

# Are Faith-Based and Proof-Based Knowledge Systems Compatible?

by

Alan G. Herron, Ph. D.

May 21, 2006

[A\\_Herron@telus.net](mailto:A_Herron@telus.net)

## Introduction

The debate over the compatibility of Science and Mysticism (mainly Religion) has been going on for centuries. Despite this discourse, even at the level of professional philosophers, scientists, and theologians, the question never seems to get resolved. Are proof-based (scientific, secular legal) and faith-based (mystical) systems of knowledge compatible, or is there a fundamental, irresolvable tension between them?

The answer is that they are fundamentally incompatible in principle, a fact that I will demonstrate below. The basic conflict, however, is not in their metaphysical tenets (what they hold to be true or not-true) where the question is usually debated, but in how they *decide* what is true or not-true. The conflict is primarily epistemic, that is, in regard to their theories of knowledge. The metaphysical conflicts that do exist arise from the epistemic, and usually cannot be resolved because the standards of "Truth" are never discussed<sup>1</sup>.

I will demonstrate the epistemic conflict twice...once in intuitive (informal) terms, and once as a proof using formal logic. The informal proof should be fairly easy to follow at an intuitive level. The formal one is intended to provide the rigor necessary to prove the point decisively. (The reader, of course, may choose to ignore either one without losing the essential point of the paper.) I will then consider the metaphysical consequences of the result, by examining a common attempt to escape the conclusion and some rather devastating consequences of that "solution" that are usually ignored.

For both demonstrations the starting point is two definitions, taken from The Concise Oxford Dictionary of Current English (1). The OED is a highly credible source, recognized almost universally as the most authoritative dictionary of the English language in existence.

The relevant excerpts are the following definitions:

faith: n. ...(Theol.)...spiritual apprehension of divine truth apart from proof... p. 426

proof: n. 1. Evidence<sup>2</sup> sufficing or helping to establish a fact... p. 961

These excerpts not only provide the needed formal meanings for "faith" and "proof", but conform to colloquial meanings as well. They suit our purpose well for this reason.

---

<sup>1</sup> The "symptom" of this misdirected effort is the "spinning wheels syndrome" mentioned, where debate goes on endlessly without resolving anything in the final analysis.

<sup>2</sup> Presumably this means *objective* evidence, that is, evidence accessible to everyone concerned. It is difficult to see how evidence could suffice for a proof or help to establish a fact in a public forum if it weren't accessible and objective.

## The Demonstration in Intuitive Terms

Based on the OED definitions, and general understanding of the ideas involved, we may make the following assertions:

Spiritual apprehension IS recognized as a sufficient basis to support a claim to "Truth" under a FAITH-BASED system.

Spiritual apprehension IS NOT recognized as a sufficient basis to support a claim to "Truth" under a PROOF-BASED system.

-----

A FAITH-BASED system DOES NOT require proof for all claims to "Truth". It DOES recognize claims to "Truth" apart from proof.

A PROOF-BASED system DOES require proof for all claims to "Truth". It DOES NOT recognize claims to "Truth" apart from proof.

I have kept the form of these statements as similar as possible in order to show clearly the opposition between faith-based and proof-based systems. In each pair of statements the sentences are identical except for the capitalized words.

Note that the positive and negative moods of the verbs switch in perfect synchronism with the switch between "faith-based" and "proof-based". The systems contradict<sup>3</sup> one another in regard to the recognition of spiritual apprehension and the requirement for objective evidence in establishing "Truth".

The rational conflict may be more obvious in the following summary table.

Standards for "Truth"	Proof-based System	Faith-based System
Spiritual apprehension is sufficient	no	yes
Objective proof is necessary	yes	no

The questions of the validity of spiritual apprehension and the requirement for evidence are not trivial, "side" issues. They are the very essences of the two types of theories of knowledge. Thus they cannot be rejected or ignored in any rational debate over compatibility of the two types of systems.

From the four assertions (and / or the table) it should be clear that proof-based systems and faith-based systems differ in their very essences in regard to how "Truth" is recognized and validated. They actually contradict one another over their basic standards of "Truth", which makes it impossible to accept both on rational grounds in *any* normal sense of the word rational.

### Formal Proof<sup>4</sup>

Define the following symbols by the indicated propositions:

- p      The epistemic system is proof-based.
- f      The epistemic system is faith-based.
- r      Proof is necessary for validation as Truth.
- s      Spiritual apprehension is sufficient for validation as Truth.

---

<sup>3</sup> two statements contradict one another if the assertion of one requires negation of the other to maintain consistency. For example, p contradicts not-p.

<sup>4</sup> this section may be disregarded if one is content with the conclusion of the previous section

By the OED definitions above (and colloquial meanings) the following premises may be asserted:

Premise #	Symbolic logic form	English equivalents	Antecedent	Consequent
1	$C p r$	if p then r p implies r	The epistemic system is proof-based	proof is necessary for validation as Truth
2	$C p Ns$	if p then not-s p implies not-s	The epistemic system is proof-based	spiritual apprehension is not sufficient for validation as Truth
3	$C f Nr$	if f then not-r f implies not-r	The epistemic system is faith-based	proof is not necessary for validation as Truth
4	$C f s$	if f then s f implies s	The epistemic system is faith-based	spiritual apprehension is sufficient for validation as Truth

#3 may be written in its equivalent form (this is known as the contrapositive (2), and it is valid if the original is valid for all possible truth values of the arguments.)

$C r Nf$  (Proof is necessary for validation as Truth) implies (The epistemic system is not faith-based)

Combining with #1 gives the antecedent of the desired (valid) inference

$C K Cpr CrNf CpNf$  If (p implies r) and (r implies not-f) then (p implies not-f)  
 If [(The epistemic system is proof-based) implies (Proof is necessary for validation as Truth.)]  
 and [(Proof is necessary for validation as Truth) implies (The epistemic system is not faith-based)]  
 then [(The epistemic system is proof-based) implies (The epistemic system is not faith-based)]

The arguments (Cpr and CrNf) of the conjunction (K, the logical “and”) are premises (true by assertion), which makes the antecedent (the conjunction itself) true. Therefore, by the Rule of Detachment we can assert the consequent independently. That is, we may conclude

$C p Nf$  If (The epistemic system is proof-based) then (The epistemic system is not faith-based)

Using the contrapositive again this is equivalent to

$C f Np$  If (The epistemic system is faith-based) then (The epistemic system is not proof based)

That is, given premises #1 and #3, we may conclude that faith-based and proof-based systems are mutually exclusive, by one of their *defining* standards for “Truth”. Conversely, if we wish to deny this conclusion we must deny either premise #1, premise #3, or both, which denies the very essence of what is meant by “proof-based” or “faith-based”.

In the above deduction we used the two premises that shared the requirement-for-proof standard of “Truth”. We could have replaced premise #1 with #4 and #3 with #2 (i.e. using the shared spiritual apprehension standard instead) and reached the identical conclusion by exactly the same formal deductive process.

In other words, proof-based and faith-based systems are fundamentally contradictory on the basis of at least two standards of “Truth” that are essential in the natures of the systems. Thus it is irrational to maintain that one may endorse both in the same “universe of discourse”.

## Universe of Discourse Considerations

The universe of discourse (U of D) is the range or scope of subject matter in which a given body of knowledge applies. For example, if a discussion concerns the legality of a particular move in checkers then the rules of chess are irrelevant, that is, outside the present U of D. As a more specific example: in checkers one can jump an opponent's token. In chess one cannot. But there is no contradiction, because one uses the U of D for checkers when playing checkers, and the U of D for chess when playing chess.

Note that the U's of D don't have to be completely exclusive; they may share rules such as "players play alternately" in the checkers / chess example.

Any conflict can be resolved this way if one can establish two different U's of D for the respective systems on legitimate grounds. For example, this is the idea behind Christ's instruction to "Render therefore unto Caesar the things which are Caesar's; and unto God the things that are God's" (3), or for using Newtonian or Relativistic laws for mechanics under different circumstances.

But does this work for our problem? Can we divide the cosmos into two domains, one where a faith-based system is correct, and another where proof-based system is correct?

The problem with this is that BOTH faith-based and proof-based systems strive to be completely universal, and claim (in their entirety) universal relevance for their established tenets within the accepted limits of certainty. To a scientist hydrogen is hydrogen whether it is in the farthest known galaxy or on earth. To a theologian God created the whole cosmos, not just the solar system. To a scientist spiritual experience is a human psychological phenomenon. To a theologian it is sensory experience of another (a purely spiritual) part of the universe. But it is the SAME universe, in its entirety, that is defined as the U of D by both...namely everything that exists. That is what "universe" means in the U of D, under *both* systems!

This leaves no way out of the incompatibility. The standards for "Truth" are contradictory, and we cannot resolve the problem by recognizing different U's of D. Thus, anyone who is truly rational must choose one or the other type of knowledge system (or some third alternative), but not both.

## A Common Attempt to Escape the Dilemma

The idea of accepting both systems is actually fairly common, and is often used to rationalize the desire to have the benefits of both. In essence, we want to "have our cake and eat it too".

The dual acceptance is attempted by subordinating one system to the other, and ignoring or dismissing only the conclusions reached in the subordinate system that conflict with the dominant one. The battles between Evolution and Creationism, or canon and secular law provide topical examples of the strategy. A more concrete example: Intelligent Design proponents accept *some* conclusions of (proof-based) Evolution, but reject the parts that explicitly conflict with their faith-based system.

This subordination strategy, of course, is absurd from an epistemic viewpoint, for at least two reasons:

1. If two standards conflict one of them should be completely rejected, or the problem resolved by recognizing two distinct U's of D. They should not be partially accepted, in order to maintain possibility in the real world and consistency. You need an *objective reason* to establish another U of D.
2. Whether one likes a conclusion or not is irrelevant to standards of "Truth". To use this feeling as an epistemic standard is a flat contradiction of the idea of objective validity. What is true is true, and what is false is false, regardless of whether it suits one's desires or not. What else does "Truth" mean?

## A Final, Very Important, Point

Contrary to casual opinion, the implications of rejecting part of a system actually go far beyond the part rejected. To be rational one must reject *all implications* of the rejected tenets that are not supported

independently by accepted standards of "Truth". Expecting a structure to stay in place while removing essential supports isn't legitimate, for buildings or for theories of knowledge! Not only that, but modification of, or addition to the body of accepted rules will likely become necessary to maintain the ability to verify the remaining intellectual superstructure. If the rejected part includes definitions of critical terms the remainder might even become incomprehensible!

For example, proponents of Intelligent Design try to reject parts of Evolution that have been established by the standards of that proof-based system. They also try to accept the validity of conclusions established by the *same* standards that support the rejected parts *without re-verification*. *If standards aren't reliable for the rejected parts they aren't reliable for the accepted parts either*. The accepted parts must be re-verified by accepted standards to be included in "Truth"! And, if rules and definitions are rejected (implicitly or explicitly) their functional equivalents must be established for any dependent accepted parts to stand as "Truth".

The situation is devastating, to say the least, to anyone trying to accept the dual system. It is a long way from the casual acceptance of harmony between the systems that is usually professed.

### **Discussion**

The foregoing may be summarized as follows:

1. The principles, or standards of "Truth", discussed are not trivial side issues. They *define* the very essences of the systems in question, because specific tenets of a system will be included or excluded based on these epistemic criteria. *The standards of "Truth" of the systems determine the content*.
2. By their essential standards proof-based and faith-based systems are contradictory.
3. If the standards of "Truth" in two systems are contradictory it is likely there will be *some* metaphysical content (not necessarily all) that *cannot* be harmonized. We have, in fact, shown some examples. This cannot be resolved by adjusting the U's of D, because, again, the U of D for both systems is, by the *definitions* of the systems, the same.
4. Any attempt to include one system in the other leads to epistemic absurdity by any rational standard. Any acceptance of contradiction in the *standards* of "Truth" is totally irrational.
5. Any attempt to include one system in the other raises problems of re-verification and rule modification whose resolution is essential in any rational claim to "Truth". Without this the knowledge in the system must be considered unverified, tentative, and, perhaps, incomprehensible.

From the foregoing it should be apparent that the *essential* contradictions between faith-based and proof-based systems lie, not in the metaphysical tenets of the systems, but in the means by which such tenets are validated. Any claim to compatibility that does not address the epistemic differences cannot be validated, *in principle*, since this is where the primary difference between the systems lies. The epistemic conflict *must* be resolved to demonstrate compatibility, and this cannot be done.

Many people, even professional scientists, moral and legal philosophers, and theologians, attempt to accept both a proof-based and a faith-based system. To give them the benefit of doubt, the fundamental incompatibilities are not widely understood, and they may not be aware of the inherent inconsistencies and difficulties in dual acceptance. But they must be judged as irrational, with all the implications that carries for their credibility and rational competence, if they *are* aware of the incompatibilities and still try to maintain the validity of both systems. The acceptance of inconsistency is antithetical to all rational systems. No one who deliberately accepts inconsistency when it matters is rational!

There are many motives for wanting to accept the "dual solution", but consideration of motives is really beyond the scope and purpose of this paper. The point is, rather, to illustrate that the consequences of trying to accept the duality reach far beyond a particular fact or problem. The attempt corrupts one's very ability to have integrity (consistency of personal action with belief) and to be worthy of respect by others in

regard to one's choice of either proof-based or faith-based theories of knowledge. One can pick either, *but not both*, without severe social and personal consequences, not to mention reduced ability to deal with the problems of living arising from application of a defective theory of knowledge.

I hope the foregoing makes the epistemic problem and its broad consequences clear and its resolution decisive. As long as this problem goes unrecognized at a public level we will have endless debates over the compatibility of proof-based and faith-based systems, and slow the acquisition of knowledge of "Truth" on which our very survival depends.

-----

(1) The Concise Oxford Dictionary of Current English, Fourth Edition, adapted from the Oxford Dictionary, Oxford at the Clarendon Press, 1951

(2) Introduction to Logic and to the Methodology of Deductive Sciences, Alfred Tarski, New York Oxford University Press, 1965, p. 45

(3) The Holy Bible, King James Version, St. Matthew, chapter 22 verse 21