?
(c) 'A statement is only meaningful if it is either a necessary truth of logic or can be tested empirically' (the once popular **verification criterion for meaning** of the 'Logical Positivists') — this statement itself is neither a necessary truth of logic nor can it be tested empirically, so it is meaningless by its own criteria.
(d) 'There are no moral absolutes, so we ought to be tolerant of other people's morals' —but 'ought' implies a moral absolute that toleration is good.

(4) Conditional Statements and Implications

These are of the form: 'if p then q' (if p is true, then q is true). Another way of putting it is 'p implies q', or in symbolic form p q. Yet another way is saying that p is a **sufficient condition** for q, while q is a **necessary condition** for p. P is called the **antecedent,** and q is called the **consequent.**

Asserting the truth of the implication (p q) does **not**

in itself imply that the antecedent (p) is true — only that if p were true, q must logically follow from it. For an example of a misunderstanding of this point, some use the following passage to 'prove' that it is possible to speak with 'angelic tongues':

> 'If I speak in the tongues of men and of angels, but have not love, I am only a resounding gong or a clanging cymbal. If I have the gift of prophecy and can fathom all mysteries and all knowledge, and if I have a faith that can move mountains, but have not love, I am nothing. If I give all I possess to the poor and surrender my body to the flames, but have not love, I gain nothing.' (I Corinthians 13:1–3)

Paul makes several conditional statements showing that without love, no matter what other wonders he might hypothetically be able to perform, he would be nothing. He is no more asserting that there are special angelic tongues than that he moved mountains or gave his body to the fire. There may be passages to support a common Pentecostal practice, but this is not one of them *(Answers in Genesis* takes no position on this issue).

Another good example is Jesus' statement in Matthew 12:27:

> 'And if I drive out demons by Beelzebub, by whom do your people drive them out? So then, they will be your judges.'

I doubt that any Christian would claim that Jesus was asserting that He drove out demons by Beelzebub! He was showing that if His opponents were right in their accusation, then the accusation would equally apply to their own people. Jesus' argument is an example of *reductio ad absurdum* (see below).

ENGLISH	SYMBOLIC
p implies q	p⊃q
p is true	p
q is true	q
Affirming the Antecedent	*Modus ponens*

Table 1. *Affirming the antecedent.*

ENGLISH	SYMBOLIC
p implies q	p⊃q
q is false	~q
p is false	~p
Denying the Consequent	*Modus tollens*

Table 2. *Denying the consequent.*

From a conditional statement, one can construct two types of valid inference: *modus ponens* (see Table 1) and *modus tollens* (see Table 2). *Modus ponens* is Latin for 'method of constructing'. The reason it is called 'affirming the antecedent' is that the argument proves that the consequent **must** be true if the antecedent is affirmed. *Modus tollens* is Latin for 'method of destroying'. This

type of argument proves that the antecedent must be false if the consequent is denied.

ENGLISH	SYMBOLIC
p implies q	p⊃q
q is true	q
p is true	p
Fallacy of Affirming the Consequent	

Table 3. *Fallacy of affirming the consequent.*

ENGLISH	SYMBOLIC
p implies q	p⊃q
p is false	~p
q is false	~q
Fallacy of Denying the Antecedent	

Table 4. *Fallacy of denying the antecedent.*

There are two types of invalid inference (see Tables 3 and 4). To illustrate all four types of inference:

If Jesus rose from the dead (p), then His bones cannot be found (q).

(1) Jesus rose from the dead (p is true)
    His bones cannot be found (q is true)
    — **valid.**
(2) Jesus' bones cannot be found (q is true)
    He rose from the dead (p is true)
    — **invalid.**

A reminder: validity is independent of the truth or falsity of the premises or conclusion. We accept that Jesus rose, but not that every dead person whose bones are missing also rose.

(3) Jesus did not rise from the dead (p is false)
    His bones can be found (q is false)
    — **invalid.**

The conclusion does not follow; many people who did not rise were cremated.

(4) Jesus' bones can be found (q is false)
    He did not rise from the dead (p is false)
    — **valid** (despite the fact that both premises are false).

The founders of many counterfeit religions still have skeletons mouldering away, which is proof that they are not risen.[15]

One use of *modus tollens* is the *reductio ad absurdum* argument, that is, showing that a premise is false by demonstrating that it implies an absurd conclusion. An example is the effort by Bishop John Shelby Spong to show that homosexual acts are acceptable because some animals practise them.[16] As it stands, the argument is invalid. To make it valid, another premise is needed that states: whatever animals do is acceptable.

(1) Animals practise homosexual acts.
(2) Whatever animals practise is acceptable.
    Homosexual acts are acceptable.

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To prove the argument to be sound, that premise must be proved to be true. Conversely, to prove the argument to be unsound, the premise must be shown to be false. This can be done by showing that it leads to a ridiculous conclusion :-
(1) Animals practise rape and cannibalism.
(2) What animals do is acceptable.
  Rape and cannibalism are acceptable.
Now if one does not accept the conclusion, if one is logical one must reject one or more of the premises. As (1) is empirically true, (2) must be the false premise. So Spong's argument contains a false premise and is thus unsound.

Another example: pro-abortionists often claim that the unborn child is merely a disposable part of the woman's body. However, see what happens if this premise is combined with other indisputable premises in the following argument:
(1) If a is part of b, and b is part of c, then a is part of c. (Called a transitive relation, an example is: if a brick is part of a wall, and a wall is part of a house, then the brick is part of the house.)
(2) A male unborn baby has a penis (that is, a penis is part of him).
(3) This baby is part of the pregnant woman.
  A woman pregnant with a male baby has a penis.
As the conclusion is false (feminists would detest it especially), at least one of the premises must be as well. All premises are indisputably true except the pro-abortionists' (3), which was the disputed issue. So this argument proves it false.[17]

An example of a fallacious *reductio ad absurdum* is the argument that the Sadducees used against the Resurrection — Matthew 22:23-34:-

'That same day the Sadducees, who say there is no resurrection, came to him with a question. "Teacher", they said, "Moses told us that if a man dies without having children, his brother must marry the widow and have children for him. Now there were seven brothers among us. The first one married and died, and since he had no children, he left his wife to his brother. The same thing happened to the second and third brother, right on down to the seventh. Finally, the woman died. Now then, at the resurrection, whose wife will she be of the seven, since all of them were married to her?"'

Note that they tried to refute the Resurrection by showing that it leads to the absurd conclusion that in this hypothetical situation the woman would not know whose wife she is.

Jesus' answer shows the masterful logic of the *Logos* of God:-

' Jesus replied, "You are in error because you do not know the Scriptures or the power of God".' (Matthew 22:29)

First, Jesus points out that the starting presuppositions are wrong — the Sadducees only accepted the Pentateuch as Scripture, while Jesus, like the Pharisees, accepted the same books as the Protestant Old Testament. If they had

not been ignorant of what the Scriptures were, they would have realised that Scriptures like Daniel 12:2 clearly teach the Resurrection.

Then He notes that if a conclusion of a valid argument is false, then it is enough for only one of the premises to be false. The false premise in the Sadducees' argument was not the Resurrection, but that people would be married in heaven:-

'At the resurrection people will neither marry nor be given in marriage; they will be like the angels in heaven.' (Matthew 22:30)

However, refuting any number of arguments against a position does not in itself *prove* that position. So Jesus proved His own position, on the Sadducees' own terms, using Scripture they accepted:-

'But about the resurrection of the dead — have you not read what God said to you, "I am the God of Abraham, the God of Isaac, and the God of Jacob"? He is not the God of the dead but of the living. When the crowds heard this, they were astonished at his teaching. Hearing that Jesus had silenced the Sadducees, the Pharisees got together.' (Matthew 22:31-34)

Even the Scriptures accepted by the Sadducees taught the Resurrection. Christ demonstrated this with an argument showing that the Pentateuch taught that God was the God of the patriarchs and the God of the living. Therefore the patriarchs were living in a sense in Moses' day, centuries after they had died physically. Note also that the argument depends on the present tense of the verb 'to be' implied in the Hebrew verbless clause of the passage (Exodus 3:6) Jesus cited. His argument makes no sense if He did not believe in the verbal plenary inspiration of Scripture.

The fallacy of denying the antecedent is committed by some groups that teach the error of baptismal regeneration by citing the following statement of Christ according to the Majority Text of Mark 16:16:

'Whoever believes and is baptized will be saved, but whoever does not believe will be condemned.'

The first part of the verse is an implication: if a person believes and is baptized then he will be saved. It is invalid to argue from this that anyone who is not baptized will not be saved. The second part is an explicit statement that unbelief results in condemnation.

To demonstrate the fallacy, examine the following statement which is in the same logical form: 'Whatever has feathers and flies is a bird, but whatever does not have feathers is not a bird.' This statement does not teach that there are no flightless birds.

Another example of the fallacy of denying the antecedent is when some people are upset because we can no longer use a stock creationist argument (for example, the depth of dust on the Moon to prove a young Moon[18]). But the argument in schematic form is as follows, and the fallacy should be clear:

(1) If the dust on the Moon argument works, then the Moon must be young.

(2) The dust on the Moon argument doesn't work.

    The Moon cannot be young.

This should be a lesson that our primary evidence should always be the infallible written testimony of One Who was there and never errs, not the evidence of fallible scientists who weren't there and often err.

An example of the fallacy of affirming the consequent is using verified predictions as 'proof of a scientific law.[19] That can be seen if we analyse it:-

(1) Theory T predicts observation O;

(2) O is observed;

    T is true.

To see why this does not follow, consider:

(1) If I had just eaten a whole pizza, I would feel very full;

(2) I feel very full;

    I have just eaten a whole pizza.

But I could feel very full for many different reasons.

On the other hand, the famous falsification criterion for a scientific theory devised by the late Sir Karl Popper is based on the valid denying the consequent:-

(1) Theory T predicts O will **not** be observed;

(2) O **is** observed;

    T is false.

We can apply this analysis to a major evolutionary argument:-

(1) If organisms X and Y have a common ancestor, they will have homologous structures;

(2) X and Y have homologous structures;

    X and Y have a common ancestor.

This demonstrates that it is an example of the fallacy of affirming the consequent. The conclusion is not proven — the homologous structures could be due to a common designer, leaving a 'biotic message' that there is a **single** designer of life rather than many.[20]

On the other hand, ornithologists like Alan Feduccia argue against dinosaur-to-bird evolution for many good reasons, including a recent discovery that a dinosaur embryo has an embryonic thumb that birds lack (I-II-III and II—III—IV digit patterns respectively).[21][22] The argument is:-

(1) If birds evolved from theropods, they will have homologous digits;

(2) Bird and theropods do **not** have homologous digits;

    Birds did not evolve from theropods.

This is valid (denying the consequent), so creationists have rightly publicised this evidence.[23][24]

However, philosophers like Imre Lakatos point out that core theories are not tested in isolation, but are 'protected' by auxiliary hypotheses. Denying the consequent only shows that one of the premises needs to be false, and it need not be the core theory. So the auxiliary hypotheses are modified instead. In schematic form, the valid argument is as follows:

(1) Theory T and auxiliary hypothesis A predict that O will not be observed;

(2) O is observed;

    Either T or A is false.

For example, Newton's theory predicted certain motions of Saturn, **provided there were no other massive objects interfering.** When Saturn didn't move as predicted, either Newton's theory was falsified, or there was another massive object perturbing the orbit (this turned out to be the planet Uranus).[25]

The above was explaining the logic of the falsification criterion. This was not necessarily to endorse it — a coherent definition of science is hard to come by.[26]

In the hands of evolutionists, 'unscientific' becomes a swear-word with which to attack creation. But it is more important whether creation or evolution are true or false, than whether one is more 'scientific' than another. Sometimes evolutionists are so keen to attack creationists that they don't realise their self-contradictions. For example, the philosopher P. Quinn (an anti-creationist himself) demonstrates the illogicality of the Marxist evolutionist Stephen Jay Gould:-

> '. . . Gould claims that "'Scientific creationism' is a self-contradictory phrase precisely because it cannot be falsified" . . . Ironically, in the next sentence Gould goes on to contradict himself by asserting that "the individual claims are easy enough to refute with a bit of research." Indeed, some of them are! But since they are so easily refuted by research, they are after all falsifiable and, hence, testable. This glaring inconsistency is the tip-off to the fact that talk about testability and falsifiability functions as verbal abuse and not as a serious objection in Gould's anti-creationist polemics.'[27]

(5) Disjunctive Syllogism

The disjunctive syllogism is a valid form of argument familiar to those who have sat multiple choice examinations. Sometimes, a process of elimination can rule out all possibilities but one, which must therefore be true. An example is: Fred is flying either on QANTAS or Air New Zealand; he is not flying QANTAS; therefore he is flying Air New Zealand (see Table 5).

To be sure that the conclusion is true, one must be sure that all possible alternatives are listed. The surest way is to apply the Law of Excluded Middle and have the disjunctive (either/or) premise contain a pair of contradictories (p or ~p).

An important example is that there are only two real

ENGLISH	SYMBOLIC
Either p or q	p v q
p is false	~p
q is true	q

Table 5. *A disjunctive syllogism.*

explanations for the origin of different kinds of life — creation or evolution. For example, Professor D. M. S. Watson wrote :-

> *'evolution* [is] *a theory universally accepted not because it can be proven by logically coherent evidence to be true, but because the only alternative, special creation, is clearly incredible.'*[28]

(That is, C v E; ~C;   E.)

As this is a disjunctive syllogism, it is a valid argument. But it cannot be over-emphasised that validity and truth are not the same — this argument is not **sound!** Many evolutionists starting with Darwin have used this reasoning. This also demonstrates the atheistic bigotry behind much evolutionist thinking. Of course, creationists can use the equally valid argument:-

C v E; ~E;   C.

That is, evidence against evolution is automatically evidence for creation. This is both valid and sound.

Many evolutionary propagandists dispute this reasoning when creationists use it, on the grounds that creation and evolution are not the only alternatives. Creationists are thus accused of the **fallacy of false alternatives,** that is, the disjunctive premise leaves out a possible alternative. But as shown, many evolutionists agree there **are** only two, so there are double standards at work.[29] This can be shown by the Law of Excluded Middle: either things were made (creation) or they weren't (evolution). It is true that **Biblical** creation is not the only alternative, so it is not **proven** by disproof of evolution. Biblical creation is certainly **consistent** with disproof of evolution, unlike atheism.

A genuine example of the fallacy of false alternatives is the following 'proof of the punctuated equilibria version of evolution:

(1) Life must have evolved either gradualistically or *via* punctuated equilibria;
(2) There are major problems with gradualism (absence of fossil intermediates, and inability to construct a functional series);

Life must have evolved *via* punctuated equilibria.

This is basically the form of argument used by Niles Eldredge and Stephen Jay Gould in their seminal paper,[30] as pointed out by creationists.[31]

OTHER COMMON FALLACIES

Hasty Generalisation

So far I have discussed deductive reasoning. As discussed, inductive arguments reason from a finite set of examples to a general rule. The reason they are less important is that they don't guarantee the truth of the conclusion — they are formally invalid by the definition of validity in logic. For example, just because we find that 1000 crows are black, it does not follow that the 1001st crow will not be an albino.

Science by its nature is inductive, not deductive.

Science always uses a finite number of measurements, each of which has an uncertainty, so science can never give a complete picture of reality. Hence, although science can be useful, it can never be a threat to the Christian Faith.

Genetic Fallacy

This is the error of trying to disprove a belief by tracing it to its source. For example, Kekule thought up the (correct) ring structure of the benzene (C_6H_6) molecule after a dream of a snake grasping its tail; but chemists don't need to worry about correct ophiology to analyse benzene!

However, many anti-Christians commit this fallacy when they try to disprove Christianity by pointing out alleged parallels in pagan mythology.[32] Another example is: 'You only believe Christianity because you were indoctrinated by your parents and culture; if you came from a Hindu family and culture you would be a Hindu', with the spoken or unspoken impression, 'thus Christianity need not be preferred over Hinduism'. In both cases, nothing can be inferred about the **truth** of Christianity from reasons a Christian's belief allegedly originated.

Many evolutionist propagandists believe that they simply need to demonstrate that a creationist has a 'fundamentalist' religious belief to discredit his purely scientific claims. The double standards are glaring — the radical atheist or even Marxist beliefs of many leading evolutionists[33] are often ignored, although these beliefs determine what scientific explanations are acceptable and what are not.

Fallacy of Division

For example, a truck is heavy, therefore all its atoms are heavy. This example is obviously fallacious, but other equally fallacious arguments are advanced in all seriousness. Some New Agers like Teilhard de Chardin claim that because living beings are conscious, then their atoms must have some consciousness.

Fallacy of Composition

This is the opposite to the Fallacy of Division. An example is: all cells are light, therefore all animals containing cells are light.

Post hoc ergo propter hoc

This is Latin for 'after this, therefore because of this'. But just because B happened after A, it doesn't mean B was caused by A. Gordon Clark gives the following example of this fallacy:

> *'In the late seventies the Internal Revenue Service [USA] undertook to harass Christian schools. . .. [They] tried to revoke the tax exemption status of Christian schools, holding them guilty of race discrimination until they could prove themselves innocent by certain processes impossible to fulfil in some localities. One of the arguments the IRS used was that those schools were organized just after laws*

of racial discrimination were enacted. Post hoc ergo propter hoc. *One of the defenses used by the Christians was that the schools were organized just after the Supreme Court banned the Bible and Prayer. One might add that they were organized after violence, drugs and sex became intolerable in the public schools.*[34]

A more recent example of this fallacy is the claim by the atheist Alex Ritchie :-

'I suggest that the name change from Creation Science Foundation [Australia] *to Answers in Genesis is a shrewd and timely precaution to safeguard this religious organisation from the possibility of legal action, following the precedent of the Plimer/Roberts case.'*[2,5]

Of course, *Answers in Genesis* in the USA changed its ministry name three years before this, and the official company name in Australia is still Creation Science Foundation Ltd, ACN 010 120 304 (ACN stands for Australia Company Number). The reason for the change in ministry name is explained in this article: the ministry's axioms are the propositions of the Bible, not the theories of fallible scientists.

THE BASIS FOR LOGIC

A final question is, why should logic work at all? Not only can unbelievers not make a sound case against Christianity, but an atheistic world-view attacks the very basis of reasoning itself. This was realised by the famous Communist evolutionist biologist J. B. S. Haldane:-

'If my mental processes are determined wholly by the motions of atoms in my brain, I have no reason to suppose my beliefs are true . . . and hence I have no reason for supposing my brain to be composed of atoms.'[36]

In a debate between the Christian William Lane Craig and the atheist Frank Zindler,[37] Zindler claimed that our logical processes evolved for survival value. Craig pointed out that this provides no reason for us to trust their validity, only their value in survival.

Even Darwin wrote in an early private notebook, *'Why is thought, being a secretion of brain, more wonderful than gravity as a property of matter?'*[38] But this argument is self-defeating. It applies to that thought of Darwin's too, and to every thought about evolution. Hence we have no reason to trust them.

The famous Marxist palaeontologist Stephen Jay Gould claimed that the mind was an illusion produced by the brain.[39] So why should we trust anything Gould says, if his thoughts are illusions?

This only shows that many atheistic theories actually refute themselves. Thus there is no need for independent empirical tests for them. Conversely, the Christian doctrine that we are created in the image of a logical God is an excellent explanation for our logical faculties.

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Dr Jonathan Sarfati has a Ph.D. in chemistry from Victoria University of Wellington (New Zealand), and has published papers on high temperature superconductors and selenium-containing ring and cage-shaped molecules. He is now on the staff of *Answers in Genesis* (Australia).

QUOTABLE QUOTE: Fidelity to God

*'The final virtue I shall mention is fidelity to God **and** dedication **to** His cause in the world as one's chief end. The Christian intellectual is here to serve a Name, not to make one. Unfortunately, I have seen too many Christian thinkers who have a certain texture or posture in life that gives the impression that they are far more concerned with assuring their academic colleagues that they are not ignorant fundamentalists than they are with pleasing God and serving His people. Such thinkers often give up too much intellectual real estate far too readily to secular or other perspectives inimical to the Christian faith. This is why many average Christian folk are suspicious of the mind today. All too often, they have seen intellectual growth in Christian academics lead to a cynical posture unfaithful to the spirit of the Christian way. I have always been suspicious of Christian intellectuals whose primary agenda seems to be to remove embarrassment about being an evangelical and to assure their colleagues that they are really acceptable, rational people in spite of their evangelicalism. While we need to be sensitive to our unbelieving friends and colleagues, we should care far less about what the world thinks than about what God thinks of our intellectual life. Fidelity to God and His cause is the core commitment of a growing Christian mind. Such a commitment engenders faithfulness to God and His people and inhibits the puffiness that can accompany intellectual growth.'*

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