

**Christian
Handbook of
Reason and
Insight for
Scientists and
Technologists**

ABSTRACT

This book is intended to make Christians stronger apologists and non-Christians re-examine their beliefs. Ten questions are addressed with classical logic; supplementary material has been relegated to the references so the reader can focus entirely on the critical arguments. This book is not a source of original thought; instead, it is a compendium of critical arguments uncluttered by supplementary material and excessive personal opinion. The reader is challenged to refute these arguments.

INTRODUCTION

In this book, answers are given to ten questions. A sound, logical basis has been provided for each answer. If you read this book and question the basis for one or more of the answers, try to formulate convincing counter-arguments. If you cannot, then reading this book will accomplish one of two things. If you are a Christian, you will become a stronger apologist. If you are not a Christian, you will be motivated to re-examine your beliefs.

Logical Preliminaries

Only classical logic, as opposed to Hegelian dialectic synthesis, is used in this book: (a) β is β , (b) β is-not not- β and (c) α is either β or not- β , where α and β are nouns (persons, places or things). This can be stated another way by writing a sentence called the thesis (α is β) and another sentence called the antithesis (α is not- β).

Given any thesis and its antithesis, one is true, the other is false and the decision must be based on evidence.

The concept of thesis/antithesis can be illuminated using the language of probability theory. Consider a sample space comprising the set of all possible choices or outcomes. Each individual choice is called a sample point. If the sample space is discrete -- the sample points can be counted -- then β is any one, but not more than one, of the sample points. not- β is the complement of β which contains all sample points except β . The thesis (α is β) means α corresponds to the sample point β . The antithesis (α is not- β) means α corresponds to one of the sample points in not- β .

If the sample space is nondiscrete -- noncountably infinite -- then it has as many points as there are real numbers corresponding to the points on a line interval such as $0 \leq x \leq 1$ denoted by γ . β is any sub-interval of γ and not- β corresponds to all the points on γ not contained in β . The thesis (α is β) means α corresponds to one of the points in β . The antithesis (α is not- β) means α corresponds to one of the points in not- β .

This is the logic of absolutes and does not permit α to be a synthesis, which is neither, β nor not- β . Consider, for example, the thesis (my height is 1.70 to 1.71 meters) and its antithesis (my height is not-1.70 to 1.71 meters). One is true; the other is false. No third option is rational such as (my height is 1.70 to 1.71 meters for some but not-1.70 to 1.71 meters for others because "truth" is personal).

A thesis may be stated in variant formats but can always be converted to the form ($\alpha \Omega \beta$) where Ω represents any tense of the verb "to be." For example, (Jesus did exist) can be converted to (Jesus was a man).

The antithetical expression (α is not- β) means α corresponds to a member of a set that does not include β . If not- β contains more than one member, the one member that is equivalent to α is not specified. For example, if $\alpha = 1$ and $\beta = 2$, the thesis and antithesis become (1 is 2) and (1 is not-2). The antithesis states that 1 is a member of the set of all integers not including 2. This is a true statement but lacks the operational specificity of the analogous statements (1 is-not 2) and not-(1 is 2). From an operational standpoint, the expression ($\alpha \Omega$ not- β) can be more usefully rephrased as ($\alpha \Omega$ -not β) or not-($\alpha \Omega \beta$).

This can be illustrated, by analogy, using a programming language called C. In this language, the symbols ==, != and ! represent the "equal to" and "not equal to" relational operators and the "not" logical operator respectively. The expressions $(\alpha != \beta)$ and $!(\alpha == \beta)$ always evaluate to the same integer: one if true and zero if false. However, the expression $(\alpha == !\beta)$ may not evaluate to that same integer because $!\beta$ is always assigned the value one if $\beta = 0$ and zero otherwise. For example, if $\alpha = 1$ and $\beta = 0$ then $(\alpha != \beta)$, $!(\alpha == \beta)$ and $(\alpha == !\beta)$ evaluate to 1, 1 and 1 respectively. However, if $\alpha = 1$ and $\beta = 2$, the three expressions evaluate to 1, 1 and 0. To eliminate ambiguity, the antithesis will be expressed as $(\alpha \Omega\text{-not } \beta)$ or $\text{not}-(\alpha \Omega \beta)$ in the remainder of this book.

Theses and antitheses can be joined by two other logical operators called "and" and "or" to form conjunctions and disjunctions respectively. If (x, y) represent two theses, two antitheses or a thesis and an antithesis, then the truth table for these logical operators is given by Table 1.

Table 1. Truth table for "and" and "or" logical operators

<u>x</u>	<u>y</u>	<u>x and y</u>	<u>x or y</u>
1	1	1	1
1	0	0	1
0	1	0	1
0	0	0	0

Based on Table 1, $\text{not}-(x \text{ and } y) = \text{not-}x \text{ or } \text{not-}y$ and, similarly, $\text{not}-(x \text{ or } y) = \text{not-}x \text{ and } \text{not-}y$. The equal sign indicates equivalence; both sides have the same truth table.

If A and B represent logically combined theses and antitheses [e.g. A = x or (not-y and z); B = u and not-v], then A can be connected to B to form the sentence "if A then B" (conditional statement). In such a statement, A and B may be different ways of stating exactly the same idea. If so, the sentence "if A then B" is a type of tautology -- it is always true. Conversely, if A and B express different ideas then the statement "if A then B" is regarded as true unless A is true and B is false.

"If A then B" can also be expressed as "B if A" and "A only if B." The expression "A if and only if B" (biconditional statement) is true when both "if A then B" and its converse "if B then A" are true. Finally, the statement "if A then B" and its contrapositive "if not-B then not-A" are equivalent as shown in Table 2.

Table 2. Truth table for conditional, biconditional and contrapositive statements

<u>A</u>	<u>B</u>	<u>if A then B</u>	<u>A if and only if B</u>	<u>if not-B then not-A</u>
1	1	1	1	1
1	0	0	0	0
0	1	1	0	1
0	0	1	1	1

Although the formal concepts of negation, conjunction, disjunction, conditional and biconditional were not developed until the early 19th century, none of these concepts is counterintuitive and reasoning, based on them, is characteristic of historic documents such as the Christian Bible.

Importance of Classical Logic

Classical logic provides the basis by which we assess the external world in our daily lives. For example, either today is your birthday or today is not your birthday. Either Easley, South Carolina is your current physical location or it is not. Either the mass of your body is 80 to 81 kilograms at this moment or it is not. On a more abstract level, classical logic provides the foundation for all program control expressions in computer source code; Boolean expressions evaluate to zero if false and one if true.

A belief that classical logic represents reality was pervasive throughout not just Christian but all civilized thought until the 19th century. Then the philosopher Hegel alluded to the possibility that we need not assume true/false should always be assigned to a thesis and its antithesis. Instead we can attempt to synthesize, by reason, a higher concept closer to actual truth. This proved to be impossible by any logical process but later, the theologian Kierkegaard proposed that logic could be abandoned altogether when dealing with propositions involving God or attributes of the human soul. When dealing with such matters, the synthesis could instead be attained by a "blind leap of faith" unsupported by any type of logic.

For example, a choice, based on evidence, between (Jesus is God) and (Jesus is-not God) is demanded by classical logic. However, using this new way of thinking, other options may be synthesized such as "Jesus can be God for some but not for others because truth is personal" or "I believe Jesus is God based on my feelings, intuition and emotions but cannot support this belief by any form of logic or reason based on evidence". This new way of looking at "truth" permeates the civilized world and may be the most crucial problem facing Christianity in this century. Philosophy, art, music, the general culture and, to some extent, Christian theology have embraced it.

In contrast, historic Christianity stands on the beliefs that classical logic represents the "truth of God" and sound reason is the foundation of the Christian faith. John Wesley, for example, placed reason at one corner of his "quadrilateral" which serves as the cornerstone of Wesleyan theology; reason based on the evidence of Scripture, tradition and personal experience should serve as the basis of the Christian faith. The Christian God is a God of absolutes and one of His attributes is "truth." Since we are created in His image, " absolute truth" is knowable and can be distinguished from "absolute lie." If you reject the use of classical logic in religious thought or some other area of your life then, in that area, truth is personal, situational, relative or unknowable and that area of your life will be a perpetual source of confusion and despair.

Should Christians address this issue or concentrate on more "spiritual" things? Perhaps Martin Luther answered that question several centuries ago:

If I profess with the loudest voice and clearest exposition every portion of the truth of God except precisely that little point which the world and the devil are at that moment attacking, I am not confessing Christ, however boldly I may be professing Christ. Where the battle rages, there the loyalty of the soldier is proved, and to be steady on all the battlefield besides, is mere flight and disgrace if he flinches at that point.

Finally, some issues are central to Christian theology while others are peripheral. Chapters 7 - 10 deal with central issues while chapters 1 - 6 address peripherals. Failure to acknowledge the truth about a peripheral issue does not imply a person cannot be called Christian.

Ten Questions

The ten questions, with which this book is concerned, are given in the following list:

- (1) Is the Christian description of the beginning of the universe consistent with the scientific description?
- (2) Does the universe exist primarily to serve as a home for us?
- (3) What is the origin of the moral law written on each of our hearts?
- (4) Did life arise spontaneously from non-living matter?
- (5) Is "survival-of-the-fittest" a rational basis for the concept of biological evolution?
- (6) Are Christians supposed to think about the basis for their beliefs?
- (7) Is each of the known Greek manuscripts and manuscript fragments, of a particular New Testament book, a "pure" representation of a unique autograph?
- (8) Did the New Testament autographs provide an accurate account of what a man named Jesus said and did?
- (9) Who was Jesus?
- (10) Were the autographs, for the book referred to as the Christian Bible, inspired by God?

A few of the ten questions can never be answered with certainty based purely on human understanding. In those cases, however, so much evidence can be amassed in support of a particular answer that a final step of faith is small and guided as opposed to large and blind. Contrary to the teaching of Kierkegaard, faith and reason are not separated by a huge, dark chasm with no way to get from one side to the other except to take a giant, blind leap. (1)

1. THE BEGINNING

Is the Christian description of the beginning of the universe consistent with the scientific description? This question can be answered "yes" with certainty. To answer it, examine the basic scientific and Biblical facts about the beginning.

Science says:

- The universe began at a definite point in time.
- Verification of any type of existence prior to the beginning of the universe is beyond the domain of science.
- Since the beginning, the universe has developed in accordance with physical laws for 13.7 billion years. The current universe is only 4% ordinary matter, the stuff of stars and trees and people. 23% is dark matter comprising an undetected particle. The remaining 73% is dark energy, a mysterious force that counteracts the effects of gravity and causes the universe to expand at an accelerating rate.

The Bible says:

- The universe began by "ex nihilo" creation (bara) at a definite point in time (Gen 1:1, Heb 11:3).
- God existed prior to the beginning of the universe.
- Since the beginning, indefinitely long periods of time (yom, plural yamim) have elapsed.

Although science and the Bible do not say exactly the same thing about the beginning of the universe, there is no inconsistency; therefore, the answer to the question is "yes." Claims of inconsistency generally originate with those who advocate one of the following concepts:

- (a) The "big-bang" theory cannot explain the bringing of the universe into existence from nothing (ex nihilo) because it requires the pre-existence of space, time and energy/matter.

- (b) Biblical genealogies can be used to construct chronologies of personalities from Adam to Noah and Noah to Abraham. Also, each creation day (yom), described in Genesis, was 24 hours long. It follows that Adam was created no more than six to ten thousand years ago and the universe was created no more than 144 hours earlier.

Concept (a) is scientifically unsound; concept (b) is theologically unsound. At no time has either concept represented the thinking of mainline science or mainline Judeo-Christian theology. (2,3)

2. THE ANTHROPIC PRINCIPLE

Does the universe exist primarily to serve as a home for us? This question cannot be answered with certainty. However, considerable evidence can be amassed in support of a "yes" answer. Consider the following facts.

Life is possible only because the universe is spatially flat and has been expanding and is continuing to expand at nearly the critical rate required to avoid collapse. If it had been expanding much faster, regions which had developed slightly higher than average densities would have continued to expand indefinitely and would not have formed stars and galaxies. If the universe had been expanding much slower, it would have collapsed long before the elements of life could have been generated in stars by nucleosynthesis. The numerical value of expansion rate is called the Hubble constant (H) and is currently 71 kilometers per second per megaparsec.

Life is possible only because the gravitational constant (G), the quantum of angular momentum (h), the speed of light (c) and the elementary unit of electrical charge (e) have the precise values required for the evolution of a very particular kind of universe. This universe contains short-lived, metal scattering blue stars and long-lived, evenly burning, slowly turning stars like the sun.

Life is possible only because of the delicate balance between the strong force that binds nuclei together and the enormous repulsive force between protons.

Life is possible only because the electromagnetic coupling constant and the ratio of electron mass (m) to proton mass (M) are precisely what are required to allow the formation of chemical compounds.

Life is possible only because the ratio of the strong force to the electromagnetic force has the precise value required to create a resonance between helium and beryllium nuclei allowing carbon-12 to form near the center of stars; carbon is the core element of all biochemical molecules.

Life is possible only because the weak-interaction coupling constant has precisely the proper value. If it were slightly smaller or larger, helium production would either be 100% or zero. In one case there would be no water, in the other an entirely variant stellar evolution.

Because H and c have the proper values to permit life, the characteristic length or "radius" of the universe (c/H) could not be significantly altered without precluding our existence. Also, since the universe is spatially flat, its density is essentially $\rho_c = 3H^2/8\pi G$. The quantities H and G have the correct values to permit life; therefore, the density of the universe is what is required to permit our existence. Consequently, the universe contains no wasted space or matter even if life is unique to the surface of planet earth.

This list could be continued but it is already long enough to justify a conclusion: not one of the fundamental properties of the universe could be changed significantly without eliminating the possibility of life. Could this be what the Bible refers to when it says God's eternal power and divine nature are clearly evident in the things He has made (Rom 1:20)? Did a Supreme Being deliberately create the universe in such a way that the slightest change in any one of its properties would preclude our existence?

The only serious alternative offered, to date, is based on the idea that not just one but rather an enormously large ensemble of universes exists; each member of the ensemble is self-contained and unaffected by the rest. In this ensemble of universes, only our universe and those similar to ours contain living creatures. The rest are lifeless. The ensemble concept makes our universe just one of many and thereby avoids the need for us to occupy a special place. Aside from the fact that no supporting evidence exists for the ensemble concept, is it really more difficult to believe in God than in an ensemble of universes? (4,5,6)

3. THE MORAL LAW

What is the origin of the moral law written on each of our hearts? This question presupposes that you and I have identical codes of conduct embedded deep in our subconscious minds; we can try to suppress or ignore this code but it is there nonetheless. This deeply embedded code of conduct is the little voice inside which, for example, tells you not to:

- Steal from, double-cross or murder persons who treat you with kindness
- Abuse children, elderly, sick or disabled
- Admire selfishness

If you question the existence of this code of conduct or "moral law," try to locate a stable society, anywhere in recorded history, which espoused the three items listed above. The origin of the moral law cannot be determined with certainty; but, once again, the evidence points strongly in a particular direction. Three origins have been suggested:

- The words "moral law" encompass certain types of behavior, which have developed in us by the process of biological evolution. The details of this development process are covered by such theories as "kinship" and "reciprocation" and may even employ the principles of game theory. The types of behavior, classified as "moral law," accomplish no purpose other than to enhance the survivability of the human race.
- The "moral law" is learned social behavior passed from adults to children; collective human experience has recognized that certain restrictions on social behavior result in a more pleasant society for all.
- The "moral law" is really God's commandment to love your neighbor as yourself (Mat 22:36-40). This commandment embodies the sum total of the Law given to us by God (Rom 13:8-10, Gal 5:14). To make sure no one missed the instructions, he wrote His Law on everyone's heart (Rom 1:18-20; 2:14,15).

Which of these explanations is consistent with the facts?

Consider, for a moment, the following groups of people in our society; assume these people are institutionalized with no means of support beyond public charity:

- Elderly (with no relatives) suffering from severe Alzheimer's disease
- Orphan babies with AIDS
- Orphan babies with Down's Syndrome

Preserving the lives of these individuals causes a drain on the resources of society and in no way enhances the survivability of the human race. Would you like to have them killed? If a little voice inside you is saying, "These people need love and compassion," that voice does not have biological evolution as its origin. Mutation, genetic drift, migration and natural selection cannot justify giving "kindness" priority over personal well-being.

Collective human experience has clearly recognized that certain restrictions on social behavior result in a more pleasant society for all; the existence of civil and criminal law reflects this recognition. However, in your daily life, cheating would often be more pleasurable than truthfulness. On those occasions when you know you won't be caught, do you really refrain from cheating because you know, in the long run, society will be a better place because of your decision? If so, you are an unusual person. Cultures which use the "good of society" as a basis for morality are typically rife with crookedness.

If confronted with opportunities to:

- Keep \$10,000 cash you found in a wallet on the sidewalk
- Commit adultery while away from your spouse
- Conceal \$15,000 of your income from the IRS

would what's "good for society" be an important consideration when making a decision? Is your innermost, secret character based on learned social behavior about what's "good for society?" There is no evidence to support such a premise.

This leaves God as the most likely source of that little voice telling you right from wrong. (7)

4. BIOCHEMICAL EVOLUTION

Did life arise spontaneously from non-living matter? This question can be answered "no" with reasonable certainty.

Every living creature contains at least one blueprint which furnishes instructions for making all the creature's biochemicals. This blueprint is a long chain of chemical units called nucleotides. The chain is neither ordered nor random but is, instead, complex; information is stored by means of a linear sequence. In contrast to an ordered sequence, the algorithm required to specify a complex sequence is as long as the sequence itself. In a living creature, a complex polynucleotide is never constructed from nucleotide building blocks without the assistance of another kind of chemical called an informed enzyme. The informed enzyme is a long chain of chemical units called amino acids. This chain is also complex and also stores information by means of a linear sequence. In a living creature, an informed enzyme is never constructed from amino acid building blocks without a complex polynucleotide to provide the code. Thus, we are faced with the catch-22 of life's origin. The complex polynucleotide, which is the blueprint for all the biochemicals of a living creature, cannot be constructed without an informed enzyme; but the informed enzyme cannot be constructed without a complex polynucleotide to code for it! If life developed spontaneously in a primordial soup of nucleotides, amino acids and nutrients, then either the first complex polynucleotide or the first informed enzyme was formed without the assistance of a pre-existing complex chemical entity. The probability of such an event is virtually zero.

By way of illustration, consider a racemic mixture of all 20 L-amino bio-acids and the corresponding 19 optical isomers. What is the probability that these 39 different kinds of amino acids will assemble themselves into a particular kind of primitive complex amino acid chain called cytochrome-c? This particular chain has 101 amino acid sites. If each of the 39 types of amino acid has the same probability of being incorporated into the chain, then the number of sequences which can be formed is simply 39 raised to the 101 power or 4.98×10^{160} . Given a more than generous estimate of the number of synonymous amino acid residues for each site in the cytochrome c chain, the number of cytochrome c sequences which can be formed has been estimated to be 1.2×10^{64} . Therefore, the probability of producing a cytochrome c chain by random chance is 2.4×10^{-97} . If the primordial soup contained 10^{44} amino acid molecules (a gross overestimate) which combined, broke-up, and recombined in groups of 101 every second for a billion years, the probability of finding one molecule of cytochrome-c during that period is $(2.4 \times 10^{-97})(3.15 \times 10^{58})$ or 7.56×10^{-39} . This is the probability that a sequence of honest coin tosses will produce 126 heads in a row. Keep in mind that cytochrome-c is only a primitive protein which contains nowhere near the information found in an informed enzyme.

The cytochrome-c illustration was based on the assumption that amino acid chains were formed in a prebiotic soup by a specific chemical process: random formation and destruction of full length chains each second for a billion years. If the illustration had been based on path independent thermodynamic concepts, the computed probability would have been virtually the same.

Random chance has been abandoned as an acceptable model for the coding of any macromolecule essential to a living system, except in introductory texts and popularizations. Subsequent to the failure of random chance as a viable mechanism, various remedial approaches have been proposed.

One approach is to insinuate chemical bonding preferences of nucleotides or amino acids cause the spontaneous formation of complex sequences. Unfortunately for those who would prefer to view first life as the inevitable consequence of nature's laws at work over vast spans of time, the concept of "directed chance" or "biochemical predestination" has neither experimental nor theoretical support.

Mineral catalysis is also being suggested as a potentially important factor in prebiotic evolution. Unfortunately, mineral catalysis can only assist in polymerizing short, random chains of polymers from selected biomonomers. It cannot account for the configurational-entropy-work required to polymerize the macromolecules of life. Other mechanisms based on non-equilibrium thermodynamics and on the thermal synthesis of "proteinoids" have also failed to explain the spontaneous generation of complexity.

Several mechanisms can provide the chemical and thermal-entropy-work necessary to form random polypeptides. In no case, however, can any scientifically sound mechanism provide the additional configurational-entropy-work necessary to convert random polypeptides into proteins. The problems that beset protein synthesis apply with even greater force to DNA synthesis.

A conviction that complex amino acid or nucleotide chains appeared spontaneously in the primitive milieu on earth is based more on faith than science. Abandonment of this conviction would leave few options for those who prefer to reject God as the designer of complex macromolecules and choose to believe the universe is teeming with spontaneously generated life. Nevertheless, the scientific answer to the question asked at the beginning of this chapter appears to be "no." (8,9)

5. SURVIVAL-OF-THE-FITTEST

Biological evolution presumably functions by mutation, genetic drift, migration and natural selection. Natural selection is supposed to operate through differential reproduction or "survival-of-the-fittest." Is "survival-of-the-fittest" a rational basis for the concept of biological evolution? This question can be answered "no" with certainty.

Consider the following two theses:

A = creature is most fit

B = all things being equal (*ceteris paribus*), creature lives longest and has most offspring

The principle encompassed by the phrase "survival-of-the-fittest" can be expressed by the biconditional statement "A if and only if B." In such a statement, A and B may be different ways of stating exactly the same idea. If so, the sentence "A if and only if B" is a type of tautology -- it is always true. Conversely, if A and B express different ideas then the statement "A if and only if B" is regarded as false when either A is true and B is false or B is true and A is false.

If the particular sentence with which this chapter is concerned is viewed as a tautology, then it is just as devoid of scientific content as the sentence "a man is married if and only if the man is a husband." If A and B express different ideas, then circumstances must be found such that the truth of A and the truth of B can be independently tested before the truth of the biconditional can be evaluated. Herein lies the problem. The truth of "creature is most fit" cannot be tested for any creature under any circumstances because the overall "fitness" of the creature can neither be measured nor computed. Since the truth of A is untestable, it follows that the truth of "A if and only if B" is likewise untestable. Therefore, the answer to the question addressed in this chapter is "no."

Although deficiencies fatal to the theory of biochemical evolution are gradually being recognized by the scientific community, our inability to measure or compute the "fitness" of a creature has not yet been viewed as fatal to the theory of biological evolution. Investigators generally settle for measuring small numbers of morphological, physiological or behavioral "traits" and insinuate that, if all other aspects of "fitness" are fixed, these traits alone will suffice. Unfortunately, no theory is available which shows how the vast majority of aspects may be fixed while a chosen few are free to vary. A change in a single trait may alter 1000 aspects important to the overall "fitness" of an organism. What sort of interfering parameters might exist cannot even be imagined due to the absence of a theory for reducing the organism to a calculable whole.

If the concept of natural selection is clearly untestable, why does the theory of biological evolution continue to dominate the field of biology? Partly because the concept's untestability makes it immune to falsification. Partly because the concept has become integrated into the common working knowledge of the biological community and has become the context within which that community understands the world. Partly because the alternative appears to involve God. (10)

6. BASIS OF CHRISTIAN BELIEFS

Are Christians supposed to think about the basis for their beliefs? This question can be answered "yes" with certainty. Christian beliefs are generally products of:

- Blind faith in a learned person (authority figure)
- Hegelian synthesis based on feelings, intuition, and emotions
- Classical logic based on the evidence of Scripture, tradition and personal experience

Which are acceptable; which are not?

If the dentist informs you that one of your fillings is cracked and you allow him to replace it even though you don't have a toothache, then your belief in his truthfulness is based on blind faith in a learned person. In our complex technological society, we must base some decisions on blind faith because we can't become experts on everything. However, we don't generally use blind faith as a basis for our beliefs if a mistake could be life threatening or financially ruinous. When a false belief can have grave consequences for ourselves or our loved ones, we may consult available experts or "learned persons" but, ultimately, we weigh the evidence ourselves and personally make a decision about what is true or what represents the best course of action. Consider, for a moment, the interesting possibility that you, as a person, may continue to exist after the death of your physical body. Consider the additional possibility that this existence may be either meaningful or meaningless depending on what's in your heart when you die. Given these premises, a false belief about what should be in your heart will have grave consequences. If you deal with this possibility like you deal with other important issues, you will not blindly accept the opinion of a learned person. You might consult a parent, teacher, pastor, priest, rabbi, mulla or guru but, ultimately, you will personally weigh the evidence and personally make a decision. Blind faith in a learned person is not an acceptable basis for any religious belief because the stakes are too high.

Hegelian synthesis based on feelings, intuition and emotions is equally unacceptable as a basis for Christian beliefs because a very basic Christian belief is that the human heart is too deceitful to be trusted (Gen 6:5; Ps 14:1; Prov 12:15, 14:12, 20:9; Isa 32:6; Jer 17:9; Mat 15:19; Mark 7:21; John 5:42; Acts 28:27). The Bible never encourages us to trust the human heart.

What about classical logic based on the evidence of Scripture, tradition and personal experience? Some believe the Bible teaches us to replace reason with blind faith. In truth, the Bible encourages us, from cover to cover, to analyze the evidence using classical logic! The following examples will illustrate this point:

Deuteronomy 18:21-22

We are encouraged to use classical logic to distinguish between a false prophet and a prophet of God. "If a prophet makes one mistake then the prophet is not getting his or her information from God" or, what is the same thing, "If a prophet is of God then the prophet always speaks the truth."

Isaiah 1:18

We are told God wants to reason with us.

Hosea 4:6

We are informed that we can be destroyed by lack of knowledge.

Luke 7:19-23

John the Baptist sends two of his followers to Jesus with the following question, "Are you the Expected One, or do we look for someone else?" Instead of saying, "Yes, I am the one whom you have awaited," Jesus performs miracles in full view of John's followers. After a while, Jesus sends the followers back to John with information obtained by first hand observation. Jesus says for them to tell John what they've seen so he can deduce the answer based on the evidence of first-hand observation.

Romans 1:20

We are invited to look carefully at each of the things around us - an incredible level of information stored in the most primitive DNA, a universe expanding at nearly the critical rate to avoid recollapse, abstract thought along with love in the mind of man - and try to explain these things without invoking the existence of God.

1 Corinthians 14:20

Christians are advised to think like adults.

1 Thessalonians 5:21

Christians are advised to carefully examine everything.

1 Peter 3:15

Christians are advised to always be ready to defend their beliefs by providing a sound basis.

1 John 4:1-4

Christians are advised to test every prophet to determine if he or she speaks for God.

Jude 3

Christians are encouraged to contend earnestly for the faith.

The fundamental beliefs of Christianity should be the product of classical logic based on the evidence of Scripture, tradition and personal experience. Christian beliefs should never be based on blind faith in some authority figure or on Hegelian synthesis, which, no matter how cleverly disguised, is no more than a blind leap of faith based on someone's feelings, intuition and emotions.

7. PURITY OF NEW TESTAMENT TEXT

Is each of the known Greek manuscripts and manuscript fragments, of a particular New Testament book, a "pure" representation of a unique autograph? This question cannot be answered with certainty since no autographs have been found. However, the available evidence supports a "yes" answer.

By 1968, the existence of approximately 5358 Greek New Testament manuscripts and manuscript fragments had been documented by scholars. Among these, more than 200,000 variants have been detected. To put this in perspective, the following facts should be considered:

- If a single word is misspelled in 3000 manuscripts and manuscript fragments, this single word is listed as the cause of 3000 variants.
- The more than 200,000 variants can be assigned to about 10,000 locations in the New Testament; serious controversy exists concerning the legitimacy of words found at approximately 400 of these locations.

Because the New Testament contains roughly 200,000 words and only 400 are the subject of serious controversy, it must be concluded that the Greek New Testament text, derived from all 5358 manuscripts and manuscript fragments, is more than 99% "pure." This compares with a 95% "purity" for the Iliad based on 643 manuscripts and a 90% "purity" for the Mahabharata (the national epic of India). Even the Koran, which originated in the seventh century A.D., suffered from a large collection of variants that necessitated the Orthmanic revision. The New Testament has not only survived in more manuscripts than any other ancient writing but it has survived in a much "purer" form than any other great book. In addition, it is interesting to note that not one shred of Christian doctrine hangs on debatable text.

The documented high degree of agreement, among the Greek manuscripts and manuscript fragments of a particular New Testament book, cannot logically be viewed as accidental. More likely it implies that each manuscript and fragment reflects a unique autograph as its ultimate source. (11)

8. ACCURACY OF NEW TESTAMENT TEXT

Did the New Testament autographs provide an accurate account of what a man named Jesus said and did? This question will be addressed with the help of an inverted logic tree. At the top of the logic tree is a thesis (x) and its antithesis (not-x). One is true, the other is false. This initial thesis bifurcates into a composite thesis (x and y) and its quasi-antithesis (x and not-y) where x and y are stand-alone theses meaning each one can be independently true or false. The actual antithesis corresponding to the composite thesis (x and y) is given by not-(x and y) = not-x or not-y but this antithesis is not assigned a location on the logic tree. Instead, a node is related to its branches by the biconditional:

x if and only if [(x and y) or (x and not-y)]

which is the tautology defined by "A if and only if B" where A = x and B = [(x and y) or (x and not-y)]; A and B have the same truth table as shown in Table 3.

Table 3. Truth table for x vs [(x and y) or (x and not-y)]

<u>x</u>	<u>y</u>	<u>(x and y) or (x and not-y)</u>
1	1	1
1	0	1
0	1	0
0	0	0

Finally, the process of successive bifurcation may be continued indefinitely.

It is frequently difficult to develop a procedure for determining the truth of a complex premise. However, if the premise can be expressed as a logical ("and" operator) combination of theses and antitheses and placed at any branch tip of a logic tree, a unique characteristic of logic trees can be utilized to determine whether the premise is true or false. When a logic tree is constructed according to the algorithm described above, one and only one of the statements located at branch tips must be true. A general proof of this proposition will be left as an exercise for the interested reader. However, proofs will be outlined for the specific logic trees used in this book.

Consider the generic three level logic tree in Figure 1.

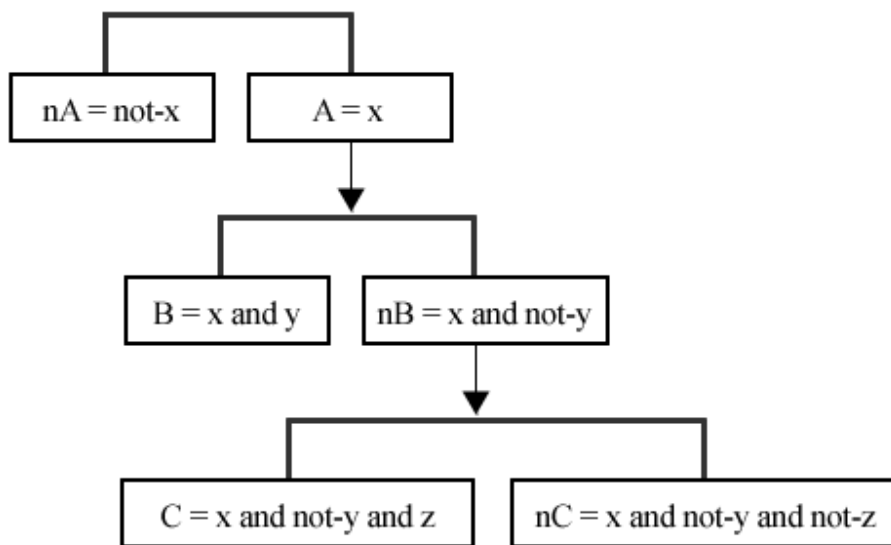


Figure 1. Generic three level logic tree

The statements located at branch tips are nA, B, C and nC. The fact that one and only one of these four statements must be true can be seen by: (1) assigning "false" to any group of three and deducing the value of the fourth and (2) assigning "true" to any one of the four and deducing the values of the other three:

nA = 0 x = 1
 B = 0 implies y = 0 implies nC = 1
 C = 0 z = 0

nC = 1 implies x = 1 C = 0
 y = 0 implies B = 0
 z = 0 nA = 0

nA = 0 x = 1
 B = 0 implies y = 0 implies C = 1
 nC = 0 z = 1

C = 1 implies x = 1 nC = 0
 y = 0 implies B = 0
 z = 1 nA = 0

nA = 0 x = 1
 C = 0 implies y = 1 implies B = 1
 nC = 0

B = 1 implies x = 1 nC = 0
 y = 1 implies C = 0
 nA = 0

B = 0
 C = 0 implies x = 0 implies nA = 1
 nC = 0

nA = 1 implies x = 0 implies nC = 0
 C = 0
 B = 0

Now consider the logic tree, in Figure 2, concerning the accuracy of New Testament text.

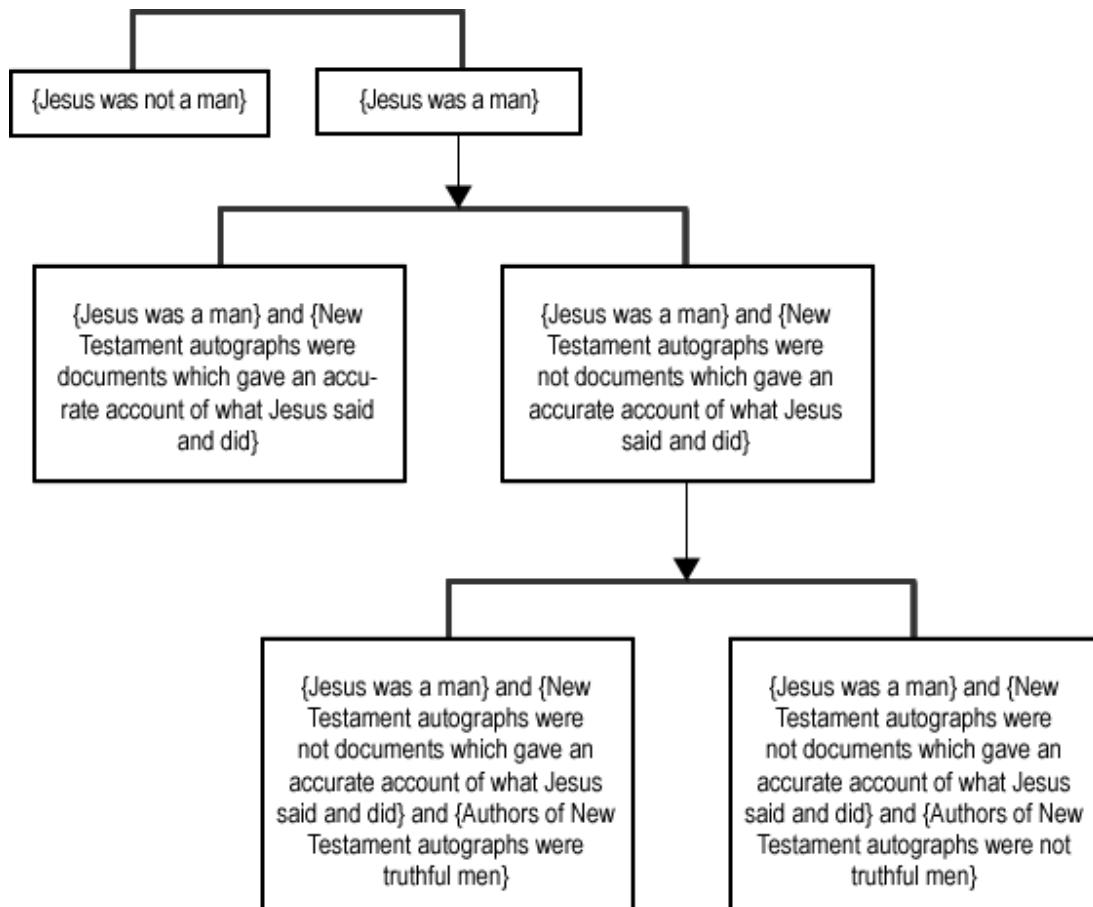


Figure 2. Logic tree concerning the accuracy of New Testament text

One and only one of the four statements located at branch tips in Figure 2 must be true.

- (1) Jesus was not a man.
- (2) Jesus was a man and New Testament autographs were documents which gave an accurate account of what Jesus said and did.
- (3) Jesus was a man and New Testament autographs were not documents which gave an accurate account of what Jesus said and did and authors of New Testament autographs were truthful men.
- (4) Jesus was a man and New Testament autographs were not documents which gave an accurate account of what Jesus said and did and authors of New Testament autographs were not truthful men.

Analyses of the logic trees in this book requires recognition that one and only one of the following theses is always true: (a man is truthful); (a man is a deliberate liar); (a man is insane). A truthful man always tells the truth about important issues regardless of the consequences. A liar tells the truth or lies with equal facility depending on how his objectives are best served. An insane man tells the truth or lies with no connection to reality. Finally, a specific individual may be insane but group insanity is not logical.

The subsequent paragraphs of this chapter will examine the likelihood that statements (1), (3) and (4) represent truth. The falsity of these three statements and, therefore, the truth of statement (2) cannot be established with certainty. However, so much evidence can be amassed in support of this position that a final step of faith is small and guided as opposed to large and blind.

(1) Jesus was not a man

The existence of a man named Jesus was claimed by:

Josephus, the first century Jewish historian

Tacitus, the first century Roman historian

The first century authors of the Gnostic gospels

The first century authors of the New Testament autographs

These four sets of authors did not share a common background, philosophy or religion. Why would they independently invent or perpetuate the invention of a fictitious character who would have been a virtual contemporary for each of them? Furthermore, even if one or more of them did invent such a character, why wasn't the hoax unmasked by eye-witnesses; why didn't someone stand up and say, "This man Jesus never existed"? I can't think of a good reason. Can you?

(3) New Testament autographs accidentally provided an inaccurate account of what Jesus said and did.

Consider the following:

The contents of the New Testament autographs must have been completely consistent with the beliefs of the Christian community at the time the autographs were circulated. Otherwise, the autographs would have been rejected just like the Gnostic gospels and other "heretical" writings were rejected.

The New Testament autographs must have pre-dated the oldest known manuscript fragments.

The oldest known manuscript fragments have been dated in the early second century A.D. This means the autographs were known to some portion of the Christian community during the first century. The fact that the autographs were accepted by their readers as statements of truth means that those autographs accurately described the beliefs of the Christian community at that time.

How could first century Christians, including those who wrote the autographs, have developed, totally by accident, inaccurate beliefs about what Jesus said and did when eye-witnesses were available to challenge those beliefs? I can't think of a way. Can you?

The idea that New Testament autographs accidentally provided an inaccurate account of what a man named Jesus said and did is viable only if the events in the life of Jesus had been recorded long after the death of all eye-witnesses. For example, if the events in His life had been handed down by word of mouth until 300A.D. and then finally began to be written down in what we now refer to as New Testament autographs, it is reasonable to believe that what He said and did could have become distorted. What was recorded would have been consistent with the beliefs of the Christian community of 300A.D. but those beliefs would have been erroneous.

(4) New Testament autographs deliberately provided an inaccurate account of what Jesus said and did.

This means the New Testament autographs contained deliberate lies set forth by certain individuals in the first century Christian community. Since eye-witnesses were alive to challenge these lies, the hoax could not have been perpetrated without the "clout" of the eleven apostles. These apostles must have been at least willing conspirators if not the actual originators of the fraud.

Since individuals do not usually conspire to defraud without anticipating some kind of gain, it is reasonable to ask, "What did the apostles get for their trouble?" There is no record to indicate they achieved wealth or political power. Instead, the apostles, along with the rest of the first century Christians, received persecution, torture and death as a reward for their beliefs. Yet no apostle ever recanted his story.

When, in recorded history, have sane men ignored personal gain and freely chosen persecution, torture and death to preserve what they knew to be a lie?

If you can rationalize the idea that eleven men, and their associates, risked their lives, with no hope of personal gain, to promulgate what they knew to be a lie, then another question must be asked. Why did anyone believe them?

History confirms that Christianity became a powerful evangelical force during the first century. Were all the converts more gullible than you? Were they so dumb they could be convinced without evidence that a poor carpenter rose bodily from the dead after spending three days in a tomb? If these converts were only of average intelligence, they would have demanded something more than the claims of a rag-tag bunch of amateur preachers. Surely they would have demanded something like the personal word of a trusted friend who witnessed a miracle or even saw the resurrected Jesus with his own eyes.

Some autographs even offered bold challenges daring skeptics to refute their claims (Acts 2:22; 26:24-28; 1 Cor 15:3-7). These challenges were thrust in the face of Jew and Roman alike. No one stepped forth to unmask the hoax. Why?

Finally, if you and your associates decided to concoct a hoax, focusing on a person claiming one-ness with God, would you agree to the fabrication of details that made this person seem susceptible to the same human frailties as you and I? If you personally were going to play the part of an apostle in this hoax, would you tolerate the fabrication of details that made you look selfish and petty? Such details were incorporated into the New Testament autographs:

Certain apostles argued about who among them should be most important when Jesus acquired his kingdom (Mark 9:33-37).

The apostles deserted Jesus after his arrest (Mat 26:56).

After the arrest of Jesus, one of the apostles denied even being acquainted with him (Mat 26:69-75).

Some people thought Jesus was crazy (John 10:20).

Jesus could not seem to perform miracles in a certain geographic location (Mark 6:1-5).

Jesus spent his early life uncertain about the precise nature of his ministry (Luke 2:51-52; 3:23).

Jesus confessed ignorance about certain future events (Mark 13:32).

Jesus had moments of bitterness (Mat 26:36-46).

Jesus uttered a cry of despair from the cross (Mark 15:34).

If you were fabricating events for a text which you planned to stuff down the throats of gullible people, would you include these nine items?

I contend that statements (1), (3) and (4) on our logic tree must be viewed as false based on all available evidence. Therefore, the question asked at the beginning of this chapter can be answered "yes" with near certainty.
(12,13,14)

9. THE IDENTITY OF JESUS

Who was Jesus? Once again, the question cannot be answered with certainty but so much evidence can be amassed in support of a particular answer that a final step of faith is small and guided as opposed to large and blind.

Let us begin by trying to find out who Jesus claimed to be. Based on Chapter 8, "who he claimed to be" was accurately recorded in the New Testament autographs. Based on Chapter 7 we can learn the content of these autographs using the Greek text derived from more than 5000 manuscripts and manuscript fragments. Finally, if we consult a translation faithful to the Greek text, we are not even required to learn Greek.

The fifth chapter of John tells us Jesus broke the fourth commandment by healing a man on the Sabbath; He then encouraged this man to likewise violate the Sabbath by telling him to pick up his bed and carry it away. When confronted by the Jews, Jesus said He was working because his Father was working. To the Jews, this meant Jesus was making himself equal with God.

In the eighth chapter of John, Jesus claimed to have existed as a person since before Abraham was born.

The tenth chapter of John indicates Jesus claimed to be one with the Father; the Jews understood this to mean Jesus was making himself out to be God.

When Jesus appeared to "doubting" Thomas, as recorded in the twentieth chapter of John, Thomas addressed him as God; Jesus accepted this greeting.

Jesus healed a paralytic in the second chapter of Mark but, before the physical healing, He forgave the man's sins. Scribes in the audience asked themselves, "Who can forgive sins but God alone?"

In the fourteenth chapter of Mark, the high priest asked Jesus if He was the Son of God. Jesus replied, "I am."

These examples show who Jesus claimed to be; Jesus claimed to be God! He was executed, not for any crime against man, but for something that would be blasphemy if not true. Was the claim of Jesus true or false? This question will be addressed with the help of the generic two level logic tree in Figure 3.

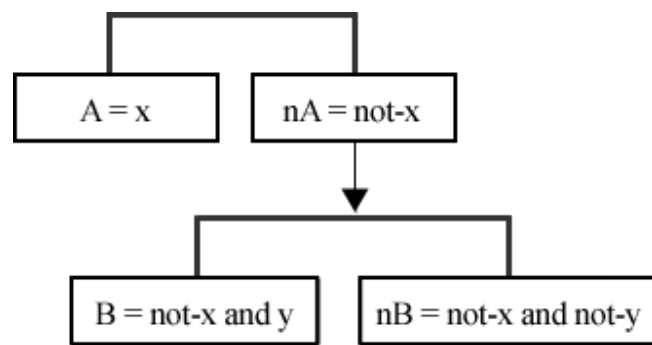


Figure 3. Generic two level logic tree

The statements located at branch tips are A, B, and nB. The fact that one and only one of these three statements must be true can be seen by: (1) assigning "false" to any group of two and deducing the value of the third and (2) assigning "true" to any one of the three and deducing the values of the other two:

A = 0 x = 0
 B = 0 implies y = 0 implies nB = 1

nB = 1 implies x = 0 B = 0
 y = 0 implies A = 0

A = 0 x = 0
 nB = 0 implies y = 1 implies B = 1

B = 1 implies x = 0 nB = 0
 y = 1 implies A = 0

B = 0
 nB = 0 implies x = 1 implies A = 1

A = 1 implies x = 1 nB = 0
 implies B = 0

Now consider the logic tree in Figure 4 concerning the identity of Jesus.

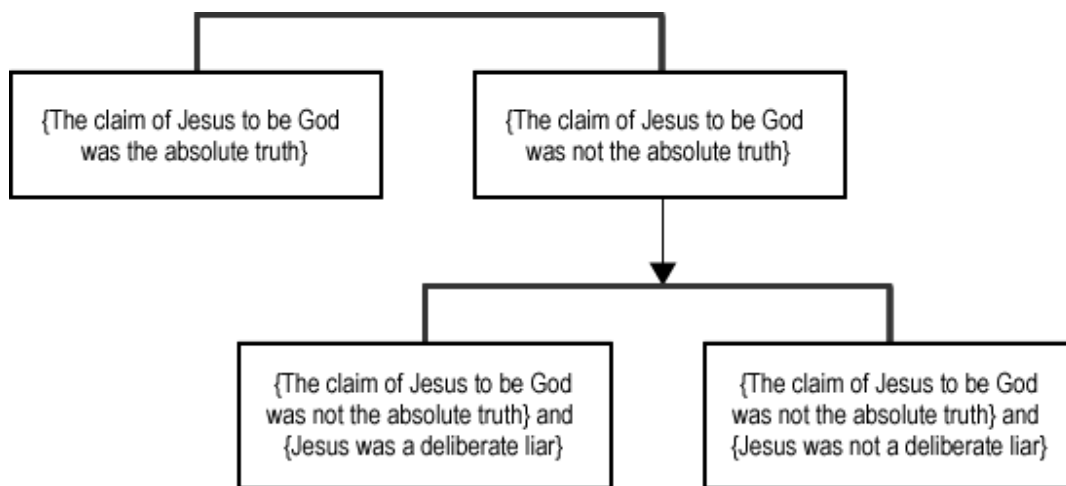


Figure 4. Logic tree concerning the identity of Jesus

One and only one of the three statements located at branch tips must be true.

- (1) The claim of Jesus to be God was the absolute truth.
- (2) The claim of Jesus to be God was not the absolute truth and Jesus was a deliberate liar.
- (3) The claim of Jesus to be God was not the absolute truth and Jesus was not a deliberate liar.

The subsequent paragraphs of this chapter will examine the likelihood that statements (2) and (3) represent truth. The falsity of these two statements and, therefore, the truth of statement (1) cannot be established with certainty. However, so much evidence can be amassed in support of this position that a final step of faith is small and guided as opposed to large and blind.

(2) Jesus knew his claim to be God was false.

This means Jesus was a blasphemous, pernicious, hypocritical and foolish liar!

Blasphemous because His claim would have been an insult to God.

Pernicious because He asked others to trust Him alone for their eternal destiny.

Hypocritical because He told others to be honest whatever the cost.

Foolish because it was His claim to be God that led to his crucifixion.

If you believe the New Testament autographs provided an accurate account of what Jesus said and did then you can study the character of Jesus using a good translation of the derived Greek text. In those pages, you will discover the most pure and noble person in recorded history. How could a deceitful, selfish, depraved man have flawlessly lived the life of a pure and noble person? I don't know of a way. Do you?

(3) Jesus did not know His claim to be God was false.

This means Jesus actually believed He was God even though He really wasn't; in other words, Jesus was insane! I challenge you to read chapters 5, 6 and 7 in the Book of Matthew and conclude you have read the words of a madman. I challenge you to pick up a red-letter edition of the New Testament, read all the teachings attributed to Jesus and conclude you have read the ravings of a lunatic.

I contend that statements (2) and (3) on our logic tree must be viewed as false based on all available evidence. Therefore, statement (1) can be viewed as true with near certainty. The final step of faith required to believe that Jesus was God is small indeed.

Notice our logic tree offers only three alternatives:

- Lord
- Liar
- Lunatic

One and only one of these three L's was an accurate description of the man Jesus. What about that other option selected by most people in the world today?

"Jesus was clearly a fine, articulate fellow - perhaps even a prophet of God - who offered lofty principles, sound teaching and great leadership but, just as clearly, Jesus was not God."

The fact that Jesus claimed to be God makes this belief irrational. Neither a deceitful liar nor a crazy person can be viewed as a great moral leader of men. Finally, if Jesus' claim to be God was true when He walked the earth 1970 years ago, then surely He is still God today. (14)

10. SOURCE OF THE BIBLE

Were the autographs, for the book referred to as the Christian Bible, inspired by God? By Christian Bible we mean the 39 books of the Old Testament (corresponding to the 24 books of the Jewish Scriptures) and the 27 books of the New Testament.

The autographs for the 39 Old Testament books were written over a period of approximately 1000 years by many different authors. If any teaching set forth in one of these documents was not inspired by God, then surely God could identify it! More generally, "The Old Testament autographs were inspired by God if and only if God cannot identify a single false teaching." Remember, one of the attributes of the Christian God is absolute truth.

During His incarnation, Jesus claimed to be inspired by the Holy Spirit (Luke 3:22; 4:1; 4:18) and to teach only what He learned from His Father (John 8:28; 14:24). In other words, the teachings of Jesus are the teachings of God. Jesus taught that the high purity manuscripts, to which he had access, were infallible and inerrant (Mat 5:18; 21:42; 22:29; Luke 24:44; John 5:39). Not a single false teaching was identified.

What about the New Testament autographs? Jesus implied that the teachings of the disciples and their colleagues "would be" inspired by God (Mat 28:18-20; John 14:26; Acts 9:15).

What you believe about scriptural inspiration is determined by the importance you attach to the opinion of Jesus. If you believe Jesus is God then the answer to the question asked at the beginning of this chapter is "yes."

EPILOGUE

If, after reading the previous ten chapters and studying the indicated references, you view my logic as flawed then you are free to reject the teachings of this book. However, if you accept my logic, please continue reading; particularly if the first five chapters have shaken your trust in the materialistic/humanistic answers to important questions and the last five chapters have shaken your rejection of Christianity. In the next few paragraphs I'm going to delineate some important truths growing out of the beliefs that Jesus is God and the Bible was inspired by God. These paragraphs are directed at your heart since I am assuming your head has already been reached.

The one true God, existing as three eternal, distinct and unchangeable persons, created the universe as a home for man and then created a man and a woman to live on planet earth. God loved the man and woman and wanted them to return that love. They chose to reject God and desired to become gods themselves. Their disobedience ushered them and all their descendants onto the path of sin. Humanity has paid a great price for their decision: aging, disease, suffering, hatred, despair, loneliness, war, jealousy, murder, grief, death and, worst of all, separation from our creator. You see, God is holy and cannot fellowship with sinful creatures like you and I.

God knew, before the creation of the universe, that all this was going to happen. On one hand, God knew sin would prevent Him from fellowship with man; on the other hand, God knew He would love each individual unconditionally and would not want eternal separation to be the inevitable consequence of sin. But sin could not simply be overlooked; a price had to be paid for every crime. Unfortunately, if you and I paid the price for our own crimes, our souls would spend eternity in Hell. Before the universe began, God chose an incredible, astounding and magnificent solution to this dilemma.

Two of the three persons who are God have a Father/Son relationship. The Father sent the Son to earth to be incarnated as a man. If this man could live a sinless life culminating in humiliation, torture and execution for crimes He didn't commit, that punishment would pay the price for every sin throughout the history of the human race. This "substitutionary atonement" is exactly what transpired about 1970 years ago. Jesus paid the price for the sins of every man and woman who ever lived. But there's a catch. No one has been or will be simply handed the gift of salvation automatically.

The gift of salvation cannot be received until your heart is right with God. "Getting your heart right with God" cannot be accomplished by joining a particular Church, faithfully participating in Church activities, tithing, dedicating your life to Christian service, becoming a pastor, living what you and your friends consider to be a holy life, making life-risking sacrifices for Jesus or exercising some spiritual gift. To get your heart right, you must make something like the following statements to God and mean them to the depths of your soul:

Father, I come into Your presence confessing my sin nature and behavior, having remorse in my heart, wanting to repent, asking Your forgiveness, forgiving those who have sinned against me, asking for Your mercy, receiving from You the far greater gift of salvation and believing I am saved by faith, the grace of God and the substitutionary atonement of Jesus Christ. I can stand before You redeemed from eternal punishment, forgiven my sins, justified as sinless, adopted into the family of God, regenerated from the death of sin to a life of righteousness, guided along the path of sanctification, reconciled with fellow believers, united in the Church of Jesus Christ and looking forward to glorification only because Jesus died on the cross for my salvation. I accept the undeserved gifts of reconciliation with You, reconciliation with fellow believers and unification in the church. I pray that the Holy Spirit will occupy and purify my heart, help me discern the truth, make known to me the will of God, be Lord of my life and keep me on the path of repentance, faith and obedience continually reaffirmed and renewed.

THINK ABOUT IT DEAR READER...THINK ABOUT IT

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