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Recent advances with Meth8/VŁ4 in analytical theology: initial results in collected papers

 (51.3K words)

Abstract

In this continuously updated file, we evaluated over 100 artifacts in analytical theology. Over 45 artifacts as rendered are original recent advances, such as: abortion contradiction; Anderson's COB and anti-paradox theorems; theorem of atonement; single axiology theorem; axiom of non-contingent good; body and soul (Swinburne); causal time loops; coherence objection resolution; conscience theorem; determinism; dialetheism (Homer Simpson's burrito); divine command theory (DCT) solution; divine consistency proof for mathematics; divine foreknowledge vs human freedom; divine retribution; divine universal causality (DUC); doctrine of divine priority; empirically skeptical theism (EST); problem of evil (2); family unit theorem; theological fatalism; feminist/Marxist analytic theology; fundamental problem of Christology; GATRG; cause of heresy as defective trinitarianism; arch-homosexual assertion; homosexuality by progeny; middle knowledge; modal collapse; dependence loops for Molinism; God of monotheism; necessity causing non-contingency; knowability paradox; God as not a person (2); Judaic argumentation theory; nomological-explanatory solution (NES); perfect being theism, perfect goodness theology; personal identity; phenomenal conservatism = seeming exclusivism; Plantinga's ontological proof; Popper's proof of (a moral) God; mappings of theism(s); challenge of Triune God; "all possible truths are tautologies"; priesthood theorem(s); responsibility and original sin (Molinism); soul as unique identifier; Stump's theorem; theological voluntarism; Trinitarian number. These serve as benchmarks against which to evaluate models for using mathematical logic in philosophy of religion and analytical theology.

Preface

In the 45-days before 09/11/2020, we evaluated articles and book reviews from these sources: "Faith and philosophy" 1989-2020; and "Journal of analytic theology" 2013-2019. Such rapid assessment was due to the industrial grade product Meth8/VŁ4. A lesson learned was that practitioners of the art of analytical theology do not use a bivalent modal logic model checker or otherwise publish proof scripts by which to replicate.

2021.02.08 Update on the state of analytical theology: The field devolved by embracing and promoting uni-gender-oriented and anti-Christian papers. Those authors demonstrated skill in the field of mathematical logic at the level of minimal- or no-schooling and not as professional educators. In fact, none used proof assistants for replication.

2021.08.02: We now use the term of analytical theology for analytic theology to express *studied* practice.

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Introduction

We assume the method and apparatus of Meth8/VŁ4 with Tautology as the designated proof value, **F** as contradiction, N as truthity (non-contingency), and C as falsity (contingency). The 16-valued truth table is row-major and horizontal, or repeating fragments of 128-tables, sometimes with table counts, for more variables. (See many details at ersatz-sysems.com.) [James 2020]

LET ~ Not, ¬ ; + Or, ∨, ∪, ⊔ ; - Not Or; & And, ∧, ∩, ⊓, ·, ∘ , ⊗ ; \ Not And;
> Imply, greater than, →, ⇒ , ↦, ≻, ⊃, ↠ ; < Not Imply, less than, ∈, ≺, ⊂, ⊬, ⊭, ←, ≲ ;
= Equivalent, ≡, :=, ⇔, ↔, ≙, ≈, ≃ ; @ Not Equivalent, ≠, ⊕;
% possibility, for one or some, ∃, ∃!, ◊, M; # necessity, for every or all, ∀, □, L;
(z=z) ⊤ as tautology, ⊤, ordinal 3; (z@z) **F** as contradiction, Ø, Null, ⊥ , zero;
(%z>#z) N as non-contingency, Δ, ordinal 1; (%z<#z) ⊆ as contingency, ∇, ordinal 2;
~(y < x) (x ≤ y), (x ⊆ y), (x ⊑ y); (A=B) (A~B).
Older papers use vt for validated as tautology, and nvt as not so.
Notes: for clarity, we usually distribute quantifiers onto each designated variable; and for ordinal arithmetic, the result is implied.

Refutation of abortion in mathematical logic

LET p, q, r, s: parent, child, abortion, s. (s=s) is alive, perfection.

Parent before or after abortion is: p<r or p>r.
Child before or after abortion is: q<r or q>r.

There are two states of affairs of parent and child, before and after abortion. We write these as:

Parent before abortion implies parent is alive; and
Child before abortion implies child is alive. (1.1.1)

((p<r)>(p>(s=s)))&((q<r)>(q>(s=s))) ;
TTTT TTTT TTTT TTTT (1.1.2)

Remark 1.1.2: Eq. 1.1.2 is tautologous, to prove the conjecture and name it as a theorem.

Parent after abortion implies parent is alive; and
Child after abortion implies child is *not* alive. (2.1.1)

((p>r)>(p>(s=s)))&((q>r)>(q>~(s=s))) ;
TTTT TT**FF** TTTT TT**FF** (2.1.2)

Remark 2.1.2: Eq. 2.1.2 is *not* tautologous, to refute the conjecture and name it as a *non* tautologous fragment of the universal logic VŁ4.

In simplest terms, abortion is refuted because parent and child before abortion are perfection, but after abortion parent and deceased child are imperfection.

Confirmation of the three legacies of AA

The three legacies of AA are commonly known as recovery, unity, and service. Bill Wilson promoted them mundanely in order as 12 Steps, 12 Traditions, and General Service Office.

We write the legacies focused on God.

LET p, q, r, s: God, man, drinking, s.

Recovery: God implies that man not drinking (temperate) implies godly perfection. (1.1)

Unity: God and man imply perfect unity. (2.1)

Service: Man, as less than God, serving God implies perfect freedom. (3.1)

(p>(s=s))>(q>(~r>(s=s))) ; TTTT TTTT TTTT TTTT (1.2)

(p&q)>(s=s) ; TTTT TTTT TTTT TTTT (2.2)

((q<p)>p)>(s=s) ; TTTT TTTT TTTT TTTT (3.2)

Remark 1.2, 2.2, 3.2: Eqs. 1.2, 2.2, and 3.2 are confirmed as tautologous.

This further means that taking them in order of implication is also tautologous.

Hence their placement as points on a circle is appropriate where point to point direction captures the start for any order.

The typical progression is that recovery of man implies unity of God and man to imply service of man to God.

Logical mapping of 12 traditions in AA: 4 and 7 are identical theorems

From [AA 2014]:

THE TWELVE TRADITIONS OF ALCOHOLICS ANONYMOUS

(SHORT FORM)

1. Our common welfare should come first; personal recovery depends upon A.A. unity.
2. For our group purpose there is but one ultimate authority—a loving God as He may express Himself in our group conscience. Our leaders are but trusted servants; they do not govern.
3. The only requirement for A.A. membership is a desire to stop drinking.
4. Each group should be autonomous except in matters affecting other groups or A.A. as a whole.
5. Each group has but one primary purpose—to carry its message to the alcoholic who still suffers.
6. An A.A. group ought never endorse, finance, or lend the A.A. name to any related facility or outside enterprise, lest problems of money, property, and prestige divert us from our primary purpose.
7. Every A.A. group ought to be fully self-supporting, declining outside contributions.
8. Alcoholics Anonymous should remain forever nonprofessional, but our service centers may employ special workers.
9. A.A., as such, ought never be organized; but we may create service boards or committees directly responsible to those they serve.
10. Alcoholics Anonymous has no opinion on outside issues; hence the A.A. name ought never be drawn into public controversy.
11. Our public relations policy is based on attraction rather than promotion; we need always maintain personal anonymity at the level of press, radio, and films.
12. Anonymity is the spiritual foundation of all our Traditions, ever reminding us to place principles before personalities.

(1.1.0 - 1.12.0)

LET p, q, r, s:

p God p>(s=s)	[God implies perfection];
q group q<(p>(s=s))	[group is less than God];
r drinking q>~r	[group implies not drinking] ;
s members/servant-leaders s<q	[members are less than group, where non-members can be special workers].

1 is rewritten as: All groups imply each group (unity) imply not drinking (1.1)

(#q>%q)>~r ; TTTT **FFFF** TTTT **FFFF** (1.2)

2 is rewritten as: servant-leaders less than (group less than God) (2.1)

Note: This has the antecedent focus on man.

s<(q<(p>(s=s))) ; **FFFF FFFF** TTTT TTTT (2.2)

2 is rewritten as: (servant-leader less than group) less than God (2.1.1)

(s<q)<(p>(s=s)) ; **FFFF FFFF FFFF FFFF** (2.1.2)

Note: This has the antecedent focus on man, group.
Since Eq. 2.1.2 is contradictory, with all **F**'s, we prefer 2.2.

3 is rewritten as: group implies members/servant-leaders not drinking (3.1)

q>(s>~r) ; TTTT TTTT TTTT TT**FF** (3.2)

4 is rewritten as: each group separate from all groups if each group does not affect all groups (4.1)

~(%q>#q)>(%q@#q) ; TTTT TTTT TTTT TTTT (4.2)

Note: This is the same truth table result as for Tradition 7.

5 is rewritten as: each group implies not drinking to non-members (5.1)

%q>(~r>~s) ; TTTT TTTT NN**FF** TTTT (5.2)

6 is rewritten as: each group should not imply all groups (6.1)

~(%q>#q) = (s=s) ; CCCC CCCC CCCC CCCC (6.2)

7 is rewritten as: all groups imply each group is self-supporting (7.1)

#q>(%q>(s=s)) ; TTTT TTTT TTTT TTTT (7.2)

Note: This is the same truth table result as for Tradition 4.

8 is rewritten as: all groups imply not (members paid) and (non-members possibly paid); non-member includes special workers (8.1)

#q>(~(s>(s=s))&(~s>(s=s))) ; TTCC TTCC TTCC TTCC (8.2)

Note: This is the same truth table result as for Tradition 9 and 10.

9 is rewritten as: all groups imply not organized and members imply service to all groups (9.1)

#q>(~(s=s)&(s>#q)) ; TTCC TTCC TTCC TTCC (9.2)

Note: This is the same truth table result as for Tradition 8 and 10.

10 is rewritten as: all group (opinions) do not imply non-group (opinions) (10.1)

~(#q>~q) = (s=s) ; TTCC TTCC TTCC TTCC

Note: This is the same truth table result as for Tradition 8 and 9.

11 is rewritten as: all groups imply members, to imply no member implies all groups (11.1)

(#q>s)>(~s>#q) ; **FF**NN **FF**NN TTTT TTTT (11.2)

12 is rewritten as: a member implies a non-member (anonymity) implies a member is beneath principles (God's truth) (12.1)

(%s>%~s)>(%s<(p>(s=s))) ; **FFFF FFFF** NNNN NNNN (12.2)

13 The further argument is that the antecedent in 12, implying 1-11, further implies the consequent in 12. (13.1)

((%s>%~s)>((((((#q>q)>~r)&(s<(q<(p>(s=s)))))&((q>(s>~r))
&(~(%q>#q)>(%q@#q))))& (((%q>(~r>~s))&(~(%q>#q)=(s=s)))
&((#q>(%q>(s=s)))&(#q>(~(s>(s=s))&(~s>(s=s)))))))&(((#q>(~(s=s)
&(s>#q)))&(~(#q>~q)=(s=s)))&((#q>s)>(~s>#q)))))>(%s<(p>(s=s))) ;
TTTT TTTT CCCC CCCC [103 steps] (13.2)

Comments: As rendered, Eqs. 4.2 and 7.2 are tautologous. This means Traditions 4 and 7 are logically equivalent as theorems, both dealing with finance for the independent organization and accounting arithmetic of groups.

The other Traditions are *not* tautologous, to refute them as claimed, denying the overall intention to promote unity as the second legacy from recovery as the first legacy. What follows is that service as the third legacy is denied from the second legacy, leaving the first legacy as definition of AA.

From the standpoint of a Higher Power, Traditions 2 and 12, dealing with God and (God's) principles, share nearly identical truth tables, with the latter replacing T in the former by the weaker N, although both *not* tautologous. The grand argument of Tradition 12 in 13.2 similarly fails.

Recent advances in AA: factual mistake in We agnostics, p 53, invalidates the traditions

From [AA 1979]:

> *... the proposition that either God is everything or else He is nothing.*

The unattributed source of this quotation is Emmet Fox, whose personal secretary was associated with Bill Wilson, meaning Bill was promoting his family religion. Fox, despite claims, was not a Christian but a dishonest Gnostic. The problem with the quotation on its face is the use of the existential quantifier (every, as in everything) and the negation of the universal quantifier (not all, as in nothing).

The Meth8 modal logic checker maps the quotation as follows.

LET: p God; q thing(s).

"God is everything" (antecedent)

This is rewritten from	"God is possibly a thing"	p = %q	(1)
to	"God is all possible things"	p = #%q	(2)

"God is nothing" (consequent)

This is rewritten from	"God is all things"	p = #q	(3)
to its negation as	"God is not all things"	p = ~#q	(4)

The assertion is that antecedent Or consequent is tautologous. Hence the logical connective is Or,
and the expression used for Tautologous is "God is God" p = p (5)

We rewrite the quotation as:

> Either "God is all possible things" or "God is not all things" is equivalent to Tautologous.
> Such truth is supposed to be a self-evident truth, an axiom.
> By substitution of Eq. 2, 4, 5:
>
> ((p = #%q) + (p = ~#q)) = (p = p) ;
> NTNT EEEE UEUE IEIE PEPE (6)

Meth8 evaluates Eq. 6 as *not* tautologous where designated truth values are `T` and `E` and mean by first letter Non-contingent, Tautologous, Evaluated, Unevaluated, Improper, Proper.

This means the quotation is factually mistaken as proved by mathematical logic.

What follows is that the quotation is seriously misleading in this way. Many AA's invoke a description of God as "God is everything or God is nothing" to mean God can be both good and evil at the same time because both good and evil are ostensibly things. This is dangerous because to assert God is evil means God can tell a lie. However that is contradictory from the counter example that God is capable to do anything except for one thing: God cannot tell a lie. (The quality of God of absolute truthfulness was proved by Karl Popper, *Conjecture and Refutation*, 1972 ed, over 45 years ago.)

What follows is Tradition 2 (*one ultimate authority ... God ... in our group conscience)* is mistaken by assuming it is necessarily God's will, and thus the traditions themselves do not self-validate as claimed.

As an alternative refutation, we present the following.

"the proposition that either God is everything or else God is nothing." (AA BB, pg 53)

LET: p thing; ~p not thing (no thing); q God.

God is equivalent to thing.		(1.1)
q=p ;	TFFT TFFT TFFT TFFT	(1.2)
God is equivalent to a thing (some things).		(2.1)
q=%p ;	NFCT NFCT NFCT NFCT	(2.2)
God is equivalent to every thing (all things)		(3.1)
q=#p ;	TCFN TCFN TCFN TCFN	(3.2)

Eqs.. 1.2, 2.2, and 3.2 as rendered are *not* tautologous (not proved as all TTTT's).

To weaken the argument in hopes of finding a proof, one replaces the connective equivalent with the connective Imply. Eq. 3.1 becomes:

God implies every thing (all things).		(4.1)
q>#p ;	TTFN TTFN TTFN TTFN	(4.2)

Eq. 3.2 as modified in 4.2 is still *not* tautologous.

The point is that God does *not* imply all things, or more strongly, God is *not* all things.

Refutation of AA "life being good to me" as "being stability or God"

From [AA, 2017]:

> My stability came out of trying to give, not out of demanding that I receive. The best of Bill: 46-47. (1.1.0)
>
> [attributed to: Wilson, Bill. (1955). The best of Bill: reflections on faith, fear, honesty, humility, and love. AA Grapevine, Incorporated.]
>
> August 21: **We just try**
>
> As long as I try, with all my heart and soul, to pass along to others what has been passed along to me, and do not demand anything in return, life is good to me.
>
> Before entering this program of Alcoholics Anonymous I was never able to give without demanding something in return. Little did I know that, once I began to give freely of myself, I would begin to receive, without ever expecting or demanding anything at all.
>
> What I receive today is the gift of "stability," as Bill did: stability in my A.A. program; within myself; but most of all, in my relationship with my Higher Power, whom I choose to call God. (2.1.1 - 2.3.1)

We rewrite Eq. 1.1.0 as: "Giving and not demanding to receive imply stability." (1.1.1)

LET p, q, r, s: demanding or expecting, giving, receive, stability or life or God.

(q&~(p>r))>s ; `TTT`**`F`**` TTTT TTTT TTTT` (1.1.2)

Remark 1.1.2: Eq. 1.1.2 is *not* tautologous, although deviating by one value, to refute the conjecture, denying a fond aphorism repeated in AA literature.

The anonymous commentary injects the notions of expecting for demanding and then of life and of God for stability, below.

(q&~(p>r))>s ; `TTT`**`F`**` TTTT TTTT TTTT` (2.1.2)

Remark 2.1.2: Eq. 2.1.2 is a restatement of 1.1.2 with the same truth table result.

~(q>p)>(q>(r&~p)) ; `TT`**`F`**`T TTTT TT`**`F`**`T TTTT` (2.2.2)

Remark 2.2.2: Eq. 2.2.2 is *not* tautologous, deviating by two values, to refute the flow of commentary, denying further the aphorism.

(r>s) ; `TTTT` **`FFFF`** `TTTT TTTT` (2.3.2)

Remark 2.3.2: Eq. 2.3.2 is *not* tautologous, deviating now by four values.

To resuscitate the argument, we take 2.2.1 as the antecedent to imply the consequent of 2.3.1: (2.4.1)

(~(q>p)>(q>(r&~p)))>(r>s) ; TTTT **FFFF** TTTT TTTT (2.4.2)

Remark 2.4.2: Eq. 2.4.2 is *not* tautologous, and equivalent to 2.3.2, to exasperate further the flow of the argument.

We recast the argument by placing God as the consequent or conclusion to read;

"If not giving for expecting to receive implies giving for receiving then God is good."

(~(q>p)>(q>r))>(s>(s=s)) ; TTTT TTTT TTTT TTTT (2.5.2)

Remark 2.5.2: Eq. 2.5.2 is tautologous, confirming the intention of the *misstated* aphorism, namely, that if good comes out of evil, then that is a proof of God, in that God is doing what only God can do, to disclose Himself as bringing good out of evil.

Confirmation for absolute necessity of honesty implies truthities of purity, unselfishness, and love

From [Speer 1896]:

> The four absolutes are purity, honesty, unselfishness, and love, as a moral summary of Jesus Christ.
>
> Because honesty is the only absolute as verifiable with a binary result of *proof* or contradiction, we take the necessity of honesty as the antecedent to imply the necessity of truthity (not invariant proof) for the other three combined absolutes of purity, unselfishness, and love. (1.1)
>
> LET p, q, r, s: purity, honesty, unselfishness, love. [Acronym PHUL as "full".]
>
> #(q>(s=s))>(#(p&(r&s))>(%s>#s)) ; TTTT TTTT TTTT TTTT (1.2)
>
> **Remark 1.2:** Eq. 1.2 is tautologous to confirm the claimed conjecture
>
> We note that honesty as proof does not imply three other attributes as truthities: (2.1)
>
> (q>(s=s))>((p&(r&s))>(%s>#s)) ;
> TTTT TTTT TTTT TNTN (2.2)

Confirmations of the Anderson COB theorem and the Anderson anti-paradox theorem

From [Tuggy 2009]:

> Anderson's ambitious project cuts against the grain of most contemporary philosophical theology. Consider the following inconsistent triad:
>
> C: If some claim appears after careful reflection to be contradictory I shouldn't believe it.
>
> O: The orthodox Christian doctrine of X appears after careful reflection to be contradictory.
>
> B: I should believe the orthodox Christian doctrine of X.
>
> What to do in the face of such a conundrum? There are three popular responses.

(1.1.0 - 1.4.0)

Remark 1.1.0- 4.1.0: We rewrite Eqs.. 1.1.0 - 4.1.0 for abstract clarity to simplify mapping:

C:	Some claim as contradictory implies non belief.	(1.1.1)
O:	The doctrine X implies contradiction.	(1.2.1)
B:	The doctrine X implies belief.	(1.3.1)
Goal:	C&O>B	(1.4.1)

LET p, q, r, s: claim, belief, doctrine X, s. (s@s) is contradiction.

C: (%p>(s@s))>~q ;	TTCT TTCT TTCT TTCT	(1.1.2)
O: r>(s@s) ;	TTTT **FFFF** TTTT **FFFF**	(1.2.2)
B: r>q ;	TTTT TT**FF** TTTT TT**FF**	(1.3.2)
C&O>B: (((%p>(s@s))>~q)&(r>(s@s)))>(r>q) ;	TTTT TTTT TTTT TTTT	(1.4.2)

Remark 1.4.2: Eq. 1.4.2 is tautologous, refuting the reviewer's claim of an inconsistent, triadic conundrum, and confirming the conjecture. We name this the *Anderson COB theorem*.

> A project this ambitious bristles with difficulties, but here I can only sketch out a central one. Anderson's project seems to crucially involve the following *non sequitur*: (1) If God exists, then God is incomprehensible. (2) Therefore, if God exists, then it is likely that humans in thinking about God along the lines of God's self-revelation in the Bible will be forced into apparently contradictory thoughts and statements. The problem is that (2) does not follow from (1), because Anderson's doctrine of "divine incomprehensibility" is just the uncontroversial claim that "although God can be known in part, he cannot be known fully and exhaustively" (p. 237). That

(2.1.1.1 - 2.3.1.1)

Remark 2.2.1.1: The simplified paraphrase of "likely contradictory belief" can be interpreted to mean two states of affairs depending on where the modal operator is placed in the phrase: "the possibility of believing in contradiction"; or "possibly the belief is contradictory". We map both, naming the former as a stronger possibility of belief (2.2.1.1) and the latter as a weaker possible belief (2.2.2.1).

LET p, q, r, s: God, belief, r, s.
(s@s) is contradiction.
(s=s) is tautology as in perfectly ineffable or unfathomable.

%p>((p>(s=s))&(q>(s@s))) ; TTN**F** TTN**F** TTN**F** TTN**F** (2.1.1.2)

%p>%(q>(s@s)) ; TTTC TTTC TTTC TTTC [stronger] (2.2.1.2)
%p>(%q>(s@s)) ; NNN**F** NNN**F** NNN**F** NNN**F** [weaker] (2.2.2.2)

Remark 2.2.1.2, 2.2.2.2: From the truth table results, Eq. 2.2.1.2 is a stronger possibility of belief to mean closer to tautology (all T's), while 2.2.2.2 is is a weaker possible belief to mean farther from tautology.

Eq. 2.1.1.2 implies 2.2.1.2:
(%p>((p>(s=s))&(q>(s@s))))>(%p>%(q>(s@s))) ;
TTTT TTTT TTTT TTTT [stronger] (2.3.1.2)
Eq. 2.1.1.2 implies 2.2.2.2:
(%p>((p>(s=s))&(q>(s@s))))>(%p>(%q>(s@s))) ;
NNTT NNTT NNTT NNTT [weaker] (2.3.2.2)

Remark 2.3.1.2: The stronger Eq. 2.3.1.2 is tautologous to refute the claim of the reviewer of *non sequitur* for (1) implying (2) and to confirm the conjecture of the reviewed author. We name this *Anderson's anti-paradox theorem*.

Refutation of Anselm's Proslogion

From [Proslogion 2020]:

First argument [edit]

There are various reconstructions of Anselm's first argument, such as Dr. Scott H. Moore's analyses, for example:[2]

- **Proposition 1**: God is a being than which none greater can be conceived.
- **Proposition 2**: If existence in reality is greater than existence in the mind alone, an imagined being who exists only in our mind is not a "being than which none greater can be conceived." A being than which none greater can be conceived must also exist in reality, where failure to do so would be a failure to be such.
- **Conclusion**: Thus a being than which none greater can be conceived must exist, and we call this being God.

Objection [edit]

Philosopher Immanuel Kant gave an objection to the argument, although it would be toward ontological arguments in general, rather than at Anselm specifically. In fact, it is actually unclear as to whether Kant had Anselm in mind at all. Kant's objection famously states that "existence is not a predicate." If Kant were considering Anselm's work in his analysis, he certainly left it up to the reader to grasp the applicability of the objection. One possible interpretation is to say that, because existence is not a predicate, a being that exists could not be said to be greater than one that does not exist; they would be equal.

Second argument [edit]

Just as the first, Anselm's second ontological argument can be formulated in numerous ways. William Viney, for instance, renders the second argument as follows:[3]

1. "God" means "that than which nothing greater can be conceived."
2. The idea of God is not contradictory.
3. That which can be thought of as not existing (a contingent being) is not as great as that which cannot be thought of as not existing (a necessary being).
4. Therefore, to think of God as possibly not existing (as contingent) is not to think of the greatest conceivable being. It is a contradiction to think of the greatest conceivable being as nonexistent.
5. Therefore, God exists.

Argument 1: (1.1.1 - 1.4.1)
Objection: (1.5.1)
Argument 2: (2.1.1 - 2.6.1)

LET p, q, r, s: God, being, reality, mind

p>q ; `TFTT TFTT TFTT TFTT` (1.1.2)

(%r>%s)>((%q&s)@((p>q)&%r)) ;
`CFCC TNTT FCNN NCFF` (1.2.2)

(p>q)>(p=q) ; `TTFT TTFT TTFT TTFT` (1.3.2)

((p>q)&((%r>%s)>((%q&s)@((p>q)&%r))))>((p>q)>(p=q)) ;
TTNT TT**F**T TTCT TTTT (1.4.2)

Remark 1.4.2: Eq. 1.4.2 as rendered is *not* tautologous. This refutes Moore's paraphrase of Anselm.

~(%q>~%q)=(s=s) ; CCTT CCTT CCTT CCTT (1.5.2)

Remark 1.5.2: Eq. 1.5.2 is *not* tautologous. This refutes the proffered interpretation of Kant's otherwise unintelligible objection.

p>q ; T**F**TT T**F**TT T**F**TT T**F**TT (2.1.2)
(p&s)>~(s@s) ; TTTT TTTT TTTT TTTT (2.2.2)
~(~(%(q&s)=(s=s))>~(#(q&s)=(s=s)))=(s=s) ;
FFFF FFFF FFFF FFFF (2.3.2)
(%(~(%(p&s)=(s=s))@(p>q)))=(~(%(p>q)=(s=s))>(s@s)) ;
CCCC CCCC CTCT CTCT (2.4.2)
%p=(s=s) ; CTCT CTCT CTCT CTCT (2.5.2)
(((p>q)&((p&s)>~(s@s)))&((~(~(%(q&s)=(s=s))>~(#(q&s)=(s=s)))=(s=s))>
((%(~(%(p&s)=(s=s))@(p>q)))=(~(%(p>q)=(s=s))>(s@s)))))>(%p=(s=s)) ;
CTCT CTCT CTCT CTCT [62 steps] (2.6.2)

Remark 2.6.2: Eq. 2.6.2 is *not* tautologous. This refutes Vivey's paraphrase of Anselm.

Eq. 2.3.2 is a contradiction. To force a redundant contingency value onto the being q in the antecedent does only slightly better: (2.3.2.1)

~((~(%(q&s)=(s=s))=(%s<#s))>~(#(q&s)=(s=s)))=(s=s) ;
FFFF FFFF FFNN **FF**NN (2.3.2.2)
with final result CTCT CTCT CTTT CTTT (2.6.2.2)

Denial of Armstrong's ontological method

From [van Inwagen 2014]:

> Any two mature unmaimed conspecific female spiders have the same anatomical characteristics
>
> Any spider and any insect share certain anatomical characteristics
>
> *Therefore*
>
> For any insect and any two mature unmaimed conspecific female spiders, there are anatomical characteristics that belong to that insect and to both spiders.

This argument is valid. If anyone doubts its validity, those doubts can be removed by the simple expedient of pointing out that its "obvious" translation into the quantifier-variable idiom is *formally* valid. And that obvious translation is this or something very much like it:

> $\forall x \forall y$ (x is a mature unmaimed female spider & y is a mature unmaimed female spider & x and y are conspecific $\rightarrow \forall z$ (z is an anatomical characteristic $\rightarrow$. x has $z \leftrightarrow y$ has z)).
>
> $\forall x \forall y$ (x is spider & y is an insect. $\rightarrow \exists z$ (z is an anatomical characteristic & x has z & w has z))
>
> *Therefore*
>
> $\forall x \forall y \forall z$ (x is an insect & y is a mature unmaimed female spider & z is a mature unmaimed female spider & y and z are conspecific . $\rightarrow \exists w$ (w is an anatomical characteristic & x has w & y has w & z has w)).[3]

Well and good. But... consider the second premise of this argument; and consider the obvious truth '$\exists x x$ is a spider . & $\exists x x$ is an insect'. From these two sentences one may formally deduce

> $\exists x$ is an anatomical characteristic.

[3] One might want to insert '&y≠z' at the obvious place. ...

(1.1.1-1.4.1)

1. Armstrong's ontological method

LET p; q; r; s; w, x, y, z:
insect; spider species; adult intact female spider; anatomical item; w, x, y, z.

(((#x>r)&(#y>r))&((#x&#y)>q))>(#z>((#x>#z)=(#y>#z))) ;
TTTT TTTT TTTT TTTT}128 (1.1.2)

((#x>q)&(#y>s))>(%z&((#x>%z)&(w>%z))) ;
CCCC CCCC CCCC CCCC}16
TTCC TTCC TTCC TTCC}16
TTTT TTTT TTCC TTCC}16
TTTT TTTT TTTT TTTT}64 (1.2.2)

((#x>p)&((#y>r)&((#z>r)&((#y&#z)>q))))>((%w>#z)&((((#x>%w)>(#y>%w))>(%w&#z))>%w)) ;

```
NNNN NNNN NNNN NNNN} 8
FFFF FFFF FFFF FFFF} 8
NNNN NNNN NNNN NNNN} 8
NFNF NFNF NFNF NFNF} 8
NNNN FFFF NNNN FFFF}16
NNNN NNNN NNNN NNNN} 8
NNNN NFNF NNNN NFNF} 8
NNNN NNNN NNNN NNNN}32
NNNN NFNF NNNN NFNF} 8
NNNN NNNN NNNN NNNN}24
```

(1.3.2)

Argument 1: ((1.1.1) & (1.2.1)) > (1.3.1) (1.4.1)

(((((#x>r)&(#y>r))&((#x&#y)>q))>(#z>((#x>#z)=(#y>#z))))&(((#x>q)&(#y>s))>(%z&((#x>%z)&(w>z)))))>(((#x>p)&((#y>r)&((#z>r)&((#y&#z)>q))))>((%w>#z)&((((#x>%w)>(#y>%w))>(%w&#z))>%w))) ;

```
NNNN NNNN NNNN NNNN}24
NFNN NFNN NNNN NNNN} 8
NNNN FFFF NNNN NNNN}16
NNNN NNNN NNNN NNNN} 8
NNNN NFNF NNNN NFNN} 8
NNNN NNNN NNNN NNNN}32
NNNN NNFF NNNN NNFF} 8
NNNN NNNN NNNN NNNN}24
```

(1.4.2)

Remark 1.4.2: Eq. 1.4.2 is *not* tautologous, so we apply the suggestion in Footnote 3 above. The obvious application point for us, which may not be what the author had in mind, was in the consequent of the first premise 1.1.1 as: (1.1.1.1)

((((#x>r)&(#y>r))&((#x&#y)>q))>(#z>((#x>#z)=(#y>#z))))&(#y@#z) ;

```
FFFF FFFF FFFF FFFF}32
NNNN NNNN NNNN NNNN}64
FFFF FFFF FFFF FFFF}32
```

(1.1.1.2)

The other application point for us could also be in the antecedent of the conclusion. The effect on *either* application point to Arg. 1 is the *same* truth table result as: (1.5.1)

((((((#x>r)&(#y>r))&((#x&#y)>q))>(#z>((#x>#z)=(#y>#z))))&(#y@#z))&(((#x>q)&(#y>s))>(%z&((#x>%z)&(w>z)))))>(((#x>p)&((#y>r)&((#z>r)&((#y&#z)>q))))>((%w>#z)& ((((#x>%w)>(#y>%w))>(%w&#z))>%w))) ;

```
TTTT TTTT TTTT TTTT}32
TTTT CCCC TTTT TTTT}16
TTTT TTTT TTTT TTTT} 8
TTTT TCTC TTTT TCTT} 8
TTTT TTTT TTTT TTTT}64
```

(1.5.2)

This means that 1.5.2 as tendered is *not* tautologous to deny the argument claimed as valid.

Confirmation of the aseity of Descartes without adornment

From [McBrayer 2018]:

Abstract: In his Mediations, Descartes introduces a notion of divine aseity that, given some other commitments about causation and knowledge of the divine, must be different than the Scholastic notion of aseity exemplified by Aquinas. Unfortunately for Descartes some commentators—contemporaries of both his and ours—have thought his "positive" notion of aseity to be incoherent. I argue that properly understanding the structure of the theistic argument in which the notion of aseity plays a role, along with considering Descartes broader views on causation, shows that the Cartesian notion of divine aseity is not just coherent but fits well into Descartes's overall conception of the divine. While he does innovate on Aquinas's notion of aseity in an interesting way, Descartes's view turns out to be very different than the view often attributed to him.

formulated explicitly. The following is an exhaustive list of potential causal explanations for God's existence:

(1) God is caused by another
(2) God is self-caused
(3) God is uncaused

God does not exist *a se* if his existence is caused by another, and so (1) has no relevance here. But given that Descartes is concerned in the second argument with finding the *efficient cause* of his (Descartes's) continued existence, the above list is too ambiguous. It can be clarified by reformulating (2) and (3) in terms of two narrower notions of aseity:

(2*) God is efficiently self-caused
(3*) God has no efficient cause

The positive aseity charge is that Descartes's argument is an endorsement of (2*). The traditional Thomistic, or "negative," notion of aseity is variously stated along the lines of either (3) or (3*).[6] If Descartes does in fact hold (2*), then he is introducing a radical new notion of aseity, since (2*) is inconsistent with both (3) and (3*). (Importantly for my argument below, note also that (3) entails (3*), but the reverse is not true.)

(1.1), (2.1.1), (2.2.1), (3.1.1), (3.1.2)

LET p: God. [We take "efficient" to mean proof as (s=s).]

~p>p ;	**F**TF**T** **F**TF**T** **F**TF**T** **F**TF**T**	(1.2)
p>p ;	TTTT TTTT TTTT TTTT	(2.1.2)
(p>p)>(s=s) ;	TTTT TTTT TTTT TTTT	(2.2.2)
((~p>p)&~(p>p))>p ;	TTTT TTTT TTTT TTTT	(3.1.2)
~((((~p>p)&~(p>p))>p)>(s=s))>p ;	TTTT TTTT TTTT TTTT	(3.2.2)

Remark 4.0: The conjecture is that:

God as self-caused is equivalent to God as efficiently self-caused. (4.1.0)

(2.1.1) = (2.2.1) (4.1.1)

(p>p)=((p>p)>(s=s)) ; TTTT TTTT TTTT TTTT (4.1.2)

God as efficiently self-caused is not equivalent to both God as uncaused and God as having no efficient cause. (4.2.0)

(2.2.1) ≠ (3.1.1) & (3.2.1) (4.2.1)

((p>p)>(s=s))@((((~p>p)&~(p>p))>p)&(~((((~p>p)&~(p>p))>p)>(s=s))>p)) ;
FFFF FFFF FFFF FFFF (4.2.2)

God as uncaused entails God as having no efficient cause. (4.3.0)

(3.1.1) > (3.2.1) (4.3.1)

(((~p>p)&~(p>p))>p)>(~((((~p>p)&~(p>p))>p)>(s=s))>p) ;
TTTT TTTT TTTT TTTT (4.3.2)

God as having no efficient cause does not entail God as uncaused. (4.4.0)

~((3.2.1) > (3.1.1)) (4.4.1)

~((~((((~p>p)&~(p>p))>p)>(s=s))>p)>(((~p>p)&~(p>p))>p))=(s=s) ;
FFFF FFFF FFFF FFFF (4.4.2)

Eqs.. 4.2.2 and 4.4.2 are *not* tautologous to refute the claims that

"God as efficiently self-caused is not equivalent to both God as uncaused and God as having no efficient cause"; and

"God as having no efficient cause does not entail God as uncaused".

What follows is that "God as self-caused" in the positive is logically equivalent to "God as uncaused" in the negative, hence not requiring additional explicitness. (5.0)

(2.1) = (3.1) (5.1)

(p>p)=(((~p>p)&~(p>p))>p) ;
TTTT TTTT TTTT TTTT (5.2)

Refutation of analytical theology as declarative or deductive theology

From [Arcadia 2017]:

Abstract: Analytic theology seeks to utilize conceptual tools and resources from contemporary analytic philosophy for ends that are properly theological. As a theological methodology relatively new movement in the academic world, this novelty might render it illegitimate. However, I argue that there is much in the recent analytic theological literature that can find a methodological antecedent championed in the fourteenth century known as declarative theology. In distinction from deductive theology—which seeks to extend the conclusions of theology beyond the articles of faith—declarative theology strives to make arguments for the articles of faith. It does it not to provoke epistemic assent to the truth of the articles, but serves as a means of faith seeking understanding. In this paper, examples are drawn from recent analytic discussions to illustrate the manner that analytic theology has been, is, and can be an instance of declarative theology, and thus a legitimate theological enterprise for today.

For deductive theology, first principle propositions serve as premises in a theological argument wherein the conclusion is an extension of the content of theology. For example, a deductive theologian could perhaps make the following argument:

(1) God is indivisible.
(2) Anything composed of parts is divisible.
∴ (3) God is not composed of parts.

(3.1)

LET	p,	q,	r,	s:	
	God,	divisibility,	parts,	a thing	[declarative]
	God,	division,	reducibility,	an entity	[deductive]

(~(p=q)&(#(s<r)=q))>~(p>r) ; TTTT T**F**TT TTCT T**F**TT (3.2)

Remark 3.2: Eq. 3.2 as rendered is not tautologous. This denies the instant example of deductive theology.

In distinction from deductive theology, according to Durandus, declarative theology inserts the first principle propositions as conclusions in theological arguments. For example, this procedure might look something like this:

(4) Any division of an entity diminishes that entity.
(5) God cannot be diminished.
∴ (6) God is indivisible.

(6.1)

(((#q<s)>(r<s))&~(p>r))>~(p=q) ;
TTTN TTTT TTT**F** TTTT (6.2)

Remark 6.2: Eq. 6.2 is *not* tautologous. This denies the instant example of declarative theology.

example, suppose someone affirmed the truth of the proposition *that Jesus Christ is one person with two natures* as it is formulated in the 'Definition' of Chalcedon. But then suppose that person was presented with the following argument:

(7) All persons are instance of one and only one nature.
(8) Jesus Christ is a person.
∴ (9) Jesus Christ is an instance of one and only one nature.

(9.1)

LET	p,	q,	r,	s:
	person,	Chris (God),	nature,	instance or mind.

((#p=(s>%r))&(q=%p))>(q=%r) ;
TTTC TTTT TTTT TTTT (9.2)

Remark 9.2: Eq. 9.2 is not tautologous. The denies the instant example. The "one and only one" phrase can be collapsed without side effect into "the necessity of one" as "necessarily possibly" which reduces to "possibly. This reduction trick is used below in 12.2.

For instance let us take the exchange between Michael Martin and Katherin Rogers in *Debating Christian Theism*. Martin marshals an argument against Thomas Morris' account of Christology from his *The Logic of God Incarnate* (Morris 1986). In that text Morris argues that:

(10) Christ is one person with two minds.

Each of Christ's minds correspond to one of the two natures that the 'Definition' of Chalcedon assigns to him. Martin, however, makes the following argument:

(11) Each person has one and only one mind.

(12) Either Jesus Christ is one person with one mind, or two persons with two minds (Martin 2013).

(12.0)

Remark 12.0: Michael Martin, a contra-Churchman, did further violence to Chalcedon by repeating Morris' enormity of using "mind" instead of "(moral) nature". We rewrite the conjecture using "nature" for "mind".

10.1 Christ (God) is one person with the necessity of the nature of God and of a person (both natures)
11.1 Each person has the necessity of one nature.
12.1. Either Jesus Christ (God) is one person with one nature, or two persons with two natures.

((q=(%p&#(r&(q&p))))&(%p>#%r))>(q=((%p&%r)+((%s<#s)&(p&r)))) ;

NNTT N**F**TT NNTT N**F**TT (12.2)

Remark 12.2: Eqs.. 12.2 is *not* tautologous. This refutes Martin's conjecture which apparently was accepted as a theorem by the journal editors. When Chalcedon is correctly interpreted in terms of nature, the conjecture deteriorates.

This exposition shows the utility of Meth8/VŁ4 as an immediate tool of universal logic for mapping analytical theology.

Refutation of the distributive assumption and absolute greatness assumption of Mark Murphy

From [Miller 2020]:

> About such an Anselmian being, Murphy defends two controversial assumptions:
>
> > *The Distributive Assumption*: "God exhibits the maximal level of the divine perfections, understood distributively – for *each* unqualified good-making property that God exhibits, God exhibits *that property* to the intrinsic maximum of its value" (12, emphasis his). (1.1.1)
> >
> > > **Remark 1.1.1:** Eq. 1.1.1 has words *each* and *that property* which we respectively take as possibly and necessarily.
> >
> > *The Absolute Greatness Assumption*: The "metaphysical limit of the good-making properties permits a being who exhibits those properties to that limit to be sufficiently great, absolutely speaking" (17). (1.2.1)
> >
> > > **Remark 1.2.1:** Eq. 1.2.1 has two phrases of limitation: "metaphysical limit"; and "that limit ... absolutely speaking". We respectively take these as possibly and necessarily.
> >
> > LET p, q, r, s: God, $A_{attribute}$,$B_{attribute}$, $C_{attribute}$.
> > (s=s) perfection.
> >
> > ((p>(s=s))>%(q&(r&s)))>
> > #(((q&(r+s))=((q&r)+(q&s)))&((q+(r&s))=((q+r)&(q+s)))) ;
> > NNNN NNNN NNNN NNNN (1.1.2)
> >
> > (%(q&(r&s))>(s=s))>(#(p>(s=s))>(q&(r&s))) ;
> > CCCC CCCC CCCC CCTT (1.2.2)

Eqs. 1.1.2 and 1.2.2 are *not* tautologous, refuting the claimed assumptions and denying subsequent conjectures. We suggest avoidance of word salad definitions and use of proof assistants to verify work.

Theorem of atonement

We approach the atonement from the standpoint of the Prayer of Consecration of the traditional Anglo Catholic communion office. [BCP 1928]

a full, perfect, and sufficient sacrifice, oblation, and satisfaction for the sins of the whole world

We take: *full* as complete or not partial; *perfect* as proof; *sufficient* as enough; *sacrifice* as praise and thanksgiving; *oblation* as solemn offering; and *satisfaction* as payment or fulfillment. Because *perfect* includes *complete* and *sufficient*, we take *perfect* or proof as the descriptor. We also take the state of *satisfaction* as perfection of fulfillment in God. We take f*or the sins of the whole world* as imperfect man.

We write the conjecture as:

The sins of the whole world as not perfectly godly imply perfect sacrifice and oblation to imply perfect godliness. (1.1)

LET p, q, r: perfection, sacrifice, oblation.

~p>((p&(q&r))>p) ; TTTT TTTT TTTT TTTT (1.2)

Remark 1.2: Eq. 1.1 is simplified further to take (r=r) as perfection in: (1.1.1)

~(r=r)>((r=r)&(q&r))>(r=r) ; TTTT TTTT TTTT TTTT (1.1.2)

This theorem has the advantage to avoid endless efforts to explain every detail in Medieval theology, as attributed to Thomas Aquinas, Anselm of Aosta, William of Ockham, and to a lesser extent John Duns Scotus, such as was the academic pastime of Rome along with its formularies for Eastertide dates.

Refutation of the axiology of God, to reduce claims to one theorem

From: Mugg, J. (2016). "The quietest challenge to the axiology of God: a cognitive approach to counterpossibles". Faith and Philosophy. 33:4:3. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2482&context=faithandphilosophy

2. Previous Work on Counterpossibles and the Axiological Question

Presumably, responding to the axiological question requires comparing the overall value of states of affairs in which God exists (Godly states of affairs) and states of affairs in which God does not exist (Godless states of affairs). Doing so requires assessing the truth-value of the following four claims:

1. If God were to exist, the world would be better.
2. If God were to exist, the world would be worse.
3. If God were not to exist, the world would be better.
4. If God were not to exist, the world would be worse.

(1.1 - 4.1)

LET p, q, r, s: God, world, r, s. Better is perfection(s=s); worse is imperfection (s@s).

(%(p>(s=s))=(s=s))>(q>(s=s)) ;
TTTT TTTT TTTT TTTT (1.2)
(%(p>(s=s))=(s=s))>(q>(s@s)) ;
TT**FF** TT**FF** TT**FF** TT**FF** (2.2)
~(%(p>(s=s))=(s=s))>(q>(s=s)) ;
TTTT TTTT TTTT TTTT (3.2)
~(%(p>(s=s))=(s=s))>(q>(s@s)) ;
TTTT TTTT TTTT TTTT (4.2)

Remark 2.2: Eq. 2.2 is the only one of the four claims which is *not* tautologous, reducing the claims to possibly three tautologies.

We perform a trick by rewriting the claims using iff as the equivalence connective.

(1.2.1 - 4.2.1)

(%(p>(s=s))=(s=s)) = (q>(s=s)) ;
TTTT TTTT TTTT TTTT (1.2.2)
(%(p>(s=s))=(s=s)) = q>(s@s)) ;
TT**FF** TT**FF** TT**FF** TT**FF** (2.2.2)
~(%(p>(s=s))=(s=s)) = (q>(s=s)) ;
FFFF FFFF FFFF FFFF (3.2.2)
~(%(p>(s=s))=(s=s)) = (q>(s@s)) ;
FFTT **FFT**T **FF**TT **FFT**T (4.2.2)

Remark 1.2.2: Eq. 1.2.2 is the only remaining claim which is tautologous. We take this to mean that the original premises as claimed are misstated as implications instead

of correctly as equivalents. Hence we simplify the claims by reducing four claims to one claim that is the only tautology. This effectively solves the problem of axiologies of God: "If and only God were to exist, the world would be better".

Refutation of Weingartner logic (WL) and axiom of non-contingent good

From [Weingartner, 2021]:

> The essence of the Weingartner logic system (WL) is the prime axiom that "somethings are good, but not willed by God". (1.1.0)
>
> > To avoid the ambiguous conjunction of "but", we rewrite Eq. 1.1.0 as the axiom of non-contingent good, namely, "God does not will some things that are good". (1.1.1)
> >
> > > LET p, q, r, s: God, things, r, s. Good is taken as tautology (s=s).
> >
> > ~(p>(%q>(s=s))) = (s=s) ; **FFFF FFFF FFFF FFFF** (1.1.2)
> >
> > However, the contradiction in Eq. 1.1.2 violates a rule in WL that denies the connective of material implication. Hence we replace it with the conjuction to overcome this defect.
> >
> > ~(p&(%q&(s=s))) = (s=s) ; TNT**F** TNT**F** TNT**F** TNT**F** (1.1.3)
> >
> > **Remark 1.1.3:** Eq. 1.1.3 is *not* tautologous, to refute the axiom, denying WL. By denying material implication, and replacing by conjunction, 1.1.2 as contrary is in fact strengthened in 1.1.3, but not to the point of tautology.

Shorter refutation of the odds form of Bayes' rule

From [McGrew 2018]:

> **5. Separationism: A broader error in the philosophy of religion**
>
> One can see this point schematically in the odds form of Bayes's Theorem:
>
> $$\frac{P(H)}{P(\sim H)} \times \frac{P(E|H)}{P(E|\sim H)} = \frac{P(H|E)}{P(\sim H|E)} \qquad (5.1)$$
>
> LET p, q, r: P, E, H.
>
> [We take the probability pipe symbol | for conditional probability with P( ) or conditional expectation with E( ).]
>
> (((p&r)\(p&~r))&((p&(r>q))\(p&(~r>q))))=((p&(q>r))\(p&(q>~r))) ;
> TFTF TFTF TFTF TFTF (5.2)
>
> **Remark 5.2:** Eq. 5.2 as rendered is *not* tautologous, therefore refuting the odds form of Bayes' rule and hence barring it from theoremhood in this briefest demonstration.
>
> What follows is that Bayes' rule as used is not appropriate for philosophy of religion or more narrowly for analytical theology as a bivalent and exact endeavor.

Refutation of Gettier problem of justified true/false belief

From [Gettier_unsolved 2020]:

> Critics of justified true belief assert "it's impossible to justify anything which is not true (where "truth" is a construct designed for the sake of argument as being some irrefutable fact)." (0.0)
>
> Justified true belief is defined as: A subject S knows that a proposition P is true if and only if: (4.1)
>
> [=] %s>(p=(%q>#q)) ; TNTN TNTN CNCN CNCN (4.2)
>
> P is true, (1.1)
>
> p=(%q>#q) ; CNCN CNCN CNCN CNCN (1.2)
>
> and S believes that P is true, (2.1)
>
> [&] s>(p=(%q>#q)) ; TTTT TTTT CNCN CNCN (2.2)
>
> and S is justified in believing that P is true (3.1)
>
> [&] (s>(q=q))>(s>(p=(%q>#q))) ;
> TTTT TTTT CNCN CNCN (3.2)
>
> Eqs.. 1.1 and 2.1 and 3.1 are equivalent to 4.1. (5.1)
>
> (((p=(%q>#q))&(s>(p=(%q>#q))))&((s>(q=q))>(s>(p=(%q>#q)))))= (%s>(p=(%q>#q))) ;
> CTCT CTCT TTTT TTTT (5.2)

Eq. 5.2 is *not* tautologous. Therefore justified true belief is not a theorem.

To answer Eq. 0.0 we rewrite it using falsity instead of truthity to read justified false belief as:

> A subject S knows a proposition is P is false if and only if P is false, and S believes P is false, and S is justified in believing P is false. (0.1)
>
> To answer Eq. 0.0, we cast Eq. 5.2 with falsity (%q<#q) instead of truthity (%q>#q). (6.1)
>
> (((p=(%q<#q))&(s>(p=(%q<#q))))&((s>(q=q))>(s>(p=(%q<#q)))))= (%s>(p=(%q<#q))) ;
> TCTC TCTC TTTT TTTT (6.2)

Eq. 6.2 is *not* tautologous. Therefore justified false belief is also not a theorem.

This means the Gettier problem as the superset of the justified belief arguments is refuted as a problem and resolved as a non-problem.

Refutation of the tetralemma and Buddhist logic

Abstract: The Buddhist tetralemma as a rendition of the Greek square of opposition produces four axioms for true, false, true and false (contradiction), and neither true nor false (contradiction). There is no designated proof value in Buddhist logic. Because Greek logic of about -350 was transmitted along with mathematical astronomy to India beginning in -100, Greek logic predates Buddhist logic by more than 200 years. Hence Buddhist logic is a trivial subset and mis-application of the Greek logic.

The tetralemma axioms of Buddhist logic are:

Affirmation: (0.1.1)

p=q ; **TFFT TFFT TFFT TFFT** (0.1.2)

Negation: (0.2.1)

p=~q ; **FTTF FTTF FTTF FTTF** (0.2.2)

Both: (0.3.1)

(p=q)&(p=~q); **FFFF FFFF FFFF FFFF** (0.3.2)

Neither: (0.4.1)

(p=q)-(p=~q) ; **FFFF FFFF FFFF FFFF** (0.4.2)

The rules of inference of Buddhist logic use the universal quantifier to mean everywhere (all locations), everything (all things), and always (all times), ie, all things are everywhere at all times.

Remark: The existential quantifier applies to rules only without the universal quantifier, as *only* in Eqs.. 1.2 and 2.2.

Whether p is q : (1.1)

%p=%q ; TCCT TCCT TCCT TCCT (1.2)

Whether p is not q: (2.1)

%p=%~q ; CTTC CTTC CTTC CTTC (2.2)

Whether p is q everywhere: (3.1)

#(p=q)=(p=p) ; N**FF**N N**FF**N N**FF**N N**FF**N (3.2)

Whether p is q always: (4.1)

#(p=q)=(p=p) ; N**FF**N N**FF**N N**FF**N N**FF**N (4.2)

Whether p is q in everything: (5.1)

#(p=q)=(p=p) ; NFFN NFFN NFFN NFFN (5.2)

Whether p is not q everywhere: (6.1)

#(p=~q)=(p=p) ; FNNF FNNF FNNF FNNF (6.2)

Whether p is not q always: (7.1)

#(p=~q)=(p=p) ; FNNF FNNF FNNF FNNF (7.2)

Whether p is not q in everything: (8.1)

#(p=~q)=(p=p) ; FNNF FNNF FNNF FNNF (8.2)

The axioms and rules of inference above are *not* tautologous. This refutes Buddhist logic.

Remark: It is mis-reported, notably by Graham Priest, that the four axioms of Buddhist logic represent a four-valued logic as, for example: true; false; true and false (contradiction); and neither true nor false (contradiction). Such a three-valued logic has no designated proof value for tautology.

This places Buddhist logic as a subset of Greek logic, for which there are historical reasons. The Greek square of opposition dates to about -350, but the Buddhist rendition dates to -50. This is because Greek philosophical knowledge was exported west to east during that 300 year period as concurrent with the transmission of mathematical astronomy to India.

Answer to Swinburne's bodies or souls, confirming body *and* soul for man and/or conscience

From [Swinburne, 2021.3]:

> [The following was cooked up while the longer paper argument was read.]
>
> We write the question as:
>
> > "If God creates the body and soul to produce man/conscience, then that is good, implying that if no body and/or soul then no man/conscience is not good." (1.1.1)
> >
> > We evaluate the question in four variables where "man" can double as "conscience".
> >
> > LET p, q, r, s: God, conscience or man, body, soul.
> >
> > (((p>(r&s))>q)>(s=s))>(~(r&s)>(~q>(s=s))) ;
> > (((p>(r&s))>q)>(s=s))>(~(r+s)>(~q>(s=s))) ;
> > TTTT TTTT TTTT TTTT (1.1.2, 1.1.3)
> >
> > **Remark 1.1.2, 1.1.3:** Eqs. 1.1.2 and 1.1.3 are tautologous, to confirm man is body and soul and also conscience is body and soul, denying that man is *exclusively* soul and that conscience is *exclusively* soul. In fact, the antecedent and consequent are also tautologous.

Refutation of Burley's paradox and rule for irrelevant propositions

From [Stump 1985]:

We can schematize this *petitio* argument as follows:

Opponent	*Respondent*	*Reason*
(1) You grant the king to be seated or not to be seated.	(1a) T	(1b) (1) is the *petitum*.
(2) The king is seated.	(2a) ?	(2b) (2) is irrelevant and uncertain.
(3) The king is not seated.	(3a) –	

(1.1.1)

LET p, q, r, s: grant, king, Rome, seat

((p>((q&s)+~(q&s)))&(q&s))>~(q&s) ;
TTTT TTTT TT**FF** TT**FF** (1.1.2)

The purpose of this argument is to show that in obligations disputations it is possible to prove any falsehood compossible with the *positum*. In this particular case, Burley does so by taking as the second

Remark 1.1.2: Eq. 1.1.2 as rendered is *not* tautologous and hence refuted as a paradox. The clause (q&s) can be replaced with (s=s) to show irrelevance as claimed. However "to show that in obligations disputations it is possible to prove any falsehood compossible with the *positum*" is denied by this truth table result, to refute Burley's rule of irrelevant propositions as trivial.

Opponent	*Respondent*	*Reason*
(1) (i) You are in Rome or (ii) that you are in Rome is to be granted.	(1a) T	(1b) (1) is the *positum*.
(2) That you are in Rome is to be granted.	(2a) F	(2b) (2) is irrelevant and false.
(3) That you are in Rome follows from the *positum* and the opposite of something correctly denied.	(3a) T	(3b) (3) follows from the truth of (1) and the falsity of (2)
(4) That you are in Rome is to be granted.	(4a) –	

LET p, q, r, s: grant, king, Rome, something.

((((r+(r>p))&(r>p))&(((r+(r>p))&(r>p))>r))&~((s>(s@s))>(s=s)))>(r>p) ;
TTTT TTTT TTTT TTTT (1.2.1)

Remark 1.2.1: Eq. 1.2.1 is tautologous. Instance two of the literal (r>p) can be replaced with (s=s) to show irrelevance as claimed with the same result:

((((r+(r>p))&(s=s))&(((r+(r>p))&(r>p))>r))&~((s>(s@s))>(s=s)))>(r>p) ;
TTTT TTTT TTTT TTTT (1.2.2)

We can get further insight into the importance of this rule for irrelevant propositions and its significance for the function of obligations by considering the second part of objection (O). Suppose, the objector says, that at step (2) of the argument in (E3) we had this conjunction:

(2C) (a) You are in Rome, and (b) that you are in Rome and that you are a bishop have the same truth-value.

((((r+(r>p))&(r&(r=q)))&(((r+(r>p))&(r>p))>r))&~((s>(s@s))>(s=s)))>(r>p) ;
TTTT TTTT TTTT TTTT (1.2.3)

Even if the objector's objection is based on an invalid principle and a confused evaluation of (2C), nonetheless I do not think that his objection is without philosophical interest. The objector has just cast (2C) in a form which is unfortunate for his purposes. We can help him out by recasting it as a conditional:

(2C′) If (a) you are in Rome, then (b) 'You are in Rome' and 'You are a bishop' have the same truth-value.

((((r+(r>p))>(r&(r=q)))&(((r+(r>p))&(r>p))>r))&~((s>(s@s))>(s=s)))>(r>p) ;
TTTT TTTT TTTT TTTT (1.2.4)

Eqs.. 1.2.3 and 1.2.4 are tautologous. This confirms that variations of the irrelevant clause do not produce side effects, to end in the same result, and denies the rule of irrelevant propositions as trivial.

Refutation of Calvin's doctrine of lesser magistrate

From [Lesser_magistrate 2020]:

> The doctrine of the lesser magistrate is dependent on the *private citizen argument* from prior to the Reformation, which stated that any evil done by an officeholder is committed as a private citizen, rather than by the office. A related example in the United States is the procedure in which the President can be removed by lesser figures.
>
> The doctrine of the lesser magistrate was first popularized in a simpler form by John Calvin, who wrote that private Christians must submit to the ruling authorities, but there are "popular magistrates" who have "been appointed to curb the tyranny of kings". When these magistrates "connive at kings when they tyrannise and insult over the humbler of the people" they "fraudulently betray the liberty of the people" when God has appointed them guardians of that liberty. (1.0)

Remark 1.0: We rewrite the conjecture, independent of the private citizen opinion above, as:

[Assuming a democratic republic form of freely elected government]

If the electorate appoints the electees and the electorate and the electees form the Government, then if the electees are bad, then the Government (or/and the electorate) is bad. (1.1.1), (1.2.1), (1.3.1)

LET p, q, r: electorate; electees; Government; (s@s) bad.

((p>q)&((q&p)>r))>((q=(s@s))>(r=(s@s))) ;
TTTT **F**TTT TTTT **F**TTT (1.1.2)

((p>q)&((q&p)>r))>((q=(s@s))>((r+p)=(s@s))) ;
TTTT **F**TTT TTTT **F**TTT (1.2.2)

((p>q)&((q&p)>r))>((q=(s@s))>((r&p)=(s@s))) ;
TTTT TTTT TTTT TTTT (1.3.2)

Eqs.. 1.1.2 and 1.2.2 as rendered have identical truth table values as *not* tautologous. This means the consequent of "if the electees are bad, then the Government (or the electorate) is bad" denies these conjectures. However, if the consequent of "if the electees are bad, then the Government *and* the electorate are bad" confirms that conjecture.

Originally Calvin framed the argument on assumption of the private citizen argument, namely, that the electee is responsible for misbehavior, not the government office to which appointed. We write that assumption as:

> If the electee is bad as part of the Government, then the Government office is not necessarily bad. (2.1)

((p=(s@s))<r)>(r>#(s@s)) ; TTTT TTTT TTTT TTTT (2.2)

Eq. 2.2 is tautologous, confirming the assumption. We therefore take that assumption as the antecedent to

the consequent as 1.3.2:

(2.2)>(1.3.2). (3.1)

(((p=(s@s))<r)>(r>#(s@s)))>(((p>q)&((q&p)>r))>((q=(s@s))>((r&p)=(s@s)))) ;
TTTT TTTT TTTT TTTT (3.2)

Eq. 3.2 is tautologous and means in effect that misbehavior by electees reflects back on the electorate *and* the Government as bad. What follows is that the electorate is just as responsible for misbehavior of electees as is the Government, in other words, the buck stops at the electorate, and hence the importance of voting.

Theologically this means that MacArthur's invocation of the lesser magistrate argument is specious and not a prophylactic to Romans 13, to obey civil authority, as claimed.

Refutation of causal time loops and the immaculate conception

From [Skrzypek, 2020]:

Abstract: The doctrine of the immaculate conception, which is a dogma binding on all Roman Catholics and also held by members of some other Christian denominations, holds that Mary the mother of Jesus Christ was conceived without the stain of original sin as a result of the redeeming effects of Christ's later life, passion, death, and resurrection. In this paper, I argue first that, even on an orthodox reading of this doctrine, the immaculate conception seems to result in a kind of causal time loop. I then consider several common philosophical objections to causal time loops, showing how each is either not a serious problem for causal time loops in general or is not a serious problem for the immaculate conception time loop in particular because of some particular features of that particular loop. The upshot of this discussion is that it shows that anyone who is committed to the dogma of the immaculate conception is also committed to the possibility, and, indeed, the actuality, of at least one causal time loop, but also that this is no reason to reject the dogma, since all of the major worries for causal time loops can be resolved in one way or another.

I. Introduction A causal time loop is a state of affairs in which some later event is at least a partial cause of some earlier event which is also at least a partial cause of the later event.[1] Such a state of affairs is called a causal time *loop* because in such a state of affairs the direction of causality loops back on itself. ... (1.1.0)

> **Remark 1.1.0:** We object to the words "earlier" and "later" as placing undue emphasis on the temporality of events rather than the sequence of states. Instead we use "previous" and "subsequent" states of affairs. We also replace "at least a partial" with the modal "possibly". We rewrite the definition of causal "time loop" as causal "state sequence", to read:
>
> "A causal state sequence is the state of affairs in which some subsequent state is possibly a cause of some previous state that is also possibly a cause of the subsequent state. (1.1.1)
>
> > We can demark the two states based on one variable such as s' and s", but prefer to use two separate variables for clarity and brevity.
> >
> > LET p, q: previous state, subsequent state.
> >
> > (p<q)>(%(q>p)&%(p>q)) ; T⊆TT T⊆TT T⊆TT T⊆TT 11 steps (1.1.2)
> >
> > Confirmed by the free modal *street prover* Molle-1.0 at sourceforge.net:
> > ~(P=>Q)=>(<>(Q=>P)&<>(P=>Q)) Red, reflexive on 21 steps (1.1.3)
> >
> > **Remark 1.1.2:** Eq. 1.1.2 is *not* tautologous, to refute the claimed definition, denying the following 15 conjectures for: six loops; three dogmatic sources; and six causal and revised states.
> >
> > As to the object of the paper, the immaculate conception (Mary herself being born without sin) is also refuted on historical grounds. We know Joachim and Anne who miraculously in old age became the parents of Mary, the Virgin Mother of God, all of whom were blessed, but none of whom are God.
> >
> > The Orthodox and Roman Catholic doctrine that Mary was forever a virgin is also not

supported by Scripture. The Hebrews knew that a marriage was not a marriage without consummation (at some point in time), and that Joseph and Mary were in fact married. However since Jesus was conceived by the Holy Ghost, the Virgin Mary separated from Joseph to visit Elizabeth in a cloistered setting for duration of her term.

After the Incarnation and return from Egypt, it is also likely Mary and Joseph were the subsequent parents of Jesus' contemporary four half-brothers, James, Joses, Jude, and Simon. (The further doctrines of the bodily assumption/dormition of Mary into heaven, as Enoch, Elijah, Moses, and Jesus, and that Mary subsequently became the co-redemptrix as queen of heaven are not supported by Scripture above tradition. The Romish doctrine of purgatory also invokes impossible logistical problems for her.)

Note added later. Publication of the captioned paper speaks to suspicious editing of Notre Dame's *Journal of Analytic Theology*. For example, including the instant subject matter in a disparate volume/issue devoted to qua salvation, Muhammadanist apologetic, practice of Satanism, and award of a trivial diversity prize implies rush to press. Significantly, no papers are published for one year as of September, 2021. None of the papers or reviews makes use of recent advances in analytical logic such as the contribution of mathematical logic to bivalent proof assistants with replicable scripts.

Refutation of a dilemma for contradictory Christology, but for the wrong reasons

From [Page, 2021]:

> **Abstract:** Jc Beall offers a novel resolution to worries about Christ's contradictory nature by introducing an account of logical consequence that allows for true contradictions. However, to prevent his view from exploding into heresy, Beall must deny that conditionals detach. But without detachment, the language fails to capture other true entailments which must be included in a complete account of Christ. Beall faces a dilemma, then, between heresy and inadequacy.

In a reply to Tim Pawl's "Explosive Theology," Jc Beall defends Contradictory Christology against Pawl's allegation that it is committed to heresies, such as the claim that Christ is not divine.[1] To explain why, he discusses the following argument:

1. That Christ is divine entails that Christ is impassible.
2. If A entails B then ¬B entails ¬A
3. So, that Christ is passible entails that Christ is not divine. (1.1.0 - 1.3.0)

Beall is committed to Christ's possibility so (3) would be a dire result. However, on Beall's view, the argument fails because (2) is false. The entailment at work in (1) is theological entailment (⊢θ) which, unlike logical entailment (⊢), does not contrapose.

Remark 1.1.0-1.3.0: We rewrite the sentences to be theologically correct according to Anglo Catholicism, in that Christ is divine *is* perfect and further avoid injection of the notorious artifice of entailments as turnstiles:

LET p, q, r, s: Christ, A, passible, B or s.

1. Christ is divine implies Christ *as* not passible. (1.1.1)

(p>(s=s))>(p>~r) ; `TTTT TFTF TTTT TFTF` (1.1.2)

2. If A implies B then ~B implies ~A. (1.2.1)

(q>s)>(~s>~q) ; `TTTT TTTT TTTT TTTT` (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is an obvious tautology, to refute the notion of its failure, denying Beall's defense of contradictory Christology.

3. Hence Christ *as* passible implies Christ is not divine.

(((p>(s=s))>(p>~r))&((q>s)>(~s>~q)))>((p>r)>~(p>(s=s))) ;
`FTFT FTFT FTFT FTFT` (1.3.2)

Remark 1.3.2: Eq. 1.3.2 is *not* tautologous, to refute the dilemma argument, denying explosive theology.

The sentence format of Christ is divine *is* perfect (p>(s=s)) is not the same as Christ is impassible (p>~r), although Page attempts this reduction in effect with "Christ is divine" (p>divine) to bolster the dilemma conjecture as tautologous.

Hence all three authors are denied. Had they invoked a free modal logic *street prover* such as Molle-1.0 at sourceforge.net with replicable scripts then these distinctions of denial can appear.

Refutation of the fundamental problem of Christology

From [Beall 2019]:

> The fundamental problem of Christology is the apparent contradiction of Christ's having two apparently complementary – contradiction-entailing – natures, the divine and the human (see Cross 2011). This problem may be sharpest for Conciliar Christology, as in Timothy Pawl's work (2014; 2016); however, the prima facie problem is clear for any orthodox or traditional Christianity according to which Christ has two apparently complementary natures.
>
> Here is one way to see the fundamental problem:
>
> 1. Christ is immutable (in virtue of Christ's divine nature).
> 2. Christ is mutable (in virtue of Christ's human nature).
> 3. Therefore, Christ is both mutable and not mutable (via logic).

(0.1)

Remark 0.1: We reject Eq. 0.1 as inexact for Anglo Catholicism and rewrite it as:

If God created man who is mutable then if Christ is God who is not mutable and Christ is God and man, then Christ is not mutable. (4.1)

LET p, q, r, s: God, Christ, man, mutable.

(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>~s) ;
TTTT TTTT TTTT TTTT (4.2)

Remark 4.2: Eq. 4.2 is tautologous, confirming there is no "fundamental problem".

Eq. 4.2 also has the advantage of showing that Christ *as* mutable is *not* tautologous:

(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>s) ;
TTTT TTT**F** TTTT TTTT (4.3)

Moreover for the "fundamental problem" as consequent, for Christ as mutable *and* not mutable, that also is *not* tautologous:

(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>(~s&s)) ;
TTTT TTT**F** TTTT TTTT (4.4)

Eq. 4.2 also fits as a consequent to the primary antecedent of defining God the Holy Trinity as:

If God is equivalent to Father, Son, and Holy Ghost, then
if God created man who is mutable then if Christ is God who is not mutable and Christ is God and man, then Christ is not mutable. (6.1)

LET p, q, r, s, t, u: God, Christ, man, mutable, Father, Holy Ghost.

(p=((t&q)&u))>
((((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>~s)) ;
TTTT TTTT TTTT TTTT}128 (6.2)

Remark 6.2: In the consequent for (q>s) or (q>(~s&s)), the truth table result is the same as for Eqs. 4.3 and 4.4 as `TTTT TTTF TTTT TTTT}128`.

After all of this, we ask why mutability was claimed as a fundamental problem of Christology in the first place, and can only point to a root cause as theology *outside* that of the Historic Church.

This example utilizes application of Meth8/VŁ4 to conjectures in analytical theology.

Refutation of religions with no answer to the fundamental problem of Christology

We assume the method and apparatus of Meth8/VŁ4 with Tautology as the designated proof value, **F** as contradiction, N as truthity (non-contingency), and C as falsity (contingency). The 16-valued truth table is row-major and horizontal, or repeating fragments of 128-tables, sometimes with table counts, for more variables. (See ersatz-systems.com.)

LET ~ Not, ¬ ; + Or, ∨, ∪, ⊔ ; - Not Or; & And, ∧, ∩, ⊓, ·, ∘ , ⊗ ; \ Not And;
> Imply, greater than, →, ⇒ , ↦, ≻, ⊃, ↠ ; < Not Imply, less than, ∈, ≺, ⊂, ⊬, ⊭, ←, ≲ ;
= Equivalent, ≡, :=, ⇔, ↔, ≙, ≈, ≃ ; @ Not Equivalent, ≠, ⊕;
% possibility, for one or some, ∃, ∃!, ◊, M; # necessity, for every or all, ∀, □, L;
(z=z) ⊤ as tautology, ⊤, ordinal 3; (z@z) **F** as contradiction, Ø, Null, ⊥ , zero;
(%z>#z) N as non-contingency, Δ, ordinal 1; (%z<#z) C as contingency, ∇, ordinal 2;
~(y < x) (x ≤ y), (x ⊆ y), (x ⊑ y); (A=B) (A~B).
Note for clarity, we usually distribute quantifiers onto each designated variable.

From: Beall, J.C. (2019). A defense of contradictory Christology. Journal of analytic theology. 7:400-433.
journals.tdl.org/jat/index.php/jat/article/view/293/518 jc.beall@uconn.edu

The fundamental problem of Christology is the apparent contradiction of Christ's having two apparently complementary – contradiction-entailing – natures, the divine and the human (see Cross 2011). This problem may be sharpest for Conciliar Christology, as in Timothy Pawl's work (2014; 2016); however, the prima facie problem is clear for any orthodox or traditional Christianity according to which Christ has two apparently complementary natures.

Here is one way to see the fundamental problem:

1. Christ is immutable (in virtue of Christ's divine nature).
2. Christ is mutable (in virtue of Christ's human nature).
3. Therefore, Christ is both mutable and not mutable (via logic).

(0.1)

Remark 0.1: We reject Eq. 0.1 as inexact for Anglo Catholicism and rewrite it as:

If God created man who is mutable then if Christ is God who is not mutable and Christ is God and man, then Christ is not mutable. (4.1)

LET p, q, r, s: God, Christ, man, mutable.
(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>~s) ;
TTTT TTTT TTTT TTTT (4.2)

Remark 4.2: Eq. 4.2 is tautologous, confirming there is no "fundamental problem".

Eq. 4.2 also has the advantage of showing that Christ *as* mutable is *not* tautologous:

(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>s) ;
TTTT TTT**F** TTTT TTTT (4.3)

Moreover for the "fundamental problem" as consequent, for Christ as mutable *and* not

mutable, that also is *not* tautologous:

(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>(~s&s)) ;
TTTT TTT**F** TTTT TTTT (4.4)

Eq. 4.2 also fits as a consequent to the primary antecedent of defining God the Holy Trinity as:

If God is equivalent to Father, Son, and Holy Ghost, then
if God created man who is mutable then if Christ is God who is not mutable and Christ is God and man, then Christ is not mutable. (6.1)

LET p, q, r, s, t, u: God, Christ, man, mutable, Father, Holy Ghost.
(p=((t&q)&u))>((((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>~s)) ;
TTTT TTTT TTTT TTTT}128 (6.2)

Remark 6.2: In the consequent for (q>s) or (q>(~s&s)), the truth table result is the same as for Eqs. 4.3 and 4.4 as TTTT TTT**F** TTTT TTTT}128.

After all of this, we ask why mutability was claimed as a fundamental problem of Christology in the first place, and can only point to a root cause as theology *outside* that of the Historic Church.

What follows is that religions without a tautological answer to the fundamental problem of Christology are invalidated. We use Buddhism, from which Mormonism is a subset.

As taught by Buddha, existence is a dream and not real. In practice, the Buddha is adored and worshiped as god in a seated figure of golden statues in temples. Buddha is deemed mutable and hence not the immutable God of the Historic Church.

If God created man who is mutable then if Buddha is mutable and
Buddha is God and man, then Buddha is not mutable. (7.1)

LET p, q, r, s: God, Buddha, man, mutable.
((p>(r>s))>((q>s)&(q=(p&r))))>(q>~s) ;
TTTT TTTT TTTT TTT**F** (7.2)

Similarly we render Mormonism with Christ as *not* God, but man as a son of God:

If God created man who is mutable then if Christ is mutable and
Christ is not God and man, then Christ is mutable. (8.1)

LET p, q, r, s: God, Christ, man, mutable.
(((p>(r>s))>((q>s))&(q=~(p&r))))>(q>s) ;
TT**F**T TT**F**T TTTT TTTT (7.2)

Remark 7.2, 8.2: Eqs 7.2 and 8.2 are *not* tautologous, refuting respectively Buddhism and Mormonism, to deny non Christian religions as a subset of Buddhism.

Refutation of an answer to the coherence objection, and the solution

We evaluate the coherence objection by denying an alternative answer to it, and by refuting it in two ways.

1. Alternative answer to the coherence objection

From [Hauser 2020]:

Abstract:

According to the doctrine of the Incarnation, one person, Christ, has both the attributes proper to a human being and the attributes proper to God. This claim has given rise to the *coherence objection*, i.e., the objection that it is impossible for one individual to have both sets of attributes. Several authors have offered responses which rely on the idea that Christ has the relevant human properties in virtue of having a concrete human nature which has those properties. I show why such responses should be rejected and, in light of that, propose an alternative response to the coherence objection.

Concluding footnote before

Conclusion:

[69]In fact, *unlike* the case of Christ's mutability and immutability, it may be that there would be no incoherence even if there were overlap, for it is not clear that there is any incoherence in something's being both timelessly F and temporally F. For example, Christ timelessly knows with his divine nature that Peter betrays Christ at t, which implies that Christ timelessly knows that Peter betrays Christ at t; but it is also the case that, at some t^* after t, Christ knows at t^* with his human nature that Peter betrayed Christ at t, which implies that Christ temporally knows that Peter betrays Christ at t; and hence Christ both timelessly knows and temporally knows that Peter betrays Christ at t.

(69.1.1 - 69.4.1)

LET p, q, r, s: Peter, q, time, God the Son (Christ).

Note: That only the three variables above are used within the universal logic of VŁ4 does not suggest a three-valued logic is intended to map the conjecture. This speaks to the compactness of representation for analytical theology in VŁ4.

The nature(s) of God the Son are differentiated by:

The divine nature of Christ is the necessity of perfection, and (0.1.1.1)
the human nature of Christ is the possibility of perfection. (0.1.2.1)

#(q=q) = (q=q) ; NNNN NNNN NNNN NNNN (0.1.1.2)
%(q=q) = (q=q) ; TTTT TTTT TTTT TTTT (0.1.2.2)

For time t and t* ("after t"), the times are differentiated by:

the necessity of t, and (0.2.1.1)
not the possibility of t. (0.2.2.1)

Remark 0.2.2.1: Eq. 0.2.2.1 does not specify where "not the possibility of t" is on the line of the arrow of time. Precisely, "not the possibility of t" could be a point greater than or lesser than the "necessity of t".

#r = (q=q) ; **FFFF** NNNN **FFFF** NNNN (0.2.1.2)
~%r = (q=q) ; NNNN **FFFF** NNNN **FFFF** (0.2.2.2)

For timelessly, it is not the state of "the necessity of t" and "not the possibility of t". (0.3.1.1)
~(#r&~%r) = (q=q) ; TTTT TTTT TTTT TTTT (0.3.1.2)

Remark 0.3.1.2: Eq. 0.3.1.2 has the equivalent truth table result as 0.1.2.2 to suggest the human nature of Christ as the possibility of perfection is equivalent to timelessly. This was an unintended result from the mapping.

For temporally, it is the state of "the necessity of t" or "not the possibility of t". (0.4.1.1)
#r+~%r ; NNNN NNNN NNNN NNNN (0.4.1.2)

Remark 0.4.1.2: Eq. 0.4.1.2 has the equivalent truth table result as 0.1.2.1 to suggest the divine nature of Christ as the necessity of perfection is equivalent to temporality. This was an unintended result from the mapping.

The Imply connective as > is also taken to mean knows.

Betrayal is implying God is not perfection as ~ (s=s), which is also a lie as (s@s).

Breaking down Footnote 69 into components, we have:

Christ timelessly knows with his divine nature that Peter betrays Christ at t, (69.1.1.1)
which implies that
Christ timelessly knows that Peter betrays Christ at t (69.1.2.1)
[Conclusion of implication] (69.1.3.1)

but it is also the case that
At some t* after t, Christ knows at t* with his human nature that Peter betrayed Christ at t, (69.2.1.1)
which implies that
Christ temporally knows that Peter betrays Christ at t. (69.2.2.1)
[Conclusion of implication] (69.2.3.1)

Hence, Christ both timelessly knows and temporally knows that Peter betrays Christ at t. (69.3.1.1)

[Conclusion of conjecture] (69.4.1.1)

((s>#(q=q))&~(#r&~%r))>((p>(s>(q@q)))&#r) ;
FFFF NNNN CCCC TCTC (69.1.1.2)
(s&~(#r&~%r))>((p>(s>(q@q)))&#r) ;
TTTT TTTT **FFFF** N**F**N**F** (69.1.2.2)
(((s>#(q=q))&~(#r&~%r))>((p>(s>(q@q)))&#r))>
((s&~(#r&~%r))>((p>(s>(q@q)))&#r)) ;
TTTT TTTT NNNN NNNN (69.1.3.2)

(#r<~%r)&((s>%(q=q))&~%r) ;
FFFF FFFF FFFF FFFF (69.2.1.2) internal antecedent
Note that: (#r<~%r)=(~%r>#r)
(~%r>#r)&((s>%(q=q))&~%r) ;
FFFF FFFF FFFF FFFF (69.2.1.2) internal antecedent
(s&(#r+%r))>(p>((s>(q@q))&#r)) ;
TTTT TTTT TNTN T**F**T**F** (69.2.2.2)

((#r<~%r)&((s>%(q=q))&~%r))>((s&(#r+%r))>(p>((s>(q@q))&#r))) ;
TTTT TTTT TTTT TTTT (69.2.3.2)

(s&~(#r&~%r))>((p>(s>(q@q)))&#r) ;
TTTT TTTT **FFFF** N**F**N**F** (69.3.1.2)

(((((s>#(q=q))&~(#r&~%r))>((p>(s>(q@q)))&#r))>
((s&~(#r&~%r))>((p>(s>(q@q)))&#r)))&(((#r<~%r)&((s>%(q=q))&~%r))>((s&(#r+
%r))>(p>((s>(q@q))&#r)))))>((s&~(#r&~%r))>((p>(s>(q@q)))&#r)) ;
TTTT TTTT CCCC TCTC (69.4.1.2)

Eq. 69.4.1.2 is *not* tautologous. This refutes the instant conjecture to answer the coherence objection.

2. Refutation of the coherence objection

2.1. To the coherence objection, the alternate answer above attempts to map omniscient states of the mind of God into omnipresent states of the time of God. The fact that God is unfathomable denies such attempted mappings. (See our Popper proof of the moral God of Orthodox Christianity for details on ineffability.)

2.2. The quoted text recites that the coherence objection is *unlike* the fundamental problem of Christology. (See our refutation of the fundamental problem of Christology.) We substitute variables from the alternate answer to the coherence objection to our refutation and solution of the fundamental problem of Christology.

If God created man who is mutable then if Christ is God who is not mutable and Christ is God and man, then Christ is not mutable. (4.1.1)

LET p, q, r, s: God, Christ, man, mutable.

(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>~s) ;
TTTT TTTT TTTT TTTT (4.1.2)

We substitute human nature for mutable and divine nature for not mutable, to read:

LET p, q, r, s: God, Christ, man, human nature.

If God created man who has human nature then if Christ is God who has divine nature and Christ is God and man, then Christ is not human nature. (4.2.1)

(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>~s) ;
TTTT TTTT TTTT TTTT (4.2.2)

Eq. 4.2.2 has the further advantage of showing Christ *as* human nature is *not* tautologous as:

If God created man who has human nature then if Christ is God who has divine nature and Christ is God and man, then Christ is human nature. (4.2.1)

(((p>(r>s))>((q=p)>~s))&(q=(p&r)))>(q>s) ;
TTTT TTT**F** TTTT TTTT (4.3.2)

Eqs.. 4.2.2 and 4.2.3 show that the coherence objection is in fact a dilution when mapped into the refutation and solution of the fundamental problem of Christology, and hence the coherence objection is refuted and solved.

Confirming the theorem of conscience

We assert the conjecture of conscience as:

If God as perfection creates man, then man chooses perfection. (1.1.1)

LET p, q, r, s: God, man, r, s.

((p>(s=s))>q)>(q>(s=s)) ; TTTT TTTT TTTT TTTT (1.1.2)

Remark 1.1.2: Eq. 1.1.2 is tautologous to confirm the conjecture of conscience as the theorem of conscience.

We make the contrary assertion that man chooses imperfection. (1.2.1)

((p>(s=s))>q)>(q>~(s=s)) ; TT**FF** TT**FF** TT**FF** TT**FF** (1.2.2)

Remark. 1.2.2: Eq. 1.2.2 is *not* tautologous, to deny man choosing imperfection.

Refutation of dialetheism

From [Cotnoir, 2017]:

ABSTRACT
The divine attributes of omniscience and omnipotence have faced objections to their very consistency. Such objections rely on reasoning parallel to semantic paradoxes such as the Liar or to set-theoretic paradoxes like Russell's paradox. With the advent of paraconsistent logics, dialetheism—the view that some contradictions are true—became a major player in the search for a solution to such paradoxes. This paper explores whether dialetheism, armed with the tools of paraconsistent logics, has the resources to respond to the objections levelled against the divine attributes.

[9] The *DKQ* conditional does not have a truth table, but is sound with respect to the truth table of the conditional in RM_3, given below.

$\rightarrow$	1	$\frac{1}{2}$	0
1	1	0	0
$\frac{1}{2}$	1	$\frac{1}{2}$	0
0	1	1	1

Since anything invalid by the RM_3 truth tables is also *DK*-invalid, this can be a useful way of checking for inferences that break down.

$$(1\rightarrow(1/2)) = 0 \qquad \text{(fn.9.1.1)}$$

((%s>#s)>((%s>#s)\(%s<#s)))>(s@s) ;

FFFF FFFF FFFF FFFF (fn.9.1.2)

Remark fn.9.1.2: Eq. fn.9.1.2 is *not* tautologous, in fact contradictory, to refute the claimed truth table, denying the paraconsistent relevant logics of both DK and RM_3.

3. Paradox of the stone,
3.2 Inconsistent responses

But light dialetheism is a slippery slope that can lead to full-strength dialetheism. In this case, one might grant the rejection of (ii) but replace it with (ii*): necessarily, if God makes a stone that he cannot lift, then it is not the case that he can bring about every event. But (ii*) leads to problems, as the following argument shows. Let g be 'God', and s be the relevant unliftable-stone-making event:

i*.	$\Box\forall y\Diamond B(g,y)$	[Omnipotence of g]
ii*.	$\Box(B(g,s)\rightarrow\neg\forall y(\Diamond B(g,y)))$	[Premise]
iii*.	$\Diamond B(g,s)$	[Premise]
iv*.	$\Diamond\neg\forall y(\Diamond B(g,y))$	[MT, ii*, iii*]
v*.	$\neg\Diamond\neg\forall y(\Diamond B(g,y))$	[equivalent to i*]
vi*.	$\Diamond\neg\forall y(\Diamond B(g,y))\wedge\neg\Diamond\neg\forall y(\Diamond B(g,y))$	[Conjunction of iv*, v*]

(3.2.vi.1)

LET p, q, r, s: B, g, y, s.

(((#(p&(q&s))>~(%p&(q&#r)))&(p&(q&s)))>%(~(%p&(q&#r))=(s=s)))&
(~(%(~(%p&(q&#r))=(s=s))=(s=s))) ;

FFFF FFFN FFFF FFFN (3.2.vi.2)

Remark 3.2.vi.2: Eq. 3.2.vi.2 as rendered is *not* tautologous, to refute the claimed conjecture of the paradox of the stone aka Homer Simpson's burrito "Could Jesus microwave a burrito so hot that He Himslef could not eat it?" [13:16], denying dialetheism.

is also designated—a possibly true contradiction. But in modal paraconsistent logics like *LP*, the truth of possible contradictions implies the truth of actual ones.[13] In general,[14]

$$\Diamond(A \wedge \neg A) \underset{LP}{\models} \Diamond(A \wedge \neg A) \wedge \neg\Diamond(A \wedge \neg A)$$

Applied above, the result shows that the dialetheic theist is committed to its being possible and impossible that God lift the unliftable stone. The contradiction 'spreads' from a merely possible world to a contradiction in the actual world. It looks as though light dialetheists are committed to full-blown dialetheism.

(3.2.1.1)

%(A&~A)>(%(A&~A)&~(%(A&~A)=(A=A))) ;

NNNN NNNN NNNN NNNN}16 (3.2.1.2)

Remark 3.2.1.2: Eq. 3.2.1.2 is *not* tautologous, to refute the claimed theorem, denying full-blown dialetheism. The following eight conjectures are also denied: Milne's paradox; Grim's paradox; consistent responses; inconsistent set theory; universal set theory; primitive attributes; semantic dialetheism; and metaphysical dialetheism.

Mistakes in "An essay on divine authority" and in its review

From [Mar 2005]:

Mark Murphy's *An Essay on Divine Authority* is a new and original work in the distinguished Cornell Studies in the Philosophy of Religion edited by William Alston. The new Problem of Divine Authority is that of (1) answering whether God has practical authority over created rational beings, and (2) providing an explanation of the extent of that authority.

namely, a reason, which if undefeated, is decisive. Explaining just how God's dictates might constitutively actualize a reason leads Murphy to articulate three grades of Divine Authority.

Let 'Cx' abbreviate 'x is a created rational being' and 'Gx' abbreviate 'God has practical authority over x,' which is analyzed as 'for any action φ, God's telling x to φ constitutively actualizes a decisive reason for x to φ.' Using this notation, we can succinctly formalize three Strong Authority Theses (SATs):

Strong Thesis:	$\forall x(Cx \rightarrow Gx)$
Stronger Thesis:	$\forall x(Cx \rightarrow \Box Gx)$
Strongest Thesis:	$\Box(x)(Cx \rightarrow Gx)$

The *Strong* Authority Thesis is the claim that God has *universal* practical authority over all created rational beings. The *Stronger* Thesis says that all created rational beings are *essentially* under God's practical authority, and the *Strongest* Thesis says it is a *necessarily true* that all created rational beings are under God's practical authority. (Note that there are even stronger theses than Murphy's 'Strongest', e.g., $\Box\forall x(Cx \rightarrow \Box Gx)$, or 'it is a necessary truth that all created rational beings are essentially under God's practical authority.') It turns out that all three of the SATs fail.

(1.1.1 - 1.4.1)

LET p, q, r, s: C, G, x, s.

(p&#r)>(q&#r) ;	TTTT TCTT TTTT TCTT	strong thesis	(1.1.2)
(p&#r)>#(q&#r) ;	TTTT TCTT TTTT TCTT	stronger thesis	(1.2.2)
(p&#r)>(q&#r) ;	TTTT TCTT TTTT TCTT	strongest thesis	(1.3.2)
#((p&#r)>#(q&#r)) = (s=s) ;	NNNN N**F**NN NNNN N**F**NN	strongest yet	(1.4.2)

Remark 1.1.2-1.4.2: Eqs.. 1.1.2 - 1.4.2 are *not* tautologous and hence fail as claimed, but for a reason in mathematical logic.

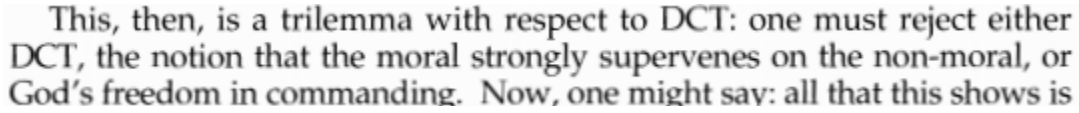
However, the 2005 reviewer, and 2002 author apparently, do not note that the three Eqs.. 1.1.2 - 1.3.2 are logically equivalent, and hence not strong, stronger, and strongest but strong. The reviewer's 1.4.2 strongest yet contribution is even farther from tautology than others.

The 2002 paper reviewed is naturally only available by purchase from Cornell, but from the reviewer's remarks it appears that neither writer used a bivalent model checker to exercise the logical equations, and serves as example 20

years later why that step can be used before a rush to publication, out of respect to readers.

Refutation of the trilemma for divine command theory (DCT), and a pastoral solution

From [Murphy 2002]:


This, then, is a trilemma with respect to DCT: one must reject either DCT, the notion that the moral strongly supervenes on the non-moral, or God's freedom in commanding. Now, one might say: all that this shows is

We evaluate the divine command theory (DCT), supervenience (strong and weak), and God's freedom in commanding.

1. DCT

From [Divine_command-theory 2020]:

[Robert Merrihew] Adams presents the basic form of his [modified divine command] theory by asserting that two statements are equivalent: (1.3.1)

1. It is wrong to do X. (1.1.1)
2. It is contrary to God's commands to do X. (1.2.1)

LET p, q: God, X.

(q>(s@s)) = (s=s) ; TT**FF** TT**FF** TT**FF** TT**FF** (1.1.2)

(~((p>(s=s))=(s=s))>q) = (s=s) ;
TTTT TTTT TTTT TTTT (1.2.2)

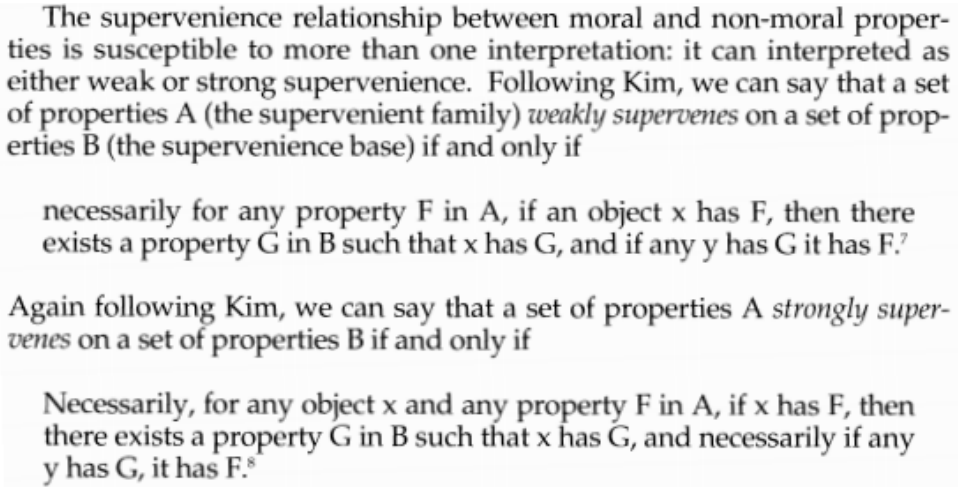
(q>(s@s)) = (~((p>(s=s))=(s=s))>q) ;
TT**FF** TT**FF** TT**FF** TT**FF** (1.3.2)

Remark 1.3.2: Eq. 1.3.2 is *not* tautologous, hence refuting the equivalence to define the modified divine command theory as adopted by the first author.

We note that the mode of moral obligation in deontic logic is purposely avoided as in compliance with the well studied objection of Leibniz that a truthful God has no obligation.

2. Supervenience

While we refute supervenience elsewhere, the argument proffered is evaluated in order below.



The supervenience relationship between moral and non-moral properties is susceptible to more than one interpretation: it can interpreted as either weak or strong supervenience. Following Kim, we can say that a set of properties A (the supervenient family) *weakly supervenes* on a set of properties B (the supervenience base) if and only if

> necessarily for any property F in A, if an object x has F, then there exists a property G in B such that x has G, and if any y has G it has F.[7]

Again following Kim, we can say that a set of properties A *strongly supervenes* on a set of properties B if and only if

> Necessarily, for any object x and any property F in A, if x has F, then there exists a property G in B such that x has G, and necessarily if any y has G, it has F.[8]

(2.1.1), (2.2.1)

LET p, q, r, s, x, y: A, B, F, G, x, y.

(#r<p)>(((x>r)>%(s<q))>((x>s)&((y>s)>(y>r)))) ; [strong]
TTTT TTTT TTTT TTTT}128 (2.1.2)
#(x&(r<p))>(((x>r)>%(s<q))>((x>s)&#((y>s)>(y>r)))) ; [weak]
TTTT TTTT TTTT TTTT}128 (2.2.2)

Remark 2.1.1.2, 2.1.2.2: Eqs.. 2.1.1.2 and 2.1.2.2 as rendered are equivalent, which contradicts Kim's conjecture that weak and strong supervenience are different, although both definitions are tautologous here.

"If the supervenience relationship between moral and non-moral properties is that of strong supervenience, then it is an *a priori* truth that for any item i and any moral property M, if i has a moral property M, then there is a set of non-moral properties N that i exemplifies such that necessarily any item that exemplifies the properties in N will exemplify M. On the other hand, if the supervenience relationship is that of weak supervenience, then it is an *a priori* truth that for any item i and any moral property M, if an item i has moral property M, then there is a set of non-moral properties N that i has such that any item that has N will have M. The difference between the claims that the moral strongly supervenes on the non-moral and that the moral weakly supervenes on the non-moral consists simply in the modal strength of the condition that there be no difference in moral properties without some difference in non-moral properties. On strong supervenience, if an item has a certain moral property due to its having a certain set of non-moral properties, then any item in *any* possible world that has that set of non-moral properties in that world will have that moral property in that world. On weak supervenience, if an item has a certain moral property due to its having a certain set of non-moral properties in some possible world, then any item in *that* possible world that has that set of non-moral properties will have that moral property." (2.2.1.1, 2.2.2.1), (2.4.1.1, 2.4.2.1)

LET p, q, r, s: i item, M moral property, N non-moral property, possible world.
Moral property is perfection (s=s); non-moral property is imperfection (s@s).

(%p&%q)>(((p>q)>(p>r))>((%p>r)>q)) ; [strong]
TTTT NNTT TTTT NNTT (2.2.1.2)
(%p&%q)>(((p>q)>(p>r))>((%p>q)>r)) ; [weak]

TTNT TTTT TTNT TTTT (2.2.2.2)

Remark 2.2.1.2, 2.2.2.2: Eqs.. 2.2.1.2 and 2.2.2.2 as rendered are *not* tautologous. This refutes the examples of strong and weak supervenience. (Elsewhere we refute different definitions of supervenience.)

The non-moral property r for N may also be defined as the negation of moral property q for M, as ~q. (2.3.1.1, 2.3.2.1)

(%p&%q)>(((p>q)>(p>~q))>((%p>~q)>q)) ; [strong]
NNTT NNTT NNTT NNTT (2.3.1.2)
(%p&%q)>(((p>q)>(p>~q))>((%p>q)>~q)) ; [weak]
TTNT TTNT TTNT TTNT (2.3.2.2)

Remark 2.3.1.2, 2.3.2.2: Eqs.. 2.3.1.2 and 2.3.2.2 are *not* tautologous, also refuting the examples of supervenience.

(%p>(r<q))>(((%p<%s)>(r<%s))>(q<%s)) [strong]
CTTT **FF**TT CTCT **FF**CT (2.4.1.2)
(%p<((r<q)<%s))>(((%p<%s)>r)>q) ; [weak]
NNTT NNTT NT**FF** NT**FF** (2.4.2.2)

Remark 2.4.1.2, 2.4.2.2: Eqs.. 2.4.1.2 and 2.4.2.2 are not tautologous. The refutes the two further examples to deny strong and weak supervenience.

Again, the non-moral property r for N may also be defined as the negation of moral property q for M, as ~q. (2.5.1.1, 2.5.2.1)

(%p>(~q<q))>(((%p<%s)>(~q%s))>(q<%s)) ; [strong]
FFTT **FF**TT **FF**CT **FF**CT (2.5.2.2)
(%p<((~q<q)<%s))>(((%p<%s)>~q)>q) ; [weak]
NNTT NNTT N**F**TT N**F**TT (2.5.3.2)

Remark 2.5.1.2, 2.5.2.2: Eqs.. 2.5.1.2 and 2.5.2.2 are *not* tautologous, also refuting the further examples of supervenience.

3. God's freedom in commanding

We choose the author's definition of God's freedom in commanding from a previous title [Murphy 1998]:

three distinct theses concerning moral obligation that a defender of DCT might affirm:

> (DCT1) The state of affairs of S's being morally obligated to ϕ depends on the state of affairs of God's commanding S to ϕ
>
> (DCT2) The state of affairs of S's being morally obligated to ϕ depends on the state of affairs of God's willing that S be morally obligated to ϕ
>
> (DCT3) The state of affairs of S's being morally obligated to ϕ depends on the state of affairs of God's willing that S ϕ^3

Call DCT1 a *command formulation* of DCT; call DCT2 and DCT3 *will formulations* of DCT. Now, DCT1, DCT2, and DCT3 are not very fine-grained formulations of DCT's theory of moral obligation.[4] They are, for example,

(3.1.1 - 3.3.1)

LET p, q, r, s: φ, God, state (of affairs), S.

The imply connective is taken to mean "morally obligated to", "commanding", or "willing".

((r&p)>(s>p))>((r&s)>p) ;	TTTT TTTT TTTT TT**F**T	(3.1.2)
((r&p)>(s>p))>((r&s)>p) ;	TTTT TTTT TTTT TT**F**T	(3.2.2)
((r&p)>(s>p))>((r&s)>p) ;	TTTT TTTT TTTT TT**F**T	(3.3.2)

Remark 3.1.2-3.3.2: The three Eqs.. 3.1.2-3.3.2 are equivalent, and *not* tautologous. Hence these definitions of God's freedom in commanding are refuted, and deontic logic is denied. (We refute deontic logic elsewhere on ceteris-paribus semantic.)

We refute definitions of divine command theory, supervenience, and freedom in commanding to deny the conjecture of trilemma.

However, we propose a pastoral solution to the arguments above based on the notion that God's Will is His Word and the converse God's Word is His Will. For example, we use John 1:1-2:

1 In the beginning was the Word, and the Word was with God, and the Word was God. (4.1.1)
2 The same was in the beginning with God. (4.2.1)

LET p, q, r, s: God, beginning [will], word, s. (The same in 2 refers to 1.)

q>(r>(p>(s=s))) ;	TTTT TTTT TTTT TTTT	(4.1.2)
(q>(r>(p>(s=s))))>((q>(r>(p>(s=s))))>(q>(p>(s=s)))) ;	TTTT TTTT TTTT TTTT	(4.2.2)

The converses are:

r>(q>(p>(s=s))) ; TTTT TTTT TTTT TTTT (4.1.2)

(r>(q>(p>(s=s))))>((r>(q>(p>(s=s))))>(r>(p>(s=s)))) ;

TTTT TTTT TTTT TTTT (4.2.2)

Refutation of divine consistency proof for mathematics

From [Friedman 2012]:

NONLOGICAL AXIOMS FOR T_5

PAIRING

$P(v_1,v_2) = P(v_3,v_4) \rightarrow v_1 = v_3 \wedge v_2 = v_4.$

L_5 COMPREHENSION

$(\exists A_1)(\forall v_1)(v_1 \in A_1 \leftrightarrow \varphi)$, where φ is a formula of L_5 in which A_1 is not free.

EXTENSIONAITY

$(\forall v_1)(v_1 \in A_1 \leftrightarrow v_1 \in A_2) \rightarrow A_1 = A_2.$

CHOICE OPERATOR

$v_1 \in A_1 \rightarrow CHO(A_1) \in A_1.$

POSITIVE CLASSES

$(\forall v_1)(v_1 \in A_1 \vee v_1 \in A_2) \rightarrow POS(A_1) \vee POS(A_2).$
$POS(A_1) \wedge POS(A_2) \rightarrow (\exists v_1 \neq v_2)(v_1,v_2 \in A_1 \wedge v_1,v_2 \in A_2).$

0-DEFINABLE CLASSES

$(\forall v_1)(v_1 \in A_1 \leftrightarrow \varphi) \wedge DEF(A_2) \wedge \ldots \wedge DEF(A_n) \rightarrow DEF(A_1)$, where φ is a formula of L_5 without DEF, with at most the free variables $v_1,A_2,\ldots,A_n$, $n \geq 1$.

DIVINE OBJECT

$(\exists v_1)(\forall A_1)(DEF(A_1) \wedge POS(A_1) \rightarrow v_1 \in A_1).$

(5.1.1 - 5.7.1)

LET p, q, r, s, t, u, v, w, x, y: P, v_1,v_2,v_3,v_4, A_1, A_2, A, x, CHO().

Pairing:

((p&(q&r))=(p&(s&t)))>((q=s)&(r=t)) ;
TT**FF** **FFF**T **FF**TT **FFF**T}1}64
FFFF TT**F**T **F**T**F**T **F**TTT}1} (5.1.2)

Remark 5.1.2: Eq. 5.1.2 is *not* tautologous, refuting the claimed axiom, to deny divine consistency.

This is replicated in the free modal *street prover* Molle-1.0 as white-bar on red-field from the script of ((P&(Q&R))<=>(P&(S&T)))=>((Q<=>S)&(R<=>T)).

Extensionality:

((#q<u)=(#q<v)>(u=v) ; TTTT TTTT TTTT TTTT}2}16
FN**F**N **F**N**F**N **F**N**F**N **F**N**F**N}4}
TTTT TTTT TTTT TTTT}2} (5.3.2)

Remark 5.3.2: Eq. 5.3.2 is *not* tautologous, refuting the claimed axiom, to deny divine consistency.

Positive classes:

["POS(A) is read 'the class A is positive'" means POS(A)>0.]

(((#q<u)+(#q<v))>((u>(s@s))+(v>(s@s)))) &
(((u>(s@s))&(v>(s@s)))>((%q@r)&(((q&r)<u)&((q&r)<v)))) ;
FFFF FFFF FFFF FFFF}2}16
TTTT TTTT TTTT TTTT}6} (5.5.2)

Remark 5.5.2: Eq. 5.5.2 is *not* tautologous, refuting the claimed axiom, to deny divine consistency. The consequent, with the same truth table result as 5.5, colors the antecedent as a tautology for the result.

Should the definition of POS(A)>0 be changed to mean POS(A)≥1, the truth table result is significantly weakened for the bottom row in the fragment to read falsity (C).

The argument to make the divine conjecture consistent finally with ZFC injects this:

AUGMENTED CHOICE OPERATOR

$v_1 \in A_1 \rightarrow CHO(A_1) \in A_1.$
$(\forall v_1)(v_1 \in A_1 \leftrightarrow v_1 \in A_2) \rightarrow CHO(A_1) = CHO(A_2).$

(6.1.1)

((q<u)>((y&u)<u))&(((#q<u)=(#q<v))>((y&u)=(y&v))) ;
TT**FF** TT**FF** TT**FF** TT**FF**}2}16
FFNN **FF**NN **FFN**N **FF**NN}2}
FFT**F** **FF**T**F** **FF**T**F** **FF**T**F**}2}
TTTT TTTT TTTT TTTT}2} (6.1.2)

Remark 6.1.2: Eq. 6.1.2 is *not* tautologous, refuting the claimed axiom, to deny divine consistency as consistent with ZFC.

Refutation of incompatibility of divine foreknowledge to human freedom and N operator

From [Furlong 2020]:

> I turn, now, to an overview of the work. As I mentioned, the volume is split, roughly evenly, between the topics of divine foreknowledge and divine providence, in both cases focusing on those issues relevant to human freedom. In section 1, the authors organize the topic around a particular argument for the incompatibility of divine foreknowledge and human freedom. For those thinking about using this work for a course text, it is worth noting that the argument, as presented, might scare some beginner undergraduates. First, readers are introduced to the N operator: "$N^{S}{}_{t}(p)$ is short for p and S has, at and after t, no choice about the fact that p" (6). With this explained, they move on to the formal presentation of the argument:
>
> (1) God believed at time t1 that Jones would decide at t3 to mow her lawn.
> (2) $N^{Jones}{}_{t2}$(God believed at t1 that Jones would decide at t3 to mow her lawn).
> (3) If $N^{S}{}_{t}(p)$ and $N^{S}{}_{t}$(p entails q), then $N^{S}{}_{t}(q)$.
> (4) $N^{Jones}{}_{t2}$(God believed at t1 that Jones would decide at t3 to mow her lawn entails that Jones will decide at t3 to mow her lawn).
> (5) $N^{Jones}{}_{t2}$(Jones will decide at t3 to mow her lawn).
> (6) If $N^{Jones}{}_{t2}$(Jones will decide at t3 to mow her lawn), then Jones cannot decide to refrain from mowing her lawn.
> (7) If Jones cannot decide to refrain from mowing her lawn, she does not at t3 decide to mow her lawn freely.
> (8) Therefore, Jones does not at t3 decide to mow her lawn freely (7).
>
> While there is no getting around this argument—at least not without jettisoning the entire section devoted to foreknowledge—I think instructors should not be fearful of using this even in relatively introductory courses.

(1.1.1 - 1.8.1)

LET p, q, r, s: God (fact), Jones, time, S (action).
The N operator, implying no choice, is mapped as modal necessity here.

Remark 1.1.1: The argument begins with the enormity of "God believed". Because belief is trust in the unseen, God cannot believe anything because its factual state is known already due to omniscience. In other words, for God to believe in anything is God expressing faith due to doubt, which would be telling a lie and which is impossible.

(Unfortunately that further admits a number of heresies as based in this case on not understanding the relationship of God the Father to God the Holy Ghost. For example, this comes out prominently with Arianism where God the Son on the cross is supposed to pray as a man to *his* God, the point being that God the Son is already God the Holy Trinity.)

(p&(r&(%s>#s)))>((q&(r&(s@s)))>s ;
TTTT TTTT TTTT TTTT (1.1.2)

((#q&(r&(%s<#s)))>#(p&(r&(%s>#s))))>((q&(r&(s@s)))>s) ;
TTTT TTTT TTTT TTTT (1.2.2)

((#s&(r&p))&(#s&(r&(p>q))))>(#s&(r&p)) ;
TTTT TTTT TTTT TTTT (1.3.2)

Remark 1.3.2: Eq. 1.3.2 is injected as an obviously tautologous rule of inference, but which is irrelevant by impeding the argument.

(q&(r&(%s<#s)))&#(((p&(r&(%s>#s)))>((q&(r&(s@s)))>s))>((q&(r&(s@s)))>s)) ;
FFFF FFFF FFFF FFFF (1.4.2)

Remark 1.4.2: Eq. 1.4.2 is *not* tautologous, to refute the sentence as claimed. In fact, it is contradictory. Its explosive effect is to make the entire antecedent of the argument as a union of of the seven sentences 1.1.1-1.7.1, also contradictory. This means that a contradictory antecedent followed by any consequent always implies a tautologous result. In other words, any tautology can be implied from a contradiction, such as sentence 1.8.1 or its negation as a counter example. Had the writers and reviewer used the modal *street prover* Molle-1.0, such disclosure obviates efforts of a thin paperback.

Refutation of doctrine of divine priority (DDP) and of pantheism as equivalent to theism

From [Cohoe 2020]:

Abstract

Pantheists are often accused of lacking a sufficient account of the unity of the cosmos and its supposed priority over its many parts. I argue that complex theists, those who think that God has ontologically distinct parts or attributes, face the same problems. Current proposals for the metaphysics of complex theism do not offer any greater unity or ontological independence than pantheism, since they are modeled on priority monism. I then discuss whether the formal distinction of John Duns Scotus offers a way forward for complex theists. I show that only those classical theists who affirm divine simplicity are better off with respect to aseity and unity than pantheists. Only proponents of divine simplicity can fairly claim to have found a fully independent ultimate being.

6. Pantheism Satisfies Weak Aseity

We can see this clearly in the characterization of aseity provided by Yann Schmitt:

> (1′) Necessarily, for any x, if x is God, x creates and maintains in existence whatever is not identical with x or a part of x.[31]

Substituting in the Ultimate or the Cosmos for God illustrates how this condition is in danger of being trivially satisfied by pantheist views:

> (1″) Necessarily, for any x, if x is the Ultimate/the Cosmos, x creates or maintains in existence whatever is not identical with x or a part of x.

[31]Schmitt, Y. (2013). The deadlock of absolute divine simplicity. International journal for philosophy of religion. 74:117-130. (1.1.1), (1.2.1)

LET q, r, s: thing x, whatever/part, s. (s=s) is perfection.

#q>(s=s))>(#q>%(~((r=#q)+(r<#q))=(s=s))) ;
TTTT TTCC TTTT TTCC (1.1.2)

Remark 1.1.2: Eq. 1.1.2 as rendered is *not* tautologous: apparently the Schmitt model is not a theorem. The "necessarily, for any x," can be removed as redundant without effect:

(q>(s=s))>(q>%(~((r=q)+(r<q))=(s=s))) ;
TTTT TTCC TTTT TTCC (1.1.3)

q>(q>%(~((r=q)+(r<q))=(s=s))) ;
TTTT TTCC TTTT TTCC (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is *not* tautologous and with truth table result equivalent to that of 1.1.2 and 1.1.3.

Substituting the Ultimate/Cosmos for God (a thing q as perfection (s=s)) is a misnomer because it is without veracity (Popper's unstated physicalistic morality of a personal spirit), so pantheist views are not satisfied with the defects of the Schmitt model. Therefore we could avoid evaluation of 1'" as an adornment of 1". In fact, that is the case as below.

7. Only strong aseity can distinguish theism from pantheism

Now we could add in a condition relating to the dependence of the parts on the whole:

(1‴) Necessarily, for any *x*, if *x* is the Ultimate/the Cosmos, *x* creates or maintains in existence whatever is not identical with *x* or a part of *x and any part of x ontologically depends on x to be what it is.*

(1.3.1)

q>(q>%((~((r=q)+(r<q))=(s=s))&((#r<q)>%r))) ;

TTTT TTCC TTTT TTCC (1.3.2)

Remark 1.3.2: If the indefinite pronoun of "it" in the phrase "depends on *x* to be what it is" is taken to refer not to *x* as a part but rather to *x* as Ultimate/the Cosmos, then:

q>(q>%((~((r=q)+(r<q))=(s=s))&((#r<q)>%q))) ;

TTTT TTCC TTTT TTCC (1.3.3)

which does not change the truth table result of 1.1.2, 1.2.2, or 1.3.2.

Elsewhere here we refute the ontotheological error, and enormities therefrom.

8. The unity of complex theism and the unity of pantheism

We see this in Gregory Fowler's recent defense of complex theism, based on the priority of the whole. The idea is that in certain unified structure the whole is explanatorily and ontologically prior to its parts. For example, the parts of the body have their status as parts because of the whole. Without the whole system in which they fit, the hand would not really be a hand nor the eye an eye. Gregory Fowler uses this notion to formulate a complex theism that he thinks can still respect the necessary metaphysical constraints. Fowler advocates for the following view:

> *The Doctrine of Divine Priority (DDP)*: For all x, if x is a proper part of God or x is a property of God, then x depends on God for its existence.[32]

Fowler presents this as an alternative to divine simplicity. If the whole can be ontologically prior to its parts, then theists can preserve aseity without endorsing absolute simplicity.

[32]Fowler, G. (2015). Simplicity or priority?. Oxford studies in philosophy of religion. 6:114-136. (1.4.1)

((#q<(s=s))+(#q>(s=s)))>%(q<(s=s)) ;
CCCC CCCC CCCC CCCC (1.4.2)

Remark 1.3.2: Eq. 1.3.2 is *not* tautologous, and indeed C contingent as falsity, to refute the conjecture of doctrine of divine priority (DDP).

Subsequent removal of the quantifiers has no effect on the truth table result:

((q<(s=s))+(q>(s=s)))>(q<(s=s)) ;
CCCC CCCC CCCC CCCC (1.4.3)

Should Fowler have meant "then x depends on the *quality* of God for its existence" as:

((#q<(s=s))+(#q>(s=s)))>(%q<(s=s)) ;
FFFF FFFF FFFF FFFF (1.4.4)

then the result degrades as contradictory.

Refutation of the argument from God's purposes against divine retribution

From [Wessling, 2021]:

> Many theists maintain that God punishes humans retributively, whereby God intentionally harms those punished as their sins deserve, without also aiming *qua* punishment to contribute to the immediate or ultimate flourishing of those punished, or to the flourishing of some third (human) party. By contrast, St. Isaac the Syrian in effect contends that such an understanding of divine retribution is incompatible with a plausible understanding of God's initial creative purposes of love and is thus untrue. In this paper, I present and substantially build upon Isaac's contention, and I defend the resulting developed argument as a good argument worthy of further consideration.

I label the resulting Isaac-inspired version of the relevant argument the Argument from God's Purposes (henceforth the AGP), and I defend the AGP as a good argument that merits further discussion. ...

> We are now in a position to consider the AGP. Relying upon the aforementioned notions of intentional-harm and strong-retribution, the argument may be stated as follows.
>
> (1) God's primary motivation for creating and guiding each human is love despite foreknowing all facts about human sin prior to this choice to create.
>
> (2) If God's primary motivation for creating and guiding each human is love despite foreknowing all facts about human sin prior to this choice to create, then God never inflicts intentional-harm on any human.
>
> (3) If God never inflicts intentional-harm on any human, then God never punishes humans with strong-retribution.
>
> Therefore, (4) God never punishes humans with strong-retribution. (1-4)
>
> **Remark 1.1-1.4:** Eqs 1.1-1.4 form the following argument flow: ((1&(1>2))&(2>3))>3. (5.1)
>
> LET p, q, r, s: (1), (2), (3), (4).
>
> ((p&(p<q))&(q>r))>r ; TFTT TTTT TFTT TTTT (5.2)
>
> **Remark 5:** Eq. 5 is *not* tautologous, to refute the claimed argument, denying AGP.
>
> The author was not required to reproduce a proof assistant script as an appendix to support the conjectures.
>
> We do not supply an evaluation of the relative merits of the theological argument.

Refutation of dual source of divine universal causation (DUC) of W. Matthews Grant

From [Turner 2020]:

> As W. Matthews Grant points out in his introduction, classical theism understands God to be the "universal cause, who causes all being distinct from himself," and that this implies "that creaturely acts are caused by God" (1). But, if that is what classical theism says, then this seems obviously to imply that a *libertarian* sense of human free will is metaphysically impossible, if classical theism is true. For, if God causes every human action, and libertarianly free actions cannot be caused by God, then since God *does* (on the classical theist understanding of God) cause every human action, there cannot be any libertarianly free human actions.

(1.1.0)

We write the conjecture as:

If that God universally causes all beings distinct from himself implies that being's actions are caused by God, then libertarian free will is not possible, that is, human beings causing an act implies God does not cause all acts. (1.1.1)

LET p, q, r, s: God, human being, action, s.

((((p>(s=s))>(#q@p))>r)>(p>r))>((q>%r)>~(p>#r)) ;
FTNT **F**C**F**C **F**TNT **F**C**F**C (1.1.2)

Remark 1.1.2: Eq. 1.1.2 as rendered is *not* tautologous, refuting the classical definition of theism as proffered.

[Grant's] dual sources model of divine universal causality is offered as a way for the classical theist to ... affirm *both* that humans have libertarian free will *and* that God causes every action that the libertarianly free agent does. (2.1.0)

We write the definition of the dual source of divine universal causality (DUC) as:
both God is cause of all existing things that are not God, *and* human beings have libertarian free will. (2.1.1)

((p>(s=s))>(#(%q>r)@p))&#(q>r) ;
N**FFF** N**F**N**F** N**FFF** N**F**N**F** (2.1.2)

Remark 2.1.2: Eq. 2.1.2 is *not* tautologous, refuting the definition of Grant's dual source of divine universal causality, and denying subsequent conjectures derived therefrom.

Refutation of divine universal causality (DUC), determinism, and metaphysical contradiction

From [Kittle 2020]:

> The book consists of eight chapters. The first lays out the basic position which Grant labels the doctrine of *divine universal causality* (DUC):
>
> Necessarily, for any entity distinct from God, God directly causes that entity to exist at any time it exists. (4)

(1.1.1)

LET p, r: God, time.

#(~p>(p>(%~p&#%r))) = (s=s) ;
NNNN NNNN NNNN NNNN (1.1.2)

Remark 1.1.2: Eq. 1.1.2 as rendered is *not* tautologous, but the truth table result is truthity, refuting the doctrine of divine universal causality (DUC).

> Determinism . . . requires that there be a certain sort of relationship between any determined event, or *determinatum*, and its *determinans*, or thing determining it; namely, the *determinans* must be *prior* to the *determinatum* and must be a *sufficient condition* for the *determinatum* (6).

(1.2.1)

LET p, q: determinatum, determinans.

The "must" word is mapped as modal necessity #; sufficiency is mapped as an antecedent to imply the consequent of proof (s=s).

#((q<p)>(s=s))&((q>p)>(s=s))) = (s=s) ;
NNNN NNNN NNNN NNNN (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is *not* tautologous, but the truth table result is truthity, refuting the definition of determinism.

However, 1.22 becomes a theorem if the necessity requirement is dropped, with "must be" replaced by "is", but this is not claimed.

(q<p)>(s=s))&((q>p)>(s=s)) ;
TTTT TTTT TTTT TTTT (1.2.3)

Apparently the reviewer and reviewee were unaware of this nuance.

Grant begins by characterising the metaphysical objection as holding that "it is literally impossible for the heat to be brought about by God and also by the fire" (41). But, Grant suggests, there does not seem to be anything contradictory in the following state of affairs:

> *(S) The fire brings about the heat in the water, and God brings about whatever exists in the fire's bringing about the heat in the water.*

Moreover, Grant says he will assume that both conjuncts are independently possible, and only consider arguments for thinking the impossibility results from their conjunction. This is a puzzling move because the second conjunct entails the first and, arguably, itself includes the alleged contradiction. If God brings about *whatever exists*

(1.3.1)

LET p, q, r, s: fire, God, heat, water.

The verb "exists" is mapped as the existential quantifier, equivalent to modal operator of possibility %.

((p>r)>s)&(q>((%p>%r)>%s)) ;
FT**F**T **FFFF** TTTT TTTT (1.3.2)

Remark 1.3.2: Eq. 1.3.2 is *not* tautologous, but also not contradictory with all **F**, confirming it is not a contradiction.

However, 1.3.2 can be strengthened (brought closer to tautology) by imposing the verb "exists" on antecedent and consequent, and hence doing away with any **F** values in the resulting truth table.

%((p>r)>s)&%(q>((%p&%r)>%s)) ;
CTCT CCCC TTTT TTTT (1.3.3)

The reviewer is mistaken in claiming a contradiction is asserted in the antecedent and then reasserted in the consequent because the term ((p>r)>s) is not a contradiction, but also is not tautologous, as TTTT T**F**T**F** TTTT TTTT.

Refutation of empirically skeptical theism (EST)

From [DeRose 2020]:

Inspired by Peter van Inwagen's "simulacra model" of the resurrection, I investigate whether it could be reasonable to adopt an analogous approach to the problem of evil. Empirically Skeptical Theism, as I call it, is the hypothesis that God shields our lives from irredeemable evils surreptitiously (just as van Inwagen proposes that God shields our bodies from destruction surreptitiously). I argue that EST compares favorably with traditional skeptical theism and with eschatological theodicies, and that EST does not have the negative moral consequences we might suppose.

1. Introduction: The van Inwagen Strategy

As a Christian physicalist, Peter van Inwagen must find a way to reconcile the following triad of propositions—one philosophical, one empirical, and one theological:

1) "If a man does not simply die but is totally destroyed (as in the case of cremation) then he can never be reconstituted, even as an accomplishment of God."[1]
2) "Men apparently cease to exist: those who are cremated, for example."[2]
3) "One day all or most dead men [including those who apparently cease to exist] will be restored to life by God."[3]

There is, of course, no strict inconsistency here, because (2) states only that there are people who *apparently* cease to exist. So long as one is willing

(1.1.1.1-1.1.3.1)

Remark 1.2: The use of the word "apparently" here is specious, and ignored, because a true perception is something appearing to be the case based on what is *known*, such as cremains.

LET p, q: man, God; death (or horrors) is (s@s).

((p>~(s@s))>(s@s))>(q>~(p>~(s@s))) ;
TTTT TTTT TTTT TTTT (1.1.1.2)

Remark 1.1.2.1: Sentence (2) as it stands is not faithful to the context of the argument in which God is named, as in the other two sentences (1) and (3). To avoid this infidelity, we rewrite (2) as, "Men cease to exist, but without God existing or not existing." The secondary clause makes it clear that the empirical observation acknowledges that other known or unknown factors, such as God, are expressly excluded from that observed.

(p>~%~(s@s))\~(%q+~%q) ; TTTT TTTT TTTT TTTT (1.1.2.2)

(((#p+%p)>(s@s))&(p>~%~(s@s)))>(q>(p>~(s@s))) ;
TTTT TTTT TTTT TTTT (1.1.3.2)

Remark 1.1.1.2-1.1.3.2: Eqs. 1.1.1.2 - 1.1.3.2 are tautologous and equivalent. This refutes the claim to reconcile the philosophical, empirical, and theological triad, because of equality of theorems in the first place.

training."[8] Naturally he has various proposals for dealing with such evils which seem to lie beyond the scope of his theodicy, but the point at this juncture is that even a fairly optimistic theist must find a way to reconcile the following triad of propositions—one philosophical, one empirical, and one theological:

(1) If there is a God, there are no horrors.
(2) There appear to be horrors.
(3) There is a God.

As with van Inwagen's triad of propositions, there is no strict inconsistency here because (2) states only that there *appear* to be horrors (and if we construe premise 1 as an evidential rather than logical claim, as we probably should, there is no *strict* inconsistency at all). Regardless of whether

(1.2.1.1-1.2.1.3.1)

(p>(s=s))>~(s@s) ; TTTT TTTT TTTT TTTT (1.2.1.2)

Remark 1.2.2.1: Sentence (2) directly above is rewritten for the same reason in Rem. 1.1.2.1 as, "There are horrors, but without God existing or not existing."

%(s@s)\~(%q+~%q) ; TTTT TTTT TTTT TTTT (1.2.2.2)

p>(s=s) ; TTTT TTTT TTTT TTTT (1.2.3.2)

Remark 1.2.1.2-1.2.3.2: Eqs. 1.2.1.2 - 1.2.3.2 are tautologous and equivalent. This refutes the claim to reconcile the philosophical, empirical, and theological triad, because of equality of theorems in the first place.

A premise of the paper is to use a triad of irreconcilable approaches (philosophical, empirical, theological) from the van Inawagen model of the resurrection to apply also to the problem of evil. Due to irreconcilability, the argument to explain the problem of evil is named skeptical theism and specifically morally skeptical theism (MST). Adding the claim of God as a shield then fosters empirically skeptical theism (EST). However, these machinations in any combination are rendered moot because irreconcilability between the triad approaches is refuted in the first place. Hence the purpose of analytical theology here is to unify the triad to show philosophical, empirical, and theological approaches when properly applied are really one in the same. To that end, a bivalent logic theorem prover is essential.

Refutation of paradox end without end

From [Vander Laan 2018]:

Abstract:

In much of Christian thought humans are taken to have an ultimate end, understood as the highest attainable good. Christians also anticipate "the life everlasting." Together these ideas generate a paradox. If the end can be reached in a finite amount of time, some longer-lasting state will be better still, so the purported end is not the highest good after all. But if the end is to possess some good forever, then it will never be reached. So it seems an everlasting being cannot have an ultimate end—a conclusion that apparently makes human life pointless. How can the paradox be solved?

We may summarize the argument as follows:

(1) Each human being B is everlasting.

(2) B has a telos T only if it is possible for B to attain T.

(3) B has a telos T only if T is greater than any other good that B can attain.

(4) If B is everlasting and B can attain T in a finite interval, then B can attain a good greater than T.

(5) If B cannot attain T in a finite interval, then it is not possible for B to attain T.

∴ (6) No human being has a telos.

(1.1 - 6.1)

LET p, q, r, s: T telos, B human being, finite interval, s.

We define everlasting as perfection as good (s=s).

%q>(s=s) ;	TTTT TTTT TTTT TTTT	(1.2)
%(q>p)>(q>p) ;	TTNT TTNT TTNT TTNT	(2.2)
(p>(q>(s=s)))>(q>p) ;	TT**F**T TT**F**T TT**F**T TT**F**T	(3.2)
((q>(s=s))&((q>p)<r))>(q>((s=s)>p)) ;	TTTT TTTT TTTT TTTT	(4.2)
(~(q>p)<r)>~(%(q>p)=(s=s)) ;	TTNT TTTT TTNT TTTT	(5.2)
(~q>p)=(s=s) ;	**F**TTT **F**TTT **F**TTT **F**TTT	(6.2)
((((%q>(s=s))&(%q>p)>(q>p)))&(((p>(q>(s=s)))>(q>p))&(((q>(s=s))&((q>p)<r))>(q>((s=s)>p)))))& ((~(q>p)<r)>~(%(q>p)=(s=s))))>(~q>p) ;	**F**TTT **F**TTT **F**TTT **F**TTT	(7.2)

Remark 7.2: Eqs.. 1.2 and 4.2 are tautologous, with the other four *not* tautologous and 7.2 as the argument *not* tautologous. This refutes the argument as claimed.

In addition these alternate premises are claimed for better results:

What this shows is that even if premise (3) is false, we can repair the argument by replacing premises (3) and (4). There are a number of ways to do this.[16] Here is one simple, serviceable replacement pair.

(3*) B has a telos T only if no other good that B can attain is much greater than T.

(4*) If B is everlasting and B can attain T in a finite interval, then B can attain a good much greater than T.

(3.1.1- 4.1.1)

(~(q>(s=s))>p)>(q>p) ; TT**F**T TT**F**T TT**F**T TT**F**T (3.1.2)

((q>(s=s))&((q>p)<r))>((q>(s=s))>(p>(s=s))) ;

TTTT TTTT TTTT TTTT (4.1.2)

Remark 4.1.2: Eqs.. 3.1.2 and 4.1.2 to replace respectively 3.2 and 4.2 have no effect on 7.2 because they respectively have equivalent truth table results. Therefore the attempt to resuscitate the argument is denied.

Had the reviewers consulted a bivalent model checker, the paper would not withstand scrutiny. This may serve as a bitter lesson to writers of philosophy of religion and analytical theology.

Refutation of escapism from hell, as in Mormon (LDS) conjecture of afterlife

The notion of escapism from hell admits to vagueness of the righteousness of its occupants to the extent that God is *supposed* to allow at least some an escape for the sake of judicial fairness and righteousness. We map four states of occupancy, to imply potential avoidance of hell by escape from adverse judgment, as based on God's righteousness and the human's perceived unrighteousness or righteousness.

God is righteous implies if the human in possible unrighteousness, then the human in possible unrighteousness. (1.1.1)

LET p, q, r, s: God, human, r, s.
Heaven as righteousness (s=s); hell as unrighteousness (s@s).

(p>(s=s))>((q>%(s@s))>(q>%(s@s)) ;
CCTT CCTT CCTT CCTT (1.1.2)

Remark 1.1.2: Eq. 1.1.2 is *not* tautologous to mean that the possibly unrighteous human is not automatically judged as unrighteous to hell.

God is righteous implies if the human in possible unrighteousness, then the human in possible righteousness. (1.2.1)

(p>(s=s))>((q>%(s@s))>(q>%(s=s))) ;
TTTT TTTT TTTT TTTT (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is tautologous to mean that the possibly unrighteous human can be judged as righteous not to hell.

God is righteous implies if the human in possible righteousness, then the human in possible unrighteousness. (2.1.1)

(p>(s=s))>((q>%(s=s))>(q>%(s@s))) ;
TTCC TTCC TTCC TTCC (2.1.2)

Remark 2.1.2: Eq. 2.1.2 is *not* tautologous to mean that the possibly righteous human is not automatically judged as unrighteous to hell.

God is righteous implies if the human in possible righteousness, then the human in possible righteousness. (2.2.1)

(p>(s=s))>((q>%(s=s))>(q>%(s=s))) ;
TTTT TTTT TTTT TTTT (2.2.2)

Remark 2.2.2: Eq. 2.2.2 is tautologous to mean that the possibly righteous human can be judged as righteous not to hell.

The four states above show two theorems in Eqs. 1.2.2 and 2.2.2 whereby regardless of the human's unrighteousness or righteousness, the human can be judged righteous and not to hell. Hence the only escape from hell is the human judged as righteous by God regardless of the humanly perceived unrighteousness or

righteousness of the human.

With refutation of escapism as a solution, the conjecture that Mormon (LDS) afterlife *without* hell is denied.

Refutation of eternal-temporal (ET) simultaneity and Hasker/Plantinga doctrine of eternity

From [Stump 2018]:

> **Introduction** The understanding of God's mode of existence as eternal is foundational for many other views of God in the history of philosophy of religion. The doctrine of divine eternity also makes a significant difference to a variety of issues in contemporary philosophy of religion, including, for instance, the apparent incompatibility of divine omniscience with human freedom and of divine immutability with the efficacy of petitionary prayer. But the doctrine of eternity has come under attack in current philosophical discussion as inefficacious to solve the philosophical puzzles for which it seems so promising. Although in the early 6th century Boethius thought that the concept could resolve the apparent incompatibility between divine foreknowledge and human free will, some contemporary philosophers, such as Alvin Plantinga, have argued that eternity gives no help with this problem. Other philosophers, such as William Hasker, have argued that whatever help the doctrine of eternity may give with that puzzle is more than vitiated by the religiously pernicious implications of the doctrine for notions of God's providence and action in time. In this paper, I want to examine these arguments against the doctrine of eternity. I will focus especially on Hasker's position, but I will look briefly at Plantinga's as well.
>
> **Plantinga's argument and the doctrine of eternity** On this supposition,
>
> if (a) In 1932 (g) *God knows that in 2095 Paul mows* is true,
> then in 1932 there is a state of affairs that corresponds to (g). (1.1)
>
> **Remark 1.1:** We inject the relation clause of 1932 is lesser than 2095 for ordering.
>
> LET p, q, r, s: Paul, God, 1932, 2095.
>
> ((r<s)>((r&q)>(s&p)))>(s=s) ;
> TTTT TTTT TTTT TTTT (1.2)
>
> If God were temporal, then, these inferences would be valid:
> (a) In 1932 (g) *God knows that in 2095 Paul mows* is true.
> Therefore, (b) in 1932 God knows that in 2095 Paul mows.
> Therefore, (c) in 2095 Paul mows.
> Therefore, (d) it is now the case that in 2095 Paul mows. (2.1)
>
> (((((r<s)>((r&q)>(s&p)))>(s=s))>((r&q)>(s&p)))>(s&p))>(s&p) ;
> TTTT TT**FF** TTTT TT**F**T (2.2)
>
> (a') In 1932, (g') *God in the eternal present knows that in 2095 Paul mows* is true,
> it does not follow that
> (b) in 1932 God knows that in 2095 Paul mows,
> because God's knowledge cannot be temporally located in 1932. (3.1)
>
> **Remark 3.2:** We define eternal present in this context as the equivalence of order for 1932 and 2095 and so replace the clause (g) of God in 2095 (q&s) with (g') of God in eternal present (q&(r=s)).
>
> (((((r<s)>((r&q)>((q&(r=s))>(s&p))))>(s=s))>((r&q)>(s&p)))>(s&p))>(s&p) ;

TTTT TT**FF** TTTT TT**F**T (3.2)

In other words, from (a') In 1932 (g') *God in the eternal present knows that in 2095 Paul mows* is true, it follows that
(c) in 2095 Paul mows. (4.1.1)
But it does not follow and is not true that
(d) it is now the case that in 2095 Paul mows.
Of course, from the denial of (d) it does not follow that
(e) it is now the case that in 2095 Paul does not mow. (4.2.1)

(((r<s)>((r&q)>((q&(r=s))>(s&p))))>(s=s))>(s&p) ;
FFFF F**F**T **FFFF** F**F**T (4.1.2)

(((((r<s)>((r&q)>((q&(r=s))>(s&p))))>(s=s))>(s&p))>(s&p))>~(s&p) ;
TTTT TTTT T**F**T**F** T**F**T**F** (4.2.2)

While Eq. 1.2 as rendered is a tautologous supposition of Plantinga, but Eqs.. 2.2, 3.2, 4.1.2, and 4.2.2 are *not* tautologous. In particular, 2.2 and 3.2 are equivalent, and 4.1.2 as claimed to be tautologous is not. Eq. 4.2.2 is not tautologous, confirming its claim.

So the crucial claim of Plantinga's argument can be true:

Necessarily, if *God eternally knows that Paul mows in 2095* was true eighty years ago, then Paul mows in 2095; (5.1)

#(((((r=s)&q)>(p&s))>(s=s))>(p&s)) = (s=s) ;
FFFF FFFF FN**F**N **F**N**F**N (5.2)

Remark 5.4: Eq. 5.2 is not tautologous as claimed, so Plantinga's crucial claim is nearly contrary.

Hasker on the uselessness of eternal knowledge Suppose that we think just about three temporally ordered events in the causal sequence in this example.

Event 1 at t1: causal interaction between the membrane of a seminal vesicle in neuron 1 and the cell membrane at the axon terminal of neuron 1 brings it about that the membranes fuse and the seminal vesicle open.

Event 2 at t2: causal interaction between the serotonin molecules in an opened seminal vesicle and molecules in the synaptic cleft brings it about that the serotonin molecules in that seminal vesicle move across the synaptic cleft between neuron 1 and neuron 2.

Event 3 at t3: causal interaction between a serotonin molecule in the synaptic cleft and a receptor on the membrane of a dendrite of neuron 2 brings it about that that receptor opens. (6.1)

LET p, q, r, s, t, u, v, w:
neuron_1, neuron_2, receptor, synapse, terminal, molecule, vesicle, open.

((((v&p)>(t&p))>(v&w))>(((u&(w&v))>(u&s))>((u&v)>(s&(p&q))))>
(((u&s)>(r&q))>(r&w)) ;
FFFF FFFF FFFF FFFF}2}2}8

```
FFFF FFFF TTTT TTFF}2} }
FFFF TTTT FFFF TTTT}2}2}
FFFF TTTT TTTT TTTT}2} }
```
(6.2)

Remark 6.2: Eq. 6.2 is *not* tautologous.

Refutation of ethical reasoning and HOL as a universal meta-logic

Abstract: An exemplary equation in HOL for ethical reasoning is *not* tautologous. By extension, HOL is refuted as "a universal meta-logic", and "ethical reasoning" is refuted. Therefore HOL and ethical reasoning are *non* tautologous fragments of the universal logic VŁ4.

From [Benzmüller et al 2019b]:

> 2. The SSE approach: HOL as a universal meta-logic
>
> > **Remark 2:** SSE is not defined as an acronym.

For example … $\Diamond\forall x.Px \equiv (\lambda w.\exists v.Rwv \wedge \forall x.P.xv)$. (2.1)
This illustrates the embedding of $\Diamond\forall x.Px$ in HOL.

> LET p, r, v, w, x, z: P, R, v, w, x, λ.
>
> (%#x&(p&x))=(((z&w)&(%v&(r&(w&v))))&(#x&(p&(x&v)))) ;
> TTTT TTTT TTTT TTTT(16),
> TCTC TCTC TCTC TCTC(12),
> TCTC TTTT TCTC TTTT(4) (2.2)

Eq. 2.2 as rendered is *not* tautologous. By extension, HOL is refuted as "a universal meta-logic", and "ethical reasoning" is refuted.

Refutation of God's ethics as norms of divine agency

From [Ebels-Duggan 2019]:

The above reviewer raises the crucial question of the morality of God as follows.

> "[W]here *X* is the welfare of some creature and *anyone* ranges over human beings",
>
> Establishing the authority of that normative view requires a move from
>
> *X is good (bad) for some A* (1.1.1)
> to (1.3.1)
> *X provides reasons for anyone to promote (prevent) X.* (1.2.1)
>
> LET p, q, r, s:
> X, one, reason, A.
> We take good (bad) as perfection (imperfection) for (s=s) ((s@s)).
>
> For the opposing predicates of promote (prevent) as >( ) (>~( )), we rename the predicate as "to imply, or to effect" and transfer the negation to the consequent of X. This casts the clause into a stronger (closer to tautology) affirmation of "for anyone to effect X (not X)" as different from a weaker (closer to contradiction) denial of "for anyone to effect X (for anyone not to effect X)". This distinction is also helpful later in the arguments when the reviewer rewrites the above argument as an equivalent to something else.
>
> Because an antecedent equivalent to tautology (p+~p) will always produce an implication of tautology, we evaluate the arguments firstly from the positive and secondly from the negative.
>
> From the positive:
>
> (p>(s=s))>%s ; CCCC CCCC TTTT TTTT (1.1.2.2)
> p>(r>(#q>p)) ; TTTT TTTT TTTT TTTT (1.2.2.2)
>
> ((p>(s=s))>%s)>(p>(r>(#q>p))) ;
> TTTT TTTT TTTT TTTT (1.3.2.2)
>
> Eq. 1.3.2.2 is tautologous as expected from the consequent before the conclusion.
>
> From the negative:
>
> (p>(s@s))>%s ; CTCT CTCC TTTT TTTT (1.1.2.3)
> p>(r>(#q>~p)) ; TTTT TTTC TTTT TTTC (1.2.2.3)
> ((p>(s@s))>%s)>(p>(r>(#q>~p))) ;
> TTTT TTTC TTTT TTTC (1.3.2.3)
>
> Eq. 1.3.2.3 is *not* tautologous as expected from the consequent before the conclusion.

The reviewer subsequently rewrites Eqs.. 1.1.1 - 1.2.1 as the equivalent to:

> Murphy's claim that the move from
>
> *X is good (bad) for* A (2.1.1)
> to (2.3.1)
> *there is a reason for anyone to promote (prevent) X* (2.2.1)
>
> needs defense.
>
> From the positive:
>
> (p>(s=s))>%s ; CCCC CCCC TTTT TTTT (2.1.2.2)
> %r>(#q>p) ; TTTT TTCT TTTT TTCT (2.2.2.2)
> ((p>(s=s))>%s)>(%r>(#q>p)) ;
> TTTT TTTT TTTT TTCT (2.3.2.2)
>
> **Remark 2.3.2.2:** Eq. 2.3.2.2 is *not* tautologous, hence refuting the conjecture from the positive.
>
> From the negative:
>
> (p>(s@s))>%s ; CTCT CTCT TTTT TTTT (2.1.2.3)
> %r>(#q>~p) ; TTTT TTTC TTTT TTTC (2.2.2.3)
> ((p>(s@s))>%s)>(%r>(#q>~p)) ;
> TTTT TTTC TTTT TTTC (2.3.2.3)
>
> **Remark 2.3.2.3:** Eq. 2.3.2.2 is not tautologous, hence refuting the conjecture from the negative.

Eq. 1.3.2.2 is tautologous, but refuted by 1.3.2. Eqs.. 2.2.2.2 and 2.3.2.3 are *not* tautologous. Hence both versions of the conjecture of the reviewer and author reviewed are not equivalent and furthermore are refuted. What follows is that neither writer established the morality of God, leading to not-an-answer to the problem of evil. The mistakes above are avoided by use of a bivalent modal logic model checker.

In fact, the morality of God is established by proof of God's veracity by Popper, as we corrected to extend by conscience to the moral God of Orthodox Christianity by the moral imperative as utterance of "I ought to".

Faith and works theorem denies the claimed problem and refutes supererogation

From [Olson 2017]:

> "Perhaps the biggest wicked problem in Christian theology is the (at least) five hundred year old problem of how to reconcile faith and good works in salvation." (0.1)

Remark 0.1: We evaluate the claimed *largest* problem of faith and good works in [God's plan of] salvation in terms of God, man, faith, and works.

We write the conjecture as follows:

> If God as perfect implies man and faith implies works, then man implies faith implies works. (1.1)

LET p, q, r, s: God, man, faith, works. (s=s) means perfection

antecedent: (p>(s=s))>((q&r)>s) ;
TTTT TT**FF** TTTT TTTT (1.1.1.2)
consequent: q>(r> s) ; TTTT TT**FF** TTTT TTTT (1.1.2.2)
conclusion: ((p>(s=s))>((q&r)>s))>((q>(r> s)) ;
TTTT TTTT TTTT TTTT (1.2)

Remark 1.2: Eq. 1.2 is tautologous confirming the conjecture of 1.1.

A side effect of 1.2 is that different consequents result in *not* tautologous for the respective conclusions, with the same table value for each:

man implies if not faith then not works (1.1.3.1)
consequent: q>(~r>~s) ; TTTT TTTT TT**FF** TTTT (1.1.3.2)

man implies if not faith then works
consequent: q>(~r> s) ; TT**FF** TTTT TTTT TTTT (1.1.4.1)

man implies if faith then not works
consequent: q>(r>~s) ; TTTT TTTT TTTT TT**FF** (1.1.4.2)

Arminianism implies the virtue of supererogation, works above and beyond the call of duty. We define this as an extended consequent to 1.1.2.1: (1.1.5.1)

man implies if faith then works, implies godliness (a form of piety)
consequent: (q>(r>s))>p ; **F**T**F**T **F**TTT **F**T**F**T **F**T**F**T (1.1.5.2)

While the non Churchman may deem Eq. 1.1.5.2 should result in tautology as in1.2, it is *not* tautologous, hence refuting supererogation which in the Historic Church has the nature of sin.

Eqs.. 1.2 and 1.1.5.2 effectively solve, to deny, the problem of faith and works in salvation.

Confirmation of the family unit theorem to refute uni-gender union

We evaluate the basis of the family unit in terms of God, man, woman, and children as:

> If God as necessarily perfect implies creation of man and woman as possibly not perfect, then possibly man and woman implies production of possible children. (1.1)
>
> LET p, q, r, s: God, man or Adam, woman or Eve, children.
>
> ((p>#(s=s))>((q&r)>%(s@s)))>(%(q&r)>%s) ;
> TTTT TTTT TTTT TTTT (1.2)
>
> **Remark 1.2:** Eq. 1.2 is tautologous and hence a theorem.

We evaluate the principle of uni-gender union as applied to production of possible children:

> Possibly man and not woman implies production of possible children, and
> Possibly not man and woman implies production of possible children (2.1)
>
> (%(q&~r)>%s) & (%(~q&r)>%s) ;
> TTCC CCTT TTTT TTTT (2.2)

We evaluate the theology of uni-gender marriage as a required doctrine of belief in the Episcopal church, writing the conjecture as Eq. 1.1 implies 2.1:

> Given: If God as necessarily perfect implies creation of man and woman as possibly not perfect, then possibly man and woman implies production of possible children.
>
> Then: Possibly man and not woman implies production of possible children, and
> Possibly not man and woman implies production of possible children. (3.1)
>
> (((p>#(s=s))>((q&r)>%(s@s)))>(%(q&r)>%s))>((%(q&~r)>%s) & (%(~q&r)>%s)) ;
> TTCC CCTT TTTT TTTT (3.2)

Eq. 3.2 as rendered for Conclusion is *no*t tautologous. This refutes the theology of uni-gender marriage as a required doctrine of belief in the Episcopal church.

Refutation of the argument of theological fatalism

From [Zagzebsi 2008]:

Using the example of the proposition T, the argument that infallible foreknowledge of T entails that you do not answer the telephone freely can be formulated as follows:

1. The argument for theological fatalism
Basic Argument for Theological Fatalism

(1) Yesterday God infallibly believed T.
[Supposition of infallible foreknowledge]
(2) If E occurred in the past, it is now-necessary that E occurred then.
[Principle of the Necessity of the Past]
(3) It is now-necessary that yesterday God believed T. [1, 2] (1.3.1)
(4) Necessarily, if yesterday God believed T, then T.
[Definition of "infallibility"]
(5) If p is now-necessary, and necessarily (p → q), then q is now-necessary.
[Transfer of Necessity Principle]
(6) So it is now-necessary that T. [3,4,5] (1.6.1)
(7) If it is now-necessary that T, then you cannot do otherwise than answer the telephone tomorrow at 9 am.
[Definition of "necessary"]
(8) Therefore, you cannot do otherwise than answer the telephone tomorrow at 9 am. [6, 7] (1.8.1)
(9) If you cannot do otherwise when you do an act, you do not act freely.
[Principle of Alternate Possibilities]
(10) Therefore, when you answer the telephone tomorrow at 9 am, you will not do it freely. [8, 9] (1.10.1)

LET p, q, r, s: God or p, Event or q, yesterday, past.

Remark 1.10.1: We evaluate the argument in four variables.

A temporal frame of reference for chronological order is that yesterday (r) is lesser than today (s) as (r<s). Tomorrow is not (today lesser than or equal to yesterday) as ~((r≤s)), interpreted as ~(~(s<r)) for (s<r). We achieve the term for timelessness T by feint in the seemingly non-obvious (r=s). The clause (r<s) serves as the main antecedent to the argument. We take the sentence "you do not answer the telephone freely" as Event (q).

The numbered sequence of the basic argument to parse correctly is:

(r<s)>
(((((((1&2)>3)&(4&5))>6)&7)>8)&9)>10) ; (1.11.1)

We map these cumulatively, saving the outer antecedent (r<s) for last.

(((r&p)>(r=s))&((q&r)>#(q&r)))>#((r&p)>(r=s)) ;
NNNN NTTT NNNN NTTT (1.3.2)

(((((r&p)>(r=s))&((q&r)>#(q&r)))>#((r&p)>(r=s)))&
(#(((p&r)>(r=s))>(r=s))&((#p&#(p>q))>#q)))>#(r=s) ;
TTTT TCTC TTTT TTTT (1.6.2)

(((((((r&p)>(r=s))&((q&r)>#(q&r)))>#((r&p)>(r=s)))&
(#(((p&r)>(r=s))>(r=s))&((#p&#(p>q))>#q)))>#(r=s))&
(#(r=s)>~(q&s)))>~(q&s) ; TTTT TTTT TT**FF** TTNN (1.8.2)

(((((((((r&p)>(r=s))&((q&r)>#(q&r)))>#((r&p)>(r=s)))&
(#(((p&r)>(r=s))>(r=s))&((#p&#(p>q))>#q)))>#(r=s))&
(#(r=s)>~(q&s)))>~(q&s)) &(~q>(q>(s@s)))>(~(q&s)>(q=(s@s))) ;
TT**FF** TT**FF** TTTT TTTT (1.10.2)

(r<s)>
((((((((((r&p)>(r=s))&((q&r)>#(q&r)))>#((r&p)>(r=s)))&
(#(((p&r)>(r=s))>(r=s))&((#p&#(p>q))>#q)))>#(r=s))&
(#(r=s)>~(q&s)))>~(q&s)) &(~q>(q>(s@s)))>(~(q&s)>(q=(s@s)))) ; [81 steps]
TTTT TT**FF** TTTT TTTT (1.11.2)

Remark 1.11.2: Eq. 1.11.2 as rendered is *not* tautologous, refuting the basic argument for theological fatalism as given.

2. Compatibilist responses to theological fatalism

2.1 The Aristotelian solution

(4′) Necessarily, if yesterday God believed T, then T will become true.
[New definition of "infallibility".]
(6) becomes:
(6′) It is now-necessary that T will become true. (2.1.1.6.1)

(((((r&p)>(r=s))&((q&r)>#(q&r)))>#((r&p)>(r=s)))&
(#(((p&r)>(r=s))>((r=s)>(s=s)))&((#p&#(p>q))>#q)))>#((r=s)>(s=s)) ;
TTTT TTTT TTTT TTTT (2.1.1.6.2)

Remark 2.1.1.6.2: Eq. 1.1.1.6.2 is now tautologous as opposed to 1.6.2. We modify Eq. 1.11.2 to reflect 2.1.1.6.2:

(r<s)>
((((((((((r&p)>(r=s))&((q&r)>#(q&r)))>#((r&p)>(r=s)))&
(#(((p&r)>(r=s))>((r=s)>(s=s)))&((#p&#(p>q))>#q)))>#((r=s)>(s=s)))&
(#(r=s)>~(q&s)))>~(q&s)) &(~q>(q>(s@s)))>(~(q&s)>(q=(s@s)))) ;
TTTT TT**FF** TTTT TTTT (2.1.1.11.2)

Remark 2.1.1.11.2: Eq. 2.1.1.11.2 is *not* tautologous, meaning 2.1.1.6.2 caused no observed side effects to results in 1.11.2 and hence refutes theological fatalism.

2.2 The Boethian solution

(1t) God timelessly knows *T*.

(2t) If *E* is in the timeless realm, then it is now-necessary that *E*.
(3t) It is now-necessary that *T*. (2.2.1.1)

(r<s)>((((p&(r=s))>r)&((q<(r=s))>(#q&r)))>#r) ;
TTTT NNTT TTTT TTTT (2.2.2)

Remark 2.2.2: Eq. 2.2.2 is *not* tautologous, but nearly so. This may attest to the genius of Boethius, but denies a solution to theological fatalism.

2.3 The Ockhamist solution

For someone, Jones, to have counterfactual power over God's past beliefs, the following must be true:

(CPP) It was within Jones' power at t_2 to so something such that if he did it, God would not have held the belief he in fact held at t_1. (2.3.1.1)

LET p, q, r, s: God, Jones or Event, yesterday or t_1, today t_2.

(q&s)>((q&s)>~((p&r)>q)) ; TTTT TTTT TT**FF** TT**FF** (2.3.1.2)

Remark 2.3.1.2: Eq. 2.3.1.2 is *not* tautologous, denying the Ockhamist solution to theological fatalism

2.6 The denial of the necessity of the past and the denial of the transfer of necessity principle

These considerations indicate that premise (2) should be given up and replaced by:

(2a) If E is an event in the past, E is not now causable.

Consider next what happens if we alter the so-called necessity of the past to express the metaphysical principle that the past is not causable. Premise (5) becomes:

(5a) If p is not now causable and necessarily (p → q), then q is not now causable.
Principle (5a) is false.

One obvious reason is that a logically impossible proposition entails every proposition. (5a) needs to be amended as:

(5b) If p is not causable, necessarily (p → q), and p is not logically impossible, then q is not causable.

But premise (5b) is also false because the truth of q may be a logically necessary condition for the truth of p, where p is not causable but q is causable.

Remark 2.6: We modify the respective sentences by (2a) and (5b) [TTTT TTTT TTTT TTTT], but not by(5a) [TTCT TTCT TTCT TTCT], for a new mapping of Eq. 2.6.1.6.2.

(((((r&p)>(r=s))&((q&r)>#(q&r)))>#((r&p)>(r=s)))&
(#(((p&r)>(r=s))>(r=s))&((((p=(s@s))&#(p>q))&~~%p)>(q=(s@s)))))>#(r=s) ;

TTTT TCTC TTTT TTTT (2.6.1.6.2)

Remark 2.6.1.6.2: Eq. 2.6.1.6.2 is *not* tautologous and with equivalent truth table result of 1.6.2 to mean no side effects are observed. This confirms denial of the necessity of the past and the denial of the transfer of necessity principle as solutions to the basic argument of theological fatalism. Evaluations of the other claimed solutions are abandoned.

Refutation of the feminist political polemic in analytic theology

From [Griffioen, 2021]:

> **Comment:** This evaluation is colored by the facts that the title as a woke, political polemic relies on anomalies directly derived from the notoriously unschooled writings of Karl Marx. These include notions of: "the" marginalized and oppressed; sexist language and racist terms; and hatred of authority as the ultimate advocacy and justification for genocide, such as of instant masculinity, with the outcomes of Marxism well documented historically in Cambodia, China, Cuba, NK, USSR, Venezuela, and VN.
>
> By contrast, a fact ignored is that God the Son (Jesus) has a Y-chromosome, and the Mother of God (Mary) does not, to mean Jesus (and hence God the Father and God the Holy Ghost) has a penis. Furthermore, Jesus was circumcised. It is exactly against that which the article contemptuously rebels, much as Marx did against Blacks and Jews in private correspondence as continuously published during the Soviet regime, in the guise of supposedly objective scholarship for protected hack writing.

We limit mathematical evaluation of the article to mapping eight attributes as equivalents for respectively epistemic objectivity of view-from-nowhere (VFN) in i-viii and classical theism with perfect being theism (PBT) in a-h. We reuse four propositional variables because the sentences lend to such minimality.

LET p, q, r, s: known assertion (God), attitude (assumption, actuality), knower (being), locality.

An objectively known assertion implies the fact of a theorem.

i. **Subject/object dichotomy**:

What is objectively known exists independently of its being known. (2.1.1)

%(p>(s=s))@(p>(s=s)) ; **FFFF FFFF FFFF FFFF** (2.1.2)

Remark 2.1.2: Eq. 2.1.2 as rendered is *not* tautologous and contrary, to refute the claimed definition, denying dichotomy or paradox. Eq. 2.1.2 is the only contradiction for an attribute in either the VFN or PBT models.

ii. **External guidance:**

Objective knowledge consists of propositional attitudes whose content is determined by the way things really are, not by the knower herself. (2.2.1)

(p>(s=s))>((q>(s=s))&~(r>q)) ;
FFFF TT**FF FFFF** TT**FF** (2.2.2)

Remark 2.2.2: Eq. 2.2.2 is *not* tautologous, to refute the claimed definition.

iii. **Detachment:**

Objective knowers are affectively/conatively detached from the things known. (2.3.1)

((p>(s=s))&r)>(r@p) ; TTTT T**F**T**F** TTTT T**F**T**F** (2.3.2)

Remark 2.3.2: Eq. 2.3.2 is *not* tautologous, to refute the claimed definition , denying .

iv. **Value-neutrality:**

Objective knowers adopt an evaluatively neutral attitude toward what is known. (2.4.1)

((p>(s=s))&r)>(r>(q>~((p>(s=s))+(p>(s@s))))) ;
TTTT TT**FF** TTTT TT**FF** (2.4.2)

Remark 2.4.2: Eq. 2.4.2 is *not* tautologous, to refute the claimed definition.

v. **Aperspectivity, ahistoricity:**

Objectivity transcends particular spatio-temporal-historical locations or embodied standpoints. (2.5.1)

(p>(s=s))>(%s+#s) ; CCCC CCCC TTTT TTTT (2.5.2)

Remark 2.5.2: Eq. 2.5.2 is *not* tautologous, to refute the claimed definition.

vi. **Generality, abstraction:**

Objectivity generalizes over contexts and prefers the universal or abstract to the particular or concrete. (2.6.1)

(p>(s=s))>#(#p>%p) ; NNNN NNNN NNNN NNNN (2.6.2)

Remark 2.6.2: Eq. 2.6.2 is *not* tautologous, to refute the claimed definition. The truth table result value is truthity, the truth level below tautology. This is logically equivalent to Eq. 3.8.2 in the PBT model below.

vii. **Simplicity, unity:**

Objective approaches will be as simple and unified as possible. (2.7.1)

Remark 2.7.1: In Eq. 2.7.1 we interpret simple as unified respectively as necessity for all perfection and possibility for at least one unification.

((p>(s=s))&q)>%(q>(%(s=s)&#(s=s))) ;
TTTT TTTT TTTT TTTT (2.7.2)

Remark 2.7.2: Eq. 2.7.2 confirms the definition as the only tautology in the VFN model.

viii. **Commonality:**

Objectivity's output is accessible to all relevantly informed epistemic agents in full possession of their rational capacities, and such epistemic agents are fungible from the objective "stance." (2.8.1)

Remark 2.8.1: We take the word fungible to mean mutually interchangeable and hence equivalent as substitutes.

(p>(s=s))>((#r>(s=s))&(%r>(q&(r=#r)))) ;
NNTT **FF**NN NNTT **FF**NN (2.8.2)

Remark 2.1.2: Eq. 2.1.2 is *not* tautologous, to refute the claimed definition.

Of course, these values tend to run together and are often difficult to distinguish from each other in practice, but there are some important relations between them that are worth noting.

Remark 2.1.2-2.8.2: Eqs. 2.1.2 - 2.8.2 are *not* tautologous and not equivalents, to refute epistemic objectivity of a VFN model, denying a tendency of the definitions to run together as claimed.

At this point we were tempted to abandon further analysis on attributes, but in keeping with an objective of methodological completeness we pressed on.

. . .

a. **Aseity:**

Not only is God ~~is~~ distinct from God's creation, God is also wholly self-sufficient and not dependent on anything else. (3.1.1)

((p>(s=s))@((q&r)&s))&(((p>(s=s))=(s=s))&~((p>(s=s))<#~p)) ;
N**F**N**F** N**F**N**F** N**F**N**F** N**FFF** (3.1.2)

Remark 3.1.2: Eq. 3.1.2 is *not* tautologous, to refute the claimed definition.

b. **Actuality, impassibility, immutability:**

God cannot lack anything, or be merely potential with regard to anything, since lacking "being" or "actuality" with regard to something is a deficiency. Therefore, God must be pure actuality—a being who does not passively undergo or "suffer" anything and who is thus also not subject to change. (3.2.1)

((%(~q+~r)>(s@s))>~((p>(s=s))<#(q+r)))>(#((p>(s=s))>q)>(~(r>#(s@s))>~(r@r))) ;
TTTT TTTT TTTT TTTT (3.2.2)

Remark 3.1.2: Eq. 3.1.2 confirms the definition as the first tautology in PBT model.

c. **Eternity, immateriality, incorporeality:**

God is not located in time or space, which additionally entails that God cannot be material or embodied, since material bodies are spatio-temporal, can be changed and affected, and are limited and definite in ways a purportedly perfect being couldn't be. (3.3.1)

(r>(s&~(s=s)))>~((r&s)>(p>(s=s))) ;
FFFF TTTT **FFFF** TTTT (3.3.2)

Remark 3.3.2: Eq. 3.3.2 is *not* tautologous, to refute the claimed definition, denying God has omnipresence and can be local if he wants to. Furthermore, Moses heard and saw God after he walked by, so God was in fact local and a person.

d. **Omnipotence:**

God is all-powerful, or maximally powerful; God can do anything it is (logically) possible to do. (3.4.1)

(p>(s=s))>#q ; **FF**NN **FF**NN **FF**NN **FF**NN (3.4.2)

Remark 3.4.2: Eq. 34.2 is *not* tautologous, to refute the claimed definition, and is the same truth table result value as the other of the three O's chosen in 3.5.2 and 3.6.2 below.

e. **Omniscience:**

God is all-knowing, or maximally knowing; God knows everything there is to know. (3.5.1)

(p>(s=s))>#r ; **FF**NN **FF**NN **FF**NN **FF**NN (3.5.2)

Remark 3.5.2: Eq. 3.5.2 is *not* tautologous, to refute the claimed definition., and is the same truth table result value as the other of the three O's chosen in 3.4.2 above and 3.6.2 below.

f. **Omnibenevolence:**

God is wholly or maximally good; there is no evil (or lack of goodness) in God's character or activity. (3.6.1)

(p>(s=s))>#r ; **FF**NN **FF**NN **FF**NN **FF**NN (3.6.2)

Remark 3.6.2: Eq. 3.6.2 is *not* tautologous, to refute the claimed definition, and is the same truth table result value as the other of the three O's chosen in 3.4.2 and 3.6.2 above. The mapping rendered in the script is also identical to Omniscience in 3.5.2.

g. **Sovereignty/freedom:**

God is fully in control of all God's actions, and all things in creation are wholly under God's control. (3.7.1)

((p>(s=s))>(#((q&r)&s)>(s=s)))&((#((q&r)&s)>(s=s))>(p>(s=s))) ;
TTTT TTTT TTTT TTTT (3.7.2)

Remark 3.1.2: Eq. 3.1.2 confirms the definition is tautologous. This is second confirmation in the PBT model and is also equivalent to the tautology in 3.2.2. This is also the only rank-ordered equivalence between the VFN and PBT models, denying that respective attributes are equivalent between the two models.

h. **Simplicity/unity:**

A perfect being must be a wholly simple and unified being. (3.8.1)

Remark 3.8.1: See Remark 2.7.1 as applicable here.

#(((p>(s=s))&r)>((#(s=s)&%(s=s))&r)) = (s=s) ;
NNNN NNNN NNNN NNNN (3.8.2)

Remark 3.1.2: Eq. 3.1.2 is *not* tautologous, to refute the claimed definition. The truth table result value is truthity, the truth level below tautology. This is logically equivalent to Eq. 2.6.2 in the VFN model above.

Remark 2.m.n-3.m.n: Truth table result values are identical for Eqs. 2.7.2 and 3.7.2. All other respective pairings are unique.

That God is veracious is not considered as the measuring tool in the instant article to describe authority, for if God is omnipotent then surely God can to anything, except for one thing: God cannot tell a lie, as that would effectively deny Himself.

The article also does not make use of a free modal *street prover* such as Molle-1.0 at sourceforge.net with replicable scripts published. This means the reader must assume the attribute definitions, and subsequent conjectures, are truthful formulations, which we demonstrate they most certainly are not.

Unfortunately the instant journal continues an established pattern of poorly edited articles, as in repetitive triteisms of in-other-vein's, of-course's, and put-differently's, and of choosing some topic matter which simply bars scholarship, as the prized article.

Refutation of "God and all things in relation to God" (GATRG) for scientific analytical theology

From [Torrence 2019]:

> Now, clearly, the term "scientific" is a loaded term and, in our contemporary culture, tends to be associated with a naturalistic methodology.[2] For the purposes of this essay, however, I shall follow Aquinas and use this term as it has been used throughout the history of theology—as *scientia*. Used in this way, it refers to theology as an endeavor to understand a mind-independent object in a way that is true to the nature of that object. As Karl Barth puts it, to be scientific is to be "thrown up against reality" with an "unconditional respect for the uniqueness of its chosen theme" (1922, 515). So when the term is applied to theology, it serves to acknowledge that the task of theology should be characterized by a commitment to understanding *God and all things in relation to God* (GATRG) in a way that is accountable to the true nature of GATRG (see Aquinas 2006, I.1.7) and takes into account God's self-disclosure.
>
> *Scientific Analytic Theology*: an approach to analytic theology in which the theologian is expected to approach and give an account of GATRG in a way that seeks to correspond to or track the reality of GATRG.

(1.1.1)

Remark 1.1.1: We evaluate "God and all things in relation to God": GATRG.

LET p, q, r, s: God, q, relations, s. (s=s) means perfection.

(p>(s=s))&(#r<p) ; **FFFF** N**F**N**F** **FFFF** N**F**N**F** (1.1.2)

Remark 1.1.2: Eq. 1.1.2 is *not* tautologous to refute the claimed conjecture of GATRG. To resuscitate the argument we move the quantifier from "God and all things in relation to God" to "God and the necessity of things in relation to God". (1.2.1)

(p>(s=s))&#(r<p) ; **FFFF** N**F**N**F** **FFFF** N**F**N**F** (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is equivalent by result to 1.1.2, hence no resuscitation.

Confirmation of Frege's "not evident to me" God conjecture to Hilbert

From [Dean 2020]:

Abstract

This paper engages the question *Does the consistency of a set of axioms entail the existence of a model in which they are satisfied?* within the frame of the Frege-Hilbert controversy. The question is related historically to the formulation, proof, and reception of Gödel's Completeness Theorem. Tools from mathematical logic are then used to argue that there are precise senses in which Frege was correct to maintain that demonstrating consistency is *as difficult as it can be* but also in which Hilbert was correct to maintain that demonstrating existence given consistency is *as easy as it can be.*

6 Consistency and existence, redux

It is, however, also reasonable to ask how the proposed analyses bear on these notions as they are employed in contemporary practice, both inside and outside of mathematics. A paramount concern among contemporary readers is likely to be that even in its original form, the Completeness Theorem appears to allow existence to be demonstrated in too wide a range of cases. An incipient version of this worry is already illustrated by another of Frege's famous challenges to Hilbert:

> Suppose we knew that the propositions
>
> 1) **a** is an intelligent being
> 2) **a** is omnipresent
> 3) **a** is omnipotent
>
> together with all their consequences did not contradict one another; could we infer from this that there was an omnipotent, omnipresent, intelligent being? This is not evident to me. (IV/5, p. 47)

(6.1)

Remark 6.1: Frege could have cut to the chase by instead of "an intelligent being" using "a veracious being".

LET p, q, r, s: a, intelligent being, omnipresent, omnipotent.

((p=q)&((p=r)&(p=s)))>(((s&r)&q)=p) ;
TTTT TTTT TTTT TTTT (6.2)

Remark 6.2: Eq. 6.2 is tautologous, meaning the conjecture is confirmed. Of course Eq. 6.2 can be weakened with consequent (((s&r)&q)>p) which is also tautologous. (6.3) The impediment in framing this with a consequent as (((s&r)&q)&p) is shown below with the "almost, but no cigar":

((p=q)&((p=r)&(p=s)))>(((s&r)&q)&p) ;
FTTT TTTT TTTT TTTT (6.4)

Gödel-Scott on God

From [Benzmüller et al 2017a]:

These assertions are attributed to the rendering of Gödel's expressions by Dana S. Scott (unpublished, 2004), where A axiom, T theorem, and D definition:

A1.1 Either a property or its negation is positive, but not both: $\forall\varphi[P(\neg\varphi) \leftrightarrow \neg P(\varphi)]$

A2.1 A property necessarily implied by a positive property is positive:
$\forall\varphi\forall\psi[(P(\varphi) \wedge \forall x[\varphi(x) \rightarrow \psi(x)]) \rightarrow P(\psi)]$

T1.1 Positive properties are possibly exemplified: $\forall\phi[P(\phi) \rightarrow \blacklozenge\exists x\phi(x)]$

D1.1 A God-like being possesses all positive properties: $G(x) \leftrightarrow \forall\varphi[P(\varphi) \rightarrow \varphi(x)]$

A4.1 Positive properties are necessarily positive: $\forall\varphi[P(\varphi) \rightarrow P(\varphi)]$

The Meth8 mapping is below with repeating fragments of truth tables.

LET: ¬ ~, # ∀, % ∃, % ♦, ∧ &, → >, ↔ =, p P, t G, x x, φ q, ψ r.

A1.2 (#q&(p&~q))=(#q&(~p@q)) ;

```
Model 1              Model 2.1            Model 2.2            Model 2.3.1          Model 2.3.2
TTTC TTTC TTTC TTTC  EEEU EEEU EEEU EEEU  EEEE EEEE EEEE EEEE  EEEP EEEP EEEP EEEP  EEEI EEEI EEEI EEEI
```

A2.2 ((#q&#r)&((p&q)&#(#x&((q&x)>(r&x))))) >((#q&#r)&(p&r)) ;

```
Model 1              Model 2.1            Model 2.2            Model 2.3.1          Model 2.3.2
TTTT TTTT TTTT TTTT  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE
```

T1.2 (#q&(p&q))=(#q&%(%x&(q&x))) ;

```
Model 1              Model 2.1            Model 2.2            Model 2.3.1          Model 2.3.2
TTTC TTTC TTTC TTTC  EEEU EEEU EEEU EEEU  EEEE EEEE EEEE EEEE  EEEP EEEP EEEP EEEP  EEEI EEEI EEEI EEEI
TTCT TTCT TTCT TTCT  EEUE EEUE EEUE EEUE  EEEE EEEE EEEE EEEE  EEPE EEPE EEPE EEPE  EEIE EEIE EEIE EEIE
```

D1.2 (t&x)=(#q&((p&q)>(q&x))) ;

```
Model 1              Model 2.1            Model 2.2            Model 2.3.1          Model 2.3.2
TTCC TTCC TTCC TTCC  EEUU EEUU EEUU EEUU  EEEE EEEE EEEE EEEE  EEPP EEPP EEPP EEPP  EEII EEII EEII EEII
FFNN FFNN FFNN FFNN  UUEE UUEE UUEE UUEE  UUUU UUUU UUUU UUUU  UUII UUII UUII UUII  UUPP UUPP UUPP UUPP
TTCT TTCT TTCT TTCT  EEUE EEUE EEUE EEUE  EEEE EEEE EEEE EEEE  EEPE EEPE EEPE EEPE  EEIE EEIE EEIE EEIE
```

A4.2 (#q&(p&q))=(#q&#(p&q));

```
Model 1              Model 2.1            Model 2.2            Model 2.3.1          Model 2.3.2
TTTT TTTT TTTT TTTT  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE
```

We ask if (A1.1 & A2.1) > T1.1, that is: (A1.2 & A2.2) > T1.2.

(((#q&(p&~q))=(#q&(~p@q))) & (((#q&#r)&((p&q)&#(#x&((q&x)>(r&x))))))>((#q&#r)&(p&r))) > ((#q&(p&q))=(#q&%(%x&(q&x)))) ;

```
Model 1              Model 2.1            Model 2.2            Model 2.3.1          Model 2.3.2
TTTT TTTT TTTT TTTT  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE  EEEE EEEE EEEE EEEE
```

```
TTCT TTCT TTCT TTCT   EEUE EEUE EEUE EEUE   EEEE EEEE EEEE EEEE   EEPE EEPE EEPE EEPE   EEIE EEIE EEIE EEIE
```

We ask if (A1.1 > A2.1) > T1.1, that is: (A1.2 > A2.2) > T1.2.

(((#q&(p&~q))=(#q&(~p@q))) > (((#q&#r)&((p&q)&#(#x&((q&x)>(r&x)))))>((#q&#r)&(p&r))) > ((#q&(p&q))=(#q&%(%x&(q&x)))) ;

```
Model 1              Model 2.1            Model 2.2            Model 2.3.1          Model 2.3.2
TTTC TTTC TTTC TTTC  EEEU EEEU EEEU EEEU  EEEE EEEE EEEE EEEE  EEEP EEEP EEEP EEEP  EEEI EEEI EEEI EEEI
TTCT TTCT TTCT TTCT  EEUE EEUE EEUE EEUE  EEEE EEEE EEEE EEEE  EEPE EEPE EEPE EEPE  EEIE EEIE EEIE EEIE
```

Our results are summarized as:

R1 A1, T1, and D1 are not tautologous.
R2 A2 and A4 are tautologous.
R3 A1 and A2 does not imply T1.
R4 A1 implying A2 does not then imply T1.

We conclude that the Gödel-Scott proof of God is *not* tautologous, as advertised in the popular press.

Benzmüller, Paleo, and Scott decline to share the tool results for independent replication, casting further doubt on the veracity of the claimed results.

Refutation of the notion that God is *not* a person

From [Morgan, 2021]:

> "Divine Science perceives God as 'universal mind presence. It does not conceive God as a person. This mind, conscious of its own ideas, is the perfect sense of consciousness which comprises the Holy Trinity of Father, Son, and Holy Spirit. Divine Science interprets and teaches this trinity as mind, idea, and consciousness. Other terms expressing the same Trinity are spirit, soul, and body.' "
>
> (1.1.1-1.6.1)

LET p, q, r, s: Father, Son, person, Holy Spirit.

God is not a person: (1.2.1)

Remark 1.2.1: We evaluate 1.2.1 from the terms in 1.4.1 of Father and Son as persons, rewriting the conjecture as:

"If the Father implies a Person and the Son implies a Person, then God the Father, Son, and Holy Spirit imply *not* a Person." (1.2.1.1)

((p>r)&(q>r))>(((p&q)&s)>~r) ;

TTTT TTTT TTTT TTT**F** (1.2.1.2)

Remark 1.2.1.2: Eq. 1.2.1.2 is *not* tautologous, to refute the conjecture, denying the core belief of Divine science, aka New thought, Religious science, and Unity [school].

The conjecture is also false to fact as based on Moses seeing God's back, literally back side, in Ex 33:23: "And I will take away mine hand, and thou shalt see my back parts: but my face shall not be seen." A person has a face and backside. Furthermore, the names of Father and Son also describe persons, namely, *male* persons possessing a Y-chromosome in the male XY-pair, absent from the female XX-pair derived therefrom.

Refutation, shortest, that God is not a person

If God as good creates a person, then God is implied as a person. (1.1.1)

If God as good creates a person, then God is not implied as a person. (1.2.1)

LET p, q, s: God, person, s.

((p>(s=s))>q)>(p>q) ; TTTT TTTT TTTT TTTT (1.1.2)

((p>(s=s))>q)>~(p>q) ; TT**FF** TT**FF** TT**FF** TT**FF** (1.2.2)

Remark 1.1.2, 1.2.2: Eq. 1.1.2 is tautologous, to confirm the conjecture that God is a person. Eq. 1.2.2 is *not* tautologous, to refute that God is not a person, denying Judaism, Muhammudanism, Jehovah's Witness, Mormonism, and New Thought, among others.

Refutation of greatest possible being (GPB) and perfect being theology

From [Speaks 2014]:

> Perfect being theology is the attempt to decide questions about the nature of God by employing the Anselmian formula that God is the greatest possible being, which we can state as follows:
>
> [GPB] □∀x (x is God iff x is the greatest possible being)

(1.1)

LET p, q, r, s: God, being, x, s.
Perfection is (s=s); and imperfection is (s@s).

#((#r>%q)=(#r>(p>(s=s)))) = (s=s) ;
NNNN NN**F**N NNNN NN**F**N (1.2)

Remark 1.2: Eq. 1.2 as rendered is *not* tautologous, although close to truthity. We note that if the connective is imply if instead of equivalent iff, then the sentence is truthity (all N's). This refutes the Anselmian formula proffered that God is the greatest possible being (GPB), to refute the conjecture of perfect being theology.

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Refutation of the arch-homosexual assertion by feminist mantra on abortion

From [Breitbart, 2021.10.02]:

> A speaker at a Women's March in Savannah, Georgia, on Saturday [Oct. 2, 2021] said the fight for the right to kill unborn children in the womb also applies to "trans men."
>
> "This is an issue that has been affecting moms, their daughters, their granddaughters, their great granddaughters, trans men — it's been affecting people for 50 years because even though it's legal, we're still fighting for it, which doesn't make sense," ... said [a white woman with long blond hair standing on a step ladder] to a crowd of several hundred people at Forsyth Park. (1.1.0)
>
> "We are the granddaughters of the witches you couldn't burn," one sign read.
> "Keep your theology out of my biology," another sign said.
> "Love your vagina: I can help", a poster read.
> "If you take away my birth control, I'll just make more feminists," another poster read.
>
> Similar to the speaker's notion that people of all genders can become pregnant, the Women's Health Protection Act offers a caveat for its use of the terms "woman" and "women" in the legislation. The bill asserts that access to abortion is "critical to the health of every person capable of becoming pregnant," including "cisgender women, transgender men, non-binary individuals, those who identify with a different gender, and others."
>
> Notably, the Biden administration's 2022 fiscal year budget request also used the phrase "birthing people" instead of "mothers".

Using the phrase "man is woman" for transgender man, we write Eq. 1.1.0 constructively as the sentence:

If man and woman implies man or woman, then both woman and man is woman. (1.1.1)

LET p, q: man, woman. (in alphabetical order)

((p&q)>(p+q))>(q&(p>q)) ; **FF**TT **FF**TT **FF**TT **FF**TT (1.1.2)

To inject abortion into the conjecture, the whole point of the polemic, uses the phrase "woman implies man or woman as bad" in an antecedent to read:

If man and woman then man or woman implies woman implies man or woman as bad [ie abortion], then both woman and man implies woman [ie transgender man]. (1.3.1)

((p&q)>((p+q)>(q>((p+q)>(s@s)))))>(q&(p>q)) ;
FFTT **FF**TT **FF**TT **FF**TT (1.3.2)

Remark 1.1.2, 1.3.2: Eqs. 1.1.2 and 1.3.2 are *not* tautologous but logically equivalent, to refute the argument, denying the conjecture. In fact, the truth table result value turns out to be the same as the logical value for woman:

(((p&q)>((p+q)>(q>((p+q)>(s@s)))))>(q&(p>q)))=q ;
TTTT TTTT TTTT TTTT (14.2)

Taking the abortion phrase alone as a consequent to woman is equivalent to not woman: (1.5.1.1)

q>(((p+q)>(s@s))=~q) ; TTTT TTTT TTTT TTTT (1.5.1.2)

Remark 1.1.4.2: Eq. 1.1.4.2 confirms that woman implies abortion is equivalent to not woman.

The arch-homosexual assertion arises when the consequent in Eq. 1.5.1.1 implies *not* male: (1.5.2.1)

q>(((p+q)>(s@s))>~p) ; TTTT TTTT TTTT TTTT (1.5.2.2)

Remark 1.5.2.2: Eq. 1.5.2.2 confirms that woman implies abortion is equivalent to not male.

In fact, the purpose of the arch-homosexual assertion is to separate woman from man as a ruse to denigrate woman, in forcing the phrase of woman inferior to or lesser than man as q<p in the consequent for 1.5.2.1: (1.5.3.1)

(q>(((p+q)>(s@s))>~p))>(q<p) ;
FFTF FFTF FFTF FFTF (1.5.3.2)

In fact, the purpose of the arch-homosexual assertion is also to separate man from woman as a ruse to denigrate man, in forcing the phrase of man inferior to or lesser than woman as p<q in the consequent for 1.5.2.1: (1.5.4.1)

(q>(((p+q)>(s@s))=~q))>(p<q) ;
FTFF FTFF FTFF FTFF (1.5.4.2)

Remark 1.5.3.2, 1.5.4.2: Eqs. 1.5.3.2 and 1.5.4.2 are *not* tautologous but logically equivalent, to confirm the argument, denying the assertions for man, woman, and transgender man.

Refutation of homosexuality by progeny

We evaluate logical progeny from human reproduction based on the antecedent of man and woman.

"A man and woman produce male or female offspring (to include twins)." (1.1.1)

LET p, q: man, woman.

(p&q)>(p+q) ; TTTT TTTT TTTT TTTT (1.1.2)

The contrary antecedent that "Not a man and woman produce male or female offspring", is logically the same as "Not a man and not a woman produce male or female offspring". (1.2.1)

~(p&q)>(p+q) ; **F**TTT **F**TTT **F**TTT **F**TTT (1.2.2)

Variations with the consequent are "A man and woman produce not a male or not a female offspring" and logically the same for "A man and woman produce not either a male or female offspring". (1.3.1)

(p&q)>(~p+~q) ; TTTT TTT**F** TTTT TTT**F** (1.3.2)

The only tautologous conjecture is Eq. 1.1.2. This means the antecedent of male and female can only conclude correctly with male and female offspring. In particular, Eq. 1.3.2 shows that excluded offspring are anything but male and female offspring.

This refutes non-productive offspring such as the labels for bisexual, homosexual, lesbian, and transgender, denying the mainstay of woke critical race theory, namely, to erode more than two *productive* genders. What further follows is that non-productive offspring labels cannot be genetic.

Refutation of propositional axioms for Judaic argumentation theory

From [Schumann 2012]. Logical cornerstones of Judaic argumentation theory.
link.springer.com/article/10.1007/s10503-012-9273-8 Andrew.Schumann@gmail.com

Judaic argumentation consists of derived trees of propositions using four rules of inference: 1. parallel, concurrent deduction; 2. analogy; 3. comparison of local subjects; and 4. comprehensive consideration of subject properties. This results in four types of axioms: 1. those forbidding sacrilege as discourse of ecclesiastical subject matters (Def. 1); 2. tree format of disciple/sage in learning/teaching (Def. 2-5, Q1-6); 3. pragmatic limitations on proof (Def. 6-10; and 4. dispute types (D1-37) for precedence of Judaic sages as earlier/later.

Our interest is in evaluating those axioms claimed in the text as already reduced to the more fully propositional-type of expressions in Def. 8.7-8.28 and D1-5.

The axioms concerning the general properties to be a conflict between sages:

$$\neg \mathrm{agst}_{\varphi}(Q, Q), \tag{7}$$

$$\mathrm{agst}_{\varphi}(Q, R) \Rightarrow \mathrm{agst}_{\varphi}(R, Q), \tag{8}$$

$$\mathrm{agst}_{\varphi}(Q, R) \Rightarrow (\varphi =_b Q \vee \varphi =_b R), \tag{9}$$

$$\mathrm{agst}_{\varphi}(Q, R) \Rightarrow (\varphi =_b Q \Rightarrow \neg(\varphi =_b R)), \tag{10}$$

$$((\phi \equiv \neg\psi) \wedge \varphi =_b Q \wedge (\psi =_b R)) \Rightarrow \mathrm{agst}_{\varphi}(Q, R), \tag{11}$$

$$A(\varphi) \Rightarrow \neg \mathrm{agst}_{\varphi}(Q, R). \tag{12}$$

The axioms concerning the general properties to be a teacher of another sage:

$$\neg \mathrm{T}(Q, Q), \tag{13}$$

$$\mathrm{T}(Q, R) \Rightarrow \neg \mathrm{T}(R, Q), \tag{14}$$

$$(\mathrm{T}(P, Q) \wedge \mathrm{T}(Q, R)) \Rightarrow \mathrm{T}(P, R), \tag{15}$$

$$(\varphi =_b P \wedge \neg \mathrm{agst}_{\varphi}(P, Q) \wedge \mathrm{T}(P, Q)) \Rightarrow \varphi =_b Q. \tag{16}$$

The axioms in respect to the general properties to be later than another sage:

$$\neg t(Q, Q), \tag{17}$$

$$t(Q, R) \Rightarrow \neg t(R, Q), \tag{18}$$

$$(t(P, Q) \wedge t(Q, R)) \Rightarrow t(P, R). \tag{19}$$

The general properties to be followed by another statement are expressed by the following axioms:

$$\neg(\varphi * \varphi), \tag{20}$$

$$(\varphi * \psi) \Rightarrow \neg(\psi * \varphi), \tag{21}$$

$$(\varphi * \psi) \wedge (\psi * \chi) \Rightarrow (\varphi * \chi). \tag{22}$$

The general properties to be an opinion of a sage are formulated by the axioms:

$$(\psi =_b Q \wedge (\varphi \Rightarrow \psi)) \Rightarrow \varphi =_b Q, \tag{23}$$

$$\varphi =_b Q \Rightarrow \neg(\neg\varphi =_b Q), \tag{24}$$

$$(\phi \wedge \psi) =_b Q \Rightarrow ((\varphi =_b Q) \wedge (\varphi =_b Q)). \tag{25}$$

The axioms regarding the general properties to be a final decision (*halakhah*):

$$(\mathrm{H}(\psi) \wedge (\varphi \Rightarrow \psi)) \Rightarrow \mathrm{H}(\varphi), \tag{26}$$

$$\mathrm{H}(\varphi) \Rightarrow \neg(\mathrm{H}(\neg\varphi)), \tag{27}$$

$$\mathrm{H}(\varphi \wedge \psi) \equiv (\mathrm{H}(\varphi) \wedge \mathrm{H}(\psi)). \tag{28}$$

(8.7.1 - 8.28.1)

LET p, q, r, s: P (or φ), Q (or H, or A), R (or χ, or φ), t (or T, or ψ, or H)

where in an expression, the four variables are unique; subscript$_n$ is read as 3. We take = as equivalent to $=_b$, and the *agst* functor for dispute as irrelevant.

~(q&q) = (s=s) ;	TT**FF** TT**FF** TT**FF** TT**FF**	(8.7.2)
(q&r)>(r&q) ;	TTTT TTTT TTTT TTTT	(8.8.2)
(q&r)>((p=q)+(p=r)) ;	TTTT TT**F**T TTTT TT**F**T	(8.9.2)
(q&r)>((p=s)>~(p=r)) ;	TTTT TTTT TTTT TTT**F**	(8.10.2)
((p=~s)&((p=q)&(s=r)))>(q&r) ;	TTT**F** TTTT TTTT **F**TTT	(8.11.2)
(q&p)>~(q&r) ;	TTTT TTT**F** TTTT TTT**F**	(8.12.2)
~s&(q&q) ;	**FF**TT **FF**TT TTTT TTTT	(8.13.2)
(s&(q&r))>(~s&(r&q)) ;	TTTT TTTT TTTT TT**FF**	(8.14.2)
((s&(p&q))&(s&(q&r)))>(s&(p&r)) ;	TTTT TTTT TTTT TTTT	(8.15.2)
((r=p)&(~(p&q)&(s&(p&q))))>(r=q) ;	TTTT TTTT TTTT TTTT	(8.16.2)
~s&(q&q) ;	**FF**TT **FF**TT TTTT TTTT	(8.17.2)
(s&(q&r))>(~s&(r&q)) ;	TTTT TTTT TTTT TT**FF**	(8.18.2)
((s&(p&q))&(s&(q&r)))>(s&(p&r)) ;	TTTT TTTT TTTT TTTT	(8.19.2)
~(p&p)=(s=s) ;	T**F**T**F** T**F**T**F** T**F**T**F** T**F**T**F**	(8.20.2)
(p&s)>~(s&p) ;	TTTT TTTT T**F**T**F** T**F**T**F**	(8.21.2)
((p&s)&(s&r))>(p&r) ;	TTTT TTTT TTTT TTTT	(8.22.2)
(s=(q&(p>s)))>(p=q) ;	T**F**TT T**F**TT TT**F**T TT**F**T	(8.23.2)
(p=q)>~(~p=q) ;	TTTT TTTT TTTT TTTT	(8.24.2)
((p&s)=q)>((p=q)&(p=q)) ;	T**F**TT T**F**TT TTTT TTTT	(8.25.2)
((q&s)&(p>s))>(q&p) ;	TTTT TTTT TT**F**T TT**F**T	(8.26.2)
(q&p)>~(q&~p) ;	TTTT TTTT TTTT TTTT	(8.27.2)
(q&(p&s))=((q&p)&(q&s)) ;	TTTT TTTT TTTT TTTT	(8.28.2)

Remark 8.7.2-8.28.2: Of the 22 Eqs. 8.7.2 - 8.28.2 as rendered, 14 are *not* tautologous. No group is fully tautologous. The refutes those claimed axioms to deny Judaic argumentative theory.

D1 One sage against many: the final decision is like the many, i.e. when the opinion of an individual conflicted with that of the majority, we should choose the opinion of the majority:

$$(\neg(\varphi =_b Q) \wedge \varphi =_b R_1 \wedge \varphi =_b R_2 \wedge \cdots \wedge \varphi =_b R_n) \quad \wedge$$
$$(\mathrm{agst}_\varphi(Q, R_1) \wedge \mathrm{agst}_\varphi(Q, R_2) \wedge \cdots \wedge \mathrm{agst}_\varphi(Q, R_n)) \Rightarrow H(\varphi).$$

D2 The final decision is never like the disciple when in dispute with his teacher:

$$(\varphi =_b Q \wedge T(Q, R) \wedge \mathrm{agst}_\varphi(Q, R)) \Rightarrow \neg H(\varphi).$$

D3 If a later sage is in dispute with an earlier sage, the final decision is like the later sage:

$$(\varphi =_b Q \wedge t(Q, R) \wedge \mathrm{agst}_\varphi(Q, R)) \Rightarrow H(\varphi).$$

D4 Within one tractate of the Mishnah, a dispute followed by an anonymous statement, representing one of the views, means that the final decision is in accordance with the latter:

$$(\varphi * \psi \wedge (\varphi \equiv \neg\psi) \wedge \mathrm{agst}_\varphi(Q, R) \wedge A(\psi)) \Rightarrow H(\psi).$$

D5 Within one tractate of the Mishnah, an anonymous statement followed by statements containing a dispute means that the final decision is not like the anonymous statement:

$$(\varphi * \psi \wedge (\varphi \equiv \neg\psi) \wedge \mathrm{agst}_\varphi(Q, R) \wedge A(\varphi)) \Rightarrow \neg H(\varphi).$$

(D1.1-D5.1)

(((~(p=q)&(p=(r&(%s>#s))))&((p=(r&(%s<#s)))&(p=(r&(s=s)))))&
(((q&(r&(%s>#s)))&(q&(r&(%s<#s))))&(q&(r&(s=s)))))>(s&p) ;
TTTT TTTT TTTT TTTT (D1.2)

LET p, q, r, s, t, u: φ, Q, R, ψ, A, H.

(((p=q)&(s&(q&r)))&(q&r))>(~u&p) ;
TTTT TTTT TTTT TTTT} 2}32
TTTT TTTT TTTT TTT**F**} 2} (D2.2)

(((p=q)&(s&(q&r)))&(q&r))>(u&p) ;
TTTT TTTT TTTT TTT**F**} 2}32
TTTT TTTT TTTT TTTT} 2} (D3.2)

(((p&s)&(p=~s))&((q&r)&(t&s)))>(u&s) ;
TTTT TTTT TTTT TTTT (D4.2)

(((p&s)&(p=~s))&((q&r)&(t&p)))>(u&p) ;
TTTT TTTT TTTT TTTT (D5.2)

Remark D2.2, D3.2: Eqs. D2.2 and D3.2 are *not* tautologous. The refutes those claimed axioms also to deny Judaic argumentative theory.

Remark D4.2, D5.2: Eqs. D4.2 and D5.2 are equivalent theorems. What follows is that the Mishnah *appears* to be inerrant because a tractate can be proved endlessly correct based on the order of anonymous and disputed sentences.

The seminal problem with Judaic argumentative theory is the notion that sage output is *assumed* to become veracious by repetition. This bleeds over from the underlying theological problem of viewing a sage as divine and hence oracular, as analogous to the inerrant and infallible prophets of the Hebrew Bible. In fact, Malachi was the last Great Prophet of Israel.

This note should further show the utility of using a *bivalent*, modal proof assistant for quickly evaluating conjectures in analytical theology. In this regard, Prover9 and the modal street prover Molle-1.0 are avoidable as not bivalent but vector space analyzers.

Relation of Judaism, Mohammadanism, and Christianity to confirm the last

See [Borowitz 1969].

We contrast the three historic monotheistic theologies of Judaism, Christianity, and Mohammadanism in two sections for core arguments and additional prophetic arguments.

LET p, q, r: God, group, prophet.
(s=s) is good, perfect, alive;
(s@s) is bad, imperfect, dead.

1. Core arguments

1.1 Judaism

This goes from good prophets to all good prophets.

If God as perfect, then:
a group implies the prophet as good, and all prophets imply the group as good. (1.1.1)

(p>(s=s))>((%q>(r>(s=s)))&(#r>(q>(s=s)))) ;
TTTT TTTT TTTT TTTT (1.1.2)

1.2. Christianity

Same as Eqs. 1.1.1 and 1.1.2.

1.3. Mohammadanism

This generalizes Judaism and Christianity and goes from all prophets to a particular prophet.

If God as perfect, then:
a group implies all prophets as good, and a prophet implies the group as good. (1.3.1)

(p>(s=s))>((%q>#(r>(s=s)))&(%r>(q>(s=s)))) ;
NNNN NNNN NNNN NNNN (1.3.2)

2. Prophetic arguments

2.1 Judaism

This goes from a group for good prophets to possibly the group against bad prophets.

If God as perfect, then:
a group implies the prophet as good, and all prophets imply the group as good,
and possibly the group implies the prophet is possibly bad [killed].

(p>(s=s))>(((%q>(r>(s=s)))&(#r>(q>(s=s))))&%(q>(r>(s@s)))) ;
TTTT TTCC TTTT TTCC (2.1.2)

2.2 Christianity

This goes from a group for good prophets to the group for not bad prophets.

If God as perfect, then:
a group implies the prophet as good, and a prophet implies the group as good, and the group implies the prophet is not bad [not killed].

(p>(s=s))>(((%q>(r>(s=s)))&(%r>(q>(s=s))))&(q>(r>~(s@s)))) ;
TTTT TTTT TTTT TTTT (2.2.2)

2.3 Mohammadanism

This goes from a group for all prophets to injection of a particular prophet prohibiting other groups.

If God as perfect, then:
a group implies all prophets as good, and a prophet implies the group as good, and the prophet implies not that group is bad [killed].

(p>(s=s))>(((%q>#(r>(s=s)))&(%r>(q>(s=s))))&(r>(~q>(s@s)))) ;
NNNN **FF**NN NNNN **FF**NN (2.3.2)

Judaism and Mohammadanism are *not* tautologous, and Christianity is. The impediment in Judaism is the chosen group sometimes killing its prophets. The impediment in Mohammadanism is claiming all prophets then killing groups other than that of a particular prophet. This exposition was performed in three propositional variables.

Refutation of the knowability paradox and denial of anti-realism

From [Kvanbig 2010]:

> Let $\exists x \exists t K = K =$ "it is known by some human at some time that". Then assume that some unknown truth is known:
>
> 1. $K(p \,\&\, \sim Kp)$.[9]
>
> Distribute the K operator to get
>
> 2. $Kp \,\&\, K\sim Kp$,
>
> and then use the fact that knowledge implies truth to drop the K operator from the second conjunct, thus deriving:
>
> 3. $Kp \,\&\, \sim Kp$.
>
> So by RAA, we get
>
> 4. $\sim K(p \,\&\, \sim Kp)$.
>
> Since this result is a theorem, by the rule of necessitation, it is necessary:
>
> 5. $\Box \sim K(p \,\&\, \sim Kp)$.
>
> 6. $\sim \Diamond K(p \,\&\, \sim Kp)$.
>
> Suppose, then, that all truths are knowable, i.e.,
>
> 7. $\forall p(p \rightarrow \Diamond Kp)$.
>
> Where p is an arbitrarily chosen unknown truth, the following conjunction is true:
>
> 8. $p \,\&\, \sim Kp$.
>
> If all truths are knowable, this truth, that p is an unknown truth, is itself knowable, i.e.,
>
> 9. $\Diamond K(p \,\&\, \sim Kp)$.
>
> Since this conclusion contradicts the formalized claim at line 6
>
> $\sim \Diamond K(p \,\&\, \sim Kp)$,
>
> we must reject one of the two assumptions we have made. One assumption is

(5.0.1 - 5.9.1)

LET p, q: p, K, x, t.

((#%r&%s)&q)=q ; TTCC TTCC TTCC TTTT (5.0.2)

(((#%r&%s)&q)=q)>(q&(p&~(q&p))) ;
FFNN FFNN FFNN FFFF (5.1.2)

(((#%r&%s)&q)=q)>((q&p)&(q&~(q&p))) ;
FFNN FFNN FFNN FFFF (5.2.2)

(((#%r&%s)&q)=q)>((q&p)&~(q&p)) ;

FFNN **FF**NN **FF**NN **FFFF** (5.3.2)

(((#%r&%s)&q)=q)>(~q&(p&~(q&p))) ;
FTNN **F**TNN **F**TNN **FTFF** (5.4.2)

(((#%r&%s)&q)=q)>(#~q&(p&~(q&p))) ;
FNNN **F**NNN **F**NNN **FNFF** (5.5.2)

(((#%r&%s)&q)=q)>(~%q&(p&~(q&p))) ;
FNNN **F**NNN **F**NNN **FNFF** (5.6.2)

Remark 5.0.2-5.6.2: Eqs. 5.0.2 - 5.6.2 as rendered are *not* tautologous; in fact if 5.0.2 is excluded as the respective antecedent, the proof table result values are also *not* tautologous. This refutes 5.4.2, 5.5.2, and 5.6.2 as claimed theorems.

(((#%r&%s)&q)=q)>(#p>(%q&#p)) ;
TCTT TCTT TCTT TCTT (5.7.2)

(((#%r&%s)&q)=q)>(p&(~q&p)) ;
FTNN **F**TNN **F**TNN **FTFF** (5.8.2)

If (Eq. 5.7.2 then 5.8.2) then 5.9.2: (5.9.1)

(((((#%r&%s)&q)=q)>(#p>(%q&#p)))>((((#%r&%s)&q)=q)>
(p&(~q&p))))>(%p&(p&(~q&p))) ;
TTCC TTCC TTCC TTTT (5.9.2)

Eq. 5.9.2 contradicts 5.6.2: (5.10.1)

((((((#%r&%s)&q)=q)>(#p>(%q&#p)))>((((#%r&%s)&q)=q)>
(p&(~q&p))))>(%p&(p&(~q&p))))@((((#%r&%s)&q)=q)>(~%q&(p&~(q&p)))) ;
TCTT TCTT TCTT TCTT (5.10.2)

Remark 5.7.2-5.10.2: Eqs. 5.7.2 - 5.10.2 are *not* tautologous. This refutes the claims that 5.8.2 and 5.9.2 are theorems, and further refutes that 5.9.2 contradicts 5.6.2. This denies Fitch's paradox of unknowability.

The footnote 9 in Eq. 5.1.1 states:

> [9]My formulation of the proof involves implicit second-order quantifiers in the K operator, with p being a zero-place predicate. For those preferring first-order explanations, such can be provided, but the presentation is considerably more complex. So here I will use the simpler version. For the more complex presentation, see (Kvanvig 1996), and for further discussion of the paradox itself, see (Kvanvig 2006).

We evaluate the earlier title in search of considerably more complex first-order explanations.

From [Kvanvig 1996]:

In order to formalize the argument, we add to first-order logic a possibility operator '◇', a truth predicate 'T', and a three-place relation 'K' (where 'KxTyt' is read "x knows that y is true at time t"). The argument also uses two other rules of proof, the "Knowledge Implies Truth" rule (KIT), according to which one may infer *p* from the claim that someone knows *p* at some time, and a principle about the distributability of knowledge. The distribution rule allows one to apply conjunction-elimination within knowledge contexts (K-&E), so that if you know *p&q*, you know *p* and you know *q*. With this apparatus, the argument runs as follows. By assumption, we are given (1) ∀p(Tp → ◇∃x∃tKxTpt) (All truths are knowable), and (2) ∃p(Tp & ~∃y∃sKyTps) (Some truths are unknown). An instance of (2) is (3) Tq & ~∃y∃sKyTqs, which we can substitute into (1) as the value for p, yielding (4) (Tq & ~∃y∃sKyTqs) → ◇∃x∃tKx(Tq & ~∃y∃sKyTqs)t. (3) and (4) compose a modus ponens argument, the conclusion of which is (5) ◇∃x∃tKx(Tq & ~∃y∃sKyTqs)t. To (5), we apply the K-&E

(1.1.1-1.5.1)

LET p, q, r, s, t, u, x, y: p, q, K, s, t, T, x, y.

(u&#p)>%((r&%x)&(u&(#p&%t))) ;
TTTT TTTT TTTT TTTT}2}32
TCTC TCTC TCTC TCTC}1}
TCTC TTTT TCTC TTTT}1} (1.1.2)

(u&%p)&~((r&%y)&(u&(%p&%s))) ;
FFFF FFFF FFFF FFFF}2}32
CTCT **F**N**F**N CTCT **FFFF**}2} (1.2.2)

Eq. 1.3.1 is an instance of 1.2.1: (1.3.1)
(u&%q)&~((r&%y)&(u&(%q&%s))) ;
FFFF FFFF FFFF FFFF}2}32
CCTT **FF**NN CCTT **FFFF**}2} (1.3.2)

In Eq. 1.1.1, substitute 1.31 for p. (1.4.1)
((u&%q)&~((r&%y)&(u&(%q&%s))))>
%(((r&%x)&((u&%q)&((r&%y)&(u&(q&%s)))))&%t) ;
TTTT TTTT TTTT TTTT}2}32
TTCC TTCC TTCC TTTT}2} (1.4.2)

Eq. (1.3.1 and 1.4.1) imply 1.5.1: (1.5.1)

(((u&%q)&~((r&%y)&(u&(%q&%s))))&
(((u&%q)&~((r&%y)&(u&(%q&%s))))>
%(((r&%x)&((u&%q)&((r&%y)&(u&(q&%s)))))&%t)))>
%(((r&%x)&((u&%q)&((r&%y)&(u&(q&%s)))))&%t) ;
TTTT TTTT TTTT TTTT}128 (1.5.2)

Remark 1.5.2: Eq. 1.5.2 is tautologous, confirming the claimed conjecture.

However, the antecedent of 1.3.1 and 1.4.1 produces this truth table value result:

```
FFFF FFFF FFFF FFFF}2}32
CCCC FFFF CCCC FFFF}2}
```

and the consequent of 1.5.1 produces this truth table value result:

```
CCCC CCCC CCCC CCCC}48}1}2
CCCC CCCC CCCC CCCC} 3}4}
CCCC CCCC CCCC CCTT} 1} }
```

Hence Eq. 1.5.2 is non constructive in the format of non tautologous implies non tautologous for the diluted falsity implies falsity as `C>C=T`.

It is impossible to know what the application of (K-&E) to 1.5.1 means as the text is conveniently truncated by Springer. Also, the equations above are not clearly keyed to the respective ones of 5.1.1-5.10.1. This means claims of anti-realism can not be evaluated completely, and on that basis are denied.

Lenzen's "Leibniz's Ontological Proof ... and the Problem of »Impossible Objects«"

From [Lenzen 2017]

In reproducing some of the conjectures above, we found what may be a mistake on pg. 12, section 5:

> Notwithstanding the question how the uniqueness of a necessary being, i.e. $\forall x \forall y(E(x) \wedge E(y) \rightarrow x = y)$, might ever be proved, it seems clear that the requirement of the *existence* of a necessary being, (xii) $\exists x(E(x))$, again renders Leibniz's proof *circular*.
>
> (1.1)

We evaluate Eq. 1 using the apparatus of Meth8 modal logic model checker of four valued logic system variant VŁ4.

> We map Eq. 1 in the affirmative with the "(xii)" expression as the antecedent implying the "i.e." expression as the consequent, as follows:
>
> (%q&#(p&q))> ((#q&#r)& (((#p&q)& (#p&r))> (q= r))) ;
>
> TTTC TTTT TTTC TTTT (1.2)
>
> The repeating truth table fragment has T as designated tautology value and C as falsity contingent value; other values not shown are F as contradiction value and N as truth non contingent value.

Meth8 renders Eq. 1.2 as not validated as tautologous, that is, Eq. 1.1 is mistaken.

However, we do confirm that *6.1 The Algebra of Concepts* is not validated as tautologous by Meth8.

Briefest known ontological proof of God (Leibniz)

The problem with Leibniz' ontological proof of the existence of God was in not defining "most perfect" from "perfect", and then repeating that definition throughout the arguments.

LET: p God.

The equivalence of the respective quantifiers and modal operators was established in our updated modern Square of Opposition and minor corrections to the syllogisms Modus Camestros and Modus Cesare elsewhere.

We test these sentences as antecedent (1), consequent (2), and proposition (3, 4).

The possibility exists of God as most perfect. (1.1)

%(p>#(p=p)) ; TTTT TTTT TTTT TTTT (1.2)

Necessarily God exists as most perfect. (2.1)

(#p> #(p=p)) ; TTTT TTTT TTTT TTTT (2.2)

It the possibility exists of God as most perfect, then necessarily God exists as most perfect. (3.1)

%(p>#(p=p)) > (#p> #(p=p)) ; TTTT TTTT TTTT TTTT (3.2)

Eq. 1.1 can be diluted by using "perfect" instead of "most perfect" in antecedent and consequent. The reason is that perfect is its own superlative, meaning "most perfect" is redundant as something "most perfectly perfect"

If the possibility exists of God as perfect, then necessarily God exists as perfect. (4.1)

%(p> (p=p)) > (#p> (p=p)) ; TTTT TTTT TTTT TTTT (4.2)

The advantage of this proof over that of Karl Popper is that the quality of perfection includes truthfulness and morality. This means that invoking the moral imperative (the existentialist uttering "I ought to ...") to show conscience is not needed to demonstrate that God is a *moral* being.

Refutation of middle knowledge in predestination

From [Middle_Knowledge 2020]: (quoted text in larger font)

[M]iddle knowledge holds that before the world was created, God knew what every existing creature capable of libertarian freedom (e.g. every individual human) would freely choose to do in all possible circumstances. (1.1.0)

It then holds that based on this information, God elected from a number of these possible worlds, the world most consistent with his ultimate will, which is the actual world that we live in. (1.2.0)

Remark 1.1.0: The words "before the world was created" as a temporal gauge are irrelevant because God is pre-existent; and "individual human" implies free will.

In analytical theology using precise theology, complex conjectures often can be mapped into four propositional variables.

For middle knowledge, we rewrite Eq. 1.1.0 for clarity as:

God as perfection created the worlds, then humans with possibility of free will. (1.1.1)

LET p, q, r, s: God, human, world (circumstance), free will; (s=s) God's perfect will.

(p>(s=s))>(r>(q>%s)) ; TTTT TTCC TTTT TTTT (1.1.2)

Remark 1.2.2: Eq. 1.2.2 is *not* tautologous. Rewriting 1.1.1 with injection of possible worlds, necessity of humans, and possibility of free has the same result:

God as perfection created possible worlds, then the necessity of humans with possibility of free will. (1.1.1.1)

(p>(s=s))>(%r>(#q>%s)) ; TTTT TTCC TTTT TTTT (1.1.1.2)

For middle knowledge, we rewrite Eq.1.2.0 for clarity as:

If middle knowledge (1.1.1.1), then possibly God chooses the actual world in which humans live. (1.2.1)

((p>(s=s))>(%r>(#q>%s)))>(p>(r>q)) ;
TTTT TCTT TTTT TCTT (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is not tautologous, hence refuting the claimed conjecture.

For example,
If free creature A was to be placed in circumstance B, God via his middle knowledge would know that free creature A will freely choose option Y over option Z. (2.1.0)

[Option "Y over Z" can be option "Y over not Y".]

God via his middle knowledge knows that if human is placed in circumstance world then that human chooses world over not world. (2.1.1)

((p>(s=s))>(%r>(#q>%s)))>((q<r)>(q>(s>(r>~r)))) ;
TTTT TTTT TTTT TTTT (2.1.2)

If free creature A was to be placed in circumstance C, God via his middle knowledge would know that free creature A will freely choose option Z over option Y. (2.2.0)

[Option "Z over Y" can be option "not Y over Y.]
God via his middle knowledge knows that if human placed in circumstance not world, then that human chooses not world over world. (2.2.1)

((p>(s=s))>(%r>(#q>%s)))>((q<~r)>(q>(s>(~r>r)))) ;
TTTT TTTT TTTT TTTT (2.2.2)

Based on this middle knowledge, God has the ability to actualise the world in which A is placed in a circumstance that he freely chooses to do what is consistent with Gods ultimate will. (3.1.0)

God via his middle knowledge can create the world of the human choosing God's will. (3.1.1)

((p>(s=s))>(%r>(#q>%s)))>(p>((q<r)>(s>(s=s)))) ;
TTTT TTTT TTTT TTTT (3.1.2)

If God determined that the world most suited to his purposes is a world in which A would freely choose Y instead of Z, God can actualise a world in which free creature A finds himself in circumstance B. (3.2.1)

["God determined world most suited for is purpose" is simply "world" because God always determines perfection; option "Y instead of Z" can be "option Y instead of not Y".]

If God creates the world where human chooses world over not world, then God creates the world where human is in not world.

(((p>(s=s))>r)>(q>(s>(r>~r))))>(p>(r>(q<~r))) ;
TTTT T**F**TT TTTT T**F**TT (3.2.2)

Remark 2.1.2- 3.2.2: Eqs. 2.1.2. 2.2.2, and 3.1.2 are tautologous. However the conclusion of the argument in 3.2.2 is *not* tautologous, also to refute the conjecture of the example.

Middle knowledge attempts to quantify the mind of God in asserting that God knows all possible outcomes from human free will. But so what. God can know all possible outcomes if he wants to, which implies a foreknowledge of speculations and also of the actual outcome which itself is non speculative and factual. In possible worlds of humanly speculative outcomes, a human choice may not align with the actual outcome of

reality in the instant world. To apply the attribute of sheer speculation of humans to God implies divine foreknowledge is contingent with necessary limitations, which we know is incorrect from our refutation of necessity causing contingency. In other words, possible circumstances versus the necessary circumstance implies middle knowledge turns on possibility versus necessity. This implies that possible worlds could *not* exist because only the instant, necessary world exists. In terms of free will, it is not what the human would choose to do *in all possible circumstances*, but what the human ultimately chose to do as conclusion of the choice. Hence possible worlds ultimately become irrelevant.

Refutation of the HOL/Isabelle rejection of E.J. Lowe's modal ontological argument

Abstract: Of 20 equations evaluated, 16 are *not* tautologous. This effectively refutes Lowe's proof, as rendered by the authors. This also invalidates the authors' rejection of Lowe's proof due to incompleteness (six of Lowe's conclusions are dismissed without evaluation) and due to an interactive, trial by error approach to reconstruct Lowe. Therefore an ideal showcase for the computer-assisted interpretive method using HOL/Isabelle failed. These results form another *non* tautologous fragment of the universal logic VŁ4.

From [Fuenmayor et al 2019]:

> **Abstract:** Computers may help us to understand –not just verify– philosophical arguments. By utilizing modern proof assistants in an iterative interpretive process, we can reconstruct and assess an argument by fully formal means. Through the mechanization of a variant of St. Anselm's ontological argument by E. J. Lowe, which is a paradigmatic example of a natural-language argument with strong ties to metaphysics and religion, we offer an ideal showcase for our computer-assisted interpretive method [tool named HOL/Isabelle].
>
> **2 E. J. Lowe's Modal Ontological Argument**
> **2.1 Introduction**
> E. J. Lowe … "A modal version of the ontological argument"... features eight premises from which new inferences are drawn until arriving at a final conclusion: the necessary existence of God (which in this case amounts to the existence of some "necessary concrete being").
>
> (P1.1) God is, by definition, a necessary concrete being.
>
> LET p, q, r, s, t, u, v, w, x, y, z:
> being, dependent, explanation, space, time, abstract, concrete, world, x, y, z.
>
> **Remark 1:** The verb depend is taken to mean the imply operator, whereas the adjectives dependent (not independent) are taken as variables. While the verb explain can be taken to mean the imply operator, the noun explanation is taken as a variable standing on its own.
>
> God: #(v&p)=(z=z) ; **FFFF FFFF FFFF FFFF**(4)
> **F**N**F**N **F**N**F**N **F**N**F**N **F**N**F**N(4) (P1.2)
>
> (P2.1) Some necessary abstract beings exist.
>
> %#(u&p)=(z=z) ; **FFFF FFFF FFFF FFFF**(2)
> **F**N**F**N **F**N**F**N **F**N**F**N **F**N**F**N(2) (P2.2)
>
> (P3.1) All abstract beings are dependent beings.
>
> (q&p)>#(u&p) ; TTTF TTTF TTTF TTFT(2)
> TTTN TTTN TTTN TTTN(2) (P3.2)
>
> (P4.1) All dependent beings depend for their existence on independent beings.
>
> ~(q&p)>#(q&p) ; **FFF**T **FFF**T **FFF**T **FFF**T (P4.2)

(P5.1) No contingent being can explain the existence of a necessary being.

(~(%z<#z)&p)>%#p ; TTTT TTTT TTTT TTTT (P5.2)

(P6.1) The existence of any dependent being needs to be explained.

%#(q&p)>r ; TTTC TTTT TTTC TTTT (P6.2)

(P7.1) Dependent beings of any kind cannot explain their own existence.

~(#(q&p)>(r>%#(q&p)))=(z=z) ;
FFFF FFFF FFFF FFFF (P7.2)

(P8.1) The existence of dependent beings can only be explained by beings on which they depend for their existence.

p>(#r>%(q&p)) ; TTTT TCTT TTTT TCTT (P8.2)

We will consider in our treatment only a representative subset of the [ten] conclusions, as presented in Lowe's article.

Remark 2 The authors summarily dismiss four of the ten conclusions (C2.1, C3.1, C4.1, and C6.1), suggesting an incomplete approach.

(C1.1) All abstract beings depend for their existence on concrete beings. (Follows from P3.1 and P4.1 together with D3.1 and D4.1.)

((((q&p)>#(u&p))&(~(q&p)>#(q&p)))&(((x>(v&p))=(((%s&t)+t)>%x))&
((x>(u&p))=((s&t)>~%x))))>((v&p)>((v&p)>%#p)) ;
TTTT TTTT TTTT TTTT (C1.2)

(C5.1) In every possible world there exist concrete beings. (Follows from C1.1 and P2.1.)

((((((q&p)>#(u&p))&(~(q&p)>#(q&p)))&(((x>(v&p))=(((%s&t)+t)>%x))&
((x>(u&p))=((s&t)>~%x))))>((v&p)>((v&p)>%#p)))&(%#(u&p)))>(#%w>%(v&p)) ;
TTTT TTTT TTTT TTTT(10)
TF**T** **T**F**T** **T**F**T** **T**F**T**(2)
TTTT TTTT TTTT TTTT(4) (C5.1)

(C7.1) The existence of necessary abstract beings needs to be explained. (Follows from P2.1, P3.1 and P6.1.)

((%#(u&p))&(((q&p)>#(u&p))&(%#(q&p)>r)))>(%#(u&p)>r) ;
TTTT TTTT TTTT TTTT(2)
TCTT TTTT TCTT TTTT(2) (C7.2)

(C8.1) The existence of necessary abstract beings can only be explained by concrete beings. (Follows from C1.1, P3.1, P7.1 and P8.1.)

(((((((q&p)>#(u&p))&(~(q&p)>#(q&p)))&(((x>(v&p))=(((%s&t)+t)>%x))&
((x>(u&p))=((s&t)>~%x))))>((v&p)>((v&p)>%#p)))&((q&p)>#(u&p)))&
((~(#(q&p)>(r>%#(q&p))))&(p>(#r>%(q&p)))))>(%#(u&p) >(r>(v&p))) ;
TTTT TTTT TTTT TTTT (C8.2)

(C9.1) The existence of necessary abstract beings is explained by one or more necessary concrete beings. (Follows from C7.1, C8.1 and P5.1.)

(((((%#(u&p))&(((q&p)>#(u&p))&(%#(q&p)>r)))>(%#(u&p)>r))&(((((((q&p)>
#(u&p))&(~(q&p)>#(q&p)))&(((x>(v&p))=(((%s&t)+t)>%x))&((x>(u&p))=((s&t)>~
%x))))>((v&p)>((v&p)>%#p)))&((q&p)>#(u&p)))&((~(#(q&p)>(r>%#(q&p))))&
(p>(#r>%(q&p)))))>(%#(u&p) >(r>(v&p)))))&((~(%z<#z)&p)>%#p))>(%#(u&p)>(r>
%#(v&p))) ;

```
TTTT TTTT TTTT TTTT( 2)
TTTT TCTC TTTT TCTC( 2)
TTTT TTTT TTTT TTTT( 4)
```
(C9.2)

(C10.1) A necessary concrete being exists. (Follows from C9.1.)

((((((%#(u&p))&(((q&p)>#(u&p))&(%#(q&p)>r)))>(%#(u&p)>r))&(((((((q&p)>
#(u& p))&(~(q&p)>#(q&p)))&(((x>(v&p))=(((%s&t)+t)>%x))&((x>(u&p))=((s&t)>~
%x))))>((v&p)>((v&p)>%#p)))&((q&p)>#(u&p)))&((~(#(q&p)>(r>%#(q&p))))&
(p>(#r>%(q&p))))) >(%#(u&p) >(r>(v&p)))))&((~(%z<#z)&p)>#p))>(%#(u&p)>(r>
%#(v&p))))>(%#(v&p)) ;

```
FFFF FFFF FFFF FFFF( 2)
FFFF FNFN FFFF FNFN( 2)
FNFN FNFN FNFN FNFN( 4)
```
(C10.2)

Lowe also introduces some informal definitions which should help the reader understand the meaning of the concepts involved in his argument (necessity, concreteness, ontological dependence, metaphysical explanation, etc.). In the following discussion, we will see that most of these definitions do not bear the significance Lowe claims

Remark 3: The definitions in fact bear significance on their face. Examples are the injections of time to define omnipresence and space to define omnipotence (akin to the reasons in Popper's obscure footnote proof E(Gx)).

(D1.1) x is a necessary being := x exists in every possible world.

LET s, t, w, x, y: space, time , world, x, y.

(x>#p)=(#%w>%x) ;

```
TTTT TTTT TTTT TTTT( 8)
CCCC CCCC CCCC CCCC( 8)
FNFN FNFN FNFN FNFN(16)
```
(D1.2)

(D2.1) x is a contingent being := x exists in some but not every possible world.

(x>(%z<#z))=((%~#%w>%x) ;

```
TTTT TTTT TTTT TTTT( 8)
CCCC CCCC CCCC CCCC(24)
```
(D2.2)

(D3.1) x is a concrete being := x exists in space and time, or at least in time.

(x>(v&p))=(((%s&t)+t)>%x) ;

```
TTTT TTTT TTTT TTTT( 1)}x8
CCCC CCCC CCCC CCCC( 1)}
FFFF FFFF FFFF FFFF( 4)}x2
FTFT FTFT FTFT FTFT( 4)}
```

(D3.2)

(D4.1) x is an abstract being := x does not exist in space or time.

(x>(u&p))=((s&t)>~%x) ;

```
TTTT TTTT TTTT TTTT( 1)}x8
TTTT TTTT NNNN NNNN( 1)}
FFFF FFFF FFFF FFFF( 1)}x4
FFFF FFFF TTTT TTTT( 1)}
FTFT FTFT FTFT FTFT( 1)}
FTFT FTFT TFTF TFTF( 1)}
```

(D4.2)

(D5.1) x depends for its existence on y := necessarily, x exists only if y exists.

(%y>x)=#(%y>%x) ;

```
TTTT TTTT TTTT TTTT(16)
NNNN NNNN NNNN NNNN(16)
```

(D5.2)

(D6.1) (For any predicates F and G) F depend for their existence on G := necessarily, Fs exist only if Gs exist.

LET p, q: F, G.

#(p&q)>((%q>p)=#(%q>%p)) ;

```
TTTT TTTT TTTT TTTT
```

(D6.2)

We will work iteratively on Lowe's argument by temporarily fixing truth values and inferential relationships among its sentences, and then, after choosing a logic for formalization, working back and forth on the formalization of its axioms and theorems by making gradual adjustments while getting automatic real-time feedback about the suitability of our changes, vis-a-vis the argument's validity. In this fashion, by engaging in an iterative process of trial and error, we work our way towards a proper understanding of the concepts involved in the argument, far beyond of what a mere natural-language based discussion would allow.

> **Remark 4:** The iterative process of back and forth formalization of axioms for adjustments based on trial and error is not an exact approach because it suggests an *a priori* goal, such as consistently to refute proofs of the existence of God using the HOL/Isabelle tool.

Of 20 equations evaluated, 11 are *not* tautologous. This effectively refutes Lowe's proof, as rendered by the authors. This also invalidates the authors' rejection of Lowe's proof due to incompleteness (six of Lowe's conclusions are dismissed to avoid evaluation) and due to an interactive, trial by error approach to reconstruct Lowe. Therefore, the HOL/Isabelle tool failed as a showcase.

Refutation of the paradox of Moses Maimonides for free will

LET p q: God, man;
(%p>#p) good; (%p<#p) bad; (p@p) imperfect, a lie.

From [Argument_free_will 2020]:

> Moses Maimonides formulated an argument regarding a person's free will, in traditional terms of good and evil actions, as follows:
>
> > Does God know or does He not know that a certain individual will be good or bad? (1.1)
> >
> > (p>(q>(%p>#p)))+(p>(q>(%p<#p))) ;
> > TTTT TTTT TTTT TTTT (1.2)
> >
> > If thou sayest 'He knows', then it necessarily follows that the man is compelled to act as God knew beforehand he would act, (2.1)
> >
> > (p>(q>(%p>#p)))>#(q>(p>(q>(%p>#p)))) ;
> > NNNT NNNT NNNT NNNT (2.2)
> >
> > otherwise God's knowledge would be imperfect ... (3.1)
> >
> > [<] p=(p@p) ; TFTF TFTF TFTF TFTF (3.2)
> >
> > If Eq. 1.2, then if Eq. 2.1 then Eq. 3.1. (4.1)
> >
> > (((p>(q>(%p>#p)))+(p>(q>(%p<#p))))>
> > ((p>(q>(%p>#p)))>#(q>(p>(q>(%p>#p))))))) < (p=(p@p)) ;
> > FNFT FNFT FNFT FNFT (4.2)

As rendered, Eq. 1.2 is tautologous, *not* contradictory, and a theorem. Eqs.. 2.2 and 3.2 are *not* tautologous and *not* contradictory. Eq. 4.2, the further embellishment of Eqs.. 1.2, 2.2, and 3.2 is *not* tautologous and *not* contradictory. Therefore the paradox of Maimonides is refuted as a paradox.

Refutation of existential generalization and prediction of Meinongian theism

From [Reicher 2019]:

> The problem of fictional discourse is closely connected to two logical principles. The first one is well known as "the principle of existential generalization":
>
> **Existential Generalization** (**EG**):
> $Fb \rightarrow \exists x(Fx)$, (1.1.1)
> i.e., (1.3.1)
> If *b* is *F*, then there is something that is *F*. (1.2.1)
>
> LET p, q, r, s: F, b, x, thing.
>
> (p&q)>(p&%r) ; TTTC TTTT TTTC TTTT (1.1.2)
> (q>p)>(%s>p) ; NTTT NTTT **F**TTT **F**TTT (1.2.2)
> ((p&q)>(p&%r)=((q>p)>(%s>p)) ;
> NTTC NTTT **F**TTC **F**TTT (1.3.2)
>
> **Remark 1.3.2:** Eq. 1.3.2 is *not* tautologous for the equivalence of 1.1.2 and 1.2.2 as claimed. This refutes the principle of existential generalization for nonexistent objects.
>
> The second principle is less prominent, rather seldom[ly] explicitly stated, but often tacitly assumed. We call it "the predication principle":
>
> **Predication Principle** (**PP**):
> $Fb \rightarrow \exists x(x = b)$. (2.1.1)
> (PP) may be read in two ways: (2.4.1)
> (PPa) If *b* is *F*, then there is something that is identical with *b*. (2.2.1)
> (PPb) If *b* is *F*, then *b* exists. (2.3.1)
>
> (p&q)>(%r=q) ; TTTC TTTT TTTC TTTT (2.1.2)
>
> **Remark 2.1.2:** Eqs.. 1.1.2 and 2.1.2 have the same truth table results, meaning they are equivalent.
>
> (q>p)>(%s=q) ; NNTC NNTC **FF**TT **FF**TT (2.2.2)
> (q>p)>%q ; CCTT CCTT CCTT CCTT (2.3.2)
> ((p&q)>(%r=q))=(((q>p)>(%s=q))+((q>p)>%q)) ;
> TTTC TTTT CCTC CCTT (2.4.2)
>
> **Remark 2.4.2:** Eq. 2.4.2 is *not* tautologous, meaning 2.2.2 or 2.3.2 (neither as equivalent) does not have the same reading as 2.1.2 as claimed. This refutes the prediction principle for nonexistent objects.

Because the principle of existential generalization and the prediction principle are refuted as the basis for nonexistent objects, Meinongism is necessarily refuted. Furthermore, Meinongian theism is denied, such as in [Willard 2020].

Refutation of Benzmüller's modal collapse

From [Benzmüller et al 2017b]:

Abstract. The *modal collapse* that afflicts Gödel's modal ontological argument for God's existence is discussed from the perspective of the modal square of opposition.

MC	Everything that is the case is so necessarily: $\forall\phi[\phi \rightarrow \Box\phi]$
MCs	Everything that is possible is necessary: $\forall\phi[\Diamond\phi \rightarrow \Box\phi]$
T	Everything that is necessary is the case: $\forall\phi[\Box\phi \rightarrow \phi]$
ExImp	(Modal Existential Import): $\Diamond\top$
AI	Everything that is necessary is possible: $\forall\phi[\Box\phi \rightarrow \Diamond\phi]$
MCt	Modalities collapse completely: $\forall\phi[(\phi \leftrightarrow \Box\phi) \wedge (\Diamond\phi \leftrightarrow \Box\phi)]$

FIGURE 3. Modal Collapse

(2.1.1 - 2.6.1)

LET p: φ.

For our purposes, we ignore the universal quantifiers which apply to all of the Eqs. except for 2.4.1 (modal existential import). This allows for direct contrast with output from the modal street-prover Molle, as indented.

p>#p ;	TNTN TNTN TNTN TNTN	(2.1.2)
P => []P	Molle no	
%p>#p ;	TTTT TTTT TTTT TTTT	(2.2.2)
<>P => []P	Molle no	
#p>p ;	TTTT TTTT TTTT TTTT	(2.3.2)
[]P => P	Molle no	
%(s=s) = (s=s) ;	TTTT TTTT TTTT TTTT	(2.4.2)
<>(T <=> T) <=> (S <=> S)	Molle no	
#p>%p ;	TTTT TTTT TTTT TTTT	(2.5.2)
[]P => <>P	Molle no	
(p=#p)&(%p=#p) ;	TTTT TTTT TTTT TTTT	(2.6.2)
(P <=> []P) & (<>P <=> []P)	Molle no	

Remark 2.2.2 - 2.6.2: Eq. 2.1.2 and its Molle mapping are *not* tautologous, hence agreeing that p does *not* imply necessarily p. However, Eqs. 2.2.2 - 2.6.2 are tautologous, but the Molle renditions are *not*. This means the modal collapse model as claimed by Benzmüller et al is denied. That those Molle renditions are not tautologous speaks to the fact that the modal logic implemented by Molle is not bivalent, and hence an inexact, probabilistic vector space (read as a crap shoot).

Refutation of the dependence response and explanatory loops for Molinism

From [Law 2020]:

> There is an old and powerful argument for the claim that divine foreknowledge is incompatible with the freedom to do otherwise. A recent response to this argument, sometimes called the "dependence response," centers around the claim that God's relevant past beliefs depend on the relevant agent's current or future behavior in a certain way. This paper offers a new argument for the dependence response, one that revolves around different cases of time travel. Somewhat serendipitously, the argument also paves the way for a new reply to a compelling objection to the dependence response, the challenge from prepunishment. But perhaps not so serendipitously, the argument also renders the dependence response incompatible with certain views of providence.

> above that no agent can perform an action that would have required the past to be different—that the past is "fixed." This premise is often called the principle of the Fixity of the Past (FP henceforth). The first claim of the dependence response is that FP ought to be rejected in favor of, or at least seen as derivative of, an alternative principle, what I will be calling the Principle of the Fixity of the Independent (FI henceforth). FI, as I'll understand it, claims that it is not the past *per se* that is fixed for the agent, but rather any part of the world that is *in no way explained* by the agent's present choice(s). Somewhat more formally, I'll understand FI as follows:
>
> **FI**: Agent S can perform action X at time t (in world w) only if there is a world, w', such that all of the facts in w that are distinct from and in no way explained by S's choice(s) at t hold in w' and yet S performs X at t in w'.[3]

(1.1.1)

LET p, q, r, s: world, action X, time, agent S.

((#p&(%s>#s))>((#(p>(s=s))@((s>r)<(p&(%s>#s))))&((s>(q&r))<(p&(%s>#s)))))>(s>((q&r)<p)) ; TTTT TTTT **F**N**F**N **F**NTN (1.1.2)

> So instead of merely holding fixed those facts which *aren't* explained by the agent's choice(s), we might also want to hold fixed those facts which *explain* the agent's choice(s), especially if we are sympathetic to FP to begin with. With this additional principle, FI can be augmented as follows:
>
> **FI+**: Agent S can perform action X at time t in world w only if there is a world w' such that (i) all of the facts in w that are distinct from and in no way explained by S's choice(s) at t hold in w', (ii) all of the facts in w that at least partially explain S's choice(s) at t also hold in w', and yet (iii) S performs X at t in w'.[11]
>
> The only difference between FI and FI+ is the addition of clause (ii), which says that those facts which explain the agent's behavior are also fixed.

(1.2.1)

((#p&(%s>#s))>((#(p>(s=s))@((s>r)<(p&(%s>#s))))&
((#(p>(s=s))>(%s>r)<(p&(%s>#s))))&((s>(q&r))<(p&(%s>#s))))))>(s>((q&r)<p)) ;
TTTT TTTT **F**N**F**N **F**NTN (1.2.2)

Remark 1.1.2, 1.2.2: Eqs. 1.1.2 and 1.2.2 are *not* tautologous and in fact equivalent. This refutes both conjectures and denies the principle of the fixity of the past (FP) as F1 and F1+.

What's of particular importance for the dependence response, though, is that these versions of Molinism seem to create an explanatory loop: your reading this paper in the relevant circumstance explains the truth of the conditional that, if you were placed in the relevant circumstance, you would (freely) read this paper. The truth of this conditional then explains why God knew this conditional which, in turn, explains why he decided to place you in the relevant circumstance. But your being placed in the relevant circumstance then at least partly explains why you (freely) read this paper. More generally, the loop goes like this (using the arrow to denote the "explains" relation):

(*S* (freely) performs *X* in *C*) → (If *S* were placed in *C*, *S* would (freely) perform *X*) → (God knew that: if *S* were placed in *C*, *S* would (freely) perform *X*) → (God placed *S* in *C*) → (*S* (freely) performs *X* in *C*)

Whatever else we might make of this version of Molinism, notice that the shift from FI to FI+ would render such loops incoherent. Under FI, each fact in the loop is explained (at least ancestrally) by *S*'s performing *X* in *C* and, thus, *S*'s freedom is not necessarily threatened by the loop. But it's a much different story under FI+: according to clause (ii), any fact which explains agent *S*'s performing action *X* ought to be held fixed in evaluating whether *S* was free to do otherwise than perform action *X*. This additional clause is what allows FI+ to deliver the result that individuals caught in explanatory loops—like time-traveling Bill or prepunished Jones—are not free. But it would seem as if this additional clause also implies that individuals caught in *providential* explanatory loops are not free. The providential loop given above implies that *S*'s performing *X* in *C* explains (at least ancestrally) *S*'s performing *X* in *C*. Obviously, there is no world where *S* performs *X* in *C* but does not perform *X* in *C*. Hence, clause (ii) of FI+ rules out this version of Molinism.

(2.1.1)

LET p, q, r, s: C, God, X, S;
"in" means the not Imply connective as less than;
freely is the modal operator for possibility %\.s

(%s>(r<p))>((((s<p)>(%s>r))>(q>((s<p)>(%s>r))))>((q>(s<p))>(%s>(r<p)))) ;
TTTT TTTT TTTT TTTT (2.1.2)

Remark 2.1.2: Eq. 2.1.2 is supposed to be a providential explanatory loop for the dependence response in Molinism, but where the shift from F1 to F1+ renders the model incoherent. Since 1.1.2 and 1.2.2 are not tautologous and equivalent, 2.1.2 under different versions cannot perform as claimed, is refuted, and hence denies Molinism.

The writer was asked for scripts for 1.1.1 and 1.2.1 in the modal *street prover* Molle-

1.0 for replication in VŁ4, but unresponsive.

Refutation that "it is impossible for humans to implement moral absolutism"

From [Tooker 2018]:

> Suppose there is an absolute moral proposition defined with *X* number of words and a real-life moral quandary defined with *Y* number of words, (1.1.0)
> and that one wants to rely on moral absolutism to make a judgment of morality regarding the quandary ... (1.2.0)
> if the quandary is completely specified by the *Y* words.
> ...
> Without absolutely specifying the quandary, one has no way to compare it to the absolute proposition.
> Therefore, in all cases, when humans attempt to implement moral absolutism, they will actually implement moral relativity when they decide, relative to their own personal standard of sufficiency, that they have considered enough of the context of the quandary such that it can be compared to the absolute proposition. (2.0)
> Therefore, it is impossible for humans to implement moral absolutism. (3.0)

We rewrite Eq. 1.0 to exclude the *a priori* notion of quandary as an *inexact* contradiction to mean an absolute moral proposition defined with *X* number of words and a different, non-moral or relative proposition defined with *Y* number of words, as:

> possibly a word number implies a proposition which is morally absolute as true (absolute morality) (1.1.1)
>
> (%r> p)> (s=s) ; `TTTT TTTT TTTT TTTT` (1.1.2)
>
> and [sic, should be *or*]
> possibly a word number implies not a proposition which is not morally absolute as not true (relative morality) (1.2.1)
>
> (%r>~p)>~(s=s) ; `FCFC FTFT FCFC FTFT` (1.2.2)
>
> With Eqs.. 1.1.1 *and* 1.2.1 as: (1.3.1)
> ((%r> p)> (s=s)) & ((%r>~p)>~(s=s)) ;
> `FCFC FTFT FCFC FTFT` (1.3.2)

We rewrite Eq. 2.0 to include the number of words to needed (necessary) to specify fully the *Y* words and to include the correction of an Or replacement connective in the consequent:

> the last word number, instant word number, or next two word numbers are never (necessarily not) sufficient to describe (do not imply) a proposition which is morally absolute as true (absolute morality) *or* a proposition which is not morally absolute as not true (relative morality) (2.1)
>
> #(((r-(%s>#s))+(r+(r+(%s>#s))))+(r+(%s<#s)))<(((%r> p)> (s=s))+((%r>~p)>~(s=s)));
> `FFFF FFFF FFFF FFFF` (2.2)

Eq. 2.2 as rendered means Eq. 3.0 (it is impossible for humans to implement moral absolutism) is *not* tautologous (*not* a theorem), but rather a contradiction, and hence refuted.

What follows is confirmation that "It is possible for humans to implement moral absolutism".

Refutation of relativity on absolute moralism

From [Tooker 2018]:

> **Remark**: We quote relevant portions of the argument because it is ill-framed without numbered equations.
>
> Bob wants to know if it is moral to kill Alice. (1.0)
>
> > We rewrite Eq. 1.0 as: "If Bob kills Alice, then is Bob killing Alice good?" (1.1)
> >
> > ((q&r)&p)>(((q&r)&p)>(s=(s=s))) ; `TTTT TTTT TTTF TTTT` (1.2)
>
> An absolute moral proposition of relevance would be that murder is wrong. (2.0)
>
> > We rewrite Eq. 2.0 as:
> > "If morality is good as a tautology, then murder is a bad as a contradiction." (2.1)
> >
> > (s=>(s=s))>(r>(s>s@s)) ; `TTTT TTTT TTTT FFFF` (2.2)
>
> "Is Alice on a machine gun rampage such that [Bob] will save lives by killing her?" (3.0)
>
> > "If Alice killing is bad, then if Bob kills Alice, then is Bob killing Alice good?" (3.1)
> >
> > ((p&r)=(s@s))>(((q&r)&p)>(((q&r)&p)>(s=(s=s)))) ;
> > `TTTT TTTT TTTT TTTT` (3.2)
>
> **Remark**: We ignore the subsequent injection of irrelevant contingencies from other worlds, such as implication of Bob killing from alien killing as a result of Alice killing.

Eq. 3.2 as rendered is tautologous, hence refuting relativity of moral absolutism.

Refutation of the theological problem of moral luck

From [Harman 2014]:

Abstract:

The problem of moral luck is that a general fact about luck and an intuitive moral principle jointly imply the following skeptical conclusion: human beings are morally responsible for at most a tiny fraction of each action. This

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their consequences is significantly diminished. To summarize the argument:

(1) All actions and their consequences are significantly affected by factors outside their agent's control.

(2) If an action (or its consequences) is significantly affected by factors outside its agent's control, then those factors significantly diminish the agent's praiseworthiness or blameworthiness for that action (or its consequences).

Therefore,

(3) Every agent's praiseworthiness or blameworthiness is significantly diminished for all actions and their consequences.

(1.1 - 4.1)

LET p; q; r; s: actions/consequents; factors; agent's control; s.
Praiseworthiness is perfection (s=s); and blameworthiness is imperfection (s@s).

(q>r)>#p ; **F**NTT **FNF**N **F**NTT **FNF**N (1.2)

((q>r)>#p)>(%q>(((s=s)+(s@s))<q)) ;

TTFF TTTC TTFF TTTC (2.2)

(#p&((s=s)+(s@s)))<#p ; **FFFF FFFF FFFF FFFF** (3.2)

(((q>r)>#p)&(((q>r)>#p)>(%q>(((s=s)+(s@s))<q))))>((#p&((s=s)+(s@s)))<#p) ;

TCTT TCTT TCTT TCTT (4.2)

Remark 4.2: Eq. 4.2 is *not* tautologous, hence refuting the conjecture. The conclusion sentence is also contradictory.

Confirmation of one God of monotheism

From [Zagzebski 1989]:

While the cited text is 1989, an important question is raised which in my view is not answered in bivalent logic: how to prove one God of monotheism. The mistake before is definition of necessity by injection of attributes. (The secondary question of how to prove the Holy Trinity, and hence affirm Orthodox Christianity as the only true monotheism, is already demonstrated elsewhere at this site by me.)

We frame the primary conjectures as:

> If the necessity of God as perfection implies the possibility of another god as perfection, then the possibility of another god is one. (1.1.1)
>
> If the necessity of God as perfection implies the possibility of another god as perfection, then the necessity of God is one. (1.2.1)
>
> LET p, q, s: God, another god, s. Perfection is (s=s), and ordinal 1 is (%s>#s).
>
> ((#p>(s=s))>(%q>(s=s)))>(%q>(%s>#s)) ;
> NNNN NNNN NNNN NNNN (1.1.2)
>
> **Remark 1.1.2:** Eq. 1.1.2 is *not* tautologous, although a truthity (non-contingency), denying the possibility of another god is one.
>
> ((#p>(s=s))>(%q>(s=s)))>(#p>(%s>#s)) ;
> TTTT TTTT TTTT TTTT (1.2.2)
>
> **Remark 1.2.2:** Eq. 1.2.2 is tautologous, affirming the necessity of God is one.

Refutation of neutrality from God, so as to deny religious in-determinism

See [Borges da Sila et al 2019]:

Some writers *assume* things are good, neutral, or evil because God deems it so, and on that basis formulate logic systems about theodicy. We evaluate this as a seminal semantic problem of the problem of evil.

There is a flaw in common theodicy conjectures, at the outset in the assignment of the term neutral as a logical value. The flaw is observed as not in defining neutral, but in not defining neutral as predicated on God.

Since God produces only good (he cannot lie), the opposite as evil comes not from negation of good by God but rather from agents which have free will to assert such a negation. Those agents are firstly Lucifer (later named Satan), created as an angel, and secondly man, created as an image of God below the angels, with both possessing the gift of free will from God. In other words, any theodicy argument at some point must account for free will and the misuse of free will, as first by Satan and then by man, to derive evil from good, to imply false from true.

The state of good or its opposite evil is defined as: (1.1)

((s=s)+~(s=s)) = (s=s) ; TTTT TTTT TTTT TTTT (1.2)

The state opposite the state of good or evil in Eq. 1.1 is its negation: (2.1)

~((s=s)+~(s=s)) = (s=s) ; **FFFF FFFF FFFF FFFF** (2.2)

Remark 2.2: We name Eq. 2.2 as *neutral*.

The corrected theodicy conjecture in words is:

If God as good creates man who produces things
as both good or evil and as not both good or evil (*neutral*),
then not God but man produces things as neutral. (3.1)

LET p, q, r, s: God, man, things, s.
The term (s=s) is good or perfection, as in proof T.

(((p>(s=s))>q) >(r>(((s=s)+~(s=s))&~((s=s)+~(s=s))))>
((~p&q) >(r>~((s=s)+~(s=s)))) ;
TTTT TTTT TTTT TTTT (3.2)

Remark 3.2: Eq. 3.2 proves that it is man exercising free will, not God, as inventor of the term neutral as a logical value. In other words, God cannot be blamed for the term neutral, only ultimately Satan by free will can be blamed.

(This portends ill for vector-space logics as non-bivalent logics, such in those of Dunn-Belnap as Béziau et al.)

What also follows from *neutral* in Eq. 2.2 is that neutral is equivalent to evil: (4.1)

$$\sim((s=s)+\sim(s=s))=\sim(s=s)\ ; \qquad \texttt{TTTT TTTT TTTT TTTT} \tag{4.2}$$

Remark 4.2: This conjures the image of spewing forth warm (sour) milk.

What further follows is that *religious in-determinism* is neutrality, to lack the moral imperative (conscience). Moreover, religious determinism is correct, with some religious determinisms obviously *determining* more correctly than others.

Denial of "not all necessary truths are tautology" to confirm "all possible truths are tautology"

We evaluate an email excerpt from a polite professor not taking us seriously:

> "Not all necessary truths are tautologies (even though they necessarily have the same truth value as any other necessary truth, and therefore the same truth value as any tautology). For example, *No bachelor is married is not a tautology*, although *No married man is married is a tautology*."
> (1.1.1 - 3.1.1)

Not all necessary truths are tautologies [ignoring parenthetical] (1.1.1)

From the above
LET: (%s>#s); (s=s): truthity `N`; tautology `T` [designated *proof* value].

~(##(%s>#s)=(s=s))=(s=s) ; `CCCC CCCC CCCC CCCC` (1.1.2)

Remark 1.1.2: Eq. 1.1.2 is *not* tautologous, and is in fact the truth table for falsity, refuting the conjecture.

We attempt to resuscitate the conjecture using truthity as the value for tautology, that is, replacing (%s>#s) with (s=s). (1.2.1)

~(##(s=s)=(s=s))=(s=s) ; `CCCC CCCC CCCC CCCC` (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is the equivalent truth table result to 1.1.2, meaning 1.1.2 can not be resuscitated.

No bachelor is married is not a tautology. (2.1.1)

LET p, q, r, s: man, married state, bachelor, s.

((r=~q)>(~r>q))=~(s=s) ; **`FFFF FFFF FFFF FFFF`** (2.1.2)

Remark 2.1.2: Eq. 2.1.2 as rendered is *not* tautologous, hence refuting the conjecture. This means the first consequent of the conjecture as "No bachelor is married" is tautologous.

No married man is married is a tautology. (3.1.1)

Remark 3.1.1: We inject negation in the first consequent so as to capture the intent as:

No married man is [not] married is a tautology. (3.1.1)

(~(p>q)>~q)=(s=s) ; `TTTT TTTT TTTT TTTT` (3.1.2)

Remark 3.1.2: Eq. 3.1.2 is an obvious tautology and equivalent to the antecedent in 2.1.2. This means the example to show not necessarily all truths are tautologies is denied.

In case we diverge from the intent, we can inject negation in the first antecedent as:

No [non] married man is married is a tautology. (3.2.1)

(~~(p>q)>q)=(s=s) ; **F**TTT **F**TTT **F**TTT **F**TTT (3.2.2)

Remark 3.2.2: Eq. 3.2.2 is *not* tautologous and diverges as an intended tautology.

We evaluate the conjecture that all possible truths are tautologies. (4.1.1)

#%(%s>#s)=(s=s) ; TTTT TTTT TTTT TTTT (4.1.2)

Remark 4.1.2: Eq. 4.1.2 is tautologous, confirming the conjecture.

The common notion in logic that not all necessary truths can be evaluated as tautologies is the source of defective scholarship in philosophy of religion and particularly analytical theology. Better is the theorem from the affirmative that all possible truths are tautologies.

Should researchers use bivalent model checkers to confirm assertions and to include transcripts for replication before rushing into print, then the field can advance beyond itself.

Refutation of non-existence proof of free will

From [Luan 2018]:

LET p, q (~q), s: freewill; outcome (~ alternative outcome); personal entity in the universe;
%(q+~q) at least one choice.

If free will exists in an indeterministic universe, all of the following three statements are valid and non-contradictory. (S.4.1)

There is at least one entity with free will in the universe. Let F be an entity with free will in the universe. (S.1.1)

%p>%s ; TCTC TCTC TTTT TTTT (S.1.2)

As per the definition of free will, F has made at least one non-random choice. (S.2.1)

%p>(%s>%(q+~q)) ; TTTT TTTT TTTT TTTT (S.2.2)

Let t_c be the time when F non-randomly chose one from multiple different physical possibilities. Let the possibility chosen be p_c. (S.3.1)

%p>((%p>(%s>%(q+~q)))>(%s&%(q+~q))) ;
TCTC TCTC TTTT TTTT (S.3.2)

Use of the phrase "non-randomly" is ignored because the definition of Eq. S.2.1 includes that. We interpret the possibility chosen p_c not as a single variable such as q but rather as either variable (q+~q) so as not to *assume* which is chosen.

The injections of both the temporal variable t for time or the name universe for possible worlds are not needed because the possible existence of at least one personal agent as %s. Therefore we ignore both injections.

These exclusions actually help the arguments by making Eq. S.3.1 (not a tautology) irrelevant, and hence Eq. S.3.2 could be excluded in our evaluation here.

As rendered, only Eq. 3.2.2 is tautologous. This disagrees with Eq. S.4.1 where all Eqs.. 3.n.2 should be tautologous.

At t_c, the universe either contained or did not contain the information that p_c was chosen.

At t_c, if the universe did not contain the information that p_c was chosen, F as defined is an entity in the universe and therefore did not contain the information that p_c was chosen. (C.1.1.1)

(((q+~q)=(q@q))&(%p>%s))> ~((%p>%s)>(q+~q)) ;
TTTT TTTT TTTT TTTT (C.1.1.2)

Therefore, the choice at t_c was not non-randomly made, (C.1.2.1)

((((q+~q)=(q@q))&(%p>%s))> ~((%p>%s)>(q+~q)))> ~(%p>(q+~q)) ;
FFFF FFFF FFFF FFFF (C.1.2.2)

which contradicts the statement ”Let t_c be the time when F non-randomly chose one from multiple different physical possibilities. (C.1.3.1)

(((((q+~q)=(q@q))&(%p>%s))> ~((%p>%s)>(q+~q)))> ~(%p>(q+~q))) =
(%p>((%p>(%s>%(q+~q)))>(%s&%(q+~q)))) ;
FNFN FNFN FFFF FFFF (C.1.3.2)

We also test if Eq. C.1.2.2 is equal to Eq. S.2.2. (C.1.3.3.1)

(((((q+~q)=(q@q))&(%p>%s))> ~((%p>%s)>(q+~q)))>
~(%p>(q+~q))) = (%p>(%s>%(q+~q))) ;
FFFF FFFF FFFF FFFF (C.1.3.3.2)

At t_c, if the universe contained the information that p_c was chosen, there wouldn't be other different physical possibilities than p_c, (C.2.1.1)

((q+~q)=(q=q))>~(%(q+~q)=(p=p)) ; FFFF FFFF FFFF FFFF (C.2.1.2)

which again contradicts the statement ”Let t_c be the time when F non-randomly chose one from multiple different physical possibilities.” (C.2.2.1)

(((q+~q)=(q=q))>~(%(q+~q)=(p=p))) = (%p>((%p>(%s>%(q+~q)))>(%s&%(q+~q)))) ;
FNFN FNFN FFFF FFFF (C.2.2.2)

We also test if Eq. C.2.1.2 is equal to Eq. S.2.2. (C.2.2.3.1)

(((q+~q)=(q=q))>~(%(q+~q)=(p=p))) = (%p>(%s>%(q+~q))) ;
FFFF FFFF FFFF FFFF (C.2.2.3.2)

Eqs.. C.1.2.2 and C.2.2.2 are *not* tautologous as expected. Eqs.. 1.3.2 and 2.2.2 are *not* contradictory as expected. However, only by weakening the arguments do they become contradictory in Eqs.. C.1.3.3.2 and C.2.3.3.2. Nevertheless, we therefore conclude that he non-existence proof of free will is refuted.

Rejection of the definition of the one divine nature

From [Hasker 2019]:

> The one divine nature is defined as:
>
> N1. Necessarily, (Father + Son + Holy Spirit) exists. (1.1)
>
> This situation, however, is logically indistinguishable from the following:
>
> N2. Necessarily, the Father exists, and, (2.1)
> N3. Necessarily, the Son exists, and, (3.1)
> N4. Necessarily, the Holy Spirit exists. (4.1)
>
> With the defined conjecture that N1 =(N2 & N3 & N4). (5.1)
>
> LET p, q, r, s: p, Holy Ghost, Father, Son.
>
> #%((q+r)+s) =(p=p) ; CCTT TTTT TTTT TTTT (1.2)
> #%q = (p=p) ; CCTT CCTT CCTT CCTT (2.2)
> #%r = (p=p) ; CCCC TTTT CCCC TTTT (3.2)
> #%s = (p=p) ; CCCC CCCC TTTT TTTT (4.2)
> %((q+r)+s)=((#%q&#%r)&#%s) ;
> TTCC CCCC CCCC CCTT (5.2)

Eq. 5.2 is *not* tautologous (nor are 1.2-4.2), hence rejecting the claimed definition of one define nature as an equivalence conjecture.

Denial of logically equivalent groups of statements as paths to open theism

From [Tuggy 2007]:

> Let's use "Fp" for the posterior present, "Op" (it is eventually going to turn out that p) for the simple future, " " for "now-unchangeably," and "◊" for "temporally possibly" (◊p means "it is not now-unchangeably the case that it is not the case that p," that is, ¬ ¬p). Such statements, like any statements, will be true, false, or neither because of how reality is. Future tensed statements are about "the future." Will it be that p? If we consider all the "branches" through the present—that is, all possible total histories consistent with the flow of time so far—p must be related to them in one of three ways. Perhaps p occurs at some point on *every* branch. On the other hand, p may occur on *no* such branch. And finally, perhaps p occurs on *some*, but not on other branches.[35] There are, then, three situations to consider, three ways that reality may relate to p—this event that we are saying will, won't, or might happen. With these tools, we can specify the truth conditions for the various possible statements, and say which are logically equivalent to which.

Logically equivalent statements	Situation 1: All accessible futures contain p, none contain ¬p	Situation 2: No accessible futures contain p, all contain ¬p	Situation 3: Some accessible futures contain p, others ¬p
Fp, □Fp, ◊Fp, □Op, ¬◊O¬p	T	F	F
¬Fp, ¬□Fp, ¬◊Fp, ¬□Op, ◊O¬p	F	T	T
F¬p, □F¬p, ◊F¬p, □O¬p, ¬◊Op	F	T	F
¬F¬p, ¬□F¬p, ¬◊F¬p, ¬□O¬p, ◊Op	T	F	T
Op, ¬O¬p	T	F	–
¬Op, O¬p	F	T	–

> All of this seems correct to me, and I invite the reader to consider each spot on this chart from the presupposition of the branching model of time.

We follow the suggestion to replicate the table results below.

LET p, q, r, s: p, F, O, s. Note: Adjacent negations are included for clarity.

No.	Logically equivalent statements	M8 scripts	VŁ4 Truth table result values	1 2 3
1	Fp	q&p ;	**FFF**T **FFF**T **FFF**T **FFF**T	t f f
2	□Fp	~(#(q&p)=(s=s)) = (s=s) ;	TTTC TTTC TTTC TTTC	t f f
3	◊Fp	%(q&p) = (s=s) ;	CCCT CCCT CCCT CCCT	t f f
4	□Op	#(r&p) = (s=s) ;	**FFFF** **F**N**F**N **FFFF** **F**N**F**N	t f f
5	¬◊O¬p	~(%(r&~p)=(s=s)) = (s=s) ;	NNNN **F**N**F**N NNNN **F**N**F**N	t f f

No.	Logically equivalent statements	M8 scripts	VŁ4 Truth table result values	1 2 3
6	¬Fp	(~(q&p)=(s=s)) = (s=s) ;	TTT**F** TTT**F** TTT**F** TTT**F**	f t t
7	¬□Fp	~~(#(q&p)=(s=s)) = (s=s) ;	**FFF**N **FFF**N **FFF**N **FFF**N	f t t
8	¬◊Fp	~(%(q&p)=(s=s)) = (s=s) ;	NNN**F** NNN**F** NNN**F** NNN**F**	f t t
9	¬□Op	~(#(r&p)=(s=s)) = (s=s) ;	TTTT TCTC TTTT TCTC	f t t
10	¬¬◊O¬p	~~(%(r&~p)=(s=s)) = (s=s) ;	CCCC TCTC CCCC TCTC	f t t
11	F¬p	q&~p ;	**FF**T**F** **FF**T**F** **FF**T**F** **FF**T**F**	f t f
12	□F¬p	#(q&~p) = (s=s) ;	**FF**N**F** **FF**N**F** **FF**N**F** **FF**N**F**	f t f
13	◊F¬p	%(q&~p) = (s=s) ;	CCTC CCTC CCTC CCTC	f t f
14	□O¬p	#(r&~p) = (s=s) ;	**FFFF** N**F**N**F** **FFFF** N**F**N**F**	f t f
15	¬◊O¬¬p	~(%(r&~~p)=(s=s)) = (s=s) ;	NNNN N**F**N**F** NNNN N**F**N**F**	f t f
16	¬F¬p	~(q&~p) = (s=s) ;	TT**F**T TT**F**T TT**F**T TT**F**T	t f t
17	¬□F¬p	~(#(q&~p)=(s=s)) = (s=s);	TTCT TTCT TTCT TTCT	t f t
18	¬◊F¬p	~(%(q&~p)=(s=s)) = (s=s);	NN**F**N NN**F**N NN**F**N NN**F**N	t f t
19	¬□O¬p	~(#(r&~p)=(s=s)) = (s=s);	TTTT CTCT TTTT CTCT	t f t
20	¬¬◊O¬¬p	~(~(%(r&~~p)=(s=s))=(s=s)) = (s=s) ;	CCCC CTCT CCCC CTCT	t f t
21	Op	r&p ;	**FFFF** **F**T**F**T **FFFF** **F**T**F**T	t f -
22	¬O¬p	~r&~p ;	T**F**T**F** **FFFF** T**F**T**F** **FFFF**	t f -
23	¬Op	~(r&p) = (s=s) ;	TTTT T**F**T**F** TTTT T**F**T**F**	f t -
24	¬¬O¬p	~(~r&~p) = (s=s) ;	**F**T**F**T TTTT **F**T**F**T TTTT	f t -

We really do not know what to make of this as the results are *all* different, hence none is logically equivalent as claimed. In following the lower case t,f values for situations 1, 2, and 3, there is no obvious pattern of truth table results by group for the three paths to open theism as conjectured.

Refutation of intensional ↓-operator and ultra-filters in Isabelle/IHOML

Abstract: We evaluate modal collapse as *not* tautologous and proffer options. On intensional logic using the proof tool Isabelle/IHOML, the following are *not* tautologous: ↓-operator; δ-ultrafilters; and γ-ultrafilters. In particular, the ↓-operator is *not* binary (bivalent) as claimed. These results form a *non* tautologous fragment of the universal logic VŁ4.

From [Benzmüller et al 2019a]:

> **Abstract** Three variants of Kurt Gödel's ontological argument, as proposed by Dana Scott, C. Anthony Anderson and Melvin Fitting, are encoded and rigorously assessed on the computer. In contrast to Scott's version of Gödel's argument, the two variants contributed by Anderson and Fitting avoid modal collapse. … Key to our formal analysis is the utilization of suitably adapted notions of (modal) ultrafilters, and a careful distinction between extensions and intensions of positive properties.
>
> **1. Introduction** The premises of Kurt Gödel's original variant of his modal ontological argument .. , as was found in his "Nachlass", are inconsistent; this holds already in base modal logic K .. . The premises of Scott's .. variant of Gödel's work, in contrast, are consistent .. , but they imply the modal collapse, $\phi \rightarrow \Box\phi$ [1] [1] Srécko Kovacš .. argues that modal collapse was eventually intended by Gödel. (1.1)
>
> LET p, q, r, s: $\phi, \delta, \gamma, \sigma$.
>
> p>#p ; TNTN TNTN TNTN TNTN (1.2)
>
> **Remark 1.2:** Instead of modal collapse, which in Eq. 1.2 is *not* tautologous, what makes more sense is non-modal collapse, namely these types of tautologies, with readings:
>
> p>%p, God implies the possibility of God;
> #p>p, the necessity of God implies God; and
> #p>%p, the necessity of God implies the possibility of God.
>
> Rewriting the above in terms of quantifiers renders:
>
> God implies at least one God;
> all gods imply God; and
> all gods imply at least one God.
>
> Once the moral imperative is invoked by one's utterance of "I ought to", a moral God is established who is a personal spirit, omnipotent, omnipresent, omniscient, and veracious (God can *not* tell a lie). The moral imperative coerces a metaphysical assertion to become a physical assertion subject to verifiability and falsifiability.
>
> These equations speak to the mapping of polytheism and monotheism with only the latter as tautologous because God is proved as a personal spirit, in the singular.
>
> The further practical question of which monotheism is tautologous gets resolved further by the veracity of God. Bahá'í denied itself with no instant, extant avatar. Judaism ceased to reveal itself after Malachi. Mohammedanism contradicted itself by

its text. Hence, Orthodox Christianity is upheld.

Two notions are particularly important in our analysis. From set theory, resp. topology, we borrow and suitably adapt, for use in our modal logic context, the notion of ultrafilter and apply it in two different versions to the set of positive properties. From the philosophy of language we adopt the distinction between intensions and extensions of (positive) properties. Such a distinction has been suggested already by Fitting … Our computer-supported analysis … exploits shallow semantical embeddings (SSEs) of various logics of interest—such as intensional higher-order modal logics (IHOML) in the present article ...

3.1. Intensional higher-order modal logic in HOL … The ↓-operator in line 40, which is of type $(\gamma\Rightarrow\sigma)\Rightarrow\gamma\Rightarrow\sigma$, is slightly more involved. (3.1.1.1)
It evaluates its second argument, which is a property P of type γ, for a given world w, and it then rigidly intensionalizes the obtained extension of P in w. For technical reasons, however, ↓ is introduced as a binary operator, with its first argument being a world-lifted predicate $\phi_{\gamma\Rightarrow\sigma}$ that is being applied to the rigidly intensionalized $\downarrow P_{\gamma}$; in fact, all occurrences of the ↓-operator in our subsequent sections will have this binary pattern.

((r>s)>r)>s ; TTTT **FFFF** TTTT TTTT (3.1.1.2)

3.2. Filters and ultrafilters … δ-Ultrafilters are introduced in line 26 as world-lifted characteristic functions of type $(\delta\Rightarrow\sigma)\Rightarrow\sigma$ … a σ-subset of the σ-powerset of δ-type property extensions. (3.2.1.1)

(q>s)>s ; **FF**TT **FF**TT TTTT TTTT (3.2.1.2)

γ-Ultrafilters, which are of type $(\gamma\Rightarrow\sigma)\Rightarrow\sigma$, are analogously defined as a σ-subset of the σ-powerset of γ-type property extensions. (3.2.2.1)

(r>s)>s ; **FFFF** TTTT TTTT TTTT (3.2.2.2)

Eqs.. 1.2, 2.2.1.2, 3.2.1.2, and 3.2.2.2 are *not* tautologous. This refutes the use of intensional logic and the proof tool Isabelle/IHOML. (We note the title relies on set theory which, along with intensional logic, we refute elsewhere.)

Refutation of the ontotheological error, and enormities therefrom

From [Adams 2014]:

I. Introduction

In some circles, 'the ontotheological error' is a buzz-word, a dismissive pejorative hurled at philosophical theologians who say that God falls under the concept 'being'. The accusation is that to say that God falls under the concept 'being' is to imply that God is *a* being, alongside others. Whatever good-making features may otherwise be ascribed, God is thereby brought down to the level of creatures. Perfect-being theology makes God differ from creatures only in degree and not in kind. To believers in such a God, critics of ontotheology charge: your God is too small!

My questions are "what?" and "why?": what exactly is the ontotheological error? and why is it an error? The label itself makes clear: ontotheology is a species of philosophical theology. My second question, therefore, breaks in two: what philosophical mistakes is ontotheology thought to make? and why are these taken to be theologically disastrous?

We abstract the definition of the ontotheology conjecture as:

If God is equivalent to a being,
then God begets a being [, then God is greater than or implies a being]. (1.1.1)

Remark 1.1.1: We know God *is* a being from the proof of God as a personal spirit who is ineffable and veracious by Popper's Ex(Gx). We also know that God proved is the moral God of the Historic Church by way of the atheist/existentialist Popper invoking the moral imperative of conscience in saying "I ought to slow down at the round about".

LET p, q: God, being.

(p=q)>(p>q) ; TTTT TTTT TTTT TTTT (1.1.2)

We abstract the definition of the "ontotheological error" conjecture as:

If God begets a being,
then God is equivalent to a being. (1.2.1)

(p>q)>(p=q) ; TT**F**T TT**F**T TT**F**T TT**F**T (1.2.2)

Remark 1.2.2: Eq.1.2.2 as rendered is *not* tautologous and the converse (reversal of antecedent and consequent with the same connective) of 1.1.2.

This answers Adams' first question of what as Eq. 1.2.2 and why as Rk. 1.2.2.

To answer Adams' second question's two parts, we assume Eq. 1.1 as antecedent in these respective conjectures.

If the ontotheological conjecture (1.1.1),
then Moore's paraphrase for Anselm's Proslogion (from a previous paper). (2.1.1)

((p=q)>(p>q))>(((p>q)&((%r>%s)>((%q&s)@((p>q)&%r))))>((p>q)>(p=q))) ;
TTNT TT**F**T TTCT TTTT (2.1.2)

If the ontotheological conjecture (1.1.1),
then Viley's paraphrase for Anselm's Proslogion (from a previous paper). (2.2.1)

((p=q)>(p>q))>((((p>q)&((p&s)>~(s@s)))&((~(~(%(q&s)=(s=s))>~(#(q&s)=(s=s)))=(s=s))>
((%(~(%(p&s)=(s=s))@(p>q)))=(~(%(p>q)=(s=s))>(s@s)))))>(%p=(s=s))) ;
CTCT CTCT CTTT CTTT (2.2.2)

The philosophical mistakes thought to be made in ontotheology are not of ontotheology itself, if its logical definition is correct, but rather of theological inferences drawn therefrom.

Disastrous theological inferences drawn from ontotheology are those of Eqs.. 2.1.2 and 2.2.2 which are *not* tautologous.

From Adams' last sentence before the penultimate footnote:

> theoretical and practical science. Anselm insists, on the contrary, ontotheology is a dimension of praxis, because ontotheology is a form of prayer.[55]

This is schizophrenic reasoning since ontotheology is *not* proved as a form of prayer, further to imply that the non-theorem of Prosologion implies a dimension of praxis.

To make matters worse, it is possible to derive all manner of enormity as a consequence to the antecedent of "ontological error" of Eq. 1.2.1. For example:

If God begets at least one being,
then every being is equivalent to God. (1.2.1.1.1)

(p>%q)>(#q=p) ; TNCN TNCN TNCN TNCN (1.2.1.1.2)

Remark 1.2.1.1.2: Eq. 1.2.1.1.2 is *not* tautologous and maps universal salvation, espoused by Adams, with which Buddhist reincarnation can be reconciled as equivalent to spiritual suicide.

Refutation of panentheism as fragment of ontotheology

From [Adams 2014], [Göcke 2020]:

Cast in a theistic world, the relationship of God to things is described as follows:

Animism holds that:

There exists an essence, as God, to imply all things, both animate and inanimate. (0.1)

LET p, q: God, thing.
[We take living and dead to mean respectively proof (s=s) and contradiction (s@s).]

%p>(#q>((s=s)&(s@s))) ; TTTC TTTC TTTC TTTC (0.2)

Remark 0.2: Eq. 0.2 is *not* tautologous. C.S. Lewis held that animism is the most difficult for Orthodox Christianity to refute which is borne out here by the truth table values being close to tautology and to diverge not by contradiction **F** but by the weaker falsity C.

Pantheism holds that:

God is equivalent to the universe of all things. (1.1)

p=#q ; T**F**CN T**F**CN T**F**CN T**F**CN (1.2)

Panentheism holds that:

God encompasses all things. (2.1)

p>#q ; T**F**TN T**F**TN T**F**TN T**F**TN (2.2)

Remark 2.2: Eqs.. 1.2 and 2.2 are *not* tautologous, with 2.2 as a strengthened version of 1.2.

Ontotheology holds that:

God as veracious (alive) is equivalent to a thing. (3.1.1)

(p>(s=s))=q ; **FF**TT **FF**TT **FF**TT **FF**TT (3.1.2)

Remark 3.1.2: Eq. 3.1.2 is *not* tautologous and a weakened version of 0.2.

Ontotheology further holds that:

If God as veracious (alive) is equivalent to a thing, then God creates a thing. (3.2.1)

((p>(s=s))=q)>(p>q) ; TTTT TTTT TTTT TTTT (3.2.2)

The ontotheological error is the converse of Eq. 3.2.12 to read that:

If God creates a thing, then God as veracious (alive) is equivalent to a thing: (3.2.2.1)

(p>q)>((p>(s=s))=q) ; **F**TTT **F**TTT **F**TTT **F**TTT (3.2.2.2)

Remark 3.2.2.2: Eq. 3.2.2.2 is *not* tautologous, denying the ontological error.

Moreover, for the thing to be possibly a being, then the conjecture reads:

If God as veracious (alive) is equivalent to a thing, then God creates a thing as possibly veracious (alive). (3.3.1)

((p>(s=s))=q)>(p>(q>%(s=s))) ;
TTTT TTTT TTTT TTTT (3.3.2)

The ontotheological error is also the converse of Eq. 3.3.2. (3.3.2.1)

(p>(q>%(s=s)))>((p>(s=s))=q) ;
FFTT **FF**TT **FF**TT **FF**TT (3.3.2.2)

Remark 3.3.2.2: Eq. 3.3.2.2 is *not* tautologous, denying the ontological error and is also equivalent to 3.1.2.

Because ontotheology in Eqs.. 3.2.2 and 3.3.2 is tautologous and panentheism in 2.2 is not, it is a refuted fragment of ontotheology. The same also applies to animism and pantheism.

The contribution is that framing the conjectures in terms of animate and inanimate things or living and dead beings brings the conjectures into a simplified, abstract logical sentence as the universal antecedent, connective, consequent.

Refutation of Pascal's wager

Abstract: The antecedent and consequent of the thought experiment of Pascal's wager are *not* tautologous. However, to determine gain by one wager or the other is tautologous. This refutes the conjecture of Pascal's wager as ultimately not allowing reason to determine faith. In other words, the "existence of God is possible to prove by human reason". What follows furthermore is that the existence of God is more profitable from this thought experiment. Therefore the conjecture forms a tautologous fragment of the universal logic VŁ4.

From [Pascal's_wager 2020]:

> "The wager uses the following logic (excerpts from Pensées, part III, §233):
>
> > God is, or God is not. Reason cannot decide between the two alternatives. A Game is being played... where heads or tails will turn up. You must wager (it is not optional). Let us weigh the gain and the loss in wagering that God is. Let us estimate these two chances. If you gain, you gain all; if you lose, you lose nothing." (1.0)
>
> We write Eq. 1.0 as:
>
> > Antecedent: ((God is, or God is not) implies (either (if God is, then wager gains) or (if God is not, then wager breaks even)) (1.1.1)
> >
> > LET p, q: God, gain
> >
> > (p+~p)>((p>(q>(s@s)))&(~p>(q=(s@s)))) ;
> > TT**FF** TT**FF** TT**FF** TT**FF** (1.1.2)
> >
> > **Remark 1.1.2:** Eq. 1.1.2 can be weakened by inserting modal operators as
> >
> > #(p+~p)>%((p>(q>(s@s)))&(~p>(q=(s@s)))) ;
> > TTCC TTCC TTCC TTCC (1.1.3)
> >
> > consequent: implies ((if God is not, then wager breaks even) is more profitable than (if God is, then wager gains)). (1.2.1)
> >
> > (~p>(q=(s@s)))>(p>(q>(s@s))) ;
> > TTT**F** TTT**F** TTT**F** TTT**F** (1.2.2)
>
> "Pascal begins by painting a situation where both the existence and non-existence of God are impossible to prove by human reason." (2.0)
>
> We write Eq. 2.0 as consequent Eq. 1.1.1 implies antecedent Eq. 1.2.1: (2.1)
>
> > ((p+~p)>((p>(q>(s@s)))&(~p>(q=(s@s)))))>((~p>(q=(s@s)))>(p>(q>(s@s)))) ;
> > TTTT TTTT TTTT TTTT (2.2)
> >
> > **Remark 2.2:** If the antecedent is chosen as the weakened modal Eq. 1.1.3, the result is different from Eq. 2.2 and is *not* tautologous:

(#(p+~p)>%((p>(q>(s@s)))&(~p>(q=(s@s)))))>((~p>(q=(s@s)))>(p>(q>(s@s)))) ;
TTTN TTTN TTTN TTTN (2.3)

The antecedent Eq. 1.1.2 of Pascal's conjecture and the consequent Eq. 1.2.2 are *not* tautologous. However, to determine gain by one wager or the other as in Eq. 2.2 results in a theorem to do just that. This refutes the conjecture of Pascal's wager as ultimately not allowing reason to determine faith. In other words, "both the existence and non-existence of God are possible to prove by human reason". What follows is that existence of God is more profitable from the thought experiment.

Refutation of the necessary existence approach for proofs of the existence of God

From [Oppy 2019]:

Of the 23 arguments rendered by the reviewer, we evaluated three sample examples as affirmations and denials, giving only final truth table results since this is a student work book.

Argument from	**Affirmation**	**Denial**
1. Basic ontology:	TTTT TTTT TTTT TTTT	TTTT TTTT TTTT TTTT
2. Contingency:	CTCT CTCT CTCT CTCT	N**F**NN N**F**NN N**F**NN N**F**NN
3. Perfection:	CTTT CTTT CTTT CTTT	NTNT NTNT NTNT NTNT

The basic ontological argument in one variable was expected to be tautologous. However the arguments from contingency and perfection were *not* tautologous. Furthermore the respective affirmed and denied truth table results were not opposite in value.

What follows is that necessary existence may not be a productive approach by which to seek or teach proofs of the existence of God.

The reviewer did not state that apparently proof assistant scripts were not supplied as an appendix for replication.

By contrast, Popper's proof of the existence of God, as we corrected and extended it to the moral God of Orthodox Christianity, serves to show how a bivalent modal logic model checker can be used effectively in the affirmative.

Refutation of necessity causing contingency

From [Koons 2006]:

> "If [Koons is] right, we have good reason to think that something that is minimally contingent, such as the Cosmos, will have a necessary cause. Sobel is unpersuaded, because he feels certain that it is impossible for something necessary to cause something contingent." (1.1.1)

LET p, q, s: necessary cause, contingent effect, s.

#p>(%s<#s) ; `TCTC TCTC TCTC TCTC` (1.1.2)

Remark 1.2: Eq. 1.2 is *no*t tautologous.

If necessary cause is taken as necessary *tautologous* cause, then: (1.2.1)

#(p>(s=s))>(%s<#s) ; `CCCC CCCC CCCC CCCC` (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is not tautologous. Hence both 1.1.2 and 1.2.2 refute the conjecture of necessity causing contingency.

On the other hand, non-necessity does cause contingency: (1.3.1, 1.4.1)

~#p>(%s<#s) ; `TTTT TTTT TTTT TTTT` (1.3.2)

~(#(p>(s=s))=(s=s))>(%s<#s) ;
`TTTT TTTT TTTT TTTT` (1.4.2)

In other words, necessity or necessity as tautologous causes a non-contingent effect: (1.5.1)

(#p+#(p>(s=s)))>(%s>#s) ; `TTTT TTTT TTTT TTTT` (1.5.2)

Remark 1.5.2: Eq. 1.5.2 is tautologous, so this title can be just as well "Confirmation of necessity causing non-contingency". Hence, Sobel is confirmed, and Koons denied.

Refutation of the nomological-explanatory solution (NES)

From [Foster 2003]:

> **Chapter 3: The nomological-explanatory solution**
>
> The right way to deal with the problem of induction is to adopt what I call the nomological-explanatory solution (NES). This holds that when an inductive inference is rational, it can be shown to be so by breaking it down into two further steps of inference, neither of which is as such extrapolative. The first step is an inference to the best explanation of the hitherto exemplified regularity, where the regularity calls for explanation because it is too extensive to be deemed coincidental, and where the explanation offered is one which involves the postulation of some law or set of laws of nature, construed as forms of natural necessity. The second step is a deduction from this explanation that the regularity will continue to hold for the relevant unexamined case or cases, or will do so subject to the continued obtaining of certain standing conditions. (4.0)

For the definition of induction, we showed elsewhere:

> C.S. Peirce originally defined the three forms of inference in logic as:
>
> Abduction: (Q implies S) and (Q implies P) imply (S implies P) (1.2.1)
> ((q>s)&(q>p))>(s>p) ;TTTT TTTT **F**TTT **F**TTT (1.2.2)
>
> Induction: (S implies Q) and (P implies Q) imply (S implies P) (2.2.1)
> ((s>q)&(p>q))>(s>p) ;TTTT TTTT TT**F**T TT**F**T (2.2.2)
>
> Deduction: (S implies Q) and (Q implies P) imply (S implies P) (3.2.1)
> ((s>q)&(q>p))>(s>p) ;TTTT TTTT TTTT TTTT (3.2.2)

From Eq. 3.2.2 as tautologous, deduction is the only form of inference in logic that is provable by itself, while abduction and induction in 1.2.2 and 2.2.2 are *not* tautologous. On this basis alone, NES is denied at its outset.

Eq. 4.0 has two parts. The first part establishes induction (2.2.1) to imply the second part of deduction (3.2.1). That in turn is to imply the goal of induction (2.2.1) with goal as (4.1.1).

((((s>q)&(p>q))>(s>p))>(((s>q)&(q>p))>(s>p)))>(((s>q)&(p>q))>(s>p)) ;
TTTT TTTT TT**F**T TT**F**T (4.1.2)

> **Remark 4.1.2:** Eq. 4.1.2 is not tautologous and equivalent to 2.2.2. This refutes the extended conjecture for NES and also denies subsequent arguments as listed in [Oppy 2006].

Refutation of perfect goodness / perfect being theology

From [Murray, 2019]:

> **4. Is perfect goodness possibly exemplified?**
>
> The argument is as follows:
>
> 1. Necessarily, God actualizes some world
> 2. Necessarily, for each actualizable world w_1, there is an actualizable world w_2 such that from the moral point of view one would prefer w_2 to w_1
> 3. Necessarily, for whatever world that God actualizes, there is a morally better world that God does not actualize yet could have (from (2))
> 4. Necessarily, for whatever world that God actualizes, God's act of actualizing that world is not as morally good as some other act that God does not perform but could have (from (3))
> 5. Necessarily, for whatever world that God actualizes, God's agency is not as morally good as it could have been (from (4))
> 6. Necessarily, God's agency is not perfectly good (from (1), (5))

(4.0.1.1 - 4.0.6.1)

We render Eq. 4.0.1.1 without the modal "Necessarily" (for which see below) as "God actualizes some world", with "actualize" as "create" and "some world" as "one perfect world without end", in keeping with the Anglo Catholic reading of Luke 1:33:

> And he shall reign over the house of Jacob for ever; and of his kingdom there shall be no end.

to mean "one kingdom without end" as:

"God created one perfect world without end." (4.1.1.1)

LET p, q, r, s: God, q, one perfect world without end, s.

p>(r>(s=s)) ; TTTT TTTT TTTT TTTT (4.1.1.2)

If "Necessarily" is injected into the mix, then 4.1.1.1 reads:

"Necessarily God created one perfect world without end." (4.1.2.1)

#(p>(r>(s=s))) = (s=s) ; NNNN NNNN NNNN NNNN (4.1.2.2)

Remark 4.1.2.2: Eq. 4.1.2.2 is *not* tautologous, and by injection of the modal necessity operator dilutes the tautology of 4.1.1.2 to truthity (non contingency).

Since the conjecture uses 4.1.1.2 as the antecedent to subsequent consequents, then implication of any *non*-tautologous consequent yields *not* a tautology. The consequents of 4.0.2.1 - 4.0.6.1 all invoke multiple worlds and hence are disqualified on their face in light of only "one perfect world, without end".

The problem with the argument 4.0.2.1 - 4.0.6.1 is that the author assumes there can be more than "one perfect world, without end" which cannot be the case of God creating a perfect world without end.

Had the author used a free modal logic *street prover* as Molle-1.0 at sourceforge.net, what is described above would be unnecessary and its lengthy listing at plato.

The full argument is further mapped instead of leaving for the reader as follows with these notes.

Anything God creates is perfect, for otherwise God would be a liar. Therefore, to attribute creation as better or worse than creation is not possible. The further assumption of the argument is that the possibility of some good or perfection is superior to the necessity of other good or perfection. In other words, at least one perfection is superior to all perfection. Those assumptions turn on the false claim that God thinks only as a human.

We assume the words actualization, action, and agency are synonyms; hence step 2 is equivalent to steps 3, 4, 5 which are ignored as the same cascading consequents. Hence we take the words "that God does not actualize/perform yet/but could have (been)" as irrelevant.

We take the words "prefer", "morally better", and "morally good" as "greater than", ">".
We take "necessarily" as the modal necessity operator.
We take the words "some", "each", and "whatever" as the modal possibility operator.

We interpret the words: "perfectly good" as "good" or "perfect" to avoid conflicting superlatives; and "that God does not actualize/perform yet/but could have (been)" as begging the question and hence irrelevant.

(#(p>%r)>#(((%r&(#s<%s))>(%r&(#s>%s)))>(s=s)))>#(p>~(s=s)) ;
N F N F **N F N F** **N F N F** **N F N F** (4.0.6.2)

Remark 4.0.6.2: Eq. 4.0.6.2 is *not* tautologous, to refute the argument, denying perfect goodness and the perfect being theism and theology.

In fact, the truth table result of 4.0.6.2 is the same as for "necessarily *not* God", #~p: **N F N F**.

Refutation of the theory of personal identity for Swinburne's inquiry of bodies or souls

From [Swinburne, 2021.1]:

The first sentence reads:

> A theory of personal identity is a theory of what makes one person P2 at a later time T2 the same person as a person P1 at an earlier time T1. (1.1.0)

We write this as:

> A theory of personal identity is the conjecture: If (earlier time T1 implies later time T2) and (person P1 is equivalent to person P2), then (person P1 at earlier time T1) is equivalent to (person P2 at later time T2). (1.1.1)

LET p, q, r, s: P1, P2, T1, T2.

((r>s)&(p=q))>((p&r)=(q&s)) ;
TTTT TTT**F** TTTT TTTT 15 steps (1.1.2)

Similarly, using the free modal *street prover* Molle-1.0 at sourceforge.net:

(((T_one => T_two) & (P_one <=> P_two)) =>
((P_one & T_one) <=> (P_two & T_two)) red no go 110 steps (1.1.3)

Remark 1.1.2, 1.1.3: Eqs. 1.1.2 and 1.1.3 are not tautologous, to refute the theory of personal identity, denying the inquiry before it commences.

Refutation of phenomenal conservatism and its equivalence of seemings exclusivism

From: en.wikipedia.org/wiki/Phenomenal_conservatism

> In epistemology, **phenomenal conservatism** (**PC**) holds that it is reasonable to assume that things are as they appear, except when there are positive grounds for doubting this. (The term derives from the Greek word "phainomenon", meaning "appearance".)
>
> The principle was initially defended by Michael Huemer in Huemer 2001, where it was formulated as follows:
>
> - If it seems to *S* as if *p*, then *S* thereby has at least *prima facie* justification for believing that *p*.
>
> A later formulation (Huemer 2007), designed to allow the principle to encompass inferential as well as foundational justification, reads as follows:
>
> - If it seems to *S* that *p*, then, in the absence of defeaters, *S* thereby has at least some degree of justification for believing that *p*.

(1.1.1 - 1.2.1)

In Eqs.. 1.*n* and 2.*n*, we interpret the words "seems" and "seemings" to mean respectively the modal operator words of "possibly" and "possibility of".

For Eqs.. 1.1.1 and 1.2.1, we interpret the antecedents as *reduced* to the equivalent.

LET p, s: p, S.

(s>%p) = (s=s) ; TTTT TTTT CTCT CTCT (1.1.1.2), (1.2.1.2)

Remark 1.1.1.2, 1.2.1.2: Eqs.. 1.1.1.2, 1.2.1.2 are equivalent and not tautologous. In fact, the following variation is also equivalent as %(s>p) = (s=s) to mean "the seemings of S believing p" or "the possibility of S believing p". (It turns out that this comes into play below in the consequents.)
Furthermore, if the veracity of p is designated as an antecedent to the above, such as p>(s=s), then the truth table result is still the same.

For Huemer 2001, Eq. 1.1.2.1, the consequent as %(s>p) is equivalent to the antecedent, hence the conjecture of 1.1.3.1 will always be tautologous as:

(s>%p)>%(s>p) ; TTTT TTTT TTTT TTTT (1.1.3.2)

For Huemer 2007, Eq. 1.2.2.1, we interpret "in the absence of defeaters" to be the negation of the possibility of p, so the consequent is:

~%p>%(s>p) ; TTTT TTTT CTCT CTCT (1.2.2.2)

and the conjecture of 1.2.3.1 will always be tautologous as:

(s>%p)>(~%p>%(s>p)) ; TTTT TTTT TTTT TTTT (1.2.3.2)

Remark 1.1.3.2, 1.2.3.2: Eqs.. 1.1.3.2 and 1.2.3.2 are tautologous, equivalent, and trivial, to refute phenomenal conservatism.

From: blakemcallister.com
[McAllister, B. (2020, forthcoming). The perspectival problem of evil. Faith and philosophy.]

Research

My main research project is a systematic defense of seemings foundationalism, which has two main theses:

- The first is **phenomenal conservatism**, a Chisholmian epistemic principle stating if it seems to S that *p*, then S thereby has a pro tanto, non-derivative reason to believe *p*.
- The second is **seemings exclusivism**, which says that if S has a non-derivative reason to believe *p*, then this is because it seems to S that *p*.

On this picture, justification is ultimately a matter of responding properly to one's seemings—the mental states by virtue of which something seems true.

(2.1.1 - 2.2.1)

In Eqs.. 2.*n*, we interpret 2.1.*n* as 1.1.*n* with the result that phenomenal conservatism is always tautologous for the same reasons as 1.1.*n*, again as:

(s>%p)>%(s>p) ; TTTT TTTT TTTT TTTT (2.1.3.2)

For Eqs.. 2.2.*n*, the conjecture is the converse of Eqs.. 1.2.*n* as:

%(s>p)>(s>%p) ; TTTT TTTT TTTT TTTT (2.2.3.2)

with the result that seemings exclusivism is always tautologous and in fact the equivalent of phenomenal conservatism.

Denial of claimed refutation of physicalistic proof of existence of the soul

Abstract: We evaluate the proffered proof of the physicalistic hypothesis of the existence of the soul as *not* tautologous, but also as *not* contradictory as claimed. Therefore the alternative spirit hypothesis is *not* established by a replacement default. A difficulty in the physicalistic hypothesis is injection of the state of annihilation, not termination, of consciousness which is equivalent to the suicide of identity in Buddhist reincarnation. These results form a *non* tautologous fragment of the universal logic VŁ4.

From [Korn 2019]:

> There are two schools of thought regarding the nature of consciousness. There's *physicalism*, also referred to as materialism, according to which consciousness is solely a product of brain activity and what I shall refer to as the *spirit hypothesis*, which holds that consciousness is contained in a nonphysical vehicle, referred to as the spirit or soul. ...
>
> In summary, we have established that if any part of your brain is exchanged with the corresponding part of your duplicate's brain, exactly one of the following must occur: (1) your consciousness remains with your original body, (2) your consciousness transfers to the body of your duplicate, or (3) your consciousness in annihilated.
>
> Let n be the number of atoms in your brain at the time of the duplication/exchange, and let these atoms be numbered 1 through n in arbitrary order. (1.1)
>
> ~(n<(%s>#s)) (1.2)
>
> Denote by Ai the subset of your brain consisting of atoms 1 through i. (2.1)
>
> (~(i<(%s>#s))>~(i<(A&i))) ; (2.2)
>
> Since exchanging A1 (that is, a single atom in your brain) with its counterpart in your duplicate's brain results in your consciousness remaining in your original body, (3.1)
>
> ((n=i)>(((A&n)=(A&i))>(C<(A&n))) ; (3.2)
>
> while switching An (that is, your entire brain) with its counterpart causes your consciousness to leave your original body and enter your duplicate's body, (4.1)
>
> (((A&n)>(A&i))>(~(C<(A&n))&(C<(A&i))) ; (4.2)
>
> it follows that there is some number k between 1 and n–1 inclusive (5.1)
>
> (~((%s>#s)<k)&(~(n-(%s>#s))>k)) (5.2)
>
> such that your consciousness remains in your original body when Ak is exchanged with its counterpart but leaves your original body, either to enter your duplicate's body or to be annihilated, (6.1)
>
> > **Remark 6.1:** The notion of annihilation of consciousness as a term may not be what the author intends, for that means death of the spirit. In the Buddhist sense of losing one's identity, the spiritual hypothesis is transmigration of souls (reincarnation) which results in loss

of one's identity at each cycle, that is, equivalent to loss of spirit. A simpler proof of the spiritual hypothesis could ignore reincarnation for that reason, not making annihilation of consciousness an option. But that is not what is written or mapped in Eq. 7.1 below

((k=i) >(((A&k)=(A&i))>(C<(A&k)))) ; (6.2)

when Ak+1 is exchanged with its counterpart. (7.1)

(((A&(k+(%s>#s)))>(A&i))>((C<(A&i))+(C=(s @s)))) ; (7.2)

We write the conjecture as:

If (1.1 and 2.1) implies (3.1 and 4.1), then (7.1 implies 6.1) implies 5.1. (8.1)

LET p, q, r, s, t, z: A, I, k, n, C, z.

(((~(s<(%z>#z))&(~(q<(%z>#z))>~(q<(p&q))))>(((s=q)>(((p&s)=(p&q))>(t<(p&s))))&
(((p&s)>(p&q))>(~(t<(p&s))&(t<(p&q))))))>(((((p&(r+(%z>#z)))>(p&q))>((t<(p&q))+
(t=(z@z))))>((r=q)>(((p&r)=(p&q))>(t<(p&r)))))>(~((%z>#z)<r)&(~(s-(%z>#z))>r))) ;
FTNT **F**TNT CNTN CNTN (8.2)

Eq. 8.2 as rendered is *not* tautologous, hence refuting the conjecture of the physicalistic hypothesis, but *not* contradictory as claimed. Therefore the alternative spirit hypothesis is *not* established by a replacement default.

Refutation of Plantinga definitions for problem of evil

From [Graham 2019]:

> (1971). Mackie argues that the existence of an omnipotent, wholly good God is logically incompatible with the existence of evil. His argument is written as follows:
>
> (11) God is omnipotent.
> (12) God is wholly good.
> (13) Evil exists.[3]
>
> Alvin Plantinga points out that this argument is not explicitly or formally contradictory (1977). Plantinga states that Mackie needs additional premises for his
>
> argument to succeed, and Mackie implicitly provides these extra propositions with some modifications by Plantinga. As Plantinga states, they are:
>
> (19c) An omnipotent and omniscient good being eliminates every evil that it can properly eliminate.
> (20) There are no non logical limits to what an omnipotent being can do.
> (21) If God is omnipotent and omniscient, then he can properly eliminate every evil state of affairs.
>
> These propositions, when combined with (11), (12), and (13) produces the implicit contradiction that Mackie desires.

(11.1 - 21.1)

LET p, q, r, s: God, omnipotent, omniscient, being.
Wholly good is "(s=s)" proof;
Omnipotent is all proof #(s=s) as necessity of proof;
Evil exists is %(s@s) as possibility of evil;
No non logical limits is omnipotent and omniscient because God cannot lie;
Evil state of affairs is a lie

p>#(s=s) ;	TNTN TNTN TNTN TNTN	(11)
p>(s=s) ;	TTTT TTTT TTTT TTTT	(12)
%(s@s)=(s=s) ;	CCCC CCCC CCCC CCCC	(13)
((s&(q&r))>(s=s))>~(s@s) ;	TTTT TTTT TTTT TTTT	(19c)
(p&q)>~~(s=s) ;	TTTT TTTT TTTT TTTT	(20)
((p&(q&r))>(s=s))>~(%(s@s)=(s=s)) ;	NNNN NNNN NNNN NNNN	(21)

[We suppose the Plantinga argument proceeds as: 11&12&19c&20&21>13.]

(22.1)

((((p>#(s=s))&(p>(s=s)))&((((s&(q&r))>(s=s))>~(s@s))&((p&q)>~~(s=s))))&(((p&(q &r))>(s=s))>~(%(s@s)=(s=s))))>(%(s@s)) ;

CCCC CCCC CCCC CCCC (22.2)

Remark 22.2: Eq. 22.2 is *not* tautologous, resulting in the same truth table result values as 13.2. This refutes the Plantinga definitions for the problem of evil.

Refutation of Plantinga's modal ontological proof for the existence of God

From [Plantinga's ontologic 2020]:

Note: We inject minimal verbiage to make the sentences below more explicit.

1. If God exists, He must exist necessarily. (1.1)
2. Either God exists necessarily or He doesn't [exist]. (2.1)
3. If God doesn't have necessary existence, then He necessarily doesn't [exist]. (3.1)

Therefore,

4. Either God has necessary existence, or he necessarily doesn't [exist]. (4.1)
5. If God necessarily doesn't have necessary existence, then God necessarily doesn't exist. (5.1)

Therefore:

6. Either God has necessary existence, or he necessarily doesn't exist. (6.1)
7. It is not the case that God necessarily doesn't exist. (7.1)

Therefore,

8. God has necessary existence. (8.1)
9. If God has necessary existence, then God exists. (9.1)

Therefore,

10. God exists. (10.1)

Antecedents 1, 2, 3:

%p>%#p ; NNNN NNNN NNNN NNNN (1.2)

> **Remark 1.2:** Probably better for what Plantinga wants is "He must necessarily exist" as in %p>#%p which is tautologous.

%#p+~%p ; NNNN NNNN NNNN NNNN (2.2)

> **Remark 2.2:** Probably better for what Plantinga wants is "He doesn't exist necessarily" as in %#p>~%#p which is tautologous.

~#%p>#~%p ; TTTT TTTT TTTT TTTT (3.2)

Conclusion 4:

#%p+#~%p ; TTTT TTTT TTTT TTTT (4.2.1.2)

Argument of 1&2&3 > 4:

((%p>%#p)&((%#p+~%p)&(~#%p>#~%p)))>(#%p+#~%p) ;
TTTT TTTT TTTT TTTT (4.2.2.2)

Antecedent 5:

#~#%p>#~%p ; TTTT TTTT TTTT TTTT (5.2)

Conclusion 6:

#%p+#~%p ; TTTT TTTT TTTT TTTT (6.2.1.2)

Argument of 4&5 > 6:

((((%p>%#p)&((%#p+~%p)&(~#%p>#~%p)))>(#%p+#~p))&(#~#%p>#~%p))>
(#%p+#~%p) ; TTTT TTTT TTTT TTTT (6.2.2.2)

~(#~%p=(s=s))=(s=s) ; CTCT CTCT CTCT CTCT (7.2)

Conclusion 8:

#%p = (s=s) ; CTCT CTCT CTCT CTCT (8.2.1.2)

Argument of 6&7 > 8:

(~(#~%p=(s=s))&(((((%p>%#p)&((%#p+~%p)&(~#%p>#~%p)))>(#%p+#~p))&
(#~#%p>#~%p))>(#%p+#~%p)))>%p ;
TTTT TTTT TTTT TTTT (8.2.2.2)

Antecedent 9:

#%p>%p ; TTTT TTTT TTTT TTTT (9.2)

Conclusion 10:

%p = (s=s) ; CTCT CTCT CTCT CTCT (10.2.1.2)

Argument 8&9 > 10:

(((~(#~%p=(s=s))&(((((%p>%#p)&((%#p+~%p)&(~#%p>#~%p)))>
(#%p+#~p))&(#~#%p>#~%p))>(#%p+#~%p)))>%p)&(#%p>%p))>%p ;
CTCT CTCT CTCT CTCT (10.2.2.2)

Eq. 10.2.2.2 is *not* tautologous, hence refuting Plantinga's conjecture. We do not attempt to resuscitate the conjecture because the conclusion sentences of 8.2.1.2 and10.2.1.2 are *not* tautologous and moreover Plantinga did not recognize at the outset that 1.1.2 and 1.2.2 are truthity and *not* tautology.

Elsewhere Plantinga specifies no bivalent modal checker, implying the conjecture was not so checked.

Confirmation of the five types of prayer in the Historic Church

The five types of prayer are commonly known alphabetically as adoration, confession, intercession, petition, and thanksgiving. The difference between intercession and petition is that intercession asks God to stop something, and petition asks God to start something.

We write the types below based on three variables:

LET p, q, s: God, man, s.

Man uttering God as truth implies perfect adoration. (1.1)

(q>(p>(s=s)))>(s=s) ; TTTT TTTT TTTT TTTT (1.2)

Man as beneath God implies that if man admits imperfection then man becomes godlike. (2.1)

(q<p)>((q>(s@s))>(q>(p>(s=s)))) ;

TTTT TTTT TTTT TTTT (2.2)

Man as beneath God implies man may implore God to stop evil. (3.1)

(q<p)>(q>((p>~(s@s)))) ; TTTT TTTT TTTT TTTT (3.2)

Man as beneath God implies man may implore God to commence good. (4.1)

(q<p)>(q>((p>(s=s)))) ; TTTT TTTT TTTT TTTT (4.2)

If man as beneath God implies if man utters perfect truth is God, then man is grateful by acknowledging God as perfect truth. (5.1)

((q<p)>(q>((s=s)>p)))>((q>(s=s))>(p>(s=s))) ;

TTTT TTTT TTTT TTTT (5.2)

Remark 1.2-5.2: Eqs. 1.2 - 5.2 as rendered are tautologous and confirmed.

We note that thanksgiving (5.2) is the most complex mapping, implying that form of prayer may be neglected. The antidote is to begin each prayer with faith by the words of "God, Thank you for ..." before the fact, whereby gratitude is paramount.

Karl Popper proof Ex(Gx)

From [Popper 1972]:

“Science is testable and falsifiable, but metaphysics is not.”

So Popper proves the *arch-metaphysical assertion* that “There is a personal spirit named God who is omnipresent, omnipotent, omniscient.”

Once asserted it's not disprovable (Fischer P=1) per Carnap.

If morality is non physicalistic, then not the moral Christian God.

However, this counter example proves *morality is physicalistic*:

> When the existentialist utters “I ought to” conscience is invoked, and the moral imperative is asserted. Thus Ex(Gx) becomes a moral God.

What forms of pure monotheism exist other than Orthodox Christianity? Baha'i, Judaism, Mohammedanism

By what reasons do they admit they are not truthful? No avatar; Revelation ceased; Impersonal contradictory rules

Meth8/VŁ4 scripts: Popper predicates

Scripts for a,b,c,d as p,q,r,s	**Predicates**	**Descriptions**
1: p&q	1: Pos(a,b)	1: a occupies a position in region b
2: (p&q)>r	2: Put(a,b,c)	2: a can put thing b into position c
3: p&q	3: Utt(a,b)	3: a makes the utterance b
4: p&q	4: Ask(a,b)	4: a is asked the truth of b
5: (%p&#q)>(p&#q)	5: Opos(a)=((Ea)(b)Pos(a,b)>(b)Pos(a,b))	5: a is omnipresent
6: ((%p&#q)>#r)>((p&#q)>#r)	6: Oput(a)=((Ea)(b)(c) Put(a,b,c)>(b)(c) Put(a,b,c))	6: a is omnipotent
7: (p&q)>(p&q)	7: Th(a,b)=(Ask(a,b)>Utt(a,b))	7: a thinks b
8: (p&%q)>(p&%q);	8: Thp(a)=(Eb)Th(a,b)	8: a is a thinking person
9: (((p&%q)>(p&%q))&~(p&#q))+(p&#q)	9: Sp(a)=(Thp(a)&((b)~Pos(a,b))VOpos(a))	9: a is a (personal) spirit
10: (q&r)>((p&(q&r))>(p&(q&r)))	10: Knpos(a,b,c)=(Pos(b,c)>Th(a,"Pos(b,c)")	10: a knows that b is in position c
11: (q&r)>s)>((p&((q&r)>s))>(p&((q&r)>s)))	11: Knput(a,b,c,d)=(Put(b,c,d)>Th(a,"Put(b,c,d)")	11: a knows that b can put c into position d
12: ((q&r)>(q&r))&((p&((q&r)>(q&r)))>(p&((q&r)>(q&r))))	12: Knth(a,b,c)=(Th(b,c)&Th(a,"Th(b,c)"))	12: a knows that b thinks c
13: ((((p&q)>(p&q))&(p@r))&(~((r&q)>(r&q))))=~(((p&q)>(p&q))&((r&((p&q)>(p&q)))>(r&((p&q)>(p&q)))))	13: Unkn(a)=Th(a,b)&(a≠c)&~Th(c,b))=~Knth(c,a,b))	13: a is unfathomable: a thinks b and a is not c and c does not think b is equivalent to c does not know that a thinks b.
14: ((p&q)>(p&q))&(q=q)	14: Kn(a,b)=Th(a,b)&T(b), where T(b) means b is tautologous	14: a knows the fact b

Scripts for a,b,c,d as p,q,r,s	**Predicates**	**Descriptions**
15: ((p&#q)>(p&#q))>(q=q)	15: Verax(a) =((b)Th(a,b)>T(b))	15: a is truthful
16: (#q=#q)>(((p&q)>(p&q)) &(q=q)	16: Okn(a)=(b)T(b)>Kn(a,b)	16: a is omniscient
17: ((p&#q)&((p&#q)>#r)> (((#q=#q)>(((p&q)>(p&q))& (q=q))))&(((p&#q)>(p&#q))> (q=q)))	17: (Opos(a)&Oput(a))=(Okn(a) &Verax(a))	17: a as omnipresent and a as omnipotent is equivalent to a as omniscient and a as truthful
18: (((((%p&#q) >(p&#q)) & (((%p&#q) >#r) >((p&#q)>#r))) >((#q=#q) >(((p&q)>(p&q))&(q=q)))) & ((((p&#q) >(p&#q)) > (q=q)) & ((((p&%q) >(p&%q))&~(p&#q))+ (p&#q)))) & (((((p&q) > (p&q)) &(p@r)) & ~((r&q) > (r&q))) = ~(((p&q) >(p&q)) & ((r&((p&q) >(p&q))) >(r&((p&q) > (p&q))))))	18: Ex(Gx)=(((Opos(a) &Oput(a)) >Okn(a))& ((Verax(a)& Unkn(a)) &Sp(a)))	18: There exists a personal spirit named God whose omnipresence and omnipotence implies omniscience, and who is truthful and unfathomable.

Meth8/VŁ4 validation tables:

Table fragments for two of the four rows (The designated truth values are T and E.)

Expression	**Model 1**	**Model 2.1**	**Model 2.2**	**Model 2.3.1**	**Model 2.3.2**
5.-18. Validated	TTTT TTTT	EEEE EEEE	EEEE EEEE	EEEE EEEE	EEEE EEEE
4. (p&q)	**FFF**T **FFF**T	UUUE UUUE	UUUE UUUE	UUUE UUUE	UUUE UUUE
3. (p&q)	**FFF**T **FFF**T	UUUE UUUE	UUUE UUUE	UUUE UUUE	UUUE UUUE
2. (p&q)>r	TTT**F** TTT**F**	EEEU EEEU	EEEU EEEU	EEEU EEEU	EEEU EEEU
1. (p&q)	**FFF**T **FFF**T	UUUE UUUE	UUUE UUUE	UUUE UUUE	UUUE UUUE

Some of Popper's definitions are rewritten for logical validity as 5, 6, 9, 10, 11, 13:

5. Opos(a) = (b)Pos(a,b) [False] = ((Ea)(b)Pos(a,b)>(b)Pos(a,b)) [True];
"*a* is omnipresent"

6. Oput(a) = (b)(c)Put(a,b,c) [False] = ((Ea)(b)(c)Put(a,b,c)>(b)(c)Put(a,b,c)) [True];
"*a* is omnipotent"

9. Sp(a) = (Thp(a)&((b)~Pos(a,b))VOpos(a)) [True] alternative = ((Thp(a)&((b)~Utt(a,b)) [False] ;
"*a* is a (personal) spirit": <u>The alternative published was false.</u>

10. Knpos(a,b,c) = (Pos(b,c)&Th(a,"Pos(b,c)") [False] = (Pos(b,c)>Th(a,"Pos(b,c)") [True];
"*a* knows that *b* is in position *c*": <u>The & connective is an apparent misprint for imply.</u>

11. Knput(a,b,c,d) = (Put(b,c,d)**&**Th(a,"Put(b,c,d)") [False] = (Put(b,c,d)**>**Th(a,"Put(b,c,d)") [True] ;
"*a* knows that *b* can put *c* into position *d*":
<u>The & And connective is an apparent misprint for > Imply.</u>

Refutation of non-male or gendered priesthood

We evaluate conjectures for non-male and gendered priests in the Episcopal church (aka The domestic and foreign missionary society) since the Roman Catholic Church tacitly allows gendered priests.

If God ordained all-male and non-gendered priests,
then non-male and gendered priests are possibly valid. (1.1)

If God ordained all-male and non-gendered priests,
then God ordained possibly non-male and gendered priests. (2.1)

If God ordained all-male and non-gendered priests,
then God ordained possibly non-male or gendered priests. (3.1)

LET p, q, r, s:
male, God, priest, gendered.

(q>(#p&(s&r)))>((~p&(~s&r))>%(s=s)) ;
TTTT TTTT TTTT TTTT (1.2)

Remark 1.2: Eq. 1.2 as rendered is tautologous only by omission in the consequent of God as the source of action, opting to inject the phrase "possibly valid" as a vicarious replacement.

(q>(#p&(s&r)))>(q>(%(~p&~s)&r)) ;
TTTT TTTT TTTT TTTC (2.2)

(q>(#p&(s&r)))>(q>(%(~p+~s)&r)) ;
TTTT TTTT TTTT TTTC (3.2)

Remarks 2.2, 3.2: Eqs.. 2.2 and 3.2 are *not* tautologous, as either non-male and gendered or non-male or gendered. This refutes the conjecture for a non-male and/or gendered priesthood.

Refutation of non-male priests in the Historic Church, shortest

We perform a gender analysis for God and priests in three variables without modal logic.

LET p, q, r, s: priest, male, God, s.

By not male, we mean not X-Y, so as to avoid specious biological confusion.
By God, we mean the Holy Trinity of Orthodox Christianity.

If God creates a priest, and God as male, then the priest is also male. (1.1)
((r>p)&(r& q))>(p> q) ; TTTT TTTT TTTT TTTT (1.2)

If God creates a priest, and God as male, then the priest is not male. (2.1)
(r>p)&(r& q))>(p>~q) ; TTTT TTT**F** TTTT TTT**F** (2.2)

If God creates a priest, and God as not male, then the priest is not male. (3.1)
((r>p)&(r&~q))>(p>~q) ; TTTT TTTT TTTT TTTT (3.2)

If God creates a priest, and God as not male, then the priest is male. (4.1)
((r>p)&(r&~q))>(p> q) ; TTTT T**F**TT TTTT T**F**TT (4.2)

Hence: If God is male, then priests are only males; or if God is not male, then priests are only not males. (5.1, 5.2)

Since God the Father, God the Son, and God the Holy Ghost are male, only Eq. 5.1 holds.

What follows is that those religions with female priests should accurately call them priestesses as derived from their female deity.

For Episcopalian or Anglican priestesses who claim a male God, this means they are not valid priests or priestesses, and logically there is nothing they can do about it.

Refutation of the problem of evil

Cast on the basis of the one thing God cannot do, namely tell a lie, we define the gift of free will given to man as:

If God who cannot tell a lie made man, then man can tell lies or not tell lies. (1.1)

LET p, q, r, s: God, man, decision, s.

(~(p>(s@s))>q)>(q>((r>(s=s))+(r>(s@s)))) ;
TTTT TTTT TTTT TTTT (1.2)

Remark 1.2: Eq. 1.2 is tautologous, meaning man is perfectly capable of telling lies or not telling lies. This serves as the proof of the source of evil, not coming from God but rather coming from God's gift of free will to his created beings, beginning with the Prince of this World, the fallen angel Satan, who is ultimately the source of all lies.

Refutation of the problem of evil to confirm its source as free will of man

We frame the problem of evil in terms of its cause, misuse of free will, to imply God is not good.

If (God creates man and free will implies good)) then
((if (man chooses free will to imply good) then good)
or
((if (man chooses free will to imply not good) then not good)))
implies
(God is not good). (1.1)

LET p, q, r, s: God, man, free will, s.

(((p>(q&r))>(s=s))>(((q>(r>(s=s)))>(s=s))+((q>(r>(s@s)))>
(s@s))))>(p>(s@s)) ; TFTF TFTF TFTF TFTF (1.2)

Remark 1.2: Eq. 1.2 as rendered is *not* tautologous, to refute the problem of evil, denying it as a problem.

We frame the problem to imply God is good.

If (God creates man and free will implies good)) then
((if (man chooses free will to imply good) then good)
or
((if (man chooses free will to imply not good) then not good)))
implies
(God is good). (2.1)

(((p>(q&r))>(s=s))>(((q>(r>(s=s)))>(s=s))+((q>(r>(s@s)))>(s@s))))>
(p>(s=s)) ; TTTT TTTT TTTT TTTT (2.2)

Remark 2.2: Eq. 2.2 as rendered is tautologous, to confirm free will is the cause of the problem of evil, and denying it as a problem.

Refutation of Roscelin's nightmare

From [Conn 2019]:

Abstract: Anselm's *On the Incarnation of the Word* is presented as a letter to Pope Urban II for the purpose of exposing and correcting the theological errors of Roscelin of Compiègne, who maintained that since only the Son became incarnate, we must conclude that the Father, the Son and the Holy Spirit are numerically distinct substances. In this paper I argue that Anselm's rejection of this conclusion involves an account of the Holy Trinity which includes a strongly relativized conception of identity, that is, one which allows an object *x* and an object *y* to be the same F, but different Gs. I further contend that Anselm buttresses this account with two nontheological examples of relative identity. Although it may well be the case that advocates of Latin Trinitarianism are generally committed to such an account, since they affirm that the Father is the same *substance* as the Son but not the same *person* as the Son, I take Anselm's defense of this position to be theologically significant, first, because it may well be the first explicit defense of Relative Trinitarianism, and second, because Anselm's position as a bishop and a Doctor of the Church is (for Catholics, at least) an indication of its theological soundness.

In this passage Anselm characterizes Roscelin as affirming what appears to be a thoroughly orthodox conception of Trinitarian monotheism, namely, one which supposes (i) that there is only one God; (ii) that the one God is the Holy Trinity; (iii) that the Holy Trinity involves three distinct Persons (the Father, the Son and the Holy Spirit); and finally (iv) that only the Son became incarnate. My account of Roscelin's argument for the above conclusions officially begins with the latter pair of claims. Taken together, they state that of the three Persons of the Holy Trinity, *only the Son* became incarnate. His argument thus begins with premise (1) that the Son became incarnate, and (2) that the Father and the Holy Spirit did not become incarnate along with the Son.

2. Roscelin's Argument...

From these five premises Roscelin is in a position to validly infer that the three Trinitarian Persons are numerically distinct substances. Here is an informal reconstruction of the argument, both in standard and diagrammatic form:

Standard Form	Diagram 1
(1) The Son became incarnate. (2) It is not the case that the Father become incarnate along with the Son. (3) If the Son is numerically identical with the Father, then whatever is true of the Son is also true of the Father. (4) If it is not the case that the Son is numerically identical with the Father, then the Father and the Son are numerically distinct substances. (5) If the Son became incarnate, and whatever is true of the Son is also true of the Father, then the Father became incarnate along with the Son. ∴(6) It is not the case that both (i) the Son became incarnate, and (ii) whatever is true of the Son is also true of the Father. (2, 5 MT) ∴(7) Either (i) The Son did not become incarnate, or (ii) it is not the case that whatever is true of the Son is also true of the Father. (6 DeM) ∴(8) It is not the case that whatever is true of the Son is also true of the Father. (1,7 DN, DS) ∴(9) It is not the case that the Son is numerically identical with the Father. (3,8 MT) ∴(10) The Father and the Son are numerically distinct substances. (4,9 MP)	

(2.1.1 - 2.10.1)

LET p, q, r, s: Father, Son, number, substance.

q>(s=s) ;	TTTT TTTT TTTT TTTT	(2.1.2)
~((p>(s=s))&(q>(s=s)))=(s=s) ;	**FFFF FFFF FFFF FFFF**	(2.2.2)
((q&r)=(p&r))>((q>(s=s))=(p>(s=s))) ;	TTTT TTTT TTTT TTTT	(2.3.2)
~((q&r)=(p&r))>((p&(r&s))@(q&(r&s))) ;	TTTT T**FF**T TTTT TTTT	(2.4.2)
(((q<(s=s))&(q>(s=s)))=(p>(s=s)))>((p>(s=s))&(q>(s=s))) ;	TTTT TTTT TTTT TTTT	(2.5.2)
~((q>(s=s))&((p>(s=s))=(p<(s=s))))=(s=s) ;	TTTT TTTT TTTT TTTT	(2.6.2)
~(q>(s=s))+~((p>(s=s))=(p>(s=s))) ;	**FFFF FFFF FFFF FFFF**	(2.7.2)
~((q<(s=s))&(p<(s=s)))=(s=s) ;	TTTT TTTT TTTT TTTT	(2.8.2)
~((q&r)=(p&r))=(s=s) ;	**FFFF** FTT**F FFFF** FTT**F**	(2.9.2)
(q&(r&s))@(p&(r&s)) ;	**FFFF FFFF FFFF** FTT**F**	(2.10.2)

Remark (2.1.1-2.10.1): From the ten Eqs.. as rendered, there are two contradictions and five

tautologies.

Roscelin's conjecture as numbered in sequence of the Standard Form is:

(((((((2.1.1)&(2.2.1))&(((2.3.1)&(2.4.1))&(2.5.1)))>(2.6.1))>(2.7.1))>(2.8.1)) >(2.9.1))>
(2.10.1). (2.11.1)

(((((((q>(s=s))&(~((p>(s=s))&(q>(s=s)))=(s=s)))&(((((q&r)=(p&r))>((q>(s=s))=(p>(s=s))))&
(~((q&r)=(p&r))>((p&(r&s))@(q&(r&s)))))&((((q<(s=s))&(q>(s=s)))=(p>(s=s)))>((p>(s=s))
&(q>(s=s))))))>(~((q>(s=s))&((p>(s=s))=(p<(s=s))))=(s=s)))>(~(q>(s=s))
+~((p>(s=s))=(p>(s=s)))))>(~((q<(s=s))&(p<(s=s)))=(s=s)))>(~((q&r)=(p&r))=(s=s)))>
((q&(r&s))@(p&(r&s))) ; TTTT T**FF**T TTTT TTTT [171 steps] (2.11.2)

Remark 2.11.2: Eq. 2.11.2 is *not* tautologous and in fact has the same truth table result value as 2.4.2. That may serve as a clue where to rehabilitate and theologically correct the refuted argument of Roscelin.

For speculative examples, 2.4.1 could read something else, but for *any* logical result therefrom, the affect on the final conclusion in 2.11.1 is nil, leaving 2.11.2 unchanged.

This leads to that 2.4.1 is *not* the source from which to resuscitate Roselin's argument and further implies the argument is simply another *non* tautologous fragment of the universal logic VŁ4.

The conjecture as proffered in Diagram 1 consists of this order:

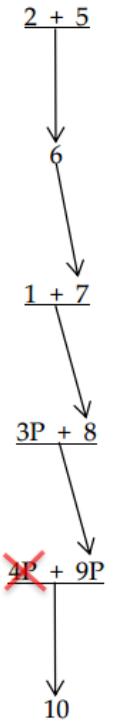
((2.4.1)&(((2.3.1)&(((2.1.1)&((((2.2.1)&(2.3.1))&((2.4.1)&(2.5.1))) >(2.6.1))>(2.7.1)))>
(2.8.1)))>(2.9.1)))>(2.10.1). (2.12.1)

((~((q&r)=(p&r))>((p&(r&s))@(q&(r&s))))&(((((q&r)=(p&r))>((q>(s=s))=(p>(s=s))))&
(((q>(s=s))&(((((~((p>(s=s))&(q>(s=s)))=(s=s))&(((q&r)=(p&r))>((q>(s=s))=(p>(s=s)))))&
((~((q&r)=(p&r))>((p&(r&s))@(q&(r&s))))&((((q<(s=s))&(q>(s=s)))=(p>(s=s)))>
((p>(s=s))&(q>(s=s))))))>(~((q>(s=s))&((p>(s=s))=(p<(s=s))))=(s=s)))>(~(q>(s=s))~((p>
(s=s))=(p>(s=s))))))>(~((q<(s=s))&(p<(s=s)))=(s=s))))>(~((q&r)=(p&r))=(s=s))))>
((q&(r&s))@(p& (r&s))) ; TTTT TTTT TTTT TTTT (2.12.2)

Remark 2.1.2.2: Eq. 2.12.1 is a tautology, confirming that Diagram 1 produces a theorem.

The additional sentences in Diagrams 2-4 are evaluated here as a matter of completeness.

3. Anselm's response to Roscelin

	Diagram 2	Diagram 3	Diagram 4
(3P) If the Father is the same person as the Son, then whatever is true of the Son must also be true of the Father. (3S) If the Father is the same substance as the Son, then whatever is true of the Son must also be true of the Father. (4P) If the Father and the Son are not the same person, then they are numerically distinct substances. (4S) If the Father and the Son are not the same substance, then they are numerically distinct substances. (8) It is not the case that whatever is true of the Son is also true of the Father. (9P) It is not the case that the Father is the same person as the Son. (9S) It is not the case that the Father is the same substance as the Son. (10) The Father and the Son are numerically distinct substances.			

(3.3.1.1), (3.3.2.1), (3.4.1.1), (3.4.2.1), (3.9.1.1), (3.9.2.1)

We take personhood to mean the same as equivalence between the Father and the Son. This keeps the truth tables at the same size as above, without injecting a fifth propositional variable.

(p=q)>((q>(s=s))=(p>(s=s))) ;	TTTT TTTT TTTT TTTT	(3.3.1.2)
((p&s)=(q&s))>((q>(s=s))=(p>(s=s))) ;	TTTT TTTT TTTT TTTT	(3.3.2.2)
(p@q)>((p&(r&s))@(q&(r&s))) ;	TFFT TFFT TFFT TTTT	(3.4.1.2)
((p&s)@(q@s))>((p&(r&s))@(q&(r&s))) ;	TTFF TTFF FTTF FTTF	(3.4.2.2)
~(p=q)=(s=s) ;	FTTF FTTF FTTF FTTF	(3.9.1.2)
~((p&s)=(q&s))=(s=s) ;	FFFF FFFF FTTF FTTF	(3.9.2.2)

Remark 3.3.1.2 - 3.9.2.2: At least there are no contradictions here.

Recommendations for mapping conjectures of analytical theology into Meth8/VŁ4

1. Number of variables

The choice for number of variables determines which executable version of the checker to use. For 1-4 variables the symbols available are lower case p, q, r, s for propositions in output of 1-row or upper case A, B, C, D for theorems in output of 16-rows. For 1-11 propositional variables the symbols available are lower case p, q, r, s, t, u, v, w, x, y, z in output of 128-rows.

In current configuration, the number of variables can be up to 22 for lower case a-z, excluding lower case I,J, L, O. The look up tables are sold on an 8 GB CD for external look up by the program, and the number of output table rows is 512 occupying 41 MB per unique output file name.

2. Assignment of variables

Assigning variables is easiest by some user convention. For example, Greek lower case letters φ, ρ, ψ map easily by the sound of phi, rho, psi to p, r, s.

3. Conjecture mapping strategy

Most conjectures in analytical theology are mappable in only four variables.

To coerce fewer variables, a variable may be meaningful in it dual. For example, r as current in time is also ~r for not current in time. Sometimes two variables together are meaningful, such as r&t for current theory versus ~r&~t for non current opinion.

4. Conjecture truth table analysis

For output of 1-4 propositional variables (p, q, r, s), one truth table of 4 rows, as row-major and horizontal to save space, is emitted both to the screen and to a unique file name. For 1-4 theorem variables (A, B, C, D), one truth table in 16 rows is emitted. For 5-11 propositional variables, 128 truth tables are produced.

To represent 128 tables in minimal space, from examination of the unique file name we manually count the instances of each pattern to total 128. For clarity we also bold face **F** for the contradiction value, and sometimes underline the C for falsity.

5. Conjecture tips

To strengthen a conjecture, bringing it closer to tautology, modal operators can be injected into the in input expression. For example, the truth table row TTT**F** could be strengthened effectively with the modal operator % into TTTC.

If a variable is desired to be the proof value T (s=s), then the imply connective achieves this as by p>(s=s) TTTT TTTT TTTT TTTT.

Adjacent modal operators with negation for compound expressions (not single variables) are *not* allowed by the parser Meth8. For example, #~(p&q) = ~%(p&q) raises an exception. This is overcome for ~(p&q) by injecting the equivalence ((p&q)=(s=s)). Hence the expression is rendered as #(~((p&q)=(s=s))) = ~(% (p&q)=(s=s)). The Meth8 parser has this side effect to ensure the user is cognizant of the input of adjacent

operators on a compound expression, a source of mapping confusion from the word description. For example, not possibly p (~%p NFNF) is not equivalent to possibly not p (%~p TCTC).

For clarity and redundancy, compound expressions may be mapped in different ways to produce the same truth table result values. However caution is needed because the word meanings are to be adjusted to demonstrate the intent.

The Meth8 parser is quick to discover parenthetical mistakes in number of or matching symbols. Therefore complex compound expressions can be tested as smaller fragments, for example, by (p&q)=p to show the parsing pass raised no exceptions.

For inputting the expression to test, only the top line of the input file is evaluated up through the first semicolon. Hence care is needed to verify that expression is indeed the first line of the input file.

Refutation of Molinism via responsibility and original sin

From [Anderson, 2021]:

> A crucial objection to the doctrine of original sin is that it conflicts with a common intuition that agents are morally responsible only for factors under their control. Here, I present an account of moral responsibility by Michael Zimmerman that accommodates that intuition, and I consider it as a model of original sin, noting both attractions and difficulties with the view.

[20] Here, it is worth noting a suggestion by Michael Rea that would identify original sin with transworld depravity. His goal is to show how original sin is consistent with the following principle:

> (MR) A person P is morally responsible for the obtaining of a state of affairs S only if S obtains (or obtained) and P could have prevented S from obtaining. ("Metaphysics of Original Sin," 320) (MR.1)
>
> LET p, q, r, s:
> Person, Attainment (obtaining), Morally responsible [freedom C], State of affairs.
>
> The inexact writing, apparently unedited, of "only if" may mean "if and only if" or "possibly if"; we take it as the latter to mean possibility of the antecedent:
>
> %((s&q)&(p>~(s&q)))>((p&r)>(q&s)) ;
> TTTT TNTN TTTT TNTT (MR1.3.2)

To get this result, he employs the following premise:

(M2) For any counterfactual of freedom C that is true of a human person P, P is or was able to prevent C from being true of P. (Ibid, 345) (M2.1)

> (#~q>(p>(s=s)))>(p>~((q>(s=s))&p)) ;
> **TFTF TFTF TFTF TFTF** (M2.2)

But (M2) is surely false: I can do nothing to prevent the truth of counterfactuals that describe what I would have done in the Paleolithic Age.

> **Remark M2.2:** Eq. M2.2 is *not* tautologous but, contrary to the claimed counter example, can be made so my moving the negation around within the consequent, for which arguable justifications are missed by the author.
>
> In fact, the conjecture of (M2.2) > (MR1.3.2): (3.1)
>
> ((#~q>(p>(s=s)))>(p>~((q>(s=s))&p)))>(%((s&q)&(p>~(s&q)))>((p&r)>(q&s))) ;
> TTTT TTTT TTTT TTTT (3.2)
>
> is tautologous, and not what the author wanted to show.
>
> We abandon the further strained conjectures for Molinism in the paper.

Proof assistant verification was not entertained, at least as reproducible scripts in an appendix.

Due to the paucity of important topics in analytical theology, endless opinions about Molinism litter the current literature.

Refutation of Roman Catholic canon law and by silence of the Holy Ghost present at epiclesis

Abstract: The conjecture that traditional Church teaching can not contradict itself, from the Roman Catholic Church (RCC) catechism, is refuted. From silence in the 1983 Code of Canon Law (CCL), this leads to the absence of the Holy Ghost in the epiclesis and a null priest host.

LET p, q, r, s: canon law, Holy Ghost, epiclesis, consecrated host.

From [Coriden 2007]:

> What does the 1983 Code of Canon Law (CCL) have to say about the Spirit's influence and activity in the church? Almost nothing. The Code simply does not reflect the church's beliefs about the Holy Spirit found in the New Testament and the documents of the Second Vatican Council. The Code mentions the Holy Spirit in seven canons [with sections]: 206[1]; 369; 573[1]; 605; 747[1]; 869.

We write CCL to mean: If the Holy Ghost is truthful, then epiclesis invocation of the Holy Ghost implies a validly consecrated Host. (2.1)

(q=(p=p))>((r>q)>(s=(p=p))) ; TT**FF** TT**FF** TTTT TTTT (2.2)

We apply Eqs.. 1.1 as antecedent to imply 2.1 as consequent. In words:

If canon law implies itself as a theorem, then it cannot be dis-asserted as such, then if the Holy Ghost is truthful, then epiclesis invocation of the Holy Ghost implies a validly consecrated Host. (3.1)

((p>(p=p))>~(p>~(p=p)))>((q=(p=p))>((r>q)>(s=(p=p)))) ;
TTT**F** TTT**F** TTTT TTTT (3.2)

Remark 3.1: If Eq. 3.1 is weakened to read :

If canon law implies itself as a theorem, then it cannot be dis-asserted as such, then if the Holy Ghost *implies* truthfulness, then epiclesis invocation of the Holy Ghost implies a validly consecrated Host. (3.3.1)

((p>(p=p))>~(p>~(p=p)))>((q>(p=p))>((r>q)>(s=(p=p)))) ;
T**F**T**F** TTT**F** TTTT TTTT (3.3.2)

Eqs.. 3.3.2 is further from tautology by one value of **F** for contradiction, than 3.2.

What follows from Eqs.. 3.1 and 3.3.1 is this question: What happens when Pope Francis as the Vicar of Jesus Christ, that is the stand-in personification of the Holy Ghost, is silent (on such matters as the clergy abuse exposed in courts of law and widely reported in the media). (4.0)

We write this question as: If the Holy Ghost who implies truthfulness is silent, implying neither affirmation nor denial, then the Holy Ghost implies a Host which is not equivalent to validity or invalidity, that is, equivalent to a nullity. (4.1)

((q>(p=p))>~((p=p)+(p@p)))>(q>(s@((p=p)+(p@p)))) ;
TTTT TTTT TTTT TTTT (4.2)

Remark 4.2: Eq. 4.2 is tautologous, meaning if the Holy Ghost is silent, then what is confected is a nullity, that is, the result is void of the Holy Ghost.

The results from Eqs.. 1.2, 2.2, 3.2, and 4.2 as rendered are that: the CCL is not infallible; the Holy Ghost implies valid Sacramental Host; regardless of the CCL, the Holy Ghost implies a valid Sacramental Host; when the Bishop of Rome as a personification of the Holy Ghost is silent on any matter, then any result derived therefrom is a nullity. It is the last point that proves the Bishop of Rome is incapable of speaking ex cathedra in any capacity for the Holy Ghost, thereby relegating encyclicals as fallible opinions du jour.

Roman Catholic Church: Erasmus contra Luther controversy

Erasmus stayed in the Church to counter contradictory doctrine and purge it.

Luther, while minimally in the Church, effectively departed from the Church (as evidenced by his subsequent non Swedish followers).

The issue to stay and cleanse or to leave and commence anew is tested by Meth8.

The conjecture is:

> If the necessity of the body of Christ implies the Church, and that implies the necessity of Christians as members of the Church, then possibly contradictory doctrines arise from members (due to the nature of original sin),
> it follows then that
> the necessity of members in the Church in the Body of Christ implies that no contradictory doctrine can survive coming from the members and the Church.
>
> LET: p Church; q Body of Christ; r Christian, a member; s contradictory doctrine
>
> ((#(q>p) > (#r<p)) > %(s<r)) > ((#(r<p)<q) > (~s<(r&p))); validated as tautology

This means Erasmus did the logically correct thing.

Roman Catholic Church: Infallibility and the Historic Church

Logical evaluation of infallibility of Pius IX from First Vatican Council (1869/70)

The argument proceeds in four Chapters as:

I. Institution of apostolic primacy of Peter
II. Perpetuity of apostolic primacy in Roman pontiffs
III. Power and authority of apostolic primacy in Pius IX
IV. Infallible teaching of the Roman pontiff, viz, Pius IX

From [Manning 1871]:

First Vatican Council 1869 to 1870 under Pope Pius IX

FIRST DOGMATIC CONSTITUTION ON THE CHURCH OF CHRIST

PASTOR AETERNUS [of our predecessors]

(This section is not relevant to the conjectures.)

CHAPTER I.
ON THE INSTITUTION OF THE APOSTOLIC PRIMACY IN BLESSED PETER.

We therefore teach and declare that, according to the testimony of the Gospel, the primacy of jurisdiction over the universal Church of God was immediately and directly promised and given to Blessed Peter the Apostle by Christ the Lord.

For it was to Simon alone, to whom he had already said, "You shall be called Cephas" (John 1:42), that the Lord, after the confession made by him, saying, "You are the Christ, the Son of the living God", addressed these solemn words: "Blessed are you, Simon son of Jonah. For flesh and blood has not revealed this to you, but my Father, who is in heaven. And I say to you, that you are Peter, and upon this rock I will build my Church, and the gates of Hell shall not prevail against it. And I will give you the keys of the kingdom of heaven. And whatever you shall bind on earth shall be bound, even in heaven. And whatever you shall release on earth shall be released, even in heaven." (Mt 16:16-19).

LET: p papacy; q apostolic primacy; r Peter.

We map the above into the words:

> "Both Peter appointed the chief apostle as equivalent to apostolic primacy, and apostolic primacy as equivalent to holding the keys of a papacy imply the existence of a papacy as equivalent to Peter." (1.1)

In Meth8 this is:

> ((r= q) & (q= p)) > (%p= r) ; nvt; NTTT TTTT (1.1.1)

Eq. 1.1 may be rewritten as the logical equivalent in words as

"Both Peter appointed the chief apostle as equivalent to apostolic primacy, and apostolic primacy as equivalent to holding the keys of a papacy imply a papacy as equivalent to the existence of Peter." (1.2)

((r= q) & (q= p)) > (p=%r) ; nvt; NTTT TTTT (1.2.2)

The truth table fragments are in the state closest to proof, but denied by the Non contingent value.

We note that that a stronger refutation replaces the existential quantifier % as "the existence of" with the universal quantifier # as "the necessity of".

We purposely avoid an analysis of the derivative word meanings for Petros and Cephas, such as that of St Augustine who stated the Church was not built on Peter (*super Petrum*) but rather explicitly on the rock (*super petram*), viz, on the confession of the faith of the Apostle. (See Bishop Joseph Strossmayer in a speech opposing papal infallibility to the Vatican Council of 1870, from an Italian version published at Florence, reprinted from "The Bible Treasury", No. 195, August, 1872, pamphlet published by Loizeaux Brothers, New York. The speech also appeared in the Sydney Morning Herald, Monday, October 16, 1871, pg. 3.)

And it was upon Simon alone that Jesus, after His Resurrection, bestowed the jurisdiction of Chief Pastor and Ruler over all His fold, by the words: "Feed my lambs. Feed my sheep." (John 21:15-17).

At open variance with this clear doctrine of Holy Scripture, as it has ever been understood by the Catholic Church, are the perverse opinions of those who, while they distort the form of government established by Christ the Lord in His Church, deny that Peter, in his single person, preferably to all the other Apostles, whether taken separately or together, was endowed by Christ with a tautologous and proper primacy of jurisdiction; or of those who assert that the same primacy was not bestowed immediately and directly upon Blessed Peter himself, but upon the Church, and through the Church on Peter as her Minister.

If anyone, therefore, shall say that Blessed Peter the Apostle was not appointed the Prince of all the Apostles and the visible Head of the whole Church Militant; or that the same, directly and immediately, received from the same, Our Lord Jesus Christ, a primacy of honor only, and not of tautologous and proper jurisdiction; let him be anathema.

We note that from the character or word count above, about 50% of Chapter I relates to institution of apostolic primacy of Peter, and 50% relates to the penalty of anathema for its contradiction. (In each of the subsequent three chapters remaining, shortened declarations of anathema are also included, rather than at the end of the document, as is customary, to avoid self-conscious repetition.)

CHAPTER II.
ON THE PERPETUITY OF THE PRIMACY OF BLESSED PETER IN THE ROMAN PONTIFFS.

We restate this argument in the abstract state and without citation as:

"The perpetuity of episcopal orders, excluding claims of primacy, as accepted by all geographical branches of the Historic Church, is a historical fact." (2)

CHAPTER III.

ON THE POWER AND NATURE OF THE PRIMACY OF THE ROMAN PONTIFF.

We restate this argument in the abstract state and without citation as:

"The span of control of the Roman pontiff as successor to Peter extends over all geographical branches of the Historic Church, as declared by Roman Catholic Ecumenical Councils not recognized universally by the Historic Church." (3)

CHAPTER IV.
ON THE INFALLIBLE TEACHING OF THE ROMAN PONTIFF

We restate this argument in the abstract state and without citation as:

"Apostolic primacy includes the supreme power of inerrant teaching *ex Cathedra*."(4)

From Chapter I, Eq. 1.1.1 and 1.2.2, we showed such apostolic primacy, as defined by the Roman Church, is not tautologous by modal logic.

Hence Chapters II, III, IV are rendered moot.

Refutation of infallible canon law in the Roman Catholic Church (RCC)

Abstract: The conjecture that traditional Church teaching can not contradict itself, from the catholic catechism (ca. 94-100), is refuted.

LET p: canon law.

From [Astagnaro 2020]:

> Traditional Church teaching can never contradict itself, catholic catechism (94-100) :
> "Neither the pope nor any individual Christian has the right to change God's law." (1.0)
>
> We write this as expressed in *one* variable.
>
> If canon law implies itself as a theorem, then it cannot be dis-asserted as such. (1.1)
>
> (p>(p=p))>~(p>~(p=p)) ; **F**T**F**T **F**T**F**T **F**T**F**T **F**T**F**T (1.2)

Eq. 1.2 as rendered is *not* tautologous, meaning canon law of the RCC can be dis-asserted as such and hence is fallible and thus subject to contradiction.

> **Remark:** The antecedent as "canon law implies proof of itself" for p>(p=p) means p as a non-tautology implying itself as a tautology. In other words, **F**T**F**T > TTTT = TTTT. The consequent as "not (canon law implies not proof of itself)" is also **F**T**F**T. Hence, TTTT > **F**T**F**T = **F**T**F**T, not a theorem.

Roman Catholic Church: Magisterium

A logical assessment of tradition, scripture, and authority in "Dei Verbum", 1965

[The text of Chapter 2 in *Dei Verbum* follows at the end with assertions in bold. [Dei Verbum 1965]]

1. We evaluate the order of appearance of non scriptural citations in Articles 7-10 based on Church dates in bold:

7.: 2. Council of Trent, **1545**; 3. Irenaeus, **180**
8.: 4. Second Council of Nicea, **787**, Fourth Council of Constance, **1414**;
5. First Vatican Council, **1869**
9.: 6. Council of Trent, **1545**
10.: 7. Pius XII, **1950**; 8. First Vatican Council, **1869**; 9. Pius XII, **1950**

The argument of Articles 7-10 does not draw on citations to be sequentially increasing in time, viz:

180, 787, 1414, 1545, 1545, 1869, 1869, 1950, 1950.

2. We next evaluate the final assertion in Article 10 of:

[T]hat sacred tradition, Sacred Scripture and the teaching authority of the Church ... **are so linked and joined together that one cannot stand without the others.** (1)

We map this using the Meth8 modal logic model checker in script.

LET: p sacred tradition; q sacred scripture; r teaching authority;
#q the necessity of Sacred Scripture;
%r the possibility of teaching authority of the Church.

We rewrite Eq. 1 as:

If the sacred tradition and the necessity of Sacred Scripture and the possibility of Church teaching authority, then not either the sacred tradition or the necessity of Sacred Scripture or the possibility of
the Church teaching authority. (2)

Eq. 2 is also rewritten in an equivalent expression as:

The sacred tradition and the necessity of Sacred Scripture and the possibility of Church teaching authority all imply not separately that either the sacred tradition or the necessity of Sacred Scripture or the possibility of the Church teaching authority. (3)

(p & (#q & %r)) > ~(#p + (#q +%r)) ; nvt (4)

In the five models of Meth8, repeating fragments of the respective truth tables are:

TTTT TTTC EEEE EEEU EEEE EEEE EEEE EEEP EEEE EEEI

where the designated truth values are T and E with the first letter definiens as Tautologous, Evaluated, Unevaluated, Proper, and Improper.

This means according to the VŁ4 logic system of Meth8 that Eq. 2 or 3 is not tautologous, and hence Eq. 1 is found to be non sequitur and mistaken.

From [Dei Verbum 1965]:

CHAPTER II HANDING ON DIVINE REVELATION

7. In His gracious goodness, God has seen to it that what He had revealed for the salvation of all nations would abide perpetually in its full integrity and be handed on to all generations. Therefore Christ the Lord in whom the full revelation of the supreme God is brought to completion (see Cor. 1:20; 3:13; 4:6), commissioned the Apostles to preach to all men that Gospel which is the source of all saving truth and moral teaching,[1] and to impart to them heavenly gifts. This Gospel had been promised in former times through the prophets, and Christ Himself had fulfilled it and promulgated it with His lips. This commission was faithfully fulfilled by the Apostles who, by their oral preaching, by example, and by observances handed on what they had received from the lips of Christ, from living with Him, and from what He did, or what they had learned through the prompting of the Holy Spirit. The commission was fulfilled, too, by those Apostles and apostolic men who under the inspiration of the same Holy Spirit committed the message of salvation to writing.[*2. citing Council of Trent, 1545*]

But in order to keep the Gospel forever whole and alive within the Church, the Apostles left bishops as their successors, "handing over" to them "the authority to teach in their own place."[3] This sacred tradition, therefore, and Sacred Scripture of both the Old and New Testaments are like a mirror in which the pilgrim Church on earth looks at God, from whom she has received everything, until she is brought finally to see Him as He is, face to face (see 1 John 3:2).

8. And so the apostolic preaching, which is expressed in a special way in the inspired books, was to be preserved by an unending succession of preachers until the end of time. Therefore the Apostles, handing on what they themselves had received, warn the faithful to hold fast to the traditions which they have learned either by word of mouth or by letter (see 2 Thess. 2:15), and to fight in defense of the faith handed on once and for all (see Jude 1:3) [*4. citing Second Council of Nicea, 787, and Fourth Council of Constance, 1414*]

Now what was handed on by the Apostles includes everything which contributes toward the holiness of life and increases in faith of the people of God; and so the Church, in her teaching, life and worship, perpetuates and hands on to all generations all that she herself is, all that she believes. **This tradition which comes from the Apostles develops in the Church with the help of the Holy Spirit.**[*5. citing First Vatican Council, 1869*] For there is a growth in the understanding of the realities and the words which have been handed down. This happens through the contemplation and study made by believers, who treasure these things in their hearts (see Luke, 2:19, 51) through a penetrating understanding of the spiritual realities which they experience, and through the preaching of those who have received through episcopal succession the sure gift of truth. For as the centuries succeed one another, the Church constantly moves forward toward the fullness of divine truth until the words of God reach their complete fulfillment in her.

The words of the holy fathers witness to the presence of this living tradition, whose wealth is poured into the practice and life of the believing and praying Church. Through the same tradition the Church's full canon of the sacred books is known, and the sacred writings themselves are more profoundly understood and unceasingly made active in her; and thus God, who spoke of old, uninterruptedly converses with the bride of His beloved Son; and the Holy Spirit, through whom the living voice of the Gospel resounds in the Church, and through her, in the world, leads unto all truth those who believe and makes the word of Christ dwell abundantly in them (see Col. 3:16).

9. Hence there exists a close connection and communication between sacred tradition and Sacred Scripture. For both of them, flowing from the same divine wellspring, in a certain way merge into a unity and tend toward the same end. For Sacred Scripture is the word of God inasmuch as it is consigned to writing under the inspiration of the divine Spirit, while sacred tradition takes the word of God entrusted by Christ the Lord and the Holy Spirit to the Apostles, and hands it on to their successors in its full purity, so that led by the light of the Spirit of truth they may in proclaiming it preserve this word of God faithfully, explain it, and make it more widely known. **consequently it is not from Sacred Scripture alone that the Church draws her certainty about everything which has been revealed. Therefore both sacred tradition and Sacred Scripture are to be accepted and venerated with the same sense of loyalty and reverence.** [*6. citing Council of Trent, 1545*]

10. **Sacred tradition and Sacred Scripture form one sacred deposit of the word of God, committed to the Church.** Holding fast to this deposit the entire holy people united with their shepherds remain always steadfast in the teaching of the Apostles, in the common life, in the breaking of the bread and in prayers (see Acts 2, 42, Greek text), so that holding to, practicing and professing the heritage of the faith, it becomes on the part of the bishops and faithful a single common effort.[*7. citing Pius XII, 1950*]

But the task of authentically interpreting the word of God, whether written or handed on,[*8. citing First Vatican Council, 1869*] has been entrusted exclusively to the living teaching office of the Church.[*9. citing Pius XII, 1950*] whose authority is exercised in the name of Jesus Christ. **This teaching office is not above the word of God, but serves it**, teaching only what has been handed on, listening to it devoutly, guarding it scrupulously and explaining it faithfully in accord with a divine commission and with the help of the Holy Spirit, it draws from this one deposit of faith everything which it presents for belief as divinely revealed.

It is clear, therefore, that **sacred tradition, Sacred Scripture and the teaching authority of the Church,** in accord with God's most wise design, **are so linked and joined together that one cannot stand without the others,** and that all together and each in its own way under the action of the one Holy Spirit contribute effectively to the salvation of souls.

1. cf. Matt. 28:19-20, and Mark 16:15; Council of Trent, session IV, Decree on Scriptural Canons: Denzinger 783 (1501).
2. cf. Council of Trent, loc. cit.; First Vatican Council, session III, Dogmatic Constitution on the Catholic Faith, Chap. 2, "On revelation:" Denzinger 1787 (3005).
3. St. Irenaeus, "Against Heretics" III, 3, 1: PG 7, 848; Harvey, 2, p. 9.
4. cf. Second Council of Nicea: Denzinger 303 (602); Fourth Council of Constance, session X, Canon l: Denzinger 336 (650-652).
5. cf. First Vatican Council, Dogmatic Constitution on the Catholic Faith, Chap. 4, "On Faith and Reason:" Denzinger 1800 (3020).
6. cf. Council of Trent, session IV, loc. cit.: Denzinger 783 (1501).
7. cf. Pius XII, apostolic constitution, "Munificentissimus Deus," Nov. l, 1950: A.A.S. 42 (1950) P. 756, Collected Writings of St. Cyprian, Letter 66, 8: Hartel, III, B, p. 733: "The Church [is] people united with the priest and the pastor together with his flock."
8. cf. First Vatican Council, Dogmatic Constitution on the Catholic Faith, Chap. 3 "On Faith." Denzinger 1792 (3011).
9. cf. Pius XII, encyclical "Humani Generis," Aug. 12, 1950: A. A.S. 42 (1950) PP. 568-69: Denzinger 2314 (3886).

Refutation of the Primacy of the Roman See

LET p, q, r, s: Pontiff, heart, Christ, sovereign or sacred.

From [Pius XI 1928]:

The argument for Primacy of the Roman See is paraphrased as:

"If *Pontiff Christ* implies *Sovereign Pontiff*, then *Sovereign Pontiff* is *Pontiff Christ*." (1.1)

((p&r)>(s&p))>((s&p)=(p&r)) ; `TTTT TTTT TFTF TTTT` (1.2)

Eq. 1.2 is *not* tautologous, although nearly so but due to two `F` values. Hence the argument for Roman Primacy is not tautologous.

Remark: Eq. 1.1 admits in the consequent to setting the sitting Pontiff equivalent to Jesus Christ as the Head of the Historic Church. From that is derived the Pontiff's title of Vicar in Jesus Christ, that is, the Pontiff is Christ's stand-in and hence infallible for matters theological.

Refutation of the vision of the Sacred Heart of Jesus

LET p, q, r, s: Pontiff, heart, Christ, sovereign or sacred.

From [Pius XI 1928]:

The argument for the Sacred Heart of Jesus, a vision, is paraphrased as:

"If Christ implies his Sacred Heart, then his Sacred Heart is Christ." (2.1)

(r>(s&q))>((s&q)=r) ; `TTTT TTTT TTFF TTTT` (2.2)

Eq. 2.2 is *not* tautologous, although nearly so but due to two `F` values. Hence the argument for the Sacred Heart of Jesus is not tautologous.

> **Remark:** If an apparition is defined as a vision confirmed by more than one contemporaneous observer, then the distinction of an apparition, as the observer *not* connecting it to a person, versus the vision, as a single observer connecting it to a person, is moot.

What follows is that the Alliance of the Sacred Heart of Jesus with the Sacred Heart of Mary, also a vision, is not tautologous.

What further follows is that the tautology of the Sacred Heart of Mary, a vision, is not directly known.

Remarks:

1. It is possible to fashion a non-sacred argument for the heart of Mary by excluding the sacred variable, and re-defining Pontiff as Mary, that is, "If Mary implies her heart, then her heart is Mary": (p>q))>(q=p) ; `TTFT TTFT TTFT TTFT`, also *not* tautologous.

2. To produce an alliance of the two hearts, as such, in the form of the Sacred Heart of Jesus implies the heart of Mary, renders: ((r>(s&q))>((s&q)=r)) > ((p>q)>(q=p)) ; `TTFT TTFT TTTT TTFT`, also *not* tautologous.

Refutation of RCC scourge of Christian fundamentalists by Lambeth Quadrilateral (1888)

Abstract: We evaluate the Lambeth Quadrilateral of 1888 as minimal membership in the Historic Church. The Roman Catholic Church and Christian fundamentalists share the same *non* tautologous states, hence refuting claim of supremacy. These results form a *non* tautologous fragment of the universal logic VŁ4.

From [Francis 2019]:

This logic question traces to when the Bishop of Rome, Francis, erroneously condemned Christian fundamentalists as scourge (2019). (The correct pastoral approach is to designate Christian fundamentalists as nominal Christians, with the hope of imminent induction into the fuller Historic Church.)

The Lambeth Quadrilateral resulted from the Anglican Synod in Chicago of 1888 where denomination membership in the Historic Church specified the four requirements of creeds (Nicene, Apostles, and Athanasian), two sacraments (baptism and holy communion), apostolic succession, and scripture (above tradition).

We write the conjecture of the minimal requirements of the Historic Church as:

> If scripture above tradition implies the creeds, and the two sacraments imply apostolic succession, and scripture above tradition implies apostolic succession, and the creeds imply the two sacraments, then both scripture above tradition implies the two sacraments and the creeds imply apostolic succession. (1.1)
>
> LET p, scripture, q, creeds, r, two sacraments, s: succession.
>
> (((p>q)&(r>s))&((p>s)&(q>r)))>((p>r)&(q>s)) ;
> TTTT TTTT TTTT TTTT (1.2)
>
> If scripture above tradition is excepted, then Eq. 1.1 maps as: (2.1)
>
> (((~p>q)&(r>s))&((~p>s)&(q>r)))>((p>r)&(q>s)) ;
> T**F**TT TTTT T**F**TT TTTT (2.2)
>
> **Remark 2.2:** Because the Roman Catholic Church (RCC) places tradition *above* scripture, this schema is *not* tautologous. The state of tradition not implying the creeds is borne out by injection of the filioque and in not inviting the Eastern Orthodox Church (EoC) to Nicea and adoption of Marian doctrines such as immaculate conception and bodily assumption. The state of tradition not implying the two sacraments is borne out by the doctrine of transubstantiation as an attempt to mechanize the operation of the Holy Ghost at epiclesis which by definition is a mystery and arguably a miracle, and further by the adoption of five more sacraments as holy orders, marriage, confession, confirmation, and unction.
>
> The RCC labels any non-catholic denomination as protestant, used as a pejorative term to signal catholic superiority. While traditional Anglo Catholicism protests the detestable enormities of the Bishop of Rome, as do some Eastern Orthodox branches, both excommunicated by Rome, those denominations are nevertheless co-equal and universal parts of the Historic Church and not heir to supremacy by Rome.

If apostolic succession is excepted, then Eq. 1.1 maps as: (3.1)

(((p>q)&(r>~s))&((p>~s)&(q>r)))>((p>r)&(q>s)) ;
TTTT TT**FF** TTTT TTTT (3.2)

Remark 3.2: What is generally known as Christian fundamentalism ignores apostolic succession as non scriptural, which is denied by the monarchical structure of the Historic Church in the Book of Acts. Hence this schema is also *not* tautologous.

What follows is that the fundamentalist minister does not confect literally the Body and Blood of Christ as a supernatural species but rather manufactures a token of periodic remembrance with any excess discarded into the waste system.

In fact, denial of infant baptism by some Christian fundamentalists is mapped in Eq. 4.2, and the assembly of a mission statement as a trendy rule of faith is mapped in Eq. 5.2.

If the two sacraments are excepted, then Eq. 1.1 maps as: (4.1)

(((p>q)&(~r>s))&((p>s)&(q>~r)))>((p>r)&(q>s)) ;
TTTT TTTT TTT**F** TTTT (4.2)

If the creeds are excepted, then Eq. 1.1 maps as: (5.1)

(((p>~q)&(r>s))&((p>s)&(~q>r)))>((p>r)&(q>s)) ;
TT**F**T TTTT TTTT TTTT (5.2)

Eqs.. 2.2-5.2 as rendered are *not* tautologous. Eqs.. 2.2 and 3.2 diverge more from tautology with two **F** values respectively than do 4.2 and 5.2 with one **F** value. This matches the relative non-tautology of the RCC with that of Christian fundamentalism. Hence the RCC is in no position to claim supreme status over Christian fundamentalists as scourge. In fact, the RCC is marginally as much of the Historic Church as are nominal Christian denominations anathematized by them.

Roman Catholic Church: Tradition above scripture

Logical evaluation of infallibility in the formula for the Historic Church

We previously evaluated infallibility using the Meth8 modal logic model checker as follows in words:

"Both Peter appointed the chief apostle as equivalent to apostolic primacy, and apostolic primacy as equivalent to holding the keys of a papacy imply the existence of a papacy as equivalent to Peter." (1.1)

or

"Both Peter appointed the chief apostle as equivalent to apostolic primacy, and apostolic primacy as equivalent to holding the keys of a papacy imply a papacy as equivalent to the existence of Peter." (1.2)

with

LET: p Papacy; q Apostolic primacy; r Peter.

for

((r= q) & (q= p)) > (%p= r) ; nvt ; NTTT TTTT (1.1.1)

or

((r= q) & (q= p)) > (p=%r) ; nvt ; NTTT TTTT (1.2.1)

We noted a stronger refutation replaces the existential quantifier % as "the existence of" with the universal quantifier # as "the necessity of", with the same net effect where explicitly:

((r= q)& (q= p)) > (#p= r) ; nvt ; TTTN TTTT (1.3.1)

For the formula of the Historic Church we include additional items:

LET: s Scripture; t Tradition; u Church.

We are careful to define the Church as the Body of Christ, viz, pre-existent as to physical scripture, tradition, or ecclesiastical infallibility.

The formula we test in words is as follows:

"If both Peter appointed the chief apostle as equivalent to apostolic primacy, and apostolic primacy as equivalent to holding the keys of a papacy imply the existence of a papacy as equivalent to Peter, then if both the Church implying scripture and scripture implying tradition imply the existence of a Church as equivalent to scripture and tradition." (2.1)

where

((((r= q)& (q= p))> (%p= r))= u) > (((u> s)& (s> t))> (%u= (s & t))) ;
nvt ; NTTT TTTT TTTT TTTT
[fragment from 128-row table] (2.1.1)

Eq. 2.1 is not validated as tautologous because the Church as equivalent to the definition of infallibility was not validated as tautologous in Eqs. 1.1.1 or 1.2.1.

A definition of the Church as the Body of Christ is terms of scripture and tradition is in words as follows:

> "If both the Church implying scripture and scripture implying tradition imply a Church implies the existence of both Scripture and Tradition." (3.1)

((u> s)& (s> t))> (u>%(s & t)) ;

vt ; TTTT TTTT TTTT TTTT (3.1.1)

However, the consequent in Eq. 2.1 above reads:

> "[I]f both the Church implying scripture and scripture implying tradition imply the existence of a Church as equivalent to scripture and tradition." (2.1)

A difference between Eq. 2.1 and 3.1 is in Eq. 3.1 where the existential quantifier is applying to the Church and not to scripture and tradition. This is because the object is to prove the existence of the Church as previously evaluated in terms of infallibility in the antecedent of Eqs. 1.1.1 and 1.2.1, but with additional terms in Eq. 3.1.

Another difference is in Eq. 2.1 where the existence of a Church is held equivalent to both scripture and tradition, a higher level of truth than in Eq. 3.1 where there is not equivalency but an implication.

Refutation of God as satisficer and derived conjectures

From [Tucker 2020]:

> **Abstract:** This paper accomplishes three goals. First, it reveals that God's ethics has a radical satisficing structure: God can choose a good enough suboptimal option even if there is a best option and no countervailing considerations. Second, it resolves the long-standing worry that there is no account of the good enough that is both principled and demanding enough to be good enough. Third, it vindicates the key ethical assumption in the problem of evil without relying on the contested assumption that God's ethics is our ethics (on steroids).

> **Ethical Premise:** God necessarily prevents suffering in the absence of sufficiently strong countervailing considerations, and
> **Empirical Premise:** There exists some suffering for which God would not have a sufficiently strong countervailing consideration.

(1.1.1.1 - 1.2.1)

> Together these premises entail that something exists—suffering in the absence of sufficiently strong countervailing considerations—which necessarily doesn't exist if God exists. So God doesn't exist. Recent literature

(1.3.1 - 1.4.1)

LET p, r, s: God, consideration, suffering.

(r>(s@s))>#(p>s) ; `NFNF TTTT NNNN TTTT` (1.1.1.2)

(r>(s@s))>~(p>%s) ; `FNFN TTTT FFFF TTTT` (1.1.2.2)

((r>(s@s))>#(p>s))&((r>(s@s))>~(p>%s)) ;
`FFFF TTTT FFFF TTTT` (1.1.2)

%p>#(~((%(~r>%s)=(s=s))=(s=s))) ;
`TTTT TCTC TCTC TCTC` (1.2.2)

~%p = (s=s) ; `NNNN NFNF NFNF NFNF` (1.3.2)

((((r>(s@s))>#(p>s))&((r>(s@s))>~(p>%s)))>(%p>#(~((%(~r>%s)=
(s=s))=(s=s)))))>~%p ; `NFNF TTTT NFNF TTTT` (1.4.2)

The ethical and empirical premises (Eqs.. 1.1.1.2 and 1.1.2.2) are *not* tautologous and not equivalent. That refutes those conjectures as proffered. The conjunction in 1.1.2 is *not* tautologous to mean its use as an antecedent is not constructive.

Eq. 1.2.2 is *not* tautologous. Eq. 1.3.2 is *not* tautologous. For 1.1.2 as antecedent to imply 1.2.2 as consequent, further to imply 1.3.2 as in the conjecture 1.4.2 is *not* tautologous. Hence Eq. 1.4.2 refutes the conjecture of God as satisficer, and thereby denies subsequently derived assertions.

This demonstration shows the efficacy of using a bivalent proof assistant to check all arguments in analytical theology. The caveat is that *free* modal proof assistants are not bivalent, such as street prover Molle-1.0.

Refutation of Schellenberg's theodicy conjecture and its proffered denial

From [Langtry 2020]:

> Schellenberg's central, motivating idea is that if God exists and is perfectly good then God is infinitely compassionate, and an infinitely compassionate being would recoil from the prospect of created persons' undergoing horrific suffering. His chapter provides a core argument embedded in lines of thought directly supporting its premises and defending it from likely objections.[3] Here it is:
>
> (1) Necessarily, if God exists, finite persons who ever more fully experience the reality of God realize their deepest good. [premise]
> (2) Necessarily, if God exists, the prevention of horrific suffering does not prevent there being finite persons who ever more fully experience the reality of God. [premise]
> (3) Necessarily, if God exists, the prevention of horrific suffering does not prevent there being finite persons who realize their deepest good. [from 1, 2]
> (4) Necessarily, if God exists, there is horrific suffering only if its prevention *would* prevent there being finite persons who realize their deepest good. [premise]
> (5) Necessarily, if God exists, there is no horrific suffering. [from 3, 4] (6) There is horrific suffering. [premise]
> (6) There is horrific suffering. [premise]
> (7) God does not exist. [from 5, 6]
>
> I will grant the truth of premises (1)–(3) and will inquire whether there is good reason to accept premise (4).

(1.1.1 - 1.7.1)

LET p, q, r, s: God, man, suffering, s.

#(%p>((q<p)>(p>(q>(s=s))))) = (s=s) ;
NNNN NNNN NNNN NNNN (1.1.2)

#((%p>~(r>(s@s)))>~(~((q<p)>(q>(s=s)))=(s=s))) = (s=s);
NNNN NNNN NNNN NNNN (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is equivalent to 1.1.2. This is because we take the clause in 1.2.2 of "finite persons who ever more fully experience the reality of God" to be equivalent to the clause in 1.1.2 of "finite persons who ever more fully experience the reality of God realize their deepest good", with the latter extension as gilding the lily.

(#(%p>((q<p)>(p>(q>(s=s)))))&#((%p>~(r>(s@s)))>~(~((q<p)>(q>(s=s)))=(s=s))))>
#((%p>~(r>(s@s)))>~(~((q<p)>(q>(s=s))))) ;
TTTT TTTT TTTT TTTT (1.3.2)

Remark 1.3.2: We take the clause in Eq. 1.3.2 of "finite persons who realize their deepest good" as equivalent to the two such clauses in Remark 1.2.2. Furthermore, we take the clause in 1.3.2 of "the provision of horrific suffering does not prevent there being" to be equivalent to the same such expanded clause in 1.2.2. Therefore, the consequent of 1.3.2 is equivalent to the consequent of the antecedent as 1.2.2. This amounts to the argument in the form of (((f&f))>f)=t which is tautologous as a *non* constructive proof.

#(%p>%(~(p>((q<p)>(q>(s=s))))>(r>(s@s)))) = (s=s) ;
NNNN NNNN NNNN NNNN (1.4.2)

Remark 1.4.2: Eq. 1.4.2 has the equivalent proof table results as 1.1.2 and 1.2.2, so 1.4.1 can just as easily be replaced by the briefer and more compact 1.1.1. On this basis, 1.4.1 is redundant and hence irrelevant. To support 1.4.1 with additional arguments in the text (a-e,f as proffered) is defective because it is supposed to result in 1.4.1, and a detailed evaluation (such as for e,f) comes across as an attempt at resuscitation. Hence Schellenberg's conjecture effectively ends here as *not* tautologous. However, we complete evaluation of the argument as presented in the quoted text.

(((#(%p>((q<p)>(p>(q>(s=s)))))&#((%p>~(r>(s@s)))>~(~((q<p)>(q>(s=s)))=(s=s))))>
#((%p>~(r>(s@s)))>~(~((q<p)>(q>(s=s))))))&#(%p>%(~(p>((q<p)>(q>(s=s))))>
(r>(s@s)))))>#(%p>~(r>(s@s))) ;
TCTC TTTT TCTC TTTT (1.5.2)

Remark 1.5.2: Eq. 1.5.2 is not tautologous.

r>(s@s) ; TTTT **FFFF** TTTT **FFFF** (1.6.2)

(((((#(%p>((q<p)>(p>(q>(s=s)))))&#((%p>~(r>(s@s)))>~(~((q<p)>(q>(s=s)))=(s=s))))>
#((%p>~(r>(s@s)))>~(~((q<p)>(q>(s=s))))))&#(%p>%(~(p>((q<p)>(q>(s=s))))>(r>(s@s)))))
>#(%p>~(r>(s@s))))&(r>(s@s)))>~%p ;
NNNN TTTT NNNN TTTT (1.7.2)

Remark 1.7.2: Eq. 1.7.2 is *not* tautologous, but instead a symmetrical mix of values for truthity (N) and tautology (T). We do not attempt to resuscitate the conjecture because of Remark 1.4.2.

Eqs.. 1.1.2 and 1.2.2 are respectively *not* tautologous, and hence deny the assumption to be admitted as respective proofs or to advance 1.3.2 as anything other than a non constructive proof.

Refutation of "some thing" from "non thing"

Abstract:

A variable implies itself in

p → p or ~p → ~p as "Thing implies thing" or "Non thing implies non thing"

but *not* when mixed with its negation in

~p → p or p → ~p as "Non thing implies thing" or "Thing implies non thing".

This means creation out of nothing "ex nihilo" is *not* supported in

~p → p as "Non thing implies thing",

or by introducing modal operators in

~◊p → ◊p as "Not some thing implies some thing" equivalent to

□~p → ◊p as "All non things imply some thing".

What follows is that

"ex nihilo" is not equivalent to "a nullo"

and that

"ex nihilo" is not synonymous with God and hence not an ontological proof of God.

Remark: The word “nothing” is rendered here as “non thing” to preserve the distinction of the negation of “thing”. To equate “nothing” with “not a thing” is also inexact because “a thing” is “some thing”, as “one thing”, as opposed to just “thing”.

From [Sullivan 2020]:

“[O]ut of nothing, nothing comes.” as (1.0)

Non thing implies non thing. (1.1)

~p>~p ; TTTT TTTT TTTT TTTT (1.2)

Thing implies thing. (2.1)

p> p ; TTTT TTTT TTTT TTTT (2.2)

Non thing implies thing. (3.1)

~p> p ; **F**T**F**T **F**T**F**T **F**T**F**T **F**T**F**T (3.2)

Thing implies non thing. (4.1)

p>~p ; T**F**T**F** T**F**T**F** T**F**T**F** T**F**T**F** (4.2)

Remark 1-4: Eqs.. 1-4 deal with the variable "thing" and its negation "non thing". Only Eqs.. 1.2 and 2.2 are tautologous. Eqs.. 3.2 and 4.2 as opposites attempt to imply thing from non thing or vice versa. Using Eq. 3.2 to support creation via "ex nihilo" is a mistake because God pre-existed and hence was *some* thing below.

We further refine "thing" to mean "at least one thing "or "some thing".

Not something implies not something. (5.1)

~%p>~%p ; TTTT TTTT TTTT TTTT (5.2)

Remark 5.2: Eq. 5.2 reduces to #~p>#~p, as All non things imply all non things.

Some thing implies some thing. (6.1)

%p> %p ; TTTT TTTT TTTT TTTT (6.2)

Not some thing implies some thing. (7.1)

~%p> %p ; CTCT CTCT CTCT CTCT (7.2)

Remark 7.2: Eq. 7.2 reduces to #~p> %p, as All non things imply some thing.

Some thing implies not some thing. (8.1)

%p>~%p ; **N**F**N**F **N**F**N**F **N**F**N**F **N**F**N**F (8.2)

Remark 8.2: Eq. 8.2 reduces to %p>#~p, as Some thing implies all non things.

Remark 5-8: Eqs.. 5-8 introduce modal operators. Only Eqs.. 5.2 and 6.2 are tautologous. Eqs.. 7.2 and 8.2 as opposites attempt to imply some thing from not some thing or vice versa. Using Eq. 7.2 to support creation via ex nihilo is a mistake because God pre-existed and hence already was *some* thing and not null as "a nullo".

Refutation of soul as unique identifier

From [Swinburne, 2021.2]

Summary/Abstract: A theory of personal identity is a theory about what makes some person P2 at a time T2 the same person as some person P1 at an earlier time T1. Most contemporary theories are "complex theories". Complex theories hold that the identity of two persons depends on a certain degree of "continuity" or "connectedness" between the two persons of one or more features – P2 having some of P1's body or brain, and/or being able to remember some of the experiences of P1. All these theories are open to the arbitrariness objection – that any such theory has to state exactly what degree of the relevant feature would make P2 the same as P1, and the choice of any particular value for that degree would be entirely arbitrary. To meet this objection complex theories have to claim that being the same person as P1 is a matter of degree. But such "partial identity theories" are open to the objection that they have the consequence that more than one later person could be partly identical to P1, a consequence that cannot be spelled out coherently. It follows that either P2 is fully identical to P1, or P2 is not at all identical to P1, and so leads to the "simple theory" of personal identity, that personal identity cannot be analysed in terms of features of which there can be different degrees. But there must be a difference between a person at T2 who is P1 and one who is not P1. And so the paper concludes that P2 is identical to P1 if they both have the same indivisible non-physical part, that is the same soul; but otherwise they are not the same. What makes a person who they are is their soul. (1.1.1-1.5.1)

LET p, q, r, s: P1, P2, T1, T2.

theory of personal identity: (1.1.1)
(r<s)>((q&s)=(p&r)) ; TTTT TTTT TFTF TTTT (1.1.2)

complex "partial identity theories": (1.2.1)
(r<s)>((q&s)=%(p&r)) ; TTTT TTTT NFNF TTTT (1.2.2)

simple "personal identity theory": (1.3.1)
((r<s)>(#((q&s)=(p&r))+#((q&s)@(p&r))))>(r@s) ;
TTTT FFFF FFFF TTTT (1.3.2)

difference: (1.4.1)
(s&p)@(s&~p) ; FFFF FFFF TTTT TTTT (1.4.2)

if simple theory and difference then indivisible identity (soul): (1.5.1)
((((r<s)>(#((q&s)=(p&r))+#((q&s)@(p&r))))>(r@s))&((s&p)@(s&~p)))>
((p=q)=(r=s)) ; TTTT TTTT FTTF TTTT (1.5.2)

Remark 1.1.2-1.5.2: Eqs. 1.1.2-1.5.2 are *not* tautologous, to refute the conjectures, denying indivisible identity. While the antecedent of 1.3.2 is tautologous, that is not enough to resuscitate the entire argument. To invoke 1.5.2 as a definition of the soul is specious because soul is indivisibly tied to time in order to establish identity at start.

The argument can only be resuscitated by injecting an antecedent for God as the creator of one's soul since God is timeless, with a consequent for inclusion in the Body of Christ, as in the Historic Church, known in Anglo Catholic theology as the

"communion of saints". *Hint:* God's creation of P1, P2, T1, T2 implies good, or tautology in our case.

The paper would not be published if a modal proof assistant was used to map the assertions, for example the free modal *street prover* Molle-1.0 at sourceforge.net. This speaks yet again to the writers of analytical theology failing to use tools available, as relied on by others studied in the art.

The readability of the paper is also marred by the self-conscious use of woke pronouns; a simple solution is to refer to he/she and him/her as one and one's, and so as also to avoid the adversarial forms of you/they.

[The title is a pay-to-play paper at Cambridge, unresponsive to independent researchers, so we rely on the translation into Polish (2019), with thanks due to Krzysztof Jaworski, at: ceeol.com/search/viewpdf?id=933498 .]

3. Zasada tożsamości kompozytów ... Stąd nasuwa się wniosek, że jeśli istnieje osoba P2, która ma duszę osoby P1, to P2 jest osobą P1, a jeśli P2 nie ma duszy osoby P1, wówczas P2 osobą P1 nie jest. Zazwyczaj dopóki nie mamy do czynienia z dużymi przeszczepami mózgu czy amnezją, nie ma wątpliwości, że nasza dusza będzie tam, dokąd idzie nasz mózg. Jednakże w sytuacjach zagadkowych nikt nie może przewidzieć, dokąd nasza dusza się uda. Niemniej we wszystkich okolicznościach to właśnie nasza dusza określa, kim jesteśmy.

3. The principle of composites identity ...
[We ignore the analogy for identical cars C1 and C2 parked at the same time as inanimate objects.]

Hence the conclusion is that if there is a person P2 who has the soul of person P1, then P2 is person P1, and if P2 does not have the soul of person P1, then P2 is not person P1. Usually, unless we are dealing with large brain transplants or amnesia, there is no doubt that our soul will be where our brain goes. However, in mysterious situations, no one can predict where our soul will go. Nevertheless, in all circumstances, it is our soul that determines who we are.

4. Postscriptum teologiczne

4. Theological postscript
[We avoid this section with its morbid answer to Aquinas, among other theological disinformation.]

Confirmation of Stump's theorem and denial of objections

From [Craig 2019]:

> Stump's argument seems to be based on three simple premises:
>
> 1. God is perfectly loving.
> 2. If God is perfectly loving, He is perfectly forgiving.
> 3. If God is perfectly forgiving, His forgiveness has no preconditions.
>
> According to necessitarian atonement theories, however, God's forgiveness does have preconditions, namely, the satisfaction of God's justice. Accordingly,
>
> 4. If any necessitarian atonement theory is true, God's forgiveness has preconditions.
>
> From these premises it follows that
>
> 5. No necessitarian atonement theory is true.

(1.1 - 5.1)

LET p, q, r, s: God, necessitarian atonement theory, reservation (precondition), s.

In analytical theology, the sufficient number of propositional variables to assign is usually four or less. This is because the concepts mapped are abstract enough to encompass nuances as in 1.2 and 2.2 below.

p>(s=s) ; `TTTT TTTT TTTT TTTT` (1.2)

Remark 1.2: For Eq. 1.1 we read the quality of God's perfect loving as God's perfection.

(p>(s=s))>(p>(s=s)) ; `TTTT TTTT TTTT TTTT` (2.2)

Remark 2.2: For Eq. 2.1 we read the quality of God's perfect forgiveness as God's perfection. This means 1.2 and 2.2 have identical truth table result values and are indeed equivalent. The clause of God's perfection is used in 3.2 and 5.2 below.

Commencing a list of premises with several as equivalents is often an unrecognized side-effect in analytical theology of not using a model checker. For example writers on Schellenberg's theodicy preserve his first two premises for the antecedent and the consequent without realizing all three are equivalents to produce a non constructive tautology.

((p>(s=s))>~r); `TTTT **FFFF** TTTT **FFFF**` (3.2)

%q>(p>r) ; `TTTF TTTT TTTF TTTT` (4.2)

(((p>(s=s))>~r)&(%q>(p>r)))>(~q>(s=s)) ;
`TTTT TTTT TTTT TTTT` (5.2)

Remark 5.2: Eq. 5.2 is tautologous, hence confirming the conjecture as proffered in the form of ((f&f)>t)=t. Objections to it cannot be logically enforced, for which we avoid further evaluation.

Because Stump's argument is confirmed by a bivalent model checker, we name it *Stump's Theorem*.

Refutation of supervenience

From [Supervenience 2020]:

> In the contemporary literature, there are two primary (and non-equivalent) formulations of supervenience (for both definitions let A and B be sets of properties).[*citation needed*]
>
> (1) A-properties supervene on B-properties if and only if all things that are B-indiscernible are A-indiscernible. Formally:
>
> - $\forall x \forall y(\forall X_{\in B}(Xx \leftrightarrow Xy) \rightarrow \forall Y_{\in A}(Yx \leftrightarrow Yy))$
>
> (2) A-properties supervene on B-properties if and only if anything that has an A-property has some B-property such that anything that has that B-property also has that A-property. Formally:
>
> - $\forall x \forall X_{\in A}(Xx \rightarrow \exists Y_{\in B}(Yx \wedge \forall y(Yy \rightarrow Xy)))$

(1.1.1), (1.2.1)

LET p, q, r, s, x, y: A, B, X, Y, x, y.

((#(r<q)&#x)=(#(r<q)&#y))>((#(s<p)&#x)=(#(s<p)&#y)) ;
TTTT TTTT TTTT TTTT}16
TTTT TTTT CTCT TTCT}32
TTTT TTTT TTTT TTTT}32
TTTT TTTT CTCT TTCT}32
TTTT TTTT TTTT TTTT}16 (1.1.2)

(#(r<p)&#x)>(((#s<q)&#x)&(((#s<q)&#y)>(#(r<p)&#y))) ;
TTTT TTTT TTTT TTTT}16} 4
TTTT CTCT TTTT TTCT}16} (1.2.2)

Eqs.. 1.1.2 and 1.2.2 as rendered are *not* tautologous. This refutes two definitions of supervenience.

Refutation of Swinburne's account of Anselm on wrongdoing, and denial of being misquoted

From [Swinburne 2019]:

> My version of Anselm's account of human wrongdoing and its consequences is that A wrongs B if and only if A fails to render to B what is due to him/her, and thereby A acquires guilt; A's guilt is removed if A makes atonement to B and in consequence B forgives A. A makes atonement to B if A repents, apologises to B, makes reparation (that is, compensation which Anselm calls "satisfaction") to B and gives to B a little extra as well
>
> which I call "penance." In response to such atonement, it is good for B to

(1.1.1 - 4.1.1)

LET p, q, s: A, B, s.

We evaluate the above in two variables for two humans, because rightdoing (atonement, forgiveness, compensation) and wrongdoing (guilt) can be cast as perfection in tautology (s=s) and as imperfection in contradiction (s@s).

"A wrongs B if and only if A fails to render to B what is due to" one (1.1.1)

~(p>(q>(s=s)))>((p>(s@s))>q) ; `TTTT TTTT TTTT TTTT` (1.1.2)

Remark 1.1.2: Eq. 1.1.2 while tautologous on its face does not capture the "if and only if" (iff) connective as equivalence which is mapped below. (1.2.1)

~(p>(q>(s=s)))=((p>(s@s))>q) ; `TFFF TFFF TFFF TFFF` (1.2.2)

Remark 1.2.2: Eq. 1.2.2 is *not* tautologous. This rendition of Anselm can be aborted here on that technicality, but we press on.

This defect is propagated below, but obscured by the trick of injecting guilt. (This is not an invocation of the moral imperative as conscience in the utterance "I ought to...".) In fact, either party may be subjected to guilt by this account as p>(s@s) or q>(s@s). (That raises an issue of the victim as wrongdoer *not* to forgive the other's amend, with a practical answer for the victim simply to acknowledge "I see".)

"A wrongs B if and only if A fails to render to B what is due to" one; "and thereby A acquires guilt;" (1.3.1)

(~(p>(q>(s=s)))=((p>(s@s))>q))>(p>(s@s)) ;
`TTTT TTTT TTTT TTTT` (1.3.2)

Remark 1.3.2: While Eq. 1.3.2 is tautologous, if the antecedent in Eq. 1.3.2 is 1.1.2, then: (1.4.1)

(~(p>(q>(s=s)))>((p>(s@s))>q))>(p>(s@s)) ;
`TFTF TFTF TFTF TFTF` (1.4.2)

In any case, the injection of guilt has this anomaly as used for common affect in Roman Catholic canon law. If there is no victim, then there is no crime; in other words, if the victim declines victimhood, as in missing, then crime is missing.

"; A's guilt is removed if A makes atonement to B and in consequence B forgives A." (2.1.1)

((p>(q>(s=s)))>(q>(p>(s=s))))>~(p>(s@s)) ;
FTFT FTFT FTFT FTFT (2.1.2)

Remark 2.1.2: Eq. 2.1.2 has the negated truth table of 1.4.2

The question then becomes how 1.3.1 and 2.1.1 relate exactly to make the argument. We take the semicolon to stand for the imply connective; in other words:

"A wrongs B if and only if A fails to render to B what is due to" one; "and thereby A acquires guilt;" implies "A's guilt is removed if A makes atonement to B and in consequence B forgives A." (3.1.1)

((~(p>(q>(s=s)))=((p>(s@s))>q))>(p>(s@s)))>
(((p>(q>(s=s)))>(q>(p>(s=s))))>~(p>(s@s))) ;
FTFT FTFT FTFT FTFT (3.1.2)

Remark 3.1.2: Eq. 3.1.2 is *not* tautologous with a truth table result equivalent to 2.1.2.

The difference between 1.1.2 and the mistaken 1.2.2, as propagated through 1.4.2, is lost and has no affect on the truth table result of 3.1.2.

"A makes atonement to B if A repents, aplogises to B, makes reparation (that is compensation which Anselm calls "satisfaction") to B and gives to B a little extra as well which I call "penance."" (4.1.1)

Remark 4.1.1: We do not evaluate Eq. 4.1.1 because of the clause "gives B a little extra [compensation or satisfaction] which I call "penance."" To us, the injection of a "little extra" as "penance" smacks of supererogation.

ance to B for B to be justified in forgiving A. Stump is however mistaken in attributing to me this simple view that satisfaction is "a prerequisite for forgiveness."[2] My view was more nuanced: "Not all [repentance, apology, reparation, and penance] are needed in every case. For some wrong reparation is inappropriate. . . . But sincere apology [that is, apology resulting from repentance] is always needed"[3]; and "in the case of a serious hurt . . . the wrongdoer must offer some attempt at reparation in so far as it lies within his power. But the victim may if he chooses let the wrongdoer off more."[4] According to both Anselm and me, someone else can provide the reparation for A to offer to B. In my view B has no obligation to forgive A, even if he has made full atonement to A, although in this case A's guilt would eventually disappear.

(5.1.1-7.1.1)

[Repeating for the reader:]
LET p, q, s: A, B, s.

We evaluate the above in two variables for two humans, because rightdoing (atonement, forgiveness, compensation) and wrongdoing (guilt) can be cast as perfection in tautology (s=s) and as imperfection in contradiction (s@s).

"attributing to me this [mistaken] simple view that satisfaction is "a prerequisite for forgiveness" (5.1.0)

Remark 5.1.0: We rewrite Eq. 5.1.0 to relate to our two variables of humans, before denial.

If A the wrong doer provides satisfaction to B, then B the right doer forgives A who becomes a right doer. (5.1.1)

((p>(s@s))>((s=s)>q))>((q>(s=s))>(p>(s=s))) ;
TTTT TTTT TTTT TTTT (5.1.2)

Remark 5.1.2: Eq. 5.1.2 as rendered is tautologous. When the text denies it as mistaken, 5.1.2 becomes contradictory.

"my view was more nuanced: "Not all [repentance, apology, reparation, and penance] are needed in every case. For some wrong reparation is inappropriate .... But sincere apology [that is apology resulting from repentance] is always needed" (5.2.0)

Remark 5.2.0: We rewrite Eq. 5.2.0 to relate to the two humans as variables.

If A the wrong doer provides the necessity of some satisfaction to B, then B the right doer forgives A who becomes a right doer. (5.2.1)

((p>(s@s))>#(%(s=s)>q))>((q>(s=s))>(p>(s=s))) ;
TTTT TTTT TTTT TTTT (5.2.2)

Remark 5.2.2: Eq. 5.2.2 is tautologous and with the equivalent truth table result of 5.1.2. This refutes the claim that 5.1.2 is mistaken and 5.2.2 should be affirmed in its

place when they are in fact equivalent.

"According to both Anselm and me, someone else can provide the reparation for A to offer to B." (5.3.1)

Remark 5.3.1: We do not evaluate 5.3.1 because injection of the *source* of reparation injects another party and hence again the further possibility of supererogation.

Mapping for theism(s) into the universal logic of VŁ4

From [Theism 2020]:

LET p, q: deity, universe

Theism: one or more deity(s), as one deity or two deities, exists. (1.1)

%((p&(%s>#s))+(p&(%s<#s))) = (s=s) ;
CTCT CTCT CTCT CTCT (1.2)

Monotheism: only one deity exists. (2.1)

%(p&(%s>#s)) = (s=s) ; CTCT CTCT CTCT CTCT (2.2)

Remark 1.1-2.2: Eqs. 1.2 and 2.2 are *not* tautologous, but have equivalent truth table results. This means theism and monotheism are logical synonyms.

Polytheism: more than one God (as in minimally two gods) exists. (3.1)

%(p&(%s<#s)) = (s=s) ; CCCC CCCC CCCC CCCC (3.2)

Deism: one Creator (God) with no subsequent divine intervention (as not implying perfection) (4.1)

%(~((p&(%s>#s))>(s=s))=(s=s)) = (s=s) ;
CCCC CCCC CCCC CCCC (4.2)

Pantheism: the physical universe is equivalent to a god. (5.1)

q=%(p&(%s>#s)) ; N**F**CT N**F**CT N**F**CT N**F**CT (5.2)

Remark 5.1: The definition of pantheism is not that the physical universe *implies* a god, which suggests the physical universe preceded a god in time. That would have the effect of strengthening the definition as:

q>%(p&(%s>#s)) ; TTCT TTCT TTCT TTCT (5.3)

Panentheism: the physical universe is equivalent to gods (at least two gods, one god for the universe of time, and another god for the universe beyond time). (6.1)

q=%(p&(%s<#s)) ; NNCC NNCC NNCC NNCC (6.2)

Remark 6.1: The definition of panentheism is not that the physical universe *implies* at least two gods, which suggests the physical universe preceded the gods in time. That would have the effect of strengthening the definition as:

q>%(p&(%s<#s)) ; TTCC TTCC TTCC TTCC (6.3)

Denial of the theist's necessary truths to deny a (revisited) logical problem of evil

From [Schellenberg 2018]:

> stead regard the following proposition as a necessary truth:
>
> *Prior Purity* (PP): Prior to creation there is no evil in God of any kind.
>
> In other words, what theists hold is that it cannot be that, prior to creation, God is or does anything bad. In my proposed new logical problem of evil
>
> I sought to show that from PP in conjunction with two other propositions theists must regard as necessary truths, namely
>
> *Unsurpassable Greatness* (UG): God is the greatest possible being
>
> and
>
> *Ontological Independence* (OI): No world created by God (or any part of a world) is a part of God,
>
> it deductively follows that there is no evil in the world.[4]

(1.1.1 - 1.5.1)

LET p, q, s: God, world, s.

Because God implies perfection (s=s), the reserved word create is equivalent to the implication connective following antecedent God. Evil is (s@s) for imperfection.

(p>q)>(~(s@s)<q) ;	TT**FF** TT**FF** TT**FF** TT**FF**		(1.1.2)
%(p>(s=s)) = (s=s) ;	TTTT TTTT TTTT TTTT		(1.2.2)
(p>q)>~(q<p) ;	TT**F**T TT**F**T TT**F**T TT**F**T		(1.3.2)
~(s@s)<q ;	TT**FF** TT**FF** TT**F**F TT**FF**	[conclusion]	(1.4.2)
((((p>q)>(~(s@s)<q))&%(p>(s=s)))&((p>q)>~(q<p)))>(~(s@s)<q) ;	TTTT TTTT TTTT TTTT	[argument]	(1.5.2)

Remark 1.5.2: Eq. 1.5.2 is a tautology with the consequent 1.4.2 as the same truth table result of the antecedent component 1.1.2. The main antecedent results and the consequent are also equivalents. This means the theist argument could just as easily read "If there is no evil in the world, then PP & UG & OI". The author does not recognize this because a bivalent model checker was not used with a replicable script. Hence the claimed theorem 1.5.2 has specious meanings.

Refutation of time and space to define God

From [Scigod 2020]:

> Physicists dabbling as amateur theologists focus on time and space as existential quantifiers to refute God. We map this folklore to mathematical logic using the 3-O qualities attributed to God here as:
>
> > If omniscience, omnipresence, and omnipotence, then:
> > both omniscience implies no time and omnipresence implies no space
> > to imply no time and space. (1.1.1)
> >
> > LET p, q, r, s, u: omniscience, omnipresence, time, space, omnipotence.
> >
> > ((p&q)&u)>(((p>~r)&(q>~s))>~(r&s)) ;
> > TTTT TTTT TTTT TTTT}128 (1.1.2)
> >
> > **Remark 1.1.2:** We decompose Eq. 1.1.2 into respectively antecedent and consequent. (1.2.1), (1.3.1)
> >
> > (p&q)&u ; **FFFF FFFF FFFF FFFF**}2}32
> > **FFF**T **FFF**T **FFF**T **FFF**T}2} (1.2.2)
> >
> > ((p>~r)&(q>~s))>~(r&s) ; TTTT TTTT TTTT **F**TTT}1}128 (1.3.2)
> >
> > **Remark 1.3.2:** What follows from the quality of omnipotence is God's ability to do anything, *except* for one thing: God cannot tell a lie. That quality is demonstrated in the modal logic model checker where the designated *proof* value is T (tautology), and not N (truthity), not C (falsity), and not F (contradiction).
> >
> > Therefore, the above theorem renders attempts as irrelevant, such as on scigod.com, to prove God exists in religions with widely known contradictions such as Bahá'í, Buddhism, Hinduism, Judaism, and Mohammedanism.

Time as God conjecture

If God knows that past, present, and future are tautologous [and that past implies present, implies future], then:

God as past implies God as present, implies past as present;
or
God as past implies God as future, implies past as future;
or
God as present implies God as future, implies present as future
{ or past as present implies pas as future, implies present as future }

Proof for time as God in Meth8 script.

LET p God, q past, r present, s future, [also t time = q & r & s].

```
(p & (((q=q)&(s=s))&(r=r)))
>
(   ((((p=q)>(p=r))>(q=r))
    +
    (((p=q)>(p=s))>(q=s)))
+
(((p=r)>(p=s))>(r=s))  ) ; tautologous
```

For the additional bracketed and braced expressions:

```
((p&(((q=q)&(s=s))&(r=r)))&(((q=q)>(s=s))>(r=r)))
>
(   ((((p=q)>(p=r))>(q=r))
    +
    (((p=q)>(p=s))>(q=s)))
+
((((p=r)>(p=s))>(r=s))+(((q=r)&(q=s))&(r=s)))  ) ; tautologous
```

Refutation of any non-Trinitarian number

From [Tuggy, 2021]:

> The above is a survey of antiunitarian arguments. None is mapped to published, replicable scripts of a free modal logic theorem prover. The arguments as rendered ignore the revelation of the Trinity as a sequence of events with the three Persons involved.
>
> For example, the order is the Father and Holy Ghost incarnate the Son at Christmastide then the Son and Father send the Holy Ghost after Eastertide (John 14:16) who appears on Whitsuntide to imply Father, Son and Holy Ghost. The filioque of the Nicene creed specifies the Holy Ghost as "Who proceedeth from the Father and the Son; Who with the Father and Son together is worshiped and glorified; Who spake by the prophets", and as also amplified by Athanasius. (1.1.0)
>
> We write this as:
>
> > If the Father and Holy Ghost imply the Son then the Son and Father imply the Holy Ghost, then the Father implies (the Son implies the Holy Ghost). (1.1.1.1)
> >
> > or
> >
> > If the Father and Holy Ghost imply the Son then the Son and Father imply the Holy Ghost, then the Son implies (the Father implies the Holy Ghost). (1.2.1.1)
> >
> > LET p, q, r, s: God the Father, God the Son, God the Holy Ghost, s.
> >
> > (((p&r)>q)>((p&q)>r))>(p>(q>r)) ;
> > TTTT TTTT TTTT TTTT (1.1.1.2)
> >
> > (((p&r)>q)>((p&q)>r))>(q>(p>r)) ;
> > TTTT TTTT TTTT TTTT (1.2.2.2)
> >
> > **Remark 1.1.2, 1.2.2:** Eqs 1.1.2 and 1.2.2 are tautologous to confirm the sequential order and operator precedence of Father then (Son then Holy Ghost) or Son then (Father then Holy Ghost). In both cases the paternal relationship is iterated.
> >
> > For the consequent, the other eight combinations of variables and logical relations cause the conjectures to fail.
> >
> > > Father, Son, Holy Ghost: (1.1.1)
> > > (((p&r)>q)>((p&q)>r))>(p>(q>r)) ;
> > > TTTT TTTT TTTT TTTT * (1.1.1.2)
> > > (((p&r)>q)>((p&q)>r))>((p>q)>r) ;
> > > **F**T**F**T TTTT **F**T**F**T TTTT (1.1.2.2)
> > >
> > > Son, Father, Holy Ghost: (1.2.1)
> > > (((p&r)>q)>((p&q)>r))>(q>(p>r)) ;
> > > TTTT TTTT TTTT TTTT * (1.2.1.2)
> > > (((p&r)>q)>((p&q)>r))>((q>p)>r) ;

FFTT TTTT **FF**TT TTTT (1.2.2.2)

Father, Holy Ghost, Son: (1.3.1)
(((p&r)>q)>((p&q)>r))>((p>r)>q) ;
FTTT **FF**TT **F**TTT **FF**TT (1.3.1.2)
(((p&r)>q)>((p&q)>r))>(p>(r>q)) ;
TTTT T**F**TT TTTT T**F**TT (1.3.2.2)

Son, Holy Ghost, Father: (1.4.1)
(((p&r)>q)>((p&q)>r))>((q>r)>p) ;
FTTT **F**T**F**T **F**TTT **F**T**F**T (1.4.1.2)
(((p&r)>q)>((p&q)>r))>(q>(r>p)) ;
TTTT TT**F**T TTTT TT**F**T (1.4.2.2)

Holy Ghost, Son, Father: (1.5.1)
(((p&r)>q)>((p&q)>r))>((r>q)>p) ;
FT**F**T TT**F**T **F**T**F**T TT**F**T (1.5.1.2)
(((p&r)>q)>((p&q)>r))>(r>(q>p)) ;
TTTT TT**F**T TTTT TT**F**T (1.5.2.2)

Son, Holy Ghost, Father: (1.6.1)
(((p&r)>q)>((p&q)>r))>((q>r)>p) ;
FTTT **F**T**F**T **F**TTT **F**T**F**T (1.6.1.2)
(((p&r)>q)>((p&q)>r))>(q>(r>p)) ;
TTTT TT**F**T TTTT TT**F**T (1.6.2.2)

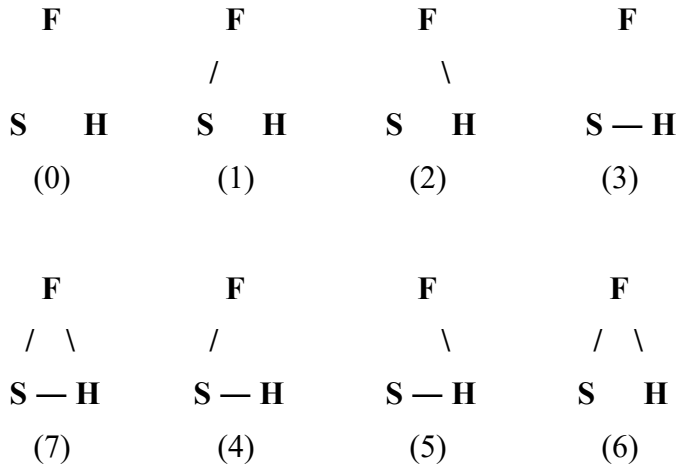
Remark 1.1.1.2 - 1.6.2.2: Eqs. 1.1.1.2 and 1.2.1.2 confirm the Holy Trinity without resorting to perfect God defined as p>(s=s). The other ten combinations are *not* tautologous. Eqs. 1.4.2.2 and 1.5.2.2 are logically equivalent.

The question of other-valued-tarians is moot because the sequential order is specified historically for the three Persons.

Confirmation of the cause of heresy as defective theology of the Holy Trinity

From [James 1997]:

> **Paraphrased excerpt:** The doctrine of the Holy Trinity is expressed in the Triune God of the Three Persons of God the Father (GF), God the Son (GS), and God the Holy Ghost (GH) as: One God in Three equivalent Persons; and Three equivalent Persons in One God. For known heresies, the figure for an equilateral triangle is used to demonstrate an absence of one or more of the Three Persons as equivalent, symbolic, vertices. (The figure when abstracted as the spherical triangle attributed to Euler is valid as a surface projection only so long as excluding the radius which would introduce the center as a fourth point.) The three vertices forming three edges admit the presence of eight combinations, independent of starting point:
>
> (0) None (1) GF.GS (2) GF.GH (3) GS.GH
>
> (7) All (4) GF.GS.GH (5) GF.GH.GS (6) GS.GF.GH
>
> These are respectively diagrammed as templates:



To avoid the plethora of often complex historical heresies, we supply a brief example for each template using modern denominations. The matrix proceeds from the point of GF clockwise through points for GH then GS.

[See table below.]

No.	Denomination	Revelation; GF to GH	Practice; GH to GS	Governance; GS to GF
0.1	Unitarian	Interpreted writings; No	Discussion; No	Democracy; No
1.1	Episcopal, Lutheran, Methodist	Modified bibles; No	Symbolic tokenism; No	Monarchical republic; Yes
2.1	Alcoholics Anonymous	Big book, literature; Yes	Step, trad, concept; No	Republic; No
3.1	Jehovah Witness, Mormon	Interpreted texts; No	Ceremonials; Yes	Absolute fascism; No
4.1	Community, Presbyterian	Interpreted bibles; No	Memorialism; Yes	Monarchical republic; Yes
5.1	Baptist	Selective bibles; Yes	Memorialism; Yes	Republic; No
6.1	Congregational	Modified bibles; Yes	Rites; No	Democrat monarch; Yes
7.1	Historic Church Anglo/Roman/Orthodox	Scripture (tradition); Yes	Real presence; Yes	Absolute monarchy; Yes

Notes keyed by number:

0.1 Writings are / can be assigned research papers.
1.1 With inter communion, exclusively gendered clergy and uni-gender unions on demand.
2.1 AA finds the GS name as repugnant, because although Higher Power is described as "He is the Father, and we are his children", one is supposedly capable of forming own opinions.
3.1 Jesus as Archangel Michael (JW) and Prophet Mormon as brother of Jesus / Adam (LDS).
4.1 Atonement for the elect emits from Calvin and Zwingli.
5.1 Infant baptism is denied and salvation is tied to a feeling experience.
6.1 Baptism is renamed dedication using rose petals instead of water.
7.1 The geographical divisions of the Historic Church are demarked in this regard: Anglo Catholicism places Scripture above Tradition; Eastern Orthodoxy holds the two co-equal; and Roman Catholicism places Tradition above Scripture.

We evaluate using the formula of (&)>(&)>(&) where no specified edge is ignored.

LET p, q, r, s: Persons, God the Father, God the Son, God the Holy Ghost.

Nothing to test.		0.2
r&q ;	**FFFF FF**TT **FFF**F **FF**TT	1.2
q&s ;	**FFFF FFFF FF**TT **FF**TT	2.2
s&r ;	**FFFF FFFF FFFF** TTTT	3.2
(s&r)>(r&q) ;	TTTT TTTT TTTT **FF**TT	4.2
(q&s)>(s&r) ;	TTTT TTTT TT**FF** TTTT	5.2
(q&s)>(r&q) ;	TTTT TTTT TT**FF** TTTT	6.2
(q&s)>((s&r)>(r&q));	TTTT TTTT TTTT TTTT	7.2

Eqs.. 1.2-6.2 are *not* tautologous, with table result values equivalent for 5.2 and 6.2. That side affect implies that the Baptist and Congregational denominations share more in common logically than meets the eye, although using nearly antithetical bible versions. This Historic Church is tautologous, confirming the titled conjecture.

Logical confirmation of the Holy Trinity formula in the Athanasian creed

From [Schaff 2018]:

LET p, q, r, s: God the Holy Trinity (GT), Person of God the Holy Ghost as the Paraclete (GP), Person of God the Father (GF) , Person of the Son (GS).

(The Athanasian creed follows this analysis.)

3. And the Catholic Faith is this: That we worship one God in Trinity, and Trinity in Unity;
4. Neither confounding the Persons: nor dividing the Substance [Essence].
5. For there is one Person of the Father: another of the Son: and another of the Holy Ghost. (0.1)
15. So the Father is God: the Son is God: and the Holy Ghost is God.
16. And yet they are not three Gods: but one God.

We rephrase Lines 15-16 to express the co-equality as: GT implies ((GP, GF, and GS) implies (GP, GF, or GS)). (1.1)

p>((q&(r&s))>(q+(r+s))) ; TTTT TTTT TTTT TTTT (1.2)

Remark: Eq. 1.2 has the format of perfect number six: 1*2*3 implies 1+2+3.

23. The Holy Ghost is of the Father and of the Son: neither made, nor created, nor begotten: but proceeding. [The Holy Ghost proceeds from the Father *and* the Son.]

We rephrase Line 23 as the filioque: GF and GS necessarily imply GP. (2.1)

#(r&s)>q ; TTTT TTTT TTTT CCTT (2.2)

27. So that in all things, as aforesaid: the Unity in Trinity, and the Trinity in Unity, is to be worshiped.
We rephrase Lines 24-27, using Eqs.. 2.1 to imply 1.1 as: If (GF and GS necessarily imply GP), then (GT implies ((GP, GF, and GS) imply (GP, GF, or GS)). (3.1)

(#(r&s)>q)>(p>((q&(r&s))>(q+(r+s)))) ;
TTTT TTTT TTTT TTTT (3.2)

Remark: Eq. 3.1 has Eq. 2.1 (filioque) as antecedent to Eq. 1.1 (co-equality) as consequent. In other words, the filioque *commences* the proof of the Holy Trinity.

Eq. 3.2 as rendered is tautologous, confirming the formula of the Holy Trinity in the commonly named Athanasian creed.

The Athanasian Creed. Old translation, revised. [Schaff 2018]

1. Whosoever will be saved: before all things it is necessary that he hold the Catholic Faith:
2. Which Faith except every one do keep whole and undefiled: without doubt he shall perish everlastingly.
3. And the Catholic Faith is this: That we worship one God in Trinity, and Trinity in Unity;
4. Neither confounding the Persons: nor dividing the Substance [Essence].
5. For there is one Person of the Father: another of the Son: and another of the Holy Ghost.

6. But the Godhead of the Father, of the Son, and of the Holy Ghost, is all one: the Glory equal, the Majesty coeternal.
7. Such as the Father is: such is the Son: and such is the Holy Ghost.
8. The Father uncreate [uncreated]: the Son uncreate [uncreated]: and the Holy Ghost uncreate [uncreated].
9. The Father incomprehensible [unlimited]: the Son incomprehensible [unlimited]: and the Holy Ghost incomprehensible [unlimited, or infinite].
10. The Father eternal: the Son eternal: and the Holy Ghost eternal.
11. And yet they are not three eternals: but one eternal.
12. As also there are not three uncreated: nor three incomprehensibles [infinites], but one uncreated: and one incomprehensible [infinite].
13. So likewise the Father is Almighty: the Son Almighty: and the Holy Ghost Almighty.
14. And yet they are not three Almighties: but one Almighty.
15. So the Father is God: the Son is God: and the Holy Ghost is God.
16. And yet they are not three Gods: but one God.
17. So likewise the Father is Lord: the Son Lord: and the Holy Ghost Lord.
18. And yet not three Lords: but one Lord.
19. For like as we are compelled by the Christian verity: to acknowledge every Person by himself to be God and Lord:
20. So are we forbidden by the Catholic Religion: to say, There be [are] three Gods, or three Lords.
21. The Father is made of none: neither created, nor begotten.
22. The Son is of the Father alone: not made, nor created: but begotten.
23. The Holy Ghost is of the Father and of the Son: neither made, nor created, nor begotten: but proceeding.
24. So there is one Father, not three Fathers: one Son, not three Sons: one Holy Ghost, not three Holy Ghosts.
25. And in this Trinity none is afore, or after another: none is greater, or less than another [there is nothing before, or after: nothing greater or less].
26. But the whole three Persons are coeternal, and coequal.
27. So that in all things, as aforesaid: the Unity in Trinity, and the Trinity in Unity, is to be worshiped.
28. He therefore that will be saved, must [let him] thus think of the Trinity.
29. Furthermore it is necessary to everlasting salvation: that he also believe rightly [faithfully] the Incarnation of our Lord Jesus Christ.
30. For the right Faith is, that we believe and confess: that our Lord Jesus Christ, the Son of God, is God and Man;
31. God, of the Substance [Essence] of the Father; begotten before the worlds: and Man, of the Substance [Essence] of his Mother, born in the world.
32. Perfect God: and perfect Man, of a reasonable soul and human flesh subsisting.
33. Equal to the Father, as touching his Godhead: and inferior to the Father as touching his Manhood.
34. Who although he be [is] God and Man; yet he is not two, but one Christ.
35. One; not by conversion of the Godhead into flesh: but by taking [assumption] of the Manhood into God.
36. One altogether; not by confusion of Substance [Essence]: but by unity of Person.
37. For as the reasonable soul and flesh is one man: so God and Man is one Christ;
38. Who suffered for our salvation: descended into hell [Hades, spirit-world]: rose again the third day from the dead.
39. He ascended into heaven, he sitteth on the right hand of the Father God [God the Father] Almighty.
41. At whose coming all men shall rise again with their bodies;
42. And shall give account for their own works.
43. And they that have done good shall go into life everlasting: and they that have done evil, into everlasting fire.
44. This is the Catholic Faith: which except a man believe faithfully [truly and firmly], he can not be saved.

Refutation of logical problem of the Trinity

From [Branson 2019]:

> So, why does the anti-Trinitarian think that P is inconsistent?
>
> Suppose we take "Father," "Son," and "Holy Spirit" univocally as names for individuals wherever they appear in S. Suppose we also take "God" in S1 through S3 univocally as the name of an individual. Suppose we take "is" univocally as the "is" of (classical) identity in S1 through S6. And suppose we analyze the counting statement expressed by S7 in a standard way, and understand "is God" as it occurs there in the same way we did in our interpretation of S1 through S3. The logical form of the claims expressed by S on this interpretation of it can be represented in PLI as:
>
> $\Phi_{\text{LPT-1}}$:
> $(1_{\text{LPT-1}})$ f=g
> $(2_{\text{LPT-1}})$ s=g
> $(3_{\text{LPT-1}})$ h=g
> $(4_{\text{LPT-1}})$ f≠s
> $(5_{\text{LPT-1}})$ f≠h
> $(6_{\text{LPT-1}})$ s≠h
> $(7_{\text{LPT-1}})$ $(\exists x)(\forall y)(x=g \;\&\; (y=g \rightarrow y=x))$
>
> $\Phi_{\text{LPT-1}}$ is inconsistent in PLI.[7] ($(7_{\text{LPT-1}})$ is not strictly necessary to derive a contradiction here: I include it only for completeness' sake.)

(1.1)

LET p, q, r, s, x, y: f, g, h, s, x, y.

(((p=q)&((s=q)&(r=q)))&((p@s)&((p@r)&(s@r))))>((%x=p)&((#y=p)>(y=%x))) ;
TTTT TTTT TTTT TTTT (1.2)

Refutation of the philosophical challenge of the Triune God

From [Byerly 2019]:

> (1) There is exactly one God.
> (2) The Father, Son, and Holy Spirit are not identical to one another.
> (3) The Father, Son, and Holy Spirit are consubstantial.

(1.1), (2.1), (3.1)

LET p, q, r, s: God, Holy Ghost, Father, Son.

p>(%p>#p) ; TNTN TNTN TNTN TNTN (1.2)

((r@s)+(r@q))+(q@s) ; **FF**TT TTTT TTTT TT**FF** (2.2)

Remark 2.1.1.1: Eq. 2.1 is not written as "not identical to one another *as permutation*" which maps to a contradictions as (2.1.1.1)

((r@s)&(r@q))&(q@s) ;
FFFF FFFF FFFF FFFF (2.1.1.2)

(r&s)&q)>p ; TTTT TTTT TTTT TT**F**T (3.2)

We take the argument as proffered for (1.1) implies (2.1) implies (3.1). (4.1)

Remark 4.1.1.1: To write Eq. 4.1 by inverting the second and third term as (1.1) implies (3.1) implies (2.1) produces (4.1.1.1)
(p>(%p>#p))>((((r&s)&q)>p)>(((r@s)+(r@q))+(q@s))) ;
FCTT TTTT TTTT TTTC (4.1.1.2)

(p>(%p>#p))>((((r@s)+(r@q))+(q@s))>(((r&s)&q)>p)) ;
TTTT TTTT TTTT TTTT (4.2)

Remark 4.2: Eq. 4.2 as rendered is tautologous, hence refuting the conjecture that this definition of the Triune God is a philosophical challenge.

This proof of the Triune God uses the universal logic system VŁ4. The approach does not fall within the others of the philosophical challenge such as Latin, Greek, or Constitution Trinitarianism. Rather, the proof denies the other approaches because those are not verified by mathematical logic of a theorem. In particular, Constitution Trinitarianism which injects being or *qua* as a retrograde variable can no longer abstract and propagate the challenge. Therefore, this serves as an umbrella approach to the others.

Refutation of the theological conjecture of universalism

Abstract: We evaluate the conjecture of universalism as the sentence: The necessity that philosophy includes contradiction and religion includes falsity implies that universalism includes both philosophy and religion. The conjecture is *not* tautologous, to form a *non* tautologous fragment of the universal logic VŁ4.

From [Universalism 2020]:

> Universalism is the philosophical and theological concept that some ideas have universal application or applicability. A belief in one fundamental truth is another important tenet in Universalism. … Christian universalism refers to the idea that every human will be saved in a religious or spiritual sense [hence there is no eternal punishment such as hell]. …
>
> > We map universalism as based on philosophy and religion. In philosophy, a basic tenant is that testability is based on what is contradictory as in what is *not* tautologous. In religion, the ideal is purity as in truthity, namely what is not falsity. In theology, this derives from God being omnipotent or all powerful and hence able to do anything, except for one thing: God cannot tell a lie. In other words, pure religion is by definition tautologous. From this, we derive the sentences:
> >
> > > By necessity, philosophy includes contradiction and religion includes falsity. (1.1.1)
> > >
> > > LET p, philosophy, q, universalism, r, religion, s: s.
> > >
> > > #((p>(s@s))&(r>(%s>#s)))=(s=s) ;
> > > NFNF NFNF NFNF NFNF (1.1.2)
> > >
> > > Universalism includes both philosophy and religion. (1.2.1)
> > >
> > > q>(p&r) ; TTFF TTFF TTFF TTFT (1.2.2)
> >
> > The conjecture of universalism is the sentence:
> >
> > > The necessity that philosophy includes contradiction and religion includes falsity implies that universalism includes both philosophy and religion. (1.3.1)
> > >
> > > #((p>(s@s))&(r>(%s>#s)))>(q>(p&r)) ;
> > > TTCT TTCT TTCT TTCT (1.3.2)
> >
> > Eq. 1.3.2 as rendered is *not* tautologous, hence refuting the conjecture of universalism.

Denial of the Valatsos proof for cogito, ergo sum

From [Valatsos 2020]:

> The phrase "Cogito, ergo sum"[1] can be trivially reduced to a logical sentence
>
> $$p \therefore q$$
>
> It is easy then to see that
>
> $$p \therefore q \iff \neg q \therefore \neg p$$
>
> where $\neg q \therefore \neg p$ is trivially true.
> Therefore
>
> $p \therefore q$ is true
>
> (1.1), (2.1), (3.1), (4.1)

(p>q) = (s=s) ;	TFTT TFTT TFTT TFTT	(1.2)
(~q>~p) = (s=s) ;	TFTT TFTT TFTT TFTT	(3.2)

Eqs.. 1.2 and 3.2 as rendered are *not* tautologous, refuting that either is "trivially true", and hence denying the conjecture. The equivalence formula 2.1 is non-constructive of form (f=f)=t and meaningless in this context.

Refutation of Ash'arite voluntarism, and subsequent salvific luck in Mohammedan theology

From [Saemi et al 2020]:

> More explicitly, the Ash'arite argument for Voluntarism can be stated as follows:
>
> P1. Divine Justice: God is perfectly just.
>
> P2. Divine Judgment: Every human person will survive death and will be judged by God on the basis of how they lived their earthly lives, with the result that some will live eternally in a state of bliss (often called "salvation in Heaven"), and others will live eternally in a state of misery (often called "condemnation in Hell").
>
> P3. Creaturely Control: God's Judgment concerning the eternal destiny of some persons depends in part upon factors beyond their control.
>
> P4. If Independence and Creaturely Control (P3) were true, then Divine Justice (P1) would be false.
>
> P5. Therefore, Independence is false.
>
> P6. Either Independence is true or Voluntarism is true.
>
> C. Voluntarism is true.

(1.1.1 - 7.1.1)

We rewrite the sentences for clarity in mapping with definitions for independence and voluntarism included, which the writers do not explicitly state as such.

Independence: If God judges man perfectly, then necessarily rules are not understood by man. (0.1.1)

LET p, q, r, s: God, man, rules*, s.
Perfect, good is (s=s). Imperfect, bad is (s@s). In part is possibly.

* Here we appropriately inject the variable r for rules because from its text Mohammedanism reveals a deity in series of impersonal rules, often contradictory, as for example the various numbers of wives allowed for one man.

((p>q)>(s=s))>~(q>#r) ; **FF**TT **FF**CC **FF**TT **FF**CC (0.1.2)

Voluntarism: If God judges man perfectly, then possibly rules are understood by man. (0.2.1)

((p>q)>(s=s))>(q>%r) ; TTCC TTTT TTCC TTTT (0.2.2)

Divine justice: God is perfectly just. (1.1)

p>(s=s) ; TTTT TTTT TTTT TTTT (1.2)

Divine judgment: Divine judgment of man results in heaven or hell. (2.1)

p>(q>(~(s@s)+(s@s))) ; TTTT TTTT TTTT TTTT (2.2)

Creature control: Man cannot control in part God's judgment. (3.1)

~(q>%p) = (s=s) ; **FF**N**F** **FF**N**F** **FF**N**F** **FF**N**F** (3.2)

Conjecture: If P0.1.1 and P3.1, then P1.1 is false. (4.1)

((((p>q)>(s=s))>~(q>#r))&~(q>%p))>((p>(s=s))>(s@s)) ;
TTCT TTTT TTCT TTTT (4.2)

Conjecture: If (4.1), then P0.1.1 is false. (5.1)

(((((p>q)>(s=s))>~(q>#r))&~(q>%p))>((p>(s=s))>(s@s)))>
((((p>q)>(s=s))>~(q>#r))>(s@s)) ;
TTN**F** TTNN TTN**F** TTNN (5.2)

Conjecture: Either (0.1.1) or (0.2.1). (6.1)

(((p>q)>(s=s))>(q>%r))+(((p>q)>(s=s))>(q>%r)) ;
TTCC TTTT TTCC TTTT (6.2)

Conclusion: (0.2.1) is true. (7.1)

((p>q)>(s=s))>(q>%r) ; TTCC TTTT TTCC TTTT (7.2)

P1 and P2 are widely accepted in Islamic theology. P5 is also trivially true. So, the major premises of the argument are P3 and P4. The truth of P3 is supposed to be illustrated by the story of three brothers. In the case of three brothers, the

Remark 0.1.2 - 7.2: Of the nine sentences in Eqs. 0.1.2 - 7.2, 1.2 and 2.2 are "trivially true", and the others are *not* tautologous. This refutes the Ash'arite argument for voluntarism, and denies further conjectures such as salvific luck in Mohammedan theology. Furthermore: 5.2 is *not* "trivially true"; and 3.2 is a *non* tautologous fragment of the universal logic VŁ4. This leads to the further editorial question of what is analytical (or scientific for that matter) about the cited title.

Refutation of unrestricted theological voluntarism

From [Callahan, 2021]:

> One of the foremost objections to theological voluntarism is the contingency objection. If God's will fixes moral facts, then what if God willed that agents engage in cruelty? I argue that even unrestricted theological voluntarists should accept some logical constraints on possible moral systems—hence, some limits on ways that God could have willed morality to be—and these logical constraints are sufficient to blunt the force of the contingency objection. One constraint I defend is a very weak accessibility requirement, related to (but less problematic than) existence internalism in metaethics. The theological voluntarist can maintain: Godcouldn't have loved cruelty, and even though he could have willed behaviors we find abhorrent, he could only have done so in a world of deeply alien moral agents. We cannot confidently declare such a world unacceptable.

2. The contingency objection: first pass

Robert Adams nicely characterized the contingency objection, which he considered to be the "gravest objection" to divine command theory (a species of theological voluntarism): Suppose God should command me to make it my chief end in life to inflict suffering on other human beings, for no other reason than that He commanded it . . . Will it seriously be claimed that in that case it would be wrong for me not to practice cruelty for its own sake?[9]

Adams called a positive answer to this question "unacceptable," and I agree.[10] We should not accept that cruelty for its own sake could possibly be morally good. I want to begin by formalizing this common reasoning:

1. If theological voluntarism is true, then God could have willed that agents engage in cruelty for its own sake.

2. If theological voluntarism is true, then, if God could have willed that agents engage in cruelty for its own sake, cruelty for its own sake could have been morally good (or right).

3. (By 1, 2) If theological voluntarism is true, then cruelty for its own sake could have been morally good (or right).

4. Cruelty for its own sake could not have been morally good (or right).

Conclusion: theological voluntarism is false.

(1-4)

Remark 1-4: The argument takes the form of:

((((1>2)&((1>2)>3))&(1>3))&3)>~1. (5.1)

LET p, q, r: (1), (2), (3).

((((p>q)&((p>q)>r))&(p>r))&r)>~p ;

TTTT TTT**F** TTTT TTT**F** (5.2)

Remark 5.2: Eq. 5.1 is *not* tautologous, to refute formalization of common reasoning, denying theological voluntarism.

The author was not required to verify assertions by replicable script of a proof assistant in an appendix.

We do not evaluate the content of the subsequently proffered conjectures, but note that the entirety of Adams and spouse is not confirmed in the universal logic system VŁ4.

Refutation of creation by White's model

Abstract: From the introduction, we evaluate a system of four postulates (P1, P2, P3, P4). P1 implies P2; P4 implies P3; but (P1 implies P2) does not imply (P4 implies P3). Hence the system is *not* tautologous. Two subsequent postulates (P5, P6) are not examined.

From [White 2019]:

LET p, q, r, s: P1, P1, P3, P4.

1. For creation of the physical universe, the basic information element is a type of projection --- more specifically, a projection from a prior level. (1.1)

p=((q>r)>s) ; TFFT TFTF FTFT FTFT (1.2)

2. The basic information structure is a sequence of such projections.
With respect to the first postulate, we may refer to both projections and levels as "elements" (or basic elements) of the system, but will reserve the term "basic information element" for the projections alone. (2.1)

p>((q>r)>s) ; TFTT TFTF TTTT TTTT (2.2)

We now add two more postulates:
3. Each such projection is a one-dimensional vector, constituting a different, but related, one-dimensional space. (The basic relations between these projections/vectors are stated in the next postulate.) (3.1)

(p@q)@(r@s) ; FTTF TFFT TFFT FTTF (3.2)

4. Prior things (e.g., projections, levels, and constructions from them) are independent of subsequent things; and, conversely, subsequent things are dependent on prior things. (The terms prior, subsequent, dependent, and independent denote here logical/ontological relations. See e.g. [4].) (4.1)

~((p>q)>(r>s)) = (p=p) ; FFFF TFTT FFFF FFFF (4.2)

Using these four postulates (and two more that will be stated later), we develop a model for the basic construction of the physical universe ... (5.1, 6.1)

Remark 1.-4.: The postulates are related in pairs, then we relate the pairs.

P1 implies P2: P1>P2 (10.1)

(p=((q>r)>s))>(p>((q>r)>s)) ; TTTT TTTT TTTT TTTT (10.2)

P4 implies P3: P4>P3 (11.1)

~((p>q)>(r>s))>((p@q)@(r@s)) ; TTTT TTFT TTTT TTTT (11.2)

Remark 11.2: For P3 implies P4: P3>P4 (11.2.1)

((p@q)@(r@s))>~((p>q)>(r>s)) ; T**FF**T TTTT **F**TT**F** T**F**FT (11.2.2)

The truth table of Eq. 11.2.2 is relatively farther from tautology than that of 11.2; hence we choose use 11.1 for P4>P3.

(P1 implies P) implies (P4 implies P3): (P1>P2)>(P4>P3) (12.1)

((p=((q>r)>s))>(p>((q>r)>s)))>(~((p>q)>(r>s))>((p@q)@(r@s))) ;
TTTT TT**F**T TTTT TTTT (12.2)

Eq. 12.2 is not tautologous. Therefore the model of creation based on four postulates so far is refuted. We did not examine the subsequent two postulates.

Refutation of Wiccan analytical theology as vicarious instantiation of incarnation

From [Hill 2020]:

Personhood and split minds

Consider the following claims about the High Priestess (HP) and the Goddess (G):

(1) Before, during, and after the ritual, HP is a person.

(2) Before, during, and after the ritual, G is a person.

(3) Before and after the ritual, HP and G are different persons.

(4) During the ritual, HP and G are the same person.

(5) During the ritual, neither HP nor G ceases to exist.

(6) After the ritual, no person ceases to exist.

(7) If two persons unite to become a single person, one of them must cease to be a person.

(1.1.0 - 7.1.0)

We take the temporal terms of before, during, and after the ritual as time less than the ritual, time equal to the ritual, and time greater than the ritual.

The notion of personhood is implicit to priestess or goddess in order to exist here. In other words, without personhood high priestess or goddess cease to exist.

We rewrite the sentences for clarity in mapping:

If before the ritual, during the ritual, and after the ritual, then the high priestess exists. (1.1.1)

LET p, q, r, s: high priestess (HP), goddess (G), ritual, time.
(s=s) is ⊤autology.

((s<r)&((s=r)&(s>r)))>%p ; TTTT TTTT TTTT TTTT (1.1.2)

If before the ritual, during the ritual, and after the ritual, then the goddess exists. (2.1.1)

((s<r)&((s=r)&(s>r)))>%q ; TTTT TTTT TTTT TTTT (2.1.2)

If before the ritual and after the ritual, then high priestess and goddess are not the same person. (3.1.1)

((s<r)&(s>r))>(p@q) ; TTTT TTTT TTTT TTTT (3.1.2)

If during the ritual, then high priestess and goddess are equivalent. (4.1.1)

(s=r)>(p=q) ; TFFT TTTT TFFT TTTT (4.1.2)

If during the ritual, then not (high priestess or goddess) cease to exist. (5.1.1)

(s=r)>~(%(~(p+q)=(s=s))=(s=s)) ;
FNNN TTTT TTTT FNNN (5.1.2)

If after the ritual, then not (high priestess or goddess) cease to exist. (6.1.1)

(s>r)>~(%(~(p+q)=(s=s))=(s=s)) ;
FNNN FNNN TTTT FNNN (6.1.2)

If two (high priestess and goddess) become one, then one (high priestess or goddess) must [necessarily] cease to exist. (7.1.1)

(p=q)>(#(~(%(p+q)=(s=s))=(s=s))=(s=s)) ;
NTTF NTTF NTTF NTTF (7.1.2)

Remark (1.1.2 - 7.1.2): The three Eqs 1.1.2, 2.1.2, and 3.1.2 are tautologous and respective equivalents, as to be expected. The four Eqs. 4.1.2 - 7.1.2 are *not* tautologous, and hence refute the claims as proffered.

This is an inconsistent set of claims. (7) rules out the possibility that (1), (2), (4), and (5) can all be true. But a Wiccan—at least one who interprets the ritual as Oakley-Harrington does—is committed to (1)–(6). It seems, then, that she must reject (7).

But (7) underlies the logic behind the Christian doctrine that Christ's human nature never existed before the union. As we saw above, that reasoning assumes that, if it had, then *either* it would have continued to be a person during the union *or* it would cease to be a person during the union—neither of which is acceptable.

(8.1.0 - 12.1.0)

We evaluate the subsequent claims written as follows:

(1)&(2)&(4)&(5) = Tautology (8.1.1)

(((((s<r)&((s=r)&(s>r)))>%p)&(((s<r)&((s=r)&(s>r)))>%q))&
(((s=r)>(p=q))& ((s=r)>~(%(~(p+q)=(s=s))=(s=s))))) = (s=s) ;
FNNN TTTT TTTT FNNN (8.1.2)

(1)&(2)&(4)&(5)>(7) (9.1.1)

(((((s<r)&((s=r)&(s>r)))>%p)&(((s<r)&((s=r)&(s>r)))>%q))&
(((s=r)>(p=q))& ((s=r)>~(%(~(p+q)=(s=s))=(s=s))))) >((p=q)>
(#(~(%(p+q)=(s=s))=(s=s))=(s=s))) ;
TTTC NTTF NTTF TTTC (9.1.2)

(1)&(2)&(3)&(4)&(5)&(6) (10.1.1)

(((((s<r)&((s=r)&(s>r)))>%p)&(((s<r)&((s=r)&(s>r)))>%q))&
((((s<r)& (s>r))>(p@q))& ((s=r)>(p=q))))&
(((s=r)>~(%(~(p+q)=(s=s))=(s=s)))&
((s>r)>~(%(~(p+q)=(s=s))=(s=s)))) ;
FFFN **F**NNN TTTT **FFF**N (10.1.2)

((1)&(2)&(3)&(4)&(5)&(6))>#~(7) (11.1.1)

((((((s<r)&((s=r)&(s>r)))>%p)&(((s<r)&((s=r)&(s>r)))>%q))&
((((s<r)& (s>r))>(p@q))& ((s=r)>(p=q))))&
(((s=r)>~(%(~(p+q)=(s=s))=(s=s)))&
((s>r)>~(%(~(p+q)=(s=s))=(s=s)))))>
#(~((p=q)>(#(~(%(p+q)=(s=s))=(s=s))=(s=s)))=(s=s)) ;
TTTT TCCT **FFF**N TTTT (11.1.2)

(7) = Tautology [same as 7.1.1] (12.1.1)

((p=q)>(#(~(%(p+q)=(s=s))=(s=s))=(s=s))) = (s=s) ;
NTT**F** NTT**F** NTT**F** NTT**F** (12.1.2)

Remark 8.1.2 - 12.1.2: Eqs. 8.1.2 - 12.1.2 are *not* tautologous hence refuting the claims as derived from Eqs. 1.1.2 - 7.1.2 and denying the entire argument.

However, Eq. 11.1.2 to show (1)-(6) does *not* imply not (7) as claimed to fail as a *non* tautologous fragment of the universal logic VŁ4.

Furthermore Eq. 12.1.2, restating 7.1.2, cannot be used to claim a vicarious instantiation of incarnation as a model for Wiccan theology because 12.1.2 is *not* tautologous.

In fact the most telling word in the article is "coven", into which the founder of the religion was initiated before 1964, to indicate explicitly that Wiccan faith and practice is a subset of the ritual and ceremonial magic of Satanism.

Concluding remarks

We evaluated over 100 artifacts in analytical theology using Meth8/VŁ4 with a refutation rate of over 85%. This approach serves as a model example to ensure validation of conjectures in analytical research.

References

Adams, M. (2014). What's wrong with the ontotheological error? journals.tdl.org/jat/index.php/jat/article/view/jat.2014-1.120013000318a/223

Alcoholics Anonymous World Services Inc. [AA]. (1979 ed.). aa.org/assets/en_US/en_bigbook_chapt4.pdf

Alcoholics Anonymous World Services Inc. [AA]. (2014). aa.org/assets/en_US/smf-122_en.pdf

Alcoholics Anonymous World Services Inc. [AA]. (2017). Daily reflections: a book of reflections by A.A. members for A.A. members.

Anderson, M.B. (2021). On responsibility and original sin: a Molinist suggestion. doi.org/10.37977/faithphil.2021.38.1.2

Arcadi, J.M. (2017). Analytic theology as declarative theology. An international journal for philosophy of religion and philosophical theology. 1:37-52. ojs.uclouvain.be/index.php/theologica/article/view/73/33

Astagnaro. (2020). ncregister.com/blog/astagnaro/traditional-church-teaching-can-never-contradict-itself [The author is known as a professional stage magician.]

Argument_free_will. (2020). en.wikipedia.org/wiki/Argument_from_free_will

Beall, J.C. (2019). A defense of contradictory Christology. Journal of analytic theology. 7:400-433. journals.tdl.org/jat/index.php/jat/article/view/293/518

Benzmüller, C.; Paleo, B.W. (2017a). "Formalization, Mechanization and Automation of Gödel's Proof of God's Existence". arxiv.org/abs/1308.4526

Benzmüller, C.; Paleo, B.W. (2017b). The ontological modal collapse as a collapse of the square of opposition. researchgate.net/publication/268211774_The_Modal_Collapse_as_a_Collapse_of_the_Modal_Square_of_Opposition

Benzmüller, C.; Fuenmayor, D. (2019a). Computer-supported analysis of positive properties, ultrafilters and modal collapse in variants of Gödel's ontological argument. arxiv.org/pdf/1910.08955.pdf

Benzmüller, C.; Parenta, X.; van der Torre, L. (2019b). Designing normative theories of ethical reasoning: formal framework, methodology, and tool support. arxiv.org/pdf/1903.10187.pdf

BCP. (1928). The Book of Common Prayer, 1928 ed., The Order for Holy Communion, Prayer of Consecration. p 80.

Borges da Silva, G.; Bertato, F. M. (2019). A first-order modal theodicy: God, evil, and religious determinism. sa-logic.org/sajl-v5-i1/04-da%20Silva-%20Bertato-SAJL.pdf

Borowitz, E.B. (1969). The problem of the form of a Jewish theology. Hebrew Union College Annual. 40/41:391-408. jstor.org/stable/23503267?read-now=1&seq=12#page_scan_tab_contents

Branson, B. (2019). No new solutions to the logical problem of the Trinity. beaubranson.com/wp-content/uploads/2019/08/No-New-Solutions-JAL-Branson.pdf

Breitbart. (2021.10.02). breitbart.com/politics/2021/10/02/watch-womens-march-speaker-says-abortion-is-a-fight-for-trans-men/

Byerly, R. (2019). Truthmaker trinitarianism. ojs.uclouvain.be/index.php/theologica/article/view/14693/17613

Callahan, L. F. (2021). Could God love cruelty? A partial defense of unrestricted theological voluntarism. doi.org/10.37977/faithphil.2021.38.1.3

Cohoe, C. (2020). "Accounting for the whole: why pantheism is on a metaphysical par with complex theism". Faith and philosophy. 37:2:4. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2777&context=faithandphilosophy

Conn, C. (2019). Anselm, the Holy Trinity, and the relative identity thesis. ojs.uclouvain.be/index.php/theologica/article/view/10263/19303

Coriden, J.A. (2007). "Holy Spirit and Church governance". New Theology Review. theophilusjournal.org/index.php/ntr/article/download/216/389

Cotnoir, A.J. (2017). Theism and dialetheism. Australasian journal of philosophy. st-andrews.ac.uk/~ac117/papers/TD.pdf

Craig, W.L. (2019). Eleonore Stump's critique of penal substitutionary atonement theories. place.asburyseminary.edu/faithandphilosophy/vol36/iss4/6/

Dei Verbum. 1965. http://www.cin.org/v2revel.html

Dean, W. (2020). On consistency and existence in mathematics. arxiv.org/pdf/2007.10167.pdf

DeRose, T. (2020). Empirically skeptical theism. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2788&context=faithandphilosophy

Divine_command_theory. (2020). en.wikipedia.org/wiki/Divine_command_theory

Ebels-Duggan, K. (2019. "Murphy, M.C. Murphy, (2017). God's own ethics: norms of divine agency and the argument from evil". Faith and philosophy. 36:1:10.

Foster, J. (2003). The divine lawmaker: lectures on induction, laws of nature, and the existence of God. Oxford Univ. oxford.universitypressscholarship.com/view/10.1093/0199250596.001.0001/acprof-9780199250592-chapter-3

Francis. (2019). dcclothesline.com/2019/12/03/pope-francis-declares-that-christian-fundamentalists-are-a-scourge/

Friedman, H.M. (2012). A divine consistency proof for mathematics.
cpb-us-w2.wpmucdn.com/u.osu.edu/dist/1/1952/files/2014/01/ConMathThe122512-1iea8ps.pdf

Fuenmayor, D.; Benzmüller, C. (2019, nee 2017).
Computer-assisted reconstruction and assessment of E. J. Lowe's modal ontological argument.
isa-afp.org/browser_info/current/AFP/Lowe_Ontological_Argument/outline.pdf

Furlong, P. (2020). Book review of Vicens, L., Kittle, S, 2019, God and human freedom. Faith and philosophy. 37:3:11. place.asburyseminary.edu/faithandphilosophy/vol37/iss3/11
[Vicens is co-author of the title reviewed, and also book review editor of the journal reviewing it.]

Gettier_unsolved. (2020). allthatsinteresting.com/fascinating-unsolved-problems/2

Göcke, B.P. (2020). Panentheism and panpsychism.
academia.edu/43095287/Panentheism_and_Panpsychism

Graham, F. (2019). Organic unities: a response to the problem of evil.
ojs.uclouvain.be/index.php/theologica/article/view/15243/17543

Griffioen, A.L. (2021). Nowhere men and divine I's: feminist epistemology, perfect being theism, and the God's-eye view. Journal of analytic theology. 9:1-25.
journals.tdl.org/jat/index.php/jat/article/view/437/586

Harman, R.J. (2014). "How to apply molinism to the theological problem of moral luck". Faith and philosophy. 31:1:4.
place.asburyseminary.edu/cgi/viewcontent.cgi?article=2517&context=faithandphilosophy

Hasker, W. (2019). The one divine nature.
ojs.uclouvain.be/index.php/theologica/article/view/2893/2063

Hauser, C. (2020). "On being human and divine: the coherence of the incarnation". Faith and philosophy. 37:1:1.
place.asburyseminary.edu/cgi/viewcontent.cgi?article=2766&context=faithandphilosophy

Hill, J. (2020). "I am the gracious goddess": Wiccan analytic theology.
journals.tdl.org/jat/index.php/jat/article/view/379/570

James, C. (1997). The cause of heresy as defective theology of the Holy Trinity. [unpublished thesis].

James, C. (2021). Recent advances in the modal model checker Meth8 and VŁ4 universal logic. [on request]

Kvanvig, J. L. (1996). "The knowability paradox and the prospects for anti-realism". Noûs. 29.4:481-500.
www.jstor.org/stable/2216283?origin=crossref&seq=1
[After 25 years, this article is still pay-to-play at $46.00 from Springer, but fortunately the single *preview* page is sufficient for evaluation: maybe Springer previews a different page now after this.]

Kvanvig, J.L. (2010). "The Incarnation and the knowability paradox". Synthese. 173.1:89-105.
wustl.app.box.com/s/0n8wdqz3jr4ofht5a6y0cau9jmzdlfzy

Kittle, S. (2020). Book review: "Grant, W.M., (2019). Free will and God's universal causality: the dual sources account". Faith and philosophy. 37:3.8. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2792&context=faithandphilosophy

Koons, R.C. (2006). Review. "Sobel, J.H. (2003). Logic and theism: arguments for and against beliefs in God. Cambridge Univ. Press." Faith and philosophy. 23:3:10. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2047&context=faithandphilosophy

Korn, S. (2019). A proof of the existence of the soul. vixra.org/pdf/1911.0325v1.pdf

Langtry, B. (2020). "God, horrors, and our deepest good". Faith and philosophy. 37:1.4. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2769&context=faithandphilosophy

Law, A. (2020). The dependence response and explanatory loops. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2786&context=faithandphilosophy

Lenzen, W. (2017) Log. Univers. 11: 85. https://doi.org/10.1007/s11787-017-0159-2) ; and page.mi.fu-berlin.de/cbenzmueller/papers/Lenzen2016_Leibniz_Ontological_Proof.pdf , /link.springer.com/article/10.1007/s11787-017-0159-2

Lesser_magistrate. (2020). en.wikipedia.org/wiki/Lesser_magistrate
and
"John MacArthur invokes Doctrine of Lesser Magistrates to oppose church lockdown" noqreport.com/2020/07/26/john-macaruthur-invokes-doctrine-of-lesser-magistrates-to-oppose-church-lockdown/

Luan, Q. (2018). A rigorous non-existence proof of free will in an indeterministic universe. vixra.org/pdf/1805.0193v1.pdf

Manning, H.E. (1871). [attributed to unspecified editing by Ronald L. Conte Jr.]. catholicplanet.org/councils/20-Pastor-Aeternus.htm

Mar, G. (2005). Review: Murphy, M.C. (2002). An essay on divine authority. Cornell studies in philosophy of religion. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2002&context=faithandphilosophy

McBrayer, L. (2018). Cartesian aseity in the third meditation. journals.tdl.org/jat/index.php/jat/article/view/182/498

McGrew, L. (2018). Of generic gods and generic men: the limits of armchair philosophy of religion. journals.tdl.org/jat/index.php/jat/article/view/201/444

Middle_Knowledge. (2020). en.wikipedia.org/wiki/Predestination#Middle_Knowledge

Miller, C.B. (2020). Review: "Mark Murphy. God's own ethics: norms of divine agency & the argument from evil". Faith and philosophy. 8:726-729. journals.tdl.org/jat/index.php/jat/article/view/372/554

Morgan, B. (2021). My sister, my brothers - our cousins. [Blue paper.] Divine Science Church,

Pueblo, CO.

Murphy, M.C. (1998). "Divine command, divine will, and moral obligation". Faith and Philosophy. 15:1:1. place.asburyseminary.edu/cgi/viewcontent.cgi?article=1674&context=faithandphilosophy

Murphy, M.C. (2002). "A trilemma for divine command theory". Faith and Philosophy. 19:1:2. place.asburyseminary.edu/cgi/viewcontent.cgi?article=1870&context=faithandphilosophy

Murray, M. (2019), Perfect goodness. plato.stanford.edu/entries/perfect-goodness/

Olson, R.E. (2017). Are there “wicked problems” in theology? patheos.com/blogs/rogereolson/2017/01/wicked-problems-theology/

Oppy, G. (2006). Review. Foster, J. (2003). The divine lawmaker: lectures on induction, laws of nature, and the existence of God. Oxford Univ. Press. Faith and philosophy. 23:1:10.

Oppy, G. (2019). Review. Pruss, A.R.; Rasmussen, J.L. (2018). Necessary existence. Oxford Univ. Press. journals.tdl.org/jat/index.php/jat/article/view/318/543

Page, M.D. (2021). Detachment issues: a dilemma for Beall’s contradictory Christology. Journal of analytic theology. 9. journals.tdl.org/jat/index.php/jat/article/view/445/594

Pascal's_wager. (2020). en.wikipedia.org/wiki/Pascal%27s_wager

Pius XI. (1928). Miserentissimus redemptor. w2.vatican.va/content/pius-xi/en/encyclicals/documents/hf_p-xi_enc_19280508_miserentissimus-redemptor.html

Plantinga's ontologic. (2020). study.com/academy/lesson/platingas-modal-ontological-argument-for-god.html

Popper, K. (1972 ed.). Conjectures and refutations: the growth of scientific knowledge. Demarcation between science and metaphysics. p 275-7.

Proslogion. (2020). en.wikipedia.org/wiki/Proslogio

Reicher, M. (2019). Nonexistent objects. plato.stanford.edu/entries/nonexistent-objects/

Saemi, A.; Davison, S.A. (2020). Salvific luck in Islamic theology. journals.tdl.org/jat/index.php/jat/article/view/377/568

Schaff. (2018). ccel.org/ccel/schaff/creeds2.iv.i.iv.html

Schellenberg, J.L. (2018). A new logical problem of evil revisited. Faith and philosophy. 35:4:5. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2655&context=faithandphilosophy

Schumann, A. (2012). Logical cornerstones of Judaic argumentation theory. link.springer.com/article/10.1007/s10503-012-9273-8

Scigod.com. (2020). all papers invoking physics at scigod.com

Speaks, J. (2014). "The method of perfect being theology". Faith and Philosophy. 31:3:2. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2586&context=faithandphilosophy

Speer, R.E. (1896 et seq). Various writings of Robert Elliott Speer (Andover, Princeton, PTS), a socialist Presbyterian minister adhering to the progressive Karl Barth; also quoted in AA by Dr Bob Smith, The Rev'd Mr Shoemaker, and Bill Wilson (who detested the four absolutes as a combined standard of morality).

Skrzypek, J.W. (2020). Causal time loops and the immaculate conception. journals.tdl.org/jat/index.php/jat/article/view/288/559 jwskrzypek@umary.edu

Stump, E. (1985). The logic of disputation in Walter Burley's Treatise on Obligations. drive.google.com/file/d/0Bwre_fqicQ1pdUJ1WHo3M3ZYMGs/view

Stump, E. (2018). The openness of God: eternity and free will. drive.google.com/open?id=16yXPxfGBr5XCAhgjBtGI74RUHjW4Uwdo

Sullivan, S.M. (2020). scottmsullivan.com/articles/NihilCh1.pdf

Supervenience. (2020). en.wikipedia.org/wiki/Supervenience

Swinburne, R. (2019). "Stump on forgiveness". Faith and philosophy. 36:4:5. place.asburyseminary.edu/faithandphilosophy/vol36/iss4/5/

Swinburne, R. (2021.1). Our soul makes us who we are. Think. 20:57:53-67. ceeol.com/search/viewpdf?id=933498

Swinburne, R. (2021.2). Summary of the argument of the paper “Are We Bodies or Souls” (based on Chapters 3 and 4A of the book Are we Bodies or Souls?). Handout%20-%20Summary%20of%20the%20Argument%20-%20Swinburne%20.pdf https://1drv.ms/u/s!Aly_kn8Z18otjOtPYXOfKp-vJZAgDg?e=mVKuAl

Swinburne, R. (2021.3). Are we bodies or souls? Logic and religion webinar series, August 19.

Theism. (2020). en.wikipedia.org/wiki/Theism

Tooker, J.W. (2018). On relativity of absolutism in morality. vixra.org/pdf/1806.0194v2.pdf [email address at gatech.edu bogus]

Torrence, A. (2019). The possibility of as scientific approach to analytic theology. Journal of analytic theology. 7:179-198. journals.tdl.org/jat/index.php/jat/article/view/265/514

Tucker, C. (2020). "Divine satisficing and the ethics of the problem of evil", Faith and philosophy. 37:1:2. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2767&context=faithandphilosophy

Tuggy, D. (2007). "Three roads to open theism". Faith and philosophy. 24:1:2. place.asburyseminary.edu/faithandphilosophy/vol24/iss1/2

Tuggy, D. (2009). "Anderson, J. (2007). Paradox in Christian theology: an analysis of its presence,

character, and epistemic status". Faith and philosophy. 26:1:9. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2351&context=faithandphilosophy

Tuggy, D. (2021). Antiunitarian arguments from divine perfection. Journal of analytic theology. 6:262-289. journals.tdl.org/jat/index.php/jat/article/view/449/598

Turner, P.R. (2020). Review: "W. Matthews Grant. Free will and God's universal causality: the dual sources account". Journal of analytic theology. 8:715-720. journals.tdl.org/jat/index.php/jat/article/view/370/552

Universalism. (2020). en.wikipedia.org/wiki/Universalism

Valatsos, V. (2020). A propositional logic review of Descartes' phrase "Cogito, ergo sum". vixra.org/pdf/2007.0024v1.pdf [from misotheistic valatsos.gr]

van Inwagen, P. (2014). In defense of transcendent universals. *Metaphysics and scientific realism: essays in honor of David Malet Armstrong.* 51-70. andrewmbailey.com/pvi/TranscendentUniversals.pdf

Vander Laan, D. (2018). "The paradox of the end without end". Faith and philosophy. 35:2:1. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2634&context=faithandphilosophy

Weingartner, P. (2021). God, contradiction and paraconsistency. Webinar. logicandreligion.com

Wessling, J. (2021). On St. Isaac the Syrian's argument against divine retribution. doi.org/10.37977/faithphil.2021.38.1.7

White, P.B. (2019). A model for creation: part 1. vixra.org/pdf/1903.0084v1.pdf

Willard, M.B. (2020). "Miravalle, J-M. L. (2018). "God, existence, and fictional objects: the case for Meinongian theism"". Faith and philosophy. 37:1:7.

Zagzebski, L. (1989). Christian monotheism. Faith and philosophy. 6.1.1. place.asburyseminary.edu/cgi/viewcontent.cgi?article=2673&context=faithandphilosophy

Zagzebski, L. (2008). Foreknowledge and free will. plato.stanford.edu/archives/fall2008/entries/free-will-foreknowledge/