Modeling God's Attributes and the Biblical God is a Scientifically Rational Concept.

Robert A. Herrmann, Ph.D.* 21 Aug. 2005. Last revision 21 Dec. 2013.

Abstract: In this article, the intuitive aspects used to model mathematically God's Biblically implied attributes are presented. The findings are fully described essentially in non-technical terms. These results counter all secular statements that claim that aspects of the Biblically described God concept are "irrational." The results specifically show that they are rational from the viewpoint of (classical) everyday logical discourse.

1. Introduction.

In 1978 (Herrmann 1979, 93), a method to model God's Biblically described attributes (characteristics) and ability-to-act as they are compared with human attributes and ability-to-act was devised. The modeling technique is based upon Genesis 1:26, which allows for such a comparison. God has attributes that are not so comparable. As discussed below, collections of such attributes or ability-to-act may also be used to model other theological concepts. The most basic results, as mathematically obtained, were first presented to the scientific community in 1981(a), then to the mathematics community (1981(b)). After this, they were presented to the general public (1981c). (I point out that the mathematical reasoning used follows the same logical patterns as the common everyday logical patterns that human beings must continually use to function within our physical world. In general, this is modern Mathematical Philosophy mathematically modeling of what have been considered as pure philosophic notions.)

In 1979, using the 1978 methods, the foundations for the General Grand Unification (GGU) Model and the General Intelligent Design (GID) Model were developed. The mathematical portion of these models is rather complex and is not presented in the article. However, their significance is discussed. Are these mathematical models valuable?

Consider why it is necessary that God, as Biblically described, be a "rational" notion.

[T]here is no way of explaining the thousands and thousands of contradictions, perplexities, difficulties, and inconsistencies in which religion belief involves us . . . (Feuerbach, 1967, p. 110).

^{*} Professor of Mathematics (Ret.), The United States Naval Academy, Annapolis, MD, U. S. A. *E-mail* drrahgid@hotmail.com

[A]theism is a complete and thoroughgoing rationalism (Feuerbach, 1967, p. 248).

Christianity, . . . , cannot agree with reason because "worldly" and "religious" reason contradict each other (Marx, 1960, p. 24)

[M]etaphysics is an anti-dialectic method in thought (Marx and Engles, 1960, p. 351).

[T]he grand contradiction is the idea that the same God who is the ideal of human aspiration is also the creator of the Universe and the only primary substance (Santayana, 1905, p. 159).

All humanists agree that religion is not based on reason (Eysenck, 1973).

It is a fact that, for hundreds of years, atheistic philosophers and scientists have claimed that a supernatural God, as Biblically described, is an "irrational" notion. Indeed, this belief is particularly paramount today. But, if the basic attributes of the Biblical God can be modeled mathematically, then, since such a model uses scientific logic (i.e. portions of common (i.e. classical) logic), this atheistic mind-set is falsified. Moreover, if it can be shown that each physical-system and alterations in the behavior of such systems follow God's creationary attributes, then this also falsifies a Santayana type statement and would give a vast amount of indirect evidence for the existence of the Biblically described God. Obviously, the existence of such models should be a valuable theological contribution.

However, some claim that the world of the spiritual and faith should not be approach via logic and reasoning and that establishing Biblical rationality contradicts the notion of "faith" - an assumption of what is being expected or a conviction concerning matters which are not being observed. This is utterly false. There is no human action that in any manner interacts with the physical world in a direct way that does not require, at the least, classical logic.

Hundreds and hundreds of times a day each human must apply the simplest aspect of such logic since observable physical behavior requires it. A healthy human brain is "wired up" in a manner that requires it. One cannot write or read a statement without using simple logical procedures. Just opening a door requires it. Indeed, it is required anywhere an experientially learned cause-and-effect process is applied. Such an application is equivalent to a statement like "If I push on this type of door, it should open. So I push on it." The mathematical reasoning that produced the General Grand Unification Model uses such classical logic.

The modeled logical process that leads to the attribute-model is a higher-intelligence form of this "trivial" cause-and-effect logic coupled with a linguistic abbreviation that is trivially applied and often not formally stated. For any appropriate expressions A, B and C, the abbreviation corresponds to "If A and B and C are fact, then A is fact. If A and B and C are fact, then B is fact. If A and B and C are fact,

then A is fact." The everyday logical processes employed yield no contradiction to the theological notion of faith.

The Bibles states that one should neither add to nor subtract from it. This does not merely include words and phrases but concepts as well. All of my creationary science and theological writings adhere to the follow: No one should accept that, throughout Biblical times, God deceives His followers. That is He lies to them. However, beginning after the death of Apostle John, this is exactly what is proposed by philosophers. They use forbidden methods of discourse (Col 2:8).

The claim is that His ideas and concepts as originally presented within the Bibles pages are faulty. That is, they claim that the literal or obvious nuances in meanings for Biblical terms used therein are incorrect and have other meanings that have been hidden until revealed after the death of Apostle John. This claim must be rejected. These other meanings even contradict literal or obvious nuances. God notes when He sends a deception. Any such alterations in the literal meanings or obvious nuances for the words as understood during Biblical times would make the entire Bible untrustworthy and even contradictory and, hence, useless except for possible historical information.

For the New Testament, faith (pistis) is the noun form of the verb "(to) believe" (pisteuo) and, since the time of Sophocles, is strongly related "to obey" (peitharcheo). This comes from peitharchos (obeying a superior or authority). A measure of ones belief in an authority is an individual's obedience to the rules and regulations put forth by the authority. So, one needs, at least, to strongly and continually attempt to follow the behavioral rules put forth by Jesus and other appropriate Old Testament rules from God as well as those presented by Jesus' Apostles, including Paul. One needs to use continually the ordinary patterns of logical thinking in order to obey.

Faith is a type of accepted hypothesis, "a conviction concerning matters which are not being observed." Hence, this hypothesis is only indirectly verifiable. That is, when events occur, then this indirectly verifies our previous conviction that an event will occur. Today, we can observe a specific molecule but not its constituents. We do not directly observe a neutron or God in His entirety. When one accepts a statement by faith, then it needs to produce logical consequences. If this is not done, then as James states it, faith without "works" (i.e. acts) is "dead, being alone" (James 2:17). These logical conclusions lead to indirect evidence that the "faith" hypothesis is fact.

The only question is which type of logical argument yields predicted indirect evidence. Marx and Engles held that only their dialectic form of logical argument is correct when discussing philosophic concepts. Such a belief is false.(**) Philosophic concepts once deemed as not scientific can now be discussed via scientific logic. Estab-

lishing the scientific rationality of God's attributes leads directly to God's rationally obtained behavior. It also refutes those medical professionals who state that <u>anyone</u> who "hears" from God is behaving irrationally and is mentally ill.

In this article, the attribute-model is specifically described. However, it is significant that all known cosmological models, whether secular or theological, are generated by the GGU-model processes. This means they all follow the rules for common logic. God's foreknowledge (future), knowledge of the past and present, all aspects of human behavior and that of our universe are rationally modeled. (Generally, the term "model" usually means that it is constructed via the common (scientific) logic and this is how it is used in the remainder of this article.) The GGU-model also models the notion of human choice. As mentioned below other theological notions are also modeled.

Relative to the remaining portions of this article and church doctrine, 1 Cor. 15:1-2 implies that a church's doctrine should have no adverse affect upon salvation if an individual follows the teachings of Jesus and the Apostles as originally presented. In the original manuscripts, the meanings of the terms are as understood during the first-century AD. These meanings need to be maintained and should not be altered. Clearly, any contradictory doctrine must be avoided.

2. Main Article

Many, many years ago a list of all of the claimed Biblical (common logic) contradictions was analyzed. After some effort, it was shown that none is as claimed. But, is a strict Genesis 1 interpretation for creation rational? There is a model [A] that shows that the Genesis 1 scenario is a scientifically rational account.

In this present article, it is shown that God's Biblically stated attributes that have a special form are, in our present material world, strength restrictions of "higher-attributes." Ps 147.5 and Isa 55:8-9 state that, at least, two of God's attributes, His understanding and His thoughts, are greater than those of any biological entity within our universe. The modeling process states that members of a collection of higher-attributes, when displayed in our physical world, are comprehensible by humankind as specific human-like attributes. The strength of each displayable and comparable attribute is still greater than a comparable human attribute. There are attributes that are not comparable to any human attribute.

After rational models are established for various Biblical concepts, then can we use generalization, as done in inductive science, and state that God's knowable behavior is rational? As in physical science, this is the "faith" part. For example, God is a Spirit. Is the Spirit notion a rational notion? Yes, since there is a mathematical model for His Spirit. The Spirit of God is, at least, partially characterized by properties that we can comprehend. Can we know every aspect of how His Spirit behaves? No. Do we need to accept various things based on faith? Yes. Are there common logical contradictions

in the Bible? No. So, the entire Bible can be added as part of a rational model for God's behavior.

What does it mean to state that Jesus is the Son of God? This statement occurs over forty times in the New Testament. In the Greek language, the term "son" need not correspond to a biological son or an adopted son. If an individual A has nearly the same characteristics as an individual B, then B can refer to A as his "son" and A can refer to B as his "father." Apparently, this is how "Son" should be interpreted in these many cases, but in the strongest possible sense.

In physical science, two entities differ if their defining characteristics differ. This difference can be in but one characteristic or parameter. Further, not all characteristics need to be listed or even known in order to differentiate an entity from all others. This is an important principle. In all of these modeling procedures, meaningful words and phrases are representations for physical or physical-like events or meaningful concepts. How the words are rationally combined represents physical or physical-like behavior or meaningful conceptual relations.

Using Herrmann (1979, 93, pp. 23-24), consider B as a list of God's Biblical attributes written in a form that can be qualified by the word "very." (It should be self-evident that other words such as "great" or "greater" or "stronger" can also be used.) These words can carry a meaning that includes God's ability-to-act upon something and produce results. The basic phrase used is "ability-to-act." Most members of B are similar to comparable human attributes and include the ability-to-act in specific cases.

Each member of B can be specially expressed in a required word-form. For example, in this list are words such as "intelligent, understanding, creative, just, loving, knowledgeable, powerful, etc." These are to be qualified by use of the word "very." Then words like "mercy" "ability-to-act" are to be qualified by a term such as "greater." In place of "mercy," the term "merciful" can be employed and this term is quantified by the term "very." This also applies to "wrath" and others. The phrase "great ability-to-act" appears stronger than just the word "ability-to-act." The Biblical concept of a Saviour is included in B by simply using this term in B. It is qualified by the repeated use of the term "great." The term "saviour" has meanings other than that of an ultimate Saviour. It will be such a ultimate Saviour when the modeling is complete.

God's Spirit is partially characterized in B by partially expressing His "omni" properties. For omnipotent, use "powerful" as the basic word and for omniscient use "knowledgeable." Each point (location) within our physical universe is contained in an entity called a "monadic cluster." Except for the physical point, no member of the monadic cluster is observable. They

are members of the "substratum" (Herrmann, 2002, p. 170), a preternatural world. Most likely, it is through the monadic clusters that God's Spirit affects the physical world.

For omnipresent, start anywhere within our universe and consider a cubical configuration of space. This yields a specific collection of monadic clusters, one for each point, that contains (or covers) this configuration. The physical cube has an edge 1 foot long in terms of a fixed measuring stick. Call this collection a "cubical-MC-space." Each cubical-MC-space has a vast set of entities that are not members of physical space. Let the word "cubical-MC-space" be a member of B. From the standpoint of spatial size, it makes sense to use the qualifier "larger (and)" for this word, where "larger" means to add a foot in length to the cube's edges.

The monadic clusters <u>represent</u> the medium through which God's Spirit acts and such actions can occur instantly throughout the entire universe by application of hyperfast subparticles (Herrmann, 2002, p. 163). The model predicts that, at least with respect to the physical world since the monadic clusters are omnipresent, that God's Spirit is omnipresent. In this model, the "omni-concepts" are, most likely, enough to differentiate God's Spirit from all other Biblically mentioned entities.

When the foundations for a mathematical model are specified, they are often straightforward. But, from such a simple basis, a highly complex mathematical theory can emerge. Such a theory can then be used to "model" other discipline notions via terminology changes. What follows is an example of this process.

The basic <u>intuitive</u> idea is that the attribute being described by the phrase "very intelligent" is "stronger than" or "better than" or "greater than" or a similar phrase than the attribute described by the word "intelligent." The attribute being described by the phrase "great ability-to-act" is "greater than" simply having an "ability-to-act." Further, we would have that "intelligent" is "weaker than" the attribute "very intelligent." One continues with this intuitive notion and considers the attribute being described by the phrase "very, very intelligent" as stronger than the attribute described by the phrase "very intelligent." One uses the informal idea of "mathematical induction" and obtains a set BP that contains each member of B and all of the strings of arbitrary length that qualify members of B, the "very, very, . . . , very b," "great, great, . . ., great b," etc. strings of symbols, where b denotes a basic member of B. The entire construction of this model yields the (Grundlegend-Deductive) GD-world or GD-world model.

A special form of simple logic is also identified. Due to the forms involved and not due to the rules of grammar, this special form of logic is called "adjective reasoning." Intuitively, this form of reasoning takes any member c of BP and logically yields the

member c of BP and all of the other members that may be "weaker than" c. For example, let b = "very, very intelligent." Taking b and applying the specified rules for this logical process yields { "very, very intelligent," "very intelligent," "intelligent" }. Adjective reasoning can also be viewed as a very simple restriction of one of the most basic forms of human thought - propositional deduction. Propositional deduction is a basic part of the classical (common) logic used throughout scientific and everyday discourse.

Now comes the somewhat more difficult part. All of these intuitive notions are turned into standard mathematical objects by a coding process and they are embedded into the mathematical theory that includes the basic theory of natural or rational or real numbers, as necessary. I note that this is just what happens in modern digital communication and what is done to communicate with a computer. For a computer, each of these word-forms is considered as coded by a binary representation for a natural number - a string of 1s and 0s like 1001 = 9. The coding for the attribute-model is not of this binary type. In what follows, the coded results are denoted by bold face type. Thus, **BP** denotes the coded and embedded set BP. Then **BP** is further embedded into a rather complex mathematical object called the Grundlegend structure (Herrmann, 1979, 93).

A mathematical theory, in form, is most simply understood as a collection of symbols, where technically each symbol has no non-mathematical meaning. When one, in a consistent manner, substitutes for various mathematical symbols meaningful words or phrases from another discipline or a different portion of mathematics itself, an **interpretation** is produced. The entire substitution process yields a **mathematical model**.

Scientifically such interpretations yield the must highly consistent, rational and predictive collection of statements obtainable by a human mind using portions of classical logic. This is exactly what is done in the case of **BP** when it is viewed from the Grundlegend structure. The theory automatically generates the mathematical object ***BP**. The set ***BP** is <u>predicted</u>. It is **not** part of the hypotheses used. Significantly, there are additional mathematical objects in ***BP** that are not in **BP**.

Yet, a more difficult part is investigating the properties of those members of ***BP** that are not in **BP**. The major result for this application is Theorem 4.4.1 (Herrmann, 1979, 93, p. 46). This is what has been discovered. Take any member b of B. Then there is an object d in ***BP**, which is not in **BP**, with the following "interpreted" properties. One cannot actually write down the complete form the object d takes, although it has conceptional meaning. We can write down portions of it and mentally be aware of its construction. What we know, in general, is that it mathematically exists and some of its properties. For example, d's behavior with respect to the "better than" ordering can be expressed. The only question would be which type of logical argument yields the consequences?

Consider <u>any</u> finite string of symbols "very, very, . . . b" in **BP**. Then d is "better than" "very, very, . . . b." When adjective reasoning A is coded and viewed mathematically, a "higher form" of adjective reasoning *A is predicted that contains the original idea of adjective reasoning.

Using *A applied to d, each "very, very, . . . b," no matter how many "very"s are placed next to the b, is obtained. What this means is that if d is interpreted as a Divine higher-attribute, then the collection of all the weaker attributes are also used, in a comparative means, to partially describe the Divine higher-attribute.

"God is good. God is very good. God is very, very good. God is very, very, very good. etc." (Great care must be taken here when considering the word "good." Indeed, the model explicitly shows that such a collection of modified attributes is a logical consequence associated with a "higher-intelligence." This is not to be taken in some general sense. It refers to a specific compatible attribute.)

Adjective reasoning *A, as viewed from the Grundlegend structure, reveals a higher form of reasoning that, when restricted to members of BP, models human adjective reasoning. This verifies one aspect of Genesis 1: 27. God has given us some of His reasoning power. Since b is arbitrary, then these characteristics hold for any member of B. Note that in all cases of which I am aware, this human form of reasoning is equivalent to a portion of "scientific" reasoning. Further, these results have been rationally established by means of scientific deduction.

What this intuitively implies is that each Divine higher-attribute being modeled is "<u>infinitely</u> stronger than" or "<u>infinitely</u> greater than" the corresponding attribute of any biological entity. Such results do not restrict God's attributes nor their strength. This includes the Spirit attributes. It is enough to characterize that Spirit as an entity that is infinitely knowledgeable, infinitely large, and infinitely powerful. These three statements are usually enough to differentiate His Spirit from others. The same approach yields the Saviour aspect of God's attributes.

Using the mathematical theory ZFC that establishes these results, there is no ultimate bound in ZFC for the concept of "infinitely stronger than." For a somewhat more technical explanation, see the article [B]. Rationally, these results do imply that such ultimate bounds can be assumed to exist. This verifies the additional faith requirement.

[Note: The processes $\bf A$ and * $\bf A$ will yield extraneous results (i.e. forms). However, using the recently discovered notion of the general logic-system (Herrmann, 2001, 2006, 2006a), the $\bf A$ and, necessarily, the * $\bf A$ can be restricted so as to remove all of the extraneous results.]

Within physical science, and especially quantum physics and early his-

tory cosmology, the actual objects discussed cannot be directly observed. These objects are defined by their measurable and describable characteristics. Their existence is "indirectly" surmised by their <u>observable</u> predictions. Thus, using this acceptable indirect approach, aspects of human behavior and human reasoning yield indirect evidence that there rationally exists an object characterized by those members of * \mathbf{BP} , the higherattributes, that are not contained in \mathbf{BP} . (Symbolically this set of higherattributes is denoted by * $\mathbf{BP} - \mathbf{BP}$.)

I repeat a few of the remarks made in the article [C]. The Scriptures state that "Christ is the image of ('the invisible' in the Sinaiticus Codex) God," 1 Cor. 4:4, and "He is the image of the invisible God," Col. 3:10. For these two Biblical statements, Vine states, that Christ is "essentially and absolutely the perfect expression and representation of the Archetype, God the Father," and that "Christ is the visible representation and manifestation of God to created beings" [Vol. II, p. 247].

Let a set of describable and pre-ascension (physical universe) restricted Father attributes and ability-to-act (i.e. the ability to perform necessary actions) be denoted by FA. This set contains all of knowable attributes comparable to human beings. It does not include the restricted omnipresent attribute.

The set **FA** is a mathematically model that is interpreted. That is, **FA** is considered as a model, <u>a representation</u>, for a set of knowable, restricted and Biblically stated Father attributes and implications based upon them. The set FA itself need not contain all such knowable attributes. The actual set FA is a subset of BP. This same representation concept is used throughout this article.

Let the strength restricted Son of God attributes contained in BP be denoted RS. Let HS denote restricted Holy Spirit attributes. (Note: Various effects of Holy Ghost attributes that are members of HS are displayable. The attributes are mental in that the Holy Ghost refers to aspects of the Spirit of God interacting, after Jesus is perfected and in a special way, with our minds. For example, it "guides and comforts us" and has other personal characteristics.)

The man "Jesus" has human characteristics that are not Father attributes. Jesus always displays human attributes as well as Divine actions. This is not a contradiction since Divine actions employ a non-physical immaterial medium. When Jesus "speaks" or behaves in various ways, one needs to determine whether He is displaying His physical and non-Father human characteristics or actions, or His Father characteristics or actions or, indeed, under certain circumstances, both simultaneously. In all cases, the action of "speaking" is a human action. When He speaks or acts as a man, various Divine attributes are not displayed. At other times Jesus speaks as God would speak or performs actions that display His Divine attributes. This is all relative to the circumstances under which His attributes are displayed. His human attributes are

displayed most often during His earthly existence. As pointed out by Colin Brown, this is consistent with both Phil 2.7 and Isa 53.

Notice that, in John 14: 15-20, Jesus states explicitly that the Holy Ghost will display His attributes. Further, Jesus also displays a restricted form of the "creation" attribute. An important step is taken when it is realized, using John 10:30 and the John 14:9-11 notion of "image," that, at least, in the physical-world

$$\mathbf{RS} = \mathbf{FA} \tag{1}.$$

This indicates that, as a man, Jesus' attributes are maximal. That is, a physical entity can have no more powerful nor greater Divine attributes than those that indwelled Jesus in either of His forms. There is a difference between having certain attributes and displaying these attributes. Not all of the FA attributes were displayed during Jesus' physical life-time. He displayed physical attributes while in His glorified form that He did not display previously.

But, is there more that can be done using this mathematical approach? Consider the Biblical notion of "being perfect" or "being complete" or "mature." The Scriptures state in Matthew 5:48 that one of the Father attributes is being perfect. Also in Hebrews 2:10, 5:9, we find that the supernatural Jesus is perfected. Consequently, being complete is an attribute of the Father and, in general, an attribute of God.

The Biblical notion of "complete" can be modeled by adjoining to the set **BP** additional word-forms that include the simplest logical implication associated with "completeness." This yields the coded set of comprehensible word-forms **BPC**. For this investigation, a set is "complete" if it can be logically demonstrated that it contains all objects that satisfy a specific requirement. A special logical process P, strong reasoning from the perfect, is defined (Herrmann, 1979, 93, p. 38). (This P is obtained by using a restricted form of propositional deduction.)

In this model, the set *BPC is used as a <u>representation</u> for the hyper-comprehensible God. (A comprehensible attribute is also hyper-comprehensible. hyper-comprehensible is a comparative notion. In order to "understand" what all members of *BPC - BPC signify, a higher language and higher "thought" processes must be applied.) The set BPC contains the three sets that model the restricted completed Father, FAC, the restricted completed Son, RSC and the restricted completed Holy Ghost, HSC, attributes. Since RSC is strength restriction, it does not immediately follow that FAC = BPC. Depending upon how completeness C is constructed, application of Theorem 4.3.5 (Herrmann, 1979, 93, p. 43) and strong reasoning from the perfect logical operator P yields a rational derivation for equations

$$^{*}\mathbf{P}(^{*}\mathbf{FAC}) = ^{*}\mathbf{P}(^{*}\mathbf{RSC}) = ^{*}\mathbf{P}(^{*}\mathbf{HSC}) = ^{*}\mathbf{BPC}$$
 (2).

[The construction of the **C** part of the word-forms that yields (2) can easily be seen to yield **BPC** when **P** is applied to **FAC** and **HSC**. The model predicts the "hyper property." It is not unusual to construct models in this manner since the significant part is that this is an <u>analogue model</u> designed to produce rationally obtained behavior. That is, expression (2) is rationally obtained. One can argued or accepted that the special construction is the one God intended when the notion of completeness is assigned to members of FA and HS. This construction appears necessary if His Spirit is considered as inseparable. For those that might reject the Vine description, (1) can be modified and we only need that RS is a nonempty subset of FA. That is, only one attribute in RS is necessary if it also carries the perfection requirement.]

The equations in (2) can be difficult to interpret when one considers that *P represents a higher-intelligence. However, they do have one significance interpretation when viewed from the Biblical "Third-Heaven."

Using the operator ***P** to obtain the Third-Heaven view, the supernatural entity being described by ***P**(***RSC**) cannot be differentiated from the other two within this Third-Heaven. All three represent a perfect entity, which is represented by perfect ***BPC**. The set ***P**(***RSC**) is also a representation for the glorified Jesus.

Equation (2) has been established via mathematically (scientific) reasoning and is not dependent upon expression (1).(*) Although, equation (2) can be discussed and interpreted informally, humankind cannot actually mimic the logical process * \mathbf{P} . A strong indication that we cannot as yet properly comprehend the total meaning of * $\mathbf{P}(*\mathbf{RSC})$ is that its equality with * $\mathbf{P}(*\mathbf{FAC})$ implies that the modeled Spirit "omni" properties also hold for * $\mathbf{P}(*\mathbf{RSC})$.

Additionally, equation (2) satisfies, at the least, four different notions. Which of these notions one accepts requires additional sources of rational information if one wishes to make an intelligent and rational Biblical choice. The notion of "choice" is one way to determine intelligent actions. The actual attributes that produce (2) are the three sets of C extended attributive collections **FAC**, **RSC**, **HSC**.

It is important to realize prior to interpreting (2) that this is a model and as such it does not "prove" that (2) or an interpretation is fact. It shows that the interpretations are classically rational. This counters the atheistic statements quoted above. Evidence for an interpretation can come from many sources, the first being a strict interpretation of Biblical statements.

In this case, recall the original meaning for the word that denotes a complete logical expression of a thought. The <u>complete logical and personal expression of Himself</u> the complete Jesus mental-like concept - the logos - exists and does not cease to exist, from our comprehension, before, during and after the thoughts are manifested. The notion that it comprises "thoughts" and the consequences of the thoughts goes back to

Heraclitus at about 500 B. C., where the consequences of these thoughts yield material entities. But, for its Biblical usage, such thoughts also produce the non-physical. In general, God's thoughts exist, in a sequence sense, prior to being manifested as physical, preternatural or supernatural entities. Entities are comprehended by listing their attributes whether they are displayed or not. This holds for the Jesus manifestations as they relate to God. Equation (2) yields rational information about these manifestations via interpretations.

In the following, the ordering of the A - D statements does not indicate a preferred ordering. Intelligent choice, as based upon additional information, is advocated.

Consider the classical notion of "truth" and "falsity" relative to basic conditional statements. Let a statement "If A, then B" be <u>true</u>, where A and B are any other meaningful statements. This signifies that when "A" true, "B" is true. But, when "A" is false, the original statement does not tell one whether "B" is true or false. In fact, the conditional "If A, then B" is false in only one case, when "A" is true and "B" is false. Now consider the statement "A if and only B" or many similar ones. This statement is <u>true</u> in only one case, when both "A" and "B" are true. Some church organizations falsely claim that for a specific "A" and "B" the Bible teaches that "A if and only B," when in reality it only teaches "If A, then B."

For what follows, there is a vast amount of literature relative to (B). This is the reason that the discussion for (A) is more extensive than for (B).

(A) It is rational to state that the three related attributive descriptions, \mathbf{FA} , \mathbf{RS} , \mathbf{HS} , signify that the Spirit of God manifests itself within the physical world in specific Biblically described ways and these manifestations can be grouped, at least, into three categories as observed within the physical world. These manifestations of God's attributes are a major aspect of His "planned" creation activities. The best way to comprehend this is to use "mind" terminology. Each collection is a mental description, where God transforms His thoughts into various realities. This is the tricategory model. First and foremost, the restricted FA = RS. Although not necessary, one can state that each of these collections displays aspects of God's personal relation to humankind. Indeed, each set can be classified as exhibiting certain characteristics that can be described as "personality-traits." Such manifestations are grouped in this way for better comprehension and they are not disjoint. "Personality-traits" are knowable behavioral traits that are the same as or similar to human behavior, or that interact with humans in such a way as to influence behavior.

The one Spirit of God is inseparable and God uses an immaterial medium to actuate each restricted manifestation. One can conclude, using this tri-category model, that part of the complete expression of this Divine concept is that, if necessary, God will present Himself to His created physical universe via **RS**. In this case, **RS** is a special

strength restriction and displayable manifestation of the Jesus attributes described in completed form by ${}^*\mathbf{P}({}^*\mathbf{FAC}) = {}^*\mathbf{BPC}$.

Note that, in this model, when Jesus is "perfected" in the sense of ***BPC**, then the glorified Jesus displays attributes that were not displayed prior to His perfection. This follows since these attributes are not displayable by Jesus the man using His restricted attributes. Further, as the supernatural Father, God can refer to Himself in various ways, such as emphasizing the completed ***RSC** without it contradicting this rational model. Significantly, taken in this complete form, the personal relationship between God and each member of His church is emphasized.

God has many different viewpoints. This rationally obtained model specifically shows that, from one major viewpoint, a display of any nonempty collection of His attributes amounts to the display of all of them. That is, in this case, He does not actually separate His attributes in any manner. It is humankind that makes such a separation. This separation is not part of God's character for the Third Heaven viewpoint. As mentioned, if this behavior is carried over to His spirit, then this also means that His spirit cannot be separated. These properties are accepted by various Christians. As usual, not all predictions made by a model need to be accepted. Hence, in simple terms, we have the following description.

(****)Jesus, as He appears during His earthly ministry, is a type of special restriction of all of God's attributes that can be associated with a physical human being and displayed within a physical universe. He is the absolute representation of the Father to the created universe and more. The attributes displayed depend upon the circumstances. He also displays during His earthly ministry purely human attributes as well. Potentially, via God's spirit that indwells Him, Jesus, the man, represents all of the Father attributes that are displayable in the Third Heaven environment. As the glorified Jesus, He displays attributes that He did not display while in an ordinary human form. More generally, the following statement expresses this (A) Jesus concept.

Jesus is the personal name of the Father when His behavior relates to His created entities. Further, the Father exhibits this behavior when His attributes are restricted to circumstances, whether physical or otherwise, that can or do influence human beings in any of their physical or non-physical forms. When any such behavior is perceived by any of His created, then such behavior carries this additional identification. The first Biblical instance of this behavior is His creationary activities in Genesis 1. The last Biblical occurrence of such activity is stated in Revelations 22.

God's comparable attributes will always remain infinitely greater than any of those of His created, no matter what form His created may take. Further, He has attributes

that we cannot, at present, comprehend. There are other questions that most likely require the Third Heaven language to answer. One is, "Will His created, in any form they take, ever know God in any other way except as He is represented by the glorified Jesus?" Some say no, as based upon the equation ${}^*\mathbf{P}({}^*\mathbf{FAC}) = {}^*\mathbf{P}({}^*\mathbf{RSC})$. They state that the glorified Jesus is the only Father entity that His glorified Church will "ever" encounter.

(B) It is pointed out during the analysis of the Greek term "logos" in [C] and [D] that the meanings of certain terms such as this one might be altered by later revelations. If you believe that this is possible, then you can accept a more complex notion described by Justin Martyr and completely revealed after nearly 800 years of "progressive revelation." In this case, one needs to modify his description and accept a distinctly different concept - the classical Trinity. In this case, all the Biblical statements that imply expression (1) and the relation between Jesus and the Holy Spirit require altered meanings.

What was generally stated can now be specified for this case. In general, thoughts represented by RSC, *RSC, HSC and *HSC exist. This case assumes that *FAC, *RSC and *HSC just don't represent distinct ideas, but distinct entities. That is, that *FAC, *RSC and *HSC describe distinct supernatural objects that share the basic attributes that would classify them as God and they use the same medium to manifest themselves in the physical world. Then equation (2) is interpreted as a unification statement. It represents the shared God attributes. Historically, there have been seven different methods suggested to unify these three collections. Indeed, some theologians have stated that how these three are unified can be classified as a "mystery." The "perfection," in this case, refers to the required "God" underlying structure that allows one to state that the three distinct entities are "God."

This case is rationally obtained by first separating BP into various appropriate collections and than applying the entire mathematical process to each of the collections. Then the non-separable property holds for each of corresponding higher-attributive collections. In this case, attributes of God have been separated.

- (C) Some theologians suggest a third possibility. For them, equation (2) does not apply at the moment that Jesus is perfected, but rather at a moment near the end of Revelations. At that moment, their interpretation states that the distinct entities of (B) are unified in such a manner that they can no longer be differentiated one from the other.
- (D) There is yet another interpretation some use. The equation (2) ${}^*\mathbf{P}({}^*\mathbf{FAC}) = {}^*\mathbf{P}({}^*\mathbf{RSC})$ is an exact equivalence of the supernatural Jesus and the Father and indicates the unification. The ${}^*\mathbf{HSC}$ equivalence is simply ignored.

The two basic interpretations, (A) and (B), for equation (2), although poorly stated, were published in Herrmann (1982). Interpretation (A) is rationally obtained

from the rationally predicted equation (2). Interpretations (B), (C) and (D) follow from hypotheses termed as revelations and they probably do not follow rationally from Biblical statements. Notice that if one uses sets such as *BPC as a model for God's Spirit with all of its attributes, then, as noted below, His Spirit is not separable in that one "piece," so to speak, cannot be differentiated from His entire Spirit.

Objects such as **BPC** are composed of specific members that are additionally characterized as being "finite." This notion is transferred to ***BPC** and is part of the "language" that can be employed by members of God's glorified church. "Expressions" from this language are hyper-comprehensible and carry an additional mathematical characteristic. Only such objects are hyper-comprehensible within this Third Heaven (2 Cor. 12:2). In 1 Cor. 13:12, Paul states that we will comprehend more. But, in many places, such as Job 28: 13, Ps. 139: 6, Isa. 55: 8-9, Rom. 11:33, the statements imply that, in general, God has incomprehensible behavior partially represented by members of ***BPC** – **BPC**.

Within the Third Heaven, it is sufficient that His glorified church view ${}^*\mathbf{P}({}^*\mathbf{RSC})$, ${}^*\mathbf{P}({}^*\mathbf{FAC})$, ${}^*\mathbf{P}({}^*\mathbf{HSC})$ as representing identical objects (eq. (2)). This helps to explain why God identifies, in a specific manner, the ${}^*\mathbf{P}({}^*\mathbf{RSC})$ collection (the perfected and risen Son - the Glorified Jesus) as the most significant and hypercomprehensible representation since it includes all aspects of His personal relationship with His physical creation and His church. Since technically \mathbf{RS} is contained in ${}^*\mathbf{P}({}^*\mathbf{RSC})$, then ${}^*\mathbf{P}({}^*\mathbf{RSC})$ also represents God's abilities to accomplish tasks - His power - as the Biblical term "dunamis" signifies. (He is powerful; very powerful; very, very powerful; etc.) It is significant that the collection ${}^*\mathbf{P}({}^*\mathbf{RSC})$ represents all of the hyper-comprehensible knowledge of God's comparative behavior that any of His created beings, in any of their allowable forms, can ever "comprehended."

When a mathematical model is proposed, it is not necessary that each of the derived conclusions be included within an interpretation. Indeed, in general, only a few are and the remainder are considered as extraneous. However, there is yet another interesting result that explains, for many, what may seem to be a rather humanly incomprehensible property.

The Theorem that yields equations (2) yields another result. Let set \mathbf{A} be any nonempty collection of \mathbf{BP} entities. Of course, this includes the case where \mathbf{A} contains only one member. Then adjoin the "perfect" notion C to \mathbf{A} . This yields the set \mathbf{AC} . Applying Theorem 4.3.5, we have that

$$^{*}\mathbf{P}(^{*}\mathbf{AC}) = ^{*}\mathbf{BPC} \tag{3}.$$

Result (3) is not the same result as (2). This formally establishes the rationality of another mentioned interpretation. It is that, from the Third Heaven viewpoint,

God's attributes, in general, are not separable. That is, if God displays just one of His higher-attributes, then, from this viewpoint, that one higher-attribute represents all of His higher-attributes. This conclusion is similar to (A). But, equation (3) and this interpretation can be ignored. On the other hand, the set *BPC can be used as a model for Spirit material, which it predicts as inseparable.

Because (A) - (D) present different possibilities, on needs to make a informed choice. Is acceptance of (A), (B), (C) or (D) necessary for salvation? If this were the case, then Moses, Abraham and other members of the original "people of God" would not be saved from the "fiery pit." Moreover, the Bible implies, even in the description of the New Jerusalem in Rev. 21, that the Apostles are saved. And, there is no Biblical indication that they had to choose from a list such as (A) - (D) to achieve salvation. How significant is extra-biblical doctrine? According to Paul's statement 1 Cor. 15:2, if church doctrine does not adversely affect the actual Biblical methods the Apostles teach and that lead an individual to salvation, then "believing anything else (the additional church doctrine) will not lead to anything." (Jerusalem Bible). That is, Paul states that such church doctrine is not significant.

"Brothers, I want to remind you of the gospel I preached to you, the gospel that you receive and in which you are firmly established; because the gospel will save you only if you keep believing exactly what I preached to you - believing anything else will not lead to anything." 1 Cor. 15:1-2 (Jerusalem Bible). I cannot found in Paul's stated doctrine that such a selection is necessary.

After about 33 AD, salvation does result, via faith in Jesus, by accepting him as the Lord and Saviour, by believing in Him, trusting Him and obeying Him. Paul's doctrine contains the implications established from John's gospel. What is presented here may further illuminate the basic meanings of the Biblical terms when they were first transcribed. If one needs additional reasons to follow the doctrine of Jesus and the Apostles, then this presentation might be useful.

The mathematics that appears in Herrmann (1979, 93, pp. 27-56) can be used to model other theological notions that some would consider less significant and, in some cases, highly speculative in character. Some of these are associated with C. S. Lewis descriptions. In this short article, I will not consider any other material that appeared in the original G-model book.

In Aug. 1979, I was challenged to solve the General Grand Unification problem. The problem is to find a collection of mathematical objects, from a specific category, that unifies all physical-system behavior. Consider two statements:

"The structure of the material universe has something in common with the laws that govern the working of the human mind." Louis De Broglie

". . . events in the remotest parts of space appear to obey the laws of rational thought. . . . According to it what is behind the universe is more

like a mind than it is anything else we know." C. S. Lewis.

My original solution to this problem began with the notion of a scientific theory. All such theories use human thought processes to predict physical behavior from a set of hypotheses. The solution is not based upon any desire to model mathematically any Divine attribute. I postulated that a solution to this problem involves a collection of mathematical objects that model "thought processes." The question then becomes, what thought processes and what mathematical objects would solve this problem. The actual mathematical structure used is not one of the usual standard structures, but the solution requires a "nonstandard" structure. General nonstandard structures were not discovered until 1961 and applying nonstandard analysis to thought processes had not been done.

The problem is solved, in the main, by applying standard and nonstandard analysis to certain operators (Herrmann (1979, 93, pp 65-128) that, at the least, represent the most basic aspects of human thought. For this application, an "operator" models processes in a specific manner. When an operator is applied to a set of hypotheses X, it predicts all of the conclusions that can be rationally deduced from X. In the 1930s, Tarski introduced operators that accomplish this. They are not well known. These are the consequence operators (or operations), which I have shown are equivalent to the general logic-system. General logic-systems yield details that such operators do not. Logic-systems are used to obtain, via a simple deductive process, ordered collections.

In the simplest case, an operator *A, based entirely upon one basic rule of inference, models the human ability to take a finite collection of objects and "order them" in a specified manner. Then there is the "gathering" operator that conjoins simple objects to form a more complex object. This yields "info-fields." One final operator, "the realism operator," yields a physical universe. These operators are used so that we can comprehend how the master operator, which is their composition, behaves. Such operators are coded and their properties investigated using nonstandard analysis. The results are the GGU-model and the GID interpretation. I note that the term "nonstandard" does not mean there is anything wrong with the mathematics, it is a technical term. These models are all obtained using modern set-theory.

After the secular GGU-model was constructed, it became obvious that this model can be interpreted in a manner that models various Divine attributes. Among these various attributes are His Biblically stated creationary methods, the notion that God designs all physical-system behavior and entities and yet allows choice, that God is a higher-intelligence, that God sustains the behavior of all physical-systems within our universe and that physical-systems display signatures for God's higher-intelligence.

Two more operators have been discovered (Herrmann, 2004) that when theologically interpreted yield sudden alterations in our physical world that can be classified as miracles events. Moreover, they verify each Biblical statement that implies that

supernatural influences affect human thought processes. Of course, the GGU-model in its pure secular form need never be interpreted theologically. Finally, it is predicted that when a universe develops "ultranatural" events are also produced. Very little can be known about these events. They can influence the physical world. They probably correspond, in some unknown way, to the relation between the non-physical and the physical worlds. They can even yield behavior aspects of the invisible human "spirit." Or, they can merely be repeated physical events. Further analysis may yield a better understanding as to the purpose for the predicted ultranatural events.

Thus, the rational existence of the Biblically described God is further strengthened by considering the Biblical creationary aspects of God as they are modeled by a theological interpretation of the GGU-model, the GID-model (Herrmann, 2002) as well as other rationally described processes discussed in this article.

(*) One of the basic hypothesis used by philosophers is that we can comprehend the essence, the basic underlying structure, of "something," by describing it in words. That "words" used refer to a god. (**) The arguments used often do not follow common logic but rather follow the notion of the dialectic argument. It has been shown that, from the view point of common logic, including the "time" axiom within your rules for a dialectic requires such a time notion to be non-finite in character.

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- [A] A DVD Genesis 1 -8 illustration. http://www.raherrmann.com/beliefdvd.htm
- [B] Measuring the Strength of God's Attributes.

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- [C] Who is Jesus? http://www.raherrmann.com/jesus.htm
- [D] Who is Jesus Additional Details. http://www.raherrmann.com/jesus1.htm