

Preface

In human intellectual endeavor there exist three principal challenges. The first is perceiving reality, the second is discovering some system of reasoning by which reality is recognized, rationalized, made consistent, reasonable, and meaningful, and the third is selecting personal goals and purposes in life. Perception and rationalization of reality are critical because only through them are purpose and meaning evaluated and selected. But, if purpose and meaning are to have assured and lasting value, an absolutely true understanding of reality is necessary. And absolutely true understanding lies far beyond the merely “consistent and reasonable.” Other endeavors in life are less intellectual and more practical. While practical and intellectual functions of life are separable in some senses, they are not in others. We learn through practice. In fact, the most important insights, values, and meaning are discovered only through both “lived experience” and contemplation.

We address these three challenges in this book. In doing so we must answer at least one “ultimate question” pertaining to perception and rationalization of reality and its meaning. We therefore address the discovery and establishment of the real nature of reality and its description – absolute or universal truth. Many answers to ultimate questions have been proposed but establishing truth of a proposed answer has not been addressed nearly so often. Yet identifying or establishing truth is an essential requirement for determining value of an answer, especially one to an ultimate question which is the type simultaneously most important and most difficult to answer.

Because discovery and identification of truth are deep and far-reaching in their importance, we examine two prominent *philosophies, systems of belief, or paradigms* widely held as “standards of truth.” (The terms philosophy, system of belief, and paradigm are used equivalently in this book and are thus interchangeable. For examples, one system of belief is science and many others may be generically categorized as religion.) In this book we consider the strengths and weaknesses of science on the one hand and of one type of religion, namely, Christianity, on the other. In each case we examine the utility and power of the philosophy for discovering and establishing truth utilizing the paradigm’s own terms, beliefs, and practices.

Religion has often been regarded as a philosophical “weak sister” of science, a belief supported by widely encountered materialistic bias. We argue in this book on the basis of logic, reason, and faith that Christianity is instead by far the philosophically “stronger sister.” Many have long held, solely on the basis of faith, the view that Christianity is the more powerful philosophy. Others would prefer a comparison based exclusively on facts, logic, and reason. However, no careful comparison can ignore any of the elements of facts, logic, reason, and faith, all essential components of both science and Christianity and, indeed, of any philosophy. Thus, our comparison considers and is based on facts, logic, reason, and faith.

Physics and mathematics are generally regarded as the most carefully and exactly developed subjects in all philosophy, as well as highly practical and useful tools. This conclusion is supported and celebrated in a summary of the history, nature, and

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utility of important discoveries in science and mathematics. But, philosophical weaknesses in science or materialism are now beginning to be widely recognized. Both theoretical and experimental discoveries in physics over the last four decades indicate long-held beliefs in this field must be rescued from contradiction or abandoned. Similarly, discoveries within the last 75 years have forced long-held certainties in mathematics to be abandoned. Unexpected failures of or uncertainty about long-held, fundamental beliefs in science and mathematics indicate the discovery of truth by logical deduction and scientific methodology is more difficult than had been supposed and no better than tentative. Such developments in two of the most carefully and rigorously developed fields in philosophy do not bode well for other areas of philosophy and they therefore merit careful examination.

Traditional understanding in religion is also being revised, suggesting here, as well, uncertainty in past or present belief and practice. Ideally, revision is driven by new information and newly deduced implications. New information has appeared over the last century or so through publication of scholarly studies (translations and analyses) of ancient documents to provide improved understanding of history and the Bible. The Dead Sea Scrolls¹ and the Book of Enoch² are examples. Likewise, as is being ever more widely recognized, the 170-year-old revelations and sacred writings of the “Mormon” prophet Joseph Smith, Jr., are having broad-scope impact on understanding of Biblical principles. If Smith’s claim that he was appointed and empowered by God as His modern-day prophet and seer is valid, this impact should be expected, eventually influencing “non-Mormon” thinking because, quoting one of his revelations, “truth embraceth truth.” Implications of some of Smith’s profound teachings as well as those of many other Christian writers are examined herein. Thus, in examining the relationship of science and Christianity we draw from scientific and traditional Christian sources, from Smith’s writings, from C. S. Lewis’ insightful and delightful sermons and addresses, and from many others.

This book contains several parallel themes. It is unusual because of the unusual nature of either some of the individual themes or of their combinations. Themes and unusual features of this book are now delineated, but not in any order of appearance or priority since the themes are interwoven throughout.

(1) Christianity is described by contrasting it with science and mathematics, a powerful literary device that allows significance, utility, and dint of elusive, delicate-but-mighty concepts of Christianity to be better recognized, assimilated, and appreciated. This device is powerful because stark but subtle contrasts exist between both the scopes and capabilities of (a) science and mathematics and (b) Christianity.

(2) Popular-level accounts of recent results in mathematics and physics and some of the new philosophical positions they imply or support are presented. Necessary components of these accounts are histories of selected topics in mathematics and science. These accounts are useful for two reasons: they illustrate the nature, utility, and limitations of science and mathematics and allow significance of recent uncertainty in their traditional beliefs to be better appreciated. Similarly, certain corrupted Christian beliefs, the original uncorrupted beliefs, and justifications of their classifications are considered.

On balance, Christianity is supported and strengthened relative to science in these accounts. Indeed, by examination of both paradigms we shall discover that according to these paradigms the scientific method cannot provide any certain principle, theory, or law while, in contrast, the Christian paradigm can. However, the position taken is not “Christianity wins over science” nor can it be since the two positions are essentially complementary. Rather, the position taken is “Christianity and science together provide useful, complementary utilities.” Nevertheless, we conclude on the basis of arguments presented that Christianity must be regarded as the stronger philosophical sister, the philosophy that should control motivation and direction.

(3) Science and Christianity are two topics often treated together and usually, in our time, the treatment attempts to harmonize and consolidate them rather than treat them as adversarial. Nevertheless, in their fundamental methods and practices they are inherently adversarial³ and it is important to recognize consequent adversity and its origin, sometimes only perceived and sometimes real.

The natural adversarial relationship of science and religion is apparent in an evolution versus creation debate, the current-day version of a much earlier “scientific revolution” against religion now 400-years old. In medieval times the Catholic Church held an elaborate, rigid dogma that specified “correct” understanding of religion and philosophy (including science). Restrictions in “proper” thinking imposed by the Church were challenged simultaneously by a scientific revolution and a religious reformation in the sixteenth and seventeenth centuries. As a result of the latter movement many found themselves members of new Protestant churches. By this mechanism, restrictions in permitted thinking were relaxed. Catholic-Church dogma was eventually moderated, removing many limitations. One detail we address is that early restriction on freedom of thought imposed on Catholics should be regarded as unsanctioned fiat by individual leaders, contrary to official policy.

In any case, from this historical “conflict between science and religion” and the evolution-creation debate, there exists today a vague, widely-held notion that some essential, fundamental conflict occurs between science and religion and that religion is somehow fundamentally flawed. Sources of information that contribute to this notion are rigid religious dogmas on the one side and, on the other, public school curricula, news media reporting, and dozens of other information sources that generally contain a materialistic bias in presenting only scientific views on various issues. Indeed, in the United States and elsewhere a disestablishment of religious (Christian) knowledge and belief is occurring in government controlled functions.

As we shall discover by thorough comparative examination, *no conflict exists between careful conclusions of science and of Christianity*. Fundamental differences in these two paradigms make their conclusions essentially independent of one another. Because they employ *different methodologies* to deal with *different primary evidential realms*, science and Christianity as philosophical systems are only complementary despite their natural adversity. In fact, because these fundamental differences in the two paradigms remain largely unrecognized, communication in debates pitting science against Christianity is frequently no better than partial, making the two *seem* adversarial in the sometimes exercised exchanges about the “actual” meaning of this or that term or the “real” significance of one event or another.

To understand that the two philosophies complement one another, we examine how they differ, down to their very foundations. Upon understanding their philosophical bases and different primary realms of experience or evidence and the consequent differences in their philosophical capabilities and priorities, causes of misunderstanding and miscommunication between advocates of each become readily apparent. Miscommunication and apparent conflict will persist until such fundamental understanding of the two systems is broadly realized. Until then, science and Christianity will be discussed in a “common language” when “different vocabularies” are often being used. (We also touch in this book on a similar problem: difficulty in communication between Christians of different denominations.) The complementary relationship of science and a Christian view immediately and spontaneously emerges from the insights apparent from consideration of the two philosophies and their different evidential realms.

(4) More than an accounting of mere knowledge of each of the two views is attempted. To understand either, one must understand an interpretation, a significance, an essence, a valuation of import, or a *meaning* of the knowledge. Until one obtains a valid interpretation or an understanding of significance, import, consequence, essence, or meaning, one does not yet fully understand.

As *meaning* and *comprehension of meaning* are important themes in this book but may be somewhat obscure concepts to some readers, we consider an example or two to illustrate meaning and its importance.

One can recite the steps of the scientific method or the articles of belief of a particular faith without fully understanding either science or the faith. One may understand all the facts but not the meaning. To comprehend meaning one must first invest effort to discover the consequence, significance, and value of the facts. And such “lived-experience” effort becomes part of their significance. For instance, a common experience of a student learning statistical mechanics may be described as a threefold process. On first encounter, the formalism seems complex and confusing. On a second, it begins to make some sense. On a third, the student fully grasps the concepts and wonders what caused his or her original confusion. The significance of and satisfaction in the accomplishment reside not merely in the newly acquired ability to use statistical mechanics but also in the success of having accomplished a difficult task. Indeed, the more difficult and beneficial a task, the greater the personal satisfaction and meaning found in its accomplishment.

Realization of meaning in principles of faith also requires effort. In such cases understanding may come through a divine response to a supplicant’s sincere application of a certain principle of faith. Until such application and response, any deep meaning of the principle remains entirely outside the individual’s experience and beyond his or her vision. What was originally an intellectual object with no associated feeling and little significance was only afterward beheld, through newly discovered feeling and associated realization of significance, as important, powerful, and rich in meaning. And the individual’s effort itself becomes the personal, enabling part of his or her newly discovered understanding. For instance, an important meaning of faith in Christ is obtained through service motivated by Christ-like love (charity).

Such motivation is declared by Paul⁴ to be the highest aspiration and Christ Himself teaches that service leads to greatness in the words

whosoever will be great among you, let him be your minister; And whosoever will be chief among you, let him be your servant: Even as the Son of Man came not to be ministered unto, but to minister, and to give his life a ransom for many.⁵

While the prescription of service is immediately understood, comprehension of the deeper meaning of faith-inspired service and its proper motivation – love of Christ and Christ-like love of others – are acquired only in experience and feeling obtained through the habit of giving service because of one’s faith in Christ. To say “I have faith in Christ” is not enough to know Him and become Christ-like in desire. Only as we follow Him in effort or works do we become Christ-like in our nature.

These illustrations indicate that comprehension of consequence, significance, or meaning represents a level of understanding deeper than a mere knowledge of facts. Any *complete* examination, comparison, and evaluation of science and Christianity, or religion in general, must therefore be addressed at the level of meaning, as we seek to do in this book.

(5) To comprehend meaning, one must pay required costs in developing capacities that are the basis or *precursors* of *comprehension of meaning*. Comprehension of meaning is therefore generally unique, personal, and subjective, depending on the presence and strength of precursors developed by an individual. How, then, is one to comprehend meaning perceived by another? Generally speaking, one does not in any complete manner. But, to the extent one has developed the necessary precursors, one may perceive at least a partial sense of meaning perceived by another through shared experiences or by mentally and emotionally placing one’s self in the other’s situation. The more knowledge, values, beliefs, and feelings one shares with another, the more the shared situation and realization of the other, the truer the perception of that person’s meaning – for only through an individual’s knowledge, values, beliefs, feelings, and precursors is meaning generated and perceived.

With these thoughts we touch on the basis of meaning and, therefore, the basis of differences in meaning between science and Christianity or, for that matter, between any two philosophies, systems of belief, or paradigms. This basis was well articulated by American philosopher and psychologist William James who wrote

The whole universe of concrete objects, as we know them, swims ... for all of us in a wider and higher universe of abstract ideas, that lend it its significance. As time, space, and the [luminiferous] ether [a quantity believed to exist in James’ day] soak through all things, so (we feel) do abstract and essential goodness, beauty, strength, significance, justice, soak through all things good, strong, significant, and just.

Such ideas, and others equally abstract, form the background for all our facts, the fountain-head of all the possibilities we conceive of. They give its ‘nature,’ as we call it, to every special thing. Everything we know is ‘what’ it is by sharing in the nature of one [or more] of these abstractions. We can never look directly at them, for they are bodiless and featureless and footless, but we grasp all other things by their means, and in handling the real world we should be stricken with helplessness in just so far forth as we might lose these mental objects, these adjectives and adverbs and predicates and heads of classification and conception.

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This absolute determinability of our minds by abstractions is one of the cardinal facts in our human constitution. Polarizing and magnetizing us as they do, we turn towards them and from them, we seek them, hold them, hate them, bless them, just as if they were so many concrete beings. And beings they are, beings as real in the realm which they inhabit as the changing things of sense are in the realm of space.⁶

The origin of differences in matters of philosophy is differences individuals hold in their abstract concepts, including differences in the assigned priorities of these concepts, by which all things receive their meanings.

After describing essential Christian precursors (abstract concepts) of meaning, the situations and qualities of several faithful Christians are described. These individuals proved their deep devotion to Christ by their responses to challenging situations they willingly faced. In reading these historical accounts the reader is invited to vicariously sense the meaning these Christians experienced by “adopting” one or more of them and attempting to perceive and feel the experience as they did.

(6) A principal theme of this book regards our personal opportunity and responsibility as *agents in search of truth* seeking the attitude and precursors required to most fully understand meaning. Awareness of meaning and feeling only thus obtained allows us to perceive Christ’s devotion to us and leads to understanding of the deepest meaning of all – knowing Christ. Such knowledge is of highest importance because, as I propose and argue in this book, the order in human afterlife or the *order of heaven*, the governing principle of heaven, is *mutual devotion* based on one’s knowledge of Christ. In heaven, and even on earth for heavenly-type persons, devotion to Christ and His Father and their devotion to us *motivates and controls behavior*.

(7) This book is primarily written for a very specific audience – my family, namely, my wife, our children and grandchildren and their spouses, and our nieces and nephews and their spouses and children, as well as later generations that will one day succeed them. In case any of them wonder what I believe and what I stand for, a written record now exists. My desire to make a statement to my family, of what I believe and why, has been the principal motivation for this book.

And perhaps others will find this book interesting and useful. I sincerely hope so. In this hope it is offered to the general public so any, especially of my engineer and scientist friends, may have an opportunity to read it. But most readers, including those of my family, will not fully plumb all the depths of this book in a single reading. This book was not written to entertain and distract but to inform, challenge, inspire, and motivate. Multiple readings of some sections and further study of science/mathematics and, especially, of scripture are intended and advised.

If this book presents only one intellectual and spiritual vision, that of a Christian embracing powerful concepts provided by the Bible, Book of Mormon, and Joseph Smith, as well as by science and philosophy, I hope it is interesting and useful in providing this vision. My selection and treatment of concepts is certainly not traditional and my contrast-centered account of science and Christianity provides enhanced understanding of both. Preparation of this book for a knowledgeable audience, in particular, careful justification of conclusions for such an audience, forced me to find weaknesses and gaps in my data and thinking. Through research I have

strengthened these weaknesses and closed these gaps. But I found no flaw in the basic philosophy I describe and, indeed, my faith in it has been reinforced through discovery that its scope and power are broader, deeper, and more compelling than I had realized.

This book is written for a reader having no special preparation in science or mathematics. Nevertheless, I have included interesting tidbits which will be new to most professional scientists, some even to expert physicists. The text is self-contained and fully explanatory. In endnotes and appendices I include formulas, figures, and tables to provide enhanced understanding for those capable in or tolerant of mathematics and science. If you are not mathematically inclined, just skip the few formulas in the text. You may generally do so with little penalty in understanding the essential gist of the material presented.⁷ However, only high-school-level mathematics is utilized in the text, all higher-level mathematical treatment being restricted to endnotes and appendices. And in every case the discussion is at a basic level so that *an interested reader without special training may learn essential concepts of mathematics and physics*. Only brief discussions of general relativity, Bohr's atomic theory, Bell's theorem, and thermodynamics and entropy even approach being intense in a mathematical or scientific sense because in these cases a little effort returns a large dividend in insight. And yet even in these cases the mathematical formulas may be skipped. The equations are displayed and some details of them discussed but, beyond those details, understanding of the equations is not required.

Likewise, no knowledge of scripture is required. I have included many quotations and citations of scripture for the interested reader as well as interesting tidbits in the form of more complete interpretations of Bible passages that will be new to most Christians. Readers who have prepared will benefit from their effort and the quotations and citations are included for these readers and for all readers who wish to use them. Scriptural preparation or preparation in matters of faith is just as essential to understanding a Christian view of reality as preparation in mathematics and science is to understanding a scientific one. The level of *meaning* one perceives in reading this book and in life itself depends on preparation in matters of faith. But even the most unprepared reader will, because of contrasts we consider between science and Christianity, perceive a sense of the meaning we address if he or she makes an attempt.

While we're comparing Christianity and science we also compare Christianity and Christianity, viz., we compare a few orthodox Christian and "Mormon" beliefs against the Bible standard. However, multiple interpretations of Biblical texts are often possible so that an adequate truth criterion is essential to reaching a reliable conclusion in any such comparison. A powerful truth criterion exactly for such use is described herein. It is simultaneously Biblical, rational, and mystical (in the special way we use this last term⁸). In the spirit of both science and Christianity one establishes truth by examining the evidence *using a reliable truth criterion*, it being the key to discovery of truth. We shall argue that for rational and mystical alike, only one adequate truth criterion exists, the one described in this book.

A few comments on terminology are necessary. I use the terms *materialism* and *science* to represent materialism or empiricism based ultimately on objective, reproducible, material facts. But according to scripture, spirits, angels, and God are material, but more "refined" so as to be invisible to humans in our present state.⁹

Likewise, *omnipotence* is used in a classical Christian sense excepting that God will not do “just anything.” If one accepts human free will or agency, one denies that God has all power, i.e., an individual has power to resist God and God will not force him or her. Also, “Mormons,” for example, fundamentally reject *ex nihilo* creation, believing rather that God *organized* existing space and matter in His creation of the universe. Subtleties in our use herein of “God’s omniscience” cause it to differ slightly from traditional Christian usage by, e.g., Boethius, Augustine, and Calvin.¹⁰ Some Greek-influenced theologies based on reason can demonstrate certain propositions including the existence of God. But we argue that perception and reason alone, without help from a higher level, are insufficient to reach any indubitable conclusion.

In the interest of clarity I often repeat myself. This aspect of style derives from my disdain for lost or invisible antecedents that completely disrupt continuity and may introduce confusion. It thus derives from my scientific writing habit, which I can only partially abandon, in which clarity of expression, rigor, and instruction are regarded as the paramount qualities to be pursued rather than elegance of presentation.

The many references to the Bible refer to the King James Version. The Book of Mormon, Doctrine and Covenants, and Pearl of Great Price are also cited. All four books are published by The Church of Jesus Christ of Latter-day Saints, Salt Lake City, Utah, and these four books together are regarded by members of this church (the “Mormons”) as the canonical body of scripture. The common element of the four books is their focus on Jesus Christ as the predicted Messiah who came among mankind two millennia ago and is about to come again. The latter, pending event gives great urgency to the topics addressed in the canonical body of scripture and in this book.

Square brackets [...] when used in a quotation contain my addition or suggestion.

I thank those who have assisted me as my teachers. In addition to my excellent, beloved teachers who taught me during my formal training, I regard the authors I have quoted and cited in this book as my teachers, especially those repeatedly cited.

I also thank my friends who have read drafts of all or part of this book and provided valuable advice and encouragement. These individuals are David Anderson, Timothy A. Bancroft, Jeffrey A. Clark, Barton S. Dahneke, Ellen Dahneke, Dale S. Dallon, David Day, John A. Fahnestock, William Evenson, Terryl Givens, H. T. Goodwill, Sarah Dahneke Hedengren, Richard Holzapfel, Mike Kearns, Truman G. Madsen, and Donald R. Snow. I also thank Timothy Bancroft, Jeffrey Clark, Sharon Clark, William Evenson, and Donald Snow for valuable guidance pertaining to source material. William Evenson was particularly generous in his help in both guiding me to important source materials and editing. I told him more than once that he should be writing this book instead of me because I think his book would be better. David Day was especially generous in leading me through the entire publication process, like a combination production editor and software instructor, for which I am grateful.

I especially thank the Silent Coauthor of this book for His responses to my many requests for help. Everything good and true came directly or indirectly from Him. The rest is my personal views and endnote speculations, so identified.

Read well, learn and follow truth, and receive joy.

B. E. D.

Palmyra, New York

References and Notes for the Preface.

¹ For information on the Dead Sea Scrolls see www.imj.org.il/shrine/.

² Laurence, Richard (editor and translator from the Ethiopic), *The Book of Enoch the Prophet*, Kegan Paul, Trench & Co., London, 1883. Charles, R. H. (editor and translator), *The Book of Enoch*, Clarendon Press, Oxford, 1893. Knibb, Michael A. (editor and translator), *The Ethiopic Book of Enoch*, Clarendon Press, Oxford, 1978. Milik, J. T., *Aramaic Fragments of Qumran Cave 4*, Clarendon Press, Oxford, 1976, 167. Nibley, Hugh, *Enoch The Prophet*, Deseret Book Co. and FARMS, Salt Lake City, UT, 1986.

The Book of Enoch was a part of both the Jewish and early Christian Bible, located after the Book of Job. It was by far the oldest of all books in the Bible, having been preserved during the flood by Noah in his ark. Jews abandoned it shortly after the time of Christ and Christians followed about halfway through the third century AD. It was banned from the sacred canon of scripture in the fourth century AD, a time of other radical changes in Christian belief. One instance of these radical changes is the Nicene Creed originating as Christian doctrine with the Roman emperor Constantine at the council at Nicaea he convened and presided over in 325 AD. Until the mid-third century AD, the Book of Enoch was regarded as authentic and sacred (see introduction to Laurence's translation for evidence on this claim). Ethiopian Christians, however, long retained this Book in their Bible and it was "rediscovered" there in 1773. Although it has been translated into English by the several translators listed above, the Book of Enoch is neither widely known nor appreciated among English speaking people, no doubt because of its unusual imagery. Nevertheless, Nibley cites 128 teachings of the New Testament that come from the Book of Enoch with many of these listed by Laurence in the introduction to his translation. Christ and His apostles often quoted Enoch. But in only one quotation in the New Testament, Jude 1:14-15, is the Book of Enoch actually mentioned in our present Bible.

³ In science one observes, thinks, and deduces while in Christianity one is told what to believe and do. Only in the latter is discovery of *Who-what-and-why* reality and meaning encouraged or possible.

⁴ *Bible*, 1 Corinthians 13.

⁵ *Bible*, Matthew 20:26-28.

⁶ James, William, *The Varieties of Religious Experience*, Mentor Books, New York, 1958, 60.

⁷ Why include equations when they can be ignored? Because they give the reader an opportunity to learn about important topics: mathematics and science. I quote from British novelist C. P. Snow who wrote *The Two Cultures* (Cambridge University Press, 1964). C. P. Snow was trained at Cambridge as a physicist and then became a writer. He had a foot planted firmly in each of two cultures. "As a result of this cultural dichotomy, I believe the intellectual life of the whole of Western society is increasingly being split into two polar groups. ...

"At one pole we have the literary intellectuals who, incidentally, while no one was looking, took to referring to themselves as 'intellectuals' as though there were no others. ... at the other, scientists; and, as the most representative, the physical scientists. Between the two lies a gulf of mutual incomprehension.

"The scientists' culture is intensive, rigorous, and constantly in action. Their culture contains a great deal of argument, usually more rigorous and almost always at a higher conceptual level than literary arguments ... scientists are very intelligent men. Their culture is in many ways an exacting and admirable one. ... Of books, though, there is very little; of novels, history, poetry, plays, almost nothing. It isn't that scientists are not interested in the psychological or moral or social life. In the social life they certainly are interested, more than most of us. In the moral, they are by and large the soundest group of intellectuals we have; there is a moral component right in the grain of science itself, and almost all scientists form their own judgements on the moral life. It isn't that they lack the interests. It is more that the whole literature of the traditional culture doesn't seem to them to be relevant to those interests. They are, of course, dead wrong.

"But what of the other side? The nonscientific culture is impoverished, too – perhaps more seriously, because it is vainer about it. The literary intellectuals still like to pretend that the traditional culture is the whole of culture, as though the natural cultural – the sciences – didn't

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exist; as though the exploration of the natural order were of no interest either in its own value or its consequences; as though the scientific edifice of the physical world were not, in its intellectual depth, complexity and articulation, the most beautiful and wonderful collective work of the mind of man. Yet most nonscientists have no conception of that edifice at all.

“As with the tone-deaf, they don’t know what they miss. They give a pitying chuckle at the news of scientists who have never read a major work of English literature. They dismiss them as ignorant specialists. Yet their own ignorance and their own specialization is just as startling. ... Once or twice I have been provoked and have asked the company how many of them could describe the Second Law of Thermodynamics. The response was cold; it was also negative. ...

“I now believe that if I had asked an even simpler question – such as, ‘What do you mean by mass or acceleration?’, which is the scientific equivalent of saying, ‘Can you read?’ – not more than one in ten of the highly educated would have felt that I was speaking the same language. So the great edifice of modern physics goes up, and the majority of the cleverest people in the Western world have about as much insight into it as their neolithic ancestors would have had.”

⁸ Many regard mysticism as pathological. A careful treatment of mysticism, which still miscasts it as somewhat negative which I believe it is not, is found in Charles A. Bennett’s essay *A Philosophical Study of Mysticism* (Yale University Press, 1923). See also William James’ book *The Varieties of Religious Experience*, loc. cit.

⁹ *Doctrine and Covenants* 131:7-8.

¹⁰ I thank Truman G. Madsen for pointing out my unmentioned yet slightly unconventional use of “omnipotence,” “omniscience,” and other similar terms.



A pencil sketch of the author drawn by Eugene Legend on 23 March 1973.

Dedication

For Marilyn,

...
Barton,
Marshall,
Marit,
Christa,
Ellen,
Sarah,
Rachel,

...
Jacquelyn Renee,
Scott Jacob,
Theresa Marie,
Elizabeth Anne,
Jonathan Scott,
Jessica Lynn,
Samuel Jesse,
Rulon Christian,
Allison Mary,
Barton Andrew,
Madeline Angel,
Andrew Marshall,
Christian James,
Hannah Abigail,
Rachel Madison,
Eric John,
Isaac Marshall,
Mary Marit,
Asher Moss,

and other grandchildren I don't yet
know, but also already love, and

...
Lani,
Susan,
and
Jesse.

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Definitions of a few terms as they are used in this book.

agnosticism - belief that the existence of any ultimate reality (such as God) is unknown and possibly unknowable so that study of and belief in it are postponed.

atheism - disbelief in existence of deity or doctrine or dogma that there is no deity.

belief - a state or habit of mind in which trust is placed in some idea or object.

Buddhism - a religion or philosophy derived from teachings of Gautama Buddha.

Christianity - the religion instituted by Jesus Christ based on His teachings as provided by Him and His authorized servants.

Hinduism - a body of social, cultural, and religious beliefs and practices native to the Indian subcontinent.

humanism - a doctrine, attitude, or way of life focused on human interests or values, especially in the philosophy asserting the dignity and worth of man and his capacity for self-realization through reason, usually excluding supernaturalism.

Islam - the monotheistic Moslem religion of which Mohammed was the prophet.

Judaism - a religion developed among the ancient Hebrews based on belief in one God who is creator, ruler, and redeemer of the universe.

materialism - a theory that physical matter is the only reality and that all being and phenomena can be explained as manifestations of matter. It is therefore focused on material rather than intellectual or spiritual being and phenomena.

mysticism - a mystical union or direct communion with ultimate reality or God.

omnipotence - an attribute of God denoting the state or quality of possessing almighty, unlimited, infinite power, authority, and influence except as (self-) restricted as described on page xiv.

omniscience - an attribute of God denoting the possessing of universal, absolute, unbounded, and infinite knowledge, awareness, and understanding.

paradigm - a pattern, set of rules (such as assumptions, axioms, and laws), or model one may utilize to understand reality and the universe or some portion thereof.

philosophy - a system of beliefs, concepts, and attitudes of an individual or group.

scholasticism - philosophy that dominated Western Christian civilization from the 9th to the 17th centuries. It was based upon patristic writings and, later, on Aristotelianism. This term is now also used to represent insistence upon traditional doctrines and methods.

science - systematized knowledge of the physical universe or some portion thereof.

secularism - indifference to, rejection, or exclusion of religion or religious concepts.