

**The Twenty-Five Theses for *Philos Sophos*:
A Partial Differential Equation from Mathematical Ethics' Operators of *Zhēn Xiàng*
for Interpolating Computerized Behavioral Flux in Economics**

by
Dallas F. Bell, Jr.

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Abstract: It is widely recognized that the common human need for purposed decision-making requires the conscious self to develop an understanding of its relationships with time and space. This basic epistemological process includes concepts that range from infinity and individual freewill to justice and societal punishment. For millennia scholars have systematically proven *zhēn xiàng* and disproven *mauvaise foi*. Negation is said to exist where axioms of 100% probability, P, space of past or future events, E, are the set of P (E1, E2) which may be apophatic (*via negativa*) and cataphatic (*via affirmativa*). The operators of negation and antonym modify the meaning of their operands in a fuzzy logic sense. Negation of less than all operators can not produce a coherent model, E2 = (not) and so P (E2) = 0, necessary for mathematical ethics due to *petitio principii*. A partial differential equation template may be formed to define the moral field of a coherent set, E1 = (is) and P (E1) = 1 or 100%. For the wave application of mathematical ethics forming the moral field, the induced transcendent authority belief times the options equals the negative of the time rate of behavioral flux. The nabla symbol, ∇ , represents the three-dimensional gradient operator of the possible beliefs regarding a transcendent authority for what is good and what is bad. The gradient operator represents the slope of the tangent. The divergence operator measures the volume of flux of the vector field. The curl operator describes the rotation of the vector field. **E** means the set of options. **B** represents the behavioral choices of the options. **t** stands for time. ∂ is the partial-derivative. Social behavioral physics is seen in the interaction of the fields of individual waves. Thus, abstract motivations that bound rationality can tangibly interpolate other data for more efficient computerized behavioral economics' analysis.

Keywords: partial differential equation, mathematical ethics, operators, negation, bounded rationality, computerized behavioral economics.

It is widely recognized that the common human need for purposed decision-making requires the conscious self to develop an understanding of its relationships with time and space. Systematically, the epistemological process includes the following operators.

1. Infinity.
2. Existence.
3. Entropy: the first cause.
4. Inorganic material and organic life.
5. Intellect and its attributes.
6. Law and justice.
7. Rationality: good and evil.
8. Freewill reality in predestination: pain and suffering.
9. Guilt, mercy, and grace.
10. Eternity.
11. After-life.
12. Love and forgiveness.

13. Redemption and sin.
14. Atonement and peace.
15. Revelation of moral, ceremonial, and civil law.
16. Extra-natural beings: existence and attributes.
17. Human relationship with the transcendent.
18. Human relationship with other humans.
19. Human nature and attributes.
20. Hope and purpose.
21. Holiness: worship and praise.
22. Societal law: punishment and human needs.
23. Societal structure and institutions.
24. Government.
25. Societal cycles.

Formally, all laws are non-material. Only their effects of enforcement, which manifest their causing lawgiver, can be seen. Rationality presupposes the observed existence of the infinite God and His just authority for eternal good and evil. The alternative is the intentional or ignorant use of material presuppositions from logical fallacies (See Note 1). In the empiricist and skeptic's, David Hume (7 May [old style 26 April] 1711 – 25 August 1776), 1748 book "An Enquiry Concerning Human Understanding", he indicated that any writing on divinity or metaphysics that does not contain abstract reasoning concerning quality or number or experimental reasoning concerning matter of fact and existence contains nothing but sophistry and illusion. His meaning, of course, that mathematical aspects of ideas should be explored. It is often observed that individuals, groups and institutions, and nation-states need to have a common set of ethics' operators for negotiating and conflict resolution. Therefore, ethics, as with other sets of laws, is indirectly acknowledged to have a mathematical linguistic structure.

As David Hume suggested the need of the abstract for mathematics, the structure may seem to be linear homomorphisms, as a chain when one link is broken and is destroyed, but actually has a logical topology of a complete graph (connected network) where all nodes have strength though one node may seem weaker for a time, as many scholars believe. For example, the reality of pain and suffering cause those with bias for theistic negation to superficially use this as a singular reason for their belief while ignoring connected nodes of other ideas, such as this universe of entropy requires there to have been a first cause(er) at some point of created existence. In mathematics and physics, a partial differential equation is a differential equation with unknown multivariable functions and their partial derivatives. They are used to formulate problems involving functions with several variables.

Within infinite truth, what can not be seen in theology and what can be seen in nature must be congruent. Conflicts or double-truth are the results of finite understanding. Divinely inspired applications of Scripture and science create twenty-five systematic theological decision-making steps of mathematical ethics, for which the alternative, a set that includes everything else, has been proven by scholars for millennia to be dead intellectual ends that create stress from cognitive dissonance for their *mauvaise foi* beliefs. Thus, negation exists where axioms of 100% probability, P, space of past or future events, E, are the set of P (E1, E2) which may be apophatic (*via negativa*) and cataphatic (*via affirmativa*).

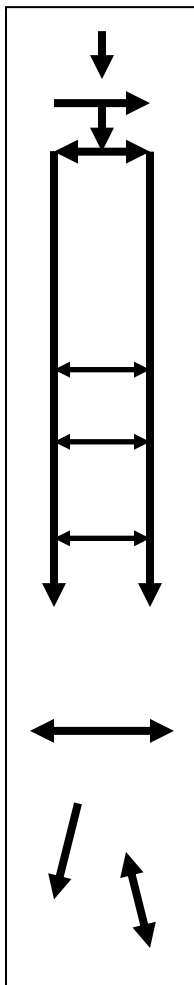
E1 = (is) and P (E1) = 1 or 100%

E2 = (not) and so P (E2) = 0

1. Infinity exists, complete without potentiality of becoming.
2. Self-existent infinity static state is moved, *finitum non capax infiniti*.
3. The ubiquitous first Causer of all effects of time and space in entropy of this closed system is preexistent asecity.
4. General mediate natural theological revelation indicates mathematical creation is separate from the understood masculine Jehovah Creator Causer of unconscious inorganic, without an innate sense of self, and organic objects of unique DNA species' codes with male and female information for wisely ordered efficient purpose.
5. Creating is purposed from single infinite *Pantokrator* intellect of omniscience, omnipotence, and omnipresence which can occupy by mechanism.
6. That *homoousian* Intellect or sovereign Elohim God of law, created with diversity from a plural of intensity, has the attribute of justice (See Note 2).
7. Distributive, punitive etc. justice requires the rational options of right and wrong or good and evil from the dichotomy "A" can not be both "A" and "not A" simultaneously.
8. The reality of right and wrong requires observer causal conscious intellect with an innate sense of self and divinely permitted freewill within predestination to make an effect of choice, allowing for consequences such as pain and suffering. The observer's relationship with *reist* and *entia rationis* objects requires standards to measure and judgments to be decided.
9. The signifier of justice needs mercy and grace for the original *noetic* evil, called sin, which separates the guilty from the signified God of judgment and life, and is death.
10. Justice is eternal and needs eternal enforcement.
11. Eternal rewards for good and evil require an eternal heaven for the predestined compliant elect with new eternal bodies *non posse peccare* and an eternal hell for the noncompliant essences of each intellect after death which is once experienced then the judgment from which no one can return to present time/space decayed bodies and leave eternal bodies unoccupied in eternity.
12. Unmerited mercy and grace needs love to forgive sin.
13. Agape or benevolent love needs redemption for the repentant from (omission and commission) sin by grace alone, which is the gift of infinite God and can not be earned by finite creation.
14. Redemption is based on immutable eternal Divine righteousness and requires an atonement plan, *iustitia extra nos*, to fill the gap between infinite standards and the finite created intellect whose fruit leads to peace.
15. The infinite Creator's attributes and His acceptable plan must be revealed in a Scriptural canon by moral, ceremonial, and civil law.
16. That efficient Scripture must be immutable yet with use of anthropocentric linguistic tools which includes the afterlife and extra-natural beings to be understood in a *sensus literalis*, *historicus*, and clear parables or *allegoricus*.
17. Behavioral commands must be given regarding relationship standards between man and God, such as loving Him with all one's heart, soul and mind by having no other gods, making no images of God, not taking God's name in vain, and keeping His day holy as He hallowed the seventh day of His creating the universe.
18. General intermediate revelation emanates from behavioral commands to treat others as one wants to be treated, or the Golden Rule, must be given regarding relationship standards between man and man, such as loving one's neighbor as one's self, by honoring one's father and mother, not murdering, not committing adultery, not stealing, not lying, and not coveting despite the entropy of the effort to even love one's enemies.
19. Eliminating the false in one and false in all or perjurer's rule, the supreme moral authority is proven by Scriptural historical, prophetic temporal, and eternal inerrant eschatology witnessed first hand by the observable fact of nature written in the hearts of children from birth, *sensus divinitatis*, with the innate ability to recognize nouns and verbs, in that they do not want to be lied to, stolen from, or murdered etc. and even thinking those things causes neural change and is an eternal violation.
20. Those laws and specific revealed theological plans for redemption by a living faith provide hope and purpose and are good news or gospel and must be *basar/kerusso* by the elect, *dignitatis humanae*, since these beliefs are an abomination to the unrepentant and their profane philosophies.
21. The complete or whole/holy God of love must be prayed to, worshiped, and praised saying holy, holy, holy, hallelujah or praise the name of God, Yahweh.
22. Behavioral violations of Divine laws require societal punishment and prevent *elpizō* in trust and efficiency of achieving individual needs of survival, economic security, love and affection, self-esteem, and self-actualization.
23. Societal efficiency requires the institutions of family for perpetuation and individual education, church for group education, medical orphanages and other efficient centralizing of efforts, business, and government to protect the lawful from the lawless with police and military within Scriptural designation of theological geography.
24. Fallible human governance needs to separate powers with a judicial branch, a legislative branch, and an executive branch, which use Divine law as societal law.
25. Societies will have cycles from reformation to revolution as they accept or reject Divine law respectively.

Or not
(The operators of negation and antonym modify the meaning of their operands, such as negation (big) = not big and antonym (big) = small so there is a need to examine the meaning of "not big" and "small" as to their being in the same set of equivalence. In this case, "small" and "not big" are in equivalence. But in a fuzzy logic sense so is "average" which is not an antonym of "not big" nor is it equivalent of "small." The set of "not big" includes both "average" and "small." Negation of less than all twenty-five theses can not produce a coherent model necessary for mathematical ethics due to *petitio principii*. For example, attempting to create a coherent model based on an unconnected argument only addressing the reality of pain and suffering, covered in step 8, is specious.)

Appearing as a human body with the head of a cross, the kanji symbol of truth below (*zhēn xiàng*; Chinese for truth, literally meaning the actual facts) can be looked at much like tunnel junctions or a Feynman type diagram of quantum chromodynamics (QCD) with strong interaction of little legs representing incoming and outgoing particles.



Infinity.

Linear time and space (cosmogony) created by the first causer of all effects (theogony).

Which is either an atheist non-existent view, which is skeptical of God but not of other atheists, or an agnostic view, which is skeptical of God and sometimes skeptical of atheists, (not possible ontologically, cosmologically, teleologically, philosophically, and morally since finite existence exist within infinity and reciprocal behavioral entropy prevents the self-sacrificing use of the transcendent Golden Rule for good and evil necessary for societal cohesion and trust. Liars steal and thieves murder, leaving only nominalistic materialism faith, forms of physical determinism, experimental error, rejection of non-material reality of love for the non-material reality of hate etc., and unfulfilling slavery to pleasure as behavioral purposes not fearing the transcendent authority and historic source of wisdom—God who is love. Rejection of love prevents discernment and achieving wisdom.) P (E1) = is = 0%; P (E2) = not = 100%

Or is an Atheological force (not coherent belief; a force is not just, merciful, loving etc. and no afterlife for eternal justice and rewards). P (E1) = is = 0%; P (E2) = not = 100%

Or is animistic and pantheistic (not coherent belief; god-like beings are not infinite and could not be creators and would be subject to the original sin without the possibility of infinite regress and could not be just). P (E1) = is = 0%; P (E2) = not = 100%

Can only be monotheistic God of Judæo-Christian triune belief. The world's first printed book and the world's most demanded book, the Bible (See Note 3) teaches to be skeptical and test the spirits. One *Elohim* God is described in the three expressions of (1) Jehovah the Father, (2) *Adoni* Son of atonement by Theanthropos (*vera deus* and *vera homo*) where the *Logos* Word became flesh in the *peroma* of time and dwelt among us fulfilling all Tanakh Messianic prophecies in which is the Truth and no one can be justified to come to the perfect holy Father except through the perfect holy sacrifice *Pantokrator* Mediator of His Son, and (3) *Rauch Ha-Kodesh* the convicting Holy Spirit teacher/comforter needed to have expressed complacent love and communication prior to creating finite creatures that require not only benevolent and compassionate love but justice and mercy. P (E1) = is = 100%; P (E2) = not = 0%

The monotheistic beliefs lead to other non-contradictory truths making science possible with enlightenment blessings and the understanding of Israel as the global theological geographic focus from its capital, Jerusalem.

Pride, hated by wisdom, causes the orthodox fundamentals of true monotheistic beliefs to eventually be legalistically added to with scrupulosity or to be forgotten and abandoned for incoherent apostate beliefs with heretical agitprop that begins the process again cursed (See Note 4). (Minus the applied exclusive truth, has infinite possibilities only known to the infinite Creator, such as $1 + 1 = \text{not } 2$, but is in the finite intellect and is finite yet *Veritas Dei Vincit*.)

The partial differential equation (PDE) form of Faraday-Maxwell's electromagnetic field may be used as a template to define the moral field.

$$\nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t}$$

For the wave application of mathematical ethics forming the moral field, the induced transcendent authority belief times the twenty-five theses options equals the negative of the time rate of behavioral flux. The nabla symbol, ∇ , represents the three-dimensional gradient operator of the possible theological beliefs regarding a transcendent authority for what is good and what is bad. The gradient operator represents the slope of the tangent. The divergence operator measures the volume of flux of the vector field. The curl operator describes the rotation of the vector field. \mathbf{E} means the twenty-five theses options. \mathbf{B} represents the behavioral choices of the twenty-five theses. t stands for time. ∂ is the partial-derivative symbol. The social behavioral physics is seen in the interaction of the fields of individual waves. Predictably, individuals, groups and institutions, and nation-states that are most similar will potentially be the most compatible and the least similar will potentially have the most conflict.

Additionally, the academic square root, 5, of the twenty-five theses are (1) Theology, (2) Rational epistemology, (3) Individual behavior, (4) Collective societal behavior, and (5) Eschatology—TRICE—and their subsets. From this systematic political science, game theory methods can be used to mathematically unify those anthropocentric academic disciplines of theology, epistemology, psychology, sociology and eschatology for computerized analysis and predictions after verification and validation methods are employed, such as red team procedures.

Note 1: If humans are random groups of atoms, they can not make purposed decisions necessary for ethics. Molecules do not choose or reject moral behavior. Consider research for ethical robots which is aimed at seeking to add the nonmaterial to the material. In other words, it is seeking to make a rock (unconscious circuits of 1s and 0s) love a tree or have that rock appreciate a sunset. Those are options for an intellect to judge what is good and what is not good. Judging in any true sense requires an intellect, which requires consciousness which requires an innate sense of self, to make a decision in its relationship to an organic (*reist*) or inorganic (*entia rationis*) object(s). This requires an epistemological standard based on either the nonmaterial with transcendent authority capable of a mathematical ethic or the material with relative, in this case, human authority incapable of a mathematical ethic. Thereby, justice is brought into focus which requires redemption, forgiveness, mercy etc. *iustitia extra nos*. Material objects do not have the ability to choose good or not good, *non posse peccare*, which is necessary for societal trust and cohesion... Such efforts seeming ignore neuroscience, fMRI etc., which indicates consciousness needed for judging is extra to the brain's neural material. To that end, their efforts also ignore many others disciplines not the least of which is philosophy and will likely be based on relative ethics where pushing a little girl to her death in a raging river is equal to jumping into a raging river to save a little girl from drowning. Hitler and Mother Teresa would be equal by those standards. Monozygotic twins, raised together, find behavioral dichotomy such as one twin becoming a college professor while

the other twin serves a life sentence for criminal activity or one twin becoming a family man with a good job while his chronically unemployed twin is convicted of serial rapes. MZ twin studies indicate freewill to choose different values for good and not good. Moreover, this thrust appears to be giving anthropomorphic potential to circuits due to their superior ability to store and sort data. Usually, people do not do the same with their cars that have much more ability to carry heavy objects at higher speeds than humans. Computers have not gained any über-human status by defeating world grand chess masters. In brief, the anthropomorphizing of this technology is understandable from a materialist's point of view. It is based on ignorance of cohesive logic/science and an unfounded faith in physical determinism. The Office of Naval Research, the Genome project, and PETA, among others, have accepted ethics without transcendent authority and thus it is based on whoever is in charge of the ethics *du jour*.

Note 2: Non material aspects of intellect are recognized to exist, such as justice, mercy, grace, redemption, and love. They must have always been included in the complete set of infinity. Justice, mercy, grace and redemption require a perfect Judge to apply the potential action to kinetic application toward imperfect trespassers of Divine law. The perfectly wise chosen equilibrium can only be understood and reached by omniscient ability which includes everything, such as freewill, and hidden motives, etc. The imperfect trespassers can not reciprocate but can imperfectly emulate justice, mercy, and grace toward other imperfect trespassers. Love does not require a position of superiority and can be seen as having always been kinetically applied. This means the one God is understandably and expectantly expressed as more than one so as Their love was always perfectly applied between Them. They then applied Their love toward imperfect creation with One being the only perfect redeeming atoning intercessor between perfect God and imperfect trespassers--God is love. The first expression of God is seen as sending the intercessor, the second expression, as trespassers are drawn with *fiducia* (trust) by the third expression to the redemption, after *notitia* (trespassers' knowledge of theological realities) and *assensus* (trespassers' assent to knowledge of theological realities), and indwelt by the regeneration and perfect sealing of the eternal destination in heaven for those saved by grace alone. All three expressions must be completely God. Redeemed imperfect creation can then imperfectly apply love toward God and toward others in creation.

Note 3: The non canonical books, *akanonista biblia*, and book passages are generally separated from the *biblia kanonizomena* by a lack of historical authenticity, canon harmony, spiritual reading experience of a living text of truth, and the lack of its doctrine meeting the human needs outlined in the twenty-five theses when applied, for example in the Old Testament 1 and 2 Maccabees, Sirach, Wisdom, Baruch, Tobit, and Judith, and parts of Daniel and Esther. The Hebrew King David, poet and soldier, said the law of the Lord is perfect, the testimony of the Lord is sure, the statutes of the Lord are right, the commandment of the Lord is pure, the judgments of the Lord are true and righteous (Ps. 19:7-11). New Testament books that at some point have been contested include Hebrews, James, 1 Peter, 2 and 3 John, Jude, and Apocalypse. Contested New Testament passages have included the closing section of Mark 16:9-20 about the apparitions of Christ after the resurrection, the verses in Luke 22:43-44 about the bloody sweat of Jesus, and the *Pericope Adulteræ*, or narrative of the woman taken in the act of adultery in John 8:1-11. Paul, an apostle that had two Ph.D.'s at the age of 21, said all *graphē*, referring to

Old Testament scripture, is inspired of God and profitable for doctrine, for reproof, for correction, for instruction in righteousness (2 Tim. 3:16). Saint Peter said Paul's writings recorded in the New Testament are scripture (2 Peter 3:15-17).

Note 4: Historically, the primary doctrinal change is the shift from infinite redemptive saving grace from the infinite God alone toward finite humans to finite works by finite man that earn infinite redemptive salvation from the infinite God. The efforts to place finite people between infinite God and finite man are for the purpose of making themselves messianic gods. They will ignore the specific opposing scriptures to their doctrines continuing toward superseding Divine scriptural authority all together. The resultant loss of Divine freedoms will curtail human achievement and accomplishment that gives God glory sending humanity into a feudalist Dark Age until a reformation back to scriptural doctrine prevails.

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Dallas F. Bell Jr. where he indicated beliefs, such as pain and suffering, need to be seen in a wider context of ideas, such as a universe of entropy requires a first cause(er), as his graduate advisor, Bruce Metzger, would have not have thought pain and suffering was a problem sufficient to call faith into question.)

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