The Problem of the Absolute in Evidential Epistemology

Published in Perspectives on Science and Christian Faith, vol. 47, no. 1 (American

Scientific Affiliation, Ipswich, Massachusetts, March 1995)

DAVID SNOKE

Dept. of Physics and Astronomy

University of Piitsburgh

3941 O'Hara St.

Pittsburgh, PA 15260

Great scientific advances have taken place on the basis of the scientific method, while many have found faith and comfort via the evidential apologetic of scholars like Josh McDowell and Hugh Ross. Both the scientific method and evidentialism rest on inductive epistemology. Yet in modern philosophy departments both the scientific method and evidentialism are dead, because inductive epistemology is dead, and modern scholars who follow them are considered naive. Although induction has been defended in this century by scholars like Wittgenstein and Reichenbach, it is perceived to have failed because of the problem of the absolute; in other words, it seems to provide no basis for absolute certainty. I propose dropping the search for "absolute certainty" altogether, since it is meaningless, and argue, partly from modern language theory, that inductive epistemology is self-consistent and that only inductive epistemology provides the basis for science and universal ethics in the Christian context. Those who want a "mathematical" certainty in epistemology, following Descartes and Kant, have in fact opened the door to the widespread relativism in this century regarding both religion and scientific matters.

Introduction

The debate about science and Christianity is one of the great arguments of our day. Some claim that science has proven Christianity false, or at least made it unnecessary and irrelevant [1]. New Age proselytizers claim not only that science has disproven Christianity, but has gone further to prove, or at least support, Buddhism or other Eastern religions [2]. Others have maintained that almost all of modern science suffers from such a degree of bias that Christians must take up arms, so to speak, against non-Christian science [3]. How can we enter into this jungle of viewpoints? Must we take refuge in a high wall of separation between science and religion, refusing to allow any connection between the two?

I have previously[4] said that Christian theology and science do not exist in two unconnected worlds. In saying this, I do not mean that theology and science are identical, but that they share a unified epistemology, that each can make claims about propositions that lie in the realm of the other. In other words, although sometimes theology and science make different kinds of claims about the same world, sometimes they make the *same* kind of claim about the same world, and therefore can conflict. For instance, theology may say that the universe has a beginning, or that some people love doing evil, and therefore tread on the realms of astrophysics and psychology. The situation is essentially the same as the interactions between, for example, music and mathematics. While these fields are certainly not the same, each of these can have implications for the other, as in a mathematical analysis of music theory.

This view of the unity of things implies an *evidential*, or inductive, epistemology. In evidential apologetics, we learn religious truths from the world around us. Non-evidential apologetics sees religious truths as arising from another place, a different world, so to speak.

The evidential apologetic of Christians like C.S. Lewis[5], Josh McDowell[6] and, recently, Hugh Ross[7] has great appeal to many for precisely this reason, that Christianity takes its place in the "real" world and not only in a "pretend" world with no tests of truth. Yet most Christian thinkers view such approaches as harmless naivete or useful fiction. Similarly, modern science rests on inductive, "real world" logic, yet modern philosophy of science essentially sees all scientists as engaging in a naive exercise, since inductive logic is dead in the philosophy departments. The objections of all these philosophers to evidentialism essentially rest on one argument, which is the problem of the absolute, or the problem of the starting point, in inductive logic. This question has remained at the center of critical philosophy for hundreds of years, and most philosophers have resolved it by rejecting inductive epistemology altogether.

In this essay, therefore, I take a look at the problem of the absolute. Is evidential epistemology really unworkable? Can an intelligent person approach both science and Christianity, indeed, all knowledge, via evidential epistemology? Epistemology is hardly an abstract and dry subject. As the subject of how we know things, it has two intensely practical applications. First, on what basis can I feel *certain* of anything I think I know? I can only act confidently on the basis of things I feel sure I know. Second, how do people learn things, that is, how do they come to have knowledge? Our approach to teaching and to conveying any message will depend on how we think people come-to-know. These issues will remain central in this essay.

Two Schools of Thought

In order to present the problem, let me start by describing the "naive model" of knowledge, called the scientific method, which goes back at least as far as Francis Bacon in the 16th century [8]. In this view, "data" and "theory" are sharply divided. "Data" represents all knowledge which is perceived through the senses and recorded, perhaps on paper or magnetic tape, perhaps only in the memory of a person's mind. A person can obtain this kind of knowledge "objectively," which means that the person can collect, or receive, data in a such a way that the data remain the same despite the theories held by the person. "Theory" refers to a general statement about the data, which a person can create by using the imagination. A theory does not generally remain the same. If a theory contradicts data, then the theory is false– data act as a judge of a theory. To deliberately change data to conform it to a

favored theory is immoral, a falsehood. If the two contradict, then the theory must change, not the data, to make a reconciliation.

Theories are quite useful because it is much easier to remember a simple statement, such as "All people have two legs," than to remember a long list of data, such as "Joe has two legs, Bob has two legs, Sally has two legs, etc." Progress in science occurs as people create general statements which are initially fictions of the imagination ("hypothesis"). These statements are compared to data ("experiment"), which either supports or overturns them. As the amount of data increases that does not contradict a theory, the theory gains greater trustworthiness. A theory therefore has greater value the more it provides *simplification* (it "unifies" the data) and has *confirmation* (it can be tested by comparison to data, which does not contradict it.)

Some readers may be surprised to learn that this picture of science, still taught in many textbooks [9], has been rejected as a description of science by almost all modern science philosophers. Philosophers have rejected the scientific method as an epistemology in this century for the same reason that they rejected evidentialism in religion in the last century, because it is inherently an *inductive* epistemology. While some may include inductive thinking as part of their systems, they reject inductive thinking as a *starting point* of epistemology, because of the problem of the absolute.

Before addressing the objections to this model of knowledge, I wish to point out that

while some may refuse to extend this model to all knowledge, few would deny that it applies to a great deal of "normal" knowledge beyond the realm of the scientific laboratory. Three examples illustrate this.

First of all, very young children learn in a process very much like this [10]. Confronted with a huge amount of new sense experiences which they do not prejudge, i.e. "data," they constantly try to form simple generalizations with which to organize the world around them. A child repeatedly tosses things off a high chair, and finds that they always come back. An expectation, i.e., a "theory," is created that "what goes down must come up." After repeated trials, however, the parent may tire and items do not return. Faced with this contradiction between experience and expectation, the child may then adjust the "theory" to "all things I throw down will come back up to me for at least for a while." This series of creating new, often nonverbal, rules about life and overturning them on the basis of experience continues for years, until perhaps the child tires of learning and decides to stick with established rules, ignoring new experiences. Language itself is learned by repetition of associations of experiences, the experience of the "sign" with the experiences of the "signed". These "experiences" include internal "feelings" as well as input from the five senses. Chomsky [11] and others have argued that certain innate "forms" of language exist from birth as instincts, such as a sense of "circle-ness" or "face-ness." Whether or not these particular senses exist, everyone agrees that a child is a "tabula raza" concerning any specific symbolic communication– any child could learn either Chinese or English or American Sign Language by the same inductive process of association of experiences (including the experiences of internal feelings of circle-ness, beauty, guilt, sadness etc.) Since language requires induction, one can safely say that all people start life as inductive thinkers.

Lawcourts, similarly, adhere to rules of "evidence" (data) and hypothesis. Once evidence is admitted, it becomes the basis of fact which both the theories of the defense and the theories of the prosecution must attempt to explain. A just judge never allows evidence to be thrown out or altered on the basis of which theory he or she prefers [12].

Biblical theologians also typically attempt to argue in the same way. The statements of the Bible itself form the "data" which can not be altered, while theology provides the organizing theory, which can and does change. This approach formed the basis of the Reformation– the Reformers insisted that theologians must submit their theories to the test of Scripture, rather than adjust the interpretation of Scripture to make it mean whatever the Church wanted it to mean. Modern evangelical groups teach the "Inductive Bible Study" method. James Sire of Intervarsity Press has written a wonderful book called *Scripture Twisting* which shows the dangers of attempting to conform Biblical data to preconceived theories [13]. Intervarsity Christian Fellowship (IFES) and similar groups train Christians to first read the Bible, then draw generalities based on what they have read, instead of "proof texting" their favorite ideas by taking verses out of context and thus, changing their meaning. Theology, in this approach, can progress for both individuals and churches, even while the words of Scripture remain venerated and unchangeable.

Why do people reject this inductive model of knowledge? There are two basic philosophical objections to this model. The first objection questions the sharp distinction between data and theory. Suppose a scientist writes down the readings of a meter that he thinks indicates the positions of electrons. He does this to test a theory about electron motion. Yet in testing that theory, he relies on another theory, which is that the meter faithfully records the positions of the particles. If he obtains a contradiction, he may drop the theory of electron motion, or he may question the theory that his meter is reliable. If he has a great deal of confidence in his meter, he will favor dropping the tested theory, but he can never absolutely rule out that his meter errs. Therefore, the distinction between "data" and "theory" is better represented as a distinction between "little theories" and "big theories", i.e. theories that have limited scope and a high degree of confidence, and theories which have much greater scope, encompassing other, more limited theories, which require much more comprehensive testing to gain a high level of confidence.

Second, no theory can have the status of absolute certainty. No matter how many confirming data exist, the possibility always remains that new data will come along which contradicts the theory. Popper[14] is not consistent when he says that a single contradictory datum can overturn a theory, since that would require absolute confidence in the theory that the new datum is interpreted correctly. New contradictory data, however, can significantly weaken a previously strong theory. Are there no theories, i.e., general statements about experience, which we can know with absolute certainty? The problem is compounded when we turn the inductive method upon itself. Since the inductive method is itself a theory of knowledge, what makes us believe it is a correct theory? By its own terms, we cannot be absolutely sure that it is true! This is Hume's [15]celebrated "problem of induction."

With only theories, then, and none of them absolutely certain, it seems that the scientific method, or inductive method, if generalized to cover all knowledge, leads us to float in uncertainty. We know nothing with absolute certainty, according to this model. We seem to have no starting point, no absolute, for arguing in favor of inductive knowledge. How can we escape the sense of anxiety, the feeling of floating at sea, that arises at this prospect?

This problem faced the philosophers of the 17th century, and Rene Descartes[16] seemed to find the way out. One cannot underestimate the impact of Descartes. As Hegel said,

"Only now do we arrive at the philosophy of the modern world, and we begin it with Descartes. With him, we enter into an independent philosophy which knows that it is the independent product of reason, and that consciousness, the moment of self consciousness, is an essential moment of truth. Here, we may say, we are at home; here, like the sailor at the end of his long voyage on the stormy seas, we may cry 'Land!... In this new period the principle is thinking, thinking proceeding from itself." [17]

The apparent bedrock provided by Descartes is the *absolute* certainty which seems to belong to certain statements. Starting with this kind of statement as an absolute assumption, every logical deduction which follows has the same absolute certainty.

This framework of Descartes, which has its roots in Aristotle and Aquinas, I will call the "mathematico-logical" model of knowledge. In this view, a distinction is made between "assumptions" and "deductions". Assumptions are propositions taken as absolutely true. Deductions are all of the propositions that can be deduced from the assumptions by the rules of logic. If the assumptions are absolutely certain, then the deductions are also absolutely certain, because the rules of logic essentially provide only a way of saying the same things in different words, without contradicting oneself. All such absolutely certain knowledge is "a priori" knowledge, in Kant's terms [18]– not open to question based on experience.

The important truth content, then, lies entirely in the assumptions. Many philosophers, however, have become enamored with the process of deduction because it can produce very surprising results– it may take years to discover all of the implications of even a few, very simple assumptions. The fact that these deductions have the same absolute certainty as the initial assumptions gives the impression that these results are a higher kind of knowledge than empirical knowledge. Nevertheless, they are merely restatements, no matter how complex.

The question remains of where to get the absolutely certain assumptions required by this model. Descartes felt that the requisite absolutes could be provided by the set of apparently self-evident, non-contradictable statements. This set is small, containing such statements as "Nothing can not exist," or "I think therefore I am." More recently, the evangelical theologians R.C. Sproul, J. Gerstner and A. Lindsley have also argued in favor of limiting the set of absolutes to these self-evident statements [19].

While scholars have deduced many powerful conclusions from apparently self-evident propositions, for example Aquinas' proof of the existence of an absolute, which we can call "God," reiterated by Sproul, Gerstner and Lindsley, this approach quickly runs out of steam when one attempts to find answers to important questions like the nature of God and the basis of right and wrong. Immanuel Kant overthrew all of Aquinas'[20] proofs for the existence of God, essentially because all of the axioms they invoke require knowledge of some sense experience, and therefore probabilistic reasoning, i.e. induction [21]. Yet Kant, a Christian, needed a basis for morality. He tried heroically to found a moral philosophy purely on self-evident concepts [22], arriving at the "universal" concept of "duty," but his efforts have remained unconvincing to most. Others arguing from "self-evident" principles have deduced different ethics, such as Ayn Rand's "deduction" of individual selfishness[23] as the absolute of morality. Rather than accepting the limitations of an approach based only on the small set of noncontradictable propositions, the Cartesian rationalist inevitably supplements the set of absolutes with some unprovable assumption in order to reach the values he or she wants [24].

Existentialism, in particular as defined by Nietzsche and Heidegger [25], but with roots in Kierkegaard [26], overcomes the hypocrisy of "self evident" rationalism by directly affirming that the set of absolutes must be supplemented by unprovable axioms. In this school, the Free Man can generate absolutes by the exercise of choice, or a Kierkegaardian "leap." This exercise of arbitrary choice represents the highest quality of humans. Of course, one person's absolutes may contradict another's, so that they can not be considered absolute in the sense of being universal. Instead, each person works within a unique logical system defined by his or her chosen axioms. These axioms act as absolutes because the individual does not doubt them afterwards.

The philosophy of science of Kuhn [27], which dominates modern philosophy of science, is essentially existentialism as applied to science. Science consists in his model mainly of "problem solving," i.e., deduction, based on "paradigms", which are axioms made by existential choice which then act as absolutes until a "revolution" occurs which supplies a new paradigm via a new existential choice. Modern science is not superior to that of Aristotle; modern scientists have simply made different existential choices of value in judging science. Polanyi's approach to science [28] is similar, insisting that in a big universe, the scientist can not randomly collect data, but rather must choose the interesting places to look based on definitions of value. Only existential choices provide these. Following the work of Kuhn and Polanyi, some in recent years have created a *false* unity of science and religion by stripping science of that same claim to objectivity that others stripped from Christianity in the last century. The new unity allows us to believe what we choose to believe about either science or religion. This is not the kind of unity I have proposed[4]– I propose that theories be approved or rejected on the basis of evidence in both spheres.

In orthodox Christian circles, existentialism has a close parallel in presuppositionalism, founded by Cornelius van Til[29] and more recently advanced by Gordon Clark [30]. In this framework, unprovable absolute axioms are seen as necessary, just as in existentialism [31]. The Calvinist presuppositionalist does not see these as arising from arbitrary choices, however, but as implanted directly in the spirit by God. Nevertheless the presuppositionalist sees these axioms as essentially irrational (or "non-rational" [32]) in nature. The Arminian, or "Free Will", presuppositionalist has a closer relation to existentialism in affirming the power of Choice as mankind's highest quality [33]. In this view the axioms of Christianity are seen as universal, but essentially unknowable and unprovable, until a person chooses to believe them.

Existentialism seems to affirm the value of the individual but has left many empty because they seek a universal absolute, or truth about objective reality, not merely a subjective personal absolute. It also has served as a justification for all kinds of systems that seem intrinsically evil, as for instance Hitler's use of Nietzsche's Superman, because it denies a universal morality. In the US, the conflict of personal absolutes has led to a new kind of power conflict of values, documented in books such as *The Closing of the American Mind*[34] and *Illiberal Education* [35].

Existentialism also has no answer to mysticism, which has blossomed in modern Western society. Having rejected non-axiomatic knowledge as uncertain and embraced perfectly certain knowledge by irrational leap, the existentialist has a hard time justifying the need to feel constrained by facts and logic at any time– even the concepts of the reliability of the senses and the need for logical deduction become mere choices of value. A person who does not make these assumptions can simply believe anything he or she wants, even if confronted by direct evidence or logic to the contrary. The mystic, therefore, consciously chooses to forego logic and allow contradictions– all knowledge is equivalent to the choice axioms of the existentialists, with deduction following only when one chooses. Comparison of claims of truth is impossible; each person remains sealed off in a subjective world alone.

Modern religion and philosophy of science seem to have painted themselves into the corner of saying that anyone can choose to believe anything, and there is nothing we can do about it. Calvinist presuppositionalists may substitute an act of God for free choice, but they still allow that the non-Christian has just as much logical consistency following pagan assumptions as the Christian has following the Bible. "Convincing" people to change their minds about fundamental beliefs seems all but dead in Western society. This conundrum stems from the attempt to define all knowledge within the "mathematico-logical" model of knowledge using Assumption and Deduction in the tradition of Aristotle, Aquinas, and Descartes. While recognizing many weaknesses of other systems, no one in the mathematico-logical school, in which I include Cartesian rationalists, existentialists, and presuppositionalists, seems to ever question directly the validity of Descartes' model of absolute certainty based on axiomatic reasoning. Even some mystics use a highly sophisticated Cartesian logic to validate their approach.

On the other side lies the inductive approach following the scientific method, outlined above, which relies on the senses and allows no absolute certainty, often going under the names of empiricism and positivism. This model is often associated with the famous Scottish anti-Christian, David Hume [15] and the atheists Mach and Wittgenstein[36]; in this century Reichenbach [37] has advanced this school without anti-Christian rhetoric. Christians associated with this approach, usually called "evidentialism" in Christian circles [38], include C.S. Lewis [5], John Warwick Montgomery [39], Josh McDowell [6], and Francis Schaeffer [40].

In thinking about the problem of the absolute, the first thing one must realize is that it is only a problem for the mathematico-logical school. In other words, it is a problem *imposed* on the inductive school by the mathematico-logical school. If the deductivist asks, "How can you be *absolutely* sure that evidentialism is correct?" the evidentialist must answer, "I am not and that doesn't bother me. Absolute certainty has no meaning within my world view. I can only say that I am very sure." Few evidentialists have had the courage to speak this way, however. Most have unwittingly capitulated to the mathematico-logical school in trying to produce some absolutely certain argument for evidentialism. By its very nature, inductivism can not produce absolute proof of inductivism. It can merely show self-consistency by showing *strong evidence* of the validity of inductivism.

Deductivists will say that showing that inductivism is self-consistent does not disprove any other epistemological system, since every axiomatic system also can show self-consistency based on its own assumptions. The inductivist has an advantage, however, since all people start out thinking inductively. To force a change, the deductivist must show inconsistency starting only with the rules of the inductivist system.

Can We Be Absolutely Sure of Anything?

Let me affirm that perfect certainty is impossible. The concept of perfect certainty is absurd, even within the mathematico-logical model. Consider the statement, "I am perfectly sure." Who am I? Am I sure who "I" am? An electron microscope will show that I do not end sharply; my skin fades away. Do "I" include all the shed skin of past years? Memories that I have forgotten? If "I" am not perfectly defined, my certainty can not have a certain definition. The absolute certainty of an apparently non-contradictable statement like "I think therefore I am" fades away when we realize that "I" and "think" can not be perfectly defined.

Since every proposition is formed from the words of a language, which come from mapping a broad set of sense experiences to a much smaller set of sense experiences (for example, all my experiences of myself are mapped to the sound of the word "I"), no proposition can have absolute certainty about its meaning in the reverse mapping process, i.e, about reality. Language, so essential for thought, automatically rules out exactness. Aquinas believed that his proofs of the existence of God were self-evident, but others later showed that the words he used, like "time" and "cause," had origins in sense experience. One can do the same with any so-called self-evident proposition.

Having ruled out perfect certainty, however, do we then condemn ourselves to a world of questions with no answers? We have all known sophomore college students who lost all sense of direction after exposure to philosophy which called into question the certainty of everything. There is no need for this. On the contrary, certainty is possible even where "perfect" certainty is not. To claim otherwise is foolishness.

It seems that philosophers and theologians often have great difficulty with the ideas

of probability and uncertainty that working scientists do not have. For many students of philosophy, only two possibilities exist, either perfect certainty or uncertainty. For scientists, a whole spectrum of degrees of certainty exists, with perfect certainty and complete ignorance as the two ends of the scale. An exact number is viewed as meaningless by scientists; every number purported to deal with reality must have an associated value of "uncertainty" which reflects the accuracy of the measurements, the number of "significant" digits in the calculation, etc.

Many scientific propositions exist which are not "perfectly" certain, yet are very certain, to such a degree that to doubt them would be foolish. For instance, according to microscopic gas laws the remote possibility exists that all of the air molecules in the room you occupy may suddenly stack up along one side of the room, causing you to suffocate. This should not be cause for concern, however– the entire history of the world is not enough time for such an event to become probable, even to occur once. Scientists and statisticians define the probability of some chance, possible events as "insignificant". To all intents and purposes, such an event is "certainly impossible." A slight possibility exists, for example, that a person jumping out of an airplane without a parachute will not die. Few philosophy professors would consider the outcome uncertain enough to warrant a test! [41]

Room therefore exists for talking of certainty even in an epistemological model which excludes "perfect" certainty. Of course, we can not be certain about everything; we are ignorant of many things. We can be very sure about some things, however.

Rather than talking about perfect certainty we can talk about being "sure enough"– sure enough to act upon a proposition. An engineer who has designed a bridge may not be "perfectly" certain that it will not collapse but certain enough to walk on it; the man who sold all he had to buy a pearl, in Jesus' picture of faith, may not have known "perfectly" that the pearl was not fake, yet had enough confidence to take this dramatic action.

I emphasize that we can become certain of religious propositions in the same way in Christianity as in science: through laws of evidence and experience. Science and Christianity share a unified epistemology. This may seem quite surprising to many people, including many Christians. What about questions of value and meaning, as discussed by Polanyi? I return to the question of value below.

This question of sureness is a watershed issue. Although many epistemological frameworks exist, all epistemologies must belong to either one category or the other, inductive or deductive. We must answer the question, are *all* propositional statements of language open to question and revision on the basis of experience, or are some "protected" as unquestioned axioms?

What Does the Bible Say?

I have argued that the approach to knowledge in the Bible is the same as that of the scientific method. This even includes faith in the promises of God Himself. If this is so, then does not faith in God have the same vulnerabilities as scientific theory, in particular the absence of perfect certainty?

At this point, let me turn to the Bible, the source book for Christians. What picture does the Bible give of knowledge? Does the Bible tell us to find the perfect certainty of the mathematico-logical model?

Ever since Kierkegaard defined faith as an irrational, or extra-rational, "leap" into a new set of perfectly certain assumptions, many philosophers have taken this without question as the proper definition of faith, and the hallmark of religion. Many modern evangelicals speak like this also. The Bible simply does not talk about faith this way, however.

First of all, faith in the Bible is very often portrayed as coming about due to *convincing*. The picture is given of "reasons" [42] which could be "examined," [43] with people being "persuaded" [44] and "convinced" [45] by "proofs," [46] "witnesses," [47] "testimony," [48] and "signs." [49] All of these terms indicate a weighing of evidence, not an irrational leap. As in the New Testament the evidence centers around the works of Christ, in the Old Testament believers were reminded of the testimony of the signs, or evidences, of God's work in the Exodus [50].

Second, faith in the Bible is spoken of as a quantity which people can have more or less of- there are degrees of certainty. Jesus called people's faith "great" [51] or "little." [52] The apostles talked of faith as something which could "increase" [53] and "grow." [54] People could become "more certain." [55] If faith means absolute certainty, how could it become greater? "Doubt", or wavering in faith, is frequently spoken of [56]. In pragmatic terms, Christians do doubt. Should we tell them that they have no faith at all, then, that they are not Christians if they are not perfectly sure? Or should we tell them that they are not really doubting after all? [57]

A leap of sorts *is* enjoined in the Bible in relation to faith, however. This is the leap of obedience. No matter how great the evidences for a theory, one can not be absolutely sure that its predictions will come true before an experiment is made. In the great chapter of faith, Hebrews 11, each person without exception is commended for what he or she did on the basis of faith. What is "unseen" in each case is the future, while the past actions of God provide the basis of faith. A person watching mountain climbers may be convinced that the rope is secure, but if asked to hang from the same rope himself, he or she may irrationally refuse to make the leap. Action requires a work of the will in addition to mental knowledge. Of course, obedient action can increase faith. Just as in scientific theories, certainty increases when tests of experience have been made. The Bible in no way endorses mysticism. Certain passages have been interpreted as self-contradictory, such as John's "I am not writing you a new command... I am writing you a new command." [58] In such passages, different senses of the same word are used for emphasis; a direct irrational self contradiction is not intended, as is clear from the context. The Bible is a book which talks of Truth and Falsehood, Light and Darkness– "Mystery" is the name of the Harlot of Babylon [59].

"Being convinced" is essentially passive, requiring neither mystical nor existential choice. Some may say, with Aquinas, "Where then is the merit of faith?" [20] If we are simply passively convinced of something by strong evidence, what virtue is there in that? The Bible answers that there is none– faith is a work done in us by God, out of grace, [60] not a work we do to save ourselves.

Can an Epistemology be Free of Presuppositions?

To show the lack of consistency of evidentialism, the deductivist argues that the evidentialist *must* make some absolute, unquestioned assumption in order to evaluate evidence, that is, in order to define knowledge. Above, I stated that the fact that children learn inductively puts the burden of proof on the deductivist. The deductivist objects that this is beside the point. That they do so (if we agree on the evidence that they do) only implies that they

have *implicitly* made an axiomatic presupposition in favor of inductivism.

What could that mean? If we define a "presupposition" as a propositional statement of language, then clearly knowledge precedes any presupposition, since sensory experience, which we must call knowledge, precedes and forms the foundation of language.[61] As Augustine said, [62]

"For who cannot see that thinking is prior to believing? For no one believes anything unless he had first thought that it is to be believed."

Similarly, knowledge can not require existential presuppositions made by choice. Small children acquire knowledge before they form theoretical biases. Knowledge must precede choice; otherwise there is nothing to choose.

On the other hand, if a presupposition can take the form of an unverbalized bias, which people who have language may later formulate in propositional form, then we can ask whether some such proposition must remain unquestioned by all evidentialists. In particular, does not the evidentialist *assume*, first, that the senses are reliable, and second, that more evidence of something makes it more certain?

Here I must digress to clarify the distinction between "unifying theories" in the inductive approach and "unquestioned presuppositions" in the deductive method. An unquestioned presupposition is a statement which we take as true with no possible doubt, an "axiom," in mathematical language. A unifying theory is a way of organizing many facts of experience into a single fact. We typically talk of such unifying theories as foundational, or as fundamental, or as first principles, because once they are learned, then a host of other facts follow as deductions. Such unifying theories are almost never learned first! Fundamental theories of physics, for example, can be learned only after years of study.

Dreadful mistakes often occur when scholars attempt to teach foundational, general theories like axioms, before teaching the particulars of a field. The fiasco of New Math occurred when educators decided to teach the basics of set theory to primary schoolers because all math "follows" from set theory. Even when students succeed in learning foundational theories first, they memorize them as irrelevancies. A person can comprehend a unifying theory only after already comprehending some particulars, or specific applications, of the theory. We think from particulars to generals, not vice versa.

Although we start with particulars, nevertheless we like general theories. Unifying theories act as "keys" to knowledge for those who understand them, unlocking great mysteries. In this way the "fear of the Lord" acts as a grand, unifying theory which one can properly call the "beginning of knowledge." [63] Once grasped, the fear of God puts all things in perspective in such a way that believers often feel they knew nothing before, that they "walked in darkness." In the same way, the physicist who grasps the theory of Special Relativity may feel he or she previously knew nothing of motion, despite having driven a car for years. Consider the difference between a unifying theory and an irrational assumption, however. With both a unifying theory and an axiomatic assumption, a choice is made by the will to suppose something is true that is not known *a priori* to be true. In the model of the scientific method, or inductive method, this is called "hypothesis". In each case, deductions are obtained from the assumption. In the case of the scientific method, however, these deductions are compared to further experience, and contradictions with experience invalidate the assumed hypothesis or at least force a revision of it, while consistency with experience increases one's level of faith in a theory. Axiomatic assumptions of perfect certainty do not allow this. Also, a hypothesis is also built out of some set of other theories with smaller scope, in other words, particulars, or "data". An axiomatic assumption, in the mathematico-logical model, claims to build on nothing.

Having clarified this distinction, then, I can affirm that evidentialists "assume" (in the sense of positing a fundamental theory) that the senses are reliable, etc. Inductivism is a general, unifying theory. An element of the irrational does exist in the process of formulating a hypothesis necessary for creating a general theory. Yet belief in successful theories (whether scientific or religious) is not mere irrational value-choice, because certainty can be ascribed to them by tests of consistency.

The fact that deductivists exist proves that inductivists do not necessarily make inductivism an *unquestioned* presupposition! As discussed above, all people start out as inductivists. Yet some become deductivists, precisely because they question the foundations of inductive thinking and become less sure that its primary assumptions meet tests of consistency.

The Certainty of the Senses

I have stated that evidentialists "assume" as an imperfect theory that the senses are reliable and that more evidence of something makes it more certain. Since these assumptions remain, in principle, open to question, the evidentialist does not violate self-consistency by making an axiomatic presupposition like the deductivist. Before we pass over these assumptions too lightly as "not absolutely proven," however, we would do well to think about what the opposite assumptions really mean.

First, to assume that the senses are not reliable does not mean merely that the knowledge gained from the senses is *incomplete*. Every evidentialist recognizes that knowledge gained from the senses tells only part of the story; therefore, the probabilistic approach to truth arises. The opposite assumption is that *none* of the information from the senses is truly knowledge, that the senses (alone) tell us nothing. The evidentialist says that the senses tell us *something* about reality; those who reject this assumption say that they tell us *nothing* about reality.

How could the senses tell us nothing real? If we merely passively receive sensory inputs, we have at least knowledge of the emissions of some source. One can postulate that Someone Out There deliberately presents us with information that is false our whole life long, so that every sensory experience gives a false view of reality. In that case, we still have knowledge of how that Someone works. Our reality *is* then the world of that Someone's deception.

As a matter of definition, we can call the senses "infallible," as Jonathan Edwards [64] did. If "reality" is the sum total of our experience minus our memory and imagination, then the senses convey reality perfectly, since one can define the senses as the way we experience whatever it is we experience. As Edwards argued, what we typically call our senses "deceiving us" comes from incomplete sense experience, not "wrong" experience.

Simply defining reality as whatever we experience, and the senses as the perfect conveyors of that, may bring scant comfort to many people, however. What makes us expect that certain things will happen again? The question of the "reliability" of the senses, whether or not they tell me something "real," has more to do with our expectation of repeatability than with the origin of what we sense. Things that are not "real" can vanish; deceptions can stop suddenly. How do we know that things will not suddenly vanish into thin air?[65]

Of course we do *not* know with absolute certainty that things will never just vanish into thin air. A nuclear bomb may go off tomorrow. Indeed, Christians believe that the world will one day vanish, that "the sky will be rolled up like a scroll" in the return of Christ. The inductive assumption (for example, of Hume [15] and Reichenbach [37]), that more evidence gives more certainty, comes from a present-tense *sense of expectation*, or "sense of certainty", we have that things we have experienced often will occur again. Logic can take us no further.

Language comes from the same sense of expectation. We learn a language by repeated association of one experience (the "signed") with another experience (the "symbol.") There are, in fact, many non-repeated things in life, experiences which we must simply leave as open questions. Finding a "meaning" consists of finding a language map, a definition, and definitions come only from repeated association.

A person who wishes to deny that repetition increases certainty must therefore call into question his or her own use of language. If a person says "You just assume that repetition increases certainty. I don't make that assumption," then one can ask, "Why do you use the word 'assumption'? Why don't you use the word 'flibber' instead?" The person uses that word because repeated usage has given that name in the English language to the referent. The person does not switch randomly between the word "assumption" and the word "flibber" because he or she is *certain* that "assumption" is the "right" word. This certainty comes only from repetition– there is no axiomatic "proof" of language definitions.

Any language is tied to successful unifying theories. A "theory" is any rule for grouping together certain diverse experiences in one category, under the same name, while ignoring other experiences as irrelevant and not needing names, which is precisely what language does. Science is merely language with finer distinctions between phenomena than people ordinarily make– the coining of new terms is indispensable for science [66]. The converse also holds. Anyone who would reject the scientific method must also reject all language. Unless one believes that the English language descended from the heavens directly into his or her brain (something like what Plato believed) then one must see that language requires inductive thinking.

The Question of Ethics

One may concede that inductivism can provide a self-consistent basis for interpreting everyday experience, i.e., that the scientific method works for *science*. But for a complete world view, do we not need absolutes of right and wrong? How can a world view which has no perfectly certain propositions provide an ethic?

The inductive/empirical approach to knowledge, as I have said, is often associated with Hume, who was vehemently anti-Christian [67]. Because the Christian scholars of his day had largely embraced metaphysics based on speculation of abstract axioms, for Hume this meant the rejection of religion *per se*. As he says at the conclusion of his *Enquiry*[15],

"If we take in our hand any volume of divinity or school metaphysics, for instance, let us ask, does it contain any abstract reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matters of fact and existence? No. Commit it then to the flames: for it can be nothing but sophistry and illusion!"

Hume's empiricism evolved into the positivism of Mach and Wittgenstein, so named because of Mach's rejection of concepts of "value" and "meaning" as existential, non-measurable quantities and his insistence on "positive" experience. Hume and Mach believed that knowledge that has no connection with experience is fantasy. I concur.

Polanyi, however, showed that all science requires beliefs about "value" and "meaning" [28]. He is widely felt to have dealt scientific materialism and positivism a fatal blow. In a big universe with many places to look, concepts of value and meaning define the interesting, or "good," places for observations. Random data collection with no purpose is not science. Yet science which restricts itself to observation of nature can not produce these concepts. I concur with Polanyi on this point.

Where do value and meaning come from, then? Polanyi essentially saw these as arising from existential choice. Does the Christian agree? Many Christians have argued for a separation of scientific and religious epistemology on this basis, e.g., Howard van Till [68]. Science deals with ever-changing theories and data; religion deals with absolute, unquestioned assumptions of value and meaning. The Bible does not make such a distinction. "Good" and "evil" in biblical terms have very concrete definitions. "Good" is that which God loves and will reward, and "evil" is that which He hates and will punish. The statement, "That is good," in the Christian ethic, therefore, has the same nature as a statement like "Tomorrow it will rain." Each makes a claim about an as-yet-unobserved fact of the world of experience, in one case, regarding the judgments of the real God in the universe of time and space, and in the other case, regarding weather in the same universe. We expect to observe both by means of the senses.

For the Bible-based Christian, then, ethics proceeds in the same way as science. Rather than making deductions from prior assumptions about good and evil, the Christian attempts to answer questions such as "Did God really command that for me?" by a process of theorymaking and evidence. Christians grow and change in their understanding of ethics, i.e., in their "wisdom." Part of that process may even include questions about the validity of the inclusion of certain passages in the canon of Bible. It may also include ongoing evaluation of the validity of "internal" sensations of the commands of God, as universal "moral laws" or personal "leadings of the Spirit."

In the post-Christian West, since belief in the revelation and universal judgment of God has ceased, morality can not be defined in absolute, concrete terms. We feel a need for universal morality, though, and therefore philosophers have attempted to construct universal norms. Without a connection to universal consequences, however, any attempt at producing a universal morality must come down to arbitrary choices.

In practice, however, these choices are not arbitrary. As Nietzsche argued, most people in society pick up their values from the "strong man" of that society. For them, morality is concrete as for the Christian– people make evaluations, from experience, of the desires of the strong man, or "god," and the consequences of disobedience. Each person obeys his or her own "god". The "free man" equals the man whose god is himself. He has only two real choices: randomness, or following his natural animal lusts. While he may dignify his choices with names like "the creation of beauty," the free man who has broken free of the societal strong man generally ends up turning to the second choice, carnal pleasure– witness the centrality of sex in contemporary art.

I conclude that all real ethical choices arise from decisions made from analysis of experiencewhich is the god most to be feared: God, the local strong man, or the unfulfilled sexual desire? Of course, one must believe that the god exists, and has spoken. A God Who exists only as a construct, Who never gives commands nor enforces them, has no relevance in the real world.

Christian ethics is then *absolute* in the sense that it involves *ultimate* and *universal* judgments, not in the sense that anyone is absolutely certain that any one proposition of ethics is absolutely certain or absolutely well understood in its implications. In this way historical Christianity is unique. No other world view based on evidence and inductive

reasoning can provide a satisfactory ethic. [69] Scientific materialism, which *a priori* excludes data which could imply intervention by an ultimate God, can not provide an ultimate ethic.

In principle, science could generate a universal ethic by demonstrating that all people have the same sense of "goodness and "badness." While evidence for the existence of such "natural law" has important implications for apologetics, restricting ethics to such an approach breaks down for two reasons. First, because of sin people will lie about what they perceive as good and bad. C.S. Lewis statement[5] that no one could imagine a country where people "bragged of running from battle" makes less sense after the Viet Nam war– many people did brag about running from battle. C.S. Lewis might also have listed as unthinkable in his day a country where mothers marched in the streets for the right to kill their babies in the womb. Second, such an approach does not show universal bad consequences of things perceived as "bad." There is no justice in this world. Therefore, positivists like Mach could say that the perception of "badness" is no different from the perception of "redness" or "blueness," i.e., inconsequential. The Bible, on the other hand, makes the claim that an omnipotent God has spoken intelligibly and unambiguously in space and time (the world of science) about the consequences of right and wrong for all people.

The late Francis Schaeffer, one of the most influential Christian philosophical writers in the twentieth century, addressed this issue at length [40, 70]. In the twentieth century, the world of our experience and the world of religion have been made into two separate worlds. "Religious truth" has no interaction with the data of experience, the realm of science. Therefore, for many people the practice of religion has faded away. Schaeffer coined the term "true truth" for the truth claims of Christianity, meaning that the truth of Christianity deals with the real world of our experience. The stories in the Bible of Adam and Eve, Moses and Joshua, and Jesus and the Cross occurred in real, space-time points in our universe [71]. The Bible does not present its foundational stories as myth and allegory. Rather, characters have extensive genealogies, interact with other historical figures such as the kings of Babylon and Egypt, and live in places with geographic reference points. The genealogical, historical, and geographic details in the Bible are specific to the point of becoming boring for some readers, but show without a doubt that the writers viewed the stories as occurring in the same world as ours.

Because the stories of the Bible occur in this world, no claim of the Bible can be completely divorced from a scientific implication. Henry Morris of the controversial Institute for Creation Research properly emphasizes this point [72]. One may easily say that the purpose of the Bible is not to convey scientific data, but that can not eliminate the grounding in reality that even statements of ethics have– if Moses never existed, for instance, then one can hardly see the commands attributed to him as originating from the oracle of a real God. Without that grounding in historical reality, ethics must indeed come from nowhere– from the arbitrary choices of existentialism, or from the conflicting opinions of conscience mixed with self interest.

The Question of Authority

This unity of religious values and science on the basis of experience may seem especially strange to some in the context of biblical Christianity. Doesn't the Christian make the Bible an "absolute"? Science deals with repeatable, measurable events in the present and theories that make testable predictions, while the Bible records unreproducible, dogmatic stories from centuries ago. How can the two compare?

Such an antithesis indicates an improper understanding of the role of authority in science. No scientist, no person, has any hope of directly testing through experience even a fraction of the truth claims presented in life. How many scientists, for instance, can hope to directly observe the W-boson which led to a Nobel prize for those who claimed to see it, which required a multibillion-dollar particle collider for its observation?

Very early, as children, we learn to evaluate second- hand information from the claims of messengers, or "authorities." While a child may start by simply believing everything the authorities say, the problem will come, as it did for Europe in the 1200's, when authorities contradict each other. Then a person must develop theories of which authorities to believe, based on experience. This process involves experience with the person who claims authority. What is the likelihood that this person will bring false information, either maliciously or by error? History, as a science, deals with exactly this question, as do law and journalism. The complete rejection of authority, an immature alternative response, leads to an extreme narrowing of knowledge. [73]

Does science on the basis of authorities allow for tests of predictive theories? Any historian will affirm this. First, one can predict that other reliable authorities will concur, if they are found. Second, one can predict that details which remain available for observation (e.g. archeology) will give corroboration.

The Bible comes to us as a purported authority about things which have occurred in the world of experience. We have every right to expect, then, that the Bible will satisfy normal tests of historical validity.

What about the concept of inerrancy? This belief, that the Bible, since it comes from God, never errs in any proposition it affirms, raises the Bible to a higher level than mere historical authority. As Sproul[74] and Hackett[75] have argued, the Christian need not come to believe in the inerrancy of the Bible by leap of faith. Starting with the Bible as a historically valid authority, a person can come to faith in Christ and then evaluate Christ's statements about the Bible contained in itself, in a "bootstrap" process. Some Christians do come to the Bible by irrational leap, as the Mormons come to their books. They have no argument against the Mormon or any other cult, as a result. Evidentialist epistemology allows comparison of religious truth claims on the basis of evidence.

Perhaps no issue brings this dogma/science dichotomy into focus better than the question of miracles. If I embrace something like Hume's definition of probability of truth based on prior experience, how can I then believe in miracles, in particular, the miracles of the Bible? Hume ruled out miracles based on this approach, since if we have never seen a miracle, the probability of one occurring, according to laws of induction, must approach zero.

To address this, I must first formulate the proper definition of a "miracle". Some atheists have accused Christians of a very silly kind of self-contradiction: defining a miracle as "something impossible," they then see Christians as believing that something impossible is possible. Clearly, Christians would define a miracle as something possible, not something impossible! We also cannot embrace the popular definition of miracles as "things that happen all around us." To do that reduces the idea of miracle to merely something that is good, but otherwise indistinguishable from other things. As presented in the Bible, a miracle is a mighty act of God which He does to accredit a messenger or to glorify His name.

I have argued that a person may come to a belief in God inductively, on the basis of evidence. Given a belief in God, no one should find it hard to believe that God has the power to do miracles in the universe He created, including speaking words to individuals and even stopping history to judge the world. Since we find records of miracles in the Bible, we would have reason to disbelieve these only if we have a philosophical bias against miracles, since the texts are otherwise reliable history. The fact that we do not see miracles of the same kind now does not provide evidence against the biblical miracles. The Bible itself indicates that miracles occur rarely and dramatically, not randomly and frequently.

Note that the Christian ascribes certainty to the existence of God, from this belief deduces that miracles are possible, and then sees historical evidence for such. If one tried to establish the occurrence of miracles apart from the existence of God, in other words, to prove the existence of God entirely on the basis on miracles, as some would like to do these days, then such a proof must surely fail Hume's test of experience. Despite a great number of claims of modern-day miracles, the number of these in which the hand of God is undeniably present is very small. Many who have relied on the miracles alone as evidence of God's presence have either needed to become extremely gullible or else have lost their faith, as documented by Philip Yancy in his book, *Disappointment with God* [76].

A miracle violates the standard "law" of nature. Yet no modern philosopher, Christian or non-Christian, accepts the 19th century view of physical laws as inviolable laws or even as causative agents. The presently expressed "laws" of nature are nothing more than inductive theories of varying certainty and levels of approximation of the observed behavior of nature, what the Christian would call the "normal" behavior of God. The distinction between miracle and law is the same as that between special and general revelation– God makes Himself known partly by things that occur regularly, and partly through things that occur rarely.

Because miracles accredit the messenger who claims to bring God's word and will, the stories of miracles are inseparable from the message of the Bible. In the 18th century, many philosophers, tried to deduce everything important in religion from scratch, without need for reference to the Bible. In doing so, they hoped to prove the validity of the Bible, but they undermined the "specialness" of the Bible and any hope for generating an ethic within an inductive approach. I have maintained that both ethics and science can arise from an evidential approach to experience. Yet as I argued above, this does not mean that one could generate all knowledge from science and the study of nature, without input from the revelation of God, as though the Bible were merely some superfluous supplement to science. The Bible offers not only a general theory about the universe, but also "news," in the terminology of Walker Percy [77], or "revelation," which can not be deduced independently. Like other news, it comes to us via "authorities" which we can judge. That news, to a large part, is the story of the unique, miraculous interventions by God that convey to us His personality and His will for us. Far from by passing the Bible, I maintain that belief in the miracles of the Bible can be reached through inductive thought, and this in turn provides the basis for ethics.

The Question of Sin

So far, I have argued that evidentialist, or inductive, epistemology is self-consistent, in that it does not require unquestioned, irrational axioms either for science or for ethical values, when the evidence for miraculous communication from God is allowed as input for ethics. Does the evidence force us to conclusions, though? What about the existence of sin and its effect on our reason?

Cornelius van Til [29], the founder of presuppositionalism, affirmed that all young children have from birth the presuppositions necessary for knowledge. He did not see these as propositional in nature, but as the ability to "see" God in the world, what I would call an inductive outlook. He insisted, however, that later rejection of God entails a voluntary choice of anti-theistic assumptions to replace these inborn presuppositions, to blind oneself to the evidence of God. The non-Christian must indeed make irrational assumptions to rule out the testimony of God which the Bible says appears in nature [63]. Christian belief therefore requires a change of presuppositions once again.

I agree that that sin leads us to make, by an act of the will, "unquestioned axioms" which *preclude* knowledge of God or which excuse us for our sinful behavior. While we all start out thinking inductively, reality often becomes too painful and we simply choose to disbelieve certain experiences. The pain of facing our own sin is one of the most powerful reasons for

this kind of "denial" [79]. The Holy Spirit must break down our barriers and lead us to question those unquestioned assumptions in order for us to come to know God and interpret the world correctly.

The question remains, however, how large a set of assumptions must change for someone to begin to have knowledge of God, and therefore, in the presuppositionalist view, to have understanding of anything. Must we begin by presupposing that the entire Bible is true? Such a notion implies that no one but Christians with a proper concept of Biblical infallibility can know God. One deviation from proper doctrine and a person becomes a heretic, an unbeliever, and knows "nothing." Or must we presuppose merely the existence of God? If so, then a God with what characteristics? The God of the Bible? Or a stripped-down God with only a few philosophical attributes such as eternity? The proper definition of God is so difficult that to talk of presupposing God before knowing anything is bizarre. Christians, in fact, commonly talk of their knowledge of God growing year after year for their whole lives.

I do not see the work of the Holy Spirit as the mere replacement of one set of unquestioned, irrational axioms with another set of unquestioned, equally irrational axioms. Rather, the Holy Spirit convicts us of our sinfulness and leads us to call into question any and all assumptions we have made, first and foremost those assumptions we have made to excuse our sin. A proper recognition of the possible effects of sin on human reason demands that a person not insist on *absolute* certainty of any proposition, including theological ones. Yet as discussed above, this does not mean that we must abandon ourselves to the wishy-washiness of liberal religion, never certain of anything and never offending anyone. The Holy Spirit also demands that we act on the truth when we know it. We can be "very sure" of some things, and we must not retreat when we are "sure" that God has called us to action.

The Holy Spirit must therefore primarily open us to *evidence* that overturns our false presuppositions and supports Christian ones. I can testify from my own evangelistic experience that this openness is sufficient for conversion. When I see a person truly open to new ideas, questioning his or her own assumptions, weighing evidence and asking questions, I expect that it is only a matter of time before that person will become a Christian. Such a person is not a Christian yet. Nevertheless a Christian and a non-Christian who are both committed to such an honest approach to the evidence of experience can have dialogue and attempt to persuade each other of their viewpoints, without a call to simply "change presuppositions by faith." As Francis Schaeffer often said, "Honest questions deserve honest answers."

Many philosophers have gotten caught up in the effect of unifying theories (what some call "presuppositions") on basic knowledge. Belief in a certain theory changes the "meaning" of many experiences. For example, a person may look every night at the stars and simply think of them as "a bunch of stars." If a person believes in astrology, however, a sign in the heavens like a comet may mean something important, while if a person understands modern astrophysics, it may mean something different. But though certain beliefs may affect the meaning of certain experiences, leading one to see them as either supporting or contradictory evidence for some theory, elimination of the theory does not eliminate these experiences as knowledge! Experiences which make up part of the "background" of life, such as the stars, can remain in the memory. Therefore as some theories become less certain, one can critically evaluate new theories based on experience, without first adopting those theories. The non-Christian can be *convinced* to become a Christian. I am one example.

Both presuppositionalists and I would say that people come to a mature belief in God when they "assume" that God exists and start to make deductions on the basis of this belief. It takes the Holy Spirit to bring about this world view change. Basic, underlying assumptions, which they call presuppositions and I would call unifying theories, alter the way we see everything.

I differ with presuppositionalists in saying, first, that the path up to this change of world view, or new assumption, is *continuous*, not disjoint with the past. No matter how fast the process may occur, a person moves to a new world view only out of dissatisfaction with the previous world view. This dissatisfaction occurs on the basis of unsatisfactory experience, evaluated as evidence. Second, I maintain that within the world view of Christianity, tests of consistency and falsification still occur. "Certainty" of one's faith, and consequently one's ability to act consistently, increases or decreases based on these ongoing tests.

Very few people come to God first because of a scientific or historical argument. The

first "evidence" of God comes from our heart feelings in response to the world around us (e.g. guilt and beauty.) I share a common perspective with most presuppositionalists in their valuing of this "internal" knowledge of God, which I call internal evidence and see as falsely placed opposing external evidence. It is a false dichotomy to sharply separate "feelings" and "senses," since feelings are sensed by the body just like sounds! The atheist inevitably must seek to explain these feelings as mere illusions. In this case, the Christian apologist must respond in kind– a complex argument deserves a complex response. To refuse to meet the atheist's argument, merely "presupposing" God, weakens faith. Far too many Christians are effectively neutralized by some non-Christian intellectual argument, taking refuge in presupposing God but never again able to evangelize with the confidence they once had.

Who Gets the Upper Hand?

It should be clear by now that an epistemology which allows science and Christianity to discuss the same things must therefore allow the possibility of conflicting claims. This is an uncomfortable proposition for many Christians. The same is true for any theoretical scientist who faces the prospect of an experiment made to test his or her theory. Yet a theory which is falsifiable, in other words, which makes predictions that can be tested, has the possibility for a confidence level much higher than an unverifiable theory, if its predictions hold true. Unfalsifiable theories are parlor games, and so every good scientist seeks to find ways in which his or her theories can be tested.

By constructing epistemologies which do not allow any experience to conflict with Christianity, some have felt that they could protect Christian belief. On the contrary, such attempts undermine Christian belief by making it irrelevant. On the other hand, some have allowed contradiction between the claims of science and Christianity, but have fallen into one of two camps that award all the victories to one side. On one side are the "liberals" who change the teachings of Christianity on a yearly basis as new scholarly theories come up in the world. On the other side are the "fundamentalists" who feel free to throw out any scientific data that contradict cherished doctrines. Both of these ignore the scientific method, or inductive method, which distinguishes between theory and data, or rather, between theories of greater and lesser scope and consequent uncertainty. Christian doctrines represent "theories" of interpretation of the biblical "data". Therefore in assessing a contradiction between a Christian doctrine and a scientific theory, the Christian must not only ask if the scientific theory follows from the data, but also whether the doctrine follows from proper exegesis of Scripture. The proper exegesis of Scripture involves the sciences of linguistic study and history; even defining exactly what passages belong to the canon of the words of God is a science.

I have stated that belief in the Bible ultimately derives from sense experience interpreted inductively, i.e. by the scientific method. Some may object that this makes science judge over Scripture. In one sense, I can say, "Of course it does." A gross and outrageous disagreement with experience weakens any religious truth claim. In another sense, I can say, "Of course it does not." It does not make the pronouncements, for example, of non-Christian scientists more authoritative than those of Christian experts in exegesis. Science for the Christian must always be interpreted *within* the framework of the unifying theory of the Christian world view. Here presuppositionalists have made their greatest contribution.

The Christian position is that "general revelation," the communication of God available to everyone in nature, and "special revelation," communication directly only to a few prophets, cannot contradict, since the same God generated each. Nevertheless, at any point in time, each Christian, and for that matter every person, carries some degree of internal "tension" due to contradictions between the theories he or she holds. While the mystic embraces contradictions, the Christian must have a constant goal of eliminating contradictions in the pursuit of Truth. This can occur either by the gaining of new information or through reformulation of exegetical or scientific theories. This basic faith in the truth of Christianity does not imply irrationality, however. Like the scientist who continues to believe in the conservation of energy despite data apparently contradicting it, the Christian can have a deep, underlying knowledge of the basic consistency of Christianity, which prevents "blowing with every wave" of apparently contradictory data. I would love to say that I do not see any contradictions between Christianity and science, or internal to either system. In fact, I see many apparent contradictions between the two and within each, but I do not see any of these as so damning, in the light of the overwhelming supporting evidence, that either system must come crashing down. Instead, I daily seek to increase my understanding and revise improper presuppositions.

No one gets the "final word," then. Certain scientific theories are "very certain," and so are certain doctrines of Christian theology. Other aspects of science and theology seem to demand revision. Neither is free to operate independently of the other.

Conclusion

I have not here presented an apologetic for Christianity. Instead, I have attempted to establish apologetics on the basis of evidence as valid from an epistemological standpoint. My argument has been as follows.

(1) The absolute certainty of deduction from axioms is illusory. Apparently selfevident, noncontradictable propositions always end up open to doubt after all, or else as meaningless tautologies, because they all must be formed from words of a language, and all language comes from a vague organization of prior sense experiences. Systems like existentialism, which create absolute axioms, provide no certainty for the validity of their original axiom of choice.

(2) Certainty is possible via induction, although "perfect" certainty is not. This sense of increasing certainty with increasing evidence comes from the way we are "programmed" at birth, from the form of language itself. It is possible to doubt the validity of this preprogramming, (evidentialists do not need to invoke an *absolute* first axiom) but only at the expense of doubting the validity of language itself.

(3) God speaks to us in this fashion, via propositions in human language with inexact meaning and imperfect justification, but with adequate certainty to demand action. This message comes through the special miracles of revelation that have occurred in the real world of our experience. Although we have an "internal witness" to God's existence and commands in our heart feelings, these alone, without the propositional revelation of the Bible, do not suffice for us to build an ethic or a relationship with God, because of the mind-dulling effects of sin.

(4) These propositions and commands form the basis of our most fundamental assumptions about all of life, including our ethics, which in turn provide the basis for science. Our certainty in them, i.e., our ability to act on them, comes as we see the validity of their origin and implications in terms of the normal tests we make of truth claims.

Too often I have heard evidential approaches to apologetics characterized as compromises successful for the masses but philosophically invalid. Certainly some apologists have not adequately addressed the issue of epistemology, but this does not invalidate their approach. Quite the opposite, I affirm the evidential apologetic as the *only* valid apologetic. To call a person to "choose" faith without adequate reason is to invite commitment to folly because of the charisma of the evangelist; to wait for God to "zap" someone into the proper presuppositions, for example when the magic incantation of Scripture is read, is to deny the work of the Holy Spirit in convincing people through their reason and ultimately to deny a part of our humanity, our rational part.

Nevertheless, I hope that no one will interpret "evidence" too narrowly. A proper evidential apologetic must include the questioning of presuppositions and biases, but in doing so remains *evidential* as long as the basis of calling these into question remains experience. Too, we must not eliminate personal experience and feelings as *evidences*. As professional counselors often say, "Feelings are facts." A proper evidential apologetic should include evidence of the experience of people– do people feel a need for God? A fear of God? Do the lives of believers change? Do some people seem to experience God in a direct way? Evidential apologetics need not deal only with archaeological digs and astronomy.

A full apologetic would involve a discussion of the entire process of weighing evidence by which a person comes to a Christian world view. I see this process as involving the following steps:

(1) We start by inductively learning who in our lives may be trusted as reliable authorities. These may be parents, if they are trustworthy, or other persons, whom we learn to trust on the basis of a pattern of consistency of action and words.

(2) These trustworthy authorities then present us with information about events in history regarding the acts and words of God, whom they claim exists. Faced with these claims which come from otherwise reliable sources, we decide inductively on the basis of our experience whether they "make sense" – in other words, if the world around us appears to have design, if our own heart feels a need for and a conviction of the presence of God, and if the actions of people around us agree with the description of mankind in the Bible. A more skeptical person may also desire to see corroborating historical and scientific evidence.

(3) If we find that these evidences agree with the message, we can then decide to adopt the "theory" of the Bible, organized by the most consistent theology we know, and act on it, interpreting the world around us based on this premise. Within this new theoretical framework, we continue to test our theory by predictions and tests of internal consistency, which causes us to have more or less faith as time goes on. We also continue to form subtheories by hypothesis and induction that deal with all the things of life, such as ethical issues, based on the commands of God, and scientific data, based on the design and purpose of God in creation.

I can not escape the feeling that the predominance of presuppositionalist and quasiexistentialist apologetics betrays a feeling that the evidence is insufficient to bring a truly open-minded person to believe in Christ; that there is *not* a compelling case for the existence of God. Suppose a man is thinking about jumping in front of an oncoming truck. If we wanted to convince him not to jump, we would appeal to the great body of evidence that showed that people who jump in front of trucks die. He might not listen to us if he did not want to, but that would not change our approach. On the other hand, if we *wanted* him to jump in front of the truck, we might well appeal to Cartesian philosophy. One hundred deaths do not *prove* that you will die if you jump in front of the truck! The mode of our apologetic will depend on which side we think the evidence really lies. I personally find the case for Christianity compelling, the evidences satisfactory, without a need for irrationality. Francis Schaeffer based his fruitful evangelistic approach on the premise that "The Christian must have the integrity to live *open* to the questions 'Does God exist?', and 'Is the content of the Judaistic-Christian system truth?'" [40](emphasis mine) or, even more to the point, "The Christian himself should always be willing sincerely to reexamine these questions as to the possibility of his being 'taken in' by his Christian commitment." [80] Does this imply uncertainty and lack of confidence? On the contrary, as in the case of the senior scientist who examines carefully a purported perpetual motion machine, the willingness to consider the evidence for the other side stems from a confidence in one's own position. The people who refuse to consider arguments against their cherished views are usually those who fear that their position is weak.

The implications of my epistemology extend further than apologetics, however. The flow may go the other way. Christian theology, as an imperfect theory of humans, must change in the light of scientific data that affects the interpretation of Scripture. This does not require liberalism, which puts modern science in the position of absolute supremacy over the Bible, but does require humility and the ability to admit errors and ignorance. I marvel at the audacity involved in altering significant doctrines held by the great body of the Church throughout history and minds such as Augustine, Calvin, and Edwards. Thus I view dimly any approach to Christianity which begins by casting aside the orthodox understanding of Scripture. However, I also feel that the wisdom of the whole Church in framing its beliefs must grow over time in the same way that the wisdom of an individual ought to grow as he or she matures. Therefore we must not automatically resist change and reformulation of theology in the light of scientific and historical research.

Although it may sound strange, eliminating the need for absolute "mathematical" certainty as the starting point for thought leads to real certainty based on strong evidence, in the Christian context. Setting up certain propositions as unquestionable ultimately gives a person no defense against arbitrariness and irrationality.

Acknowledgments. I thank Dr. R. Jones of CERN, Geneva, Prof. R. Hammer of Louisiana State University and Prof. F. Skiff of the University of Maryland for challenging and uplifting, though not always polite, discussions on these subjects.

References

- [1] E.g. New Scientist, 8 August, 1992.
- [2] E.g. G. Zukav, The Dancing Wu Li Masters, (Morrow, New York, 1979).
- [3] E.g. I. Stonehocker, Creation-Science Dialogue 8, 5-6 (May 1981).
- [4] D. Snoke, "Toward the Unity of Theology and Science," Perspectives on Science and Christian Faith 43, No. 3, (American Scientific Affiliation, Ipswich, MA, September

1991).

- [5] C.S. Lewis, *Mere Christianity*, (Macmillan, New York, 1943).
- [6] J. McDowell, Evidence that Demands Verdict, (Here's Life, San Bernardino, 1972).
- [7] H. Ross, The Fingerprint of God, 2nd ed., (Promise, Orange, California, 1991). A newsletter is available from "Reasons to Believe," P.O. Box 5978, Pasadena, CA 91117.
- [8] E.g. The Philosophical Works of Francis Bacon, ed. J.M. Robertson (Routledge, London, 1902).
- [9] E.g. Richtmeyer, Kennard and Cooper, Introduction to Modern Physics, (McGraw-Hill, New York, 1969).
- [10] For a readable example of modern scholarship on early childhood, see F. Caplan, *The First Twelve Months of Life*, (Bantam, New York, 1978), from the Piaget-influenced Princeton Center for Infancy and Early Childhood. As a father of four, I also claim my own observations in justification of the claim that children learn everything, including language and "common sense," inductively.
- [11] See e.g. Chomsky: Selected Readings, J.P.B. Allen and P. van Buren, eds. (Oxford University Press, London, 1971); Noam Chomsky, Language and Politics, C.P. Otero, ed. (Black Rose Books, Cheektowaga, NY, 1988).

- [12] S. Greenleaf, The Testimony of the Evangelists, (Storey and Sage, Newark, 1903), reprinted in J.W. Montgomery, The Law Above the Law, (Bethany, Minneapolis, 1975).
- [13] J. Sire, *Scripture Twisting*, (Intervarsity Press, Downers Grove, 1980).
- [14] K. Popper, Logik der Forschung, 7th ed., (Mohr, Tübingen, 1982).
- [15] D. Hume, An Enquiry Concerning Human Understanding, (London, 1748); Dialogues Concerning Natural Religion, ed. N. Kemp Smith (Bobbs Merrill, Indiana, 1977).
- [16] See e.g. R. Descartes, *Principles of Philosophy*, ed. and trans. E.S. Haldane and G.R.T. Ross (Cambridge University Press, Cambridge, 1911-12).
- [17] Hegel, WW XV, 328, as quoted in Hegel's Concept of Experience, M. Heidegger, (Harper and Row, San Francisco, 1970).
- [18] I. Kant, Kritik der reinen Vernunft, (Riga, 2nd ed, 1787), Critique of Pure Reason, (Macmillan, London, 1968).
- [19] R.C. Sproul, J. Gerstner, and A. Lindsley, *Classical Apologetics*, (Academic Press, Grand Rapids, 1984).
- [20] E.g. Summa theologica; see also F.C. Coppleston, Aquinas, (Penguin, London, 1955).

- [21] R. Reymond, in *The Justification of Knowledge*, (Presbyterian and Reformed, Philadelphia, 1976), calls Aquinas an "evidentialist" because he reasoned on the basis of imperfect sense evidence; yet Aquinas saw himself as deducing self-evident conclusions with absolute certainty.
- [22] I. Kant, Grundlegung zur Metaphysik der Sitten, 1785; Foundations of the Metaphysics of Morals, L. W. Beck, trans. (Macmillan, New York, 1990).
- [23] Ayn Rand, The Virtue of Selfishness (Signet, New York, 1970).
- [24] Starting with Laplace, another deductivist school of thought avoided this problem essentially by eschewing any concept of morality, i.e. definitions of "ought" rather than "is." Only deductions based on the "laws" of nature and mathematics could be held as certain. This school started to fall apart at the beginning of this century when many scientific "laws" turned out to be mere approximations. Gödel put the final nail in the coffin when he showed that no logical system of pure assumption and deduction can prove or disprove all statements which can be posed within that system. Certain proofs require an axiom of choice– elements of sets chosen for no self-evident reason. Any logic which restricts itself to self-evident statements can not give a complete description of the system in which it is expressed. (See e.g. Gödel, Monatshefte f. Math. u. Physik <u>38</u>, 173 (1931) in From Frege to Gödel, J. van Heihenoort, ed. (Harvard Press, Cam-

bridge, 1967); for a very readable account see D.R. Hofstadter, *Gödel, Escher, Bach: The Eternal Golden Braid*, (Basic Books, New York, 1979).) Atheists like Bertrand Russell, who in the early part of this century contrasted the certainty of mathematical reasoning with the apparent arbitrariness of moral and religious reasoning, found their own system falling to that same enemy, arbitrariness.

- [25] E.g. M. Heidegger, Basic Writings, and Nietzsche: Volumes I-IV, (Harper and Row, San Francisco). For an interesting review of Nietzsche and Heidegger's influence, see Ref. [34].
- [26] S. Kierkegaard, *Either/Or* trans. Walter Lowrie, (Anchor Books, Garden City, 1959); see also S.U. Zuidema, *Kierkegaard* (Presbyterian and Reformed Pub., Philadelphia, 1960).
- [27] T.S. Kuhn, The Structure of Scientific Revolutions, (University of Chicago Press, Chicago, 1962).
- [28] E.g. M. Polanyi, Science, 113, 1308 (1968); The Tacit Dimension, (Doubleday, New York, 1966).
- [29] C. van Til, *The Defense of the Faith*, (Presbyterian and Reformed, Philadelphia, 1955).

- [30] For a review see R. Nash, The Philosophy of Gordon Clark, (Presbyterian and Reformed, Philadelphia, 1968).
- [31] In fact, Kierkegaard might well be called a presuppositionalist. In *The Sickness unto Death*, trans. H.V. and E.H. Hong (Princeton Press, Princeton, 1980), Kierkegaard writes an eloquent call for a return to Christian orthodoxy. A presuppositionalist would find little to disagree with in this book. Kierkegaard states that to reject Christ is a sin worthy of eternal condemnation, yet he rejects giving *reasons* for faith as unworthy of a Christian, like a lover giving reasons for his love. (Of course, it is one thing to give reasons for love, and another thing to give reasons for the existence of the loved–if a stranger claimed that the fiancee did not exist, being merely a deception of a con artist, the lover might indeed engage in collecting evidence and making deductions!)
- [32] Some make a distinction between "irrational" and "non-rational" thought, the former consisting of belief despite evidence acknowledged to be contradictory, the latter consisting of belief which takes no consideration of evidence at all. I see the distinction as moot- a person who steps into traffic *knowing* he is stepping in front of an oncoming truck, and a person who steps into traffic *without looking at all* may both be called "irrational." Therefore the term "irrational" in this essay refers to both kind of belief.
- [33] Although not often called presuppositionalist or for that matter an existentialist, the

free-will theology expounded by Ryrie (e.g. So Great Salvation, Victor Books, 1990) essentially expounds the view of faith as a choice of axioms about God, totally apart from the world of experience and not necessarily requiring implications for the world of experience, i.e. repentance. Once made, the choice is unquestioned and final, equal to the axiom of the mathematician or the presupposition of van Til; thus a person is "once saved, always saved."

- [34] A. Bloom, The Closing of the American Mind, (Simon and Schuster, New York, 1987).
- [35] D. D'Souza, Illiberal Education: The Politics of Race and Sex on Campus, (The Free Press, New York, 1991).
- [36] L. Wittgenstein, *Philosophical Investigations*, (Blackwell, Oxford, 1953); On Certainty, (Blackwell, Oxford, 1969).
- [37] H. Reichenbach, The Theory of Probability; An Inquiry into the Logical and Mathematical Foundations of the Calculus of Probability, (University of California Press, Berkeley, 1949).
- [38] Evidentialism also sometimes goes by the name of rationalism, (or pejoratively as "Neorationalism,") but although rationalism rules out existentialism, the term "rationalism" are very broad, applied to those who would deduce knowledge from "self-evident"

propositions, like Descartes and Aquinas, as well as to those who argue inductively. For Christians, the word "rationalism" often carries the connotation of reason operating independently, without the effects of sin or a need for the Holy Spirit; therefore "evidentialism" conveys better the idea of persuasion and the use of evidence in the context of the work of the Holy Spirit.

- [39] J. W. Montgomery, The Shape of the Past, (Edwards Brothers, Ann Arbor, 1962); History and Christianity, (Intervarsity Press, Downers Grove, 1972); The Law Above the Law (Intervarsity Press, Downers Grove, 1975).
- [40] F. Schaeffer, The God Who is There, (Intervarsity Press, Downers Grove, 1968). There exists some confusion about Schaeffer's position because of his use of the term "pre-suppositional apologetics." For Schaeffer, this means the calling into question of pre-suppositions on the basis of logic and experience, not the irrational creation of pre-suppositions. In this book Schaeffer states that "No one can live logically according to ... non-Christian presuppositions." The presuppositional *ist*, however, maintains that the non-Christian can and does live completely consistently within his or her logical framework. Schaeffer also says in this book, as I do, that "Scientific proof, philosophical proof, and religious proof follow the same rules." The van Tillian author R. Reymond, in *The Justification of Knowledge*, (Presbyterian and Reformed, Philadelphia, 1976),

properly defines Schaeffer as an evidentialist. *Presuppositional* apologetics calls into question presuppositions on the basis of evidence and experience (can we live with it?); Presuppositional*ism* allows no such questioning. For the presuppositionalist this would be to allow human reason to become a judge over God.

[41] To use another example, Popper's well-known dismissal of proof by induction (*ibid*), that seeing a great number of white swans does not prove that no black swans exist, makes inductive proof seem silly precisely because we all *have* seen black swans, or at least black birds. Yet the fact that we are surprised the first time we see a black swan shows that we had indeed been *certain* until then that all swans are white. In an example completely analogous to Popper's, never seeing baby elephants materialize in the atmosphere does not *prove* that none will ever fall from heaven. Yet if Popper were to express any uncertainty at all about whether this might start to occur tomorrow, we would call for the mental hospital. The evidence against spontaneous materialization of baby elephants is far greater than the evidence against black birds.

[42] Acts 17:2,17

[43] Acts 17:11

[44] Acts 18:4, 2 Cor 5:11

- [45] Acts 19:26, 28:24, 1 Cor 14:24, 2 Tim 3:14
- [46] Acts 1:3
- [47] Acts 1:8, 1 Peter 1:16-18
- [48] John 5:31, 36, 39, 21:24, Hebrews 2:4, 1 John 1:2
- [49] John 3:2, 20:30
- [50] E.g. Deut 6:22, Psalms 78:43, 108:27
- [51] Matthew 8:10, 15:28
- [52] Matthew 6:30, 8:26, 14:31
- [53] Luke 17:5
- [54] 2 Thess 1:3
- [55] 2 Peter 1:19
- [56] Matthew 14:31, Luke 24:38, John 20:27, Jude :22
- [57] A recent book edited by R.C. Sproul, *Doubt and Assurance* (Baker, Grand Rapids, 1993) deals sensitively with the issue of Christian doubts, summarized well by Os Guinness' statement, "There is no believing without doubting."

[58] 1 John 1:7-8

[59] Rev 17:5

[60] Ephesians 2:8

- [61] John M. Frame, another presuppositionalist, in *The Doctrine of the Knowledge of God*, (Presbyterian and Reformed, Philadelphia,1987) follows Plato (*Theaetetus*) in defining an experience as "knowledge" only when it can be placed in a "normative" framework which makes a judgment about its "meaning." If one accepts this definition then presuppositionalism follows almost automatically. But this narrows the definition of "knowledge" in the extreme, since it rules out all things which we know but make no judgment about, or which we make a wrong judgment about. It is also subject to a criticism of circularity– does one "know" the normative framework first? If so, what normative framework did one know which gave a judgment about the meaning of the other normative framework? How does one know that prior framework? And so on. Frame acknowledges this circularity and promotes it as a necessity.
- [62] St. Augustine of Hippo, in On the Predestination of the Saints, in Nicene and Post-Nicene Fathers, (Eerdmans, Grand Rapids, 1974).
- [63] Proverbs 1:7

- [64] J. Edwards, in *The Works of President Edwards*, (Leavitt and Allen, New York, 1857).
- [65] A separate question is the problem of "objective" knowledge, whether my perceptions tell me the same thing that they tell you. Do other people really exist who perceive the same things that I do, or are they possibly just figments of my imagination (or "Someone's" imagination)? Since I am attempting to construct an epistemology and not a metaphysic, I do not need to answer this question. Clearly people do exist in my experience, whatever they "really" may be, and whether or not I have full knowledge of what they are (which I almost certainly do not). My knowledge and my language does not require you to be real. Since language consists of a mapping of one set of my experiences (e.g. the sound of the word "ball") onto another set of experiences (finger pointing at a ball), I can define as truth any consistent use of that map by whomever or whatever I communicate with. Mortimer Adler, in his book Ten Philosophical Mistakes, (Macmillan, New York, 1985) addresses the issue of "objective" knowledge, or dialogue between people of different world views. Of course, although I can not prove with absolute certainty that other people exist, and I do not need to assume they are similar to me in order to have a theory of knowledge, nevertheless the assumption of their existence is the simplest unifying theory for explaining a vast amount of experience.

- [66] B. Gregory, *Inventing Reality: Physics as Language*, (John Wiley and Sons, New York, 1988).
- [67] Actually, Hume called himself a Christian- in the sense that Madonna calls herself a Catholic, one might say. After ridiculing the Torah on the basis of anti-semitism as a book "presented to us by an ignorant and barbarous people, written in an age when they were still more barbarous," (*ibid*) he states it would take a miracle for anyone to believe it, and then proposes exactly that kind of belief-against-all-reason as the basis for Christianity- the same kind of pure fideism not infrequently encountered in churches today.
- [68] H. van Till, D. Young, and C. Menninga, Science Held Hostage, (Intervarsity Press, Downers Grove, 1989).
- [69] I must include some heretical descendents of Judaism and Christianity, such as certain schools of Islam, as world views that also espouse an evidential approach to morality on the basis that "God has spoken." In these cases I must simply say that a direct evaluation of the evidence for these claims to experience with God in history, using good lawcourt reasoning, reveals severe deficiencies. In general, however, heretical groups thrive on the existentialist mentality that their "unprovable axioms" as just as good, but different, from those of Christianity.

- [70] F. Schaeffer, *Escape from Reason*, (Intervarsity Press, Downers Grove, 1968).
- [71] E.g. F. Schaeffer, Genesis in Space and Time, (Intervarsity Press, Downers Grove, 1972), Joshua and the Flow of Biblical History, (Intervarsity Press, Downers Grove, 1975).
- [72] E.g. Scientific Creationism, H. Morris, ed. (Master Books, El Cajun, CA, 1974); H.
 Morris The God Who is Real: A Creationist Approach to Evangelism and Missions, (Baker, Grand Rapids, 1988).
- [73] Mysticism, as usually practiced, is actually an extreme form of veneration of authority. The words of authorities are taken as the source of knowledge to such a degree that even logical contradictions can not devalue their validity. On the contrary, even the slightest little detail of the words of the authorities becomes venerated, such as the exact spelling of words. Almost all forms of Mysticism have their "holy man" whose words, though contradictory, must be accepted because of his authority. Mysticism is therefore essentially an alternate branch from the "child's epistemology" when the child finds that the authorities contradict, and often appears in cultures with strong scholastic traditions, such as the Roman Catholic church, the Muslims, and the Chinese. Rather than judging the credibility of various authorities, as I propose, or rejecting all author-

ity, as often occurs, the child may simply decide to cease to think logically and accept authority blindly.

- [74] R.C. Sproul, Reason to Believe (Objections Answered), (Zondervan, Grand Rapids, 1978).
- [75] S.C. Hackett, The Reconstruction of the Christian Revelation Claim, (Baker, Grand Rapids, 1984).
- [76] P. Yancey, *Disappointment with God* (Zondervan, Grand Rapids, 1988).
- [77] Walker Percy, The Message in the Bottle, (FS&G, 1975).
- [78] Romans 1:18-20
- [79] R.C. Sproul, The Psychology of Atheism (If There is a God, Why are there Atheists?), (Tyndale, Wheaton, 1988).
- [80] As quoted by R. Reymond, *ibid*.