

Quantum Realism Part II. The Observer Reality

Chapter 7. Being the Observer

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"I am because I am"

Mystical claims about the nature of reality are often ignored by science, as they involve inner experiences that others can't see. Science isn't restricted to things, but it does judge by physical results, not inner experiences. Yet if we live in an observer-observed reality, where science studies the observed to get knowledge, why not study the observer as well? If observer and observed are part of one reality (6.3.15), why not study both?

The physical view is that the observer can never be observed because a thing can't observe itself. The other view is that the observer isn't a thing, but it can be experienced. If the observer experience is real, then to study it is to study reality, so did mystics acquire knowledge by *being the observer*?

This chapter explores the idea that science and mysticism are alternate ways to explore reality (Figure 7.1), by studying outer things and the inner observer experience, respectively. If so, both methods are based on results, whether physical or experiential, that can reveal reality. This proposal, that science and mysticism complement rather than contradict each other, is now investigated as follows:

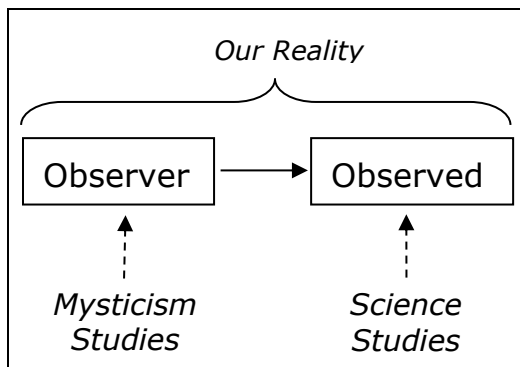


Figure 7.1 Ways to study reality

1. *Premises*. What are the premises of mysticism?
2. *Possibilities*. What possibilities arise from these premises?
3. *Practices*. What practices does it advocate?

Each part leads to the next, as premises lead to possibilities that in turn imply practices.

7.1. Premises

Many cultures have scriptures written by mystics who reported access to higher knowledge. Over time, their followers formed social organizations called religions that interpret scriptures a certain way, like the Catholic or Protestant interpretations of the Bible. Well-known scriptures and their mystic sources are:

Zoroastrianism. The *Zend-Avesta* scripture attributed to *Zoroaster*, in Persia.

Hinduism. The *Vedanta* scripture attributed to unknown *Rishis*, in India.

Judaism. The *Old Testament* scripture attributed to the *Prophets* of Israel.

Taoism. The *Tao-Te-Ching* scripture attributed to the sage *Lao-tzu*, in China.

Buddhism. The *Sutra* scriptures attributed to the *Buddha*, in India.

Christianity. The *New Testament* scripture based on *Jesus*, in Israel.

Islam. The *Koran* scripture revealed through the prophet *Mohammed*, in Arabia.

It is now proposed that these scriptures have three premises in common:

1. *Divinity*. That there is an invisible, all-powerful divinity.
2. *Dependence*. That the manifest world around us depends on this divinity to exist.
3. *Deliverance*. That human beings can survive death by means of the divinity within them.

Different religions differ greatly in their teachings, as some have one divinity, some have a trinity, some have many divinities and some don't refer to divinity at all. Some say that divinity created a perfect world, while others say that perfection is yet to come. Some say we go to heaven or hell after death, while others reincarnate us up or down the evolutionary scale. Whatever the differences, and they run deep, modern materialism denies all such views by arguing for:

1. *Physical causes*. Every physical event has a physical cause, so no unseen divinity is needed.
2. *Physical particles*. Everything is made of fundamental particles, that depend on nothing else to exist.
3. *Physical mortality*. Every physical system winds down, so there is no deliverance from mortality.

Religion and materialism are thus currently at loggerheads, based on their premises about the nature of reality.

7.1.1. Divinity

Since time immemorial, people have died for divinities they didn't understand, but in general, the divinity premise is that an immaterial supreme reality exists beyond the manifest world. Over five thousand years ago, in Persia, Zoroastrian scriptures called that divinity *Ahura Mazda*:

“Verily I beheld Thee, O Mazda Ahura, to be the Supreme Benevolent Providence, For I beheld Thee as the primeval source of creation.” (Yasna 43, v5).

Ahura Mazda not only created and sustained all things, but was also benevolent, for the good of all. At about the same time, or later, seers in India called their supreme divinity *Brahman*:

“The wise realize everywhere that (Brahman) which cannot be perceived and grasped; which is without source, features, eyes and ears; which has neither hands nor feet; which is eternal, multi-formed, all-pervasive, subtle and undiminishing; and which is the source of all.” (Mundaka Upanishad, I.i.6).

Brahman, like Ahura Mazda, was the non-physical source of all things everywhere. The equally ancient Old Testament divinity, *Yahweh*, is also alone the invisible maker of all visible things:

*“Thus sayeth the Lord (Yahweh), thy redeemer, and he that formed thee from the womb, I **am** the Lord that maketh all **things**; that stretcheth forth the heavens alone; that spreadeth abroad the earth by myself.”* (Isaiah, 44.24).

This divinity says *“I am the Lord”* as a person would so the New Testament adds that the invisible word of a personal *God* made all that appears:

“Through faith, we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear.” (Hebrews, 11.3)

Meanwhile in China, the sage Lao-Tse called the invisible essence behind everything the *Tao*:

“There is a primal essence that is all-inclusive and undifferentiated and which existed before there was any appearance of heaven and earth. How tranquil and empty it is! ... Yet this tranquil emptiness becomes the mother of all. Who knows its name? I can only characterize it and call it Tao.” (Tao, 25).

The Tao isn't a personal God, yet its "emptiness" is the mother of heaven and earth. Buddhism began in India, then spread to China as Chan Buddhism, then to Japan as Zen Buddhism. Some call it a godless religion, but the Buddha was clear that a divinity existed:

"There is an Unborn, Uncreated, Unformed. If there were not this Unborn, this Unoriginated, this Uncreated, this Unformed, escape from the world of the born, the originated, the created, the formed, would not be possible. But since there is an Unborn, Unoriginated, Uncreated, Unformed, therefore is escape possible from the world of the born, the originated, the created, the formed." (The Word of the Buddha, p32).

He called this primal essence *Tathata* so the Buddha is a *Tathagata*, meaning one who has realized Tathata. We might translate this as God-realization but perhaps, given the many gods of Hinduism, he tried to avoid that. Buddhism doesn't deny a supreme divinity, just the need to worship it, by the following logic:

"It is as if a man were pierced by a poisoned arrow, and his friends, companions, or near relations called in a surgeon, but that man should say: I will not have this arrow pulled out until I know, who the man is that has wounded me: whether he is a noble, a prince, a citizen, or a servant; or: whether he is tall, or short, or of medium height, Verily, such a man would die, ere he could adequately learn all this. Therefore, the man, who seeks his own welfare, should pull out this arrow – this arrow of lamentation, pain, and sorrow." (The Word of the Buddha, p35).

Mohammed wasn't a king like the Buddha, but an illiterate fifty-year old Arab. He heard a voice say "Read!" which he ignored, but it repeated "Read!" then gave the first verse of the Koran, said to be from the angel Gabriel:

"Read! In the name of thy Lord who creates, who created man from a clot. Read! And thy Lord is the Most Bounteous, who teaches by the pen, teaches man that which he knew not." (Koran, 96).

The Koran also makes clear that there is only one divinity, *Allah*:

"Say! He is Allah, the One! Allah, the eternally besought of all! He begetteth not nor is begotten. And there is none comparable unto Him." (Koran, 112).

Different scriptures have different approaches but they agree that an all-powerful divinity exists behind the physical world, whether it is called Ahura Mazda, Brahman, Yahweh, God, Tao, Tathata or Allah. All these scriptures recognize a non-physical supreme power, which is the divinity premise.

7.1.2. Evaluating divinity

At first glance, an invisible divinity seems a convenient way to explain the unexplained, like garden fairies that steal spoons, but quantum theory also has an invisible cause, namely quantum waves. How can science dismiss the divinity premise out of hand when its own best theory also uses the unseen to explain physical effects? It is illogical to accept one theory but reject another for saying the same thing.

Recognizing this, the founders of quantum theory made their invisible cause imaginary, or non-existent. This let them calculate results but deny invisible causes, like eating apples while denying the existence of apple trees. They invented a theory of invisible waves then disowned it, so the most successful theory in physics is, according to physicists at least, a theory about nothing. Then physics became a hollow science, empty of meaning ([1.1.2](#)).

In contrast, scriptures at least propose a cause that exists, even though it transcends physicality:

- When asked if he was King of the Jews, Jesus replied: *"My kingdom is not of this world."* (John, 18.36).

- The Buddha said: “*Verily there is a realm where there is neither the solid nor the fluid, neither heat nor motion, neither this world nor any other world, neither sun nor moon.*” (The Word of the Buddha, p32).
- The Vedas say: “*His form does not exist within the range of vision; nobody sees Him with the eye.*” (Katha Upanishad, II.iii.9).
- Lao-Tse says: “*There is one thing in the universe that we cannot see with our eyes, nor hear with our ears, nor grasp by our perceiving mind ... yet may be realized by meditation. When we look up, we cannot see its brightness, when we look down, we cannot perceive its existence. This mystery is always present but there is no adequate name for it.*” (Tao, 14).

In scientific terms, the alternatives are that physical causes explain everything, or that they don't. These are mutually exclusive, as if physical causes explain everything, then non-physical causes aren't needed, or if they don't, then they are. Given two mutually exclusive hypotheses, science should evaluate them based on evidence, not prefer one over the other based on tradition.

If all causes are physical, why can't physical causes explain effects that quantum causes can? For example:

- A photon of light always finds the fastest path to any destination, which is physically impossible ([3.6.3](#)).
- Light waves vibrate at right angles to space ([6.3.6](#)), which physical waves can't do ([2.2.9](#)).
- Light in delayed-choice experiments chooses a path after arrives, which is physically impossible ([3.8.3](#)).
- Light travels like a wave and arrives like a particle, which a physical wave can't do ([3.1.2](#)).
- Non-physical detection occurs, yet it is physically impossible ([3.8.4](#)).

Physical causes can't explain these effects and probably never will, so the hypothesis that they explain all physical events, even in theory, must be rejected because it can't explain how light travels or vibrates, delayed-choice experiments, particle-wave duality, and non-physical detection. The claim that the physical universe is causally complete is a myth with no basis in evidence. Those who deny that quantum waves exist must explain their effects, which they haven't, so it is reasonable to accept that they do. Nor is it unexpected that a universe born fourteen billion years ago isn't all there is, as that it made itself from nothing is ridiculous.

Quantum reality not only explains all physical events, it also has divine properties, like:

1. *Tirelessness*. According to quantum theory, quantum waves never stop, as physical events just restart them, and likewise the divinity of scriptures never tires, stops, or slows down, as physical things do:
 - “*Brahman is birthless, sleepless, dreamless, nameless, formless, ever-effulgent, everything, and a knower.*” (Mandukya Upanishad, 3.36)
 - “*Tao is invisible but permeates everywhere; no matter how one uses it or how much, it is never exhausted.*” (Tao, 4).
 - “*Hast though not heard, that the everlasting God, the Lord, the creator of the ends of the earth, fainteth not, neither is he weary?*” (Isaiah, 40.28).

According to scripture, divinity doesn't tire, sleep or fade, just as quantum reality is always active. Both predict that if either stopped, our universe of events would have to restart from the beginning.

2. *Encompassing*. Based on quantum theory, quantum waves vibrate in a dimension outside space ([6.3.16](#)), and divinity is likewise said to surround all things everywhere:

- “*Whither shall I go from thy spirit? Or whither shall I flee from thy presence? If I ascend up into heaven, thou art there; if I make my bed in hell, behold, thou art there.*” (Psalms, 139.7)
- “*Lo! Is not He (Allah) surrounding all things?*” (Koran, 91.54).
- “*For in him we live, and move, and have our being;*” (The Acts, 17.28).

According to scripture, divinity surrounds physical reality everywhere, just as quantum reality does. Both generate physical events locally, at specific points, but aren't contained by our space at all.

3. *Invisible*. According to quantum theory, quantum waves can't be observed, and scriptures also claim that divinity can't be seen:

- “*Thou canst not see my face: for there shall no man see me, and live.*” (Exodus, 33.20).
- “*Vision comprehends Him not, but He comprehends (all) vision.*” (Koran, VI.104).
- “*By higher knowledge the wise realize that Brahman can't be perceived or grasped; is without source, features, eyes or ears; has neither hands nor feet; is eternal, multi-formed, all-pervasive, subtle and undiminishing; and is the source of all.*” (Mundaka, I.i.6).

According to scripture, divinity can't be observed and neither can quantum reality because they cause observation itself.

4. *Eternal*. According to quantum theory: “*In the beginning was the wave function.*” (Zeh, 2004), p19, so what began our universe will eventually reabsorb it ([5.6.6](#)). Quantum reality is eternal just as divinity is:

- “*... there has always been an eternally abiding Reality.*” (Lankavatara, p348).
- “*But thou, O Lord, shall endure forever.*” (Psalms, 102.12).
- “*In the beginning this was but the absolute Self (Brahman) alone. There was nothing else whatsoever that winked (was active). He thought: Let me create worlds.*” (Aitereya Upanishad, I.i.1).
- “*For I am Alpha and Omega, the beginning and the end, the first and the last.*” (Revelations, 22.13).
- “*He is the First and the Last, the Outward and the Inward; He is the Knower of everything* (Sura [57:3](#))”.

According to scripture, divinity remains as physical events come and go just as quantum reality does, so both existed before our universe began and will remain when it is gone.

These similarities suggest that the scriptures of old and quantum equations of today describe the same thing, in personal and abstract ways, so the divinity premise equates to the statement that quantum reality exists. Obviously, physics doesn't worship quantum reality but Buddhism doesn't worship its divine reality either. It's hard to find a feature of divinity that quantum reality doesn't support, whether it is power, mystery or universality. If no distinction can be drawn, the evidence for quantum reality given in Chapters 1-3 gives the divinity premise an operational base. How then does the next premise of scriptures fair?

7.1.3. Dependence

The dependence premise is that the world we see depends on divinity to exist. In the Zend-Avesta, this dependence began when Ahura-Mazda filled the heavens with light:

“He who in the beginning thus thought: Let the glorious heavens be clothed in light.” (Yasna 31.7).

The Old Testament God, also filled the initial void with light:

“In the beginning, God created the heaven and the earth. And the earth was without form and void, and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters. And God said: Let there be light; and there was light. (Genesis, 1.1).

In the New Testament, the “Word” (vibration) of God also made everything:

“In the beginning was the Word, and the Word was with God, and the Word was God ... All things were made by him, and without him was not anything made that was made.” (John, 1, 1-3).

Likewise in the Vedas, the unmanifested Brahman created the manifest world:

“In the beginning all this was but the unmanifested (Brahman). From that emerged the manifested.” (Taittiriya Upanishad, II.vii.1).

In China, the hidden Tao created our universe in order for it to evolve:

“The source of the universe (Tao) is hidden in non-existence; existence is only the mother of its evolution.” (Tao, 1).

Even Buddhism recognizes that the physical world depends on a primal essence:

“If we examine the origin of anything in all the universe, we find it is but a manifestation of some primal essence.” (Surangama, p126).

This essence isn't a god or gods but the unseen “suchness” that is the only reality:

“This universal, undifferentiated, inscrutable ‘Suchness’ is the only reality but it is variously characterized as Truth, Mind-Essence, Transcendental Intelligence, Noble Wisdom, etc.” (Lankavatara, p299).

Finally, the Koran also confirms that:

“Unto Him (Allah) belongeth whatsoever is in the heavens and whatsoever is in the earth, and whatsoever is between them, and whatsoever is beneath the sod.” (Koran 20.6).

Different scriptures take different approaches but all agree that the manifest world depends on an unmanifest divinity. Our universe doesn't exist by itself because it was made, manifested, emerged, created, or is owned by divinity. There is agreement that physical reality requires divine support, which is the dependence principle.

7.1.4. Evaluating dependence

By the divinity premise, an all-powerful divinity exists, and by the dependence premise, the manifest world depends on it, so the second premise essentially applies the first to the physical world:

- *“Great Tao is all-pervading. It is available everywhere, on the right hand and on the left. Everything is dependent upon it for existence and it never fails them. It does all this but it claims no ownership.”* (Tao, 34).
- The biblical God is always: *“... upholding all things by the word of his power”* (Hebrews, 1.3).

- The Koran says that “*Every day He (Allah) exerciseth (universal) power.*” (Koran, 60.29).
- The Vedic divinity is also the source of all: “*As from a fire, fully ablaze, fly off sparks, in their thousands, that are akin to the fire, even so, O good-looking one, from the imperishable Brahman originate many different creatures that return in the end to the same source.*” (Mundaka Upanishad, II, p113).

In scientific terms, the alternatives are that the physical world exists by itself alone or that it needs something else to occur. This isn't just that *some* physical events have a non-physical cause, but that they *all* do. These alternatives are mutually exclusive, as if physical reality exists by itself alone, nothing else is needed, and if it needs something else to exist, it doesn't exist by itself alone.

If the physical world alone exists, physical causes should explain everything, but even today they still can't explain the following universal effects:

- *Location*. Where a physical event occurs without regard to physical history, so exactly where a photon of light will hit a screen isn't predicted by physical causes ([3.6.1](#)).
- *Form*. Molecules can transform in physically impossible ways, so the form observed isn't predicted by physical causes ([3.8.1](#)).
- *Movement*. When electrons tunnel past physically impassable barriers, their movement can't be explained by any physical path ([5.3.1](#)).
- *Adjustment*. The physical adjustments that instantly conserve properties between entangled entities at any distance is a faster-than-light effect that physical causes can't explain ([3.8.5](#)).

In contrast, quantum theory explains these effects as follows:

- The location of a physical event is chosen by quantum collapse, which isn't a physical cause.
- The form a physical event takes depends on quantum superpositions that can be physically incompatible, so one form can switch to another even if no physical means is possible.
- The movement of matter depends on quantum waves that ignore physical barriers, to allow quantum tunneling, movement that no physical path allows.
- Physical adjustments after quantum entanglement occur instantly, faster than any physical cause.

These effects, verified by experiment, apply to every physical event, whose location, form, movement, and adjustments are defined by quantum causes that current physics says don't exist. The hypothesis that physical causes can in theory explain any physical effect is thus rejected because it can't explain quantum collapse, superposition, tunneling or entanglement effects that are universal. That physical causes fully define the physical future is seen to be a myth with no basis in evidence. Those who deny that quantum events cause physical events must explain the above, which they haven't, leaving no reason not to accept that they do. Nor is it unexpected that the physical events predicted by wave equations are caused by the quantum waves they describe.

By the first premise, the all-powerful divinity is invisible, and by the second, it made the visible world, but how can the invisible, that initially existed alone, create the visible from itself? And even if it did, an all-powerful divinity that makes what isn't itself is no longer so. What is everything can't make something not itself and still be everything, just as an absolute ruler who gives a kingdom to his son no longer rules absolutely. The scriptural premises seem to contradict each other!

It became apparent, to Asian mystics at least, that either divinity is real or the physical world is, but not both. For a world that exists by itself doesn't need divine support, and a divinity that creates what isn't itself is no longer all-powerful. The divinity premise, that a supreme divinity exists, and the dependence

premise, that our universe depends on it, together imply that the visible world doesn't exist by itself, and scriptures agree:

“Just as a dream and magic are seen to be unreal, or as a city in the sky, so also is this whole universe known to be unreal from the Upanishads by the wise.” (Mandukya Upanishad, II.31).

The Vedic Brahman thus projects the world as *Maya*, literally “*ya*” (that which) “*ma*” (is not):

“It is beyond question that the phenomenal world couldn't arise if it had any real existence. All this duality is nothing but Maya. It is non-duality in reality.” (Mandukya Upanishad, I.16).

Long before western dualism, the Vedas absolutely deny it, because a supreme divinity can't create a real world and still be supreme, so one can have physical reality or divine reality, but not both. Buddhism reached essentially the same conclusion based on the nature of the physical world:

“The disciple must get in the habit of looking at things truthfully. He must recognize the fact that the world has no self-nature, that it is unborn, like a passing cloud, like an imaginary wheel made by a revolving flame, like a castle in the sky, like the moon reflected the ocean, like a vision, a mirage, a dream.” (Lankavatara, p320).

Or as we might say today, like a video game. This lack of self-nature is the doctrine of dependent origination, that everything physical has causes and conditions, for as Buddha's disciple Sariputra recalls:

“I met the brothers Kasyapa who kindly explained to me the principle of the Lord's teaching – that everything arises from causes and conditions (dependent origination) and therefore was empty and transient - and I realized the infinitude of Pure Mind Essence.” (Surangama, p234).

By logic, a system whose every event depends on other events is irretrievably circular, so it can't cause itself. The world must therefore be empty of substance and caused by something else. Not all scriptures explicitly state the physical world is illusory, but all declare that it depends on divinity to exist:

“The God who made the world and everything in it ... is not served by human hands, as if he needed anything. Rather, he himself gives everyone life and breath and everything else” (Acts, 17.24-5).

The Koran agrees that the world is illusory:

“The life of this world is but comfort of illusion.” (Koran, 3.185).

A divinity that causes all manifestations must therefore remain immanent to constantly sustain it:

“Man's work merely consists of shaping a pre-existing mass. ... Hence, once he finishes shaping his artifact he can leave it to its own devices, secure in the knowledge that it does not need him anymore. ... (But) Before heaven and earth were created, they simply did not exist. ... In such a situation, the creative force which brings them into existence must constantly recreate them in order for them to exist. Were this force to withdraw, for even the briefest moment, creation would revert to nothingness.” ([The Tanya](#), Chapter 2).

The second premise of scriptures equates to the idea that the physical world is a generated virtual reality. It's hard to find an aspect of online games that isn't matched by scriptural descriptions of the world as an illusion, whether it is its transience, impermanence, or ultimate pointlessness. If no distinction can be drawn, the evidence in Chapters 4-5 supports the dependence premise by specifying how divinity generates the world. What then about the third premise, that human beings can survive death?

7.1.5. Deliverance

The deliverance premise is that human beings can become immortal by means of the divinity within. In the Zend-Avesta, Ahura Mazda bestows this deliverance to those who have attained to the ‘*best mind*’:

“May He (Ahura Mazda) in sovereign authority and through the spirit of right-mindedness, Bestow upon us His two great blessings: perfect integrity here and immortality hereafter.” (Yasna 47.1)

Mazda’s blessings are unity of being in this life, followed by life after death. The Vedas also state that those who realize Brahman (God) become immortal:

“All this universe, that there is, emerges and moves because there is the supreme Brahman that is a great terror like an uplifted thunderbolt. Those who know this become immortal.” (Katha Upanishad, II.ii.2).

This is attributed to the observer becoming Brahman in samadhi:

“When the mind does not become lost nor is scattered, when it is motionless and does not appear in the form of objects, then it becomes Brahman.” (Mandukya Upanishad, III.46).

Taoism proposes similarly that one can return to the original state of Taohood:

“... when one is able to concentrate his mind to the extreme of emptiness and is able to hold it there in supreme tranquillity, then his spirit is unified with the spirit of the universe and it has returned to its original state from which the mind and all things in the universe have emerged as appearance... To have attained Taohood is to become unified with eternity. One can never die even with the death of the body” (Tao, 16).

Buddhism calls this state nirvana, the “*eternal-unthinkable of the Tathagatas*”:

“The eternal-unthinkable of the Tathagatas is the ‘suchness’ of Noble Wisdom realized within themselves. It is both eternal and beyond thought ... Being classed under the same head as space, cessation, Nirvana, it is eternal.” (Lankavatara, p347).

Western religions, perhaps being more practical, see deliverance as a heavenly place not a state of mind, but agree that divinity makes it possible. The Old Testament is clear that this deliverance is beyond death:

“For thou hast delivered my soul from death, mine eyes from tears and my feet from falling” (Psalms 116.8).

“Yea, though I walk through the valley of the shadow of death, I will fear no evil: for thou art with me; thy rod and thy staff they comfort me.” (Psalms, 23.4).

This deliverance is “*walking with God*”, as Abraham and Enoch did:

“And Enoch walked with God: and he was not; for God took him.” (Genesis, 5.24).

The New Testament clarifies that this means everlasting life:

“Verily, verily I say unto you, he that heareth my word, and believeth on him that sent me, hath everlasting life ...” (John, 5.24).

Therefore, it advises:

“Lay not up for yourselves treasures on earth where moth and rust corrupt... But lay up for yourselves treasures in heaven where neither moth nor rust corrupt... For where your treasure is, there will your heart be also.” (Matthew, 6,19-21).

The Koran is equally clear that those who believe and act rightly will live forever in paradise:

“For those who believe and do right, we charge no soul beyond its capacity. These are the companions of paradise; they will abide therein forever.” (Koran, 7.42).

Different scriptures take different approaches but all propose that we can live forever by divinity, whether by the Best Mind, Samadhi, Taohood, Nirvana, being with God, or in heaven or paradise. These scriptures all agree that human beings can potentially survive death by divine means, which is the deliverance principle.

7.1.6. Evaluating deliverance

An all-powerful divinity must also exist inside us, so the third premise essentially applies the first premise to humanity by proposing that we have a back-door to immortality. That we can survive death is perhaps the most outrageous premise, as it seems to deny that everything eventually decays and dies, yet scriptures don't deny death. They merely claim that it needn't be the end of existence. The last words of the Buddha were "*Decay is inherent in all compound things. Seek wisdom and work out your salvation with diligence.*" The Koran confirms that "*Every soul will taste of death.*" (Koran, 30. 57), but if the body dies, what carries on after it?

In the Zend-Avesta, eternal bliss is found in the Kingdom of the Good Mind, which isn't physical:

"Because of the goodness in his thoughts, in his words, in his acts, unto him Ahura-Mazda shall grant the Kingdom of the Good Mind" (Yasna 51, 21).

In the Old Testament, the "*dust*" of the body returns to the earth but the spirit returns to the eternal God:

"Then shall the dust return to the earth as it was: and the spirit shall return unto God who gave it." (Ecclesiastes, 12.7).

The logic is that when the physical body dies, the non-physical spirit can carry on. Hindu scriptures concur not only that human beings can defeat death, but that it can occur while alive:

"When all the knots of the heart are destroyed, even while a man is alive, then a mortal becomes immortal. This much alone is the instruction of all the Upanishads." (Katha Upanishad, 15).

In Taoism, one becomes immortal by returning to the original state of the eternal Tao:

"All things are in the process of appearing and disappearing ... The original state is eternal. To understand this eternity of emptiness is enlightenment ... To have attained Taohood is to be unified with eternity. One can never die even with the decay of his body." (Tao, 16).

The Buddha gave the original state many names, including truth-essence, suchness, essence of mind, noble wisdom, the eternal-unthinkable and transcendental intelligence, perhaps to avoid deifying it:

"Transcendental Intelligence rising with the attainment of enlightenment is of a permanent nature. This Truth-Essence, which is discoverable in the enlightenment of all those who are enlightened, is realizable as the regulative and sustainable principle of Reality, which forever abides ... The eternal-unthinkable of the Tathagatas is the 'suchness' of Noble Wisdom realized within themselves. It is both eternal and beyond thought." (Lankavatara, p347).

The Bible also recognizes a "well" within oneself that leads to everlasting life:

"But whoever drinks of the water that I shall give him shall never thirst; but the water that I shall give him shall be in him a well of water springing up into everlasting life." (John, 4.14).

Chinese scriptures said much the same centuries earlier:

"As rivers have their source in some far-off fountain, so the human spirit has its source. To find his fountain of spirit is to learn the secret of heaven and earth. In this fountain of mystery, spirit is eternally present in endless supply." (Tao, 6).

The Koran also attributes immortality to divinity but not the physical world:

“That which ye have wasteth away, but that which Allah hath remaineth.” (Koran, 41.96).

The common theme is that the divinity within us can survive death because it isn't physical. Eastern mystics compared it to space, that appears empty but contains all things. In the west God 'breathed' a soul into the 'dust' of the body (Genesis, 2.7). In both cases, the divinity within has no material substance, so Buddhism and Taoism called it the emptiness, and western religions equate it to God's 'breath'.

The modern candidate for this role is consciousness, here defined as the ability to observe. If it is physical, it will end when the body does, but if it isn't, it may survive. The question of whether anything can survive death then depends on whether human consciousness is physical or not.

In scientific terms, either observation is a physical event or it isn't. These alternatives are mutually exclusive, as if observation is a physical event, nothing else is needed, while if it isn't, then something else is. It is a simple choice, but physicists repeatedly struggle to explain observation in physical terms, though they accept it occurs:

- We experience observation but no physical mechanism can explain how matter that is busy interacting with other matter can also observe its interactions (Reason, 2018) ([6.3.14](#)).
- Cell activities like photosynthesis, where bacteria observe photons, require millions of molecules to act in a unified way that is so unlikely by the laws of physics as to be physically impossible ([6.3.1](#)).
- How distant areas of the brain bind their activities into a single conscious experience can't be explained by information integration based on a central processing area ([6.1.6](#)).

In contrast, quantum reality explains these effects as follows:

- Observation in general occurs when quantum waves interact in a physical event, as restarting entangled at the same point lets the entities that generate those waves observe each other.
- Tubulins in cells synchronize receptor molecules to entangle them so they observe in a unified way.
- Brain synchronies entangle nerves into the global observation that we call consciousness ([6.3.7](#)).

The theory that observation is a physical event is thus rejected because it can't explain how matter, cells, or brains observe. It follows that the idea that observation is physical is a myth with no evidential basis. Those who deny that observation is a quantum event must otherwise explain it, which they haven't done, so there is no reason not to accept that it is. Nor is it unexpected that physical reality is observed from outside itself, because it is an act in itself.

Observation occurs when quantum waves collapse in physical events, hence to observe an entity one must physically interact with it. Attributing observation to quantum mechanics is better than the panpsychism that matter observes by a method unknown to physics (Strawson, 2008).

Evolution then produced larger entanglements that observed more, until our brain waves created an "I" experience. Over millions of years, humans evolved a self because it helped survival, not because it was real. Even today, identity issues, not knowing who we are, affects the will to live. Yet a consciousness that exists for an instant then is laboriously regenerated by a brain cascade is hardly immortality. The mind that western thinkers focus on is nothing if not transitory:

“It would be better (for one) ... to regard his body ... as his self rather than the mind. For it is evident that this body may last for a year, ... or even a hundred years and more; but that which is called thought, or mind, or mind-consciousness, is continuously, during day and night, arising as one thing and passing away as another thing” (The Word of the Buddha, p39).

If consciousness isn't physical, it doesn't inherently decay, but it does grow and shrink. Consciousness changes by day and night, as nerves join or leave the synchrony, so it isn't constant. In diseases like Alzheimer's, as the brain fails so does consciousness, because the ability to observe sits atop a great evolution that death unravels. If sleep and disease diminish consciousness, how can it survive death?

The droplets of consciousness that coalesce into an observer could dissolve at death, just as the body decays into atoms. Therefore, consciousness could survive death, as scriptures say, or it could be recycled back into the quantum bulk, to be re-used elsewhere.

The deliverance premise isn't that immortality is likely but that it is possible, because: "... *many are called but few are chosen.*" (Matthew, 22.14). Nor is it that brain functions like thought and memory survive, which seems unlikely, but whether the observing I does. Can the observer transcend physicality as scriptures claim? To investigate further needs a method, so the next section considers how science can apply to the observer experience.

7.1.7. Experiential science

Experiential science arises because experiences are observations and science studies observations. The aim of science is to reduce bias, our tendency to see what we expect instead of what is actually there, so it is a method of observing not an edifice of facts:

"Science is not about building a body of known 'facts'. It is a method for asking awkward questions and subjecting them to a reality-check, thus avoiding the human tendency to believe whatever makes us feel good." (Pratchett et al., 1999) p90.

The scientific method works by requiring observations to be valid and reliable:

- a. **Valid.** An observation is valid if it represents what it says it does, so to see a rope as a snake is invalid. Hallucinations, dreams, and magic observations aren't scientific facts because they are invalid.
- b. **Reliable.** An observation is reliable if others can confirm it, so a bird on my head that others don't see isn't a reliable fact. Ghosts, fairies, and mermaids aren't scientific facts because they are unreliable.

An observation is a scientific fact if it is valid and reliable. That the sun moves across the sky is reliable but invalid because the sun isn't really moving, we are. We see the sun moving because the earth's spin is moving us. Conversely, ESP (extra-sensory perception) isn't scientific because valid experiments can't reliably repeat it. Both validity and reliability are needed for an observation to be a scientific fact.

This also applies to experiences, although some take the extreme view that only physical events are scientific facts, so violent behavior is a fact but the anger experience that others can't see isn't. It sounds good in theory but in practice, science often uses observations that aren't physical events at all:

1. *Money* isn't a physical fact because it isn't the coins and notes we see but the value we attach to them.
2. *Software* isn't a physical fact because observing a computer reveals only physical hardware.
3. *Perceptions* like red aren't physical facts because the light spectrum has no red section.
4. *Language* isn't a physical fact because a physical sound or word can have any meaning given to it.
5. *Number* isn't a physical fact because no-one has ever seen a "three".

What use is business science without money, computer science without software, or psychology without perceptions? A science that accepted only physical facts would be small indeed! Universities study

politics, mathematics, languages, societies, and cultures because science is based on observation not physical events. Scientific facts can be classified by the type of observation made (Whitworth, 2009), as follows:

1. *Physical*. Facts based on observing physical events, measured by hardware instruments.
2. *Informational*. Facts based on observing informational events, measured by software context.
3. *Experiential*. Facts based on observing experiential events, measured by human brains.
4. *Social*. Facts based on observing social events, measured by group agreement.

These levels describe how we observe not what we observe, so engineers see a phone as hardware, computer scientists see it as software, user analysts see user experiences like usability, and socio-technologists see social results like group norms. Note that hardware doesn't cause software because both

Event Level	Scientific Discipline
<i>Social</i>	Business, Law, Sociology, Anthropology, History, Economics, Politics
<i>Experiential</i>	Psychology, Mathematics, Philosophy, Music, Health, Education, Languages
<i>Informational</i>	Computer Science, Genetics, Linguistics, Accounting, Information Systems
<i>Physical</i>	Physics, Chemistry, Astronomy, Geology, Biology, Engineering, Geography
<i>Quantum</i>	Quantum Theory

are just ways of observing the same reality. Observation levels change the observer not the observed.

These levels cumulate because information is how we view physical events, experiences are how we view brain information, and societies are how we view group agreement. If physical events are how we observe quantum events, every discipline of science is just a [reality view](#) (Table 7.1), including physics, so the rigor of a discipline depends on how it observes, not what it observes. This doesn't

Table 7.1 Scientific disciplines by subject event level

deny physical facts but just adds informational, experiential, and social facts to them. The breadth of science is based on observation not materialism.

Experiences are intrinsically valid to the experiencer. My pain is a certain fact for me, so if you report a similar pain, we agree it is a fact. Headaches are a fact of medical science because people report them not because we know their physical cause. In science, causality follows validity and reliability, so phantom pains in limbs that aren't physically there are accepted. In general, any experience that others can repeat as described is accepted, even synesthesia, the hearing of colors or seeing of sounds.

Yet if experiences can be facts, can't people just make them up? They can but they can make up physical data just as easily (Bohannon, 2015). Faking isn't new to science, so the answer isn't to reject experiences but to apply validity and reliability to them. Social factors like reputation reduce physical and experiential fakes. In practice, some people lie but most don't and those who do are revealed by comparing reports. A science that applies validity and reliability to experiences will succeed by [productivity](#) of new facts, not by making them physical.

If science can study experiences like pain, why not consciousness, the observer experience? That observation occurs is valid by direct experience and reliable by common report so science can and does study it. Yet what we experience isn't always real. An experience is imaginary if it refers to what doesn't occur, and isn't if it refers to what does. In hallucinations and dreams we experience events that didn't occur, so is consciousness the same?

7.1.8. Is consciousness imaginary?

Consciousness, the ability to observe, includes an awareness that observation occurs. It describes not what we observe but that we observe, in a subjective experience that others confirm. In contrast, there is no evidence that a camera experiences the photos it takes. It is just a set of atoms, with no subject to see what it makes. If our brain is a biological camera, it should be the same, so is the observation experience imaginary?

I think I observe, but am I imagining an event that doesn't occur? In scientific terms, either observation is a real event, where a subject observes an object, or it isn't. Whether consciousness is imaginary or not then depends on whether the act of observation occurs.

Current neuroscience doesn't agree that the brain makes one observation because it has no physical center to do that. For example, reading this sentence involves brain areas of vision, language and thought that have no central control. Without a control center, the text, grammar, and meaning of a sentence can't form one observation, but it happens. I observe the appearance, syntax, and semantics of a sentence in parallel, not sequentially, and can focus attention on any aspect at will. The brain is like a city with an aerial observer who sees the whole yet can jump to any location detail, regardless of the road links! A brain with no control center shouldn't be able to do this.

And to conclude that we don't observe at all is also a problem, because what then is science based on? How do we know anything at all if observation isn't real? If the act of observing is imaginary, then so are all our facts. Rejecting observation denies both our experience of it and science, including quantum and relativity theories, so most scientists accept that we do observe, but if so, to what event does it refer¹?

To observe as we do is to experience the state of something else, not just process information as cameras do. We don't just register red light frequencies; we see redness itself. A subject observes and knows that it does so, but physical things can't both act on others and experience them, so that they observe is inherently illogical.

Physical events can't explain observation but quantum theory can, as it attributes it to quantum collapse. Observation is said to occur when quantum waves collapse in a physical event that restarts them at the same point, to become one. Being the same entity lets them experience each other, and they retain that knowledge when they disentangle, and that is observation. Note that what observes isn't the waves that spread, but the entities that generate and restart them (6.3.16).

Physical realism makes observation imaginary but quantum realism makes it real. It lets our brains entangle millions of nerves into an entity that can observe and choose for the whole, with obvious evolutionary benefits. And if observation is a real event, mystics meditating on it are studying reality, so their honest reports:

"...should claim from us the same attention we give to other explorers of countries in which we are not competent to adventure ourselves; for mystics are the pioneers of the spiritual world..."
(Underhill, 1961) p4.

If the spiritual world is an experience of quantum reality (7.1.1), statements about it should satisfy quantum theory. For example, Hindu scriptures say that the divinity within has no parts, nor is it tainted by physical events:

"In the supreme bright sheath is Brahman, free from taints and without parts." (Mundaka Upanishad, II.ii.9).

¹ Facing this problem, some materialists suggest that observation is an unknown property of matter (Strawson, 2008), but even this can't explain how the observations of atoms became human observations.

If Brahman (the divinity within) is a quantum entanglement made by the brain, then it indeed has no parts because quantum theory describes entanglement as a genuine unification, with no parts at all. And if this observer exists outside physical space, it is beyond all physical taints. This scripture is then valid in the sense that it doesn't contradict quantum theory, and it is reliable if other reports repeat it. In contrast, claims that divinity enables powers like flying aren't valid because no evidence suggests that quantum entities can nullify gravity. That we observe by quantum means isn't a carte blanche for any claim because quantum reality must follow quantum laws.

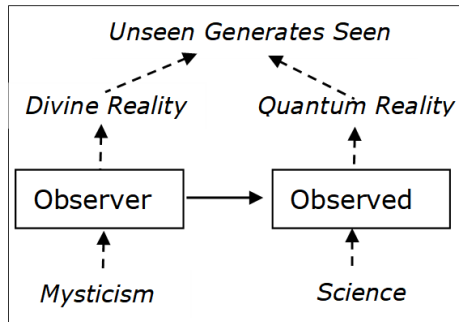


Figure 7.2 Results of studying reality

Quantum realism concludes that quantum reality causes matter and the ability to observe it, and scriptures say the same of divinity. Current science calls both imaginary but the evidence disagrees, as quantum events explain matter and observation better than physical events (Chapters 1-6). In our observer-observed reality, the study of either suggests that the unseen causes the seen (Figure 7.2). Mysticism and science both tend to conclude that the unmanifest became manifest by physical events. And if observation is an event that occurs, albeit in the quantum realm, there must be beings that observe. Regardless of what is observed, observation needs a being to do so.

In this view, consciousness is the ability to observe and being is that which observes. There is being and manifestation, one real and the other not. Being, the entity that observes and chooses, is real in the sense that it exists both before and after physical events. In contrast, manifestation, the appearance to us of things, is unreal in the sense that they don't exist before or after physical events. Beings then manifest quantum waves that interact in physical events that let them observe each other.

That being isn't physical supports its survival but that it needs brain waves that end at death doesn't. Either way, consciousness is fundamental to nature because every physical event is a mutual observation. If everything observes on some scale, consciousness is all around us, just as light is. The eyes don't create light, they just focus it, and likewise the brain doesn't create consciousness, it just concentrates it. The brain is like a lens that condenses light, where:

"Allah (God) is the light of the heavens and the earth." (Koran, 4.35).

If our eyes fail, there isn't less light in the universe, and equally if our brains fail, the consciousness of the universe isn't reduced. Being was given to us, just as light was, so the question isn't whether the primal reality that made our universe billions of years ago will survive our death, but whether what our brain made of it can. The next sections examine this and other questions raised by scriptures and their mystical traditions, given that consciousness is part of the natural world, and under the right circumstances, it can coalesce into beings like us.