They exist as they are perceived

The end is the beginning

THE EVIDENCE
OF THINGS
NOT SEEN

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1. Most Advanced?

Should we moderns be proud of our achievements? When we compare our technology with that of our ancestors, we see how far we have come. Two hundred years ago our forbears traveled in wagons, used open fires to heat their homes, and struggled to prevent infant mortality. Although the Scientific Revolution was well underway, it would be joined by communication, transportation, and industrial revolutions. In our own time new technology in a broad array of endeavors has increased life expectancy and standards of living.

There is, however, an aspect of our existence compared to that of our forebears that may not be tipped in our favor. If we could go back and question a great great grandparent concerning how we humans fit into a broader than this-life-only context, we would likely get a response. If, however, the tables were turned and our ancestors could come back and question us today on the same topic, a blank stare might be our only reply.

There can't of course be dramatic changes in technology without dramatic changes in culture. As a result of change the rudder that served as a guide for our forebears often seems inadequate today. While they accepted the views of established institutions, we are inclined to question them. When solving a problem they put their trust in a higher power. We tend to put ours in research, study, and trial and error.

While religion was dominant in their day, science and the pursuit of technological advancement prevails in ours. They believed God was the benevolent governor of all creation. That, however, was before the horrors of technology reaped havoc in World War I and then again in World War II. Today, while science continues to carry the bigger stick in public opinion, religion still has a role to play. Together the two claim that all of existence can be accounted for

by a force, which for religion is God and which for science is energy.

What we learn from religion and science is that both God and the universe are incomprehensible. God, according to religion, is the superintendent that oversees existence as it occurs while determining what will happen along the way. Science, disagreeing with this view, claims the material world, rather than guided by an outside force is sufficient in itself. According to science whatever happens in the material world is not because a rational being wills it but because the laws of nature determine it.

Though the validity of the claims made by religion and science is not demonstrable and though their claims hardly take all options into account, they are nonetheless highly impactful when it comes to the question of individual identity. There is a price to be paid for the espousal of beliefs in entities that are defined as both universal and incomprehensible. It is paid as individuals attempt to find meaning in a world that is beyond their understanding. What role is there for the individual person in an existence governed by incomprehensibility? Not knowing what governs existence is to not know what existence is. Wanting to make the most of our circumstances, we who value individuality note the difference between an existence that is believe-in and one that is perceived.

2. Sensory Awareness

When we look out what do we see? In our culture our focus is on objects and our interest is in their functionality. We want to know what an object does and how it does it. Qualities such as large or small, light or dark, here or there, hard or soft, or rigid or flexible, are characteristics of objects. Although we are aware of qualities that characterize objects, we often ignore them focusing instead on an object's usefulness.

A compelling reason to consider qualities is that they are relational. While objects are entities that exist separately, qualities exist in relation to each other. With our awareness of qualities comes an awareness of their relationships and how they relate to existence generally. We easily misunderstand the fundamentals of existence when our attention is on objects only. A corrective is to consider objects as they are characterized by qualities.

We believe that objectivity and perception are at odds with each other. We cite the difference between what we perceive and what we believe is "really out there." We tend not to take sensory perception at face value. To keep the objective and the subjective separate we minimize perception in favor of methods designed to bypass subjective considerations.

Nonetheless, perception provides a view of existence that takes into account the relationship of its parts. Context is what makes our existence meaningful, and context has to do with how one thing relates to another. Perception enables us to view our existence in the context of ourselves relating to the world. Perception is of entities we believe exist out there in the world. We relate to the world as we perceive it, and the world relates to us as it is perceived.

There's a difference between a world that is perceived and one that is only believed in. When we focus on belief we fail to realize that an unperceived world has no qualities. The real world is, of course, qualitative. When the qualities that characterize the world are not perceived they don't exist. Accordingly, for a qualitative world to exist it must be perceived.

Nonetheless, the necessary relationship of a perceiver and the world as it is perceived may seem counterintuitive because it stands in opposition to the common belief that when we die we will stop existing even as the world continues to exist without us.

The latter would be true if the world were not qualitative, if it were not characterized by qualities we perceive. When we die the world can't go on existing as before because when we "go" the world as we have perceived it goes with us!

We ignore perceived qualities, but we're not alone. Our forebears and their forebears going back thousands of years did the same as did also the "big guns" of philosophy including the Greek philosophers Plato and Aristotle. They were aware of qualities but did not seriously inquire concerning them. Plato, in his allegory of the cave, regards the realm of the constant as real as compared to the changing perceived world, which he believed was not real. He was unaware of the fundamental role that changing qualitative relationships play. Aristotle, Plato's famous pupil, speaks of "opposites," or paired qualities, but thought they were secondary as compared to the more enduring "substance" of things.

When Christianity arose it claimed that in the afterworld life is eternal or timeless, unaware that life as we know it consists of qualitative relationships that occur in time. St. Augustine, early Christianity's most famous philosopher, claimed that the quality "good" is real while the quality "evil" is only an illusion. He failed to realize that the qualities *good* versus *evil* are perceived in relation to each other.

Among the scholastics of the late Middle Ages were realists and nominalists. The realists sided with Plato claiming that qualities are eternal existents in a transcendent realm. The nominalists, which included the French philosopher Peter Abelard and the English Franciscan William of Ockham, said that such qualities as "the Just," "the Good," and "the Beautiful" exist as names only, hence the label "nominalist." Abelard's and Ockham's version of nominalism acknowledges classes of like things such as beds and tables, but regards "bedness" and "tableness" as referencing concepts in the mind rather than existents in a transcendent realm. Neither the

realists nor the nominalists, however, were acquainted with qualitative relationships that serve as structural components of existence.

In the 17th century the philosopher Rene Descartes said that the universe consists of two radically different kinds of substances—the mind, characterized by the qualities *immaterial* and *thinking*, and the body, characterized by the qualities *material* and *unthinking*. That the mind and body interact is apparent but how the interaction is accomplished was a question Descartes left unanswered. It remains unanswered still today. Although we believe the body is material and the mind is immaterial and that the mind and body exist separately, we note that our existence consists of an ongoing series of mind/body interactions. The relationship of the mind and body is apparent. Without it living things couldn't perceive, move, make decisions, or perform everyday functions. The mind/body relationship is necessary not only for humans but for living things generally including insects, fishes, birds and animals.

Although the brain is regarded as the interface between the mind and the body, we have no awareness of a connecting link between the mind and the brain. That the two must be connected seems obvious. A material connector would be tangible to the touch, take up space, exist in time, and have finite boundaries. An immaterial connector wouldn't be tangible to the touch, wouldn't take up space, wouldn't exist in time, and wouldn't have finite boundaries. To connect to the mind an immaterial connector would be required. To connect to the brain a material connection is necessary. To connect the one to the other we look for an immaterial/material connector, but since there isn't one we have no idea how the mind and brain are "connected."

3. Changing Qualities

From change comes difference. When the quality *cold* changes it becomes the quality *hot* because the quality *hot* is different than

the quality *cold*. Similarly, when the quality *hot* changes it becomes the quality *cold* because the quality *cold* is different than the quality *hot*.

The quality *cold* is changing. It isn't absolutely cold because it is becoming the quality *hot*. The quality *hot* is changing. It isn't absolutely hot because it is changing to become the quality *cold*.

Because we perceive the quality *cold* becoming the quality *hot* and the quality *hot* becoming the quality *cold*, we perceive the two qualities in relation to each other. As the result of change, water is sometimes hot and sometimes cold, and yet, if something about water didn't remain constant, we would regard hot water and cold water as two different substances rather than as one substance with two different qualities. But what is the substance that remains constant as qualities change? We don't know because our perception is of qualities only. The substance of an entity isn't a quality and therefore isn't perceptible to the senses. By contrast, that which characterizes a substance is a quality and is therefore perceptible to the senses.

Our sensory organs are designed to detect qualitative changes. We perceive qualities as they change. If they did not change there would be nothing for our senses to detect and therefore nothing for us to perceive. When we refer to a change, our reference is to changing qualities that we perceive. When a quality changes it becomes different than it was before the change. Because the after is different than the before, it is the contrary of the before just as the before is the contrary of the after. Contraries are different although to be different they must be comparable to something that is the same. The qualities *hot* versus *cold* are different. The quality *warm/cool* is the same.

We are not able to perceive the qualities *same* versus *different* with our senses. We can't see, hear, touch, taste, or smell either the

quality *same* or the quality *different*. We are, however, equipped with a cognitive faculty that enables us to consider the relationship of the qualities *same* versus *different*. Change is inclusive of a before and an after. With our intellect we are able to consider the relationship of a quality before and after it changes. Our intellect indicates that a quality has changed, that a quality that has changed is different, and that a quality that is different is in contrast to what the quality was prior to the change.

When we perceive a quality, because the quality is changing as we perceive it, it is followed by its contrary. Our intellect enables us to consider the relationship of a quality and its contrary. Although the qualities *hot* versus *cold* are contraries, because they are the before and after of the same quality, they constitute a pair. Our intellect informs us that as contraries they are different and that as different they are two while also informing us that as members of a pair they are the same, and as the same they are one.

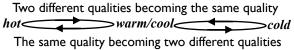
As a quality changes it may be regarded as two different qualities. When the quality *hot* changes we may perceive it to be the quality *cold*, just as when the quality *cold* changes we may perceive it to be the quality *hot*. With our intellect we are able to compare the two qualities and determine that they are different. If, however, the quality *hot* changes to become cooler, and the quality *cold* changes to become warmer, at some point our intellect after comparing the two may indicate that these two different qualities *hot* versus *cold* have become the same quality *warm/cool*. Because paired qualities change, our intellect may inform us that they are two qualities separated by difference or that they are one quality united by sameness.

Although paired qualities may be judged to be either two separate qualities or one united quality, because they are changing they are neither absolutely separate nor absolutely united. Water that is changing can be perceived to be neither absolutely hot nor abso-

lutely cold. Neither the difference between nor the sameness of the qualities *hot* versus *cold* is absolute because as the qualities change their relationship also changes. Because the changing qualities *cold* versus *hot* are never absolutely different or absolutely the same, there are no entities characterized by them that are absolutely cold or absolutely hot.

Qualities that characterize an entity are perceived in paired relationships. They are paired in relation to the qualities *same* versus *different*. If the qualities *hot* and *cold* were absolute they would be either absolutely the same or absolutely different. If they were absolutely different they would be two absolutely separate qualities. If they were absolutely the same they would be one absolutely united quality. But because they are changing they are neither absolutely different qualities nor absolutely the same quality but are instead either two different qualities becoming the same quality or the same quality becoming two different qualities. Figure 1 below indicates the relationship of the changing qualities *hot* versus *cold* and the corresponding relationship of the changing qualities *same* versus *different*.

Figure 1



Paired qualities are ubiquitous. Wherever there are perceivers there are paired qualities. On the desk at which I work I have two monitors. One is on the left the other on the right. The qualities *right* versus *left* are paired and are perceived in relation to each other. The room where I work has a ceiling and a floor. One is characterized by the quality *up* the other by the quality *down*. Because I perceive the quality *up* in relation to the quality *down*, the two qualities are paired. Sometimes I arrive early. Sometimes I arrive late. I perceive the qualities *early* versus *late* in relation to each other. They are paired.

Paired Qualities 4. Constant Ideas

With our senses we perceive qualities. With our mind we conceive ideas. Prominent among the ideas we conceive are ideas of entities. The table at which I work is an entity. I conceive an idea of it in my mind as I perceive characteristics of it with my senses. The sensory qualities that I perceive are changing. The ideas of entities that I conceive are constant. While sensory qualities are perceived in opposing pairs, entities are conceived as separate standalone ideas. Changing sensory qualities are perceived "out there" in the world. Constant ideas of entities are conceived "in here" in the mind. Our conscious awareness is of both ideas of entities that are constant in here in the mind and qualities that are changing out there in the world.

The qualities we perceive are always characteristics of entities the ideas of which we conceive. We never perceive qualities that are separate from entities. When we speak of the quality *hot*, for example, we refer to something that is hot. When we refer to something, we identify it by the qualities that characterize it. We differentiate one entity from another by noting the difference in their respective qualities. The water in one container is hot. The water in another container is cold. A quality is meaningful as it characterizes an entity. An entity is meaningful as it is characterized by qualities. Entities are identifiable only as they are characterized by qualities. Qualities are perceived only as they characterize entities.

Even though qualities are perceived out there and ideas of entities are conceived in here, because qualities are perceptible while ideas are imperceptible, we believe that entities exist out there where we perceive their qualities. When I view my table, I consider it to be out there apart from me even though I conceive the idea of it in here in my mind.

Although we never perceive qualities that are separate from entities, some qualities are perceptible while others are imperceptible.

Perceptible entities are characterized by perceptible qualities while imperceptible entities are characterized by qualities that are imperceptible. When the idea of an entity is characterized by qualities that are not perceptible, we may identify it by its assumed function. Apart from its assumed function the idea of an imperceptible entity is "abstract" because it has no identifiable characteristics. To enable an abstract idea to be considered in a context it may be associated with an institutional belief system. The idea of the "universe," for example, though it has no perceived qualities that characterize it, is nonetheless meaningful in the context of the physical sciences. Monotheistic religion provides meaning for the otherwise abstract idea of "God." The term "zero" is meaningful in the context of mathematics. Music theory provides meaning for the term "tonality." In each of these cases meaning isn't determined by perceptible qualities but rather by considering the assumed functions of an entity in the context of a belief system.

Just as we are able to conceive ideas of entities so too are we able to conceive ideas of qualities. We perceive qualities out there in the world. We conceive ideas of qualities in here in our mind. The qualities we perceive are changing. The qualities we conceive are constant. Because perceived qualities are changing, we perceive them in pared relationships. Because conceived qualities are constant, we conceive them as separate from each other. A perceived quality is relative because it is perceived in relation to its partner quality. A conceived quality is absolute because it is conceived separately from other qualities.

A general rule concerning perceived qualities is that they are "out there," changing, paired, and relative. A similar rule regarding conceived qualities is that they are "in here," constant, separate, and absolute.

When we refer to the "material universe," both the idea of the entity "universe" and the idea of the quality "material" are conceived

in the mind. Similarly, a reference to "Almighty God" incudes the idea of the entity "God" and the idea of the quality "Almighty." In mathematics the "Fibonacci sequence" is a conceived idea. In music the ratios of the harmonic series are conceived ideas. In none of these cases is the idea of the entity characterized by perceived qualities. In each of them the meaning of the idea of the entity is dependent on an absolute quality that is a conceived idea in here in the mind rather than a relative quality that is perceived out there in the world.

5. "Matter" and "Energy"

From antiquity to modernity a lot of water passed under the bridge, or did it? A comparison of fundamental cultural beliefs held in medieval times with those commonly held today reveals they are different as to subject matter but surprisingly similar as to substance

Christians of the Middle Ages (about 500 to 1500 CE) believed in "God" as the creator of the world and that "spirit" (or "soul") is the animating or vital entity that sustains human life. As immaterial, constant, non-spatial, eternal, and infinite "God" was believed to be everywhere present though nowhere visible. Although a person's "spirit" is not detectable, Christians believed it to be an immortal entity and that a person continued to exist as a spirit while awaiting the "morning of the resurrection" in the afterlife.

While a belief in "God" and "spirit" is still maintained by some today, the standard modern belief is that "matter" and "energy" constitute the fundamentals of material existence. While "matter" is believed to be the material of which the "universe" is made, "energy" is believed to be the force that makes it move.

Although we moderns claim that everything material is made of "matter," in everyday parlance we describe material things in terms of identifiable materials such as wood, steel, plastic, and fabric.

We believe the "universe" is made of "matter," but when referring to specific entities we say they are made of specific materials. People in the Middle Ages made a similar distinction. Although they believed that "God" created the world, they also believed that castles, cathedrals, municipal buildings, family dwellings, etc. were made by humans. Just as they didn't believe that "God" would knock at the door, neither do we believe "matter" can be ordered online or purchased at a store. We believe that "matter" is everywhere yet nowhere present at the same time.

"Matter" is a cultural term we use in certain cultural contexts especially those associated with science. By contrast, we avoid using it when referring to qualities we perceive with our senses. Whether "matter" is hard or soft, light or heavy, or short or long, we don't specify because our references to it are as an abstract idea of an entity rather than as a specific substance that is characterized by perceived qualities. People in the Middle Ages made a similar distinction when referring to "God." Although the deity was believed to be omnipotent, omniscient, and omnipresent, commonly experienced effects were attributed to what were believed to be commonly experienced causes.

We say the stars of a galaxy and the planets of a solar system are moved by "energy," while specific effects are the result of specific causes. Although gasoline is sold by the gallon and electricity by the kilowatt hour, "energy," requires no unit of measure because it is neither bought nor sold. We speak of "energy" as if it were an entity with which we are familiar, and yet we have never viewed it, put it in a container, or moved it from one location to another. What does "energy" look like? We don't know. We can neither see it nor picture it in our mind. We refer to it as an idea in our mind as opposed to something that exists in the everyday world.

We believe "energy" causes effects, but because it isn't perceptible to the senses, the effects we perceive have no identifiable cause. We, for example, claim that gravity is a form of energy that causes objects to fall but are challenged because we perceive the effects but do not perceive the cause. Although we believe that floods, hurricanes, tornadoes, and earthquakes are the effects of "natural causes," we perceive the effects but not the causes. We speak of the "kinetic energy" that moves an object. We see the object moving, but the "kinetic energy" if present is invisible. We claim an atomic explosion is a manifestation of "energy." The explosion is visible but not the "energy."

We can't perceive causes because our perception is limited to qualities. A quality is an effect. As perceivers we perceive effects but do not perceive causes. Although believed to be powerful and dynamic, "energy" is not a perceptible entity characterized by qualities that exist out there in the world. For us it is instead an abstract idea that is conceived in here in the mind. If unaware that our perception is of effects not causes, when we see an effect we may believe it to be a cause. We may believe that a natural occurrence is a cause, even though it is the effect of a cause rather than the cause of an effect.

"God" and "spirit" are entities associated with medieval Christian belief. "Matter" and "energy" are entities associated with modern secular belief. Both sets of beliefs are founded on ideas conceived in the mind that are not characterized by qualities perceived by the senses. The world we inhabit consists of perceived qualities. The world we believe in consists of conceived ideas. The former makes an impression on our senses, the latter an impression in the mind.

Our forefathers believed that "spirit" is real. We believe the same concerning "heat." We perceive the quality *hot* when we touch a hot object but can't perceive "heat" because we can't touch it. We

nonetheless believe that "heat" is a form of "energy." We perceive the quality *hot* with our sense of touch. We conceive the idea of the entity "heat" in our mind. We believe the perceived quality *hot* is an indicator of the presence of heat. We conversely claim that the perceived quality *cold* is an indicator of the absence of "heat." We perceive the difference between the perceived quality *hot* and the perceived quality *cold* but do not perceive the difference between the presence or absence of "heat."

"Heat" is believed to exist but is not believed to be a material substance. Changes in a material substance contained in a thermometer are believed to indicate changes in "heat." While the changes in the material substance are perceptible, the changes in "heat" are not.

"Heat," rather than an entity characterized by qualities that exist out there in the world is an idea of an entity that exists in here in the mind. The conceived idea of the entity "heat" is separate and absolute. It is characterized by the conceived idea of the quality "hot." Neither the conceived idea of the entity nor the conceived idea of the quality is perceptible to the senses. Consequently our only awareness of them is as conceived ideas.

We perceive the qualities *hot* versus *cold* as they characterize entities. When they are not characterizing entities they are not perceptible. Claims concerning the transfer of "heat" from one object to another are not verifiable because the qualities *hot* versus *cold* are imperceptible except when they characterize entities and because "heat" is a conceived idea in here in the mind rather than an entity that is characterized by qualities that exist out there in the world.

Just as the qualities *hot* versus *cold* are perceptible to the senses, so too are the qualities *light* versus *dark*. Although we believe that the entity "heat" causes the quality *hot*, our perception is of the quality *hot* in relation to the quality *cold*. Similarly, although we

believe that the entity "light" causes the quality *light*, our perception of the quality *light* is in relation to the quality *dark*. As a means of formulating a relationship between the entity "heat" and the perceived quality *hot* we claim that the entity is the cause and the quality is the effect. A parallel formulation regarding the perceived quality *light* is that it is the effect of the conceived idea "light." Although we can't perceive the entity "light" as a cause, we can perceive the quality *light* as an effect.

The claim that light is "electromagnetic radiation," is a form of "energy," is visible at certain "wavelengths," and travels at a speed of 186,000 miles per second assumes it is an entity. Rather than a quality that characterizes entities, it is believed to be an entity that is characterized by qualities. Despite this belief we never perceive light as an entity but rather perceive it as a quality that characterizes entities. Where there are no entities there is no *light* because there is nothing for the quality *light* to characterize. Further, the quality *light* is perceived in relation to the quality *dark*. Just as the quality *light* characterizes entities so too does the quality *dark*. Because the qualities *light* versus *dark* are changing they are never perceived as absolute qualities. Therefore, when we perceive an entity that is characterized by the quality *light*, we also perceive that it is characterized by the quality *dark*.

The qualities *light* versus *dark* are perceptible only as characteristics of entities. Where there are no entities to characterize, neither the quality *light* nor the quality *dark* is perceived. We can't see "light" or "dark" as standalone conceived qualities but can see that the sky is characterized by the quality *light* in the daytime and the quality *dark* at night. A comet is lighted as it passes though the nighttime sky. It is characterized by the quality *light* in contrast to the sky that is characterized by the quality *dark*.

Medieval culture was founded on a belief in "God" and "spirit," modernity on a belief in "matter" and "energy." While the objects

of belief have changed, a reliance on belief is necessary in both cases. Because the entities in question are not perceptible, they are not identifiable as entities characterized by qualities perceived out there in the world but are instead ideas that are conceived in here in the mind. For believers in the middle ages faith was "the substance of things hoped for, the evidence of things not seen" (Hebrews 11:1). Modern believers may regard methods successfully applied as evidence of the existence of things they cannot see!

6. A Perceived or a Believed-in Existence?

In 1710 George Berkeley wrote:

There was an odor, that is, it was smelled; there was a sound, that is to say, it was heard; a color or figure, and it was perceived by sight or touch. This is all that I can understand by these and the like expressions. For as to what is said of the absolute existence of unthinking things without any relation to their being perceived, that seems perfectly unintelligible. Their *esse* is *percipi* (they exist as they are perceived)... (George Berkeley, *Principles of Human Knowledge and Three Dialogues*, Penguin Books, 1988, p. 54).

Few in our society have considered Berkeley's claim that qualities exist as they are perceived. We don't believe that perceived qualities are any different than qualities that are not perceived. Our experiences lead us to believe that the perception of the qualities that characterize an entity have no bearing on whether the entity does or does not exist.

Still, however confident we might be that existence and perception are not related, we nonetheless entertain the question, "If a tree falls in a forest does it make a sound?" When does sound exist, when a tree falls or when someone hears (perceives) it? A modified version of this question is addressed in a Wikipedia article that relates a conversation between Albert Einstein and two colleagues:

While physicists and good friends Albert Einstein and Niels Bohr were equally instrumental in founding quantum mechanics, the two had very different views on what quantum mechanics said about reality. On one of many daily lunchtime walks with fellow physicist Abraham Pais, who like Einstein was a close friend and associate of Bohr, Einstein suddenly stopped, turned to Pais, and asked: 'Do you really believe that the moon only exists if you look at it?' (https://en.wikipedia.org/wiki/If a tree falls in a forest)

Einstein's question reflects the widespread belief that the characteristics of an object are the same both when they are and when they are not perceived. The same belief extends to those qualities that characterize the world, which according to our belief are what they are without reference to perception.

Nonetheless, however satisfying our belief may seem, it misses an essential point. Qualities are changing as they exist. To be aware of the changes we must perceive them. When we only belief that qualities exist we don't perceive their changes and accordingly are unaware of their changing existence. Do changing qualities exist? Only after perceiving them are we able to answer the question. Changing qualities exist when they are perceived, which means that (and this is the punch line) when changing qualities are perceived they exist!

When we hear music we perceive its qualitative changes. When we don't hear it, there are neither qualities nor changes. Music is perceived as it exists, and it exists as it is perceived.

Although our focus is on the practical effects of qualities, their perception addresses the question, "What is existence?" Could a society ensconced in the belief that an objective view of the world is all that is necessary, bring itself to consider the alternative—that existence because it is changing is what it is as it is perceived?

Personal consciousness is something none of us can do without. But is it possible to be conscious of what is out there without being conscious of ourselves? A careful consideration of the question tells us that consciousness requires an awareness of both ourselves and of something other than ourselves. We, consciously aware of ourselves as perceivers, are consciously aware of qualities as we perceive them. The one is what it is in relation to the other. Existence consists of the two in relation to each other.

Some cultural beliefs to the contrary there is no such thing as a "pound of matter" or a "gallon of energy." While cheese is sold by the pound and gasoline by the gallon, "matter" and "energy" are neither bought nor sold because there's no container to put them in. No one has been able to determine exactly where "matter" exists or discover where "energy" is located. Although they are said to exist everywhere, their whereabouts are unknown. George Berkeley could have been referring to them when he spoke of the "absolute existence of unthinking things" had he been speaking in 1910 rather than 1710. Matter and energy are of course unthinking things, and "unthinking" is an apt description of something the existence of which, rather than perceived in relation to other things, is believed to be absolute.

7. Paired Entities

Sometimes authors refer to pairings as entities rather than qualities. In the first quotation cited below the author refers to the nouns *righteousness* versus *wickedness* rather than to the adjectives *righteous* versus *wicked*. In the second quotation the author refers to the nouns *spirit* versus *matter* rather than to the adjectives *immaterial* versus *material*. Whether the members of a pair are referred to in their noun or adjectival form, the context indicates they are paired rather than separate.

The *Book of Mormon* was published by Joseph Smith in 1830 in the "Burned-over district" of upstate New York. Although the text

is for the most part directed toward religious subjects, the following excerpt describes with considerable clarity the pairings of the entities cited.

...for it must needs be, there is an opposition in all things. If not so, my first born in the wilderness, righteousness could not be brought to pass; neither wickedness; neither holiness nor misery; neither good or bad. Wherefore, all things must needs be a compound in one; wherefore, if it should be one body, it must needs remain as dead, having no life, neither death nor corruption, nor incorruption, happiness nor misery, neither sense or insensibility (Joseph Smith, *The Book of Mormon*, Palmyra, New York, 1830, pp. 62 and 63).

In the 1830s Ralph Waldo Emerson, active in the Boston, Massachusetts area, wrote a series of essays. The first series was published in 1841. It included the essay entitled "Compensation." In it is found the following statement:

An inevitable dualism bisects nature, so that each thing is a half, and suggests another thing to make it whole; as, spirit, matter; man, woman; odd, even; subjective, objective; in, out; upper, under; motion, rest; yea, nay (*The Selected Writings of Ralph Waldo Emerson*, The Modern Library, 1992, p. 156).

The Book of Mormon statement indicates that opposition or difference is necessary to distinguish one member of a pair from the other. Because qualities exist as they are perceived, to be different the perception of both members of a pair is necessary. The perception of one member of a pair is contingent on the perception of the other. Accordingly, the existence of "righteousness" is contingent on the existence of "wickedness" and vice versa. The difference between paired qualities is not resolvable. If it were resolved the two qualities would no longer be in opposition to each other and could no longer be perceptible or as the passage indicates could not be "brought to pass."

According to the Emerson passage because one quality is only one half of a pair, the other half is necessary to make the pair complete. Implied is that for one member of a pair to be perceived the other must be perceived in relation to it. Thus, for humanity to be perceptible, the perception of the qualities *masculine* (men) versus *feminine* (women) in relation to each other is necessary.

That the Joseph Smith and Emerson passages are similar goes without saying. We can only speculate as to the influence these authors may have had on each other or whether either author was aware of the other's writings. Both passages suggest a distinction between relative and absolute existence. Cultural beliefs founded on absolute existents are problematic because while we are able to perceive paired existents in relation to each other, absolute existents that are ideas conceived in the mind are separate and as such are not perceptible.

The cited Book of Mormon passage is followed by an extended discussion concerning the "fall" of Adam. The text indicates that Adam's "sin" was necessary and that had it not occurred the human race would not have existed. The argument is based on the statement that "wickedness" is a necessary partner of "right-eousness." The "fall" of man and woman is in contrast to the rise of humanity. The discussion ends with the famous couplet,

Adam fell that man might be; Men are that they might have Joy. (adapted)

A setting of this text appears in the finale of my Symphony No. 2.

8. Perceptible versus Imperceptible

The qualities *material* versus *immaterial* are paired. They are perceived in relation to each other. We perceive the quality *material* with our senses. The quality *immaterial* is not perceptible to the senses. Our capacity to perceive features four varieties of perception: of the senses, of the emotions, of the volition, and of the intel-

lect. We perceive the qualities *large* versus *small* with our senses. These qualities characterize entities. The entities they characterize are material. They are perceptible to the senses. We perceive the qualities *happy* versus *sad* with our emotions, the qualities *determined* versus *hesitant* with our volition, and the qualities *same* versus *different* with our intellect. The entities they characterize are immaterial. They are not perceptible to the senses.

Our awareness of the qualities *material* versus *immaterial* is the result of a combination of sensory perception and the judgment of our intellect. With our senses we perceive the quality *material*. With our intellect we make a judgment concerning the extent to which the qualities *material* versus *immaterial* are characterized by the qualities *same* versus *different*. We judge the qualities *material* versus *immaterial* to be the same because we perceive them to be members of the same pair. At the same time, however, we judge them to be different because one is perceptible to the senses while the other is not.

An entity characterized by the quality *material* is also characterized by the qualities *changing*, *temporal*, and *spatial*. These qualities are listed in Table 1.

Table 1 A material entity is

changing temporal spatial

An entity characterized by the quality *immaterial* is also characterized by the qualities *constant*, *timeless*, and *non-spatial*. These qualities are listed in Table 2.

Table 2 An immaterial entity is

constant timeless non-spatial

The qualities listed in Tables 1 and 2 are paired. These pairings together with the paired qualities *material* versus *immaterial* are listed in Table 3.

Table 3 Paired Qualities

material versus immaterial changing versus constant temporal versus timeless spatial versus non-spatial

The qualities listed in the lefthand column of Table 3 are perceived in relation to the qualities listed in the righthand column. As the quality *material* is perceived in relation to the quality *immaterial*, the quality *changing* is perceived in relation to the quality *constant*, the quality *temporal* is perceived in relation to the quality *timeless*, and the quality *spatial* is perceived in relation to the quality *non-spatial*.

The members of a pair of qualities are perceptible when one member of the pair is contrasting to the other member. Accordingly, the quality *material* is perceptible when it is in contrast to the quality *immaterial*. Separately, the quality *material* isn't contrasting and therefore isn't perceptible. The quality *material* contrasts with the quality *immaterial* when the two qualities are paired because the quality *material* is perceptible while the quality *immaterial* is imperceptible. Accordingly, an entity characterized by the quality *material* is also characterized the quality *perceptible* while an entity characterized by the quality *immaterial* is also characterized by the quality *immaterial* is also characterized by the quality *immaterial* versus *immaterial* are perceived in relation to each other the quality *material* is perceptible to the senses while the quality *immaterial* is not.

The conceived qualities "material" and "immaterial" are ideas that exist separately from each other. As such, the conceived idea of the quality "material" and the conceived idea of the quality "immaterial," are two separately conceived qualities. They are not perceptible. They are two absolute qualities that contradict each other

rather than two relative qualities that are contrasting in relation to each other.

Because perception is of qualities that are paired, a material entity is perceived as changing only in relation to an immaterial entity that is perceived as constant. With our senses we perceive a changing body but are unable to perceive the constant entity that causes it to change. A body that is changing exists in time. It is temporal. That which causes it to change is constant. It is timeless. With our senses we perceive an entity that is temporal but are unable to perceive that which is timeless. A body takes up space. It is spatial. That which causes a body to change doesn't take up space. It is non-spatial. With our senses we perceive an entity that is spatial but are unable to perceive an entity that is non-spatial.

The qualities that characterize a material entity are paired with the qualities that characterize an immaterial entity. Because an entity characterized by the quality *material* is perceptible to the senses, it is accordingly characterized by the quality *perceptible*. Because an entity characterized by the quality *immaterial* is imperceptible to the senses, it is accordingly characterized by the quality *imperceptible*. Because the qualities that characterize a material entity are paired with the qualities that characterize an immaterial entity, the qualities *perceptible* versus *imperceptible* are paired.

Over the past several thousand years we humans have considered the conceived qualities "perceptible" and "imperceptible" to be separate ideas, and as such, we believe that entities characterized by them are either perceptible or imperceptible, one or the other, but not both. When asked how we confirm the existence of an entity we refer to its perceptibility. Following the Scientific Revolution that began in the 16th century, the belief arose that claims concerning the existence of imperceptible entities are spurious. The belief was in accord with the view that the conceived ideas of the qualities "perceptible" and "imperceptible" are contradictory

and that because immaterial entities are not perceptible to the senses, they were believed to be nonexistent.

A material body is perceptible to the senses but the capacity to perceive qualities is not. While our sensory organs are necessary to facilitate perception, they alone are not sufficient to complete the process. The capacity to perceive qualities of the senses, of emotion, of volition, and of the intellect is immaterial. A material entity is perceptible while an immaterial entity is imperceptible. For the qualities *material* versus *immaterial* to be perceptible they must be perceived in relation to each other. Similarly, for the qualities *perceptible* versus *imperceptible* to be perceptible they too must be perceived in relation to each other.

9. The Person

The person consists of a body and a self. A person's body exists "out there." A person's self exists "in here." As Emerson said, "each thing is a half, and suggests another thing to make it whole." Each half of a person exists as the other half exists. The material half is the person's body while the immaterial half is the person's self. Both halves are necessary to make the existence of a person whole. Because to remove one half of a person is to remove the other half with it, the two halves exist in relation to each other or not at all

As previously stated, perceived qualities are paired, while qualities that are conceived ideas are separate. Although the existence of paired qualities is obvious once we become aware of them, we nonetheless believe the world exists without being perceived and that the conceived qualities "material" and "immaterial," and "perceptible" and "imperceptible" are absolute. We believe that perceptible things exist while things that are not perceptible do not exist. We believe live people exist because they are perceptible but question the existence of dead people because they are not perceptible. We also believe live people are perceptible because their

bodies are material while dead people are not perceptible because their existence (or lack of it) is immaterial. We believe life is temporary because live people die. We believe death is permanent because we know of no one who has died that has come back to life. We associate existence with the conceived qualities "material" and "perceptible" while associating nonexistence with the conceived qualities "immaterial" and "imperceptible."

In spite of our beliefs the qualities *material* versus *immaterial* and *perceptible* versus *imperceptible* are perceived in paired relationships. The body is characterized by the qualities *material* and *perceptible*, while the self is characterized by the qualities *immaterial* and *imperceptible*. When the body and the self are paired they constitute a person. The body, characterized by the qualities *material* and *perceptible* is also characterized by the qualities *changing*, *temporal*, and *spatial*. The self, characterized by the qualities *immaterial* and *imperceptible*, is also characterized by the qualities *constant*, *timeless*, and *non-spatial*. The body is perceived in relation to the self as the self is perceived in relation to the body. The two together constitute the person. The body and the self are respectively characterized by the qualities listed in Table 4.

Table 4 The Person the body the self	
	the self
versus	immaterial
versus	Imperceptible
versus	constant
versus	timeless
versus	non-spatial
	versus versus versus versus versus

The qualities that characterize the body are paired with the qualities that characterize the self. The body is characterized by the quality *material* as the self is characterized by the quality *immaterial*. As the body is characterized by the quality *changing*, the self is characterized by the quality *constant*, and so on. The reverse is also the case. When the body is not characterized by the quality

material, the self is not characterized by the quality immaterial, and so on.

A common belief is that the spirit (soul) is the body's source of life while a person is alive. According to the belief, when the person dies the spirit separates from the person's body, becoming a separately existing entity. For that to be possible the spirit would have to be both a life-giver when united with the body and an absolute entity capable of separate existence when separated from the body. How a spirit could serve in both capacities is a question believers leave unaddressed.

The question is avoided when we consider the pairings of the qualities that respectively characterize the body and the self. As stated, the body is perceived as material only when the self is perceived as immaterial. The body is perceived as changing only as the self is perceived as constant, and so on. While a person is alive the qualities that characterize the person's body and the person's self exist as they are perceived. Contrary to traditional belief, when a person's body dies there is no body/self separation. Instead, by means of the normal process of reproduction, a new body is conceived in preparation for the birth of a new person. Life is cyclical. Although a person begins at birth and ends at death, a person's self neither begins nor ends. Even though a person's existence ends when the person's old body dies, a new person's existence begins as a self and a new body are perceived in relation to each other.

Existing at a particular time and place, a body is characterized by the qualities *temporal* and *spatial*. These qualities are paired with the qualities *timeless* and *non-spatial* that characterize the self. Although the body exists in time and space, the existence of the self is in neither time nor space. Accordingly, when and where the body exists is a question to be addressed, whereas in the case of the self it is not a question that can be addressed! Thus, although the

body and self exist in relation to each other, the body exists at a particular time and place while the self does not.

We have no knowledge of how a body and a self are "connected." Because the self is characterized by the qualities *timeless* and non-spatial, it is able to participate in the reproductive process and the formation of a new person wherever life is sustainable.

Accompanying the birth of a person is a sense of personhood. When a body dies a person's memory is erased. When the self and the new body are together, the slate that contained previous remembrances has been wiped clean. At birth, though we have no awareness of a prior existence, we nonetheless retain a sense of self-identification, which we refer to as our "sense of self."

Dominant throughout human history is the belief that we humans are subject to a higher power. The belief rests on the assumption that though our existence is temporary, the existence of a higher power is permanent. Although mortal existence is temporal, according to our forebears the governing power we are subject to provides for our immortality by continuing our existence in an afterlife.

These beliefs, however, ignore the effects of the quality *changing*. Life consists of an ongoing series of events that occur over a period of time. The length of an event consists of the amount of time it takes to occur. As time passes the person's body changes. As the result of change a person that is young will over a period of time become old. An aging body eventually dies. Thus, because life requires change and because change leads to death, the cause of death is life!

Although the qualities *alive* versus *dead* are paired, some believers attribute death to a human act of wrongdoing. They claim that death is a penalty imposed on all mankind as a result of a behav-

ioral mistake. The claim, however, ignores the effects of change that lead to old age and death. It also ignores the pairing of the qualities *alive* versus *dead*, which rather than conceived qualities that are separate from each other are qualities that are perceived in relation to each other. Although religions speak of eternal life that endures forever, life occurs in cyclical rather than linear time. Life isn't eternal because a life cycle begins at birth and ends at death. Each cycle is a unit, the end of one cycle is the beginning of another.

A common belief is that because the conceived qualities "mortal" and "immortal" exist separately they are absolute. According to the belief a person is either mortal or immortal. Nonetheless, believers also claim that although a person is mortal in the present life, the person will become immortal in the afterlife. Once a person has become immortal, however, the person is believed to remain in that state forever.

In contrast to this belief, the perceived qualities *mortal* versus *immortal* are paired. They are perceived in relation to each other. A person, rather than either mortal or immortal is characterized by the qualities *mortal* versus *immortal*. This is the case because a person's mortal body exists in relation to a person's immortal self. A person's mortal body is changing, while a person's immortal self is constant. Because the qualities *changing* versus *constant* and *mortal* versus *immortal* characterize the person, when a person is changing the person is mortal and when the person is constant the person is immortal. But because the person's body is changing while the person's self is constant, the person is characterized by the qualities *changing* versus *constant* and *mortal* versus *immortal*.

10. Perception: a Two-Step Process

Perception is rarely if ever of sensory perception alone. When we perceive something we perceive it in relation to something else. To perceive something with our senses is to also perceive some-

thing else in addition to it. When we say we see something, we are referring to both the something we perceive with our senses and to something in addition that we don't perceive with our senses.

Perception is a two-step process. Step one is to detect something with our senses. Step two comes when we perceive something related to what we detect with our senses but which our senses do not detect. With our senses we, for example, perceive a black line and a white surface. With our intellect we perceive the difference between a black line and a white surface. If we were equipped with sensory perception alone we could perceive the quality black and the quality white as they respectively characterize a line and a surface but could not perceive the difference between the two qualities. Difference is not perceptible to the senses. We can't see, hear, touch, taste, or smell difference. To perceive difference we must perceive the qualities same versus different. We can't perceive these qualities with our senses but can perceive them with our intellect. With our senses we perceive the qualities black and white. With our senses together with our intellect we perceive the qualities black versus white or the quality black as it contrasts with the quality white.

A body is a material entity that is perceptible to the senses. To put it in a context, however, requires the perception of the qualities *changing, temporal,* and *spatial*. These qualities are not perceptible to the senses. Sensory perception is instantaneous. Change occurs over time. A body that is changing exists in time because time passes as change occurs. Because an entity that is changing exists in time, if my body were perceptible to my senses only, I would not perceive that it is changing or that it exists in time. A body that is changing exists in space because change occurs in a given space. If my body were perceptible to my senses only, I wouldn't perceive that it exists in space. Although the qualities *changing, temporal*, and *spatial* characterize material entities, they

are perceived not by the senses that are material but by the intellect that is immaterial.

When one member of a pair of qualities is perceived, the other member is perceived in relation to it. A person consists of a material body and an immaterial self. When a material body is characterized by the qualities *changing*, *temporal*, and *spatial*, the immaterial self is characterized by the qualities *constant*, *timeless*, and *non-spatial*. The quality *material* is perceived by the senses as the quality *immaterial* is perceived by the intellect. The qualities *changing* versus *constant*, *temporal* versus *timeless* and *spatial* versus *non-spatial* are also perceived by the intellect.

Where there is a body there is a self, and where there is a self there is a body. The body is characterized by the quality *material* as the self is characterized by the quality *immaterial*. The material body is characterized by the quality *changing* as the immaterial self is characterized by the quality *constant*. The material body is characterized by the quality *temporal* as the immaterial self is characterized by the quality *timeless*. The material body is characterized by the quality *spatial* as the immaterial self is characterized by the quality *non-spatial*. As the body is changing the self is constant, as the body is temporal the self is timeless, and as the body is spatial the self is non-spatial.

As the senses perceive the quality *material* and the intellect perceives the quality *immaterial*, the intellect also perceives the qualities *same* versus *different*. Because the quality *material* is different than the quality *immaterial*, when the quality *material* is perceived by the senses, the qualities *changing*, *temporal*, and *spatial* are perceived by the intellect. Further, as the intellect perceives the quality *immaterial* it also perceives the qualities *constant*, *timeless*, and *non-spatial*.

As stated, when we die the body and the self do not separate. Instead, a dead body is replaced by a live body. The qualities *alive* versus *dead* are paired. The one is the contrary of the other. The two qualities are perceived in relation to each other. Because the qualities *alive* versus *dead* are paired, when we are alive we are not absolutely alive, and when we are dead we are not absolutely dead. Instead, when alive we will die, and when dead we will live. As death follows life so too does life follow death.

The end is the beginning. At the end of one cycle and the beginning of another neither the timeless self nor the yet-to-be-formed body have an awareness of the passage of time. Accordingly, although a third party may consider the end of an old person and the beginning of a new person to occur in a measurable length of time, from the perspective of the old person that dies and a new person that will be born the two events occur simultaneously. From their perspective life cycles are continuous without a break. The moment of death is followed immediately by birth, which means that "the end is the beginning."

At birth we have no memory of previous lives. Each life is a one-time-only event. Nonetheless, the self is a constant that links a present life to lives that preceded it. The self is constant but isn't absolutely constant because it exists in relation to a changing body. The body is changing but is not absolutely changing because it exists in relation to a constant self. Because the qualities *changing* versus *constant* are paired, a changing body and a constant self exist in relation to each other.

When we perceive, qualities are the result. When we conceive, ideas are the result. Institutions base their claims on constant conceived ideas because they require claims that remain the same over an extended period of time. Otherwise their claims would change as qualities change. Nonetheless, we perceive qualities in paired relationships but conceive ideas as single entities that are separate

from each other. A quality is meaningful because it is perceived in relation to its partner quality. An idea, by contrast, is not meaningful because it is conceived separately from other ideas.

The quality *hot* is meaningful in relation to the quality *cold*, the quality *light* is meaningful in relation to the quality *dark*, and the quality *moving* is meaningful in relation to the quality *stationary*. We refer to the ideas of "heat," "light," and "motion" as "forms of energy." These ideas lack meaning because as separate ideas they are not related to anything. We say that "heat" from the sun causes the earth to be hot but do not say that "cold" from the moon causes the earth to be light but do not claim that "light" from the sun causes the earth to be dark. We say that "motion" causes an object to move but do not say that non-motion causes an object to be stationary.

These inconsistencies are the result of constant ideas that because they are conceived as separate idea don't refer to anything. We don't know what "heat" is because we can't interact with it. We can speak the word but can't say what it means. We use a word that has no meaning when it is culturally acceptable. When everybody is assuming a meaning the assumption is acceptable. Although the statement, "heat escaped from the oven" is meaningless, we repeat it as if to say, "Oh, you know what I mean." Words that refer to conceived ideas lack meaning because we can't relate them to anything that is perceptible. By contrast, words that refer to entities characterized by perceived qualities are meaningful because we perceive the characteristics they refer to.