

Implications of Free Will in the Cosmos

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1. Free Will. What is “free will”? Can the existence of any amount of “personal free will” be proved? Can “personal free will” co-exist with a mechanistic energy universe of purely antecedent causation? What happens in the brain and neurological system when someone makes a choice? Finally, if free will exists in the cosmos, then what are some implications of its existence?

In recent decades with the advent of non-invasive methods such as magnetic resonance imaging (MRI) some of these questions have received much closer scrutiny by neuroscientists, who are now able to observe living brain activities while agents are choosing. Numerous well-documented, novel experiments have been performed and ideas explored¹.

One concept of “free will” hinges on “whether someone could have done otherwise”². A much stronger notion of “free will” requires a mind to have “absolute autonomy” --- choose in a way not at all determined by anything previously happening in the brain or external to it.

While certain fateful human decisions might be in the second category (such as whether to accept eternal life), a very constrained decision having just two possible options might still be completely free. Whether to “first walk north a block and then west a block” or instead to “first walk west and then north” is a “free will” decision according to the “could have done otherwise” criterion even though absolute autonomy from constraints is not present. Yet, depending on whimsy, it seems that I could freely choose either route.

2. Physical Determinism. Contrasting the notion of free will in the cosmos is the notion that the universe is *totally deterministic*, that its energy reactions are repeatable and predictable, that physics and chemistry tell the *whole story* of what will happen in the future.

In this regard it is good to recall the first law of conservation of matter and energy as stated in its simplest but still valid form by I. Newton: “Every object in a state of uniform motion tends to remain in that state of motion unless an external force is applied to it.” This plus two other axiomatic laws were enough in the 17th century to describe and predict the mechanics of the solar system!

So well did Newton’s 3 laws predict the motions of the heavenly bodies that the famous 18th & 19th century mathematician P. Laplace held that “if a sufficiently powerful mind knew all the laws of nature and the location of every particle in the universe it could

¹*Surrounding Free Will*, edited by Alfred R. Mele, Oxford University Press, 2015, has 15 chapters by 35 authors ranging over a wide spectrum of related topics.

²The Origins and Development of Our Conception of Free Will, A. Gopnik and T. Kushnir, Ch. 2 p5 in [1]

accurately predict every future event.”³

In this mechanistic view of the cosmos, antecedent energy causation determines all future events. A bouncing ball must continue bouncing according to the laws of physics.

In summary, the argument against “free will” goes something like this:

Observe a falling row of dominoes or a bouncing ball. They demonstrate how prior energy relationships cause a completely predictable future event. Physics and chemistry are founded on the repeatability of such experiments (experiences).

Secondly, every finite event in the cosmos has traceable antecedent finite causes. There are no present physical effects without *past* antecedent physical energy causes.

Therefore, since the state of a person's brain has prior energy causes, that person really has no "free will" or "choice" about his/her present or future acts. They are determined by the energy relationships existing in the brain.

Furthermore, there is no scientific evidence of free will. To believe in free will is to believe in something for which there is no scientific evidence.

Physical determinism imagines the stable and uniform part of the cosmos to be the whole cosmos. Matter-energy in motion in space is conserved. Physical effects have physical causes. Physical causes can be traced back according to energy laws. Therefore proximate (presently made) choices are impossible. Such a choice would supposedly be a physical effect without a physical cause.

(However, scientists also used to think that mass was conserved until A. Einstein came along and showed that mass (m) could be lost or gained by changing back and forth into energy (E) according to the famous formula $E = mc^2$. Thus “conservation of mass (matter)” was replaced by “conservation of the total of mass and energy”. Suddenly, having new mass appear was no longer “a physical effect without a physical cause”.)

The question is not *how much* free will we have to change what would otherwise be the future course of events. The question is whether we have *any* presently undetermined actions at all.

A. Monroe and B. Malle⁴ give several good examples of such expressions of disbelief in free will including this one⁵ which nicely sums up the issue: “The jargon of free will in everyday language...requires us to accept pockets of indeterminism in an otherwise deterministically conceived world view.”

Notice that the “deterministically conceived worldview” assumed here ignores the

³ “Free Will Belief and Reality”, R. Baumeister, C. Clark & J. Luguri, Ch. 4 p49 in [1]

⁴ “Free Will without Metaphysics”, Ch. 3 p27 in [1]

⁵ *Voluntary action: Brains, minds and society*, S. Maasen, W. Prinz, & G. Roth, Oxford Univ. Press, 2003

existence of those “pockets of indeterminism” in the cosmos called “living beings”! Living beings are individually not completely predictable when give freedom to operate! Ironically, these unmentioned “living beings” include the very conceivers of such completely deterministic concepts of the cosmos. These folks believe themselves and us to be no more than complicated machines. And they are also attempting to commit moral suicide by saying that neither they nor anyone ‘could ever have done otherwise’. Believers in the omniscience of God have sometimes unwittingly been fellow travelers in this deterministic notion of the cosmos by claiming that since God knows the future, the future is already determined.

In such erroneous concepts of the living cosmos, there is no room for free will. Everything is already determined ahead of time by the past energy situation or the omniscience of God.

However, in a universe of “living selves” who act for the benefit of “self” and “other selves”, the deterministic world is merely the *action field for choices*.

Acknowledging the existence of free will is crucial to an understanding of human life, the state of the world, and individual responsibility for outward actions.

3. Insights of Neuroscience. Depending on the premises one is willing to entertain, scientifically proving the existence of “free will” is difficult or impossible. Therefore questions closely related to “free will” have been diligently investigated by neuroscientists in a sustained effort to learn more about the decision process and what goes into it, leaving the main question of its existence for later.

3.1 Free Will in Children and Animals. A. Gopnik and T. Kushnir point out evidence⁶ that children under 2 years of age understand “goal directed actions”, “alternate methods”, and that they recognize that “certain actions reflect subjective, individual preferences and desires”. Although an individual child must grow and develop (evolve?) an ability to make wider and more significant choices, nevertheless even an infant demonstrates some degree of self-preference. That primitive humans had to evolve in order to claim the sense of “free will” seems plausible, but even animals appear to grasp the essentials of making choices. This suggests that “belief in free will” is innate.

Decisions by monkeys and other animals surely are a basis for understanding the physiology and psychology of the more complex decision-making by humans.⁷ An animal can know the meaning of some motion and react according to instinct and non-physical “understanding”. This also happens in human choice.

3.2 Meanings and Free Will. Many experiments and common experiences indicate that physical effects can be manifest (and measured) based purely on what some agent was led to *believe* was true. As expressed by Baumeister, Clark and Luguri “Meaning is

⁶ “The Origins and Development of Our Conception of Free Will” A. Gopnik & T. Kushnir, Ch. 2 p7 in [1]

⁷ “Monkey Decision Making as a Model System for Human Decision Making” A. Roskies, Ch. 12 p232 in [1]

essentially a nonphysical connection. ...Therefore one handy way to think about free will is the deliberate, intentional use of meaning to guide action. ...You are supposed to do something, or not to do it, based on what it means.”⁸

While every finite effect has a finite cause, it has been experimentally verified that the energy state of a person's brain can to some degree be independently affected by the subjective consciousness of that person, by what that person believes or is led to believe.⁹ Thus, some physical effects have non-physical causes. The well-known placebo effect in humans is a physical response to a non-physical “belief”.

There is even a *measurable* affect on behavior¹⁰ of merely “the belief that one has free will”. Those who believe that they have it consider more possibilities when given choices. And reducing people’s belief in free will (by manipulation) increases the likelihood of cheating behavior.

What one believes can result in different outward actions from the outward actions that result from believing something else. That has been measured. “Meaning”, “symbols” and “beliefs” are potent non-physical causes of actions.

3.3 The Self and Free Will. Another essential aspect of decision-making is the unifying “self”, which in humans is even conscious of its own consciousness. As reported by J. Ismael¹¹ Descartes argued for mind-matter dualism based on the “self” or “mind” having no parts, and therefore being nonmaterial.

Furthermore, mind has the ability to unify individual living cells, parts of a living body or even different individual animals and humans into an integrated whole. This is a property that is exhibited in bee, ant and termite colonies, in schools of fish and flocks of birds. A committee or company of people can “speak with one voice”.¹²

3.4 Free Will Determinations. Those minds that subscribe to a completely deterministic universe (perhaps allowing for minor quantum mechanical indeterminism) have no tolerance for non-material influences from outside the deterministic matter-energy system, labeling this “dualism”. Supposedly, this would be “meta-physical” and so unacceptable as a scientific idea. Some people even investigate how determinism could somehow be compatible with free will or moral responsibility.¹³

And in a limited sense this is true because an actual decision necessarily includes some amount of determinism, namely the actual effects of the decision itself. If I decide to throw a rock at my neighbor’s window, then the result was determined by my free will

⁸ “Free Will Belief and Reality” R. Baumeister, C. Clark & J. Luguri, Ch. 4 p55 in [1]

⁹ “Free Will Belief and Reality” R. Baumeister, C. Clark & J. Luguri, Ch. 4 p61 in [1]

¹⁰ As reported in “Measuring and Manipulating Beliefs and Behaviors Associated with Free Will” J. Schooler, T. Nadelhoffer, E. Nahmias & K. Vohs, Ch. 5 in [1]

¹¹ “On Being Someone” J. Ismael Ch. 14 p275 in [1]

¹² “On Being Someone” J. Ismael Ch. 14 p278 in [1]

¹³ “Incompatibilism and ‘Bypassed’ Agency” G. Björnsson, Ch. 6 in [1]

act. That I no longer had a free will choice *after the rock left my hand* simply means that the rock breaking the window was the necessary, deterministic result of my free will choice to break the window with the rock. There is a *moment in time* after which a choice has already been made and determinism takes over what happens.

Determinism co-exists with choice. Living agents simply utilize the deterministic aspects of the universe when they make decisions.

3.5 Last Minute Choices and Preparations. Another observation of neuroscience is that complex decisions may involve real-time ongoing parallel assessments of alternative outcomes with possible “last minute override” of tentative decisions. With little trouble one can imagine circumstances in which an initial decision is overruled, for example, by inhibitions. So there is a hierarchical aspect of mind willing to overrule earlier choices.

Therefore, the unconscious preparations of the human brain in the run-up to a decision should not be taken as evidence of a lack of free will concerning the action. These preparations can be vetoed thereby demonstrating that they are tentative. They merely anticipate a subsequent choice to be made, but are not determinative of that choice.

A man who goes to his kitchen whenever his stomach growls from hunger is capable of resisting the preparations made by his stomach for another meal. (Surely some man somewhere has actually done this, and so the neural preparations in anticipation of some decisions are not completely determinative of subsequent actions. Free will lives!)

3.6 Conservation of Energy. If we postulate that agents are able to “apply an external force” to the matter-energy realm, then there would be no contradiction to the laws of physics, just a need for scientists to recognize that the material mechanism is not without an *interface* to a mind-spirit realm that humans can access to exercise some degree of free will.

For scientists, it would be to admit that a heretofore-unrecognized energy realm exists, something akin to the present day conjectures of the hidden dimension from which the “Big Bang” supposedly burst into space-time existence as we know it, or better, like the “vacuum zero-point” energy of “empty space” from which “virtual” particles condense into space and may be reabsorbed into the higher energy realm.

Consider also the phenomenon of a physical state comprising the interface between a surface of water and an atmosphere above it with some evaporated water. There is a constant back and forth of water molecules leaving the water surface (disappearing) and entering the atmosphere (by evaporation) and also the “emergence” (by condensation) of heretofore-invisible water molecules from the air onto the visible water surface.

Condensation drops of water on a cold windowpane mysteriously appear as coming from some “external” non-watery world and to violate energy conservation if everything in the water world is assumed to have a water world cause. Something like this could be happening between a “spiritual energy realm” and the “material energy realm”.

This framework provides a way for some amount of free will to operate on a universe of physical laws, and the research cited provides some empirical evidence of the existence of free will beyond the subjective inner experience.

3.7 A Philosophical Proof of Free Will. One philosophic (non-scientific) proof of the existence of “free will” is based on the existence of sin in the finite cosmos. Doing something that one knows is morally wrong would be impossible were there no free will. However, that argument presumes that sin, knowingly doing something wrong that one “could have done otherwise” is a real experience.

Nevertheless, the phenomenon of regret or guilt for a past choice is a subjective proof of free will. This feeling is quite different from the feeling of having no control over events that lead to the same result. It is precisely the guilt-making poor choice that is missing in the “no control” situation.

Feelings of guilt or regret are common human experiences that hardly need to be proved. Their existence can be taken as axiomatic since they are universally experienced and intuitively grasped. However, the proof is a philosophical one based on the subjective experience of guilt or regret, not strictly speaking a scientific (objective) proof.

4. A Theory of “Free Will”. Not everything true can be proved true with scientific evidence. Just as it was necessary in “plane geometry” to include Euclid's 5th postulate instead of attempting to prove it from the first four postulates, so too is it necessary to include a postulate or “axiom of choice in the cosmos” to obtain a philosophically adequate concept of the living cosmos. Although perhaps not scientifically provable, some degree of personal choice is the personal experience of everyone. It should need no proof. It is “self evident”.

All knowledge is founded on unproved axioms. Therefore scientific claims against the unproved beliefs of religion are ‘the kettle calling the pot black’. While religion should always be willing to accept the revelations of true science, science should be tolerant of religious beliefs based on values and feelings of righteousness and good --- realities that cannot be expressed in scientific terms and are really beyond the purview of science.

Every scientific theory has unproved (and often implicit) axioms or premises that are the “intuitive” starting places for deductive implications. Plane geometry starts with “lines”, “arcs” and “points” that are “undefined” except by offering examples of “lines”, “arcs” and “points” in one or more contexts. Then the axioms (postulates) of plane geometry such as “two distinct points are on one and only one line” can be stated. “Line” is taken as “a given”, understood by direct experience of the reader.

Similarly, physics and chemistry have undefined words and unproved assumptions such as “matter”, “motion” and “life”, which are “intuitively understood” words. Otherwise, in terms of what more fundamental words would these words be defined? Whatever these more basic concepts are, they become the undefined words and axioms of a new theory

(understanding). The finite mind simply must have an intuitively grasped but technically undefined starting point for mathematical deduction to occur.

Due to common experiences, many words need not be “defined” in order to communicate. One need not “define” the word “apple”; one need only hold up an apple and say the sound for “apple” to make the necessary association of the word (sound) “apple” to the common personal experience of the nature of an apple.

4.1 Free Will is Axiomatic. It is a common experience that we can choose and change the future. Contemporary neuroscience finds it difficult to explain where the energy would come from by which to freely alter the energy state of the brain. But that is no reason to assume that “free will” is impossible within the physical world. We are more than the physical world, these minds that have the power to choose somewhat what will be. We might call that “will power”.

Since the idea of “free will” is so intuitively grasped by common folk and even by the most mechanistically minded scientist, why should there be a need to “prove” its existence? Those who imprudently (and impudently) deny its existence should demonstrate that it doesn’t exist based on more than inconsistency with their mechanistic interpretation of life in the cosmos. The only reason for questioning free will is that it clashes with the view of the cosmos as completely deterministic, a view that has recently gained credence despite its destructive implications on personal human dignity, freedom, and moral-spiritual consciousness.

4.2 Free Will Terminology. A cursory examination of “free will” makes obvious certain necessary features of any discussion of the phenomenon. Among these entailed ideas there is the notion of an *agent* as contrasted from a *pure mechanism*. The latter is inherently passive while the former is inherently active having the capacity to learn and adapt, including a sense of “self”, the self that chooses for its own good, that has some “free will”.

Therefore some kind of *mind*, a *conscious self*, is necessary for the concept of “free will”. Furthermore, there is a necessary *span of time* associated with making a “free will” choice in a time-space universe.

We can list the words and concepts so far encountered without immediately deciding which might be defined in terms of the others and which might be regarded as synonymous. It is not necessary at first that the axioms be logically independent, just consistent and adequately inclusive of the essential features of “free will”.

- a) *Agents* (selves, minds, conscious choosers, persons)
- b) *Matter-Energy*; the deterministic realm of time-space caused by or affected by agents
- c) A *Spirit-Mind-Matter Interface* by which an agent can willfully add material energy to the physical cosmos and *actualize* some *potential* material effect.
- d) *Knowledge* by agents of the *meaning* and *value* of (physical and mental) motions
- e) *Time periods*; past, present and future periods during which an agent can choose to act

4.3 Justification of Chosen Undefined Terms and Axioms. The justification for the chosen “undefined words” and “unproved axioms” meant to form the basis of a mathematical representation of some realm of science or philosophy lies in how fundamental and natural the chosen words and axioms are as applied to various specific examples.

For example, a theoretical “plane” helps to locate points in space relative to other points. It easily applies to vertical walls and walls of any orientation. Two planes can locate a line of intersection, and so forth. But, although they are very useful, the only justification for the undefined terms and associated 3-dimensional geometric axioms is in their faithful representation of ideas of space that are *common human experiences* as we all attempt to understand and quantify simultaneous space relationships.

Despite the deterministic drift of present day neuroscience, recognition of the facts of human psychology demands recognition of “free will” as a human psychological experience. “... People hold a psychological concept of free will”¹⁴ not one based on a belief in metaphysics.

Again, in a vote for practicality Baumeister, Clark and Luguri say “... we are inclined to think that deterministic inevitability is useless as a basis for psychological theory. The psychological project of explaining human thought, emotion, and especially action requires in practice the assumption that multiple future outcomes are possible.”¹⁵

It is the assumption of absolute determinism in the cosmos that must be abandoned. It simply is no one’s personal experience! Absolute determinism is contrary to common human psychological experiences.

5. Implications of Free Will. There are many implications to gather from the existence of Free will in the cosmos. Many have already been mentioned.

5.1 “Will Power”. The apparent existence of some degree of individual mind free choice in the cosmos, the ability to independently deflect matter from its course as otherwise determined by antecedent causation, *implies* that there is something else associated with minds not reducible to matter-energy mathematical causation - something mysterious called “will power”, an ability associated with human minds and to some degree with all *living* things.

Physicists are constantly conjuring up hidden dimensions even a dimension to explain the genesis of all time-space in a so-called Big Bang. One “theory of everything” supposes 11 physical dimensions to account for all quantum and relativistic observations. Considering such imaginative conjectures, physicists should not look with askance at the notion of an individual mind energy dimension that adds some individual mind freedom

¹⁴ “Free Will without Metaphysics” A. Monroe & B. Malle, Ch. 3 p35 in [1]

¹⁵ “Free Will Belief and Reality” R. Baumeister, C. Clark & J. Luguri, Ch. 4 p51 in [1]

to the physical cosmos.

5.2 An Unrecognized Energy Source. Again, some people will object that every neural act has a physical cause, and that nothing physical happens without a physical cause. Therefore, free will is an illusion. However, if new energy is introduced into the physical cosmos from outside, say from a different energy realm to which the phenomenon of human mind is attached, then free will is compatible with energy conservation laws since such laws have exceptions such as “unless acted upon by an outside force”. Or to put it positively, introducing additional energy into an otherwise closed system alters that system in ways different from how that system would have proceeded without the new energy. But that is exactly the phenomenon experienced every day by every scientist and non-scientist alike as “free will” --- willfully doing something!

That there is such ability to introduce energy into the physical cosmos is implied by the self-evident phenomenon of free will, experienced by scientists and all people. This new energy cannot solely come from some energy realm that is subject to complete determinism because then there would be no human freedom to change the course of physical events from those already determined in the combined system.

Free will implies a realm of experience and energy that is *potential* as contrasted from *actual*, but which can be made actual by proximate choice. Therefore in each *temporal moment*, and for each person, there is a set of potentials, some conflicting with each other, that can be chosen by that person at that time. The new energy could be as little as an ability of mind to presently open a valve from the present-future potential realms of energy to the past- present actual energy realm.

Again, if there is free will - the ability to proximately affect the future course of events - then by implication there must be some little acknowledged form of energy available to the human mind to activate "at will" whereby neural events and physical actions take place resulting in outward effects. Free will in the cosmos also *implies* that not every finite event is determined ahead of time. Actual finite choices exist.

This energy whereby the human mind makes the proximate choice to open the valve from potential energy to actual energy must be some unrecognized energy of pure mind. This option of mind to presently open or close the "decision valve" must be an innate property of mind.

Perhaps a better description is in the various electrical circuits that mind can either close (make actual) or keep open (potential). Making neural connections is somewhat a matter of choice as we work to accomplish some task, or choose not to work (and grow) for the task. With new connections (neural circuits) come new possible actions and patterns of behavior.

5.3 The Understandable Universe. If the universe is understandable (motions have meanings to mind) then understanding must be a prior foundation of the universe because understanding always transcends what is understood. 'I think. Therefore the Universe thinks.' I understand; therefore the Universe understands. I transcend matter with choice. Therefore the Universe transcends matter with choice.

Idea-decisions are the basic units of the mind's activities. Mind understands the *meaning* (idea) of a potential act and then decides based on its *value* to individual mind. These abilities of mind are too sophisticated to plausibly "emerge" from the mechanism alone. Water does not rise higher than its source. It is not enough for determinism to 'beg the question' by saying these abilities "emerged" by pure evolution from simpler things or else they wouldn't exist now.

It has been demonstrated that mind itself can give rise to outward physical effects (acts) depending on how mind understands or misunderstands the meaning of some motion. This already indicates that mind has a way to affect the deterministic environment.

Furthermore, mind can choose actions in keeping with a spiritual ideal of "goodness". "Will is that manifestation of the human mind which enables the subjective consciousness to express itself objectively and to experience the phenomenon of aspiring to be Godlike."¹⁶ The ability of human beings to make moral choices and change the course of the material energy universe *implies* that there is a connection in the phenomenon of human mind between an inner volitional (spiritual) realm of choice-action and the outer material realm of mathematical antecedent causation.

This inner (spiritual) perception of *values* by which a mind evaluates the virtue (goodness, truth & beauty) of a choice (to actualize some potential) is contrasted from the outer mechanistic world of *deterministic effects* of all previous choices by various choosers in the eternal cosmos.

The mechanistic effects (shadows) of previous choosers limit the possible actions available to subsequent choosers. However, we can know from experience that the first Chooser chose to allow subsequent free choices, rather than decide everything ahead of time. While all effects have causes, first causes have original effects, and God, the First Cause, decided originally to include in the finite evolutionary cosmos limited free will in the minds of personal human beings, thus giving them a unique ability.

Mechanistic theories that don't include the phenomenon of choice have no application in the living cosmos. The cosmic mechanism has a living mind. A pure mechanism could never ask itself the question "Am I only a machine?"

5.4 Choice in Time and Eternity. This "ability to choose" must also be a part of the original (eternal) cosmos, which includes the deterministic past-present domain presently opening into various alternate present-future domains. In the beginning (or without beginning) there was choice ---- free will --- or else we would not personally observe (experience) it now.

If there was choice in the beginning, or eternally, then there were choosers in the beginning, or better, choosers who had no beginning.

¹⁶ *The Urantia Book*, Urantia Foundation, RR Donnelly & Sons, Chicago 1955, p1431. ([130:2.10](#))

Realities that are potential (present-future) can be actualized only during some period of time. This "time for decision" varies in duration with the situation, from a small time interval to decide whether to watch the sunset tonight, or a large period of time to decide on a scientific career. Nevertheless, at some moment in time the period begins and at a subsequent moment the period of decision is past, and the potential can no longer be made actual.

Physicists such as A. Einstein have admitted that their mathematical models of physics cannot distinguish between going backwards or forwards in time. That suggests that something is missing in those physical models, especially considering how persons so easily distinguish past and future.

5.5 Cosmic Morality. If there is no free will, then there is no reason to morally blame anyone for what they do since they have no way to do otherwise than what they do. This was the opinion held by F. Nietzsche who said that people invented "free will" in order to hold other people to blame and worthy of punishment for their misbehavior.¹⁷

Neither is it consistent to embrace both complete determinism and free will. Logically speaking, if there is any free will at all - freedom to presently alter the future course of events even in the slightest or most trivial way - then by implication there cannot be complete determinism in the cosmos.

Some people somehow imagine having complete determinism coupled with moral responsibility for one's actions, but clearly these are not *compatible*. A baby or adult as agent may be directly responsible for a broken dish but not culpable (morally responsible for a bad act). Culpability requires knowing an act is not good (or not socially acceptable) and freely doing it anyway.

So the existence of "free will" leads directly to questions of standards of morality and ethics. Without free will there is no morality because no one "could have done otherwise" than what happened. That regards agents as being mere machines.

5.6 The Source of Energy and Free Will. In any 'theory of everything' the realm of science (physics, chemistry and mathematics) must be recognized as having origins that can be traced back eternally to absolute (deterministic) laws of matter & mind energy. This is the mathematical realm of antecedent causation. It is contrasted with the volitional realm.

Although any finite physical energy event can be traced back to its cause in the energy Absolute, that fact does not imply that there is only matter energy in the cosmos. That is not the whole picture of everything. The picture of everything must include the observers (minds) as well as the material universe being observed.

The observer of the matter has the power of will, which means choices about the matter. Unlike the matter, which must behave uniformly according to physical law, the observer

¹⁷ "Free Will Belief and Reality" R. Baumeister, C. Clark & J. Luguri, Ch. 4 p65 in [1]

can decide and determine something about this material environment.

When this power of will, partial in human persons, is followed back to its cause, then to be consistent, the source of will and the source of energy must be unified in One Living and unified First Source, personalized as God.

Science is a way of learning about the material side of The First Source - the prior energy decisions and choices (physical laws) of God. Religion is a way of knowing the spiritual God himself, the Giver of Choices.

Moral laws are acted out in the material and intellectual world, but the facts of science are no more true than the moral laws of the spiritual (volitional) realm of persons: "Don't do to another what you would not want done to you" and "do onto others as you would want done to you", even "do what you imagine God would want done."

5.7 Science & Religion. Science and religion *do* have different understandings of reality. They talk about the same universe of things but religion adds meaning-values to the same scientific facts. The spiritual and moral universe cannot be divorced from the material energy universe any more than the material mind of the human being can be separated from the body of that human being.

In terms of primitive physical concepts, science seeks to tell what and how things happen; religion seeks to tell the meanings and values of those same happenings.

The method of science is logic and measurement. The method of religion is to choose according to the golden rule (or if possible, divine love) when making moral choices.

Thus there is no conflict between science and religion. Science tells us what and how. Religion tells us whether it is good and maybe how to make it better.

The agnostic scientist is correct in requiring a physical cause for all physical effects: There is always an energy side to reality along with the spiritual side, all unified in One Absolute, the First Source and Center of Infinite Reality whose personal manifestation is known as God, our spiritual Father.

The one-eyed agnostic scientist makes a mistake when he insists that determinism is all there is to infinite Reality. He could use his mind's eye to recognize the spiritual-intellectual reality that affects matter and unlike physical matter, has choices. These choices come with a sense of responsibility for the value of the effects they cause.