

“The
Education of the Future
will be
instruction, in spiritual Science,
against
the material symbolic counterfeit sciences”

(Mis. 61: 4)

by
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author of
“From Genesis to Revelation”
“Civilization Lieth Foursquare”
“The Spiritual Evolution of the Christian Science Movement”
“Take, Eat; This is My Body”
“The Bible and Science and Health – Their Spiritual and Scientific Wedlock”

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"Christ Jesus' sense of

M A T T E R

was the opposite of that which mortals entertain...

His earthly mission was to

TRANSLATE SUBSTANCE

into its original meaning,

M I N D."

(Mis 74:13)

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Abbreviations

The following abbreviations are used for the works of Mary Baker Eddy cited in this book:-

S & H . . .	Science and Health with Key to the Scriptures
Mis	Miscellaneous Writings
Retro	Retrospection and Introspection
Pul	Pulpit and Press
My	Miscellany
Man	Manual
No	No & Yes
Po.	Poems

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PREFACE

In the opening chapter of the Bible, the "days of creation" follow one another in natural scientific order. When I wrote my first book, "FROM GENESIS TO REVELATION," I did not know that a series of books was about to develop, the different subjects of which would be found, in retrospect, to have a relationship to each other which corresponds, in certain marked respects, to the relationship of the seven days.

This book, "EDUCATION OF THE FUTURE," is the sixth of the series, and its relationship to its five predecessors runs parallel to the sixth day of creation in its relationship to the five preceding days.

"Let us make MAN in our image...let THEM have DOMINION ...over all the earth..." is the divinely creative "word" at the sixth stage of the unfoldment. The essential message of the sixth day is the wholeness of man in his manhood and womanhood, and the dominion this wholeness gives him over all that constitutes his world.

My fifth book, "THE BIBLE AND SCIENCE AND HEALTH - THEIR SPIRITUAL AND SCIENTIFIC WEDLOCK," emphasizes the idea of the manhood and womanhood of God in their eternal undividedness. This present book emphasizes the power inherent in this spiritual wedlock to translate the material universe. Spiritual and scientific dominion is exercised only in terms of spiritual and scientific translation; hence the conversive power which persons, creeds, and governments set out to wield over the human race is not the kind of world-dominion referred to in the sixth day of Genesis.

Spiritual translation and spiritual education are essentially the same process. The subject of this book is the translation of the whole by the Whole, - the translation, that is, of the whole of human consciousness by that which underlies all human phenomena, namely, the idea of God in its health, or wholeness. Today, through Christian Science, this idea is voicing itself in its order, system, and Science,

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and the educational possibilities implicit in this fact are destined in the end to make the idea of God understandable and demonstrable by the whole of mankind.

Just as the statement of the days of creation pivots symmetrically on the message of the fourth day, so the fourth book of this series is the spiritual hinge, the determining centre, of all the other books. The fourth day of creation presents the idea of the universe itself, or the entire stellar system. My fourth book, "TAKE, EAT; THIS IS MY BODY," touches the study of the system of Christian Science in its order, coherency and oneness. This is the system of the Logos, or Word of God, which, in this sixth book, reaches out to translate the cosmos, because it is the cosmos. In the consciousness of the individual Jesus, had not the Whole translated the whole, the phenomenon known as the ascension could never have taken place.

In the pure Science of Christian Science the order of the seven days finds its fulfilment in the fundamental order of synonymous terms for God given on S & H 465. But this order: Mind, Spirit, Soul, Principle, Life, Truth, Love, has not only a sequential meaning, it must also be viewed from the Principle in the midst, with Soul, Spirit, Mind, and Life, Truth, Love, reaching out on either side like the branches of Moses' "golden candlestick" (Ex 25). In this symmetrical rendering, the pairs of terms, Soul and Life, Spirit and Truth, Mind and Love have a special reciprocal relationship.

In like manner, my second book, "CIVILIZATION LIETH FOURSQUARE," has an immediate complementary relationship to this present sixth book. The subject of "Civilization Lieth Foursquare" is the historical evolution, seen from the metaphysical point of view, of the multitudinous aspects of knowledge and experience that make up the human picture. Not in terms of their historical development, but rather of their place in world consciousness today, "Education of the Future" discusses the idea of the spiritual translation of this same vast array of subjects, technologies, and general walks of life.

So immense is the field of research, so boundless the possibilities of spiritual penetration, that this book sets out to do no more than open a door. It is in four parts: (1) a metaphysical treatise on the subject generally as the standpoint from which alone the work can be approached, (2) a look at the human picture from this metaphysical point of view, (3) an indication of the workings of spiritual translation, (4) an Appendix, listing the different phases and facets of the human experience, that invites illimitable investigation and development.

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The spirit and purpose of the work is focussed in a single, succinct statement of Mrs Eddy's: "SCIENCE, UNDERSTOOD, TRANSLATES MATTER INTO MIND" (Mis 25:12).

November, 1964.

W.G.B.
Haslemere,
Surrey, England.

Education of the Future

P A R T I

O U T F R O M T H E D I V I N E

“Without the Logos, the Aeon or Word of God,
‘was not anything made that was made.’”
(S & H 335:10-12)

MOTHERHOOD OF GOD

“The SPIRIT OF TRUTH...the COMFORTER... whom the Father will send in my name, he shall TEACH YOU ALL THINGS ...” (John 14).

This is the promise which Jesus gave regarding Christian Science. He foretold the advent of a spiritually educational system which would enable humanity as a whole to understand Truth as he himself understood it, and to solve the problem of being in the way he himself was solving it. Not partially but wholly, the mission of Christian Science is to teach humanity ALL things, and to guide it into ALL truth. In a word, Jesus foresaw the revelation to humanity of the universal MOTHERHOOD OF GOD.

Mother and Comforter have the same spiritual meaning. The word “comfort” is from “with + strong” and means to fortify, to

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impart strength and hope, to cheer, to gladden, to encourage, to console. A mother comforts by imparting strength; she makes her child strong. Her strength is the strength of understanding. Nothing really cheers, nothing really comforts but understanding. Understanding gladdens and encourages every heart. Mother understands. Education and understanding go hand in hand. Education makes man strong. Writing in *Science and Health* on what seems to be a purely human level, Mrs Eddy declares, "A mother is the strongest educator" (S & H 236). This is true humanly, only because it is first true divinely. The aspect of God as MOTHER is the aspect of God as the great spiritual EDUCATOR of mankind.

A mother gives birth. Her offspring is drawn forth from within her own body. Her child is the outward manifestation of her own subjective being. Hence, in metaphysics, the idea of birth and the idea of education are essentially the same thing. The word "educate" is from the root, "educere," meaning "to lead out, to draw forth."

The mother in the 12th chapter of Revelation, who gives birth to a man child, is "GENERIC MAN, the spiritual idea of God" (S & H 561:22). Every race, every nation, every individual, every creed, every philosophy, science and art under heaven finds in "the woman in the Apocalypse" the reality of its own being. The woman is radiant with spiritual enlightenment, spiritual understanding, and no darkness, no ignorance, is in her. Clothed with the sun, she looks out from God as God's reflection of Himself. She is not looking up to God from outside of God. If she were she would be His deflection, not His reflection. She is the spiritual identity of all humanity, or the world as it really is.

In the words of Paul, generic man is the "body of Christ" (I Cor 12:27). The woman in Rev 12 is the body of Christ giving birth to Christ, — that is, to the demonstration of its own undividedness in God. Her Son is the world's true selfhood, indivisible and whole, drawn forth from within the world's own body. The world giving birth to what it really is is the world in process of spiritual education. Universal man is the quality of motherhood in God.

The educator of the children of Israel in the Old Testament was Moses. His name means, to pull out, or draw out, of the water. Moses mothered Israel. He drew her forth out of the elemental darkness which was Egypt and guided her to the promised land. He set in motion a spiritually educational system of laws which led Israel out of ignorance and misunderstanding into the light of the knowledge of God. Jesus said, "Ye shall know the truth, and the

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truth shall make you free" – free, that is, from the darkness of Egypt. Mrs Eddy once wrote that the children of Israel "stand in type for the whole human race" (C.S. Journal April 1895). Christian Science mothers the world just as Moses mothered Israel.

The Old Testament leads to the New Testament as one continuous story. The motherly, disciplinary methods of Moses led to what is called a "new covenant" for Israel. Paul writes of how God promised Israel that an enormous spiritual advance would take place in her life. We read in Heb 8, "Behold, the days come, saith the Lord, when I will make a new covenant with the house of Israel and with the house of Judah; Not according to the covenant that I made with their fathers in the day that I took them by the hand to lead them out of the land of Egypt...after those days...I will put my laws into their mind, and write them in their hearts...And they shall not teach every man his neighbour, and every man his brother, saying, Know the Lord: for all shall know me, from the least to the greatest."

Likewise in the experience of the Christian Scientist, the process of education is twofold. At first he learns his subject objectively through an apparently outside source. But the purpose of this initial mothering is solely to lead him to where his subject is subjective to his own thought, or to where his "I" has reached unto the subject itself. Thereafter he shows his subject forth as the expression of his own being. It is written divinely in his heart and in his mind. In the story of Exodus, Israel was unable to take one step out of Egypt until she had accepted the truth about the "I AM." Then she began to move.

Yet even in the learning process, understanding must be drawn forth idea by idea from within the student's own loins, or the promised land of the new covenant will not be reached. The difference between the two phases is that in the first, an orderly, disciplinary impartation dispels step by step the student's ignorance of his subject, and in the second, the subject itself in its coherency and wholeness expresses itself as him. When Moses drew Israel forth from Egypt, he was in fact drawing her forth from God; and this meant, in turn, that he was drawing her spiritual selfhood forth from within herself. Exactly the same process applies in the educational system of Christian Science. The student's sole objective is that the subject of divine Science shall become his "I AM."

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SON OF MAN

Jesus referred to himself as the "Son of God," and at the same time as the "Son of man." Just as there is no man without God, so there is no God without man. The two are one, even as Spirit and its reflection are one. Mother is the simultaneity of God and man. The true idea of mother involves the coincidence of the human with the divine. Only the Son of woman, the Son of (generic) man, is the Son of God, and vice versa. The child of the woman in the Apocalypse is the Son of man who is at the same time the Son of God. He is drawn forth simultaneously from God and man because the two are one. Jesus foretold the advent of Christian Science as "the coming of the Son of man" (Matt 24). Except universal humanity in its true relationship to God is conceived of as the mother of Christian Science, and except Christian Science itself is conceived of as humanity's eternal spiritual selfhood, there is no true conception of Christian Science. "Behold my mother and my brethren!" Jesus said as he pointed to his twelve disciples, who stood in type for the spiritual identity of mankind (Matt 12:49). In the Apocryphal New Testament he is reputed to have said that "the Holy Spirit" was his mother. The need of the present portentous hour is for Christian Scientists to evaluate rightly the concepts, "Holy Spirit," "mother," and "man," in order that the saviour from the present world situation may be born. Mrs Eddy writes in her illustrated poem, "Christ and Christmas," "For Christian Science brings to view the great I Am, - omniscient power, - gleaming through Mind, mother, man."

"There is but one I, or Us..." (S & H 588:11). "Unto us a child is born, unto us a son is given" (Is 9:6). We, as man, are the mother of the Son of God when we reflect God as Mother, or when we are God's reflection. For this means that our "I" has gone unto God, Principle, - unto the divine subject of Christian Science, and is no longer believed to be a personal ego. In this measure we are the body of Christ, the body of the living God. Mrs Eddy once said that man has not got a body, that God has a body, and this body is man. Man giving birth to the Son of man is the modus operandi of the Son of God being "born of the Spirit, born of God" (463:18).

And so it is that in the process of spiritual education, or spiritual birth, our true Christ-selfhood which is born to us is born simultaneously of God.

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SPIRIT OF GOD

In this subject of spiritual birth, or spiritual education, no concept is more important to us than what is meant by "the Spirit of God." The Spirit of God, or God in His aspect as Spirit, is the Holy Ghost, the Holy Comforter, and is Christian Science as a pure universal Science.

In the first chapter of Genesis, the "Spirit of God" (Gen 1:2) moves upon the elements of human consciousness and forms humanity in its own likeness, as its own reflection. Humanity, at this point, is represented as without spiritual "form," – "void" of spirituality. What the Spirit of God does, therefore, is to present the human with Spirit's own elements of immortality, and at the same time take away humanity's supposed mortal elements. Step by step, according to its own inherent order, it unfolds the universe including man as they exist in absolute Truth. This process of exchange transforms humanity from being the apparent deflection of divinity into being its proper reflection.

The "days" of humanity's spiritual creation are the "days" of its spiritual education, or new birth. These days signify that the birth is ordered. Order alone gives form; order alone brings form to birth.

"The divine understanding reigns, is all, and there is no other consciousness." (S & H 536:8) The Spirit of God is the living understanding of the Science of the universe, – the understanding of infinity as one and undivided. It is the understanding of the pure Science of Christian Science. Its elements, therefore, are the elements of individual understanding. The Spirit of God is that state of consciousness wherein all things understand one another. Humanly, it is that wherein man understands God by understanding his brother man. The Spirit of God moving in our own lives is the spiritual understanding of our own and each other's individuality. This mutual, reciprocal understanding forms our identity in the likeness of God.

In the symbolism of Rev 21, the universe is the city foursquare, the "city of the Spirit." To humanity it is "a new heaven and a new earth." Actually it is the only heaven and the only earth there ever is. Science and Health defines the city's "four equal sides" as "the Word, Christ, Christianity, and divine Science" (S & H 575). The universe is thus the Word, Christ, Christianity, – God, Christ, man – one and indivisible. The trinity in unity of God, Christ, man,

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constitutes the Science of the universe.

Hence the pure Science of Christian Science, the Spirit of God, has four fundamental concepts. These are "the numerals of infinity," the "divine infinite calculus," the "matrix of immortality," and the "system" itself. The human must be born again; it must have a new selfhood, a new form. Writing of the process of humanity's spiritual translation, Mrs Eddy speaks of "man's changed appearance and diviner form visible to those beholding him here" (Mis 68:5).

The numerals are the elements out of which humanity's new form is made, the calculus is the actual new form, while the matrix is the Spirit of God itself which does the forming. The functioning together of these three concepts comprises the workings of the system. In fact, the numerals, calculus, and matrix, are the threefold essential nature of the system; just as, with the sides of the city, the Word, the Christ, and Christianity, are the threefold essential nature of Science; and with the synonymous terms for God, Life, Truth, and Love, are the threefold essential nature of Principle.

The days of creation necessarily include four corresponding symbols, namely, the waters, the earth, heaven, and the universe. In the beginning the earth is "without form" because there is darkness upon the face of the waters. That is, there is ignorance of the elements out of which the real earth is made. But the Spirit of God replaces the darkness with light, and the earth is given form.

The Spirit of God, this Spirit of pure understanding, is always identified with the firmament, or heaven, of the second day with its waters, or elements. Of the "heaven" of the second day the "earth" of the third day is born. Hence heaven is identical with the "matrix," earth with the "calculus," while the waters are the matrix's elemental "numerals" out of which the calculus is made.

The calculus is born of the matrix. Earth is born of heaven. The Son of man is born of man when man is one with God. Then he is the Son of God.

In the Spirit of God, which is the all-embracing matrix, humanity finds its true identity. There is in fact no matrix apart from generic man, the heavenly God-crowned woman, no calculus but the Son this woman brings to birth, and no elements out of which to form the Son but the elements of spiritual individuality of which the woman herself is comprised. Individuality in Science is that state of consciousness to which the understanding of the matrix is subjective, and whose Ego, in consequence, is God, not man.

From the elements of his own individuality, reciprocally under-

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stood, generic man brings forth the demonstration of collective and universal unity which is himself in the image of God. Birth-giving on a personal basis is the dark element of egotism and false individuality, which spiritual understanding removes from human consciousness in order that man as both Son of God and Son of man can be formed and brought to light.

BE BORN AGAIN

"Ye must be born again," Jesus said to Nicodemus, who came to him in the darkness of night, — that is, in ignorance of the true idea of motherhood. To Nicodemus, Jesus was a rabbi, a teacher, a spiritual educationist, who came from God.

For Nicodemus to be born again, Jesus explained, did not mean that he must enter a second time into an organic womb and be born, but that he must understand himself and all mankind to be in and of the kingdom of heaven, and therefore as having originated spiritually. He must see his universe as the spiritual university of all true education, wherein all real birth takes place.

To this end the new birth is twofold. Nicodemus must be born simultaneously "of water and of the Spirit." That this demand applied even in the case of Jesus himself is shown by his twofold baptism. When Jesus came to John for baptism two things happened simultaneously. He came up out of the waters of Jordan at the same time as the Holy Ghost lighted upon him from heaven. John's "water" baptism is known as the baptism of "repentance." Jesus said of it: "Suffer it to be so now, for thus it becometh us to fulfil all righteousness." Jesus' own baptism of the Holy Ghost, or "the Spirit," is the baptism of spiritual understanding. With every individual "new birth," the Spirit of God, moving upon the dark waters of ignorance, removes this ignorance by imparting understanding. As the true sense of motherhood, of education, of birth, is imparted, the personal, fragmented sense of these things is repented of and they pass away.

"The wind bloweth where it listeth," Jesus told Nicodemus, "so is every one that is born of the Spirit." Wind is the symbol of the Spirit. When, in Gen 1:2, the Spirit of God moves upon the waters, this is the wind of God, the breath of God, blowing upon the waters in order that they shall form the dry land. The word "spirit" is

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from the Latin, "spirare," "to breathe." On the day of Pentecost there came a "rushing mighty wind" to the consciousness of the disciples. The Spirit of God is the eternal "breath," the circulating animus, of the universe. The body of Christ pulsates with its inspirations. Far from being a humanly intellectual process, spiritual education is the body which is man breathing eternal life. John writes of Jesus that he "breathed" on his disciples and said unto them, "Receive ye the Holy Ghost." This is Spirit, the Teacher, the Mother, imparting the living understanding of Truth within the student's own consciousness. It is the opposite of a human teacher implanting or superimposing ideas from outside. Therefore the process is one of translation, not conversion.

When Jesus bade the disciples "Take, eat; this is my body," the same educational process was taking place. The disciples were understanding their own birth-giving identity in terms of universal man, the divine Christ-embodiment. Soon, on the day of Pentecost, they themselves would demonstrate this understanding, and all the world would respond. The disciples, in their turn, would "breathe" the Holy Ghost upon the world.

THE SPIRIT POURED OUT UPON ALL FLESH

The supreme instance of where the Spirit of God instructs and inspires the receptive, teachable thought of humanity is the occasion of the day of Pentecost described in Acts 2.

Properly understood, Jesus' career had led the world to God. He himself could not have "ascended" to the right hand of Principle except, from his own individual standpoint, he had taken his world there too. His advancing demonstration of Truth during his human experience had been his advancing understanding of his entire surrounding universe in, of, and indeed as, God. He and his world were one, just as he and his Principle were one. As the outcome of his final act of translation, the "descent" of the Holy Ghost on the day of Pentecost signified the world itself being born of God, — the world giving birth to the idea of its own unity in Christ. The occasion set in motion a process of spiritual education which was destined to gather momentum until at last all mankind would have followed Jesus' example and wrought the same translation.

Science and Health defines "Holy Ghost" as "divine Science."

OUT FROM THE DIVINE

The author's third book, "The Spiritual Evolution of the Christian Science Movement," shows how the revelation of divine Science at the end of the 19th century bridges the ecclesiastical time-gap represented by the organized Church of the preceding centuries. In other words, the original outpouring of Christian Science in the days of Mrs Eddy and the events of the day of Pentecost are metaphysically contemporary. The book shows furthermore that today's revelation of the non-sectarian Science of Christian Science bridges the corresponding period of "organization" that developed in the Christian Science movement following Mrs Eddy's passing.

Ideally, therefore, the total interval which today is capable of being bridged is the one that has ranged ever since Jesus' translation of his universe. Jesus proved his own indestructible life to be the indestructible life of mankind. Today's revelation of the absolute Science of Christian Science is destined to make Jesus' solution of the problem of being possible for the whole human race.

There is one overriding condition as to whether or not the rebirth of the world begins to take place, - whether or not the Comforter, the holy Spirit, the universal Teacher, the idea of the motherhood of God, is in fact "descending" upon mankind, and this, in the case of Jesus' disciples, was that "they were all with one accord in one place." The disciples represented the spiritual nucleus of world-Christendom, or the kingdom of heaven on earth. Radiant with the meaning of the resurrection and ascension, the disciples stood for the seed-like beginnings of a spiritual demonstration that would eventually encompass the earth. The demonstration of the whole world in and of Christ, and Christ in and of God, was launched. The Science of the Word, the Christ, and Christianity was speaking to the human race. The Apostles' Ego was God not man. Their "I" was the Principle of the oneness of God, Christ, man, not themselves or each other personally. Reflected in their unity and spiritual accord mankind saw the reality of its own being. The movement they set in motion was that of scientific world-translation rather than conversion to some new religious doctrine.

So must it be today with students of Christian Science who are inspired with its pure Science. Neither through collective organization, nor individual segregation, but through what Mrs Eddy calls "Love's spiritual compact" (Ret 47:3), their overwhelming need is to find themselves "with one accord in one place." When Mrs Eddy dissolved her first church organization in 1889, she referred, by way of illustration, to Joshua's dissolution of the walls of Jericho and to

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the disciples on the day of Pentecost. We read in Mis 279:24-2, "...in the case of Joshua and his band they all had to shout together in order that the walls might fall; and the disciples, too, were of one mind. We, today, in this class-room, are enough to convert the world if we are of one Mind; for then the whole world will feel the influence of this Mind; as when the earth was without form, and Mind spake and form appeared."

TWOFOLD TRANSLATION

Spiritual education, spiritual rebirth, spiritual translation, are all the same thing. The translation to the world of what the world really is translates a material sense of the world into the unfragmented harmony of being, — the world in Christ, and Christ in God.

On S & H 115-116 is a statement of spiritual translation which epitomizes fully the workings of Christian Science. It is in two parts. The first is the "scientific translation of immortal Mind," the second is the "scientific translation of mortal mind." The second takes place in consequence of the first. The first is that which gives the disciples "one Mind," and causes them to be in spiritual "accord." The second relates to the transforming effect this Mind has on the appearance of many minds. Through the first, the world as it really is is translated to humanity in a "language" humanity can understand. The second signifies the translation of the sense of many minds back into one Mind.

Note that the second is the scientific "translation" of mortal mind. It does not say, destruction. Mortal mind is not an entity that has to be destroyed, but a "language" to be translated. Destruction signifies death, translation signifies salvation and life. Paul says in Hebrews 11:5, that "Enoch was translated that he should not see death..." Likewise all through the career of Jesus this same twofold translation was going on and on until, with the overcoming of "the last enemy," death, it was fulfilled in the final ascension. With the Christian Scientist there is nothing to be destroyed, as such, all that is ever going on is the translation of consciousness from one "language" to another.

Mrs Eddy writes on Mis 74:13, "Christ Jesus' sense of matter was the opposite of that which mortals entertain... His earthly mission was to translate substance into its original meaning,

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Mind." Because of his natural sense of communion with God (first translation) Christ Jesus' sense of matter was quite unlike the sense the ordinary mortal has of matter. To him matter was a symbol to be translated, not something that could be destroyed and die. Hence Jesus' "earthly mission was to translate substance into its original meaning, Mind" (second translation).

So it is that the system of spiritual education based on the seven and four capitalized terms for God, translates the universe out of the language of what mortals call matter back into the language of Spirit.

"God," Mrs Eddy says, "is the sum total of the universe" (Mis 105:32). The fact is that the universe is Mind, Spirit, Soul, Principle, Life, Truth, Love functioning eternally as the Word, Christ, Christianity, Science. When, through the first translation, the Holy Ghost voices itself to human consciousness, as on the day of Pentecost, and in the revelation of Christian Science, this is what it declares the universe to be. Through the second translation, the universe is, in consequence, translated out of "material terms" back into Mind, Spirit, Soul, Principle, Life, Truth, Love, the Word, Christ, Christianity, Science, the "terms" of its "original spiritual tongue" (S & H 115:9-11).

WORLD'S MOTHER TONGUE

Hence the story of the day of Pentecost is fundamentally to do with language. We read how the disciples, "filled with the Holy Ghost... began to speak with other tongues, as the Spirit gave them utterance." Representatives of "every nation under heaven" were in Jerusalem at the time, and all were confounded and amazed because every man heard the disciples speaking to him in his own native language, - in his own mother-tongue wherein he was born.

Truth can do no less than voice itself to the world as a whole. This is because the whole world - the world in its wholeness - is Truth. And it can do no less than make itself comprehensible individually, because spiritual individuality is that which manifests, reflects, and identifies Truth's wholeness.

The disciples were not "full of new wine" in the sense that some imagined. Neither did they wax eloquent because of some intervention of spiritualistic clairvoyance. They were full of the "wine"

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which is the Spirit of God. Divine inspiration was pouring itself forth as them, and therefore as the world's spiritual identity. What they were imbibing, what they were inspired and filled with, indeed what they were actually representing and reflecting, was the spiritual idea of the whole human race.

Peter referred the multitude to the words of the prophet, Joel: "And it shall come to pass in the last days, saith God, I will pour out of my Spirit upon all flesh: and your sons and your daughters shall prophesy, and your young men shall see visions, and your old men shall dream dreams. . . I will pour out in those days of my Spirit. . ." We are reminded of the words of the new covenant cited earlier: "After those days, saith the Lord; I will put my laws in their mind, and write them in their hearts. . . and they shall not teach every man his neighbour, and every man his brother, saying, Know the Lord: for all shall know me, from the least to the greatest."

Peter explained to the people that in proportion as they "repent" and are "baptized" they too become partakers of "the gift of the Holy Ghost." This means that they become subjectively involved in the operation of the two translations, in the twofold process of spiritual education, and in the twofold process of the new birth. Ye must be born both of John's water of repentance and of the pure Christ-Spirit, Jesus had said, in effect, to Nicodemus.

Thus everyone heard the language of Spirit translated into his own individual tongue, or into a form comprehensible to him individually. But in divine metaphysics the idea of translation is not confined to mere human languages. Translation from one particular speech into another is symbolic of far wider and more profound issues, — of something far more comprehensive and significant than the mere nationalistic tongues of the "Parthians, and Medes, and Elamites, and the dwellers in Mesopotamia, and in Judæa. . . Cretes and Arabians" etc., or even the tongues of the English, French, Germans, Russians, Chinese, Japanese, and so on, today. There is, for example, in the modern world, the language of atomic physics, of physical science generally, of the Theory of Relativity, which so many human minds find so difficult to understand. There is the language of mathematics, of music, the language of economics, of politics; there is the language of philosophy, of theology, of medicine, of psychology, of biology; the language of painting, of sculpture, of architecture, etc., etc., to mention at random but a few. Above all there is the language of the sciences and the language of the arts, generally, which are at the moment so incomprehensible to each

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other as to give rise to much of the prevalent disruption in human relationships and world affairs. The despairing cry of the intellectual world today is that different individuals in different walks of life cannot understand one another's speech.

Yet under the impact of the language of Spirit (the mother-tongue of them all) all are translated out of materialism, fragmentation and discord back into the language of Spirit, – into a spiritual diversity in unity, in which universal understanding, reciprocal appreciation, and the natural desire to reflect and embody the other fellow's point of view, is the fundamental rule of the Principle of being.

The language of Spirit is the Word of God. The universe as a whole is the divinely spoken Word, – the Deific utterance. John writes at the beginning of his gospel, "In the beginning was the Word, and the Word was with God, and the Word was God. . . All things were made by him; and without him was not anything made that was made." The language of Spirit is Spirit; the Word of God is God; the universe and the language which creates the universe are one. The objects of the so-called material universe are the terms, the words, the grammar, the syntax, etc., of the language of matter. The ideas that comprise the divine universe are the terms, the words, the flow of speech that make up the language of Spirit. Man shall live by "every word that proceedeth out of the mouth of God," Jesus taught his followers.

The Word of God is the language of Science, the pure scientific understanding of the only universe there is. Embraced in this language are the infinitude of identities and their diverse tongues of which the universe as a whole is comprised.

The Word is Spirit. The language of Science is Spirit. There is no such thing in Science as a technological "letter" here, and a living expression or "spirit" there. Such a belief might obtain in the religious phase of Christian Science, but not in its pure Science. In Science, letter and spirit are indivisibly one. The letter of Science is the understanding of the Spirit of Science, not something that can be considered apart from the Spirit. Spiritual understanding is the substance of the universe. In the human picture, the sciences will no longer feel themselves divorced from the arts once these facts and their implications are acceded to.

The situation in Acts 2 is the divine reversal of the one depicted in Gen 11, which is the mythical story of the tower of Babel. With Babel, "the people is one, and they have all one language." But their's was the language of a totalitarian egotism, which is not real

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unity at all. We know this to be so because of the standpoint from which they were working. The people of Babylon set out to build "a city and a tower, whose top may reach unto heaven." They were seeking to work their way upwards from matter to Spirit. They were looking for unity and equality on a materially communal basis. But this is impossible in Science. And so God is supposed to have come down from heaven and to have confounded their false uniformity "that they may not understand one another's speech." Therefore they were scattered abroad "upon the face of all the earth" in a state of confusion and disarray.

Spirit is unity, matter is disunity. Spirit is understanding and harmony, matter is a state of piecemeal misunderstanding. Unity can never be achieved materially, yet it is the 'fait accompli' of the universe spiritually. Unity and agreement in Spirit are the key to the story of Pentecost, confusion and disagreement in matter are the key to the story of Babel. With the former, the movement is out from the divine, out to the human; the latter is the endeavour to work materially from the human standpoint upwards. Looking up to God what we see is matter everywhere. Looking out from God everything is Spirit. Hence Jesus healed instantaneously.

Ideally on the day of Pentecost the confusion of Babel ends. The pandemonium of uncoordinated teachings and opinions is translated into the all-inclusive mother-tongue of Spirit. Misunderstanding disappears and understanding takes its place.

Under the educational system of Christian Science men will understand each other because they will speak one language. They will have common spiritual values. Diversity of individuality will not be lost in this one language, but will be brought to light for the first time through proper reciprocal relationship. The ignorance and darkness of disagreement will be eliminated in the light of mutual understanding and love.

ONE UNIVERSAL "I"

The universe is created by the Word, "I AM." "I AM" is the declaration the Infinite makes in reflecting upon its own infinitude. The reflection forms the image of God, — the image of the infinite "I." The image itself is man and the universe. The infinitude of individual reflection and individual identity that comprises the uni-

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verse is WHAT I AM. What the I AM is is seen and known only in terms of the image which its reflection forms.

Throughout her teaching ministry with her students, Mrs Eddy used the method of question and answer as exemplified in the chapter, "Recapitulation," in Science and Health. A question implies a void, — ignorance of his subject on the part of the questioner. It corresponds to the darkness upon the face of the deep in Gen 1:2. All there is to matter and an apparently material universe is just this ignorance. The answer to the question is the requisite enlightenment that dispels the ignorance and lifts the questioner to the point of understanding his subject for himself. Then his thought is no longer "void" of the answer, and he himself is no longer "without form." The questioner, in fact, is no longer a questioner, for he embodies the answer to his question and, in the very essence of his being, is the answer itself. The real identity of the student of Christian Science lies not with the question that looks up to God, but in the answer which comes forth from God. The answer is part and parcel of the one Christ, Truth. Only in terms of one indivisible body of Truth does he and the world find true identity.

The declaration, "I AM," is the answer to an implied preceding question, "What am I?" In their journey through the wilderness the children of Israel were fed with manna. The meaning of the word, "manna," is "what is it?" Israel was making an educational journey from Egypt to the promised land. This means that she was progressing all the time from darkness to light, from ignorance to knowledge, from the standpoint of the question, "what am I?" to the standpoint of the answer, "I am."

Included in God's "I AM" is every answer to every question in the universe. Every question is, in fact, one question, just as all ignorance is one ignorance. Because God is infinite, every question it is possible to ask is the question, "What is God?"

Recapitulation was originally a teaching syllabus entitled "Science of Man," and was in circulation amongst Mrs Eddy's first students before Science and Health was written. Later it became the basis of the textbook itself, and eventually a recapitulation of the textbook's entire teaching. From it Science and Health stems, with it Science and Health concludes. From its very first appearing "Recapitulation" began with the comprehensive question, "What is God?" And therefore the whole of Christian Science, indeed the whole truth of the universe, is found in the comprehensive answer.

We read on S & H 517:22, "Even eternity can never reveal the

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whole of God." As the eternal answer to the eternal question, "What is God?" God declares:

"I AM INCORPOREAL, DIVINE, SUPREME, INFINITE
MIND, SPIRIT, SOUL, PRINCIPLE, LIFE, TRUTH, LOVE."

This is the WORD that shall TEACH YOU ALL THINGS. This is the seed within itself of all true spiritual education. It is the foremost utterance of the Holy Comforter, the Teacher, the universal Mother. ALL TRUTH is infolded in it, ALL TRUTH is unfolded by it. When, in the beginning of the student's career, his thought is spiritually "without form and void," this is the Word that speaks to him; this is the understanding that is imparted to him in order that his "form" shall appear. All that is meant by the NUMERALS, CALCULUS, MATRIX, SYSTEM, of the one divine body, or universe, is included in the fundamental idea of God presented by this declaration.

INDUCTIVE AND DEDUCTIVE EDUCATION

The word "educe," from which comes the word "educate," is from the same root as "induce" and "deduce." In fact, induction and deduction comprise the basic methodology of the process of education. They involve the principles of logic and reason, symbolic of the Logos, or Word.

Defined symbolically, in terms of human logic, DEDUCE means to reason from the general to the particular, or from the universal to the individual. To INDUCE is the complement of this, and means to reason from the part to the whole, from the particular to the general, from the individual to the universal. Deduction is therefore analytical in character, while induction is synthetical.

On the day of Pentecost, the Holy Ghost, man's universal language, spoke to every individual in his own particular tongue. Here the emphasis is deductive, and corresponds to the first translation. But the purpose of the deduction was to translate the babel of different human tongues back into the one parent language. Here the emphasis is inductive, and corresponds to the second translation.

We read in S & H 146:31, "Divine metaphysics is now reduced to

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a system, to a form comprehensible by and adapted to the thought of the age in which we live." A similar statement occurs on 471:30, namely, that "divine Science. . . reduced to human apprehension, [is] named Christian Science." Divine Science reduced to the system of spiritual ideas called Christian Science, indicates the deductive operation of the first translation. But when, in consequence, this coherent, whole system translates an apparently material universe back into the universe of divine Science, this is the inductive operation of the second translation.

Through the painstaking, scientific searchings of its physicists, the material universe asks, in effect, 'what am I?' But from the standpoint of its own materiality the question is incapable of being answered. Only Christian Science, the system of divine metaphysics, can really answer the question. And so the answer comes: You are what I am, namely, Mind, Spirit, Soul, Principle, Life, Truth, Love, functioning eternally as the Word, Christ, Christianity, Science. But you will never realize this as long as you go on trying to find out about yourself from the objective basis of matter.

In an article entitled "Fundamental Christian Science," Mrs Eddy writes: "Inductive and deductive reasoning is correct only as it is spiritual, induced by love and deduced from God, Spirit. . ." (My 349). In the process of spiritual education, every conclusion regarding the world must be deduced from God, Spirit, in order that the world may be induced by love to rise up out of the ignorance of materialism and understand its real selfhood.

The act of spiritual deduction is further illustrated in S & H 467:29-32. Here we read: "Reasoning from cause to effect in the Science of Mind, we begin with Mind, which must be understood through the idea which expresses it and cannot be learned from its opposite, matter." The corresponding act of induction is illustrated in similar, complementary terms on S & H 195:15-22. This reads: "Whatever furnishes the semblance of an idea governed by its Principle, furnishes food for thought. Through astronomy, natural history, chemistry, music, mathematics, thought passes naturally from effect back to cause. Academics of the right sort are requisite. Observation, invention, study, and original thought are expansive and should promote the growth of mortal mind out of itself, out of all that is mortal."

We learn from this that such human, academic subjects as astronomy, natural history, chemistry, music, mathematics, furnish "the semblance of an idea governed by its Principle." Rightly

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regarded from the standpoint of Spirit, not matter, they are, in fact, symbols of idea governed by Principle; and spiritual deduction, operating as the first translation, furnishes us with the original idea in Science which each one of these subjects symbolizes. Reciprocally, spiritual induction, operating as the second translation, translates the material concept of these subjects back into the original language of idea governed by Principle. In this circulatory process, the apparent identity of the subjects as counterfeit and material disappears, and what they really are in and of the system of divine Science appears.

Further light on this supreme metaphysical issue is thrown by Mis 60:27-10. This passage tells us that "every creation or idea of Spirit has its counterfeit in some matter belief. Every material belief hints the existence of spiritual reality; and if mortals are instructed in spiritual things, it will be seen that material belief, in all its manifestations, reversed, will be found the type and representative of verities priceless, eternal, and just at hand."

Every material belief, all manifestations, signifies nothing less than the whole material universe. But the imperative word as regards the practical implications of this statement is, REVERSED. Material beliefs as they stand are not types and representatives of the ideas of Spirit, rather are they the self-destroying counterfeits of these ideas. Reversed, however, by spiritual sense, and through spiritual "instruction," they become of the nature of symbol. As symbols they are indispensable to spiritual education, and to the solution of the problem of being. They are included in the meaning of the great general statement we read on S & H 575: "SPIRITUAL TEACHING MUST ALWAYS BE BY SYMBOLS."

Symbols furnish a "semblance." They reflect in a measure the ideas they symbolize. In spiritual education and spiritual translation, that which the senses call matter is found not to be matter as such at all, but to reflect increasingly the idea of Spirit until, as with Jesus at the ascension, the reflection is total and the translation complete. Hence it is that "Christ Jesus' sense of matter was the opposite of that which mortals entertain. . . His earthly mission was to translate substance into its original meaning, Mind" (Mis 74).

The overwhelming need on the part of the student is to have the same sense of matter as Jesus had, rather than the sense which mortals have. Nothing can give him this sense but the deductive action of the first translation. The purpose of this book might well be said to be a quest for "Christ Jesus' sense of matter," and all

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that this implies.

Mrs Eddy continues her instructions regarding the reversal of material belief with the statement upon which the whole of this book is based, and from which it gets its title, namely, "THE EDUCATION OF THE FUTURE WILL BE INSTRUCTION, IN SPIRITUAL SCIENCE, AGAINST THE MATERIAL SYMBOLIC COUNTERFEIT SCIENCES."

The phrase, "instruction in spiritual Science" corresponds deductively and analytically to the operation of the first translation; "against the material symbolic counterfeit sciences" involves the inductive, synthetic operation of the second translation. The first takes the form of instruction in the numerals, calculus, matrix and system of the eternal Science of man; the second demands the translation of every symbolic counterfeit belief into this very Science.

SCIENCE AND HEALTH

The author's fifth book, "The Bible and Science and Health - Their Spiritual and Scientific Wedlock," shows that the Bible, focussed in the career of Jesus, has the emphasis on the student's "ascent" to Principle, while Science and Health has the emphasis on his "descent" from Principle. Jesus' consciousness ascended, metaphysically, from earth to heaven; while the Holy Ghost, on the day of Pentecost, descended from heaven to earth. Holy Ghost, city foursquare, Christian Science, the message of Science and Health, are all the same conception. Each shows forth the motherhood of God, the spiritual educator of mankind. Each signifies the matrix of eternal Science wherein the divine infinite calculus is held.

The sixteen chapters of Science and Health, as they range from "Prayer" to "The Apocalypse," are said by their author to unfold the "body of Principle" (S & H 559:25). The ideas which, in their order and consistency, are expressed in these chapters reveal this "body" in its health and wholeness. Science and Health, in fact, presents the idea of man and the universe "every whit whole."

16 is the square of 4, or 4 multiplied by itself. In the order in which Mrs Eddy finally arranged them, the sixteen chapters stand for each side of the city foursquare, reflecting (or multiplied by) every other side. In other words, they represent the Word, Christ, Christianity, Science reflecting (or multiplied by) the Word, Christ, Christianity, Science. Only in terms of this self-reflection can the

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city be conceived of as undivided and whole. Divine reflection is the *modus operandi* of divine creativity, multiplication, and birth. The textbook and the matrix are one, because they educate and form humanity in the image and likeness of God. By means of the Christian Science textbook we conceive immaculately the idea of God's allness, not in terms of theological mysticism but in terms of divine Science.

In the imagery of Rev 10, Science and Health comes down from God out of heaven. To Mrs Eddy its message was divine inspiration, pure revelation. "Whence came to me this heavenly conviction?" she asks. And she answers in the words of Paul, It was the gift of God "given unto me by the effectual working of His power" (S & H 108:1-4). This is the first translation in operation. But not only does Science and Health unfold the idea of Truth's wholeness, it teaches at the same time the translation of the whole of human consciousness out of matter beliefs. This is the operation of the second translation. In fact, in accordance with the "three degrees" of the second translation, three concepts of the universe are to be distinguished and taken into account.

There is the spiritual reality of the universe typified by the third degree. There is the material counterfeit of this reality, typified by the first degree. And there is the result of the impact of the true upon the false, typified by the second degree. The second degree focusses the simultaneous action of both translations. That is to say, in the second degree reality is appearing and unreality is disappearing, and the effect of this replacement is the translation of the human concept. In the second degree the "things" of humanity's universe are regarded not as material counterfeits but as symbols of spiritual ideas. The second degree includes "Christ Jesus' sense of matter," in contrast to the sense which the first degree entertains. In the first degree humanity is subject to death, in the second to life through translation.

TRANSLATION OF THE WHOLE BY THE WHOLE

Science and Health teems with multitudinous symbolism which, as the constituents of the human consciousness, are subject to translation by the ideas they symbolize, — that is, by the Science of universal being which they teach.

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Pre-eminent amongst such symbols are, as we have seen, the subjects of astronomy, natural history, chemistry, music, mathematics. But these are not the only subjects which the narrative uses. For when the text is analysed, and pertinent terminology is extracted and classified, a range of subjects begins to emerge which necessarily covers the full gamut of human experience.

A list of subjects which the preparatory work for this book tentatively brought to light, together with certain of the relevant terminology of each, comprises the Appendix, beginning p.147.

This book, "Education of the Future," sets out to do no more than present a vast general idea. This idea is the one alluded to in the Preface, namely, the translation of the whole by the Whole. Science and Health, by its very nature, cannot do less than unfold the whole Science of being, and therefore at the same time, it cannot do less than cover symbolically the whole of human consciousness as that which is translated out of self-destroying fragments.

When the reader turns the pages of the Appendix, however, let him not imagine that he is required by Christian Science to acquaint himself humanly with all, or indeed with any, of the vast array of subjects he comes across there. This is not the demand of spirituality. The demand upon him is that he shall acquaint himself divinely with the all-embracing Science of being. For in so doing, whether he realizes it or not, he will be acquainting himself with the fundamental Principle and fundamental reality of every one of these subjects. Then, in accordance with his individual needs and individual growth, his divinely imparted understanding of the Whole will, little by little, operate to translate the whole of consciousness as he finds it, and thereby solve the whole problem of being. Eternal Science already and forever includes within it every one of the subjects specified, in its spiritually reversed form. The reduction of divine Science to a calculus of ideas is these subjects as they are in Principle. The action of the calculus upon the fragmentary, material concept translates this concept back into the calculus.

CENTRE AND CIRCUMFERENCE ONE

The symbol of the circle, or sphere, made up as it is of an interdependent centre and circumference, is an important and useful one in understanding this picture. Remember that in describing a

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circle on paper with a pair of compasses it is always the centre which must be positioned first before the circumference can be drawn.

In our present discussion, the circle as a whole represents the universe as we know it, the determining centre of which is the order and system of Christian Science. This supreme central system focusses within it the infinitude of divine identities that make up the spiritual universe.

At the same time let us visualize the circumference of the circle as comprising the multitudinous array of sciences, philosophies, religions, arts, etc., that make up the human picture.

Now because the circumference's spiritual reality is found to be in and of, and to comprise the centre, this means that the centre can do no other than reach out in all directions at once and gather the circumference to itself. The centre, in fact, says to the circumference what Jesus the Christ said, in effect, to his surrounding world: 'I am what you are, and you are what I am.' And thus the all-embracing centre translates the circumference of discordant fragments (which are unable to understand one another's speech) into its own harmony and unity. The centre reveals to the circumference that from everlasting to everlasting centre and circumference are one. In divine metaphysics, the centre is the circumference, and the circumference is the centre. And this is because, in the words of Science and Health, "God is at once the centre and circumference of being" (S & H 203:31).

Mrs Eddy writes in S & H 242:25, "The divine Science of man is woven into one web of consistency without seam or rent." Let us not imagine from the foregoing that in order to solve the problem of being, the divine Science of man gathers together a lot of material fragments and unifies them within itself. Fragmentary, antagonistic so-called sciences, philosophies, etc., can never find themselves collected and assembled in unified being within one all-inclusive Science. "That which is born of the flesh is flesh; and that which is born of the Spirit is spirit" (John 3:6).

Wholeness is always wholeness and incapable of fragmentation, while a fragment, as such, is always a fragment and can never realize wholeness in the sense of inclusion and cohesion within one whole Truth. "Truth is not fragmentary, disconnected, unsystematic, but concentrated and immovably fixed in Principle," we learn from Ret 93:10. Wholeness is universal Truth, fragmentation is the universal lie, and nothing can enter the universe of Truth which

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looking at the white object through the blue glass. God, Christ, man, are Spirit, not matter. What seems to be a material universe manifests cosmic order simply because the only universe there is is the universe of God, Christ, man. Standpoint determines whether the universe appears as matter or Spirit. A matter universe is the universe impossibly viewed from a standpoint of objectivity. Physical science always views the universe objectively, hence its universe is matter. This is what physical science is – the universe viewed objectively. Divine Science is the universe viewed subjectively. In mystic theology, or mythology, the standpoint is that of man having supposedly fallen away from God. Godless matter is God, Spirit, impossibly looked at from this fallen, outside position.

An indivisible spiritual universe is the universe as it is in Science and in Truth. A dismembered material universe is wholly a mythological concept. Science and mythology are opposites. Science is the positive of which mythology is the negative. Never from their diametrically opposite standpoints do the twain meet. Yet the solution to the problem of being lies in the scientific resolution of this apparently dualistic state of affairs. The answer is to be found only in spiritual translation, or spiritual education. Science translates mythology as a false concept, it does not destroy it as an entity apart from Science. It translates mythology by replacing mythology. It says to mythology, "I am what you are when the mortal sense of you is reversed and translated, and you appear in your true colours."

Science says to mythology: "I am the only, the infinitude of being. and all my eternity is now. Though you, mythology, claim to be timeless you are wholly a thing of time. All your claims as to primordial origins dissolve in my timeless 'now.' All your past, all your future is reversed and translated by my 'now.' What I am now, you, in truth, always were and will be. No primordial rebellion, no original explosion can possibly take place in my being. Because I am infinite, no subversive animal will-power, no forces of egotism, are at this moment bombarding and disrupting my integrity from outside of myself. And I am incapable of generating any such forces within myself. The infinitude of individual identity of which I am comprised is not in a state of rebellious self-assertiveness against the Science of its own being. Therefore I am not Spirit split and scattered so that I have become a universe of matter. I am not divine Science exploded and disintegrated into a universe of physical sciences, human philosophies, mystical re-

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ligions, etc., which you, mythology, claim I am. You and your claims are one, and this one is a lie regarding the Truth, the Science, of all being. There is no such realm as a matter universe, no fallen man, no sinful, self-destroying world into which I must enter in the person of a saviour in order to piece it together again and save it from itself. I do not have to recover my health, my wholeness, for I am whole. I do not have to restore my original unity within myself, for I am indivisible. No part of me has ever, or can ever, be lost from me. I see and know my own infinitude all at once, now. What I am doing, mythology, is to unmask you. And as I do so I find not you but me. This does not mean that I have turned you into me, for we are irreconcilable opposites. I am simply telling you that from everlasting to everlasting you have never turned me into you. Thus you have no self but me. Thus we are one, but this one is me, divine Science, not you, mythology."

On the day of Pentecost, the apparent mythological world of matter hears divine Science speaking in the world's own tongue. This is because there is no world, in fact, but the world of divine Science, and therefore the two are one. The world hears the message of the allness of Truth and the nothingness of error. It does not hear the denunciation of mythology as the denunciation of itself, but as the denunciation of a lie about the world, or as a lie about divine Science.

This brings the world face to face with the reality of its own being. The world hears itself speaking in its own mother tongue, and it recognizes and understands what is said. Look at this picture through mythological material sense and what we see is a saviour entering the world of fallen man in an effort to lift him up and restore him to his lost estate. In Acts 2 the different nationalities hear one common language translated into their own native tongues. But the purpose of this translation is that the diverse "tongues" of the different identities of being shall be translated back into the original Word of God, as the only means whereby "they all may be one."

Mythology is basically twofold. First, evil is supposed to have entered the kingdom of good, and to have caused man to descend into the kingdom of evil; second, good is supposed to enter the kingdom of evil in order to retrieve fallen man. This 'from and to' proposition is identical with the concept of time. In Science man comes from God and returns to God, and yet never leaves God. This means to say that he is God's timeless, instantaneous reflection, living in the

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eternal now.

Zephaniah prophesied how God would "turn to the people a pure language, that they may all call upon the name of the Lord, to serve him with one consent" (Zeph 3:9). This is the language of Spirit, the language of pure Christian Science. As a result of its appearing, not only are the disciples on the day of Pentecost "all with one accord in one place," but also "all that believed" in the surrounding multitude, "were together, and had all things common" (Acts 2:44). The central nucleus of the circle is the spiritual determinant of its own circumference. If the story of Acts prefigures the revelation of Christian Science as a comprehensible, universal Science, then what is depicted in the Scriptural narrative is destined to fulfil its purpose in the world today.

The human purpose of a common scientific language is not that individuality shall be communally submerged, but rather that it shall be brought to light as it really is for the first time. Having one language, individuals understand and love each other. Having many languages, personalities misunderstand and are at variance with each other. In Science, individuals find themselves, each other, and their relationship with each other, in and of the one Principle, God. Their spiritually diverse tongues find agreement, understanding and indivisibility in one Mother tongue.

GENERALIZATION AND SPECIALIZATION

In the contemporary world, the rapid acceleration of technological knowledge and the development of technological skills make it increasingly difficult for the different fields of intellectual activity to understand one another. So much so, that the so-called 'man in the street' turns away from these technologies as mysterious and incomprehensible, even though they are effecting incontestable changes and revolutions in his own everyday life.

The physical sciences, the human philosophies, the mystical religions, the different branches of medicine, the cutthroat worlds of economics, politics, and industry, the humanitarian worlds of the arts, of literature, music, painting, sculpture, architecture, etc., all have their individual languages, and their individual terminologies. And particularly in the two major realms of the sciences and the arts, each field finds the other virtually impossible to comprehend.

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Some of these languages are openly at variance, some are in tolerant accord. Generally speaking, few understand even themselves, let alone each other. None but the specialists in each understand anything adequately. And yet for the future safety and well-being of the race the prayer has consistently to be offered: "Principle, that they all may be one."

In Science, specialization is the same as individualization. But individualization is inconceivable apart from generalization, or a universal outlook. In material sense, in the modern world, specialization may also be defined as individualization, but in this case individualization is blinkered and sectarian, with little or no appreciation of the general point of view.

This is inevitable, for material sense, by its very nature, can do no other than testify to confines and segmentation. Due to the recent spectacular advances in knowledge and techniques, specialization grows more and more inevitable. The individual's prison becomes increasingly hard to break out of. The bedrock limitations of time and human capacity enslave the human mind, alias the human brain, and make generalization impossible. Individuals, it seems, cannot help themselves, but are forced by inexorable circumstances to live increasingly rut-like, one-track lives.

An extraordinary dilemma presents itself. For, at the same time, in the 20th century world, a general unifying impulse is, on every hand and in every sphere, making itself decisively felt. The paramount question of the moment is, How can these two opposite trends, a segregated individualism on the one hand, and an integrated universalism on the other, be reconciled? For both stem from the same cause, namely, the increase in modern technological knowledge. As the time-space world shrinks to such proportions that all may begin to encompass it and live in each other's pockets, so the gulf between one individual field of activity and another expands, and the barriers multiply.

The fact is, these two opposing factors cannot be reconciled on a material basis. But because the impulse underlying them is not really material at all but spiritual, they can be reconciled on a spiritual basis. Left to themselves in the grip of matter, the picture presented, like that of individual capitalism versus universal communism, is one of a kingdom divided, self-destructively, against itself. Under the control of the unseen spiritual influences, however, the outlook is quite different. Divinely, in Science, the two are already reconciled, and therefore, humanly, under the impulse of Science,

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they can and will be reconciled.

The essence of the Science of Life is infinite diversity of individuality in unity, – infinite distinction of identity, classification, category, etc., without division. The language and system of one universal Science embodies an infinite diversity of individual languages and systems all in harmony and agreement one with another, – all understanding, appreciating, and needing for their own integrity the other fellow's outlook and identity.

Hence, in Science, individual man looks out upon his universe from the generic point of view. He is a specialist in a general Principle; he is not a specialist in a special principle, as he is in material sense. Neither is he a jack-of-all-trades. His individuality is specific and unique. Looking out subjectively from his divine Principle, he is an individual specialist in the general Principle and general knowledge of every one of the special fields of human endeavour in their reversed, translated forms. Looking out from God individually, he is looking back at himself and his world in God, universally.

Language is thus the key to our whole undertaking, because language involves the possibility of translation. The language of the system of Christian Science, Zephaniah's pure language, is the language of the numerals of infinity, of the divine infinite calculus, of the matrix of immortality. It is the language of the seven synonymous terms for God, and of the four sides of the city. It is the language of the four orders of the seven terms. It is the language of the infinite reflection of these terms and their tones upon each other. All these factors taken together constitute a humanly comprehensible, symbolic language, which teaches primarily the language of Spirit, and translates secondarily the language of matter.

And so it is that every individual hears the language of the universe in his own individual tongue. Students of the absolute Science of Christian Science have talked much about the language of the so-called 'man in the street,' and of the need to reduce the technological language of Science to his comprehension. But who is the 'man in the street' but the sum of the participants of all the different walks of life that make up the human picture? What is the language of the astronomer, for example, but the language of astronomy? What is the language of the nuclear physicist but the language of nuclear physics? What is the language of the biologist but the language of biology? What is the language of the economist but the language of economics? What is the language of the mathematician but the

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language of mathematics? – of the musician, but the language of music? – of the architect, but the language of architecture? and so on, ad infinitum.

In terms of the Science and system of Christian Science, each individual is destined to hear the language of the Whole in his own specialized tongue; each is destined to find the reality of his own subject in the one universal Subject.

P A R T I I

O U T T O T H E H U M A N

"Christ is...the divine message from God to men speaking to the human consciousness."
(S & H 332:9-11)

THE HUMAN PATTERNS THE DIVINE

In Unity of Good p. 37 Mrs Eddy makes the statement that "human beings are physically mortal, but spiritually immortal." The impact of the divine upon our present sense of the human causes this sense increasingly to pattern the divine. This means to say that the human is, in fact, a symbol of the divine. A living symbol reflects in a degree the qualities of the original which it symbolizes. In its true identity, apart from suppositional mortality, the human is wholly a reflection of the divine. God, Principle, reflects upon His own manifestation as Christ, or idea, and this reflection constitutes the real selfhood of humanity, whose Ego is thus the Principle itself.

To the senses, the human has the appearance of mortality. But when the divine comes to heal, transform, and translate this false human sense, the human appears, transitionally, to become a purer and purer reflection, a better and more accurate symbol of the divine. And this purifying process goes on until humanity's translation out of mortality is complete and the degree of reflection is total. No inversion, no deformity, remains to distort the true idea

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of man. At this point the human patterns the divine perfectly. We read in S & H 502:14-17, "Even thus the crude forms of human thought take on higher symbols and significations, when scientifically Christian views of the universe appear, illuminating time with the glory of eternity."

PATTERN OF THE MATRIX

From 1866 to 1910 Mary Baker Eddy bore continuous witness to the revelation of Christian Science. To the senses, she personally was its discoverer, founder, and mother. Actually, Mrs Eddy's natural spirituality enabled her to reflect and record a birth that was universal, — namely, the Christ-idea in its Science born of generic man. To Mrs Eddy herself, generic man, the spiritual idea of God, the "woman" in Rev 12, was the forever mother of Christian Science. Hence her statement in 1901 that, following her passing, "man the generic term for mankind" would succeed her as leader of the Christian Science movement (My 347). But her church from that day to this has been unable to comprehend the impersonal, scientific implication of this statement, just as it has been unable to accept and realize the Science and system of universal man which she hid within the pages of Science and Health. Because of this, as far as the observing world is concerned, the character of Christian Science is religious rather than scientific.

Mrs Eddy's foresight was such that she put on record in Science and Health the prophecy that sometime a "higher discovery" would be made regarding Christian Science; but that this discovery would be based upon, and derive wholly from, what she herself had revealed (see S & H 380 MH "A higher discovery").

The Christian Science teacher and practitioner, John W. Doorly, through his instinctive conviction that Christian Science was indeed Science in the true meaning of the term, and through his researches into the final edition of Science and Health, initiated this "higher discovery." Little by little he began to understand what it is that makes Christian Science available and acceptable to all men. In a word, he began to understand what Mrs Eddy means when she uses the pre-eminently scientific term, "the divine infinite calculus." From that moment onwards, from an historical point of view, Christian Science merged from religion to Science.

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Though his revelation was misunderstood and misrepresented as "intellectualism," the "dead letter," etc., what in fact it set in motion was the very opposite of this, namely, the understanding of the Science of Spirit. The real letter of Christian Science is not a conceptual build-up of the human mind, but the pure Science of the Spirit of Christian Science, — the understanding of God's nature as Spirit. Today it is more apparent than ever before that Science and Health is the textbook of the Holy Comforter, that "shall teach you all things" and "lead into all truth."

John Doorly was the first human being to identify the city four-square of Rev 21 with "the divine infinite calculus" referred to in Science and Health; and he consummated his vision in a spiritually mathematical symbol of the city which he named "the matrix." Mathematically and metaphysically, the symbol he conceived is that of the formative, birth-giving matrix of Spirit wherein the divine infinite calculus flows. Whereas before, men had lovingly "felt" the presence and power of Spirit, now they could begin to understand this presence intelligently and scientifically as well.

Mrs Eddy cites De Quincey as saying that "mathematics has not a foot to stand upon which is not purely metaphysical" (S & H 113:14). The city foursquare is one indivisible city because the universe which it symbolizes is one indivisible universe. But in order to represent and teach this fact humanly each of the city's "four equal sides" must be shown to embody by reflection every other side. In this way, the four divine concepts, Word, Christ, Christianity, Science, become the four basic "elements" of a metaphysical "matrix." A symbol of the city in its oneness and wholeness must include every possible reflection of these four elements.

Correspondingly, in mathematics, a matrix embodies every possible multiple of whatever are its numerical elements. In Science, multiplication can be explained only in terms of reflection. The function of reflection within the meaning of the term, Spirit, gives to Spirit its character as the multiplying, birth-giving matrix of the calculus of God's ideas. Hence in the pure Science of Christian Science what the student is dealing with above all else is the divine Spirit of Christian Science. Spirit and understanding are one. The label, "intellectualism," is the carnal mind's lie regarding spiritual and scientific understanding, and is its attempt at the reversal of Truth.

The symbol Mr Doorly evolved is therefore a sixteenfold symbol. It presents the four multiplied by the four, or the four squared.

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Mathematically, it signifies infinity to the power of infinity. God Spirit, is represented as infinitely self-multiplied, infinitely self-reflected. Such multiplication does not suggest the increase of God's totality, but rather the infinite unfoldment of eternal Life. No term in the scientific vocabulary is more appropriate to describe this function of infinity than the term, "calculus."

THE MATRIX AND SCIENCE AND HEALTH

It was spiritually inevitable that the sixteen "tones" of Mr Doorly's "matrix," as they range from the Word reflecting the Word to Science reflecting Science, should be found the same in essence as those of the sixteen chapters of Mrs Eddy's "Science and Health," as they range from "Prayer" to "The Apocalypse." The flow of the text of these sixteen chapters is itself a symbol of the interwoven fabric of the universe flowing as the Word of God. The universe in its wholeness corresponds to the matrix itself; the living, moving, content of the universe corresponds to the calculus. So it is with the textbook as a whole, and the development of its spiritual message. The textbook in its totality signifies the matrix; the ideas that weave and flow throughout its sixteen chapters signify the calculus.

In view of this, it should not seem surprising that when the text of Science and Health has yielded up the multiplicity of human subjects and fields of thought which it uses to symbolize and teach its calculus of ideas, that this vast array of subjects should arrange themselves into an ordered pattern that reflects the structure of the matrix. It should not surprise us, in other words, to see them assume a general sixteenfold form.

The purpose of Part II of this book is to present an outline of this sixteenfold pattern. Whereas Part I can be said to have the emphasis on the divine idea itself, and in this sense to relate to the first translation (S & H 115), Part II has the emphasis on the relative human concept, and in this sense relates to the second translation. Part III hints at the coincidence of the two viewpoints, and so relates to the two translations operating together as one. Part IV, the Appendix, lists and classifies under sixteen main headings certain of the outstanding terminology, pertinent to each subject, found within the textbook's pages.

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Regarding the Appendix, it must not be imagined that the work of arrangement and classification undertaken there is in any way comprehensive or final. The present lists of terms provide no more than a hint at the particular aspect of the textbook's content now under consideration. Indeed it is to be hoped that specialists in these subjects, working within the field of divine Science, will bring to bear upon the present findings such changes and reassessments as are in line with a fuller and more accurate analysis and scrutiny.

"SCIENCE, THEOLOGY, MEDICINE"

When the task of sifting and classifying this huge quantity of terminological symbolism had been taken as far as was felt practical at the moment, there was, at that time, no indication of the pattern, or design, the subjects would assume when they were gathered and woven together under the dictates of Science. It was apparent that a pattern of some sort must emerge, for, as we have already said, in the process of spiritual translation the human symbol increasingly reflects the idea which it symbolizes. That, after much prayerful thought a pattern closely related to that of the matrix began to make itself felt was due to nothing preconceived, or to any human effort to make things 'fit.'

The following words kept coming to thought in one's quest for the aforesaid pattern: "The kingdom of heaven is like unto leaven, which a woman took, and hid in three measures of meal, till the whole was leavened." The leaven in Jesus' parable is the divine Science of man which ferments and translates no less than the whole of human consciousness. This parable is the basis of the chapter "Science, Theology, Medicine" in Science and Health, and therefore it seemed reasonable to expect that the pattern one was looking for might be revealed by this chapter. Firstly, was it possible that the three main headings of the chapter, Science, Theology, Medicine, would themselves accommodate the enormous variety of subjects which Science and Health as a whole had thrown up?

Upon investigation, it did not appear that these three categories by themselves were sufficient to provide an adequate underlying framework. On the other hand, if they were expanded to include three further categories, then it did seem that the host of subjects brought to light would all be catered for. Naturally the fields of

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Science, Theology, and Medicine covered a great many of the subjects but there were at the same time a large number that demanded the general heading of "Language," more still that demanded the general heading of "Art," and still more, the general heading of "Sociology." Reviewing the full list of subjects, it seemed that in the range of these six categories, Science, Theology, Medicine, Language, Art, and Sociology, every subject was able not only to find its place, but to find it in relation to every other subject.

Incidentally, although "Language" is not part of the title of "Science, Theology, Medicine," nevertheless pages 114-117 of this chapter are devoted, almost exclusively, to a discussion of this very topic. In fact it is here that we find the all-important statement of the two translations. Again, near the beginning of the chapter, the woman's "leaven" is defined with reference to a statement by Paul as "the gift of the grace of God given unto me by the effectual working of His power." The artist may not think consciously about his art in such mystical terms as these, yet it would be difficult to find a purer description of the ideal of true art, or of the incentive that lies behind the genuine artist's quest for truth, than is afforded by these words. At the same time, the message of the chapter itself has to do with the whole of human society, and in this respect embraces the idea of sociology. And so it might be said that this chapter does point, after all, to the "whole lump" of human consciousness represented by the above six categories.

FUNDAMENTAL FRAMEWORK

Pondering the significance of these six categories, and endeavouring to evaluate their significance spiritually, it soon became clear that the subject of "science" was wedded indissolubly to the subject of "art," and the subject of "theology" to "medicine." And once the reason for this was understood, the picture resolved into a total of four main categories, instead of six.

This fourfold framework of the whole of human consciousness presented itself in the following order: (1) the category of LANGUAGE (2) the category of SCIENCE and ART (3) the category of THEOLOGY and MEDICINE (4) the category of SOCIOLOGY. And clearly the reason for this order was that underlying it, and determining it, was the fourfold divine order of (1) the WORD (2) CHRIST (3) CHRISTI-

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ANITY (4) SCIENCE.

In its divine significance, "language" is the Word of God. Spiritually translated, "science" and "art" are the two fundamental components of the Christ. "Theology" and "medicine" are the two fundamental components of Christianity, while "sociology" is the whole human race under the government of Principle, or the brotherhood of man in Science.

It is true to say that the relationship between science and art and the Christ, as the second category of the above framework, is fundamental to the entire message of this book. The world's sciences and the world's arts comprise mankind's two basic cultures, and today their apparent inability to understand each other's speech is responsible for many of the world's frustrating and apparently insoluble problems. Hence the need for a language wherein the two are one, which will rid the world of its divisions, and which will establish in consequence a state of understanding and brotherhood among men.

The reason that science and art are found to be inseparable once they are translated out of material terms is because the one divine Science and the one divine art are in fact the "letter" and the "spirit" of the subject of man and the universe. Together they comprise the living body of the Christ Science, that declares itself to human consciousness in order to heal and save the human race. Mrs Eddy says in Mis 372:27 that "the art of Christian Science... is akin to its Science."

Similarly, the reason theology and medicine prove to be inseparable is because sin, disease, and death are the stock-in-trade of scholastic theology and material medicine. It is no more possible, metaphysically, to consider theology apart from medicine than medicine apart from theology. The basic concern of theology is sin, just as the basic concern of medicine is disease. The "wages of sin is death" (Rom 6:23). Death is the outcome of sin, just as disease is the outcome of sin. The human race is saved from sin, disease and death because Science is the truth about theology's God, and divine art outpictures itself in human experience as the art of spiritual healing, and therefore as the reality that lies behind materia medica's healing methods. Mis 232:20 tells us that in Science is perfected "that most important of all arts, - healing."

On a moral and physical level, scholastic theology and materia medica set out to cure humanity of sin and disease and to rationalize death. But the solution of these problems is impossible from

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dualistic, anthropomorphic premises, and so these two death-dealing forces, sin and disease, are fostered rather than overcome. On the other hand, the translation to humanity of the divine Science of theology coupled with the divine art of medicine eliminates sin and disease from consciousness and destroys the last enemy, death. Actually, it destroys death not only in the form of the last enemy itself, but also in the form of the first enemy, birth. Revelation speaks of two deaths, the first death and the second death. Mrs Eddy, in a letter she once wrote to a student, significantly put it the other way round. She said, "Mankind has reached the last enemy, birth, and knows it not." This is because spiritual education, the essence of Christian Science, is identical with the spiritual idea of birth.

The pattern we are looking for thus begins to be established on spiritual foundations. It is clear that our need, firstly, is for a common spiritual LANGUAGE, – for the mother tongue of the WORD of God as the medium of universal communication. By means of this language, secondly, the SCIENCE, and the ART, the letter and the spirit, the body and the blood, of the world's CHRIST selfhood is made understandable and demonstrable humanly. This rids us, thirdly, of the sin, disease, and death attendant upon material THEOLOGY and MEDICINE, because theology and medicine have now been replaced by divine Science and divine art. This deliverance translates humanity out of mortality and establishes CHRISTIANITY. By reason of these three functions we enter, fourthly, the realm of divine SOCIOLOGY, which is our goal.

Mrs Eddy writes, "The Revelator tells us of 'a new heaven and a new earth.' Have you ever pictured this heaven and earth, inhabited by beings under the control of supreme wisdom?" (S & H 91:1). The picture she is asking about is that of the whole family of man under the government of God, speaking the language of mutual understanding, – understanding the letter and spirit of eternal harmonious being, in which the myth of rebellious fallen man, with all his sin, disease, and death, is swallowed up in translation.

PHILOSOPHY AND THE SCIENCES

Because of its application to all fields of human knowledge, no subject is more important or more fundamental, academically, than

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philosophy. Philosophy, in fact, might be said to pertain to knowledge of the universe as a whole, while science pertains to knowledge of the parts that make up the whole.

The subject matter of philosophy is said to be the nature of the real world, and to apply to the science of the whole as against the sum of the specialized sciences. In the article on "philosophy" in the Encyclopaedia Britannica we read that "the synthesis of the parts is something more than that detailed knowledge of the parts in separation which is gained by the man of science. It is with the ultimate synthesis that philosophy concerns itself...the subject matter which we are dealing with in detail really is a whole, consisting of articulated members...the relation existing between philosophy and the sciences will be, to some extent, one of reciprocal influence. The sciences may be said to furnish philosophy with its matter, but philosophical criticism reacts upon the matter thus furnished, and transforms it. Such transformation is inevitable, for the parts only exist and can only be fully, i. e. truly, known in their relation to the whole...This task of coordination...is undertaken by philosophy...the philosopher...takes a 'synoptic' or comprehensive view of the universe as a whole. The aim of philosophy...is to exhibit the universe as a rational system in the harmony of all its parts...the philosopher refuses to consider the parts out of their relation to the whole whose parts they are. Philosophy...may claim, therefore, to be the only concrete science... The world is not a collection of individual facts existing side by side and capable of being known separately. A fact is nothing except in its relation to other facts...There is no such thing...as an individual fact...the nature of any fact is not fully known unless we know it in all its relations to the system of the universe...The sciences, one and all deal with a world of objects...the ultimate fact as we know it is the existence of an object for a subject. Subject-object, knowledge, or, more widely, self-consciousness with its implicates - this unity in duality is the ultimate aspect which reality presents...Philosophy may be said to be the explication of what is involved in this relation..." (E. B. Vol 21 p. 441).

The foregoing confirms perfectly for us, on the human plane, through the symbol of philosophy, what we know to be true on the divine plane, and what we know will one day be wrought out on the human plane as the human is looked at more and more from the divine point of view. Philosophy and the sciences, defined in this way as the whole and the parts that make up the whole, are symbolic,

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in the realm of the Science of being, of the two concepts, divine Science and Christian Science. Divine Science signifies the all-inclusive oneness and wholeness of the infinite as it exists in, and is known to, its divine Principle, God. But divine Science, in this form and according to this definition, could never be known to humanity, — it could only be known to Principle itself. Humanity can never find in divine Science its own identity as the idea of Principle except divine Science is reduced, for this very purpose, to the system of Christian Science. In the form of Christian Science, humanity is able to accept and understand divine Science as an ordered unfoldment of ideas, all in relation to one Principle and therefore in relation to one another. Divine Science and Christian Science are two aspects of one Science, neither of which exists without the other. Hence in Mis 336:21, Mrs Eddy says that divine Science is “but another name for Christian Science.”

In Christian Science no idea properly exists outside the context of one whole system. No idea exists therefore out of relationship to that which holds the system in its oneness and undividedness, namely divine Science. As the article on philosophy says, “There is no such thing as an individual fact.” In Christian Science are to be found all the identities, categories, and systems of being, which, in their oneness and inseparability, comprise the universe of divine Science. These are the parts which make up the whole, and which bring within reach of human comprehension the unfolding identity of the infinite wherein subject and object are one. Hence the correspondence which exists between philosophy and divine Science on the one hand, and between the specialized sciences and the system of individual identities, called Christian Science, on the other.

In her article, “Science and Philosophy,” Mrs Eddy writes of Christian Science that it is “the soul of divine philosophy, and there is no other philosophy.” She says Christian Science “is not a search after wisdom, it is wisdom: it is God’s right hand grasping the universe, — all time, space, immortality, thought, extension, cause and effect; constituting and governing all identity, individuality, law and power. It stands on this Scriptural platform: that He made all that was made, and it is good, reflects the divine Mind, is governed by it; and that nothing apart from this Mind, one God, is self-created or evolves the universe” (Mis 364:10-21).

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EXTENDING THE FOURFOLD FRAMEWORK

Let us examine in a little more detail, and develop one by one, the four main categories of the human picture which we have now arrived at, namely, Language, Science and Art, Theology and Medicine, Sociology. And as we do so let us remember that these four, in this order and in this relationship, are determined by the Word, the Christ, Christianity, and Science, the four main categories of the holy city.

In the system of Christian Science these four elements, Word, Christ, Christianity, Science, each reflect the other's identity in order that the system (which is the city) shall be integral and whole, — i. e. that it shall be the city of divine Science. So with our four human categories. Each demands a fourfold extension of itself in order that all the different subjects and activities which the textbook has yielded, and which comprise the human picture, shall be embraced and classified within one compound symbol. The fourfold framework thus expands into sixteen subdivisions, which we must now identify.

The subdivisions into which LANGUAGE resolves itself are found to be GRAMMAR, SPEECH, LITERATURE, and EDUCATION. The subdivisions into which SCIENCE and ART resolves itself are found to be MATHEMATICS, the PURE SCIENCES, the APPLIED SCIENCES, the FINE ARTS. The subdivisions into which THEOLOGY and MEDICINE resolves itself are found to be RELIGION, MATERIA MEDICA, SURGERY, PSYCHIATRY. The subdivisions into which SOCIOLOGY resolves itself are found to be MARRIAGE and PROGENY, GOVERNMENT, WARFARE, and the all-inclusive subject of CIVILIZATION itself. (See Appendix, p. 144)

The order of each extension corresponds in itself to the order of the Word, Christ, Christianity, Science. Thus the Word in its four tones underlies the fourfold extension of "Language," the Christ in its four tones underlies the fourfold extension of "Science and Art," Christianity in its four tones underlies the fourfold extension of "Theology and Medicine," and Science in its four tones underlies the fourfold extension of "Sociology."

Within this sixteenfold framework, all the different subjects which the textbook has brought to light as a result of sifting and classifying its manifold forms of symbolism and terminology can, as far as this present book is concerned, be seen to fall into place. Note that it is not necessarily the names of the subjects themselves that are

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found within the textbook's pages, only their relevant terminology. Often and often, the name of the subject is there too, — for example, music, mathematics, astronomy, chemistry, etc. Whereas such subjects as rhetoric, anthropology, engineering, atomic physics, etc., are not actually there by name. We know of them by implication only, — by reason of the presence in the text of certain of their relevant terminology.

It cannot be stressed too strongly that the listing of words and terms under their appropriate headings in the Appendix is in no way to be thought of as exhaustive. Nor should one attempt to make it so. This work is not humanly intellectual, and can move forward only under the guidance of spiritual sense, subject to endless individual and collective development.

In view of this, it might be appropriate to quote from a statement by the artist, Paul Klee, where he says of the progress of modern art and of modern artists: "Nothing can be rushed. It must grow, it should grow of itself." He writes, "We seek a people. . . each one of us gave what he had. More we cannot do. . ." (Paul Klee on Modern Art, p. 55).

Now let us consider one by one the significance, not only of our four main categories, but also the resolution of each into its four subdivisions.

LANGUAGE

The force behind all language-making is the desire for communication. The divine philosophy hinted at in this book has of necessity to rest fairly and squarely on the foundations of LANGUAGE, because the entire teachings of Christian Science rest upon, and are included within, what is called the WORD of God.

The sixteenfold framework, laid out on p. 144 shows Language extended into its four subdivisions: Grammar, Speech, Literature, Education. This comprises the first of the framework's four main sections.

At this point, Language appears in its widest and most universal sense, as a subject in its own right. Whereas language, in a specific sense, pertains in one form or another to every single subject within

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the framework. Whether we are considering atomic physics, physiology, psychology, aeronautics, music, or any other subject, each has its own particular language and terminology. In just the same way, every individual man has his own particular viewpoint of the universe.

Thus the all-embracing language of Spirit, the Word of God, underlying the first four sections, has to be established first, before its multifarious individualization can be considered. Otherwise there is no primal unity – no means of universal understanding – to translate to the disrupted human consciousness; and therefore nothing to translate this consciousness back into, while at the same time retaining the idea of specific individuality.

The object of the language of Spirit, the Word of God in divine Science, is that, in the process of its translation to humanity, and the consequent spiritual education of humanity, every “language” on the face of the earth shall find itself in unrestricted communication with every other “language.” This means, in practice, that individual man shall understand, and be at one with his fellow man in the universal harmony of being. Individuals shall no longer disagree, and be at variance with each other because of misunderstanding.

A splendid little book called “The Miraculous Birth of Language” by R.A. Wilson, shows that out of the central unifying faculty of reason in man arose and evolved the necessity for “language,” as the means of symbolizing and communicating to others an understanding of the physical world.

We read on p.40 of this book that language is “the one unique human instrument which man has designed for the purpose of elaborating within his own mind an actual mental picture of the material world of space and time in which he lives. By means of these designed symbols of language he has built up, and is still building up within his own mind a space-time picture of the space-time world; and since the space-time mental picture elaborated by language is the approximating image or counterpart of the actual space time world, there must be a close correspondence between the structure of language and the structure of the world which language images.”

Language is creative. In divine metaphysics, “without the Logos, the Aeon or Word of God, ‘was not anything made that was made.’” S & H 335:7 tells us that “Spirit, God, has created all in and of Himself.” In and of the language of Spirit the entire spiritual universe

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is formed. This language is translated to human comprehension as the language of the system of Christian Science. Hence this system images the harmony and unity of being that exists in the divine Word. Remove the stigma of "intellectualism" from it and the language of the system as it really is is identical with man himself.

Grammar

Grammar is the study of the different forms of speech in their relation to one another. Grammar treats of the basic elements of language, and how these elements relate and synthesize to form the flow of discourse and of the written word. The grammar of the Word of God is comprised of the fundamental "words," or ideas, that make up the system of Christian Science. Jesus instructed his followers how man must live "by every word that proceedeth out of the mouth of God."

Mrs Eddy writes of the "infinite elements of the one Mind," and of the "primal elements of Truth and Love" (S & H 512:21, 559:26). The "tones" of the synonymous terms, the "tones" of the four sides of the city, the way these relate with each other and reflect each other under the laws of the divine system, are all involved in the grammar of the Word. The grammar of the Word teaches the student the rudiments of a universal Principle, and how these rudiments relate in his consciousness to form the fabric of his life.

We can see, therefore, that with grammar, as the first category of ideas within the subject of Language, we have a subtone of the Word within a main tone of the Word. That is to say, underlying the first of our sixteen categories is the idea of the Word reflecting the Word, or simply, the Word as the Word.

On Ret 10, under the heading, "Early Studies," Mrs Eddy makes a searching metaphysical statement regarding grammar, which might well be said to set the tone of our attitude towards the whole subject of this book. She writes that after her discovery of Christian Science, "learning was so illumined, that grammar was eclipsed. Etymology was divine history, voicing the idea of God in man's origin and signification. Syntax was spiritual order and unity. Prosody, the song of angels, and no earthly or inglorious theme."

To think that etymology (the analysis of a word to discover its origin and derivation) is, when applied to the Word of God, "divine history!" Yet this is precisely its significance within the system

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of Christian Science. In this system the Word is analyzed into its constituent "words" in order to discover the origin and derivation of the universe, — in order, that is, that man shall understand and speak the language of God's creation. The days of creation in the first chapter of Genesis represent this analysis of the Word of God. They state the origin and "history" of the universe. "And God said..." The days of creation record the words that proceed out of the mouth of Principle, and from them Principle's "grammar" derives. From the root-symbols of the days of creation derive the "numerals of infinity," the "divine infinite calculus," the "matrix of immortality," and therefore the language of the "system."

Speech

From the "grammar" of language we come, secondly, to the "speech" of language. Whereas grammar signifies the learning aspect of language and is objective in character, speech is the spontaneous expression, the outpouring flow of language, and is subjective in character. A man speaks a language fluently because he is first versed in the grammar of that language. Speech (apart from the written word) fulfils the purpose of grammar, for it is grammar's inspired, articulated and unexpendable flow.

Ideally, speech is like the river of life in Rev 22, which pours forth "clear as crystal." Indeed speech is this very river when, as a symbol, it is translated in divine metaphysics into the living circulations of the pure Christ-idea. Speech as an aspect of language corresponds, in Science, to the Christ as an aspect of the Word. Speech is the Word of God poured forth as Christ. And therefore, underlying the second of our sixteen categories is the idea of the Word reflecting the Christ, or the Word as the Christ. Christ is defined on S & H 332:9 as "the true idea voicing good, the divine message from God to men speaking to the human consciousness."

With the "language" of any subject, the "Christ" of that subject is the spontaneous, subjective, intercommunicable flow of a true understanding of the subject. It is the principle of the subject expressing its coherency in terms of the subject itself. To reach the stage of subjective fluency and eloquence in the enunciation of his subject is the goal of every student of whatever subject. Under the heading of "speech," in the linguistic sense, come such derivative subjects as discourse, oratory, rhetoric, etc.

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Literature

Literature is the third category in the Language group; for now it is that speech must be recorded and fixed in consciousness in order that its ideas may be propagated, and made universally available. It might be said that the written word, both as prose and as poetry, is the means of propagating and disseminating the spoken word over the face of all the earth. To this end the prophets recorded Judaism in the literature of the Old Testament, the apostles recorded Christianity in the literature of the New Testament, and Mrs Eddy recorded Christian Science in the literature of Science and Health and her other writings.

Speech is like life, — free, spontaneous, unconfined. It is new every instant, transient, unrepeatable. In this sense it corresponds with the passing of time. Always fresh and hitherto unknown, no moment of its output can ever be recaptured. Literature, too, flows, and when inspired continues to yield new views of its message indefinitely. But literature is different from speech. It is the complement of speech in the way that Christianity is the complement of the Christ. If speech is identified with time, literature is identified with space. The purpose of Christianity is the propagation throughout all space of the Christ-idea voiced by Jesus. Historically, both in terms of its literature and its church, Christianity is that which set out to make the living Christ available to all mankind. Hence the underlying tone of this section is the Word reflecting Christianity.

Bad literature confines, confuses, and smothers ideas. A bad church imprisons and kills the living message which its founder originally voiced. In exactly the same way, if man were ever incarcerated in a mortal body he would inevitably die there. But the truth is that man is no more limited by a mortal body than ideas are limited by written words. "You cannot put it into words" is a dictum as true of an inspired idea as it is of man and his body. But you can and must symbolize and communicate ideas by both oral and written words as the means of their propagation. Then when the words, as symbols, have fulfilled their mission of teaching and communication, they are no longer needed in that form. The recipient has made them his own, and the symbol is outgrown.

So it is with everything we are considering throughout this work. First, the general grammatical principles, the fundamental concepts,

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of a subject have to be understood and embodied; second, the cultured "speech" of that subject has to flow from the exponent subjectively and spontaneously; third, there has to be a literature of the subject, so that its teachings may be spread abroad, and everyone who wants to can avail himself of them and so make the subject his own.

Education

This leads naturally to the fourth and final category of the Language group, namely, "education." Education is the comprehensive purpose – the goal – of language. Conversely, without language as an instrument of communication there can be no education in anything. Education in any subject is provided by the three foregoing aspects of the language of the subject, namely, its grammar, its speech, and its literature. As soon as all three of these are made available, a system of education is set in motion and the subject can be scientifically taught.

Language in its aspect of education is, metaphysically regarded, the Word of God in its Science, – the Word reflecting the Science of being, or the Word as Science. The Word in its Science is the creative Logos itself.

Under the heading of education comes the great comprehensive subject of philosophy, and therefore of logic. Philosophy includes epistemology as the theory of knowledge generally. Epistemology is the central philosophical discipline. Epistemology leads to metaphysics, or ontology, the science of being. Epistemological findings have to be ontologically expressed. This means that once epistemology draws its conclusions, it becomes of the nature of metaphysics, in which knowledge passes into being. Remember that here the term, metaphysics, is used in its humanly philosophical sense, as originally formulated by Aristotle, not in the sense of divine metaphysics as understood in Christian Science.

While language itself is creative in character, education is conceptive and birth-giving. Understanding the language of his subject through the process of education, the individual gives birth to his own unique expression of the subject from within his own being.

Education in the spiritual and universal sense is the basic theme of this book. From this point of view nothing is more important to our present deliberations than what is signified by this fourth section of the framework, namely, the Word in its Science. For

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except the Logos is revealed in the form of a universal system of education, man in the likeness of God cannot be humanly born.

SCIENCE AND ART

In his book, "The Two Cultures and the Scientific Revolution," C.P. Snow expresses his conviction that in the twentieth century the apparent inability of the world of the sciences to understand the world of the arts, and the inability of the world of the arts to understand the world of the sciences, is fraught with great danger for the future of mankind. It is as if the respective "languages" of these two cultures are so diametrically opposed to each other that, in the words of the story of Babel, the sciences and the arts are unable to "understand one another's speech." And it is as if this particular breach in intellectual understanding focusses the general picture of a world disrupted and bedeviled by the inability not only of individuals, nations, and races to understand one another, but also of this same inability on the part of the different philosophies, religions, political creeds, and so on. If only the breach between the sciences and the arts began to resolve, other breaches would heal also, and the race, which otherwise is in danger of destroying itself on account of its misunderstandings, would be saved from doing this.

On their face value, the two spheres of human activity, the sciences and the arts, are at variance by reason of their having opposite approaches to the philosophy of life. Only in divine Science can they be truly reconciled, and their relationship found not antagonistic but complementary. Divine Science reconciles them humanly by translating them out of matter. In divine Science the two are forever one as the absolute letter and absolute spirit of the Subject of all subjects, Christ. Christ is the scientific understanding of the living Spirit of God, and is therefore that wherein letter and spirit, understanding and life, are one.

Merging from the first four sections of our framework, where the emphasis is on the Word, to the second four sections, where the emphasis is on the Christ, we see that what the world needs is a "language" in which the sciences and the arts are already one and do not have to be made so. For this will include a system of education for teaching this oneness to mankind. The Word of God

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is the language of Science and art one, and the Christ is the form in which this oneness presents itself to the world.

The Word is the great generic Principle of the oneness of being. The Christ is this generic Principle translated to the point of individual comprehension. Hence, on the day of Pentecost, when the Spirit of God was poured out on all flesh, individuals heard a common world-language speaking to them in their own tongues. Within this common language individual tongues do not lose their individuality; they lose the belief that they are at variance with each other and that they do not understand each other's point of view.

It is the same with the multitude of human subjects and their individual languages which come specifically to our attention in this "Christ" section of our framework. Christ speaks to humanity in terms of the individualized identities of being that make up the comprehensive One. The Christ's human appearing is as the One-in-all and the all-in-One. "Each of Christ's little ones reflects the infinite One," Mrs Eddy writes in Pul 4:14. The solution to the problem of the sciences and the arts, and to all other instances of misunderstanding in the world, will be solved in proportion as the individual "all" is found embraced in the generic "One" and the One is found reflected in all.

The word "science" is from the root, "to know, to distinguish, to separate." Science is "any branch or department of systematized knowledge considered as a distinct field of investigation or object of study." It is "a branch of study concerned with observation and classification of facts, especially with the establishment (and, strictly, the quantitative formulation) of verifiable general laws, chiefly by induction and hypotheses; as, the biological, historical, mathematical sciences." Science is "accumulated and accepted knowledge which has been systematized and formulated with reference to the discovery of general truths or the operation of general laws..." (Wbr)

Whereas science has the emphasis on knowing, art has the emphasis on doing. Whereas science is defined as systematized knowledge, art is knowledge made efficient by skill. Whereas science works objectively, inductively, and oftentimes hypothetically, art works subjectively, deductively, and, to the thought of the artist, veritably. The method of the artist is in fact the exact complement of that of the scientist. The scientist approaches the phenomenon before his physical senses empirically, universally. He is concerned only with universal laws. The artist interprets universal phenomena

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individually. That which is "out there" to the scientist, to be analyzed objectively in terms of general physical laws, is "in here" to the artist, to be interpreted subjectively in terms of the living spirit of creation. The scientist "understands" universally; the artist "feels" individually.

Christ is Scientist and Artist one and indivisible. Christ is the living understanding of the Spirit of reality which is both universal and individual, objective and subjective, at the same time. The Word of God is the "language" of both the Science and the art of the one Christ-creation. There is therefore no possibility of disagreement between the two, no failure on the part of the one to understand the other's point of view, as there is in material sense. We read on S & H 507:25, "This divine Principle of all expresses Science and art throughout His creation. . . Creation is ever appearing, and must ever continue to appear from the nature of its inexhaustible source."

Whereas Science has the accent on quantity, art has the accent on quality. Whereas Science is suggestive of the manhood of God, art is suggestive of the womanhood of God, and the two of them together form the one Christ, the divine manifestation of God.

As with the idea of language, the compound idea of science and art resolves itself, within our present framework, into a natural fourfold structure.

Mathematics

The first of our four categories under the heading, "Science and Art," is "mathematics." From the general field of education, philosophy, and logic, which concludes the four language categories, we blend naturally into the subject of mathematics.

Mathematics might well be defined as the "language" of the sciences. Resolve this concept metaphysically and what we find with mathematics is a subtone of the Word within the main tone of the Christ, - that is, Christ reflecting the Word. Once the sciences and the arts are divinely wedded, then what Mrs Eddy calls "the spiritual mathematics" (S & H 3:6) is not only the language of Science but the language of art as well.

In general, the sciences are formulated quantitatively in terms of different orders of measurement, different scales of magnitude. Mathematical equations, formulae, etc., are the means by which

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scientists express these measurements and communicate them to the world. They are therefore the means by which the sciences to which they relate are translated into intelligible form. Mathematics is the common language of the individual sciences whether these tend in the direction of infinity as with the calculations of astronomy, or the infinitesimal as with nuclear physics.

With the Greeks the word "mathematics" meant originally "a thing learnt," and applied to science generally. Later it came to be concerned exclusively with number and quantity, and such a definition as "the science of discrete and continuous magnitude" was accepted over the centuries. Today, however, this definition is regarded as far from adequate, for with the conceptions of "pure" and "higher" mathematics, the subject of mathematics has spilled over into the field of philosophy. In general terms, mathematics is regarded now as the science concerned with the logical deductions and conclusions drawn from the premises of reasoning.

From the purely quantitative standpoint, the dictionary defines mathematics as "that science, or class of sciences, which treats of the exact relations existing between quantities or magnitudes and operations...the science of serial, spatial, quantitative, and magnitudinal relations; the science of order..." (Wbr)

Mathematics is essentially a pure, abstract science. Its value as a symbol of the order, exactitude, and proof that obtains within the realm of divine metaphysics is apparent from the above reference to "spiritual mathematics." Mrs Eddy also writes that the days of creation, the "order of Christian Science" (S & H 508:28), are stated "in mathematical order" (Mis 57:27). Hence they are really "numerals of infinity" (S & H 520:10). Numerals of infinity is a mathematical concept, even as is "infinite calculus" in the same paragraph. Indeed the other two terms that feature so fundamentally in the language of scientific metaphysics, — "matrix," and "system," are also mathematical conceptions.

In the spiritual mathematics of Christian Science there are no "numbers" as such. The only number is the "one" of infinity, or "the infinite One" (S & H 112:16). The "numerals" of infinity, as the tones of the scale of synonymous terms for God, are the symbolic means whereby the One is made comprehensible to humanity, — whereby the One is reflected individually, and humanity finds its true Ego to be this infinite One.

The "One" relates specifically to the "individuality" of divine Principle, or God. The infinite reflections of the One, whereof the

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spiritual mathematics is comprised, relate to infinite individuality in man and the universe. We read on S & H 336:6, "The divine Ego, or individuality, is reflected in all spiritual individuality from the infinitesimal to the infinite." Discussing "the term individuality" on S & H 117, Mrs Eddy writes that the individuality of God "is One." She says in Mis 104:9, "In Science all being is individual, for individuality is endless in the calculus of forms and numbers." And on Mis 22:11, that "the infinite calculus... absolutely refutes the amalgamation, transmigration, absorption, or annihilation of individuality." "Is not a man metaphysically and mathematically number one, a unit, and therefore whole number, governed and protected by his divine Principle, God?" she asks in Pul 4:7; and continues: "You will find that one is as important a factor as duodecillions in... demonstrating deific Principle. A dewdrop reflects the sun. Each of Christ's little ones reflects the infinite One, and therefore is the seer's declaration true, that 'one on God's side is a majority.'"

And so what we are primarily concerned with in the mathematics of metaphysics is not numerical digits but the idea of infinite individuality in relation to the infinite One. Whether we are thinking of individuality specifically with regard to man, to the lesser identities, the animals, vegetables, etc., or to the spiritual realities of all the individual subjects, sciences, arts, etc., with which this book is concerned, their common language, the mother tongue of them all, is the spiritual mathematics of divine Science, namely, the Word of God.

Thus the first four sections of our framework have the emphasis on this one common language. In the second four sections, the Christ translates this language to the point of infinite individualization, or to the point where it speaks to the individual aspects of human consciousness in terms of their own individual being. Thus the numerals, calculus, matrix, and system of the spiritual mathematics derive from the one and only number, the one and only individual, the infinite eternal One.

The Pure Sciences

Two aspects of the sciences are to be distinguished — their "pure" aspect and their "applied" aspect. Their pure aspect results from the scientists' search for truth and knowledge for its own absolute sake, irrespective of the way in which this knowledge may skillfully

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be applied to the problems of human existence and the ceaseless urge on the part of humanity towards higher standards of living.

The category of thought which comprises the sixth section of our framework is "the pure sciences." The number of subjects to be classified under this heading, and which give rise to the seventh section, "the applied sciences," are legion. Inasmuch as the pure sciences are concerned solely with the impersonal truths and laws of the universe, the underlying metaphysical tone of this section is Christ in its own pure aspect as Christ, or Christ reflecting Christ.

It will be appropriate in touching upon this section to specify certain of the individual subjects that come within its scope. The reason such a large number of subjects locate in this section by comparison with other sections (with the possible exception of the following one) is because the Christ in its own office is that which, in fact, translates the spiritual reality of all the subjects within the entire framework to the comprehension of humanity.

Let us, then, identify some of the more outstanding subjects that fall within this category. We will start with Einstein's Relativity Theory together with what is called his Unified Field Theory; for whether we look in the direction of the infinite with astronomy, or the infinitesimal with the atom, the Unified Field Theory covers the operation of both. We are specifically in the realm of "physics." Astronomy is the field of macro-physics, the atom is the field of micro-physics. The subjects that derive from astronomy naturally decrease in the scale of magnitudes as we pursue them, while the subjects that build up from the atom naturally increase magnitudinally.

Under the heading of atomic and nuclear physics come the classical physics of heat, light, radiation, magnetism, electricity, space, time, etc., all of which are basic to Relativity and therefore pertain to the understanding of the universe as a whole. It is convenient to include sound at this point, too, as one of the classical branches of physics.

Rising in the scale of magnitudes, we come from the sub-matter realm of atomic physics to matter as such, — first of all, to matter's molecular structure, and therefore to chemistry. The vast field of chemistry includes such subdivisions as bio-chemistry and geo-chemistry. Also appearing at this point is the general subject of mechanics, with its two branches, statics and dynamics.

Coming down the scale of magnitudes within the field of astronomy, we start with the galactic nebulae, or the island universes of

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interstellar space, as the largest individual units of which the universe as a whole is composed. From these infinitely vast stellar systems we reach the subject of the solar system, in which the sun, planets, and satellites include the earth itself. The subject of the earth, as the dwelling-place of man, is so vast in range that from it derives every other subject it is possible to consider as contributive to the human consciousness.

The earth involves what are called the earth-sciences and the life-sciences. The earth-sciences include geo-physics, geology, geography, petrography, mineralogy, metalurgy, meteorology, and so on. And here, through geo-chemistry, we find ourselves linking up with the previously mentioned subject of chemistry. Geography involves such subjects as the four seasons, the forces of nature, evolution, natural history, etc., Evolution opens up another vast territory of physical science, biology. At this point, bio-chemistry links us once more to the general subject of chemistry.

Biology is defined as the science of life, and therefore with biology we enter the field of the life-sciences, as distinct from the earth-sciences. Under biology comes ecology, which has to do with the balance of nature, also botany, closely associated with agriculture, horticulture, gardening, etc. From cytology (cells), and embryology (organisms), we come to the branch of biology which is zoology, with its several subdivisions, – ornithology, ichthyology, entomology.

Here we arrive at the centre of the entire picture, for biology also leads to anthropology, or the science of man. From anthropology comes the ethnology of the different races, the subdivision of the races into nations, the subdivision of nations into families, and finally the subject of individual man himself. At this point three main subjects branch out: anatomy, the structure of the mortal body; physiology, the science of the living functions of the body; and psychology, the science of mortal man's mental processes.

The metaphysical import of this section is that the one whole Christ, the phenomenon of all reality, speaks to the human consciousness in the form of all the individual identities of being of which its own individuality is comprised. This means that the language of the Word of God – the language not only of the universe, but the language which is the universe – is translated to the point of the infinite individual expressions of life that form the one universe. These different individual expressions all speak the same language in their own individual way. Because of this, everything in the hu-

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man concept understands and unites with everything else, and harmony reigns on earth.

The Applied Sciences and Applied Arts

The seventh category of the framework is made up of the applied sciences and the applied arts. In the practical walks of everyday life these two fields are so interwoven as to constitute a single category.

“Art” is the “systematic application of knowledge or skill in effecting a desired result . . . as, industrial arts . . . Art in general consists of the truths of science, arranged in the most convenient order for practice, instead of the most convenient order for thought.” Art is also defined as the “application of skill and taste to production according to aesthetic principles . . .” (Wbr)

The idea of the skillful application of pure knowledge to the needs of humanity in order to effect freedom from want, general human betterment, etc., suggests the operation of Christianity within the activity of the Christ. In other words, the underlying metaphysical tone of this section is Christ in its aspect of Christianity. In Christianity, the pure Christ-idea applies itself to the healing of the human concept and to the solution of human problems, just as the purpose of the pure sciences is to solve the problems of mankind's living conditions, and to pave the way for humanity's dominion over all the earth.

Foremost in the realm of the applied sciences is the vast field of engineering and industry, which is inseparable from economics. In fact, in the running of the modern world, science applied to economics is perhaps more crucial and fundamental than any other factor we are considering. This is because, in metaphysics, the infinite Christ-Principle comprises our true capital resources, while the circulating income from this capital keeps the body of consciousness alive. In the language of the divine Word, capital is represented by the fundamental order of capitalized terms for God, or Principle. The individualization of this capital comes from Principle and returns to Principle, even as Jesus said of his own Christ-identity. In so doing, the economics of Principle solve the problems of human limitation, or life in matter.

Economics has both a “theoretical” branch and a “practical” branch. There are also what are called “macro-economics” and

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“micro-economics.” Economics is defined as “the science that investigates the conditions and laws affecting the production, distribution, and consumption of wealth, or the material means of satisfying human desires.” (Wbr) Money as money says to the human body ‘without me you die.’ Christ says to the body of the human race, in Christianity, ‘I am your forever circulating, multiplying life.’

Economics subdivides into banking, accounting, insurance, commerce, trade, etc. Imports, exports, the home market, all involving commercial exchanges, dominate the fields of industry. The engineering industries include such branches as aeronautics, astronautics, navigation, rail and road transport, mining engineering, electrical engineering, chemical engineering, civil engineering, hydraulics, flow-engineering, and so on. Then there is the farming industry, with its allied fields, agriculture, forestry, gardening. Also there is architectural engineering and the building industry. With architecture we blend into the realm of the applied arts, and look in the direction of our next main category, the fine arts. Ceramics, engraving, printing, weaving, fashion, furniture-making, metal work, etc., comprise some of the branches of the applied industrial arts, or what are called the craft-industries.

All these different interrelating activities represent the flow and circulation of human life throughout the general body of consciousness. They signify the output, the intake, the assimilation, use, and exploitation of raw materials, all brought about by the labours, skills, and inventive genius of mankind, with a view to giving humanity dominion over all the earth. The flow of the world’s life-blood through the channels of the applied sciences and the applied arts counterfeits the flow of the life of Spirit through the arteries of the body of Christ.

The Fine Arts

Our eighth category, “the fine arts,” closes the range of Science and Art, just as the fourth category “education,” closed the range of Language. The fine arts include drawing, painting, sculpture, architecture, music, literature, and the theatre.

Fine art is “art which is concerned with the creation of objects of imagination and taste for their own sake and without relation to the utility of the object produced.” The subject which covers all the fine arts is “aesthetics,” another branch of philosophy. Aesthetics is defined as “the branch of philosophy dealing with

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beauty or the beautiful, especially in the fine arts; a theory or the theories of beauty...the scientific study of taste; the psychology of the sensations and emotions that have the fine arts as their stimulus ... Hegel elaborated a science of the fine arts which he called *Asthetik*." (Wbr)

From the metaphysical point of view the dominant note which is struck by the four sections of Science and Art is, as we have seen, individuality. This conception of individuality reaches its climax in the "fine arts," as the "Science" of the other three sections.

Christ is the great artist who is simultaneously the great Scientist. Christ is the great Scientist who is simultaneously the great artist. The Science of art and the art of Science is the key to this tone. Underlying it is the metaphysical tone of the Christ in its aspect of Science, or Christ reflecting Science. Commenting on the third day of creation, at the point where the earth reproduces from within its own being the grass, the herb, and the fruit tree, Mrs Eddy writes, as already quoted, "This divine Principle of all expresses Science and art throughout His creation..." (S & H 507:25). The dominant idea at this point of the third day of creation is "the seed within itself." Soul is the aspect of God which dominates the third day, in which subject and object, object and subject, are one. Soul is the term which applies above all others to the aesthetics of genuine art.

Humanly, and in terms of his own individual interpretation, the artist strives for the expression, the reproduction, of the absolute ideal of whatever the subject is that holds his attention. He delves profoundly, without counting the cost, into what are, to him, the realities and truths of being. He seeks to reproduce in symbolic, image-form the perfection of his own ideal. He is essentially an inspired individualist. The image of the world which he submits to the world is his own subjective conception of the world. His image of the object before him is the objectification of his own subjective being. The individual artist, in his quest for idealism, images forth subjectively his own interpretation, his own innermost feelings, regarding the objective universe. In his relation to what he calls reality, the artist is not looking up to the stars, he is looking out from them; and the image he forms of them and presents to the world is, to him, an essential aspect of what they really are. In the art of divine metaphysics it requires an infinitude of individual artists to image forth in compound form the world as it is in Truth.

All that we find suggested by the individuality of "number" in the

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realm of mathematics, all that we find suggested by individuality in the realm of the pure sciences, all that we find suggested by individuality in the transforming application of the pure sciences to the human picture, is focussed and consummated in the individual idealism of the artist. In the field of modern art it is more evident than ever before that the artist looks through and beyond the blinkered formalism presented by his physical senses, and penetrates the depths of freedom and joy radiant beneath the surface. Here, in the realm of pure ideas, variety of expression and scope of interpretation knows no limits.

The following is from a statement on modern art by the Swiss artist, Paul Klee. But first some words from Herbert Read's introduction to this statement. Read writes that Klee had been teaching art for four years, and "these notes are the product of his deep meditation upon the problems of art which the task of teaching had brought to a head. In my own opinion," Read says, "they constitute the most profound and illuminating statement of the aesthetic basis of the modern movement in art ever made by a practising artist. He [Klee] was of a metaphysical cast of mind and widely read in philosophy and science, and proficient in still another art than his own - in music. . . . An art like painting is itself a language - a language of form and colour in which complex intuitions are expressed. . . . To explain art - that, for Klee, meant an exercise in self-analysis. He therefore tells us what happens inside the mind of the artist in the act of composition. . . . He. . . defends the right of the artist to create his own order of reality [think what the scientist would have to say to this!] . . . The artist must penetrate to the sources of the life-force. . . only then will he have the requisite energy and freedom to create. . . . The final source of power in the artist is given by society . . . We have no sense of community. . . only those who are blind to their own social disunity and spiritual separateness blame the modern artist for his obscurity."

Klee himself declares that the artist "does not attach such intense importance to natural form as do so many realist critics, because, for him, these final forms are not the real stuff of the process of natural creation. For he places more value on the powers which do the forming than on the final forms themselves. . . . The deeper he looks, the more readily he can extend his view from the present to the past, the more deeply he is impressed by the one essential image of creation itself, as Genesis, rather than by the image of nature, the finished product. . . he permits himself the thought that the process

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of creation can today hardly be complete and he sees the act of world creation stretching from the past to the future. Genesis eternal!... This being so, the artist must be forgiven if he regards the present state of outward appearances in his own particular world as accidentally fixed in time and space. And as altogether inadequate compared with his penetrating vision and intense depth of feeling... Presumptuous is the artist who does not follow his road through to the end. But chosen are those artists who penetrate to the region of that secret place where primeval power nurtures all evolution. There, where the power-house of all time and space — call it brain or heart of creation — activates every function; who is the artist who would not dwell there? In the womb of nature, at the source of creation, where the secret key to all lies guarded... our pounding heart drives us down, deep down to the source of all.

... Nothing can be rushed. It must grow, it should grow of itself... We must go on seeking it! We have found parts, but not the whole! We still lack the ultimate power, for: the people are not with us. But we seek a people... We began... with a community to which each one of us gave what he had. More we cannot do."

How pertinent and applicable these words are for the Christian Scientist who is seeking to balance in his own individual being the qualities of both scientist and artist.

THEOLOGY AND MEDICINE

The factors which, above all others, beset, determine, and devastate the lives of human beings are humanity's love of sin and fear of disease and death. But disease and death are the inevitable wages of sin, and therefore the three are inseparable.

In the same way, scholastic theology and materia medica are inseparable. Theology purports to handle sin and to prepare the soul for a future life. Medicine purports to cure disease, but at the same time prepares the body for death. If there were no sin and no disease in the world there would be no place for theology and medicine.

The non-theological, healing Science of Christianity, on the other hand, reveals to mankind humanity's original unfallen status, its forever exemption from sin and disease, and so rids human con-

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sciousness of this fundamental triad of errors.

Reversed and translated out of mortal conceptions, theology and medicine find in the Science of Christianity – that is, in Christian Science – their reciprocal spiritual accord. Christian Science, free from mysticism and supernaturalism, explains God logically, at the same time as it demonstrates God practically by healing and transforming mankind.

And so it is that when, through the language of the Word, Christ translates the Science and art of divinity to the consciousness of humanity, in the way hinted at in the four preceding sections, humanity finds in Science the non-theological identity of God, and in art, God's unfailing medicine.

The artist reproduces in image form the likeness of the ideal which he holds in thought. Mrs Eddy writes of Jesus that he "beheld in Science the perfect man, who appeared to him where sinning mortal man appears to mortals. In this perfect man the Saviour saw God's own likeness, and this correct view of man healed the sick" (S & H 477:1). Jesus, the divinely scientific theologian, is here represented as the divinely scientific artist who is at the same time the divinely scientific healer. Jesus reproduced in consciousness his own subjectively held image of God, and this replaced the sick, sinful, dying image conjured up by scholastic theology and materia medica.

The key to the fourfold expansion of "Theology and Medicine" is that God is not anthropomorphic, that Mind is not in matter, that man is not a sinful, sick, dying mortal boxed up and imprisoned inside a mortal body. The freedom of spiritual and scientific individualism, emphasized by the four preceding "Christ" sections, and represented as focussed in the idealistic, uninhibited thought of the artist, is here, in the four "Christianity" sections, active in human consciousness, ridding humanity of its organic enslavements and bodily confines.

Religion

The first category of the Theology and Medicine section is "religion." The word is from a root meaning, "to hold fast, to bind back." True religion, based on the Science of being, binds man back and holds him fast to Principle. To human sense it restores fallen man to God. Religion, based on the dualistic premise of the

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equal realities of good and evil, Spirit and matter, on the other hand, binds mortal man back to mortality and holds him fast in a sinful, fallen state.

On this dualistic basis, religious monotheism is the worship of a supernatural God, conscious of good and evil; while polytheism, or paganism, involves the worship of a pantheon of good and evil gods. In either form, religion derives from the formulated mythologies and artistic imageries of early civilized man.

Religion began with the cosmogonies of the early civilizations, which were themselves the product of primitive astrology and mythology. From mythology in one form or another come all the sectarian religions of mankind. The original purpose behind the worship of "the gods," was to placate the supposedly supernatural, deific forces of nature, and persuade them to act benignly in human affairs.

Mythological religion deifies natural forces, and personifies its resultant gods in the likeness of mortal man. False religion creates its god in the image of humanity; true religion recreates humanity in the image of God.

Common to both monotheism and polytheism are priestcraft and ritualism. From early ritualistic practices derive faith-healing and the medicine-man. Priestcraft invades the freedom of self-expression and the individual interpretation of truth which are the heart-beats of the true artist; for the policy of priestcraft is to indoctrinate humanity with whatever is the party-line. It enforces obedience to sectarian dogmas, and sets out to convert mankind to exclusive, predetermined points of view.

Religion endeavours to explain material creation, to rationalize the forces of evil, suffering, disaster, etc., in the face of a good God. But until religion yields to the Science of being it has perforce to fall back on superstitious doctrines of mystery and miracle with which to pacify its adherents. Only the monotheism of the prophets of Israel in the first millennium B.C. has within it the seeds of absolute religious truth, for this ultimates in the "religion" of Christ Jesus and the "religion" of Christian Science. The purpose of Jesus' life-work was to translate world-mythology and religious mysticism back into the original Science of God and man.

Sectarian religion, breeding hatred and intolerance among men all down the ages, is the counterfeit of what is meant, metaphysically, by universal Christianity. The doctrines, dogmas, creeds, and rituals by which sectarianism holds mankind in subjection to its will

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counterfeit the divine Word. Hence the underlying spiritual tone of this section is Christianity in its aspect of the Word, or Christianity reflecting the Word.

Mrs Eddy writes in No 45:24, "Let the Word have free course and be glorified. The people clamor to leave cradle and swaddling-clothes. The spiritual status is urging its highest demands on mortals, and material history is drawing to a close. Truth cannot be stereotyped; it unfoldeth forever. . . The question now at issue is: Shall we have a practical, spiritual Christianity, with its healing power, or shall we have material medicine and superficial religion? . . . Theologians descant pleasantly upon free moral agency; but they should begin by admitting individual rights. . ."

Materia Medica

The second category of this development is "materia medica." This has its beginnings directly in mythology and religion. While mythology deals with the origins of the mortal body and the material world, medicine is called upon to save the body from the very diseases which this false theory of origin induces.

Medicine started with religious rituals and incantations, in which the gods were besought to withhold the curses and displeasures they meted out to mortal man in the form of bodily afflictions, natural disasters, and so on. Mrs Eddy writes in S & H 158:1, under the heading, "Mythology and materia medica," "It is recorded that the profession of medicine originated in idolatry with pagan priests, who besought the gods to heal the sick and designated Apollo as 'the god of medicine.' He was supposed to have dictated the first prescription. . . Apollo was also regarded as the sender of disease, 'the god of pestilence' . . . the future history of material medicine may correspond with that of its material god, Apollo, who was banished from heaven and endured great sufferings upon earth."

The application of true religion to the healing of disease and the mitigation of suffering, on the other hand, is the action of the Christ within the general operation of Christianity – in other words, Christianity in its aspect of the Christ. Christianity as the Christ, the underlying tone of this tenth section of our framework, heals and saves humanity as a whole from sin, disease, and death, and is the divine counterfact to the practices of materia medica.

Included in the category of materia medica are such subjects as

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the drugging system, homeopathy, nature cures, etc. Nature cure involves hygiene, dietetics, physical exercise, physiotherapy, and so on.

Under the heading, "Jesus' own practice," we read in S & H 148: 3-6, "...the requisite power to heal was in Mind. He prescribed no drugs, urged no obedience to material laws, but acted in direct disobedience to them." Jesus did not restore a body to health, he understood the workings, in Science, of the only body there is, namely, the body of Christ in its wholeness. This body is Christianity. He knew that God does not have to recover the wholeness of His own body, generic man, because this body never fell from grace. And what is true generically is necessarily true individually as well.

Surgery

The third section of this development is "surgery." Surgery is "that branch of medical science, art, and practice, which is concerned with the correction of deformities and defects, the repair of injuries ... by manual and instrumental operations..." (Wbr)

Christianity is wholly concerned with the individual, collective, universal body of Christ. Christianity is all humanity as an indivisible spiritual embodiment, - one whole structure of the spiritual ideas of God. The most fundamental quality of this structure is that every part of it is inseparable from, and non-existent apart from, all the other parts that make up the body. In I Cor 12:12, Paul puts it this way: "... the body is one, and hath many members, and all the members of that one body, being many, are one body... That there should be no schism in the body; but that the members should have the same care one for another... ye are the body of Christ, and members in particular."

In Christianity as Christianity, which is the underlying tone of this section, every part of the body of Christ is in perfect relationship with every other part. No part can be cut off from, or brought back into unity again with, any other part. Yet the attempt to perform these operations in the physical realm is the basis of surgery. Unlike the drugs of materia medica which do their work involuntarily and unconsciously, surgical treatment involves manual dexterity and the use of instruments. All the surgeon's physical manipulations are carried out consciously.

The surgeon works in two ways. Either he cuts portions away

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from the body, as in the case of deformed tissue and offensive growth, or else he pieces portions together again, as in the case of breakages and dislocations. But neither of these two operations are possible with regard to the body of Christianity. This body, as we read on S & H 242:26, is "without seam or rent." Mrs Eddy writes here: "'They parted my raiment among them, and for my vesture they did cast lots.' The divine Science of man [the body of God's ideas] is woven into one web of consistency without seam or rent...inspiration restores every part of the Christly garment of righteousness."

Like *materia medica*, surgery, too, stems from mythology. Of the creation of Eve in the second chapter of Genesis, we read on S & H 528:15 how God is supposed to have induced "a sleep or hypnotic state in Adam in order to perform a surgical operation on him and thereby create woman." But the essence of Christianity is the manhood and womanhood of God as one whole healthy body, because it is undivided.

Under the heading of surgery come such subjects as anatomy, anaesthetics, dentistry, etc., as well as the treatment of accidents, and the practice of obstetrics; also veterinary practice.

On S & H 462:20 - 463:20, Mrs Eddy links together, in their spiritual signification, anatomy, surgery, and obstetrics. She writes: "Anatomy, when conceived of spiritually, is mental self-knowledge, and consists in the dissection of thoughts to discover their quality, quantity, and origin... This branch of study is indispensable to the excision of error. The anatomy of Christian Science teaches when and how to probe the self-inflicted wounds of selfishness, malice, envy, and hate..." She continues in the following paragraph: "Teacher and student should also be familiar with the obstetric taught by this Science... A spiritual idea has not a single element of error, and this truth removes properly whatever is offensive..."

The anaesthetics, and/or hypnotism, involved in the practice of surgery leads directly to the subject of the next section, "psychiatry," which is the purely mental concept of surgery, namely, the addition or subtraction of different kinds of thoughts.

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Psychiatry

Mythological religion and mythological medicine reach their natural conclusion in the practice of psychiatry. Therefore psychiatry constitutes the fourth and last category of the "Theology and Medicine" development, and the twelfth category of the picture as a whole.

Psychiatry is a derivative of the science of psychology. The dictionary defines it as "the medical speciality that deals with mental disorders..." Psychology is "the science which treats of the mind... in any of its aspects; systematized knowledge and investigation of the phenomenon of consciousness and behaviour..." The word "psyche" is the Greek for "mind," or "soul." (Wbr)

Thus psychiatry turns wholly to the mind of the body rather than to the body itself. It treats unconscious and subconscious as well as conscious mortal thought. It deals with mental disorders themselves, and also with mental disorder as the apparent cause of physical disorder. Unlike materia medica and surgery, its analyses, healing methods, and manipulations lie wholly in the mental realm, not the physical.

Under the heading of psychiatry come psycho-analysis, the subconscious, the unconscious, hypnotism, mesmerism, sleep, dreams, etc.

Sometimes through depth hypnosis the psychiatrist is able to delve into the patient's unconscious mind and bring to the surface for attempted obliteration certain primordial mythological images and beliefs that are causing his conscious disability. Today, there is a growing awareness among psychologists that the subconscious, (and on a deeper level, the unconscious) and the mythological images of primeval mortal existence are inseparably connected. A psychologist once wrote to the author how, today, psychology is becoming "more and more myth-eaten!"

As with mythology, time is a fundamental factor in psychiatric practice. The psychiatrist analyzes his patient's mentality particularly with reference to the build-up of his past life. In common with the purpose of mythology his aim is to get back to origins. The patient's fears, hates, repressions, frustrations, appetites, - his unadmitted interest in violence, lust, and so on, that have developed over the years, and are causing his present disability, lie deep and unknown in his unconscious mental stratum, and the purpose of psy-

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chiatry is to unearth these mental states and bring them to the surface. Oftentimes disorders are less deep-rooted than this, and are traceable to more obvious prenatal inheritances. Sometimes they are traceable to immediate emotional relationships with other human beings, or with marital, business, or other forms of anxiety. Often, however, the cause is deep beneath the surface of thought and associated with the primitive, mythological beliefs of the human race as a whole. Then it is that memory, time, unconscious mind, and mythology go hand in hand.

Having brought the cause of his patient's disorder to the surface, in the form perhaps of some archetypal image, the psychiatrist seeks to replace this image with an opposite mental condition. Yet, in fact, he only replaces one kind of belief with another, better kind. The real answer lies in the practice of Christian Science, where the only unconscious, the only "unknown," is the unfathomable depths of the Mind which is God, the eternal source of health and harmony. God is the Mind of man, and man is the body of God. What Science and Health calls "perfect God and perfect man" are really perfect Mind and perfect body, which individual man reflects.

It was the psychologist, C.G. Jung, who first introduced the idea of the "collective unconscious." Jung showed how individual mortal consciousness stems from a collective and universal unconscious level, which is filled with primeval, mythological images. He showed that what appears to be an individual, independent unconscious mind is really the collective and universal unconscious mind individually expressed. Just as in Christian Science "all men have one Mind," so in the counterfeit realm of psychology, men's apparently independent minds show forth one universal unseen mind. The reason Jesus fully worked out the problem of being is because, on behalf of the world, he exploded the world's primeval mythological laws and beliefs, and replaced these with a conscious understanding of, and union with, Mind.

Like a true artist, Jung worked impersonally and scientifically in his tireless search for truth. He allowed what is to reveal itself, free from his own personality. Likewise in the realm of Christian Science healing, the Christian Scientist turns to immortal Mind for the revelation of Truth as it is. Through spiritual understanding, the Christian Scientist enters consciously the realm of Mind. Through his analysis of the psyche, Jung entered voluntarily and consciously, for the benefit of mankind, the depths of the universal unconscious. The difference between the two approaches is

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that, in the one case, Truth speaks to consciousness in terms of pure Truth, while, in the case of Jung, it revealed its own exact counterfeit which Jung mistook for reality. It might be said that in the one case Truth declares what Truth is, and in the other what Truth is not. Yet in both cases the same Truth is operating. If in either case, personality is allowed to obtrude itself, and analysis is attempted egotistically, the door is closed not only against Truth's revelation of Truth but also against Truth's revelation of the true nature of error. It is evident from his life-story that Jung never allowed this to happen, but that he always worked with the conscientious humility of both a scientist and an artist.

Underlying this concept of the universal unconscious in its relation to psychiatry, is universal Christianity in its aspect of Science. The Science of Christianity is generic man, the body of God, the body of Christ, whereof all conscious spiritual individuality is born.

In the chapter, "Christian Science Practice," in Science and Health, Mrs Eddy reverses the mortal concept of "psychology" and reveals it as "the Science of Spirit, God" (S & H 369:26). In Mis 3:29, she writes, "The tendency of mental healing is to uplift mankind; but this method perverted, is 'Satan [primeval mythology] let loose.' Hence the deep demand for the Science of psychology to meet sin, and uncover it; thus to annihilate hallucination."

SOCIOLOGY

Our fourth main heading is "Sociology," or the "science of human society." From the standpoint that within the evolution of society as a whole have come to birth all the different sciences, philosophies, arts, etc., which we are here considering – from this point of view, Sociology is the great comprehensive subject that embraces and holds all the others within itself. What it signifies metaphysically is heaven on earth, or the brotherhood of man under the government of divine Principle.

"Sociology" is the goal of the three preceding main subjects, "Language," "Science and Art," "Theology and Medicine," just as Science is the goal of the Word, the Christ, and Christianity. The Word is Science unfolding, the Christ is Science unfolding, Christianity is Science unfolding, until the point is reached at which it can

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be said: Science is that which these three have unfolded. It is the same with the development of our present human framework. All of it is Sociology unfolding to the point where we find ourselves thinking in terms of human society as a whole.

"Sociology" is defined in the dictionary as "the science of the origin and evolution of society;" as "the name for the comprehensive, objective study of the associated life of man." Also as "the culmination of [the] hierarchy of the sciences" (Wbr). The Encyclopædia Britannica says that in Sociology "we obtain the ruling principles to which the laws and principles of all the social sciences stand in controlled and subordinate relationship" (p. 323 Vol. 25).

Sociology has therefore an enormously broad and comprehensive connotation. Like its three predecessors, it expands into four categories of activity, just as does Science, the fourth side of the holy city.

Marriage and Progeny

"...unto us a child is born..."
(Isaiah 9:6)

The first factor to be considered within the field of Sociology is the creative aspect of human society, — what it is that comprises society, and what it is that ensures its life and continuity. What we are concerned with divinely at this point is, in the words of Science and Health at the close of the chapter, "Marriage," the "sense of increasing number in God's infinite plan" (S & H 69:12). Hence we arrive at the subject of "marriage and progeny."

The marriage, in Science, of the manhood and womanhood of God is really the marriage of Christ and Christianity, — Christ, the generic "head" of the human race, Christianity the infinitely specific "body." In proportion as this wedding is reflected in individual man, the propagation of individuality, or of "increasing number in God's infinite plan," takes place.

In the words of Isaiah, "Unto us [the human race, the woman in the Apocalypse] a child is born." This child, in Science, is the idea of the individual, collective, and universal unity of man.

The metaphysical tone at this point is Science from the standpoint of the creative Word, or Science as the Word. It is the natural outcome of the preceding tone, Christianity as Science, where the

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subject, humanly, was the subconscious mind. In the counterfeit mortal realm, no concept derives more immediately from the mythological subconscious than the involuntary mortal instincts that relate to marriage and progeny.

Science and Health defines the human sense of marriage as "the legal and moral provision for generation among human kind" (56:7). The paragraph goes on, "Until the spiritual creation is discerned intact, is apprehended and understood, and His kingdom is come as in the vision of the Apocalypse, — where the corporeal sense of creation was cast out, and its spiritual sense was revealed from heaven, — marriage will continue..."

While appearing to be organically constructive, sex is really destructive. It presents man as a body divided against itself. Christ does not sow the seeds of mortality, or death, in the body of Christianity, his own body, as does the male in the body of the female. Christ sows the seeds of life, and the "child" that is born of this human and divine coincidence is humanity's unfallen identity, and therefore its eternal life.

We read at the close of the chapter, "Marriage," "Proportionately as human generation ceases, the unbroken links of eternal, harmonious being will be spiritually discerned. Mortals can never understand God's creation while believing that man is a creator. God's children already created will be cognized only as man finds the truth of being... No longer to marry or to be 'given in marriage' neither closes man's continuity nor his sense of increasing number in God's infinite plan."

The "unbroken links of eternal harmonious being" are none other than "the generations of the heavens and of the earth" (Gen 2:4), presented as the seven days of creation in the first chapter of Genesis. Each successive "day" is a new generation of the spiritual idea of God. Not the sexual division of male and female, but the wedding of heaven and earth, man and woman, brings each new generation to birth within the eternal order of Science.

The subjects of home, family relationships, sex, heredity, divorce, etc., fall within this category. Mrs Eddy writes on S & H 254:31, "Pilgrim on earth, thy home is heaven..." Earth finds its home in heaven, and heaven in consequence reigns on earth in proportion as humanity finds its identity as God's reflection. Of this union with divinity, as in the case of the woman in the Apocalypse, spiritual progeny is born.

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Government

“...and the government shall be upon His shoulder...”

The idea of government is a monumental one within the subject of Sociology. Divinely, the government of the world is upon the shoulder of the Christ-idea which is born to us in Science through the understanding and practice of the true idea of marriage. When, in Rev 12, the woman's man child, the Son of (generic) man, is born to human consciousness, we read how he “will eventually rule all nations and peoples – imperatively, absolutely, finally – with divine Science” (S & H 565:16). That is, he will set up a state of spiritual world government.

The need on the part of humanity is that the Christ-idea of government shall operate humanly and divinely at the same time, – “in earth, as it is in heaven.” Daniel writes of how divine Principle, in whom is vested the true idea of government, “doeth according to his will in the army of heaven, and among the inhabitants of the earth: and none can stay his hand, or say unto him, What doest thou?” (Dan 4:35).

The emphasis with this fourteenth section of the framework is thus the Science of world government. Underlying it, therefore, is Science in its aspect of the Christ, or Science reflecting the Christ.

The subjects that come under the heading of government are, first of all, monarchy, with its inevitable class society, heraldry, parliamentary democracy, state dictatorship, politics, diplomacy, international relationships, law, and so on. Law and jurisprudence subdivides under such headings as police, criminology, punishment, etc.

The purpose of Christ's government is to rid society of its mad ambitions, its greedy vested interests, its desire for ruthless exploitation, and all the other vicious and violent elements that otherwise cause it to be in a state of conflict within itself, and therefore to be self-destroying. Mrs Eddy writes in S & H 239:5, “Take away wealth, fame, and social organizations, which weigh not one jot in the balance of God, and we get clearer views of Principle. Break up cliques, level wealth with honesty, let worth be judged according to wisdom, and we get better views of humanity. The wicked man is not the ruler of his upright neighbour.”

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Field of Human Conflict

“...and his name shall be called...The Prince of Peace...”

The third category of the Sociology group is concerned with the mighty problem of conflicts, wars, rebellions, etc., which go on in one form or another throughout the whole of mortal experience. These conflicts are the direct result of the supposed duality of being, – the original myths of the separation of man from God, woman from man, and the consequent growth in human consciousness of the tree of the knowledge of good and evil. In Science, all conflict resolves into the warfare between Spirit and the flesh, or between good and evil.

Science and Health teems with references and terminology to do with war. The government of the Prince of Peace is set up on earth in proportion as the warfare between Spirit and the flesh is fought and Spirit is victorious. What Spirit battles with are the very forces of conflict and self-destruction that claim to devastate humanity. All these forces pertain to the appetites, passions, hates, and fears, of a mortal sense of life. Humanity must be self-translated not self-destroyed.

Throughout the animal kingdom and the kingdom of man, that which is “here” is always at war in one form or another with that which is “there,” because the evidence before the mortal senses is that subject and object are two and at variance with one another.

And so the battle between Spirit and flesh is in very fact the war to end all wars. In this warfare humanity finds its identity in Spirit, not matter. In Spirit there are no antagonistic, dualistic, self-destroying elements. In Spirit, Soul, subject and object, man and woman, man and God, are one.

We read in S & H 254:6, “God requires perfection, but not until the battle between Spirit and flesh is fought and the victory won.” Again, on 567:10, “Truth and Love [Michael and Gabriel, the manhood and womanhood of God] prevail against the dragon because the dragon cannot war with them. Thus endeth the conflict between the flesh and Spirit.” And again on 568:5, “The twelfth chapter of the Apocalypse typifies the divine method of warfare in Science, and the glorious results of this warfare.” Included in this one chapter, the 12th chapter of Revelation, are first of all the true idea of marriage and progeny, then the true idea of government, and thirdly, in the

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victory over the great red dragon, the true idea of warfare.

All the wars of history, individual, tribal, civil, religious, national, or on a world scale, derive from the belief that subject and object are two, and that subject must prevail over object in order to be supreme. In proportion as the government of Spirit ends the sex war of conquest and possession that rages between the male and female of mortality, all other kinds of warfare will begin to cease, and the Principle of peace will assume control of human relationships.

In assessing the symbolism of warfare and rivalry in Science and Health, two complementary aspects stand out. One is war itself in which protagonists seek each other's destruction, the other is sports and games, where opposite sides do not assail one another with mortal intent but engage each other peacefully and competitively in the spirit of mutual enjoyment.

The purpose of the battle between Spirit and flesh, Truth and error, is to dispose of all seeming divisions between man and God, between man and man, and to establish the kingdom of mutual understanding and peaceful coexistence on earth. Mrs Eddy writes on S & H 467:9, "Thou shalt love thy neighbour as thyself.' It should be thoroughly understood that all men have one Mind, one God or Father, one Life, Truth, and Love. Mankind will become perfect in proportion as this fact becomes apparent, war will cease and the true brotherhood of man will be established."

Clearly the underlying metaphysical tone of this section is Science in its aspect of Christianity, or Science reflecting Christianity.

Civilization

"Of the increase of his government and peace there shall be no end... to order it, and to establish it with judgment and with justice from henceforth even for ever. The zeal of the Lord of hosts will perform this" (Is 9:7).

The final subject of this sixteenfold picture is the comprehensive one of civilization itself, — civilization as a whole. Sociology and civilization are one, and the goal of each, whether humanity is aware of it or not, is the city foursquare of Revelation 21, or the establishment of the kingdom of heaven on earth.

The words "city" and "civilize" have the same root-meaning.

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The human society which finally "lieth foursquare" is the "New Jerusalem," the "city of [world] peace," defined by Paul as "the mother of us all." Its form is the matrix and calculus of all real being, — a World University, wherein the Comforter, the spiritual educator of mankind, fulfils its timeless purpose, and where man himself is at the point of ceaseless new birth.

Hence the idea of "civilization" becomes the consummating tone of the matrix's human pattern, the outline of which, in terms of this present work, we have now seen unfold. As the final section of all, "civilization" reaches out and embraces every other section, just as the sixteenth tone of the "matrix" does in relation to the preceding tones.

Among the subjects dealt with under this heading is "history," and the idea of "making a journey." Terminology relative to journeying in time from one place to another abounds throughout Science and Health.

The historian, A. J. Toynbee, in his book, "Civilization on Trial," writes "Civilization, as we know it, is a movement not a condition, a voyage and not a harbour. No known civilization has reached the goal of civilization yet" (p. 55). He asks in the same book, "Is not history itself, in the last analysis, a vision of the whole universe on the move in the four-dimensional framework of space-time?" (p. 31).

And so it is that, as stated in the Preface, the author's second book, "Civilization Lieth Foursquare," which treats the subject of sociology from the standpoint of its unfoldment through history, is the exact complement of this present sixth book, which treats sociology in the form of the total build-up which it has reached today.

The story of civilization is the story of education on a world scale. Humanly regarded, both civilization and education signify the making of a journey, namely, the journey of mankind as a whole from darkness to light, from ignorance to knowledge, or from the time of primitive, prehistoric society to when the city foursquare shall be found to constitute the whole of human consciousness. As we have established from the beginning of this book, that which makes the journey (the education process) possible, is the fact that the "kingdom of God" is already within man, and constitutes the true identity of the human race. The continuous "birth" of this kingdom necessarily fills the void of apparent human ignorance, and this appears outwardly as the civilizing journey of mankind.

The tone of this section, as the summation of all that we have

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been discussing from the beginning, is that of Science in its own office, or Science reflecting Science.

FROM "PRAYER" TO "THE APOCALYPSE"

Finally, in this part of the book, let us examine an aspect of the work which did not reveal itself until the foregoing framework had unfolded, and a glimpse had been caught, divinely and humanly, of the sixteenfold form as a whole.

In view of the fact that Science and Health, standing for the matrix of spiritual education, had yielded all these different subjects that make up the human picture; and in view of the fact that these subjects, without willful persuasion, had resolved themselves into a human replica of the matrix-pattern, the question repeatedly presented itself as to whether or not there exists an inevitable correlation between these sixteen human categories and the spiritual messages of the sixteen chapters that make up Science and Health. Because of the danger of attempting to make things "fit" in work of this sort, the urge to investigate the possible parallel was shelved for a long time. The query, however, persisted until it could no longer be denied, and once the inquiry started, the confirmation that such a correlation does indeed exist was spontaneous and, to the author, convincing.

This does not mean to say that there is actual textual relationship between the subjects of the sixteen categories and those of the sixteen chapters. Literal references to these subjects, or specific dissertations on them, are neither to be expected nor looked for within the pages of the individual chapters. What it does mean to say is that a metaphysical relationship exists, which has little to do with surface words, but with the spiritual meaning behind the words.

Let us examine these parallels one by one, and find, thereby, divine authority for the whole of the foregoing development.

THE FIRST FOUR CHAPTERS

Because they accentuate the first side of the city foursquare, the first four chapters of Science and Health: "Prayer," "Atonement

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and Eucharist," "Marriage," "Christian Science versus Spiritualism," are sometimes called the "WORD" chapters. Correspondingly, the first main subject of our human framework, that covers the first four sections, is LANGUAGE. Language is itself a symbol of the Word. Language is a medium of COMMUNICATION, of intercommunion, and this is the idea which, above all others, pervades the first four chapters. Through "Prayer," humanity desires and seeks communication with God. "Atonement" signifies "at-onement," while "Eucharist" is "spiritual communion with the one God" (S & H 35:25). Divinely, "Marriage" likewise signifies union and communion, even as it does on the merely human level. "Christian Science versus Spiritualism" handles the belief that communication with Spirit is carried out through the mediumship of the human personality.

Prayer

The chapter, "Prayer" is elementary in its teaching. It presents the basic values, qualities, and attitude of mind required of the student in order that he shall qualify for communion with God, — in order that his Principle shall be able to speak with him in a language which he understands. These elemental values, qualities, attitudes, form the "grammar" of this language, without which communication is impossible.

Mortality does not pray to, or commune with, immortality. Nothing prays to, or communes with God but that which first comes from God, namely, the elements of the language of Spirit which are the constituents of spiritual man. Man communes with God through the grammar of the Word which comes from God. He lives by the words that proceed out of the mouth of God. In the act of communion, man, as these "words," returns whence he came.

Even so, the accent with the first chapter is on the apparent human approach to God, and therefore on the objective. This makes it the complement of the second chapter where the accent is on the subjective, and on God's communion with man.

Atonement and Eucharist

The focus of the second chapter, "Atonement and Eucharist," is

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the gospel incident of the "last supper." Jesus imparted to his disciples the Eucharistic elements, and said to them, "Take, eat; this is my body." Acknowledging no other self, no other "I," but Spirit, Jesus was speaking subjectively the language of Spirit. Hence the reality behind his symbolic act was Spirit itself imparting understanding to his followers – voicing to them its own pure language of ideas, so that they could understand God and each other. The eloquent flow of this language is mankind's true identity in all its articulated unity.

Through Christ, God communicates freely and spontaneously with man, and vice versa. But first the "grammar" of the communicating language must be established, as represented by the first chapter, or the flow of "speech" can never take place, as represented by the second. Grammar is the elements and syntax of the body of Christ; speech is the flow of the living, whole body. Speaking this language, and being this language, Jesus, as shown in the second chapter, could translate the entire language of matter back into Spirit, and so solve the problem of being.

Marriage

The correlation between the third chapter, "Marriage," and the third section "literature," is a more delicate and less obvious one, but none the less beautiful for that. The grammar and speech of the Word of God is recorded, symbolically, in the literature of the Bible and Science and Health for the purpose of universal propagation. The Bible and Science and Health typify the manhood and womanhood of God, whose spiritual wedlock propagates the Christ-idea. As a result of Jesus' demonstration of wedlock and communion in the second chapter, all mankind is enabled to follow his example in the third chapter, and gradually dissolve the carnal sense of marriage which is really divorce from God.

In metaphysics the idea of human marriage and the idea of organized religion are closely connected. The third chapter is based on Jesus' statement to John on the occasion of the Jordan baptism: "Suffer it to be so now: for thus it becometh us to fulfil all righteousness." Mrs Eddy applied this statement not only to the symbol of human marriage, but also to her necessity for organizing a church for the propagation of Christian Science (see Ret 48:25). In its rightful function, as conceived by her, the Christian Science Church

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no more confines and absorbs the continuous divine impartation of Christian Science than literature confines and absorbs the ideas that flow freely as "speech" in the author's own mind. The ideas are not "in" literature any more than Christian Science is "in" a church organization, or man is locked up inside a mortal body. The ideas are, however, symbolized in literary form in order to be made humanly available and universally appreciable. The Christian Science Church, as conceived by Mrs Eddy, is represented by the wedlock of the Bible and Science and Health, which she called the church's "dual and impersonal pastor" (Mis 322).

Until marriage is understood spiritually, mortal wedlock propagates more mortality. In the same way religious organization begets more and more organization. Mankind joins itself to an organized church; the male joins himself to the body of the female. Hence the way in which Paul, in his epistles, uses marriage to symbolize the relationship between Christ and his "bride," the church. The dissolving, solving answer lies in what God hath joined spiritually together, namely, Himself and His reflection, man. Rightly understood, church, marriage, mortal body are dissolving human symbols of this eternal holy communion.

In the same way, a scholar takes up a literary publication in order to wed himself subjectively to the unconfined ideas that lie behind the word-symbols. Having done this he is at the standpoint of the flow of "speech" that originally inspired the words, and the literature, as such, has served its temporary, useful purpose.

Christian Science versus Spiritualism

We come to the fourth chapter, "Christian Science versus Spiritualism," correlative with the fourth section of the framework, "education." Christian Science is the scientific system of all ultimate spiritual education. The theories of spiritualism are the antithesis of the teachings of Christian Science, and correspond to false personal methods of education. Spiritualism is personally, organically, objectively, mediumistic in its method of conveying "messages." "Spirits," the unlikeness of Spirit, are supposed to channel themselves through personal mediators in order to communicate with mortals. In all forms of mediumship mortals seek to communicate with the subject of their desire through the medium of other mortals. This is occult education, and is the means of impos-

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ing objectively on mortals alien conversive propaganda.

Christian Science, on the other hand, says to the student, 'The kingdom of God, the subject of your desire, is already within you, and has to be led out, or drawn forth, from within you. If you think you can find, or have found, this kingdom externally, or that it has come to you mediumistically from outside of yourself, then, by definition, you have not found the kingdom of God. The subject of your desire is Spirit. Spirit communicates with you direct in its own spiritual language which is attuned to you individually, and which comes to you in the form of spiritual understanding.'

Mrs Eddy writes in My 253:26, "We understand best that which begins in ourselves and by education brightens into birth. . . Let the creature become one with [be in spiritual communication with] his creator, and mysticism [spiritualism] departs, heaven opens, right reigns, and you have begun to be a Christian Scientist." She once said to students, "When I teach Science it is not woman that addresses man, it is the Principle and Soul bringing out its idea by blotting out the belief that otherwise hideth it." When Abraham pleaded with God that his servant, Eliezer, might be his legitimate heir, God rebuked him and said, "This shall not be thine heir; but he that shall come forth out of thine own bowels shall be thine heir" (Gen 15:4).

Christian Science presents the true method of education because Christian Science is non-mediumistic; while its antithesis, spiritualism, represents the false method, being based on outside impartation and alien indoctrination. Though their sponsors may be unaware of the principles of Christian Science, modern theories of scholastic education confirm the rightness of the one method and the wrongness of the other.

Understanding the grammar of Spirit, the language of Spirit speaks to us direct, and dissolves the belief that we need to be joined to an external organized body for the purpose of spiritual education. What seems, then, to be God speaking from outside ourselves is in fact God speaking within us. The purpose of a communicating language is fulfilled in this true idea of education, or birth.

THE SECOND FOUR CHAPTERS

The second group of four chapters, "Animal Magnetism Unmasked," "Science, Theology, Medicine," "Physiology," and "Footsteps of

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Truth," are sometimes called the "Christ" chapters. With them the accent is on Christ as "the divine manifestation of God, which comes to the flesh to destroy incarnate error" (S & H 583:10). This spiritual destruction can be finally understood only in terms of spiritual translation. The CHRIST, emphasized in the second four chapters, speaks to human consciousness in the language of the WORD, emphasized in the first four chapters. That which speaks, or that which is translated, is the message of the inseparable SCIENCE and ART of all real being. There comes to us, within us, the living understanding of reality wherein object and subject, manhood and womanhood, are one, and this one is us. The absolute prerequisite for the salvation, or translation of humanity is the scientific understanding of subject and object one.

Animal magnetism is the fundamental lie that subject and object are two, and have to be made one. "Animal Magnetism Unmasked" teaches the handling of this lie subjectively in order to erase it objectively. "Science, Theology, Medicine" is all about the revelation subjectively that subject and object are one, in order that this shall be manifest objectively. "Physiology" teaches the translation of the mortal, objective sense of body in order that the body of Christ shall be found to be the only body there is, both subjectively and objectively. "Footsteps of Truth" teaches us that our apparently objective human journey to perfection is, in fact, the subjective step-by-step unfoldment within us of perfection itself.

Animal Magnetism Unmasked

The metaphysical correlation between the fifth chapter, "Animal Magnetism Unmasked," and "mathematics" is of great significance. Everything about mathematics is impersonal; everything about animal magnetism is personal.

According to S & H 106, animal magnetism is that which would "invade" man's "inalienable rights" of "self-government, reason, and conscience." It is that which, through mental "trespass," subliminal infiltration, mental bombardment, would "interfere" with the "divine order" of being, which is that God and man, man and woman, subject and object, are one. Science and Health defines "order" as "like" producing, or reproducing "like" (see S & H 276: 29-23). In reflecting upon Himself, God, - Mind, Spirit, Soul, Principle, Life, Truth, Love - is forever reproducing His own likeness,

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never His unlikeness. This is the divine order of being.

Animal magnetism claims to trespass upon this order, and through infiltration and subversion to attract man to itself, away from God. It claims to make object and subject two, and to give man an ego of his own. It is that which would explode the nucleus of being and precipitate a material universe.

Mathematics is the foremost symbol used by the textbook to represent the infallibility and invariability of the divine order of being. Mrs Eddy says that the days of creation, the "order of Christian Science," are stated "in mathematical order." Animal magnetism would trespass upon the first record of creation, wrest man from God, and turn the first record into the second. In mathematics no idea can be wrested from its principle. This means that no idea can be wrested from any other idea, that all ideas are one idea, and this one, in its oneness, is the principle expressed. In mathematics all ideas belong exclusively to their principle. Not one is personally possessed. Not one can say, "I," independently. Therefore animal magnetism cannot trespass upon them, or interfere with them, or rob their principle of them. And it will be the same without our own lives in their relation to divine Principle as they partake more and more of the nature of the divine order of being.

It is said that, in the matter of "brain-washing," whether in the case of military prisoners in the second world-war, or political prisoners in the subsequent era of the cold war, if victims could be taught beforehand to concentrate their thought on mathematical truths, such as the numeration tables, for example, they became relatively immune from hypnotic indoctrination.

In Science, we do not think about the order and coherency of being in the hope that this will protect us from the subversive bombardments of animal magnetism, we find that we are this order and coherency, which is immune from all such attacks. In Science there is no attacker, no attack, and no attacked. Principle is the Ego of man in Science, and therefore man belongs not to himself or to others personally, — not to animal magnetism, but to God.

"Man is properly self-governed only when he is guided rightly and governed by his Maker, divine Truth and Love," we read on S & H 106:9. The fact is that we can no more be robbed of our rights of self-government when we are moving spiritually in the divine order of being, and become governed instead by animal magnetism, than there can be disruptive interference with the order, laws, and integrity of mathematics.

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Science, Theology, Medicine

Once the lie of animal magnetism is found out and nullified, then, as related in the sixth chapter of the textbook, "Science, Theology, Medicine," the period of "preparation" in the student's experience is over, and divine law and order reveals itself spontaneously to his consciousness as the reality of his own being. Mrs Eddy recounts at the beginning of this chapter the circumstances of the initial revelation of Christian Science, — the discovery of the "divine laws of Life, Truth, and Love," which 'poured into her thought as a "heavenly conviction," and as "the gift of the grace of God."

Mrs Eddy sought and loved Truth for its own pure sake. Because of this, her revelation (the "evidence" of which she says in this chapter she allowed to "multiply with mathematical certainty") is destined to transform the "whole lump" of human consciousness and translate it back into the "language of Spirit." Referring to the cures that were "produced in primitive Christian healing by holy, uplifting faith" she declares that she herself "must know the Science of this healing," and that she "won [her] way to absolute conclusions through divine revelation, reason, and demonstration" (S & H 108-109).

Likewise the physical scientists devote their lives to one thing only, the discovery of scientific truth for its own absolute sake. In words which Mrs Eddy uses with reference to Truth itself, they devote "time and energies to discovering a positive rule" (109:15). The scientists are concerned with discovering and understanding objective reality as it is, and as it proves itself to be through exhaustive tests and experimentation, not as it seems to be according to the evidence of the physical senses, or according to mere human theories and opinions unsubstantiated by proof. Their aim is to discover the universal laws of what they believe to be matter, time, space, etc. These so-called laws are the suppositional opposite of the "divine laws of Life, Truth, and Love" which constituted the discovery of Christian Science. Discoveries in the field of the pure sciences operate to leaven and transform the entire gamut of human life, hence the correlation between the chapter, "Science, Theology, Medicine" and the sixth section of our human framework, "the pure sciences."

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Physiology

The seventh chapter, "Physiology," is correlative with the seventh section of the human framework, the "applied sciences and applied arts." "Physiology" is all about the mortal body as a living organism, and is therefore the counterfeit of the true idea of body.

Interpreted metaphysically, the gist of the chapter is that the "head" (Christ, the Mind of Christ, the true idea of brain) wholly governs the "body" (Christianity, the spiritual idea of the human race). Hence the correspondence between this true conception of head and body and the idea of the application of the pure sciences to the functions and conditions of the world as a whole.

Individual mortal body (head and body together) images the generic body of the Adamic race. What goes on "in here" as regards "my" mortal body is an individual reaction to what goes on "out there" as regards generic mortal body. Hence the need to understand that what is really going on "out there" is the harmonious functioning of the head and body of Christ; and that body, individually, is a perfectly controlled reflection of this one divine body.

Pure Christian Science, the true idea of head and body, operates to control and translate the body of humanity which, particularly in this present era, is itself in process of being radically overturned by the application of the physical sciences to the conditions of everyday life. Nothing escapes the transforming influence of the physical sciences. They apply themselves to the whole of human experience, with a view to improving and easing living conditions, and supplying humanity with an abundance of material things.

But this is only a counterfeit sense of the purpose of Christian Science. Through its reduction to a system of ideas which is humanly understandable and demonstrable, and through the processes of change and translation which this reduction sets in motion in world thought, the divine Science of body controls and reverses the mortal dangers of self-destruction inherent in applied physical science. Divine Science causes physical science to become the temporary servant and benefactor of humanity. In so doing, divine Science is the saviour of humanity from a physiological sense of life, and the determining influence behind all the revolutionary scientific changes to which the human race is at present being subjected.

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Footsteps of Truth

The key to the eighth chapter, "Footsteps of Truth," is found on its closing page, namely, "God requires perfection," and therefore that "the human footsteps leading to perfection are indispensable."

The question is, what comprises the human footsteps leading to perfection? Are they footsteps which rise painfully, hopefully, out of matter upwards towards Spirit? They are not. Such footsteps signify the Adamic curse on mortals to till the soil, and are the reverse of the Christ-footsteps (see S & H 545:7). The human footsteps leading to perfection are the appearing humanly of the "footsteps of Truth." They are the human appearing of the ordered footsteps that lead out from perfection itself.

Jesus said, "No man hath ascended up to heaven, but he that came down from heaven, even the Son of man which is in heaven" (John 3:13). The religious curse on mortals to try to rise up spiritually out of matter finds no place in Jesus' teaching. And yet from the human point of view the need to ascend from earth to heaven is self-evident. How shall this ascent be made, and what does it entail? The human footsteps to perfection are really the return journey of the divine footsteps that come forth from perfection. These are the footsteps implicit in the idea of reflection. Reflection comes from God and returns to God yet never leaves God. Man as God's reflection can only possibly be God's reflection of Himself.

Yet from the human point of view "imperfect mortals grasp the ultimate of spiritual perfection slowly," hence the marginal heading at the close of this chapter, "patience and final perfection." That which puts us humanly on the road to perfection, and keeps us there, is the continuous unfoldment within us of what we are as God's reflection. The way of the Christ in its Science is that we ascend to perfection by descending from perfection, a two-way journey which is timeless and continuous when understood in terms of reflection.

One of the outstanding topics of "Footsteps of Truth" is the passage dealing with the journey of the children of Israel from slavery to freedom, from imprisonment within a mortal body to the free and fetterless body of Christian Science, the promised land (see 224-228). The footsteps taken by the children of Israel, spiritually understood, are the proper "human footsteps leading to perfection."

In order to come forth from Egyptian slavery, humanly, Israel

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had to come forth from God's land of freedom, divinely. Her journey from bondage to freedom was really but her return to the land of Canaan whence she originally came. In other words, she was God's spiritual reflection. In terms of pure Science, she came forth spiritually from within herself simultaneously as she came forth from God.

According to later pages in the chapter, the demonstration of freedom is seen, for example, in victory over "ugliness" and "age." We read on 246:10, "Except for the error of measuring and limiting all that is good and beautiful, man would enjoy more than threescore years and ten and still maintain his vigor, freshness and promise." Captions around this passage are (p. 247): "Eyes and teeth renewed," "Eternal beauty," "The divine loveliness," "Mental sculpture," "Perfect models," "Renewed selfhood." We are told that "Love never loses sight of loveliness," that "Immortal Mind feeds the body with supernal freshness and fairness, supplying it with beautiful images of thought and destroying the woes of sense which each day brings to a nearer tomb." In fact, the subject of spiritual aesthetics, typified by the outlook of the true artist, dominates this part of the narrative. The Christian Scientist is bidden to reproduce humanly in image form the ideal of his own indestructible identity. Hence the reproduction, or renewal, of eyes and teeth, for example. Hence the way in which Jesus, the scientific artist, "reproduced" his entire body, which animal magnetism claimed to have destroyed (see S & H 314:12). What we are really concerned with here is the divine order of being, the mathematics of metaphysics, in which "like" always "reproduces like," and man does not rise from matter upwards.

Again we read in this chapter: "The sculptor turns from the marble to his model in order to perfect his conception. We are all sculptors, working at various forms, moulding and chiseling thought. . . Have you accepted the mortal model? Are you reproducing it? . . . We must form perfect models in thought and look at them continually, or we shall never carve them out in grand and noble lives. . . Let us. . . give up imperfect models and illusive ideals; and so let us have one God, one Mind, and that one perfect, producing His own models of excellence. Let the 'male and female' of God's creating appear. . ." (S & H 248:12-5).

And so it is that the corresponding section to this chapter in the human picture is the "fine arts." As far as his art is concerned, the artist is a perfectionist. He is always seeking perfection, with-

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out, in his estimation, ever achieving it. Holding his ideal continually before his thought, his lifework consists in the footsteps he takes in the direction of this goal, or ideal. The artist, in fact, is he who comes from his ideal in order to image the ideal forth, or reproduce in symbolic form its ever more perfect representation. In this way, step by step, he journeys nearer and nearer his perfect ideal.

The demand which the artist makes upon society is for individual freedom, — freedom of self-expression, freedom of individual self-determination, freedom to be what he individually is, freedom to image forth from within his own being the ideal of truth as he apprehends it, uncontrolled by any external, dictatorial, blind restrictive human forces.

The plea of so much of the chapter, "Footsteps of Truth," is that this same individual and universal freedom shall be experienced by the whole human race.

THE THIRD FOUR CHAPTERS

The four "CHRISTIANITY" chapters are "Creation," "Science of Being," "Some Objections Answered," and "Christian Science Practice."

Christianity has the emphasis on the demonstration of the Christ-ideal in human experience. This means the translation of the human concept (in which almost everything seems to be at loggerheads with everything else) into the wholeness and solidarity of the ideal itself. Accordingly, each of these four chapters stresses an imperative requirement on the part of the Christian Scientist regarding his human demonstration of the absolute Christ-ideal.

"Creation" tells him that this ideal cannot be boxed or imprisoned within finite human conceptions. "Science of Being" tells him that it cannot be mixed or confused with any other world-teaching inferior to its own that would make it of the nature of "semi-metaphysics." "Some Objections Answered" tells him that it can never be cut up into detached, disconnected, contradictory segments, the way things seem to be in material sense. "Christian Science Practice" tells him that it cannot and does not operate according to stereotyped mental formulae, but is always of the nature of new life and fresh inspiration whereby to solve the human problem and meet the individual need.

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Creation

The ninth chapter, "Creation," corresponds to the ninth section of the human framework, "religion." We read on p.255-257 of this chapter, "The everlasting I AM is not bounded nor compressed within the narrow limits of physical humanity... No form nor physical combination is adequate to represent infinite Love... It would require an infinite form to contain infinite Mind..." Yet, to bind and compress the I AM within physical limitations, so that individual fallen man believes he has an ego of his own in opposition to God, is just what organized, sectarian, anthropomorphic religions, in effect, do.

Whether it is the world's higher religions, such as Buddhism, Hinduism, Mohammedanism, or Christianity, or whether it is the subdivision of Christendom itself into a lot of warring denominational sects, all these different religious bodies, in their claim to be the exclusive purveyors of universal Truth, in effect confine and limit the infinite within organic, hierarchic, ecclesiastical forms, and fashion their concept of God in the image of mortal man.

Organized religion theorizes mystically about a spiritual creator's impossible material creation. Whereas the unsectarian, unconfined religion of Christian Science does exactly the opposite. Christian Science shows that "the infinite Principle is reflected by the infinite idea and spiritual [not material] individuality" (258:19); that "never born and never dying, it were impossible for man, under the government of God in eternal Science, to fall from his high estate" (258:27).

Christian Science reveals man as never having been born of matter, as never dying out of matter, and therefore as never confined within a finite matter body. No church form nor religious body is adequate to represent Christian Science, as Mrs Eddy taught and illustrated with her own church organization, just as no mortal body is adequate to represent man. Christian Science, never born of a woman, never in an organized church-form, is man, individual, collective, universal, never in a mortal body.

Christian Science unconfined puts the standpoint of the artist in the preceding tone into universal expression. It shows, according to the chapter, "Creation," that because he is incapable of being "absorbed," man "cannot lose his individuality," but rather his individuality is continuously "enlarged."

While organized religion tends to absorb individuality, Christian

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Science confers and develops individuality as the primal element of universal being out of which the brotherhood of man, in Christianity, is formed.

Science of Being

The essence of the tenth chapter, "Science of Being," is that "divine metaphysics," in its fight to the death with the false premises of "physics" has little or no chance of success except it is understood and practised in its absolute purity, free from confusion, free from any degree of admixture with physics, or mysticism.

This is the way the chapter puts it: "Materialistic hypotheses challenge metaphysics to meet in final combat. . . In this final struggle for supremacy, semi-metaphysical systems afford no substantial aid to scientific metaphysics. . . These semi-metaphysical systems are one and all pantheistic, and savor of Pandemonium, a house divided against itself." Again we read, "Belief in a material basis, from which may be deduced all rationality, is slowly yielding to the idea of a metaphysical basis, looking away from matter to Mind as the cause of every effect" (p. 268-269).

The tenth category of the human framework, with which this chapter corresponds, is "materia medica." Materia medica is a physical system which works wholly from a matter basis, or from materialistic hypotheses. It looks for cause in what is the objective bodily effect of subjective material thought, and in one way or another doctors this effect in an effort to eradicate cause. From start to finish, materia medica looks only at and into matter.

In terms of the Christ-translations on S & H 115-116, materia medica corresponds to the first degree, the "physical;" the healing system of divine metaphysics corresponds to the third degree, the "spiritual;" while the second degree, the "moral," if erroneously conceived of as working from matter upwards in the direction of Spirit, corresponds to the "semi-metaphysics" which "afford no substantial aid to scientific metaphysics."

The way we are endeavouring to look at physics in this book is, as we have said, according to "Christ Jesus' sense of matter," which Mrs Eddy says "was the opposite of that which mortals entertain." And therefore our "earthly mission," like that of Jesus, is to "translate substance into its original meaning, Mind." This implies that our concept of the second degree is based on the third degree, and

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not on the first. In the measure that we thus succeed in translating "substance," physics and material medica are in process of disappearing.

Some Objections Answered

Mrs Eddy bases the teachings of the eleventh chapter, "Some Objections Answered," on the following simile to be found on the chapter's final page: "As a drop of water is one with the ocean, a ray of light one with the sun, even so God and man, Father and son are one in being. The Scripture reads: 'For in Him we live, and move, and have our being'" (361:16-20).

To signify the basic fact of Christianity, namely, that the infinitely diverse universe, in its oneness and wholeness, cannot be split into fragments, she refers to the essential wholeness and indivisibility of the texts of the Bible and Science and Health. Condemnatory criticisms of Science and Health, she says, are "generally based on detached sentences or clauses separated from their context." And she goes on to explain how, "Even the Scriptures, which grow in beauty and consistency from one grand root, appear contradictory when subjected to such usage" (341:4-8).

The wholeness of the spiritual universe, in its infinite diversity and variety of expression, is determined by the fact that down to its minutest detail, subject and object are one. To separate off, or abstract from that which is whole, a part, or parts, of the whole, is to divide object from subject, so that the two are in a state of contradiction and disagreement. In proportion as the Bible and Science and Health are understood and demonstrated in the unfragmented wholeness of their meaning, Christian Science will cease to meet with objections from an apparently antagonistic world. When the two books cease to be "subjected" to piecemeal treatment, then there will be no outside "objections" to assail them, for there will be no "subject" here and "object" there to produce these objections.

The "objections" cited in this chapter are raised principally by organized religion and materia medica, the subjects of the two preceding sections of our framework. The objections, as we have said, are due to misinterpretations of the text, by reason of sentences or clauses having been detached from the main body of the text, and by the fact that this practice of fragmentation gives rise to apparent contradiction in meaning.

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The word "text" is from a root meaning "to weave a web." We read on S & H 242:25 that the "divine Science of man [presented by the single text of the Bible and Science and Health] is woven into one web of consistency without seam or rent." Hence the correlation between this chapter and the practice of surgery, which cuts open, detaches, and joins together again, parts of the mortal body.

Surgery penetrates beneath the surface of the body; psychiatry, the subject correlative with the next chapter, penetrates beneath the surface of the mind.

Christian Science Practice

The twelfth chapter of Science and Health is expressly devoted to the subject of Christian Science healing. This healing system operates wholly within the realm of mentality, and although it heals both mind and body, matter and mortal body as such enter neither its premises nor its conclusions. Another name for Christian Science practice is "Christian Science Mind-healing."

The only "mentality" which Christian Science practice is concerned with is the Mind which is God. This Mind acts upon the so-called human mind, disabuses this mind of its self-destroying beliefs, and causes it to yield itself up to the divine Mind. This process heals the human body, for the body is but the objectification in consciousness of the subjective human mind. Human mind and human body are one. Likewise the Mind of Christ and the body of Christ are one. All we are ever dealing with in the theology and practice of Christian Science is Christ, — Christ, whose Mind is God and whose body is man. The understanding of the unity of God, Christ, man, — the Mind and body of all real being, — heals the human race of belief in fragmentation, and therefore of sin, disease, and death.

Hence in its method and operation, Christian Science Mind-healing is the opposite of the mind-healing practices of psychiatry. The psychiatrist delves into the patient's subconscious and unconscious mind in order to analyze and bring to the surface the cause of the patient's disabilities. The Christian Scientist looks into the Mind which is God for the true identity of all things, and in this Mind he sees his patient's real selfhood "every whit whole."

The practice of psychiatry includes the practice of hypnotism, in which the patient yields his mind to the mind of the psychiatrist. In Christian Science healing the patient yields his mind to the Mind of

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Christ, the Mind which is God, and thereby admits himself part of the one Christ-body.

All forms of hypnotism, thought transference, mental trespass and interference are called in Christian Science, "mental malpractice." As such they are the antithesis of "Christian Science practice." At the close of the twelfth chapter, Mrs Eddy writes, "Christian Scientists, be a law to yourselves that mental malpractice cannot harm you either when asleep or when awake" (442:30). "Asleep" has the emphasis on subconscious mind, "awake" has the emphasis on the conscious level of mind. According to S & H 559: 3-8, the "dominant power" of Christian Science is upon the subconscious, the realm of "elementary, latent error, the source of all error's visible forms." Secondly, Christian Science exercises power over conscious mind, — that is, over "visible error and audible sin." Whether with Christian Science or with psychiatry, the healing process penetrates the visible surface of consciousness to the causative realm underneath. Mrs Eddy says of Jesus that he "plunged beneath the material surface of things, and found the spiritual cause" (S & H 313:24).

What we are really contrasting are the two methods of mind-reading discussed on S & H 83, namely, "mortal mind-reading and immortal Mind-reading." Psychiatry is mortal mind-reading, Christian Science practice is immortal Mind-reading. In the subconscious mind of his patient the psychiatrist reads the messages of mythology. In immortal Mind the Christian Scientist reads the facts of Truth. What the psychiatrist reads as the content of the subconscious is the mythology of fallen man. In Truth man has never fallen. The order and harmony of the divine system has never been upset. Therefore there is no state of wholeness to be restored, no health to be recovered. God, the Mind of man, and man, the body of God, are one. Perfect God and perfect man, perfect Mind and perfect body, is the basis of all true Christian Science practice.

THE LAST FOUR CHAPTERS

The "SCIENCE" chapters of the textbook correspond to the fourth side of the city foursquare, Science. Their titles are, "Teaching

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Christian Science," "Recapitulation," "Genesis," and "The Apocalypse." The theme of these chapters is the true idea of teaching and education, based on the true idea of birth and obstetrics. "Teaching Christian Science" accentuates the relationship between student and teacher in the human concept. "Recapitulation" translates this relationship into absolute metaphysics, and presents it impersonally as the relationship between "question" and "answer." "Genesis" shows that the process of education is really the ordered revelation of the spiritual universe to the dark mortal consciousness of humanity. "The Apocalypse" shows this revelation as coming from within man himself, and therefore that the appearing of the city foursquare is none other than the world giving birth to the truth about its own identity.

Teaching Christian Science

Such qualities as undeviating honesty, integrity of purpose, a proper sense of morality, fidelity, etc., must always characterize the relationship between teacher and student, student and teacher, with regard to the impartation of the subject of Christian Science. So we learn from the thirteenth chapter of Science and Health, "Teaching Christian Science." These are like the qualities most requisite in the marriage relation between husband and wife.

The chapter reaches its climax with the paragraph on "scientific obstetrics" on p. 463. This paragraph shows that teaching, or education, metaphysically regarded, is a process of spiritual birth. Birth is the result of marriage. Hence the relationship between this chapter and the thirteenth section of the human framework, "Marriage and Progeny."

We read: "Teacher and student should also be familiar with the obstetrics taught by this Science. To attend properly the birth of the new child, or divine idea, you should so detach mortal thought from its material conceptions, that the birth will be natural and safe." Not only does the teacher, under divine direction, sow the seed of Truth in the womb of the student's consciousness, but he also attends the birth of the "new child" in the capacity of spiritual midwife. The child is born from within the student's own loins as the student's spiritual identity. To ensure that the teacher is not like the devouring dragon in the 12th chapter of the Apocalypse, which likewise stands before the woman who is about to be delivered, the

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teacher's methods must be wholly impersonal, wholly spiritual. What he teaches his student is the true idea of God; and when this activity is properly understood and practised, then all there is to him is God teaching. As with Jesus, all there is to the teacher's identity is Spirit imparting understanding.

Like the "seed within itself" in the first chapter of Genesis, the idea which the teacher sows holds within it from the beginning the full flower and fruitage of its own orderly appearing. This is the seed of eternal life. It is the idea of the matrix of infinite Love, and is the opposite of the seed sown within mortal body in the male-female relationship. That which is "born of the Spirit, born of God" through the spiritual relationship of teacher and student is the opposite of the child of mortality born through the process of human procreation.

Recapitulation

Recapitulation presents what it is that the teacher teaches, or the nature and content of the seed that is sown. Mrs Eddy says that "absolute Christian Science" pervades the statements of the twenty-four questions and answers that make up this fourteenth chapter of the textbook. Hence the seed in question can be none other than the seed of absolute Christian Science, — the reduction of divine Science to a system of absolute values that apply themselves in the consciousness of humanity for the purpose of solving the life-problem. In this conception God, the divine Principle, is the only teacher, and the student's only identity is the seed that is God-sown.

The twenty-four questions of Recapitulation signify the need for spiritual enlightenment on the part of humanity, while the twenty-four answers represent humanity's Christ-identity coming to it from God to fill the apparent void, and to blot out the need for asking questions.

All twenty-four questions and all twenty-four answers are based upon, and are implicit within, the first question and answer. Hence the only question the student ever really asks is, "What is God?" The answer, "God is incorporeal, divine, supreme, infinite Mind, Spirit, Soul, Principle, Life, Truth, Love" includes the fulness of the student's identity as man. The answer to the opening question is, in fact, the seed that holds within it the infinitude of its own

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development.

The law and order, the Science and system, the diversity of individual, collective, and universal identity ranged in classified unity, which is implicit in this answer, furnishes humanity with the ruling, underlying Principle of individual and world government. The government of the universe is upon the shoulder of this all-inclusive idea of God. It alone can bestow upon man his proper rights of self-government. It alone can found on earth the democracy of man in the embrace of the theocracy of God. This, in fact, is the idea to which the woman, in Rev 12, gives birth, that shall "eventually rule all nations and peoples - imperatively, absolutely, finally - with divine Science" (S & H 565:16). Hence the relation of this chapter to the fourteenth section of the human framework, "government."

Genesis

Creation is the unfoldment within itself of the "infinite self-containment" of Mind, Spirit, Soul, Principle, Life, Truth Love. Yet, as we read on 517:22, "even eternity can never reveal the whole of God, since there is no limit to infinitude or to its reflections."

The days of creation at the beginning of the book of Genesis typify, in one all-inclusive conception, the eternity of man's spiritual education, the timelessness of his continuous, ordered birth. The order of the days of creation and the order of the synonymous terms are the same. The days of creation coming in the chapter that succeeds "Recapitulation" signify that the idea unfolded by Mind, Spirit, Soul, Principle, Life, Truth, Love is the very universe itself.

The chapter, "Genesis," is in two parts, the second part being the exact antithesis of the first. These two parts are two opposing versions of creation, both of which cannot be true. The first is the spiritual record represented by the "seven days," the second is the record of an apparent matter creation. The fact is that before the answer to the question, "What is God?" dispels the ignorance implicit in the question, this ignorance to mortal sense, has the form, not of being a "void," an absence, or the negation of Truth, but of being solid, factual, material creation. Yet, as Jesus proved, the disappearing of the one in the face of the appearing of the other, shows that matter is not solid fact at all, but is, to Spirit, as darkness is to light, or ignorance to knowledge. That is to say, it is really of the nature of an empty void. Hence there are not two creations, but only

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one. In Science the two opposing accounts of creation simply stand for God known and God not known. "Matter," Mrs Eddy says, "is a misstatement of Mind" (Mis 174:2). Matter and ignorance are the same thing. Today, even in the realm of material science, atomic physics shows matter to be made up almost entirely of empty space.

The battle which the righteous governments of the world are most concerned with is the battle against ignorance. Ignorance, in one form or another, is the cause of all the conflicts and all the sufferings that have ever beset mankind. The two parts of the "Genesis" chapter represent the two sides in this battle, — the battle of the true record of creation against the false, the warfare between Spirit and the flesh, the conflict of knowledge, understanding, education, versus ignorance. All the wars of history derive from the ignorant belief that there are two elemental forces at work in the universe, each seeking the other's destruction, namely, the forces of good and evil, Spirit and matter.

The fact that the Science of the first record ends all warfare through the translation of the Adam-record, and in so doing establishes the harmony and unity of the human race, shows the correlation between the fifteenth chapter of the textbook and the general subject of "human conflict" which comprises the fifteenth category of our framework.

The Apocalypse

We come to the sixteenth chapter of the textbook, "The Apocalypse," and to the final section of the human picture. Just as this final section, "civilization," gathers and epitomizes the framework as a whole, so "The Apocalypse" is in sixteen subdivisions which represent all sixteen chapters. In just the same way, the sixteenth tone of the matrix holds within it, as one conception, the fifteen preceding tones, or the idea of the matrix as a whole.

The chapter's sixteen divisions fall into two groups of twelve and four. The first group interprets Revelation 12, the story of the God-crowned mother and the birth of her man child; the second interprets Revelation 21, the story of the city (civilization) foursquare, or the marriage of the Lamb and his bride. The mother, generic man, gives birth to the Prince (Principle) of world peace. The city is the world at peace under his government. Interpreted metaphysi-

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cally, the picture is that of the world giving birth to its own identity as the Son of God, and being spiritually self-governed, under God, in consequence.

Recorded history, from the fourth millennium B.C. onwards to the present day, is the story of the human race journeying forward step by step towards the goal of the city foursquare. This is the ultimate ideal of all the self-civilizing, self-educating processes that have activated the journey and which have been impelled from the beginning by the timeless, everpresent reality of the foursquare city itself.

This is the theme of this book, that the spiritual identity of the race as a whole causes the race humanly, to give progressive birth to its own true selfhood in and of Christ, and therefore in and of God. This birth dispels the ignorance which is materialism in a continuous process of education, or civilization.

P A R T III

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"Christianity causes men to turn naturally from matter to Spirit, as the flower turns from darkness to light."
(S & H 458:32-1)

THE UNIVERSE, THE ATOM, AND MAN

The purpose of Part III of this book is to illustrate, through the use of examples, how we may begin to resolve the "things" of human consciousness, indicated in Part II, into thought-symbols, and thereby translate them from the language of matter into the language of spiritual ideas, — that is, translate our present sense of them.

Let us touch on three different subjects, — three different spheres of human activity, — though what we shall find as we begin to see their translation is that they are not really three different subjects at all, but three aspects of one subject, namely, the one divine Science of man. Indeed this is what we shall always find. In whatever direction we look, whatever part of the human picture engages our attention, the multitude of subjects, activities, and walks of life outlined in Parts II and IV will, when examined in the light of divine metaphysics, and translated out of material sense and material fragmentation, be found to relate with each other and flow together as the content of one all-embracing Science.

This does not mean to say that through this activity we are spiritualizing matter, or that we are seeking to deposit a material world

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into the kingdom of God. It means, on the contrary, that we are finding the kingdom of God to be the sole reality of what the senses cognize as a material world.

We will focus our attention on certain comprehensive views of the human picture, — views that will establish for us this great general truth that the universe we are living in now and forever is the universe of Spirit, not a universe of matter. The more detailed aspects of experience will take their place naturally within the grand design once this universal premise is established. Jesus said, in effect, 'I come forth from the Principle,' — that is, 'I start my reasoning, and therefore my life, with the big, comprehensive view of what infinity is.'

If we think for a moment of the scale of physical magnitudes set forth today by the physical scientists, we see at one end of this scale the 'infinitely' large proposition of interstellar space and the expanding universe, and at the other end the 'infinitesimally' small proposition of the world inside the atom. While standing in the middle of the scale, midway between these two dimensional extremes, is, we are told, the physique of individual man. Let us allow cosmology, nuclear physics, and man, to furnish us with three vital subjects which we can begin to think about from the standpoint of their spiritual translation.

The fountain can rise no higher than its source. Clearly we can take our inquiries no further than our present spiritual sense and spiritual culture allows. It will be well therefore to attempt the examination of but a few of the more fundamental concepts within the range of these three fields.

Turning to the subjects of cosmology and the atom, let us begin by looking at one or two aspects of the contemporary picture presented by the physicists, and then approach the spiritual resolution and translation of these subjects in the light of Christian Science.

TWENTIETH CENTURY ADVANCE IN KNOWLEDGE

The discovery in the latter half of the 19th century that original Christianity as practised by Jesus was, in fact, a universal divine Science and not something personal to him, liberated the human race from many of its previously held limitations and convictions. By reason of this 19th century discovery, the present 20th century has

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witnessed an unprecedented advance in all fields of human knowledge, particularly with regard to time and space and the constitution of matter. As the 19th century merged into the 20th, where so much scientific development and so much scientific birth was destined to take place, Mrs Eddy wrote of the new century, "Thou God-crowned, patient century, thine hour hath come!" (Po 22:1).

Regarding Christian Science, the advance from the one era to the other was, as far as the onlooking world was concerned, the advance from Christian Science as a centrally controlled religion, to Christian Science as a universally liberated, impersonal Science. In the early years of the 20th century Mrs Eddy completed the work of reducing her original discovery to terms of order, category, and system, commensurate with the accepted meaning of the term, "science." Ideally, this rendered her discovery scientifically available to mankind. At the same time, along contemporary paths, she paved the way for her religious organization to dissolve its sectarian boundaries, and resolve itself into this very Science, as a system of spiritual education.

In the field of the physical sciences the corresponding advance was from a stereotyped, mechanistic explanation of the universe to a conception which can only be presented in terms of mathematical relationships, and which is therefore essentially mental, or a construction of the consciousness. This advance, broadly speaking, was from the old physics of Newton to the new physics of Einstein.

As John the Baptist, in the field of the spiritual idea, prepared the way for the infinitely more profound and penetrating teachings of Jesus, so, by analogy, the physics of the 19th century prepared the way for the advanced and altogether revolutionary explanations of the 20th century.

But just as Jesus declared his need for being baptized of John, so Einstein, who made so many of these advanced discoveries, explained how he could not thereby abandon the laws set forth by Newton, because these applied to the activities of his everyday life. Newton's laws pertain to the phenomena around us as we see it through the senses, while those of Einstein lie far beyond the testimony of the senses. His laws plunge beneath the surface of the visible world and can only be understood through mathematical calculation. This revolutionizes the scientist's attitude towards the objects with which he is surrounded. Jesus approached the laws promulgated by John from the standpoint of the unseen laws of Spirit, and this brought everyday moral concepts under the control of Spirit.

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Even in the world of art, the artist today is much less concerned than he used to be with the outward appearance of things. He is no longer a slave to sensory representation. Hence the present era of abstract art, where the emphasis is more on the ideas that lie beneath the surface than on the surface form itself.

FOUR SCIENTIFIC THEORIES

The system of scientific metaphysics to which divine Science is reduced for human comprehension is fundamentally fourfold. The representation of this system in the Bible is the city foursquare of Revelation 21, which is defined in Science and Health as the city of the Word, the Christ, Christianity, and Science.

Correspondingly, since the turn of the century, four revolutionary, interlocking theories have presented themselves in the world of physics. The first was evolved by Max Planck and published in 1900, the other three have appeared subsequently as the work of Albert Einstein. The first is known as the Quantum Theory, which revolutionizes all previously held convictions as to the nature of electromagnetic radiation. The others are three variations of the Theory of Relativity, which revolutionize all previously held convictions regarding space, time, and the structure of the universe as a whole. The first of the Einstein Theories is the Special Theory of Relativity and dates from 1905, the second is the General Theory of Relativity and dates from 1916, the third is the Unified Field Theory which was completed in 1949.

Whereas Quantum Theory deals with the elemental units, or "quanta," of energy emitted or absorbed in the process of atomic radiation (particularly with reference to the "photons" of light), Special Relativity emphasizes the equivalence of matter and energy and explains the translation of the one into the other. General Relativity presents the indivisibility of space and time, and gives an entirely new interpretation of gravitation. The Unified Field Theory may be said to reveal the unification and interdependence of the first three theories in a single harmonious whole.

To the student of divine metaphysics, these four theories, in the order of their chronological appearing, typify, in material counterfeit form, the four sides of the holy city, or the workings of the Word, Christ, Christianity, Science. This does not mean to suggest,

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however, that these four theories comprise the last word in physics. Other theories, more advanced and more profound still are bound to come along and supersede them, and this will go on and on until the time comes for scientific world thought to make the requisite right-about turn in its outlook, and begin to reason from spiritual rather than material premises.

Lincoln Barnett in his book, "The Universe and Dr. Einstein," writes that the Unified Field Theory "touches the 'grand aim of all science.'" He says that "the urge to consolidate premises, to unify concepts, to penetrate the variety and particularity of the manifest world to the undifferentiated unity that lies beyond is not only the leaven of science; it is the loftiest passion of the human intellect. The philosopher and mystic, as well as the scientist, have always sought through their various disciplines of introspection to arrive at a knowledge of the ultimate immutable essence that undergirds the mutable illusory world" (p. 99).

FROM THE INFINITESIMAL TO INFINITY

"The divine Principle of the universe must interpret the universe" (S & H 272:28). As scientific metaphysicians our outlook upon the two extremities of modern scientific knowledge, the outermost world of the stellar galaxies and the innermost world of the nuclear atom, must be from the standpoint of the underlying divine creation revealed in Christian Science. Mrs Eddy writes of this creation on S & H 503:1, that it "consists of the unfolding of spiritual ideas and their identities, which are embraced in the infinite Mind and forever reflected." "These ideas," she says, "range from the infinitesimal to infinity..." She also writes on 336:7 of how "the divine Ego, or individuality, is reflected in all spiritual individuality from the infinitesimal to the infinite." This range from the infinitesimal to infinity signifies the divine counterfact, in Science, to the above two physical extremes, and also to one of the dominant concepts in Einstein physics, namely, the "continuum" of the space-time universe.

The laws governing the inner and outer horizons of modern knowledge, the atom and galactic space, are fundamentally the laws of electromagnetism and gravitation. All the phenomena of nature derive from these two primordial forces and their respective sets

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of laws. The theories of Quantum and Special Relativity cover the problem of electromagnetism, General Relativity deals with gravitation, while the Unified Field Theory welds these two concepts together into a single coherent structure.

From the standpoint of Christian Science, this one structure represents the total "deflection of being" which, when "rightly viewed" from the standpoint of the creation of Spirit, "serves to suggest the proper reflection of God and the spiritual actuality of man, as given in the first chapter of Genesis" (S & H 502:10).

Let us then touch on a few of the basic concepts relative to electromagnetism and to gravitation, – first of all as the physicist describes them. Then we will turn to their spiritual translation as revealed in Christian Science.

ELECTROMAGNETISM

The Atom

Chemistry analyzes matter into its basic "elements." From the standpoint of the chemist, "elements" are the building-blocks of the visible world. There are about a hundred of these elements altogether. The majority of them are natural, a few are laboratory made.

The lightest and simplest of all the natural elements is hydrogen, the heaviest and most complex is uranium. The two types of atomic bomb, the fission bomb and the fusion bomb, have been evolved from uranium and hydrogen respectively.

The smallest quantity of an element handled by chemistry is a "molecule." Molecules consist of more than one atom of an element and are the smallest particles of matter to retain chemical identity. This means that when we come to the "atom" itself, we merge from the realm of chemistry into that of atomic physics. From the standpoint of the atomic physicist, atoms, not elements, are the building-bricks of the universe. The atomic physicist breaks down the atom still further into its subatomic particles, and it is at the point of what the atom itself is made up of that we enter the field of electromagnetism.

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Electricity and magnetism complement each other in a single physical phenomenon. An electric current is surrounded by a field of magnetic force, and vice versa, a field of magnetic force set up by a magnet induces in a conductor an electric current. Electromagnetism manifests itself as electromagnetic radiation. All electromagnetic radiation is light in one form or another. In terms of its propagation through space, light varies in frequency, or wavelength, from the 'infinitesimal' to 'infinity.' The electromagnetic light-spectrum ranges from light of infinitesimally short wave length, known as cosmic rays, to light of infinitely long wave length known as radio waves. In the middle of this spectrum, between these two extremes, is the tiny band of red, orange, yellow, green, blue, indigo, and violet light visible to the physical eye. This is an interesting parallel to the range of magnitudes from the atom to the galaxies, in which man finds himself standing in the middle of the scale.

The velocity of all the light that makes up the electromagnetic spectrum is constant throughout the universe. This velocity is approximately 186,000 miles per second, and is the physical "speed limit." Nothing travels, or can travel faster than light. Matter travelling at the speed of light is no longer matter, as such, but light. Light is the form matter assumes when converted subatomically into radiant energy. Hence atomic radiation is the radiation of light. Atoms radiate light, and through this radiation they expend their energy.

Two apparently antithetic concepts are necessary in physics in order to explain the propagation of light. It is said, on the one hand, that this propagation takes the form of moving particles, called "photons" as in the Quantum Theory, and experiments are carried out to prove this. It is said, on the other hand, that propagation is in the form of wave movements of varying frequency, and experiments are carried out to prove that this, too, is true. In spite of the apparent contradiction, the physicist is forced to accept both concepts as valid and essential, and he deems them complementary.

The current view of the atom is that it is made up of three primary particles. Many subsidiary particles are present too in the atom, and these seem to increase in number and complexity as time goes on. Basically, however, there is the "proton" which manifests a positive electric charge, the "electron" which manifests a negative electric charge, and the "neutron" which manifests no charge at all, i. e. is neutral. These three particles are distributed between a

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central atomic "nucleus" and a field of force with which the nucleus is surrounded. The proton and neutron pertain to the nucleus, the electron pertains to the surrounding field of force. In the simple hydrogen atom, however, there is no neutron. Here the nucleus is a single proton, and the surrounding field is made up of a single revolving electron. From this simple hydrogen premise the entire scale of a hundred or so different kinds of atom evolves.

Protons, electrons, and neutrons are constants throughout the universe. Their identity remains the same in every element. Difference in element is determined solely by differing numbers of protons, electrons, and neutrons that make up the respective atoms, not by differences in the atomic particles themselves.

Rising in the atomic scale, the next element after hydrogen is helium. The helium atom consists of a nucleus of 2 protons and 2 neutrons, with 2 electrons revolving round it. Lithium, the third element, has 3 protons and 2 neutrons for its nucleus, and this is surrounded by 3 electrons. So the scale mounts and mounts until it reaches the 92nd element, uranium, the atom of which is made up of 92 protons, 146 neutrons and 92 electrons. The reason that the number of protons in an atom and the number of electrons balances is because an atom must always be electrically neutral. Therefore whatever the number of neutrons in the nucleus, this balance is unaffected.

In each case the nucleus is said to be bound together by an atomic "cement," called the "meson." The "binding" quality within the nucleus is what stores the nuclear energy.

Solar System Analogy

The behaviour of the particles comprising the atom is similar in some respects to that of the bodies comprising a solar system. The nucleus corresponds to a sun and the electrons to planets. Electrons and planets revolve in their own orbits around the nucleus and the sun. The analogy is useful, but only up to a point. In the atom, electrons revolve at such fantastic speeds that their orbits form a series of what are called "shells" around the nucleus. To illustrate this: The revolving blades of an electric fan seem to the eye to form a solid screen simply because of the speed of their rotation. There are six atomic "shells" altogether, and according to the chemistry of the element, electrons revolve in varying

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numbers in one or all of them. The total number of shells plus the nucleus itself show the structure of the atom to be basically seven-fold. The speed of an electron around its orbit is calculated at several million million times a second. Whereas in the solar system planets revolve slowly, in the system of the atom electrons revolve at unimaginably high speeds.

Just as the universe itself is nearly all empty space, so it is with the atom. If all the atoms in the human body are conceived of as packed together in a solid mass, with no space either in them or in between them, we are told they would comprise a cube a thousandth of a centimeter across which would weigh the same as the original body.

So matter as matter is nearly all empty space! Understood in metaphysics, matter as matter is completely empty space, — namely, the “void,” the “darkness,” the ignorance, suggested in the second verse of Genesis.

Energy and the Bomb

When a body is heated it gives off radiant energy. This energy is one form or another of electromagnetic light. Atoms are the storehouses of this energy and radiate this light. The energy is stored in both the electron part of the atom and in the nucleus. But the amount of energy resident with the electrons is minute compared with what is held in the nucleus. Nuclear energy is a million times that of electronic energy. When Rutherford first split the atom at the end of the first world war and witnessed the release of electronic energy, he predicted that scientists would never succeed in splitting the nucleus and releasing nuclear energy. Yet by the end of the second world war they had succeeded in doing this very thing, and in building the atomic bomb.

An atomic bomb is therefore, more accurately, a nuclear bomb, and an atomic explosion a nuclear explosion. With both the uranium bomb and the hydrogen bomb the nucleus, not the electron, provides the energy of the explosion. The uranium bomb is a “fission” bomb, while the hydrogen bomb is a “fusion” bomb. In the case of the complex uranium atom, the nucleus has to be split in two in order to release the energy; in the case of the simple hydrogen atom, where the nucleus is a single proton and there is nothing to split, hydrogen nuclei are caused to coalesce. This process of

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hydrogen fusion releases a far greater quantity of energy than does uranium fission. Fission takes place when the uranium nucleus is bombarded with neutrons. These penetrate the electron shells and attack the nucleus. The binding agent, the meson, is overcome, and the nucleus divides and yields up its energy.

While the uranium bomb is thus limited in potential, the hydrogen bomb is virtually unlimited. The uranium bomb is known as the "dirty" bomb because its explosion precipitates a radioactive "fall-out" which is physiologically poisonous. The hydrogen bomb is known as the "clean" bomb because it has no such harmful after-effects. The reason there is "fall-out" following a hydrogen explosion is because a hydrogen bomb can only be triggered off by firing a uranium bomb. Hydrogen nuclei fuse only when they are raised to enormously high temperatures like those in the centre of the sun. The explosion of the uranium bomb provides these temperatures, and so puts the hydrogen bomb into action. Hence the explosion is called "thermonuclear."

Both fission and fusion take place according to a chain reaction amongst the number of atoms present in the quantity of material detonated. In the case of the bomb, the reaction is uncontrolled and uncontained. In the case of nuclear energy put to constructive, peaceful purposes it is both contained and controlled. Hence a "nuclear reactor" forms the core of an atomic power station.

In the bomb all atoms undergo fission and/or fusion in less than a millionth of a second. The explosion itself with its release of energy is a miniature sun artificially produced. Heat is radiated at the speed of light. The prolonged blast effect resembles a mighty rushing wind.

Nuclear fusion reaction is the main source of energy in the universe. What is called "free" hydrogen is abundant in the sun. Combined with oxygen to form water, hydrogen is also abundant on the earth. Uranium, on the other hand, is correspondingly scarce. Hence it is that once fusion reaction is safely harnessed and controlled, the oceans of the world are destined to become the limitless source of mankind's fuel supply.

Fission and fusion correspond to the two basic precepts in the mythology of fallen man. The fact is that no original, rebellious explosion ever fissioned man from God, and therefore there is no question of an ultimate restoration, in which individuals are fused together again in God.

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Mass

Let us turn to the subject of "mass" relative to atomic energy, for the potential energy in a body is directly proportional to its mass. This fact is stated in the mathematical equation evolved by Einstein upon which the whole of Relativity rests, and which, since its formulation, has been responsible for every major advance in nuclear physics, including the production of the bomb. The equation states that $e=mc^2$, where e is energy, m is mass, and c is the speed of light. In other words, the energy which inheres in a body is equal to the product of the mass of the body multiplied by the speed of light squared. Because the speed of light is more than 186,000 miles per second we realize what enormous energy is stored in even a minute quantity of matter, and released when the one is converted into the other. In the explosion that devastated Hiroshima a piece of uranium the size of a cricket ball was translated wholly into energy. It is calculated that 2 lbs of coal if converted into energy, would produce an equivalent of 25 billion kilowatt hours of electricity.

Because it is possible to transform matter wholly into energy, therefore matter and energy are interchangeable concepts. Matter is energy and energy is matter, and because energy and radiation are the same, therefore matter translated into energy is of the nature of electromagnetic radiation, or light.

Mass is not the same as weight. Mass is atomic content. A pound of matter would have the same mass on the earth as on the moon, but because of the difference in the gravitational fields of the two planets, its weight on the moon would be very much less than on the earth. Mass is defined as resistance to motion. It therefore corresponds to another term, "inertia." Hence the expression "inertial mass."

Motion is expenditure of energy, and energy has mass. The mass of a body increases with its velocity, and the increase in mass results from increase of energy. An electron moving almost at the speed of light has a greatly increased mass. Theoretically and mathematically, the mass of a body reaches infinity when its velocity attains the speed of light. This is because at this point it is no longer matter, as such, but is radiant energy, or light.

In old religious pictures of what is called 'Christ in glory,' Jesus is represented as radiant with light. In Jesus' translation of mortal consciousness, that which the senses had called matter was wholly

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transformed into the light and energy of Spirit. To Jesus' individual consciousness, Spirit's radiant energy had reached the point of infinity, and was the omnipresence of being.

GRAVITATION

Space-Time

We have touched upon a few concepts to do with atomic physics, particularly with regard to the Quantum Theory and Special Relativity. While still in the realm of Special Relativity let us turn from the infinitesimals of matter to the fabulous magnitudes of the universe as a whole and thereby find our way into General Relativity and the laws of gravitation. In this section we carry forward the concept of light, but we now relate it to space and time.

In 1881, two American physicists, Michelson and Morley, opened the way for Einstein's Relativity by proving that the velocity of light is constant throughout the universe. It had always been assumed that if a light was carried by a moving vehicle towards an observer, the speed at which the light reached the observer was that of light itself plus the speed of the vehicle. If the vehicle was moving away from the observer the speed was the speed of light minus the speed of the vehicle. This is how it always was in the case of sound, and it was supposed that the same law held true for light. Michelson and Morley proved something quite the contrary. They showed by experiment that the speed of light is wholly unaffected either by the motion of the source transmitting the light or by the motion of the object receiving it. Their findings opened up a vast new field of scientific research. To Einstein it was nothing less than the revelation of cosmic law! The velocity of light is constant regardless of the motion of any sun, planet, galaxy, etc., in the universe! Einstein deduced from this that all the laws of nature are in consequence the same for all the systems of the universe that move uniformly relative to one another.

Everything in the universe is in motion. There is no such thing as an absolute, fixed standard of reference. The movements of the different stellar bodies can be described and understood only in

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terms of their relation to one another. Space cannot be conceived of apart from time, and time cannot be conceived of apart from space. Hence there is no absolute space, and no absolute time, and hence the formulation of the "space-time continuum."

Furthermore, Einstein deduced there is no such thing as simultaneity. There is no such thing as "now" independent of the subject experiencing "now." For example, we look at the sky and say we see a certain star "now." But this star may be trillions of miles away, and the light by which we see it may have taken 50 years or more to reach us travelling at 186,000 miles a second. Therefore we are not seeing it "now," we are seeing it, in effect, 50 years ago. We are seeing what it "was then." Whether it even exists "now" we cannot possibly know for another 50 years, for it will take this length of time for its "now" to reach us.

This principle of relativity applies to all the moving systems of the universe. We think we are not moving because we are sitting still in a chair, or that we are travelling, say, at 50 miles an hour when we are out in a motorcar. But both these concepts are relative. The earth on which we are sitting, or driving, is rotating on its own axis at 1000 miles an hour. At the same time it is revolving round the sun at 20 miles a second. The solar system, of which the earth is part, is moving within its own local star system, the Milky Way, at 13 miles a second, and the Milky Way itself, of which the solar system is part, is moving in relation to other galaxies at apparently fantastic speeds. Thus all time and all space is relative. And this relativity derives from the fact that the velocity of light is unaffected by motion, and is the speed-limit of the universe.

So with our own living, moving, interwoven individualities. They only exist, and can only be understood, in relation to the infinitude of other individualities with which each one of us is surrounded.

Expanding Universe

Thus from the elemental physics of light comes the relativity and inseparability of matter, space, and time. The further out in space the object is that we are observing, the further we are looking back in time. This is because the modern cosmological idea of the universe is that it is expanding. The galaxies that comprise its outermost reaches are, we are told, racing away from us and from each other at apparently unimaginable speeds. Yet to an observer

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on one of these island universes our galaxy appears to be racing away from him. It would seem, in fact, that everything in the universe is trying to get away as fast as possible from everything else!

Evidence of this phenomenon has caused cosmogonists, searching for an explanation of the universe's origin, to arrive at what is called the "big bang" theory. They reason that at a point in primordial time all the matter in the universe was concentrated at fantastic density in some sort of primordial "atom;" that certain internal conditions caused the "atom" to explode, and that its fragments ever since have been rushing outwards from their point of origin, thus accounting for the present evidence of universal expansion.

That which has a beginning must also have an ending, and the "end" of the universe will come when its total energy that has been expending itself from the "beginning" has been fully dissipated. This is the way Barnett puts it in his book on Einstein: "All the phenomena of nature, visible and invisible, within the atom and in outer space, indicate that the substance and energy of the universe are inexorably diffusing like vapor through the insatiable void. The sun is slowly but surely burning out... matter is dissolving into radiation, and energy is being dissipated into empty space... When the universe reaches this state some billions of years from now all the processes of nature will cease..." (p. 90).

But there are other classes of cosmogonists less pessimistic than this, who believe that, throughout the aeons of time, proportionably as the universe runs down, so it builds up again. Theirs are the "steady state" theory and the "expansion-contraction" theory. As matter expends itself in the form of energy in one place, so energy recondenses back into matter again in another. And so we have the contrast in theory between a single temporal birth-death cycle of the universe, and cycles of birth-death-birth that go on and on forever. But just as the "wave" theory and "particle" theory are deemed essential to each other in explaining the propagation of light, so these different cosmogonies and cosmologies may in time cease to vie with one another for supremacy and be reconciled as complementary. Certainly they are so when metaphysics reverses and translates them, and reveals the divine facts that lie behind them.

According to the physicists' computations, the universe began its present phase of expansion some two billion years ago. As we have said, the further we look out into the universe spatially, the further we look back in time. The deeper the modern optical and radio

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telescopes probe the regions of hitherto unseen galaxies, the nearer they get to the time when the universe supposedly "began." Advances in spectroscopy reveal that the further out the telescope penetrates, the greater the speed of recession of the object being viewed. For example, a galaxy which is only a million light-years away is receding from us at a mere 100 miles per second, while one that is 250 million light-years away is receding at a rate of 25,000 miles per second!

The question arises as to what happens when ever more powerful telescopes penetrate ever more "distant" regions. What happens when galactic recession begins to approach the speed of light? Prof. Bernard Lovell said in his Reith Lectures a few years ago that once a certain point of astronomical theory and deduction is reached, thought can go no further along these lines and physics passes over into metaphysics. Certainly with these different astrophysical theories we are already in the realm of purely mental concepts, — concepts which the "calculus" of divine metaphysics is destined to translate "back into Spirit."

In view of this obvious metaphysical borderline, let us push the question to its utmost limits and ask what happens when the speed of galactic recession actually reaches the velocity of light. At this point galactic mass attains infinity, for matter is transformed into radiant energy, and this energy is light. A purely mental, metaphysical symbol offers itself, — that of the universe not only embraced in infinite light, but also stemming from this light as its origin. For at the unimaginable distances where recession approaches such velocity, we have also reached the limits of time, and are at the moment of the universe's supposed birth. The galactic light that would fall on our telescopes "now" would be light that left its source all those billions of years ago. The "then" of that far-off era would be "now" to us, and in that respect there would be no time. The speed of light is the nearest approach physics can ever get to instantaneity or timelessness.

Yet only the non-physical "light" of the first day of creation in the first chapter of Genesis is truly instantaneous, truly timeless, for this light is the everpresence of Spirit, Mind. Light is of the nature of eternal, infinite idea. There is no space in Mind for this light to travel through, and therefore it takes no time to travel. Mind, Spirit, is spaceless instantaneity.

To return to the counterfeit symbol: An expanding universe, as we have seen, must have had a point of origin from which to expand.

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And yet, if a geometric sphere is used to represent the universe, then, according to the foregoing reasoning, the outermost circumference of this sphere must also be its source, or origin. In terms of matter, this is an impossible contradiction, and the contradiction disappears only when we translate the symbol back into Spirit, and realize, in the words of Science and Health, that Spirit, God is "at once the centre and circumference of being" (S & H 204:1). Also that, as man, what we are setting out to reach is the "absolute centre and circumference" of our own individual being (S & H 262:15).

General Relativity

The basis of Einstein's General Relativity is that we live and move and have our being in a universe in which time, space, and matter are one and indivisible. To make this universe comprehensible to the human mind he described its framework as a "four-dimensional space-time continuum." Lincoln Barnett puts it beautifully, and for the Christian Science student significantly, when he says that such a universe "can be encompassed in its entire majesty only by a cosmic intellect." "But," he says, "it can also be represented symbolically, by a mathematician, as a four-dimensional space-time continuum. An understanding of the space-time continuum is requisite to a comprehension of the General Theory of Relativity and of what it says about gravitation, the unseen force that holds the universe together and determines its shape and size" (p. 62).

In this four-dimensional space-time unity, the first three dimensions have the accent on space, (that is, on line, plane, and space itself) while the fourth dimension has the accent on time. But space and time being indivisible, all space-measurements are time-measurements and all time-measurements are space-measurements. The time span of 24 hours is the space traversed by a point on the earth's surface by reason of the earth having made one complete revolution. But a day on a planet of a different size, rotating at a different rate, would be very different from 24 hours. Barnett sums it up as follows. He says, "Seconds, minutes, hours, days, weeks, months, seasons, years, are measurements of the earth's position in space relative to the sun, moon, and stars" (p. 60).

Motion is therefore as relative as space and time are relative. Our senses do not tell us that the earth is moving through space, —

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quite the contrary. The same is true for all the other celestial bodies. We only know we are moving by reason of a change of our position in relation to these other bodies. If the earth was the only object in the universe, and nothing happened to interfere with the uniformity of its motion, we could never know whether we were in a state of motion or at rest. Only by reason of a sudden change of direction, or a sudden acceleration, could we possibly know we were moving.

It seems we do not like being jerked out of a state of moving comfortably forward in a straight line and at a uniform speed! This is because there is a quality in matter called "inertia" that resists a force being imposed on it which causes a change in its motion. There are obvious personal lessons to be learnt here. For most of us, as mortals, prefer a nice comfortable straight forward existence to one of continuous and oftentimes sudden change, — although change usually means progress.

Gravity and Inertia

When two bodies of different weight "fall" freely through space simply under the influence of gravity they do so at precisely the same rate. Yet if these same objects were projected horizontally by some artificial force equal to that of gravity, the lighter one would travel faster and further than the heavier one. Space itself is un-directional, there is no such thing as right side up, upside down, no right turn or left turn. All natural uniform movement in space is due to gravitation. The reason the heavier body does not fall faster than the lighter one is because the force which gravity exerts on each is exactly what is required to overcome the particular body's inertia, or resistance to being moved. Gravitation, as it were, adapts itself to the requirements of each particular body. This principle of the Equivalence of Gravitation and Inertia is the basis of General Relativity.

Just as gravitation is the basic cosmic principle, so, in Christian Science, the divine Principle, God, is that which holds all the identities in the universe in a state of exact scientific relationship.

Gravitation, Einstein revealed, is not really a "force" at all in the accepted sense of the word. Bodies do not "attract" one another according to mechanical laws over millions of miles of space. Rather do they behave in a certain prescribed way when they are

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moving in a gravitational field. For a gravitational field has a structure as definite as that of an electromagnetic field. All bodies set up gravitational fields around them just as a magnet sets up a magnetic field. A magnet does not really "attract" a piece of iron to itself. The piece of iron behaves in a certain way in the magnetic field which the magnet has set up. The structure of an individual body's gravitational field in space is determined by the body's mass and velocity. The sum of the gravitational fields of all the stellar systems in the universe determine the structure and properties of the space-time continuum in which the universe itself moves. Gravitation cannot properly be considered piecemeal, but only in terms of the universe as a whole.

Einstein's supreme discovery in General Relativity was that because light is energy and has mass, therefore when light passes through a gravitational field, the path it traces is not a straight line but a curve. The conclusions he drew from his experiments were that in the total space-time continuum, made up as it is of all the interrelated gravitational fields of all the different classes of stellar systems, individual stars, galaxies, meteors, comets, stellar dust clouds, cosmic rays, etc., the light which pertains to them all travels in a gigantic cosmic circle, or sphere, and in so doing determines the geometry of the one space-time continuum.

Cosmic Sphere

There grew from this realization a conception of the universe as a whole, its shape, structure, and size. But the geometry involved is very different from the kind of geometry which Euclid introduced. Barnett writes: "...the geometrical structure of the universe as a whole must be shaped by the sum of its material content...the total effect is an over-all curvature of the whole space-time continuum... the incomputable masses of matter in the universe cause the continuum to bend back on itself in a great closed cosmic curve" (p. 84).

We are reminded how, in divine metaphysics, that which constructs the universe is infinity eternally reflecting upon its own infinitude. The meaning of the word "reflect" is "to bend back...to turn back the thoughts upon anything..." It signifies the bending back of something upon itself.

There are no straight lines, there are only cosmic circles. Space itself is both finite and boundless at the same time. Its four-

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dimensional geometry can be symbolized only by the outside surface of an immense celestial sphere. To Sir James Jeans and others an expanding soap bubble, or an expanding balloon, offered the best kind of symbol. Yet the analogy soon proves unsatisfactory, for whereas the surface of the bubble is two-dimensional, the universe we are being asked to visualize is four-dimensional; and whereas the bubble has an outside, an inside, and a centre, the physical space-time universe is symbolized only by the bubble's expanding outside surface.

The plain fact is that the senses are incapable of visualizing such a concept, just as they are incapable of visualizing the structure of the atom. Spiritual sense alone can visualize and understand it through its translation from matter to Spirit. The only thing the physicist can do is to describe it and symbolize it mathematically. Hence mathematics becomes the "language" of physical science.

The estimated size of the finite physical universe is such that if we conceive of a ray of light setting out through space at a rate of 186,000 miles per second, this ray will return to its starting-point after a lapse of 200 billion terrestrial years, having described a cosmic circle!

Unified Field

We come to the Unified Field Theory. When, in his latter calculations, Einstein united in a single supreme edifice the laws governing the atom and the laws governing the four-dimensional continuum of space and time, — that is to say, the laws of electromagnetism and the laws of gravitation, — this does not mean to say that the two sets of laws are identical with one another. Rather are they two complementary aspects of the same thing, namely, fundamental cosmic law. Each is essential to the other, and inseparable from the other, and physical science needs both in unity in order to describe its universe.

That in these mighty considerations we are not really dealing with "things" as such but with symbolic mental concepts, was suggested long ago by Jeans, when he was questioning the material palpability of an electron. He said, "It is probably as meaningless to discuss how much room an electron takes up as it is to discuss how much room a fear, an anxiety, or an uncertainty takes up." Indeed, in the last analysis, what can a negatively charged electron be but a negative quality of mortal mind which occupies no space as

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such at all.

In line with this, Barnett writes in "The Universe and Dr Einstein," "Thus gradually philosophers and scientists arrived at the startling conclusion that since every object is simply the sum of its qualities, and since qualities exist only in the mind, the whole objective universe of matter and energy, atoms and stars, does not exist except as a construction of the consciousness, an edifice of conventional symbols shaped by the senses of man. As Berkeley, the arch-enemy of materialism phrased it: 'All the choir of heaven and furniture of earth, in a word all those bodies which compose the mighty frame of the world have not any substance without the mind.'.. Einstein carried this train of logic to its ultimate limits by showing that even space and time are forms of intuition, which can no more be divorced from consciousness than can our concepts of colour, shape, or size. Space has no objective reality except as an order or arrangement of the objects we perceive in it, and time has no independent existence apart from the order of events by which we measure it" (p. 13-14).

The divine fact behind these conclusions is the scientific statement of being in Christian Science, which reads: "There is no life, truth, intelligence, nor substance in matter. All is infinite Mind and its infinite manifestation, for God is All-in-all..." (S & H 468:9).

TRANSLATION BACK INTO SPIRIT

On S & H 209, under the caption, "spiritual translation," Mrs Eddy writes, "The compounded minerals and aggregated substances composing the earth, the relations which constituent masses hold to each other, the magnitudes, distances, and revolutions of the celestial bodies, are of no real importance, when we remember that they all must give place to the spiritual fact by the translation of man and the universe back into Spirit." She says in the paragraph that follows, "Material substances or mundane formations, astronomical calculations, and all the paraphernalia of speculative theories, based on the hypothesis of material law or life and intelligence resident in matter, will ultimately vanish, swallowed up in the infinite calculus of Spirit."




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These two paragraphs allude specifically to the kind of topics we have been discussing. From them we learn that the translation of "man and the universe back into Spirit" is the "infinite calculus of Spirit" swallowing up the material sense of man and universe, and causing it to disappear. In proportion that the calculus of Spirit reveals itself to human consciousness as comprising the only universe there is, so the material sense of the calculus, suggested in the above paragraphs, dissolves, and the universe is translated "back" into the calculus itself.

No single concept is therefore of greater significance in our immediate considerations than the "calculus" of infinity. This is borne out when we realize that the entire calculus of matter is embraced in the "four-dimensional space-time continuum" which Einstein revealed, and that, as stated in Mis 22:11, the "infinite calculus" is that which defines "the line, plane, space and fourth dimension of Spirit," and is the antidote to the space-time concept.

It is true that "astronomical calculations," "speculative theories," etc., are of "no real importance" in and of themselves. Yet when we look out upon them from the standpoint of Spirit, and they become to us transitory symbols of reality, then they are important. For in no other form than as symbol can the calculus of infinity translate them back into Spirit. Man has reached the point where, universally as individually, the alternative facing him is either destruction and death or translation and life.

In attempting to fathom such momentous issues let us never forget that Christ Jesus' sense of matter was the opposite of the sense we entertain of matter as mortals. In proportion as we really begin to entertain Christ Jesus' sense of matter there will be translation and life instead of destruction and death, even as he himself demonstrated. If, on the other hand, we continue to entertain the old mortal sense of matter there will be inevitable destruction and death.



Mrs Eddy hints at the translation of celestial phenomena in the paragraphs immediately preceding the above quotations. She gives the true idea of "sun," the true idea of "light," and the true idea of the celestial bodies generally when she writes: "Mind, supreme over all its formations and governing them all, is the central sun of its own systems of ideas, the life and light of all its own vast creation..." There is no sun but Mind, no light but Mind, no astronomical phenomena but Mind's formations and systems of ideas. Hence the inevitability that the concepts of modern physics should become more and more mental under the impact of these facts.

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As "light" is the basic element of the physical concept and gives rise to all subsequent phenomena, so Mind, intelligence, is the elemental source of the entire spiritual universe. Mind is the real "light," the real electromagnetic radiation. John declares in his first epistle (1:5), "God is light, and in Him is no darkness at all." Mrs Eddy writes in her commentary on the fourth day of creation (the day that depicts the whole framework of the universe), "God is revealed as infinite light. In the eternal Mind, no night [no physical misconception] is there."

Unlike optical light which (although its velocity is the speed limit of the physical universe) takes time to travel through space, Mind is truly instantaneous because it is everpresent. Divinely conceived, reflection is instantaneity. In Mind there is no space, no time, no matter, only the infinite here and eternal now of ideas, images, formed by the infinite Mind, Spirit, Soul, Principle, Life, Truth, Love, reflecting upon itself.

Here, then, we find the truth about the great cosmic circle, which physical light, in its journey through space, takes billions of years to form.

Tree of Electro - Animal - Magnetism

So fundamental in the physical realm is electromagnetism, that when we begin to translate it metaphysically we find, not surprisingly, that we are led to consider the Principle of the universe in its most elemental form. We are led, in fact, to the analysis and resolution of what appears, humanly, as two antithetic principles, namely, the Principle of the allness of God, or good, on the one hand, and the principle of the apparent equal realities of good and evil on the other. This means, as we shall see, that in the opening stages of its metaphysical translation the subject of electromagnetism brings us face to face with the two apparently opposite accounts of creation given in the first two chapters of Genesis.

"And God saw that it was good." The key to the Principle of the first record in Genesis is that creation as a whole is absolutely good, and is of the nature of Spirit, while the key to the principle of the second lies with the tree of the knowledge of good and evil (that is, of matter, the opposite of Spirit) in the midst of the garden of Eden.

The revelation of Science is that our present universe in which we live is Spirit, not matter. Hence the four-dimensional space-time



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continuum of the theory of Relativity is in reality "the line, plane, space, and fourth dimension of Spirit." The space-time continuum revealed by Einstein, spiritually regarded, is a mathematical symbol of the metaphysical calculus of the Word, Christ, Christianity, Science, revealed by Mrs Eddy.

In addition to the four terms, Word, Christ, Christianity, Science, another way of representing the four-dimensional universe is in the form of what is called the "Science order" of the seven synonyms for God: Mind, Spirit, Soul, Principle, Life, Truth, Love. In this order, the terms are viewed according to the pattern of the "golden candlestick" of Ex 25, where Principle in the middle is the starting-point, and Soul, Spirit, Mind, and Life, Truth, Love, form symmetrical branches radiating outwards on either side. This represents the fact that, positively, the Principle of infinite good stands in the midst of the universal calculus, and is the determining centre thereof, just as, negatively, the principle of good and evil stands in the midst of the garden of Eden and dominates all that goes on there. The tree of knowledge is the governing centre of the field of consciousness fabricated by the five personal senses.

In the garden all the various trees are subordinated to the tree of knowledge, while all the animals are subordinated to the talking serpent who is intimately associated with the tree.

Yet there is another tree totally unlike the tree of knowledge which, according to the text, occupies exactly the same central position. This is "the tree of life also in the midst of the garden ..." (Gen 2:9).

The reason that two trees stand in precisely the same place, or coincide with one another in the centre of the human picture, is because, in Truth, there are not two trees at all, any more than there are two universes, or two opposite versions of creation. The one is but the supposititious opposite of the other. The tree of knowledge is the supposed absence of, or ignorance of, the tree of life. Right where the tree of knowledge seems to be, there stands the tree of life. Right where the material space-time continuum seems to be is the four-dimensional calculus of Spirit, the continuum of infinity and eternity. Understanding this fact in Science, the time-universe of electromagnetic light has perforce to yield to the "light" of eternity, - to the everywhere present radiant energy inherent in the unity of being. The lighted candlestick of Ex 25, the woman standing in the sun in Rev 12, are symbols of this spiritual radiation.

There is no universe but Mind, Spirit, Soul, Principle, Life, Truth,

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Love in perpetual operation as the Word, Christ, Christianity, Science. The system of the seven and four capitalized terms for God is the counterfact to both the space-time continuum and to elemental nuclear energy. Likewise the tree of eternal life is the counterfact to the self-destroying tree of the knowledge of good and evil, or the tree of death. Jesus, in his victory over "the accursed tree," proved there was only one kind of universe, one kind of tree.

The "tree" from whence all physical knowledge stems is described on S & H 92:11. We read here: "In old Scriptural pictures we see a serpent coiled around the tree of knowledge and speaking to Adam and Eve. This represents the serpent in the act of commending to our first parents the knowledge of good and evil, a knowledge gained from matter, or evil, instead of from Spirit. The portrayal is still graphically accurate, for the common conception of mortal man – a burlesque of God's man – is an outgrowth of human knowledge or sensuality, a mere offshoot of material sense."

A serpent is coiled around the trunk of a tree. "Coiled" is a term within the vocabulary of electricity, and therefore comes within the scope of the subject of electromagnetism. In fact as we ponder the portrayal deeply, a remarkable symbol is thrown up. In terms of elementary magnetism and electricity the picture before us is that of a simple bar magnet with a wire wound round it.

In metaphysics, the serpent is animal magnetism. He is the conductor along which, or through which, the "animal magnetic fluid," referred to on S & H 100:19, flows. According to 100:8 this magnetic "influence" is supposed to exist "between the celestial bodies, the earth, and animated things." This universal influence is the gravitational, electromagnetic field in which the whole physical universe revolves.

The flow of electricity through a conductor in physics, or through the nerves of the mortal body in biology, is basically the same flow. There is no difference between mineral atoms, and flesh atoms except one of electronic and nuclear arrangement. Without the physical energy pent up in the atomic shells and the nucleus, there is no flow of electrons constituting the electric current, no build-up and discharge of elemental electric power, no vibrating nerves in the mortal body which claim that sensation is resident in matter both as pleasure and as pain.

To return to the serpent coiled around the tree, or the copper wire around the bar magnet, every schoolboy knows that if he sprinkles iron filings on to a piece of paper held over such a magnet,

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the filings arrange themselves into the shape and structure of the field of magnetic force which the magnet induces in the space around it. Every magnet has what is called a north pole and a south pole, just as biologically mortality is both male and female, and the tree of knowledge is both good and evil. In fact the north pole of a magnet is regarded as the "positive" pole and the south pole as the "negative" pole. This is the order and direction of the magnetic flow, and is what controls the "attraction" of a piece of iron placed within the magnet's field. The magnet itself is made up of an immense number of neatly arranged two-pole molecular magnets. The degree of order in the arrangement of the magnetic molecules determines the strength of the magnet.

A coil of copper wire wound round the magnet lies within the field of magnetic influence. If the coil is moved backwards and forwards, so that it cuts and recuts the lines of magnetic force, this to-and-fro movement induces an electric current to flow in the wire. In like manner, the tree of knowledge of good and evil induces the flow of animal magnetism in the serpent, and this is transferred to Adam and Eve when their thought is caught in the field of influence. The serpent, with its to-and-fro frictional movement, is in fact the connection which joins Adam and Eve to each other, and induces an animal magnetic current to flow between them. Remember that the serpentine tree is in the middle of the garden, and the garden itself is the mortal body (see S & H 526:29-1).

The parallel between the magnet and the tree can be taken still further. A tree is made up of three things, trunk, roots, and branches. It is true that in nature the branches that come out of one end of the trunk do not literally join up with the roots that come out of the other end, as do the lines of force from the two poles of a magnet; nevertheless the branches drop their fruit and their leaves to the ground, and these in turn feed the roots. In this sense there can be said to be continuity and circulation between the branches and the roots, just as the lines of force that make up the field of the bar magnet branch out and circulate through the two poles.

(See Appendix diagram p.143)

Tree of divine Principle

The tree of life is the divine antidote to the tree of electro-animal-magnetism. S & H 406 tells us that, "The Bible contains the

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recipe for all healing. 'The leaves of the tree were for the healing of the nations' . . . The tree is typical of man's divine Principle . . . offering full salvation from sin, sickness, and death."

We see from this statement that the Bible, the book of life, based as it is on the seven days of creation, and therefore on the seven synonymous terms for God, stands for the tree of life. Mrs Eddy is quoting here from the Bible's final chapter, Revelation 22, where the tree of life is identified with "a pure river of water of life" flowing from the throne of God. In the midst of the river, and on either side of it "was there the tree of life, which bare twelve manner of fruits, and yielded her fruit every month: and the leaves of the tree were for the healing of the nations." The river of life flows around the tree of life in the positive symbol, just as the serpent flows around the tree of death in the negative symbol.

The woman standing in the sun in Rev 12 is crowned with twelve stars. The tree standing in the river in Rev 22 is crowned with twelve manner of fruits. The vision in each case depicts a fertile matrix, or womb. The woman gives birth to a son, while the tree yields her monthly fruit. The river has fertilized the tree, and this has caused it to form its fruit. The sun has fertilized the woman, and this has caused her to bring forth her son. In terms of pure Science, what is being symbolized in each case is the matrix and calculus of infinity, fertilized by the divine Principle, Love. Of the absolute unity of God and man is born the Son of man, who is the Son of the living God.

The "infinite calculus," in defining "the line, plane, space, and fourth dimension of Spirit," reveals how "all true thoughts revolve in God's orbits: they come from God and return to Him" (Mis 22). This is the antidote to the gravitational orbits of the space-time continuum. In reality all being revolves in the orbits of the tree and the river of life, - in the field of divine radiation emitted by the woman in the sun. This is the antidote to atomic radiation. The belief that life revolves in the orbits of the serpentine tree of knowledge, or in the birth-death cycles set up by Adam and Eve, is a misconception of being.

There is divine magnetism, which is the antidote to animal and human magnetism. Divine magnetism is that quality of infinity whereby Principle holds its universe in eternal harmony and unity. Animal magnetism would split this unity into fragments, and then either hold the fragments in a state of separation or bring them back into physical contact again. This is the action of fission and fusion.

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Typified by the tree and the river, all identity circulates out from Principle and returns to Principle. But in so doing it never moves outside the field, or consciousness, of Principle's divinely magnetic forces. S & H 102:9 declares, "There is but one real attraction, that of Spirit. The pointing of the needle to the pole symbolizes this all-embracing power or the attraction of God, divine Mind."

The field of forces we are now looking at, as the opposite of the one set up by electro-animal-magnetism, is the consciousness of Mind, Spirit, Soul, Principle, Life, Truth, Love, the Word, Christ, Christianity, Science, eternally self-reflecting. As the infinite One reflects upon itself in terms of these aspects of its oneness, the infinite image which is formed revolves in God's orbits, - moves in His channels of reflection. The symbol of this is the tree of life, and/or the golden candlestick, whose radial branches are the channels in which all life moves, - whose light is the light which fills the world, and is the world's own radiant energy.

Mrs Eddy writes on My 107:21 of "the grooves of omnipotence." And on Mis 104:18, that man's spiritual senses move "in God's grooves of Science;" while his physical senses "revolve in their own orbits," and stand "the friction of false selfhood until self-destroyed." Such friction is set up when a coil of wire cuts backwards and forwards across the lines of magnetic force, or in the act of physical creation.

Whether we are looking at the lines of force of the electromagnetic field, whether it is a diagrammatic representation of the shells of electron forces surrounding an atomic nucleus, whether it is the spherical symbol of the space-time continuum, or whether it is the graphic depiction of Mind, Spirit, Soul, Principle, Life, Truth, Love functioning as the seven-branched candlestick, the image in each case is remarkably similar.

The difference between Principle in the midst of its field of spiritual force, and the magnet in the midst of a field of magnetic force, is that whereas the magnet has a positive pole from which its radiation emanates and a negative pole to which its radiation returns, Principle, in the midst of the divine order of being, is wholly positive. It is represented, therefore, as the centre of a series of expanding circles just as the candlestick suggests. (See Appendix diagram p.142)

In this symbol, the circles or spheres are three in number. The innermost sphere is represented by the two terms Soul and Life, the centre sphere is represented by Spirit and Truth, and the outer

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sphere by Mind and Love. These three spheres, pulsating forever from and to their centre, represent the radiant consciousness, or universe of Principle in which all harmony moves. Principle, in other words, is the central nucleus, the I, the Us, of all the individual identity (Life and Soul), of which the calculus is formed (Truth and Spirit), and which is embraced forever within the womb of the creator (Mind and Love).

Implicit in this picture are the four "orders," the four "channels," of the synonymous terms for God. (See Appendix p. 140) These four comprise the all-pervading, self-containing framework of the system of Christian Science. Mind, Spirit, Soul, Principle, Life, Truth, Love, the order of the Word, is epitomized by the two terms Life and Soul. This is the order which brings the "numerals of infinity" into being, as the constituents of individual identity. Principle, Life, Truth, Love, Soul, Spirit, Mind, the order of the Christ, is epitomized by the two terms Truth and Spirit. This order brings the "divine infinite calculus" into being, in which the numerals of infinity function and flow in infinite variety of expression. Principle, Mind, Soul, Spirit, Life, Truth, Love, the order of Christianity, is epitomized by the two terms Love and Mind. This order signifies the universal "matrix" which forms the calculus, and which determines its endless diversity. Finally, the order of Science is the candlestick as a whole, in which the other three orders are embraced, and which is represented by the term, Principle, "in the midst."

These four channels, or orders, wherein all being moves, comprise a symbol of the reality that lies not only behind the space-time continuum, but which underlies the atom as well. They are the orbital grooves of the divine magnetism in which all reality functions, and from which there is no escape. No bombardment from without, no subversive activity within, ever broke up the unity and integrity of this eternal, indivisible One.

Individuality and the Nucleus

When the physicists split the atom, first as regards its electronic outside and then its nuclear inside, they gave the lie to the original meaning of the word, "atom," as "uncut, indivisible." Nothing material can ever really be indivisible, for matter is the immediate outcome of the belief that man is divided from God.

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When, on S & H 465:17, we read that "Principle and its idea is one, and this one is God," this is the truth regarding the atomic nucleus. When we read that the "reflection" of this uncut, indivisible one is "man and the universe," this is the truth regarding the revolving field of electrons with which the nucleus is surrounded. In this oneness of Principle, idea, reflection, (this uncut unity of God, Christ, man, or Word, Christ, Christianity), lies the primordial "atom" of infinity which never disintegrated, never exploded, and which never, therefore, precipitated an expanding, material universe.

Like the word "atom," the root meaning of "individual" is also "indivisible." And therefore individuality which has supposedly "broken away from Deity and [is] revolving in an orbit of [its] own" (S & H 522:9), is not really individuality at all in the true meaning of the word. Individuality reflects the undividedness of Principle and its idea, God and His Christ, and is therefore both indivisible within itself and is embraced within Principle's oneness.

Mis 104:9 declares: "In Science all being is individual; for individuality is infinite in the calculus of forms and numbers." My 109:20 tells us that "We are individually but specks in His universe."

We do not learn about individuality from the "specks" of the material atom, any more than we learn about Spirit from matter, or about any aspect of God's universe from counterfeit material concepts. We learn to understand individuality in its relation to the uncut One, and therefore in its infinite variety. And in so doing we arrive nearer the spiritual truth behind the atom.

"Unity and power are not in atom or in dust," Mrs Eddy writes in My 162:6, "A small group of wise thinkers is better than a wilderness of dullards and stronger than the might of empires." The heart of the atom is its nuclear centre, or core.

There never was a wiser group of thinkers in all the world than the twelve or so individuals who gathered in Jerusalem shortly after Jesus' ascension, conscious that the radiant Spirit of God comprised not only their own identity but also that of the whole of their outside world. Mrs Eddy says in Mis 279 that they "were of one mind," and likens them to "Joshua and his band" in the Old Testament, who encircled the walls of Jericho and caused the harlot-city to collapse. "They had all to shout together in order that the walls might fall," she says. And she goes on, "We today, in this class-room, are enough to convert the world if we are of one Mind."

Nuclear physics converts matter into energy. Divine metaphysics detonates Jericho both outside and inside and in so doing converts

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(translates) the material universe back into Spirit, Mind.

Jesus had prayed that "they all may be one," — One in all and all in One. Consequently, on the day of Pentecost, the disciples were "all...in one place." But what lay back of this human concept of twelve united people? The disciples were operating "together" from the point to which Jesus had raised them at the ascension, and this point was the determining centre of their entire objective universe. They were in Christ and Christ was in God; and this trinity in unity of God, Christ, man (Word, Christ, Christianity) was the nuclear focus of their world.

On the day of Pentecost the world saw the unity of the divine Spirit humanly manifest, and recognized therein the reality of its own being. The power that was unleashed from heaven was the power inherent in the fusion of spiritual individuality in God. According to S & H 47, it was an "influx of light," an "overwhelming power." Acts 2 describes it as "a rushing mighty wind [which] filled all the house where they were sitting." To material sense, nuclear fusion, as in the case of the hydrogen bomb, manifests the light of a miniature sun, and is accompanied by a tremendous rushing wind.

Not that individuality has really to fuse itself in God, the infinite One, for this One has never in the first place been fissioned into fragments to make the fusion necessary. "The divine Science of man... is without seam or rent" (S & H 242:25). Individuality starts from the forever unity of the One, — from the divine "I or Us," — and strives to demonstrate this in human experience until the last vestige of fragmentation is gone. Mrs Eddy, in My 164:18, calls such unity the "great sanity," a "mighty something buried in the depths of the unseen" that leaps "into living love." She describes it as "the bond of perfectness," and "the thousandfold expansion that will engirdle the world." This is the truth behind satellites in orbit, and the efforts of rocketry to conquer space.

The nucleus of the future spiritual education of mankind involves an issue infinitely greater than the banding together of a group of people zealous of bringing this to pass. The supreme question to be decided is, What is the ego? What is the "I"? We read on S & H 336, under the heading, "the divine Ego," that "Mind is the I AM or infinity;" that "the divine Ego, or individuality is reflected in all spiritual individuality from the infinitesimal to the infinite." Individuality in man is determined solely by his having God, not man, as his "I." The definition of "I, or Ego" in the Glossary reads,

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“There is but one I, or Us, but one divine Principle, or Mind, governing all existence...”

Individuality whose Ego is the one Mind, – whose divinely single “I” is at the same time the divinely plural “Us” – comprises the nucleus of inexhaustible power and energy. The nucleus in Science is nothing less than the one I AM, the one individual, whose individuality is infinite. This is manifest humanly in the measure that personal egotism yields to the system of Christian Science as comprising the present universe. In Science, individuality is individuality only when the matrix of universal Love is the subjective state of its being.

The symbol in the Bible of universal humanity redeemed to this state of Mind is the “woman clothed with the sun,” – radiant with inexhaustible power. The woman is divinely, infinitely energized. She is the fusion of infinite individuality in God. She is the infinite individuality of God. She is energized to give birth to the Son of man who is the Son of the living God. In the theories of physical science, the sun’s energy, like that of the fusion bomb, comes from the fusing of free hydrogen nuclei, – that is, of individual, positive protons of which hydrogen nuclei are comprised. The fusion of spiritual individuality in God releases the power and energy to heal and transform the entire world and convert it back into Spirit.

No wonder Mrs Eddy says on S & H 534:12 that “the Son of the Virgin-mother unfolded the remedy for Adam, or error; and the Apostle Paul explains this warfare between the idea of divine power, which Jesus presented, and mythological material intelligence called ENERGY and opposed to Spirit.”

The demand upon Christian Scientists at this crucial juncture of the world’s history is to translate nuclear warfare from matter to Spirit. For there is and must be enmity to the death between the woman and the serpent. The matrix of divine Science is necessarily engaged in a warfare of extermination with the electromagnetic serpent, and with the tree of bodily, physical knowledge worshipped by Adam and Eve.

“Let the ‘male and female’ of God’s creating appear,” we read on S & H 249:5, “Let us feel the divine energy of Spirit, bringing us into newness of life and recognizing no mortal nor material power as able to destroy.” Again, S & H 445:20 refers to “the unlaboured motion of the divine energy in healing the sick.” Energy is reflected, not expended, in the motions of spiritual birth, – that is, of spiritual education and healing. Hence, the human need not labour.

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Energy is "capacity for performing work" (Wbr). In Science, men and women are divinely charged with power and energy to fulfil God's purpose, - to finish the work which their Principle has given them to do. It is said of Jesus that he was "charged with the grandest trust of heaven" (S & H 49:19). While the atomic proton carries a positive electric charge, the electron is charged negatively. The same is true of Adam and Eve. Adam is charged with a "positive wrong" and Eve with a "negative right" (S & H 491:8). But the disciples on the day of Pentecost, like the "angels of His presence" (S & H 512:10) are charged with the flow of the Holy Ghost, - the holiest, wholly positive, birth-giving charge. This released energy of Spirit has power to rebirth the world.

As we come now to our third and last subject, we must not expect that something new, something different, from the foregoing will be brought to light. Rather shall we find ourselves looking at the same conceptions, but from a different point of view. So it will be with every subject we are led to investigate. The underlying Principle remains the same, the form of the expression varies infinitely.

SPIRIT THE GREAT ARCHITECT

Body

We have looked in the direction of infinity at the truth behind the space-time continuum; we have looked in the direction of the infinitesimal at the truth behind atomic physics. In doing this, we have touched upon the great generality of Spirit, on the one hand, and its analysis and translation of the great generality of matter, on the other. And it is logical for us to work in this order, from this premise, because once such a premise is established, the general can begin to resolve into the particular, and the complex detail of the human picture, outlined in Part II, be gradually seen in its true perspective and translated back into Spirit. Little by little, metaphysics resolves the "things" of human consciousness into "thoughts,"

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and then exchanges these thoughts, as symbols, for "the ideas of Soul." And this goes on until at last, as with Jesus at the ascension, the work of individually translating the universe is complete.

As we have said, according to the calculations of physical science, the point midway between the two foregoing extremes is, from a quantitative standpoint, occupied by the body of individual man. In terms of relative sizes, mortal man stands midway between the galactic universe at one end of the scale and the atom at the other. It would seem appropriate, therefore, in our present considerations, to touch, thirdly, on the truth about body.

Body is the building wherein man dwells. Yet in Science, body and man are synonymous; and because man is the idea of God, therefore body, as idea, dwells in God, the Mind of man, rather than vice versa. Man does not really dwell in body. Man is body which dwells in God. Perfect God controlling perfect man is perfect Mind controlling perfect body.

Strange as it may seem, of the hundreds of references to "body" in Science and Health, about the only really positive one is that on 559:25 to "the divine body of... Principle." The reason for this is that Mrs Eddy sought to avoid confusion between what body really is and what mortals think body is. The real body, the body of Principle, is identical with the system of Christian Science, the structure of the spiritual ideas of God, which Jesus was explaining to his disciples when he said, "Take, eat; this is my body."

As will be seen from p. 559, Science and Health as a whole elucidates this same Christ-system, or body. The sixteen chapters of Science and Health, representing the matrix and calculus of all real being, unfold God's foursquare "body." Yet the actual references to the term "body" do not tell us this, - at any rate not on the surface of the text. The vast majority of these references refer simply to the mortal sense of body.

In certain parts of the Bible, however, especially in the Pauline epistles, "body" is often used directly in its spiritual sense. For example, "Your body is the temple of the Holy Ghost which is in you, which ye have of God, and ye are not your own" (1 Cor 6:19), can scarcely be an allusion to a structure of flesh and bones.

Spiritual Dwelling-Place

An investigation of the subject of "body" involves almost immed-

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ately the subject of "architecture," because architecture, too, is about the house, or building, wherein mortal man dwells. In fact, in both the Bible and Science and Health, the relationship between the two concepts, body and building, is so close that the translation of the one into spiritual idea is virtually inseparable from the translation of the other.

We learn from Science and Health that Spirit is the only real "architect" and Mind the only real "builder." In line with this, in the Bible, Paul tells us that the "builder and maker" of the universal metropolis, the holy city, the consummation of all spiritual architecture, is God.

We read on S & H 68:5, "Sometime we shall learn how Spirit, the great architect, has created men and women in Science." Spirit's architecture is not a building of stone, brick, wood, any more than Spirit's body is made up of flesh and bones. Both architecture and body are the structure of spiritual consciousness, — the consciousness of "men and women in Science." Spirit's architecture is the structure of the Science of generic man.

In the same way, the holy city is nothing to do with houses, thoroughfares, organized centres of administration, seats of government, etc., in a material sense, but is the structure, the spiritual embodiment of the manhood and womanhood of God. Mrs Eddy makes this plain when she writes of the "unity of male and female as no longer two wedded individuals," but as "a compounded spiritual individuality," a "divinely united spiritual consciousness;" and then identifies this consciousness as "the city of our God." (See S & H 577:4-13).

She wrote in the 16th edition of Science and Health: "...the Scriptures compare the heavenly kingdom or association to a city, in which Christ bears rule. God is both the founder and foundation of this city. He is at once its centre and circumference.. It is equal-sided, as long as it is broad. In its way, the square is as perfect as the circle... The faith of... the Jewish nation... built their Holy City, with the Temple as its centre..." (p. 225-228).

Eventually, in later editions of Science and Health, and as foreshadowed by this statement, the holy city was given two complementary descriptions, namely, "city foursquare" (S & H 575), and "city of our God" (S & H 577). In the first description, the city's geometry is a square; in the second it is a circle. In the Old Testament, in the books of Ezra and Nehemiah, the architect's plan of Israel's capital city, Jerusalem, (the symbolic forerunner of the

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"New Jerusalem,") is that of a central "nucleus" in the form of the temple, and an encircling wall made up of twelve foundations and twelve gates. In Exodus, when Moses is given instructions for building the tabernacle, the architectural detail is profuse. It is the same with Solomon's temple later on, and still more so at the close of Ezekiel, where the prophet envisions, in symbolic form, this structure of spiritual ideas as Israel's true body.

What mathematics calls "squaring the circle" is wrought out metaphysically in the architecture of the holy city. Both concepts, square and circle, in complementary relationship, are essential to an understanding of the city's structure. The square is "divine Science" (S & H 575), the circle is "Christian Science" (S & H 577). The square typifies the "One," the circle typifies the "all." The square has walls around it, the circle has none. So it is with divine Science and Christian Science. Except divine Science is reduced to its system, Christian Science, it seems, from the human point of view, that divine Science is surrounded by limiting walls. Whereas the "holy habitation" of Christian Science is without boundary or limit.

Humanity does not get very far with only the concept of divine Science. Christian Science is the systematized understanding of divine Science, and this understanding does away with all sense of exclusiveness and restriction, for it makes divine Science universally available and demonstrable. In the unity of the two concepts, the "all" is found embraced in the "One," and the "One" is found reflected in all. Divine Science and Christian Science are the two essential aspects of the one Science, just as divine manhood and womanhood are the two essential aspects of the Son of God.

Foundation and Superstructure One

The emphasis with Christ Jesus is divine Science; the emphasis with universal humanity is Christian Science. Through Christian Science every individual reaches the standpoint of Christ Jesus in divine Science.

The manhood and womanhood of God, represented by Christ Jesus and Christian Science, are what Paul calls the "head" and "body" of the Son of God. Together, head and body, like subject and object, form a complete identity. In architecture these two concepts become the foundation and superstructure of which a building is comprised. Hence a foundation stone is a headstone. In Science and

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Health, "Zion," one of the names for Israel's holy city, is defined in part as: "Spiritual foundation and superstructure." "Church," on the other hand, is the "structure of Truth and Love." Together, foundation and superstructure make up structure, just as head and body make up man, centre and circumference make up sphere, and subject and object make up identity.

When Jesus gave the name "Peter" (meaning "stone," or "rock,") to his disciple, Simon, and said that his church (that is, the Christ-body) would be built upon this rock, he showed that Peter had glimpsed the fundamental principle upon which the structure of the universal brotherhood of man would be built. Jesus had asked the disciples to tell him what they understood him to be as the Son of man. And Peter had identified the Son of man as the Son of the living God. Peter had come to realize that all there is to the human concept is the divine idea itself. In other words, he had glimpsed the truth of the human and divine coincidence. He had seen that except humanity acknowledges a common Ego – except God, not man, is its "I" – it has no foundation upon which to build the structure of its own relationships. Peter had not learned this from the testimony of the physical senses, Jesus assured him, but from his heavenly Christ-principle. Peter was able to identify Jesus correctly because he had the "square" and the "circle," divine Science and Christian Science, in a proper sense of balance.

In view of this, it is only to be expected that Peter, in his first epistle, should pay particular attention to the spiritual edifice we are discussing. He writes of its foundation as one "living stone," and of the "spiritual house" reared on this foundation as built of "lively stones."

Paul puts it to the Ephesians in this way: "Ye are...built upon the foundation of the apostles and prophets, Jesus Christ himself being the chief corner stone; In whom all the building fitly framed together groweth unto an holy temple in the Lord: In whom ye also are builded together for an habitation of God through the Spirit...that we...may grow up unto him in all things, which is the head, even Christ; From whom the whole body fitly joined together and compacted by that which every joint supplieth, according to the effectual working in the measure of every part, maketh increase of the body unto the edifying of itself in love" (Eph 2-4).

Both Peter and Paul are describing the harmoniously related, perfectly proportioned edifice of "men and women in Science," as the work of the great architect, Spirit.

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Coincidence of the Human and the Divine

In the Bible, "Zion" is the "city of David." When, in II Samuel, David desires to build a house for God to dwell in, Samuel tells him that, instead, God will build him a house, and that David's son, Solomon, is the one destined to build an earthly house for God.

In the Old Testament, David is the forerunner of the generic Christ; while Solomon, with his sumptuous temple, is the forerunner of specific individuality in Christianity. Actually, David's house is already built, for it is "eternal in the heavens," while Solomon's house is set up stone by stone on earth. The salvation of humanity from sin, disease, and death depends upon the idea that, in fact, the two houses are one house. Peter saw they were one when he recognized in the Son of man the Son of the living God. On no other principle than that of the unity of heaven and earth, or the human and divine coincidence, can a system of relationships be built in Science, and the problem of human fragmentation be solved.

Except today we understand that we are "man," generic man, the woman in the Apocalypse, and not a lot of separate "men," what hope is there of salvation? Why do you go on building your little egotistical "cield house," and allow the "Lord's house" to lie waste? Haggai asks in his prophecy. He says: "Ye have sown much, and bring in little; ye eat, but ye have not enough. . . ye clothe you, but there is none warm. . . Consider your ways. . . ye looked for much, and, lo, it came to little. . . Why? saith the Lord of hosts. Because of mine house that is waste, and ye run every man to his own house."

As man we are the body of Christ, the house of the Lord, in all its health and wholeness. And with this body, and as this body, we heal sick bodies. As man, not men, we are the living structure of Truth and Love founded on divine Principle. Of our wedlock with God and with each other our true individuality is born. Hence "the woman" gives birth to a Son. The woman is ourselves having God as our Ego, and the Son of man who is born to us is the very Son of God. Our Son is none other than the heavenly demonstration on earth of our own unity in God.

House of Consciousness

"I will dwell in the house [the consciousness] of [Love] for ever" (S & H 578:17). Our real "house" is our "consciousness," and the

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human concept of house, or home, is a symbol of spiritual consciousness. It is the symbol of the rock in the centre of our universe. From this rock we radiate out to the world, to it we radiate back from the world. Within our rock-like consciousness we embrace individually the truth about the whole world. Mrs Eddy writes, "The divine understanding reigns, is all, and there is no other consciousness" (S & H 536:8). House, body, consciousness, understanding, are all the same thing.

The house we are learning to build is the structure of spiritual understanding, — the home of the whole human race. We are building our understanding of God by building our understanding of each other. We are building our love for God by building our love for each other. In the measure that we understand, in that measure we love. In the measure we love, in that measure we understand. In the measure we understand and love, in that measure we build. But we only build the house of the Lord in proportion as we build together. The house we build as the body of Christ is the loving understanding of each other's identity in Science.

This is the house (ark) which Noah built in the Bible's second thousand-year period, and it gave birth to a totally new world. His old world passed away. What in fact Noah built, to offset the floods of materialism, was a subjective understanding of the matrix of divine Love. This was Noah's own state of consciousness, and it held within it, in embryonic form, the world's spiritual identity.

Jesus likened the days of Noah to the days of Christian Science, or to the coming of the Son of man. "As it was in the days of Noe, so shall it be also in the days of the Son of man," he says in Luke 17:26. It is demanded of Christian Scientists today that they give birth to a new world, in which love and understanding reign.

Understanding, in order to be understanding, must always be new. The body of understanding must always breathe new life, new inspiration, new love, or else it is not understanding. If ever understanding ceases to be thus, it has become the "dead letter," the dead body of the subject, "pulseless, cold, inanimate." Living understanding translates the universe. The letter by itself is the body that dies.

With architecture down the ages, indeed with all expressions of art, each particular form and style has always given place to a new form, hitherto unknown. The new form is determined by the particular stage in human development that has been reached, and by the fresh needs of society. Hungering for bygone eras of architectural

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splendour has often resulted in attempts at revival which have proved abortive and unsuccessful. New human circumstances demand and give rise to new expressions of human life. The same is true of our individual experience under the impulse of what must always be a developing, self-renewing understanding of God.

Spiritual Environment

“Environment” is a word which has great significance in architectural thought and terminology. The qualities of a particular environment should themselves determine the particular building which the architect designs for this environment. The true architect refrains from superimposing upon a given set of circumstances his own tastes and opinions, but allows his designs to form themselves according to environmental needs.

The word “environment” is from a root meaning “circle, circuit.” “Environ” means “to form a ring around; to surround, encompass, or encircle...to envelope.” On S & H 521:2 we read of how knowledge of the Science of Mind lifts man “above earth and its environments” to his true spiritual environment, namely, “conscious spiritual harmony and eternal being.” Heaven, harmony, is man’s natural environment, and the fashioner of all that he is. In fact, just as a precious stone has for its environment the matrix-rock which forms it, so heaven is earth’s proper environment. Spiritually understood, the relationship between the object and the environment is that of the divine calculus and the matrix.

In architecture, “environment” applies internally as well as externally. A piece of architecture, be it a house, a school, a university, or any other type of building, is itself the environment for the particular human purpose that needs to be carried on within its walls. The architect’s ideal is that his building shall furnish the perfect environment for a particular human function. At the same time the building must take its place within its right external environment. This means that within the building’s exterior setting all things are in proper aesthetic and functional relationship not only to it but to each other. For example, however perfect in itself a school of music might be for teaching and practising music, if this school were built next door to a sawmill its individual purpose would be defeated, and the whole enterprise would fail.

In Christian Science, two reciprocal factors relating to man and

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his environment have to be taken into account. Not only does Science and Health refer to "the universe, including man" (83:16), but also to "man, including the universe" (502:26). Without both these aspects of environment there can be no Science of relationship, no true appreciation of identity.

The problem facing mortal man, and the one from which he derives all his limitations and sufferings, is that from the time of his conception in the prenatal womb, his background, his hereditary and circumstantial environment, shapes and determines not only the condition of his mind and body, but the course of his whole life. Except in cases where, through the exercise of self-determination, he is able to lift himself out of one set of circumstances into another, or, on the rare occasions when his real selfhood shines through and asserts itself in spite of his limiting circumstances, mortal man is a prisoner to the dictates of his environment. In any case, simply to change his physical and mental position and allow a different mode of existence to reshape his personal life is in no way to have worked out the shackling problem of material environment.

Man is not "a material form with a mind inside, which must escape from its environments in order to be immortal," S & H says on 258:9. In material sense the environment of mind is mortal body. In Science the environment of body is immortal Mind. Herein body reflects the harmonious workings of its own Mind; and is, by reflection, this Mind's perfect environment. Hence the need to understand that the environment which surrounds and encompasses us, and which we individually reflect, is not made up of the comings and goings of the race of Adam, - is not the atmosphere of animal-magnetic discords and tensions, with all their superimpositions of sin, disease, and death, - but is the creative matrix of the divine Principle, Love forming and maintaining, according to divine law, the ideal structure of our being. In this way individual consciousness is its own environment for its unique, universal mission.

The fact is, there is nothing going on "out there" but Mind, Spirit, Soul, Principle, Life, Truth, Love, functioning as the Word, Christ, Christianity, Science, and this by reflection, is the only thing which is going on "in here."

Man is the perfectly focussed image of God reflecting his God-environment. Because of this environment, like a piece of true architecture suited to its setting, individual identity is whole and a unity, taking its place in proper relationship with every other identity in the universe. Unity of conception, in respect of the building itself,

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its individual purpose, and its relationship to everything that surrounds it, is the ideal of every true architect.

Just as, in the case of the atom, the electron shells that environ the nucleus are said to determine the particular chemistry of the element; just as in the case of the universe as a whole we conceived of it as environed by primeval light; so, midway along the scale of physical magnitudes, stands man in the midst of his environment responding to its formative influence.

Unending Development

We have touched on but three of a multitude of subjects. Yet, even with these three, we can scarcely fail to have appreciated their interwoven relationship with a host of other subjects. Chemistry, anatomy, biology, psychology, space-travel, the earth sciences, the arts in general, have all been asking at one time or another to enter into our considerations. And so it will always be, until the divine Science of being is found to embrace and include, through reversal and translation, the diversity, wholeness, and unity of all that makes up the conscious experience of mankind.

In conclusion, let us refer once more to Mrs Eddy's article in Mis 22-25 on "One Cause and Effect," which might be said to set the tone of all our aspirations and endeavours. She writes:-

"Christian Science translates Mind, God, to mortals. It is the infinite calculus defining the line, plane, space, and fourth dimension of Spirit. It absolutely refutes the amalgamation, transmigration, absorption, or annihilation of individuality. It shows... that all true thoughts revolve in God's orbits; they come from God and return to Him... A falling apple suggested to Newton more than the simple fact cognized by the senses, to which it seemed to fall by reason of its ponderosity; but the primal cause, or Mind-force, invisible to material sense, lay concealed in the treasure-troves of Science. True, Newton named it gravitation, having learned so much; but Science, demanding more, pushes the question: Whence or what is the power back of gravitation, - the intelligence that manifests power?... The universe, including man, is not a result of atomic action, material force or energy; it is not organized dust..."

...SCIENCE, UNDERSTOOD, TRANSLATES MATTER INTO MIND."

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In MIND, SPIRIT, SOUL, PRINCIPLE, LIFE, TRUTH, LOVE; WORD, CHRIST, CHRISTIANITY, SCIENCE we live, and move, and have our being. In this work of SPIRITUAL EDUCATION, nothing less than the UNIVERSE as a whole comprises our UNIVERSITY. The word, "university," is from a root meaning "altogether, the whole, the universe." Not an "Alma Mater," but the universal MATRIX, the "MOTHER OF US ALL" is our real UNIVERSITY CITY.

P A R T IV

A P P E N D I X

“Science reverses the false testimony of the physical senses, and by this reversal mortals arrive at the fundamental facts of being.”

(S & H 120:7)

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THE FOUR ORDERS
of
THE SEVEN SYNONYMOUS TERMS FOR GOD

foundations of the system of scientific metaphysics
denominated
CHRISTIAN SCIENCE

<u>THE WORD</u>	<u>THE CHRIST</u>	<u>CHRISTIANITY</u>	<u>SCIENCE</u>
MIND	PRINCIPLE	PRINCIPLE	SOUL - LIFE
SPIRIT	LIFE	MIND	
SOUL	TRUTH	SOUL	SPIRIT - TRUTH
PRINCIPLE	LOVE	SPIRIT	
LIFE	SOUL	LIFE	MIND - LOVE
TRUTH	SPIRIT	TRUTH	
LOVE	MIND	LOVE	PRINCIPLE
(S & H 465)	(S & H 115)	(S & H 587)	(S & H 465)

THE SIXTEEN CHAPTERS
of
SCIENCE AND HEALTH

THE WORD			
PRAYER	ATONEMENT AND EUCHARIST	MARRIAGE	CHR. SCIENCE v. SPIRITUALISM
Rudimentary spiritual communication	Divine communication	Dissolution of personal communication	Non-mediumistic spiritual communication
THE CHRIST			
ANIMAL MAGNET- ISM UNMASKED	SCIENCE, THEOL- OGY, MEDICINE	PHYSIOLOGY	FOOTSTEPS OF TRUTH
The order and sys- tem of divinity stems from impersonal Principle, immune from animal magnetism	The laws of the divine system reveal themselves to humanity	The system, or body, of divine laws heals and translates the physiological sense of body	The law of the Christ Science is that for man to return to God he must first come from God in the freedom of God's own image
CHRISTIANITY			
CREATION	SCIENCE OF BEING	SOME OBJECTIONS ANSWERED	CHR. SCIENCE PRACTICE
The infinite cannot be confined within an organized religious body	Divine metaphysics is the saviour of humanity from the self-destroying confines of physics	The unconfined body of Christ is without seam or rent	Science of (immortal) Mind-healing
SCIENCE			
TEACHING CHR. SCIENCE	RECAPITULATION	GENESIS	THE APOCALYPSE
Spiritual education and spiritual obstetrics are one	The idea of God as Mind, Spirit, Soul, Principle, Life, Truth, Love, will eventually rule the world	Spiritual government ends the warfare between Spirit and the flesh	"Ye are the city." The world is the forever functioning of the Word, Christ, Christianity, Science

The following classifications of words and terms from the text of Science and Health are selected more or less at random from much longer lists. They are in no way to be thought of as comprehensive, but simply as indicating the different fields of thought that make up the human picture.

L A N G U A G E

means of

COMMUNICATION, UNDERSTANDING, EDUCATION

The language of Spirit is the

WORD OF GOD

the world's original mother tongue
the symbol of which is
THE MATRIX.

L A N G U A G E

1. GRAMMAR – systematized elements of language

adjective	mood
analyzes (into elements)	neuter noun
antecedent	object
article	objective
attribute	phrase
auxiliary	plural
base	positive
case	predicated
causative	present (tense)
clause	proper (noun)
common	qualified
comparative	quality
conditional	question
consecutive	reduce (to rules)
construction	regimen (syntax)
coordinate	regular
correlative	roots
definition	(etymology)
degree	sentence
dependent	similitude
derivation	solecism
(etymology)	subject
dissection	subjective
elements	syllables
feminine	symbols
forms	synonym
function (syntax)	synonymous
gender	term -s
grammar	underived
hieroglyphs	unqualified
imperative	verb
imperfect	word -s etc.
irregular	
letter	
masculine	
modifying	

L A N G U A G E

2. SPEECH - language flowing subjectively, spontaneously

address	interpretation	theme
announce	inversion (phonetics)	tone
answer	inspired	tongues
argument	jest	translate -ion
articulations	language -s	trope
audible -y	lisped	utter -ance
babbling	loquacious	verbal
breath	loud	voicing
call	message -s	voluble
chattering	metaphor	weighing (words)
commune	mutter	whisper
communication	metastasis	wit
contradict	natural	word -s -y
conversation	orally	
debate	period (rhetoric)	
declaration	peroration	
deliver (address)	phraseology	
describe	platitudes	
dictate	pouring (forth words)	
discoursing	preach	
enunciator	pronounce	
exclaim	proposition (rhetoric)	
explain	question	
expound	quote	
eloquence	remark -ed	
faltering	rhythm	
figurative	rising (inflection)	
flowing	say -ing	
free (translation)	sermon	
gossip	speaking	
gushing	shout	
halting	speech	
hesitate	stammeringly	
heartfelt	styled	
impartation	syllogism	
impediment	talking	
inarticulate	tattling	

L A N G U A G E

3. LITERATURE – means of propagation – ideas of speech made available universally

account	legend	uninspired
adaptation	letter	verse
allegory	lines	version
argument	literary	volume
article	manuscript	well-authenticated
author	measure (prosody)	word -s -y
bard	narrative	work -s
biographical	novel -s	write -s -er -ing
books	outline	
chronicle	pages	
classic	pamphlet	
compilation	paraphrased	
composition	period (meter)	
context	phraseology	
copyright	plagiarism	
dead (letter)	poetry	
describes	publication	
detach (clauses from context)	printing	
dictionary	proverb	
digest	quality	
document	quantity	
edition	read -ing	
epistle	record	
essay	regular (rhythm)	
exegesis	revision	
extract	rhythm	
fable	sequel	
fiction	styled	
full (unabridged)	subject	
fustian	summary	
gospel	text	
historian	textbook	
issue	theme	
introduction	title	
inspired	translation	
jot -tings	treatise	
	unfoldment	

LANGUAG E

4. EDUCATION – ultimate purpose of the language of every subject – the kingdom of understanding is within each individual (general)

academics	facts	moulding	superimpose
accretion	faculties	new (ideas)	supple (mind)
application	fathom	next (step)	systematic
apprehension	fill (mind)	obedience	take (in ideas)
approach	find	object-lesson	talent
advancement	follow	obstacle (mental	teaching
assimilate	foundations	obstetrics)	thoroughness
athirst	fragmentary	old school	thought-taking
attention	fundamental	outgrown	throw (light)
awakening	furnish (with ideas)	patience	tractable
barren	gain (knowledge)	penetrate	trained
brain	gate-way (to	perseverance	transition
becoming	understanding)	pioneer	translation
budding	groundwork	plunge (deep into	truth
capacity	growth	subject)	understanding
college	guidance	potential	undigested
comprehend	grasp	practice	unfoldment
conceive	gathering	principles	university
course	hearing	problems	unknown
cultivate	hungry	promising	untutored
darkness	imbibe	propagation	uphill
dawn	implant	pupil	uproot (old beliefs)
deduction	information	question	way
dig	instruct	qualifications	wayshower
digest	journeying	receptiveness	wondering
discerning	(mentally)	remember	words
discipline	knowledge	repetitions	work
discover	learning	researches	wrestling (with
dispel (ignorance)	lessons	results	problem)
elementary	light (en-	rod	yield (to new ideas)
elucidate	lightenment)	rudiments	young
embrace (ideas)	listening	rules	youth
education	master	standard	
erudition	mediator	steps	
examination	mind-faculties	student	
explanation	misconceptions	subject	
exact	mother	successful	

L A N G U A G E

4. EDUCATION

(philosophy, science, metaphysics, etc.)

absolute	explanation	positive	universal
absurd	enigmatical	postulates	unity
accurate	existence	predicated	universe (of discourse)
abstract	facts	premise	unreality
agreement	false (reasoning)	presentation	valid
analyze	formal	principle	verities
antithesis	fragmentary	probability	versus
antecedent	function	process	wisdom
a priori	fundamental	pro or con	word -s
argument	general	proposition	
assumption	genus	provable	
attributes	hypothesis -es	pure (reason)	
axiom	hypothetical	quality	
basis	idea -s	quantity	
being	ideal -s -ism	rationality	
belief	induction	real -ity -ism	
calculus (of reason)	inference	reasoning	
cause	language	recapitulation	
conception	law -s	reduce	
consciousness	life-problem	(syllogism)	
categories	logic -al	relative	
conclusion	logos	researches	
consequence	major	rules	
contingent	minor	rudiments	
contradictory	matter	species	
debate	metaphysics	subject -ive	
definition	mind	substance	
deduction	noumenon	supposition	
determine	negative	supposititious	
differ -ent	object -ive	symbols	
discernment	opposition (logic)	syllogism	
disprove	ontology	system	
disquisition	order	theory -ies	
draw (conclusions)	paradox	thinker	
error	phenomenon	transcendental	
essence	philosophy	truth	
	platform	type	

S C I E N C E A N D A R T

To human sense the sciences and the arts are divided so that they cannot "understand one another's speech." (Babel - Gen 11)

The divine SCIENTIST is the divine ARTIST. Divinely conceived, "Science" and "Art" are the undivided "letter" and "spirit" of Truth that comprise the one

C H R I S T .

They present the SCIENTIFIC UNDERSTANDING of SPIRIT. By their means the universal language of Spirit is reduced to individual comprehension. (Day of Pentecost - Acts 2)

S C I E N C E A N D A R T

5. MATHEMATICS – universal language of the individual sciences

absolute	date	join (geom)	power (multi- plied by itself)	subtract
abstract	degree	laws	principle	sum -s
accurate	denominator	length	probability	surface
acute	determine	limits	problem	symbols
addition	diametrically	line -s	product	symmetrical
alternating (function)	divide	logic	progression	system
amount	double	low -er -est	proof	table
angular	duodecillions	magnitude	proposition	terms
applied	element	matrix	pure	theoretical
arithmetic	enumerate	mean	quantity	total
ascending (series)	equal	measure	quotient	touching (geom)
assume	error	method	radical (alg)	three
axis	exact	minus	ratio	triune
balance	example	multiplication	rational	truths
base	face (geom)	nought	rays (geom)	twelve
borrow	facts	negation	real (number)	twentyfour
breadth	factors	next (order)	reasoning	ultimate
calculate	family (curves - geom)	numbers	reckoning	undivided
calculus	fathom	numerals	recurring	unerring
cancel	figures	numeration	reduce	unit
cardinal (number)	finite	table	regular	unity
centre	first	operation	resolves	unknown (alg)
circle	formulated	order	reverse	unlimited
circumference	four	one	right (angle)	upright
common	foursquare	origin	root	value -s
compass	fraction	over	rules	variable
compound	function	pairs	scale	verify (by proof)
compute	geometric	parallel	series	volume
consequent	geometry	pattern	seven	vulgar (fractions)
constant	gradation	philosophy	sign	wave (equation)
conversion	half	plane	simple	whole (number)
coordinate	hypothetical	plurality	solution	work (out problem)
counts	improper	point	sphere	wrong
curve	infinity	position	square	
	irrational	positive	straight	
	inversion	potential (function)	subdivides	

S C I E N C E A N D A R T

6. PURE SCIENCES - natural sciences made understandable through the language
 (Macro-physics: - of applied mathematics - the pure sciences examine ob-
 Relativity, astronomy, jectively the structure of the physical world in order to
 astro-physics, solar formulate universal laws
 system, earth, etc.)

above	east	magnetism	satellite	wandering
aeon	eclipse	moon	solar	(planet)
annual	empyrean	monthly	south	waning
Arcturus	epoch	motions	sign	waxed
arise	equator	movements	spheres	weight (gravi-
ascending	ether	music (of the	stars	tational mass)
astrography	far-off	spheres)	stellar	west
astronomer -y	field	near	space	whole (universe)
atmosphere	(gravitational)	nebulae	sun -s	world
attraction	firmament	night	sunrise -set	zenith
axis	force -s	north	sky	
before	full-orbed	north star	system	
behind	full (moon)	opposition	(universe)	
beneath	(space) globe	orb	system	
beside	gravitation	orbits	(solar)	
between	great (lights)	observation	system	
beyond	harmony (of	origin (of	(stars)	
body -ies	the spheres)	universe)	tables	
cancer (zodiac)	held (in orbit)	period	(astronomical)	
celestial	hemisphere	phases	terrestrial	
circle	horizon	planets	tides	
comet	inclination	polar	time	
cross (southern)	infinity	position	turning	
cycles	immensity	precede (star	twilight	
daily	lamps (stars)	movement)	under	
dawn	latitude	primary	uniformed (stars)	
daystar	(celestial)	progression	universe	
degree	light -s	(thro' zodiac)	unsearchable	
depression	lodestar	rays (cosmic)	uttermost (space)	
descent	luminaries	remoteness	unfathomable	
deviations	lunar	retrogression	(void)	
distances	mathematics	revolutions	vacuum	
diurnal	Mazzaroth	rotations	variable (star)	
earth	magnitude	round	vastness	

S C I E N C E A N D A R T

6. PURE SCIENCES

(Earth sciences: geo-physics,
geology, oceanography, etc.)

aeons	evolution	jungle	rust	underlying
alabaster	expansion	land	reservoir	unfathomable
aggregated	explore	lava	(porous rock)	upheaval
barren (rock)	extinct	lake	salt	upper (strata)
bed (ocean)	(volcano)	limb (geol)	sands	upright (strata)
bottom (ocean)	extract	location	sandstone	volcanic
cave	(metals)	low -er -est	shift (rock	veins (rocks)
clay	face (of	magnetic	fault)	virgin (metal
crust	earth)	marble	shores	from ore)
currents	fathom	measure	sea -s	wash
dust	forms -ations	mine	seam	water
dead (volcano)	family (rocks)	movements	scale	waves
debris	fish	mineral	shallows	world
deep	fossils	matrix	silver	
degrade	fault (rock	mapped	sinking	
(erosion)	strata)	masses	soil	
deposit	flood-tides	metal	surface	
depth (ocean)	gems	mountains	stratum	
derived (fossils)	granite	nature -al	strata	
desert	ground	ocean	submerged	
destroy	gold	organism	subsides	
(erosion)	gas -es	origin	substratum	
discordant (strata)	geology	oil	system (of	
dislocation (rock	globe	pole	rocks)	
fracture)	gravitation	primeval	stone -s	
diamond	growth	primitive	structure -al	
dig	gushing	pure (metal)	terrestrial	
discovery	hemisphere	period	tide -s	
diving (ocean)	hewn	pressure	thrust (rock	
dross (metalurgy)	hidden	precious	fault)	
earth	history	(stones)	transgression (sea	
earthquake	ice	reefs	over land)	
epoch	inversion	river	tremor	
era	rock (strata)	river-bed	time	
elements	impress (rock	rocks	treasures	
emeralds	fossil)	rock-ribbed	underived (indigenous)	

S C I E N C E A N D A R T

6. PURE SCIENCES

(Meteorology)

aeriform	geometric (pressure)	storm -s
air	hail	temperature
almanacs	hurricane	tempest
atmosphere	inversion (temp)	tempest-tossed
barometer	low (pressure)	thermometer
becloud	lift -ed (clouds)	thunder -s
befogged	light	thunderbolts
billows	lightning	unsettled
bitter (wind)	locality	upper (atmosphere)
blast	mercury	uncertain
build (pressure)	mild	violent -ce
calm	maximum (temp)	wash (away by floods)
climate	measure (rain fall)	weather
cloud	melting (snow)	weather-vane
cold	mist -s	wet
changeable	momentum (storm)	whirlwind
chart	movements (wind)	wind -s
damp	nature	winter
dense (cloud)	natural	wintry
depression	normal (temp)	
(barometric)	observation -s	
deviation (wind)	precipitation	
disperse (clouds)	pressure	
drenching (rain)	prevailing (winds)	
dry	raging	
element -s	rain	
fair (weather)	raindrops	
fall (in temp)	rise (in temp)	
falling (barometer)	seasons	
fierce (storm)	sky	
force -s	summer	
freezing	sun	
frost	sunshine	
front (wind)	shrieks (wind)	
fury (storm)	snow -s	
foreknowing	solar	
(weather forecast)	spring	

S C I E N C E A N D A R T

6. PURE SCIENCES

(Geography)

abroad	Europe	north	undiscovered
affluence (river)	equator	ocean	undulations
African	explore	Olympus	United States
Alpine	England	Orient	unknown (lands)
altitude	features	overflowing	unsettled (land)
America	foreign	parallel	vale -s
antipodes	forest	(latitude)	valley -s
arctic	globe	parched	verdant
Asia Minor	gradation	(desert)	village
Athens	gulf	peaks	volcanic
Australia	Germany	plane -s	water -s
barren (land)	Greece	point -s (compass)	wave -s
borders	height -s	polar	west
boundary	hemisphere	precipice	wilderness
brink	horizon	receding (sea)	
Canaan	India	reclaimed (land)	
California	Jordan	Red Sea	
cataract	jungle	reefs	
cave	journey	resources	
chain (mountain)	lake	rising (tide)	
channel	land	river	
chart (map)	latitude	river-bed	
circle (of latitude)	level (ground)	rocks	
city -ies	lie (of land)	Rome	
cardinal (compass points)	line -s (latitude longitude)	rolling (landscape)	
compass	lofty (summits)	sands	
continent	longitude	sea	
country	low -er -est	shore	
climate	Massachusetts	south	
dense (frost)	maps	source	
depression	Mecca	swollen (river)	
desert	mountain -s	temperate	
discovery	magnetic	Thibet	
dry	mankind	tide -s	
earth	nature	town	
east	natural	tributary (river)	

6. PURE SCIENCES

(Micro-physics: atomic and nuclear structure of matter, radiation, etc.)

attraction	lines (spectroscopy)	tribes (electrons)
atom	mathematics	uncontaminated (no
action	motion	nuclear fall-out)
absorption (of	movement -s	vacuum
energy)	masses	volatile (particles
annihilate (transform-	nucleus	of matter)
ation of matter)	number (atomic)	weight (atomic)
bind (nucleus)	negative	waves (vibrations)
calculate	orbit	
chain (reaction)	physics	
constituent	positive (positron,	
(quantum)	proton)	
convert (matter to	potential (energy)	
energy)	power	
chance	probability (calculus of)	
circle	quantity (quanta)	
create (matter)	radiate	
discovery	radiation	
divide (atom = not +	radiant	
divided)	ray -s	
divisibility (split atom)	rapid (electron speed)	
electricity	reaction	
energy	released (energy)	
field (electro-	resident (energy)	
magnetic)	resistance (inertia)	
force -s	rotation -s	
flow (of photon quanta)	shells (electron)	
free (particles)	speed (electronic rotation)	
grain (quantum theory)	system -s (atomic)	
heat	symmetrical (atomic	
impulse	patterns)	
inertia	time (for light to travel)	
infinitesimal	transformation (of	
(quanta)	matter)	
latent (energy)	transmission (of energy)	
light (radiant energy)	triad (trivalent atom)	

S C I E N C E A N D A R T

6. PURE SCIENCES - Classical Physics - no change in composition of matter
(Heat)

absolute (temperature)	generates
absorb -tion	glow
aflame	heat
anger (mental heat)	hot
blaze	ice
boil	inflammation -ory
burn	latent
build (up temp)	light
conduct	motion
change (in temp)	passion -s (mental heat)
chilled	physics
cold	power
combustion	radiation
commotion	ray -s
conflict	red
consuming	reflect -ed
degree	reflection
destroys	rubbing
discharge	shadow
dissipates	solar
energy	sun
electricity	sunshine
enrages (mental heat)	singe
ever-agitated	thermometer
excitement	transmission
exercise	turbulent (thermo dynamics)
expel	unit (of heat)
febrile	warm
fear (mental heat)	winty
fervent	
flow	
fever	
fire -y	
flame -ing	
freezing	
frozen	
furnace	

S C I E N C E A N D A R T

6. PURE SCIENCES – Classical Physics (Light – colour, photometry, etc.)

absorb	enlighten -ment	power -ful	vibrations
absorption	electricity	(magnification)	vibrating
analyze (prism)	faint -ly	prism	virtual (image)
axis (lens)	fix (photometry)	pupil (optics)	visible
beam	flame	pure (colour)	vision
befogged	flickers	radiance	visual
benighted	flow	radiant	waves
black	focal	radiation	white
blaze -ons	focus	ray -s	
blend (colours)	gleam	rainbow	
blot (out)	glints	red	
bow (rainbow)	glistening	reflect -s	
breaks (light)	glory	reflection -s	
bright	glow	reflex (image)	
burning	hue -s	reproduction	
camera	image -s	(photometry)	
cast (shadow)	illuminate -ion	retina (eye)	
clear	iris	see -ing	
colour	irradiance	shadow	
dark	intense	shine	
dawn	lens -es	sight	
day	light	sensitive	
definition (image)	luminaries	speed	
deflection	lunar	source	
depth (focus)	magnify -ied	sun	
develop (make visible)	microscope	sunlight	
deviation (of ray)	mirage	sunshine	
diffusive	mirror -ed	threw (projected light)	
disappear (from view)	negative (photometry)	time (speed of light)	
discern (optically)	night	tints	
distance (focal)	obscure	tone -s	
distorted (image)	opaque	transmission	
effulgence	optic -s -al	transparency	
energy	picture (image on	travels	
expose -ure	retina)	undimmed	
(photometry)	positive (photometry)	undulations	
eye -s	pour (in light)	unilluminated	

S C I E N C E A N D A R T

6. PURE SCIENCES – Classical Physics
(Sound)

absorb	re-echoes
absorption	reflection
air (sound travel)	resounded
aloud	sang
atuned	scream
audible	shadow
audition	silence
Babel	sing
clamour	source
clear	speak
colour (acoustics)	speed
consonance	sustained
dead (acoustics)	sympathetic
deaf	tension
depth (pitch)	thunder
distinct	tone -s
duli	transmit
dying	travels
echo	trump
emit	trumpet-word
faint	undulations
flow	unsustained
frequency	vibrations
hear -ing	vibrating
hushed	voice -d
inarticulate	weak
inaudible	waves (sound)
jarring	
listen-ing -er	
loud -er	
moan	
murmur	
noise -s	
peals	
physics	
quality	
radiates	

6. PURE SCIENCES -- Classical Physics
(Electricity and Magnetism)

absolute (units)	electric	pole
absorb	electricity	positive
absorption	element -s	potential
acid	excite	power
accumulate	fault	pressure (voltage)
adamant (loadstone)	field (magnetic)	primary (coil)
alternating (current)	flow	radiation
amplification	fluctuate	reluctance (magnetic resistance)
alive	force	repel -led (like poles)
amplitude	frequency	resistance
attract -ion (unlike poles)	generating (power)	rubbing (friction)
atmosphere (electrical)	generation	secondary (coil)
bare (wire)	ground	series
barrier	heat	shock
bond (connection)	impulse	short (circuit)
break (circuit)	induction	signal
bridge	light	spark
broadcast	lightning	telegraphy
build (up charge)	lines (magnetic force)	thunder
capacity	link	transform
cell	live (wire)	transit (conductor)
charge -d	load	trembler (vibrating)
coiled	magnetic	unbroken (circuit)
conduct	magnetism	uniform
connect	main	unit
contact	matter	universal (elec bridge)
coupled	measure (units)	unlike (poles)
current	maximum (load)	valves
cycles	negative	water
dead (no charge)	neutralize	waves
derived (current)	open (circuit)	winding
deviation (magnetic compass)	parallel	wire -s
discharge	periodical	
drop (in current)	phase	
earth	physics	
	polar magnet	

S C I E N C E A N D A R T

6. PURE SCIENCES – Classical Physics (Mechanics – statics, dynamics)

accelerate	inertia	use
accumulate	latent (energy)	utility
act -s -ion	level	vacuum
adhesion	lever	work -s -ing
arrest	lift -s -ed -ing	
arm	light (not heavy)	
aspiration (suction)	machine	
automatic	mechanism	
(mechanism)	mill	
auxiliary	momentum	
axis	motion	
balance	motive power	
bear -ing	move -s -ing	
bed (of machine)	movement -s	
blow (steam)	potent -ial	
bridge	power	
build (pressure)	propulsion	
centre	random (force)	
chain	resistance	
choke	retard -s -ed	
compensate	rest -ing	
component	running	
coupled	safety-valve	
dead (weight, stop)	smooth (running)	
depth (wheel pinion)	speeds	
devil (machine for breaking up)	stillness	
direct (drive)	tension	
effort	thrust -s -ing	
energy	translation (of motion)	
engage	ultimate (strain)	
falling (gravitation)	unbearable	
force -s	unclasp	
generating (heat)	uniform (velocity)	
governor	union (coupling rods)	
halt -ing	universal (joints)	
impulse	unwinding	

S C I E N C E A N D A R T

6. PURE SCIENCES - change in composition of matter (Chemistry - bio-chemistry, geo-chemistry, etc.)

ablution (alchemy)	chemistry	leaven	quantity
absorption	chemist	lees (dregs)	rarefaction
accretion	combustion	liquid	reaction
action (chemical)	compound	matter	reducing
acid	constituent	mercury	regular (crystals)
adhesion	convert	measure	resolve (dissolve)
adulterate	decomposition	metal	rust (metallurgy)
aeriform (gas)	degrade (split compound)	microscope	saline
agent	deposit	mineral	salt
alchemy	derived	mixture	separate -ion
alcohol	descent	molecule	settle
alkali	(distillation)	morphine	simple
alterative	dispense	mother (vinegar sediment)	solution
analyze	dissolve	nature	solvent
antagonism (salt action)	dross	natrum	substance
apothecary	element -s	muriaticum	sulphuris
argentum nitratum	ether	neutralizing	systems (substances in equilibrium)
arsenic	evaporate	nitrous oxide	transform (alchemy)
ascension	excited	organic	triad (trivalent element)
(distillation)	experiment	pharmaceutics	unsettled
attenuation	extract	pharmacy	upheaval
attraction	family (related elements)	physics	vacuum
auxiliary (valence)	fermentation	poison -s	vapid (vapor)
basal (crystals)	fluid	potion	vessels
base	flow	precipitation (from solution)	vials
bitter	form (crystal)	precipitate (action of reagent on con- crete state of solution)	volume
blood (alchemy)	fumes	principle (essential constituent)	water
bridge (molecule)	gas -es	properties	weigh
buoyant	generate	pure	working (chemical action)
burning	hemlock	purifying	yeast
cohesion	heat	quality -ies	
calomel	ice		
caustic	inversion		
change	intermixture		
chemical	intrinsic		
chemicalization			

6. PURE SCIENCES - Life-sciences - Biology
(Botany)

abundant	cultivated	mushroom	unfold -s -ing
aconitum	derivative (hybrid)	nature	unnatural
adaptation	detach	natural -ist	uproot
agamogenesis	different (species)	nipped (in the	vegetable -s
allied (species)	disease	bud)	violet
annually	disseminate (sow	order (of growth)	voluble (twining)
acorn	seed)	offshoot	wither -s -ed
apple	diversifies	organism -ic	
arbutus	drooping	palms	
articulations	dust (pollen)	pattern	
attraction	escape (run	perennial	
(capillary)	wild)	perfume	
axis	fade	perpetual	
bay-tree	family -ies	petal -s	
bear -ing	free (wild)	plant -s -ed	
blade -s	fungus	pluck	
blighted	gender	poisonous	
blossom	genus	pollen	
botanic	germinate	propagate -s	
botanist	grain	propagation	
botany	grape	radiation	
break (from calyx)	grass	reduce (classify)	
bud	grow -s -ing	reproduce -tion	
categories	growth	root -s -ed	
cell	ground	rose	
classification	habitat	sow -s -er	
climb	identity	seed -ling	
clover	immature	soil	
coffee	individuality	seasons	
common (gender)	insect	species	
complete (self	joint -s -ed	spray	
propagating)	leaf -let	surroundings	
complicated (folded)	lily -ies	(natural)	
creep	living	tea	
crown	limb	thistles	
cut -ting	male	thorns	
cycle -s	masculine	tobacco	

S C I E N C E A N D A R T

6. PURE SCIENCES - Life-sciences - Biology
(Zoology)

abortive	decay	gnats	order	tiger
adaptation	deformity	habits	organism	toad
affinities	degenerate	hair	ovum	type -s
Agassiz	derivation	hatch	pairs	unfoldment
amalgamation	descent	horn -s	pattern	uninterrupted
anatomy	development	horse	pearls	(development)
ancestor	drooping (wings)	identity	peck	unnatural
animal	devouring	individuality	perch	upward-soaring
apehood	drop (young)	insect	pinions	various
articulata	display (male)	jaws	preens	venomous
articulations	different (species)	joints	prey -ing	vertebrata
backward	dogs	jungle	productive	viper -s
basal	dove	kitten	progenitors	virus
behaviour	egg	kid	prolific	vulture
bestial	embryo	king (lion)	propagation	weaned
bird	evolution	kingdom	protoplasm	web -s
birth	epizootic	lamb	queen (bee)	whales
body -ies	embryology	leopard	radiata	wild
bone -s	emergence	lion	rams	wing -s -ed
brain	environment	lobster	reclaim (tame)	wolf -ves
breed	extinct	lower (grades)	reduce (classify)	workers
brood	family -ies	life	reproduction	(insects)
brute	fatling	masculine	ripe (spawning	worm -s
calf	feathers	matrix	eggs)	young
cast (skin	feed	male	roams	
excrement)	female	microbe	roar -ed	
categories	ferocious	monad	ruminates (cud)	
camel	firstlings	mutation	serpent	
carnivorous	fishes	mimicry	sex	
cell	fly -ing	mollusca	sheep	
class -es	flocks	monarch	species	
cattle	fowl	monkey	sting	
claw	free (wild)	moth	suckling	
common (genus)	gender	nature	swift-winged	
caterpillar	genus	natural	swine	
cycles	growth	natural history	tail	
Darwin	guest (parasite)	neuter	teeming	

6. PURE SCIENCES – Life-sciences – Biology
(Anthropology – ethnology, nationhood, individual man)

absorption (of race)	discovery	homicide	pagan	unselfish
adaptation	diversifies	I	people	uprooted
adjust (to conditions)	dominion	I am	personality	village
advance (civilize)	downfall	idealism	physique	wanderer
African	education	identity	pioneer	warfare
agriculture	egotism	imagination	principles	Welsh
American	eloquent	immoral	primitive	will-power
ancestors	English	independence	progenitors	wisdom
animal	enlightenment	individuality	progeny	words
appetites	Esquimaux	inheritance	psychology	world
ascending (scale)	ethics	intelligence	race -s	
Assyrian	evil	intuition	rationality	
art -ist	evolution	invention	reason	
Babylonian	faculties	Israelites	relationships	
barbarism	faith	Indians	religion	
begets	family	Jews	rights of man	
branch (ethnol)	fellow-beings	journeyings	Romans	
brotherhood	father	judgment	Saxon	
character	forefathers	knowledge	science	
childhood	foreign	language	sects	
citizen	French	law -s	self-government	
civilization	freedom	lawmaker	self-will	
class -es	genera	legislators	selfish	
clothing	generations	manhood	sin	
communication	generic	mankind	society	
companionship	genius	masculinity	soul	
comprehension	genus	mastery	speech	
conscience	government	Mohammedan	spiritual	
creativeness	growth	morality	talent	
cultivation	habits	mythology	thinker -s	
culture	Hebrews	my	traditions	
custom	heredity	nation -s -al	traveller	
depraved	Hindoo	native	tribal	
descent	history	neighbour	understanding	
development	home	noble	unfoldment	
	humanity	organisations	unity -ed	
	husband	owner	universal	

6. PURE SCIENCES - Life-sciences - Biology
 (Physiology - anatomy, molecular and cellular biology, the five senses)

anatomy	decay	hand -s	organization	tears
ache	derangement	head	over-action	taste
arm	digestion	hearing	over-exertion	teeth
articulations	disease	heart	palate (taste)	thirsty
auditory (nerve)	dying	heel	palpitating	throat
alive	discharge	hip	palpable (touch)	tired
appetites	disperse	healing	palsied	tissue
asleep	dissolve	hearing	perspiration	tongue
awake	drink	holding	physiology	tooth
blood	ear -s	impulse	physiologist	touch
body -ies	eat -ing	instinct	physique	transmits
belly	embodiment	indigestion	pore	(genetics)
bleeding	embryology	inflammation	powerful	tremble
blow (breathe)	energy	inspirations	(muscular)	undigested
blush	exhalations	involuntarily	pulse	unconscious
brain	exhaustion	joints	pungent (taste,	valves (heart)
breathe	eye -s	knelt	smell)	veins
bruise	eye-lids	lameness	reaction	ventilation (lungs)
bone -s	face	languidly	reflection (reflex	vertebrae
bowels	faint	living	nerve action)	vigour
cerebellum	fat	lift	retchings	viscera
circulation	fatigue	limb	rigid (muscles)	void (excrement)
cranium	feel -s -ing	lips	rotation (joints)	voluntary -ily
cheek	fibres (nerve)	liver	sinew	water (urine)
cerebrum	finger	lungs	skin	weep
congestion	flatulency	marrow	seeing	womb
connected (organs)	flow (blood)	matrix	skull	wrists
constitution	foetus	mouth	secretion	yawn
corporeal	feet	muscle	senses	
corpse	forehead	motion	smell -s	
crippled	functions	movement	stomach	
cry -ing	fragrant	nasal	swallow	
cycles (birth-death)	(smelling)	natural	sweat	
death	gland -ular	nerve -s	sympathy	
death-pallor	gastric	nostrils	(nerves)	
deformity	gestation	optic	system	
dislocated	growth	organism	tarsal	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS – ridding the world of poverty, (Economics – banking, accounting, insurance) limitation, etc., and raising the standard of living

account -ing	debt -s	laying (up	sum -s
accumulate	depressed (market)	treasure)	surplus (accounting)
amount	discharge (debt)	lends -ing	surrender
appreciated	discount	legacy	(insurance)
anticipate	drop (in market)	loss	security
(insurance)	due	liability	settle
affluence	earn	make (money)	silver
afford	economy	mammon	society
agent	enrich	market	solvent
appropriates	estimate	misfortune	speculative
assurance	exchange	money	spend
auditor	endorse	monopoly	supplies
auxiliary (capital)	expense	national	tangible (assets)
balance	endowment	organization	traffic
bonds	failure	overtaxed	transfer
borrow -s	(bankruptcy)	paid	trust -s
buyer	farthing	payment	value
bounty	fortunes	penny	venture
branch	fraud	perpetual	vested
charge	frozen (assets)	(annuity)	want -s
claim -ant	fees	poverty	warrant
commercialism	forfeit	price	wealth
commission	forged (cheque)	prosperity	withdrawn
compensate -ion	gain	purse	
convert	goodwill	realize (assets)	
cost	guarantee	reckon -ing	
credit	gold	regulate (economy)	
capitalization	holding	repayment	
circulation	honesty	resources	
collect	interchange	riches	
cumulative	interest	risked	
company	impoverished	ruin	
contract	increase	share -s	
dead (capital	inheritance	substance	
stock)	investiture	substantial	
dealer -ing	insure	(gains)	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

(Economics – commerce, trade, real estate, ownership of property, etc.)

advertisement	dispossess	labour	store
appreciate	disown	limited	speculative
appropriate	dominion (absolute	limitation	surplus (goods)
agreement	owner)	(boundaries)	spend
agent	discount	law	solvent
afford	dishonest	loss	secured
belongs	dealer -ing	maintenance	settle (account)
boundary	dissolution (of	my -mine	terms (come to)
business	partnership)	merchandise	take (possession)
buyer	estate	money	title
burden (overhead	entitled	means	trespass
expenses)	earned	monopoly	traffic
build (up business)	employer	owner	transfer
bought	enrich	occupancy	trustworthy
conversion	exchange	obligations	trickster
convey	expense	possessor	unpaid
covenant	free (hold)	premises	value -s
credit	fees	procure	vested
company	firm	property	wages
collect	flexible (trust)	payment	worth -less
copartnership	fortunes	price	
capitalization	fraud	profit	
charges	free (trade)	promoters	
confidence	funds	public	
contract	grant	receive	
controls	goods	real estate	
costs	guarantee	redeem	
creditor	goodwill	relinquish	
dear bought	house	(debt)	
debt -or	habitation	render	
demand	honesty	(accounts)	
depression	insure	repayment	
determination (of	inherited	repudiate (debts)	
tenancy)	imported	rising (in value)	
development	industry	ruin	
deeds	incur (debts)	satisfaction (debt	
disposal	keeper (shop)	repaid)	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

(Industry – food production, farming, gardening, etc.)

abundant	environment	land	ripe -r -n	waste (land)
agriculture -ist	estate	leaf	roots	wheat
annually	exhausted	life-giving	rotation (crops)	wilderness
animals	fan (winnow)	light	seedling	woodman
almanacs	farm	manger	sprout -ed	work
barren	feed (soil)	meal	stock	water-wheel
birds	firstfruits	movement	sunshine	yield -s -ed
bed	forced	(growth)	superabundance	yoke
break (plough)	foster (growth)	mushrooms	(crops)	
breed	fruit -s -age	mythology	sweat	
bridegroom (son of the earth)	fruit-bearer	nature	swelling (buds)	
burden (crop)	germinate	natural -ist	take (male to female)	
blighted	glean	new-mown	tangled	
blossom	grain	nipped	tares	
bear (fruit)	growth	native	thirsty	
cut -ting	garden	nutriment	(ground)	
crop -s	grafting	oak	till -s	
cultivate -d	gather	obnoxious	toil	
culture	grapes	outgrowth	toilsome	
calendar	ground	overworked (soil)	transplant	
changeable (weather)	harvest	perennial	trees	
chaff	hay	perishable (fruit)	tender (plant)	
climate	husbandmen	plant -s -ed	thrust (up through ground)	
cycles (seasons)	herbs	plentifully	time	
dead (unpro- ductive soil)	herdsman	poor (crop)	unimproved	
deep-lying	herds	productive	(untilled)	
depletion (of soil)	hireling	promotes (growth)	uproot	
dig	impoverished	propagation	upturn	
devouring (insects)	(soil)	quality	verdant	
dormant	increase	quantity	vigorous (growth)	
drooping	ingrafted	rain	vineyard -s	
dry	insect	raise	virgin (soil)	
earth	intertwined	reap	water -ed	
enrich	jungle	refresh	weaned	
elements	labour	replenish	weed	
	laden	resurrection		
	lambs	(spring)		

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS (Craft Industries - foundries, potteries, etc.)

anvil	fill -s -ing	paint -er	visual
art -s	fluid	pattern -s	welding
artist	form -s -ation	piece -s -ed	wheel (potter's)
balance	functional	potter	womb (mould)
beauty	graven	pounds -ing	work
blast	grind -ing	platter	wrought
burning	growth	pour -ing	
blow	gold	press -ed	
brazen	goblet	process	
bottles	hammer -ing	proportion	
cast -s -ing	hand -s -le	product	
clay	idol	quality	
create	image	reject	
centred (potter's wheel)	impress -ion	remove	
cement	industry	repaired	
chemistry	jar	rotation (wheel)	
(glazing)	joint	run (metal into mould)	
delight	joining	sculpture	
drawn (from mould)	knife	sections	
design -s -ed	line -s	separate (pieces of mould)	
embellish	liquid	shape -d	
empty (mould)	loosen (from mould)	square	
engrave	made	statue	
exhibit -ion	maker	steel	
expel (air from clay)	manufactures	styled	
extract (from mould)	market	surface	
facsimiles	materials	symmetrical	
fashion -s	matrix	taste	
forged	melt -s -ing	threw (pottery)	
found -ing	mend	throw -s -n	
furnace	mineral	turn (pottery)	
figure	mix -ture	unformed	
(sculpture)	model -s	upright	
	mould -ed -ing	utility	
	object -s	vessel -s	
	outpouring		

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

(Craft Industries - printing, calligraphy, cartography, publishing)

acid	indexes	scribe
advertises	infringe -ment	sentence
agents	issue -s -d	set (type)
art	language	skill
artist	line -s	surface
article	letter	text -s
author	literary	textbook -s
beauty	lower (case)	title
beautiful	machine	tradition -al
binds	map -s	translation
bound	matrix	type -s
book -s	method	uniformly
canon (printing)	monthly	verse -s
chapter	mould	version -s
character	offset	volume
chart	page -s	well-authenticated
circulate	passage -s	word -s -y
colour	pictorial	work -s
commercial	periodical	write -s -er
copy -ies	picture -s	writing
copyrighted	point -s	written
civilization	press	
design	print -s -ing	
distribute	printers	
engraved	process	
editor	public	
edition	publications	
education	publisher	
embellishment	proof (reading)	
face (type)	quote -d -ing	
facsimiles	read -s -ing	
founding	record -s -ed	
guillotine	renewal (copyright)	
hand -s	reproduction	
illuminated	reviews	
illustration	revision	
impress -ion	run (of pages)	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

(Craft Industries - furniture, weaving, dress-making, etc.)

adornment	display	line -s	regular	woodman
art	edge	looms	reproduce	wore
artist	elasticity	loose -ly	right (angle)	work
artificial	embellishments	lovely	round	woven
alluring	enhance	machine	seam	wrung
attractive	enshroud	make	section -s	
appearance	entangled	made	secure	
awry	fashion -s -able	match	shape -d -n	
bare	fit -ted	manufactures	shearers	
beauty -iful	fix -ed	market	sides	
blanket	flannel	material -s	square	
borders	flimsy	measure -s	stretch	
box	fades	measurement -s	strip -ped	
build	fast (colours)	mirror	structure	
carpet	fasten -s -ed	model -s	styled	
carve	fibres	modes	swaddling-clothes	
chiselling	form -s	moulding	tangled	
cradle	foundation	naked -ness	tatters	
cloaked	frame	needle	tears	
clothes -ing	furnish -ed	net -s	ties	
coated	frivolous	oak	tore -n	
covering	garment -s	panoply	twist -ed	
cut -ting	gossamer	pattern -s	undo -ne	
chair	grace	pin -ning	unfashion	
clad	grave-clothes	proud (surfaces)	union (woven fabric)	
construction	hammer	piece -s	uniform	
craze	hem	plain	unloose	
creation	hand	plan	vanity	
custom	immaculate	plane	veil -s	
design -ed	imagination	plank	vestments	
develop (dying)	imitative	press -ed	vesture	
discard (garment)	individuality	proportion	warped	
disentangles	interlaced	quality	wear -ing	
disrobe	interwoven	quantity	weaving	
divest	investiture	raiment	web -s	
dress	join -s -t -ing	rend	white-robed	
discoloured	labour	robe -s	winding-sheet	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

Industrial Engineering – Science and art whereby the properties of matter and sources of power are made useful to man in structures, machines, and manufactured products

(Mechanical Engineering – machinery)

anvil	component	gland	pace	unaided
action	connection	governor	pendulum	unconscious
adapted	construction	grinding	pinions	unintelligent
adjustment	consume (fuel)	hammering	plant	union
administer	continuous (running)	handle	power	universal
application	controls	head (of steam)	press	(joint)
arm	conveying	heat	production	untiring
attached	counterpoise	inaction	reaction	unwinding
attend	coupled	inertia	regulate	useful
automatic	crush	invention	reproduce	vibration
axis	cutting	joint -s	rest	water-wheel
balance -d	design	keeper	retards	wearing
base	deterioration	level	revolves	winding
bearing	devised	lifting	rigid	wire -s
bed	discharge	links	rod	work -s -ing
blacksmith	drilling	lock	rotation -s	wrench
blast	drive -n	locomotion	running	wheel
blow	effort	loose	rust	
breakage	electricity	lubricating	safety-valves	
builder	employed	machine	scale	
burden	empowers	mechanics -ism	shut	
combustion	failure	machinations	skill	
capacity	fan	magnet	speed	
carry	fashion	manages	spring	
centre	fasten	man-made	start	
chains	fault	metal	still	
choke	fixed	mill	task	
circulation	flexibility	mindless	tend	
circumference	flow	motion -less	tension	
claw	foot	movement	thrust	
cohesion	forged	non-intelligent	transmission	
coiled	function	oil	traversing	
communication	gather (speed)	operation	trip-hammer	
compensated	generating	overworked	turn -ing	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

Industrial Engineering

(Mechanical Engineering - aeronautics, astronautics)

absolute (ceiling)	electricity	launched	rising	vastness
air	elements	laws	rolling	vibration
altitude	elevation	lifted -ing	resistance	view
atmosphere	encompass (earth)	load	(wind)	vision
astronomy	ether	longitude	run (great	void
barrier (sound, heat)	exploring	low -er	circle)	warfare
base	falling	machine	sky	warping
bird	fatigue (metal)	magnetic	soaring	wash (air
buffet	field (gravity)	mapped	space	foil)
build	flexible	maximum	southward	wing -s -ed
celestial	flight	measurement	speed	wind -s
course	fly -ing	motion	sphere	weight
carry	floor	motive-power	stability	westward
chart	firmament	navigator	stars	worldwide
communication	flow (air)	northward	steers	zigzag
compass	formation	observer	straight	zenith
curve	freedom	onward	strain	
circle	glide	orbit	strength	
contact	geometric	planet -ary	stress	
conquer (space)	(altitudes)	passage	structure	
controls	gravity -ation	pathway	swerved	
climb	ground	penetrate	telegraphy	
cloud	guided	(space)	(wireless)	
construction	heat	perpetually	terrestrial	
descent	heavenward	(in orbit)	test -ed	
deviation	height	pleasure-trip	thrust -s -ing	
degree (compass)	high -er -est	power	traveller	
downward	horizon	pressure	traversing	
drop -s -ped	immensity	probe	uplift -s	
distance	inclination	propulsion	upward	
direction	increase (speed)	pioneer	under	
drift	intercommunication	raise	underlying	
design	inverted	rarefaction	upper	
dual (control)	journeying	(altitude)	upward-soaring	
earthward	landmarks	return	vacuum	
eastward	latitude	revolutions	vapour	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

Industrial Engineering

(Mechanical Engineering - transport, navigation, rail, road, etc.)

advance -ing	eye (of wind)	observations	structure
aloft	ebbing	obstruction	superstructure
anchor	elements	ocean	surging
ark	equator	onward	swelling
asleep (sails)	ever-agitated	overtakes	swept
across	(sea)	plunged	telegraphy
bar (harbour)	engulfed	passage	tempest-tossed
bark	flood	passing	tide -s
bearing	flood-tides	peril	tightened
bed (of ship)	flowing	pleasure-trip	time-tables
bosom (of sea)	foaming	polar	torrent
billows	fill (sails with	position	traffic
break (change	wind)	power	train
direction)	float	rail-road	transition
build -ing	full (sail)	reefs	travel -ler
buoy -ant	gather (speed)	right (ship's	traversing
current -s	globe (explorer)	position)	turning
canvas	helmsman	road	underlying
channel	heavy-laden	rocks	upright
corals	horizon	roll	vessel -s
chart -er	journey	reduce (speed)	violent (storms)
controls	lodestar	rescue	watch
compass	laid	steer -s	water -s
change (course)	latitude	sea -s	wave -s
course	launched	ship	westward
company	main	shrouds	wind -s
contrary (winds)	mariner	seaman	wheel
depth	master	shallow	winding (course)
dam	magnetic	ship-wreck	wreck
degree (compass)	map	shore -s	zigzag
deviation	motion	signal	
drifting	name	sinking	
direction	nautical	southward	
error (mist)	navigator	stars	
eastward	northward	storms	
exploring	north star	straight	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

Industrial Engineering

(Mining - minerals, ores, fuels, etc.)

arch	drilling	inspection	reopen	yield
ascend	drive -n	inward	resources	
asunder	earth	labour	riches	
base	electricity	laborious	rock-ribbed	
blast	elevation	ladder	rocks	
buried	emeralds	length	safety-valve	
barren	empty	level	standstone	
build	entrance	lever	seam	
barrier	escape	location	seeking	
bowels (of the earth)	expel (foul air)	low -er -est	source -s	
clay	explore	machine	stones	
claimant	extract	map	stratum -a	
cave	face (coal seam)	masonry	strike	
cavern		mazes	structure	
channel	fault (rocks)	mine	submergence	
climb	foul (air)	minerals	subside	
collapse	fall (of rocks)	mire	supports	
compressed	fan (ventilation)	narrow	surface	
connected (passages)	foothold	natural	toilsome	
construction	foundations	oil	treasure -s	
cramped	fumes	open	uncover	
crude (oil)	gas -es	outside	undermine	
crumbling	granite	passage	underworld	
cutting	grinding	penetrates	unearth	
debris	groundwork	pervades	unknown	
depth -s	grovel	pillar -s	unsafe	
deposit	heap	precious (stones)	uproot	
dig	heat	plane	vein -s	
deep-lying	hew -n	pure (air)	ventilation	
depression	impassable	range (mineral belt)	void	
descending	impediment	railroad	walls	
disclose	inside	reach -ed	water	
discover	incarcerated	remove (metal from ore)	wealth	
downward	inexhaustible (supply)		workings	
			win (metal from ore)	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

Industrial Engineering

(Electrical – electronics, telegraphy, radio, television, computers, etc.)

across (space)	diffusive	irradiance	reception	vision
air	discharge	joined	reflection	volume
alternating	disseminating	lead	reproduction	watching
audible	distance	lens	resistance	wave -s
altitudes	distribute	light	resolve	wire -s
amplification	ear -s	lines	satellite	world-wide
amplitude	earth	listener	seeing	
atmosphere	echo	live	selects	
attuned	electricity	looking	sender	
audience-chamber	elements	magnetic -ism	signal	
automatic	energy	magnify	source	
beam -s	ever-present	mathematics	space	
boundless	extends	maximum	speaking	
brain (computers)	fade -ing	messages	speed (of	
broadcast	far-off	mix	calculation)	
calculate -us	feed (data to	movement	sphere	
(computers)	computer)	near -ness	strength	
camera	field	negative	(signal)	
centre	flow	now	supress	
channel	focus	obstruction	telegraphy	
charge	force -s	omnipresence	terrestrial	
circle	gazing	one (basic	time	
circumference	globe	impulse)	tone	
clear	ground	optics	transform	
closed (circuit)	hearer	pervades	transition	
coiled	height	planet	translate (sound	
communication	hill	positive	into electric	
compass	hold	power	impulses)	
computed	ill-attuned	propagation	transmission	
connection	image -s	quality	undulations	
contact	immediate	radiant -ce	units (electrical)	
controls	impression	radiation	universe -al	
conversion	induction	range	upper (atmosphere)	
correct (answers)	instantaneous -ly	rays	valley	
current	invisible	reaches	vibration	
detection	interference	receive	viewing	

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

Civil Engineering

(Building and Architecture - town, city, and regional planning)

abiding-place	counterfeit	gate	measurement -s	sandstone
accommodate	create -ion	geometrical	members	satisfaction
arch	custom	granite	monument	scale
architect	delight	ground	noble	sculptor
artifice	design	growth	occupy	sections
artist	detached	harmony	open	shape
aspect	deterioration	headstone	outlook	sides
atmosphere	development	height	outside	society
base	diametrically	home	outwardly	solid
beautiful	dig	house	painter	space
boundary	disposal	idea -s	parallel	square
bridge	domain	ideal -ism	passage	stability
build -er -ing	dome	imagination	pattern	statue
carve	door	imitate	pillar -s	steps
cast	drain	individual	pinnacle	stone
cement	dwelling-place	indwelling	plane	streets
centre	elevated	inhabitant	planted	structure
character	embellishment	inside	portals	superstructure
charm	enclosure	inspiration	precints	support
chiselling	entrance	intercommunication		symmetrical
church	environment	join -ed	proportion	temple
circle	erected	joint -s	public	theatre
city	falls (drains)	key	purpose	threshold
climate	fashion	laid	quality	town
cohesion	fitted	(foundations)	quantity	tradition
colour	fixed	landscape	rail-road	transition
communication	floor	level	raise	undermined
composed	form -ation -s	lie (of land)	real estate	uniform
conception	foundation -s	life	rebuilt	unity
congestion	front	light	reconstruction	upright
connection	foresight	line	regular	ventilation
construction	(planning)	location	relationships	vestibule
containment	foursquare	lodgement	resident	walls
conversion	frame	masonry	resting-place	whole
corner	functional	masses	room	within
corner-stone	garden	materials	sanctuary	without

S C I E N C E A N D A R T

7. APPLIED SCIENCES & APPLIED ARTS

Civil Engineering - water resources, hydraulics, flow engineering

bed	gland	sea
beneath	gravitation	shallows
bottom	ground	springing
brink	gushing	stoppage
builder	head (of water)	streams
burst -ing	hydra	tides
cataract	influence	underlying
channel	influx	unobstructed
circulation	issue	uphill
connection	joints	uprising
course	lake	waste
cut	land	water -s
dam	liquid	water-wheel
deep	measure	wave -s
deposit	mire	welding
dig	muddy	work -s
disposal	nature	
downward	natural	
drain -ed	ocean	
derivation (stream from source)	outpouring	
draw (water)	overflowing	
drilling	passage	
dry	plunged	
earth	pour -ing	
elements	pressure	
emptying	rain	
escape (channel)	reservoir	
fall (drainage)	resources	
feed (pipe)	reclaim	
filled	rising	
fitted	river	
fixed	river-bed	
float	road	
flowing	rocks	
fluid	running (water)	
fountain	safety-valve	
	sanative	

S C I E N C E A N D A R T

8. FINE ARTS Aesthetics: science of the arts. The artist interprets individually and subjectively that which the scientist analyzes objectively and universally. The artist reproduces in image-form the world as he beholds it.

(Plastic Arts - drawing, painting, sculpture)

abstract	depict -s	illustration	object -s	soul
art -s	embellishments	image -s	objectified	spirit
artist -s	engraved	imagination	observation	spontaneous
academic	enjoyment	imitative	original	statue
accurate	exalting	immortality	outline	stereotyped
adulterating	exciting	impression	painter	student
anatomy	express -ion	improvisation	painting	subject -s
animated	erase	individuality	palpitating	subjective
balance	facsimiles	inspiration	pattern -s	symmetrical
beauty	fashion	interpretation	perfect -ion	sublime
build	feeling	intuition	picture -s	surface
canvas	figure -s	joy -ful	plane	takes (form)
carves	fill (canvas)	landscape-	pleasing	talent
character	finish	paintings	portraits	taste
chiselling	flow (design)	life	profound	time-honoured
classic	freedom (of	lifework	proportion	tone -s
clay	expression)	light	pure	tradition
colour	form -s	likeness	qualities	translation (flesh
composition	frame	line	reality	to stone)
communicate	free (hand)	loveliness	religious	truth
conception	genuine	marble	representation	ugliness
construction	genius	metal	reproduction	unformed
contrasts	gift	matrix (mould)	revolutionary	uninspired
create -s -ion -or	great -est	meaning	rhythm	unity (of conceptic
culture	graven	misunderstood	resemblance	universal
curve	hand -s	model -s	sacred	unexplained
craze	harmony	mould -ed	sandstone	vision
depth (of feeling)	hew -n	movement (in	satisfaction	vitality
definition	horizon	form)	self-expressed	vivid
delineate	(perspective)	moving	sentiment	wholeness
design -s	idea -s	(emotion)	shallow	work -s
detail -s	ideal -ism	nature	shape	worship
distorted	idiosyncrasies	natural	sincerity	wrought
drawn	illumination	new (art forms)	skill	zeal

S C I E N C E A N D A R T

8. FINE ARTS -
(Music, Literature)

absolute (pitch)	descending (scale)	incidental instrument	pause peals	soul symphonies
abstract	development	inversion	perform	student
accompaniment	diapason	imagination	period	subject -ive
air	diminished	immortal	position	sublime
arrangement	din	impression	practice	sympathy
art -ist	discord -ant	individuality	prelude	taste
artificial (harmonics)	dominant	inspiration	principle	tension (strings)
ascending (scale)	enchantment	interpretation	progression	theme
attuned	exalting	jarring	pure	theory
atmosphere	exciting	joyful	profound	thin (lacking resonance)
audience	expressive	key	public	transcendant
balance	fall (cadence)	keynote	quality	time
beauty	false (out of tune)	language (musical)	rapture	tone -s
Beethoven	feeling	leading (note)	religious	traditional
bridge (between movements)	fervency	listen	recapitulation	trump
chords	form	lyre	read	touch
compass	full (tone, voice)	living	related (keys)	render
composition	flow	love	resolve (a discord)	uninspired
concord	grace	life-work	resounded	unison
conduct	grave	major	rest	unsustained
communicate	great	measure	rhythm	universal
colour	genuine	medley	rising (tone)	unfoldment
conception	genius	melody	root (of harmonies)	uplifting
construction	gift	minor	rudiments	value -s
creator (musician)	give (performance)	Mozart	run	vibrating
creation	harmony	movement -s	sacred	vigorously
culture	hands	memory	song	vitality
consonance	harp	moving	scale	voice -s
design	heart-felt	music -al -ian	sensuous	volume
delight	hold (pause)	natural (musician)	seventh	whimsical
dance	hushed	national	sharp	wind
derivative (one chord from another)	imitate	organ	shape	worship
	improvisation	order	sincerity	works
		pattern		zeal

S C I E N C E A N D A R T

8. FINE ARTS

(Theatre: plays, dance, conjuring, cinema, etc.)

act	design	individuality	profession	talent
action	direction	inspiration	projected	theatre
actor	disappearance	interpretation	public	tradition
acting	discover	interval	raise	tragedy
alias	displayed	jest	(curtain)	translation
adroitness	enactment	joyous	realism	tricksters
amusement	entrance	language	reception	type -s
applause	entertaining	laughing	rehearses	unfolding
art -ist	excitement	leading	representation	(plot)
artificial	exhibiting	living	response	unmasked
assume	exit	looker -on	reveal	utterance
atmosphere	expectation	love	ridiculous	vanity
audience	egotism	magnetism	rise -ing	vanishes
astonish	farce	mask -ed	ritual	veil
appearance	feats	masquerading	run	(curtain)
beauty	feelings	measure (dance)	scene	verse -ion
burlesque	flow (dance)	memory	self-conscious	visual
befooled	footsteps	mesmeric	self-control	voice
character	frivolous	message	self-expressed	withdraw
company	gala	mimicry	self-love	word -s
change (of character)	gaudy	movement -s	self-satisfied	wrestling
cue	genius	moving	set	zeal
culture	genuine	music	show	
curtain	gift	mythology	simulate	
cheat	gorgeousness	opening	sincerity	
credulity	great	overaction	sketch	
conjure	hallucination	parading	spectators	
convincing	heartfelt	parts	speech	
creative	hypnotism	pause	spell	
camera	hypocrisy	performed	stage	
dance	illusion	personality -ies	star	
deceitful	imagination	play -ing	steps	
deceptive	imitator	plot	story	
defraud	impersonation	poet -ry	straight	
deliver (speech)	impostor	popularity	student	
delusion	improvisation	portrayal	supporting	
	incredulous	producer -tion	(role)	

T H E O L O G Y A N D M E D I C I N E

SCIENCE, the true Theology, and the ART OF SPIRITUAL HEALING, the true Medicine, replace material theology and material medicine in human experience.

The stock-in-trade of material theology and material medicine is sin, disease, and death. The divine Science of

CHRISTIANITY

in which Science and art, understanding and healing, are one, rids humanity of sin, disease, and death, on the basis of their nothingness.

Jesus, the individual Scientist-artist, demonstrated the art of scientific healing by imaging forth humanly the divine identity of man.

T H E O L O G Y A N D M E D I C I N E

9. RELIGION — originally the deification and personification of the creative and destructive forces of nature. Foremost deity: the ubiquitous Mother Goddess of fertility. Other deities: the sky-father, earth-mother, divine child, maiden goddess, etc.

(General — priestcraft, ritualism, etc.)

ablution	dissent	immortality	polytheism	traditions
absolution	doctrines	infidel	pomp	tribulation
accursed	dogmas	instruction	power	turned (convert)
accuser	duality	incarnation	(priestly)	unbelief
adherent	ecclesiastical	join (church)	prayer	uncleanness
angels	evil-doer	kingdom of	preaching	unfaithful
anthropomorphic	eternity	heaven	predestination	ungodly
archpriests	ethics	lip-service	priest -s -ess	unknowable
ascetic	faith -ful -less	Lord	priesthood	unveiling
assumption	fallen (man)	life	prostrates	veneration
atheism	father (priest)	love	purification	vestments
baptism	fear (God, gods)	monotheist	religion -ist	victim
belief	feast	mission	repentance	(sacrifice)
blasphemy	flesh	Mohammedan	revelation	Vishnu
blood	following	matter	rite -s	vision -s
(sacrifice)	forbidden	medium (priest)	rituals -ism	vow -s
Brahman	frenzy	metaphysics	robes	wash (away sin)
Buddhism	glory	morals	sacrifice	wicked -ness
burial	God	mortality	sanctuary	wicked one
cell	god -s	mystery	Satan	will (of gods)
church	good -ness	miracle	sect -arian	worship -s
clergy	heathen	mythology	sin -ner -ful	worshipper
cloistered	holy -ness	narrowness	supernatural	zeal
communion	humanization	ordain	Spirit	
conversion	(of Deity)	obedience	spirits	
creed	hypocrisy	organization	scholastic	
curse	heaven	orthodox	theology	
death	hell	pagan -ism	self-righteousness	
dedication	halo	pantheistic -ism	suffering	
deity	high-priest	pardon	Supreme Being	
demigod	idolater -ry	penitent	temple -s	
denomination	idols	perfunctory	temptation	
despotism	image -s	piety	theologians	
discipline	image-gods	pilgrimage	theology	

T H E O L O G Y A N D M E D I C I N E

9. RELIGION

(Astrology, Mythology)

abyss	devil -s	hell	myth -ical	spirit com-
adversary	disclose -s	horoscope	mythology -ies	munications
Aesculapius	divine	house (zodiac)	nature	spirit -s -ism
altar	doom	Hippocrates	necromancy -ers	spiritualism
Aphrodite	dream -s	hypnotism	observation -s	spring (god's
Apollo	disaster (dis +	hysteria	Olympus	resurrection)
animal -s	astral)	influence (of	Oriental	supernatural
apparitions	downfall (of	stars)	Witchcraft	superstition
astrology	man)	idolatry	origin -s	sun (worship)
augury	esoteric	idols	personification	sacrifice
aforethought	evoke	image -s	(of natural	seasons
balance (Libra)	ecstasy	imagination	forces)	seedtime
birth (nativity)	eloquent	impersonation	phantoms	sensualism
bring (conjure up)	excite -ment	(of natural forces)	planchette	signs (zodiac)
break (spell)	fable -ulous	improvisation	possessed	stars
Beelzebub	fallen (man)	infant (god)	power -s	symbols
cancer (crab)	familiar	intuitions	(supernatural)	table-tipping
call (invoke)	(spirits)	involuntary	priesthood	telling
cast (horoscope)	firmament	incantations	predicting	(fortunes)
clairvoyance	fishes (Pices)	king -s	preternatural	tricksters
calculate	forebodings	legendary	primeval	theosophy
(horoscope)	foretelling	legerdemain	prophecy	underworld
calendar	future	likeness	pagan -ism	universe
celestial	(horoscope)	(animal gods)	pantheism	unnatural
Chaldean Wisemen	fraud -ulent	magic	precipitate (man	unsubstantial
chart (horoscope)	frenzy	magnetism	thrown violently	untutored
conjure (up spirits)	first cause	manipulation	out of heaven)	virgin (Virgo
control (by stars)	future-world	materializes	queen (of heaven)	vision -s
creation -or	god -s	Mecca	rapport	visitant -s
damned	ghost -s	mediator	reading (mind)	voices
dark -ness	guesswork	mediumship	religion	void (the)
deductions (from	guide -ance	mesmerism	revelation	wicked one
stars)	Hades	mind-reading	ritualism	worshippers
demigods	hallucination	moon-god	rebellion	witchcraft
demons	harvest (god's	mother (goddess)	(Lucifer)	wizards
derangement	death)	muscularity	sorcery	wonder -s
destiny	heaven	mystery	seances	

T H E O L O G Y A N D M E D I C I N E

9. RELIGION

(Judaic - Christian line of development)

Aaron	disciples	kingdom of	shepherd	Yawah
Abel	doctrines	heaven	Son of man	yoke
Abraham	dogmas	key (to	Son of God	zeal
Adam	dust	heaven)	student	Zion
adoration	Elohim	Lamb	Supreme Being	
agony	Eucharist	Lord God	symbols	
Almighty God	evangelist	life	temple	
angels	Exemplar	love	temptation	
anti-Christian	faith	Maker	testament	
apostles	father	mammon	transfiguration	
Apocalypse	Father	master	tradition	
atonement	forgiveness	Messiah	translation	
babe	formalism	miracles	(ascension)	
Babel	Gentile	missionaries	trinity	
Babylon	glory	Mosaic law	Truth	
baptism	God	new covenant	unchristian	
beginning	God-power	obedience	unction	
believer	Golden Rule	one (God)	union	
Bible	gospel	organization	universal	
bread	heaven	Passover	unknown	
brotherhood	healing	Pharisaism	veil	
Cain	hell	pilgrim	version -s	
Canaan	Hebrews	priesthood	(Bible)	
Catholic	Holy Ghost	prophet	vestments	
Christ	Holy Writ	Puritan	vicarious	
Christendom	I AM	repentance	Virgin-mother	
Christian church	idolatry	resurrection	vows	
Christianity	immortality	revelator	warfare (religious)	
Christian Science	infallibility	Rome	water	
Christ Jesus	infinite	sacrament	way	
Comforter	institution	saints	wayshower	
convert	Israel	salvation	will (of God)	
cross	Jehovah	saviour	wine	
crucifixion	Jesus	Science	woman	
curse	Jews	self-offering	Word	
Day of Pentecost	Judaism	sepulchre	works	
descent (Holy Ghost)	judgment-day	servant	world	

T H E O L O G Y A N D M E D I C I N E

10. MATERIA MEDICA - healing on a purely physical basis
(General - disease, drugs, death, etc.)

abscess	deplete (blood-	infirmity	poison	stoppage
ache	letting)	inflammation	poor (health)	strychnine
accretion	derivation (draw	influenza	post mortem	subject (to
adhesion (tissue)	off fluid)	innoculation	power (of drug)	disease)
ailment	diagnosis	invalid	practitioner	stomachs
allay	discharge	isolate (infection)	predisposing	suffering
allopathy	disease	Jahr	prescriptions	suppress
anodyne	disorder	juices	prophylatic	(inflammation)
application	dropsy	laws of health	pulmonary	swelling
attend	epileptic	leprosy	pulse	symptoms
anatomy	eliminate	life-preserving	purgative	take (medicine)
bedside	emptying	liver-attack	quackery	tapping (drops)
bind	examination	loss (of blood)	quelling	therapeutics
bleeding	expel	malignant	quickens	thermometer
blister	doctor	medical	quieted	tomb
body	dose	medicine	recuperative	tonic
bone-disease	drug	meningitis	recovery	treatment
break (fracture)	dust (dead body)	microscope	regain (health)	tubercles
bronchial	dyspepsia	morbid secretion	reject (from	typhoid
cancer	fever	morphine	stomach)	undigested
care	flatulency	move (bowels)	relapse	unhealthy
cast (vomit)	flow (menses)	nerve -s	resolve	upset
cataplexy	fluctuate	neuralgia	(inflammation)	verdict
catarrh	gall	nurse	restoration	victim
cholera	gastric	opiates	retchings	virus
chronic	growth	organism	rheumatism	waste
complication	germ	oath (Hippocratic)	run (discharge)	water
congestion	gathering	open (wound)	sanative	(attenuate)
consumption	glandular	overaction	sanitary	weakness
contagion	hay-fever	ossification	scrofula	weariness
cough	healing	pain -ful	secretions	well
crisis	health	pathology	serpent (med.	whole
curative	health-laws	palsy -ied	emblem)	withered
dangerous	heat	panacea	sickness	worse
death	hemorrhage	paralysis	smallpox	
debility	homeopathy	patient	soporific	
deep (therapy)	hypodermic	physician	sore	

T H E O L O G Y A N D M E D I C I N E

10. MATERIA MEDICA (hygiene, nature cures, etc.)

ablutions	mentality	thought
administer	mind-cure	treatment
air	morals	uncleanness
application	movement-cure	unmedicated
baptism	nature	vegetarianism
baths	natural	walking
bathing	organs	washing
bleeding	over-exertion	waters
body	patient	weighing
breathing	pinching	will-power
clean -liness	plunged	
cleanse -d	pounding	
climate	pouring	
currents (healing)	purgatives	
drink	purifying	
dirt	quackery	
eating	radiation	
exercise	ray -s	
exhalations	reducing (weight)	
fasting	regeneration	
filth	regular	
foul	relaxes	
freshness	renewing	
functions	rest	
habits	resuscitating	
healing	rubbing	
healthful	sanative	
health-giving	sanitary	
herbs	scrubbing	
hydropathy	secretions	
hygiene	semi-starvation	
ill-health	sleep	
impurity	soothing	
inhaling	submerged	
irregular	sunlight	
liquid	temperance	
manipulations	therapeutics	

T H E O L O G Y A N D M E D I C I N E

10. MATERIA MEDICA (dietetics, food, digestion, etc.)

appetite	enjoyment	morsel	take (food)
assimilate	Eucharist	mouth	taste
ate	famine	nutriment	tea
athirst	fast -ing	overeaten	thirsty
balanced (diet)	feast -ing	palate	tidbits
belly	feed -ing	portion	teeth
bite	fiery (flavour)	partaking	tongue
bitter	flavour	piled (plate)	tempting (food)
blend	flesh (meat)	quantity	undigested
body	flour	quality	unsatisfied
bread	food	recipe	(hungry)
breakfast	full	render (melt down)	vegetables
brim	filled	replenish	viand
cheer	glutton -y	rich (food)	wine
chewing	gain (weight)	rigid (diet)	wanting
consume	gastric	repast	wasted
cook	grapes	sacrament	wine
course	greed	sacrifice	wholesome
crumb	gross	saltiness	yearning
dead (no tang)	heavy (meal)	savour	yeast
debauched	honey	satisfied	
delicious	hunger -ing	self-denial	
desire	hungry	self-control	
devouring	imbibe	sensuality	
diet -etic	indulge	slaughter (butcher)	
digestion	inebriate	smell	
disagree	juices	sour	
(indigestion)	kill (butcher)	starvation	
disgusting (no taste)	leaven	stomach	
drank	loaf	sustaining	
draught	lamb	swallow	
dregs	liquid	sweet	
drop	liver	syrups	
drunk	lust (for food)	supper	
egg -s	manna	table	
extract	measure	table-salt	
	meat		

11. SURGERY – branch of medicine which removes, replaces, divides and joins together again parts of the human body.

(General – accidents, anaesthetics, etc.)

accident -s	deposit	injection	penetrates	spread (of disease)
adhesion	detach	injury	performed	stoppage
amputate -d	devouring	inside	pierced	stones
analogous (tissue)	(malignant)	inspection	pluck	strictures
anatomy	diagnosis	invisible (on	poison	surface
ankylosed	discharge	surface)	probe -ing	swollen
articulations	discover	involuntary	quackery	sword (scalpel)
artist (surgeon)	dislocation	(action)	radiation	symptoms
artificial (limb)	dissection	join -ed	reaches	tapping
autopsy	divide	joint -s	readjust	tissue
accumulates	draught (ether)	jugular	reconstruct	transplant
adjustment	examination	knife	reduction	torn
administer	excision	lacerated	regulate	tumor
(anaesthetic)	ether	life	remove -al	two-edged
asunder (cut)	exploring	lose (part of	renewal	(scalpel)
attach (join)	extract	body)	rent	ulcer -s
bare	fasten	major	reopen	unconsciousness
body	finding	(operation)	replace	(anaesthetics)
bone -s	forceps	malignant	restore	underlying
bone-disease	formation	manipulate	roots	undermining
breakage	fragmentary	mask	set	undivided
calculus (kidney	fraction	mend	surgeon -s	union
stones)	gash	minor	spear-wound	united
carious	grafting	(operation)	spinal	unremoved
chloroform	growth	morphine	structure	unveiled
cohesion	handle	nurse	scrofula	uprooted
complication	harmony	oblivion	seal (up	vertebrae
conjoined	(harmos=joint)	(anaesthetics)	wound)	vessels (blood)
connected	healing	offensive	seam	viscera
consciousness	hypnotism	open -ing	search	wash
contracted	hypodermic	obstetrics	section	wield (scalpel)
cords	incisive	operation -s	separation	withered
cripple	infected	organism	severance	(growth)
cutting	inflammation	outgrowth	sharp	wound
cancer	inhaling	passage	sleep	wrested
deep-lying	ingrafted	patient	(anaesthetics)	

11. SURGERY
(obstetrics)

ablutions	contains (womb)	generation	mouth (of	removal
abortive	CORDS (umbilical)	germination	womb)	reproduction
acute (pain)	cradle	gotten	movements	safely (delivered)
advanced	cranium	growth (in womb)	multiplication	section
(pregnancy)	creators (parents)	genesis	naked	separation
advent (birth)	cries	headlong (birth)	nameless	severed
ancestry	curse (on Eve)	head	narrow	slime
arrive	cut (from mother)	heat	(passage)	sorrow (curse
attached	dam (female	heart	nature	on Eve)
attend -s	parent)	heavy-laden	newborn	son
await -ing	death (birth = first	hold (mid-wife)	obstacle	stranger
babe	death)	identity	obstetrics	stretch
barren (unfertile)	deliver	imprisoned (in	opening	suckling
bathe	detached	womb)	order (of	suggestive
bear	divided	individual	birth)	(obstetrics)
bed	drawn (forth)	indwelling	organism	swaddling-
begets	elasticity	infant	origin	clothes
beginning	embraced (in	infolds	outcome	swell
belly	womb)	intertwined	(come out)	teeming
big (with child)	embryo -nic	(twins)	outside	(pregnant)
birth	emerge (from	involuntary	ovum	travail-ing
birth-throes	womb)	joined	pain -less	turn (in womb)
bleeding	enclosure	joy	pang -s	unborn
born	enlarged	knife	parent -age	unfolding
bore	entrance (to	labour	parted	unformed
body	womb)	living	passage	unwelcome
bowels	excision	likeness	parturition	ushered
break (waters)	expansive	load	plurality	visible
budding (life)	expecting	love	presentation	waiting
burden	egg (ovary)	man child	(mouth of womb)	wash
child -ren	firstfruits	maternal	procreation	waters
cleanse	fluid	matrix	producing	weariness
coddling	foetal -us	miracle (of	protecting	woman
conception	forceps	birth)	push	womb
confinement	formed	miscreator	quicken	wrested
connected (child	fruit-bearer	mother	reception	yielded
to parent)	fruitful	moulded	rejoicing	

11. SURGERY

(dentistry, veterinary surgery)

ablutions	forceps	sharp
abscess	freezing	sound
aching	front	stop
alkali	full (set of teeth)	surgeon
anatomy	gas	sympathy (nerves)
arch (roof of mouth)	grinding	teeth
attend	growth	tender
bicuspid	hygiene	tooth
body	hypnotism	tooth-pulling
bone -s	hypodermic	unconscious
breakage	impression	uprooted
bridge	incisors	wash
cast	infantile (teeth)	wrench
cavity	inflammation	
carious	inherited	anatomy
cement	injection	animal -s
chewing	irregular	beast -s
chloroform	jaws	body
cleanse	loosened	bone
crowned	lost	cattle
crumbling	lower (jaw)	dogs
cuspid	matrix	epizootic
decay -s -ing	molar	fatling
deficient	mouth	horns
deformed	mould	horse
draw -n	nerve -s	humane
examine	nitrous oxide	kindness (to animals)
excision	pain	lamb
explore (mouth)	painless	sheep, etc. etc.
expose (nerve)	patient	
extract	practice	
false	probe -ing	
feeling	quackery	
fill -ing	quiets (pain)	
fit -ted	removal	
flesh	roots	
	sensitive	

T H E O L O G Y A N D M E D I C I N E

12. PSYCHIATRY - science of (mortal) mind-healing (General - psychology, subconscious-conscious mind, hypnotism, dreams, etc.)

address (the sub-conscious)	despotic depth (psychology)	images imagination implant impression	needle-thrusts night-dream obedience operator	thinking thought -s thought-forces transference treatment
analyzes	diagnosis	impulsion	overpower	unaware
asleep	dictated (hypnotist)	inducing	penetrate	unconscious
assassin (mental)	direct (thoughts)	influence	personality	uncovered
awaken	disentangles	ingrafted	picture (mind-image)	undermine undiscovered
barriers (mental)	dormant	injection (mental)	power (mental)	unearth
beliefs	draw (beliefs to surface)	insane	projected (thought)	universal (unconscious)
beneath (the surface)	dream -s -er	intercommunion	pseudo-mental psychology	unknown unremoved
betray (inner feelings)	dream-shadows emptied (mind)	interference	quackery	unseen
bottom (of mental action)	enter (mind)	interpret (dreams)	rapport	upheaval
bring (to the surface)	exchange (beliefs)	invaded (mind)	recall (to memory)	uprooted
bygone	explore	involuntary (action)	recorded (in memory)	visions
carry (in thought)	externalized	latent	reflecting (mentally)	voluntary
chambers (of imagery)	fancy	level (of consciousness)	remember	wakened
characteristics (mental)	fashionable	lurking (in subconscious)	resistance (to hypnotism)	will
closed (mind)	fill (mind)	lodgment (in subconscious)	responses	will-power
communication	forms (mental)	magnetism	retain (in memory)	within (mind)
conflict	gods (mythology)	malpractice	roused	wrung
conscious -ness	governs (mind over mind)	manipulations (mental)	sleep	(confession)
consent (to hypnosis)	guesswork	mediumship	subject -ion	
control	heavy (sleep)	mental -ity	submit	
cooperation	hearing (sub-consciously)	mesmerist	suggestion	
corrective	hidden	mind -s	superimposed	
cure	history (of individual)	mind-forces	superinduced	
deduced	holding (in thought)	mind-power		
deep-lying	hypnotism	mind-picture		
deranged	hypochondria	mind-reading		
descend (into subconscious)	I	misuse (of mind)		
		mythology		

T H E O L O G Y A N D M E D I C I N E

12. PSYCHIATRY (Appetites)

abnormal	engulfed	morals	shame	yielding
abstinence	enjoy	mortality	sin	
abused	excess	narcotics	smoking	
adultery	excitement	nerves	soporific	
all-absorbing	fallen	obnoxious	soothing	
alcoholic	feasting	odiousness	stimulus	
animality	feed	opiates	strychnine	
anodynes	filled	opium	swallowed	
appetites	flesh-pots	over-eaten	temperance	
asylum	folly	pains (and	thirsty	
besottedness	freedom	pleasures)	tobacco	
befool	gluttony	perverted	torpid	
bestial	gods	pleasure	tea	
bondage	greed	puffing	temptation	
coffee	grossness	passion -s	torture	
consuming	habit	poison	unconsciously	
control	hashish	propensity -ies	underworld	
corrupt	hell	psychology	unmanly	
covered	hungry	quieted	unsatisfied	
craving	hypnotic	restrain	unspiritual	
cup	I	revellings	vanity	
curse	idols	remembrance	vice -s	
debauchee	imbecility	repentance	vicious	
dormant	indulge	repulsive	victim	
downfall	inebriate	resist	victory	
drink	inflames	ruin	wanting	
drugs	imbibe	stupefaction	weakness	
drunken	intercourse	subjection	wine	
drunkard	intoxicating	supressed	wine - bibber	
delight	joys (sensual)	(appetites)	worldling	
delusion	lasciviousness	satisfaction	wreck	
depravity	licentiousness	self	whisky	
deprived	lust	self-control	wild	
despair	lonely	self-love	will-power	
disgusting	longing	self-mesmerism	worldly-minded	
eat	magnetism	sensuality	wrong-doer	
ecstasy	memory	sexuality	yearning	

T H E O L O G Y A N D M E D I C I N E

12. PSYCHIATRY

(mental processes, qualities, emotions, beliefs)

affection	desolate	loathing	timid
afraid	duplicity	loving	transparent
anxiety	ethical	mEEKNESS	unflinchingly
ashamed	egotism	malicious	ungrateful
anger	emotional	mean	unpretentious
anguish	enraptured	modest	unselfed
apathy	envy	mournful	unsatisfied
arrogance	failure	morbid	unshaken
ascetic	fearful	nervous	vain
baneful	fervency	noble	variable
bigotry	flexible	normal	vicious
bitter	fortitude	obstinate	vulgar
blameworthy	foursquare	offensive	warped
brazen	fury	pampered	weak
brutal	goodness	perverse	whimsical
beloved	gentle	petty	wholesome
behaviour	genuine	poverty (of	willful
character	gracious	intellect)	worthless
chastity	grateful	prejudice	wrathful
cheat	gross	profane	etc., etc.
conscience	hate	proud	
courage	heartfelt	quick (mentally)	
complex	humble	refined	
deaf (to reason)	heretic	relentless	
debauched	honest	remorse	
decadent	hopeful	responsible	
dedicated	hypocritical	righteous	
depraved	infidelity	rigid	
despair	insincere	sensual	
despondent	intense	sincere	
determination	intelligent	sorrowful	
devout	jealousy	subtle	
discontented	joyful	superficial	
dishonesty	just	stupid	
disposition	kind	sweet	
demoralized	knavish	swinish	
depressed	liar	temperate	

S O C I O L O G Y

- Science of Human Society -

The divine Sociology pertains to the "CITY [CIVILIZATION] FOURSQUARE" which comes "down from God out of heaven" and is set up on earth. It is the demonstration in

SCIENCE

of heaven and earth, matrix and calculus, one. It signifies the brotherhood of man under the government of Principle. It involves understanding the universal in terms of understanding the individual, and understanding the individual in terms of understanding the universal.

S O C I O L O G Y

13. MARRIAGE & PROGENY - creation and continuity of human society (sex, heredity, divorce, etc.)

adore	distrust	incompatibility	pride	trysting-times
adultery	division	infant	procreation	uncover
affection	divorce	jealous	productive	unfaithful
ancestor	dwell (together)	joined	progenitors	unity
asunder	each (other)	joyful	progeny	unlawful
attract	egg (ovary)	kinship	prolific	unmarried
barren	embrace	kindred	propagate	unrequited
begotten	embryo	lay	quarrel	untimely (birth)
beloved	emotion	legitimate	raise (family)	unveil (bride)
between	erected	life-giving	reconciled	us
birthright	excite	longing	relationship	virgin -ity
body	expel	love	reproduction	vitality (germin-
bosom	faithful -less	loyal	repulsion	ating power)
breed	family	lust	restoration	vows
brethren	father	matrimony	(conjugal rights)	waiting (pregnant)
bride -al	female	maternal	ruptures	wedded
bridegroom	foetus	magnetism	(brotherhood)	whole (family)
cherish	fornication	manly	separation	wife
child -ren	fruitful	marriage	seed	withhold
communion	gestation	masculine	sister	woman -ly
conception	genesis	matrix	sensual	wreck
conjugal	gender	mother	sexual	(relationship)
consummate	generation	multiply	son	wronged
contract	germinating	naked	submission	yearnings
coupled	gratification	numbers	taken (wife)	young
covenant	growth	nuptial	teeming	
cover (copulate)	happiness	obligation	(fertile)	
create	head (of family)	obstetrics	tender -ness	
dam (mother)	heavy (pregnant)	offspring	thrust	
daughter	heir	organs	ties (fleshly)	
dear	help-meet	origin	together	
delight	husband	outgrowth	transmit	
dependents	indulgent	ovum	(heredity)	
desire	immoral	parentage	tread	
destitute	increase	physicality	(copulate)	
devotion	intercourse	pleasure	trust	
dissolution	issue	possession	true	

S O C I O L O G Y

13. MARRIAGE & PROGENY

(home, family, relationships, etc.)

abiding-place	environment	indwelling	pillow	universe
accommodate	exclude	inhabited	planted	unlock
associations	expansive	inheritance	play	usher
atmosphere	expressive	intimate	portals	vestibule
attraction	family	invaded	porter	view
back (home)	food	inside	precincts	viewless
banished	father	joy	premises	visit
base	forefathers	joined	quiet	visitants
beautiful	foothold	kingdom	receive (into home)	ventilation
bed	foundations	knocking	refuge	walls
boundary	foursquare	liberty	replenish	watchtower
brotherhood	freedom	life-basis	resting-place	welcome
builder	friendship	light	return	window-pane
centre	furnish	locality	room	within
chamber	garden	lord	routine	without
church	gateway	loveliness	real estate	warm
circumference	gathering	luxury	restore	woman ("home... is woman's world" Mis 287:28)
citizen	goal	manages	roots	
comfort	gracious	master	supplies	
common	guard	meal	surroundings	
confined	guest	mutual	sacred	
contents	habitation	my	sanctuary	
copartnership	handmaid	mother-love	secret	
dearest	harmony	narrowness	settle	
debarred	heart	national	shelter	
disorder	heaven	neighbour	storehouses	
display	hedge	nurse	strangers	
domain	heritage	nurseries	structure	
domestic	home	nutriment	sunlight	
dominion	homesick	obedience	table	
dwelling	hospitality	obligations	table-setting	
dwelling-place	host	outside -rs	take (into home)	
economy	household	outstretched (arms)	threshold	
enchantment	ideal	own -er	trespass	
enclosure	imprisoned	partnership	treasure	
enlarge	inclusive	persons	undisciplined	
entertain	individual			

S O C I O L O G Y

14. GOVERNMENT - means of controlling the society that has been formed (General - democracy, dictatorship, propaganda)

art	dismiss	league (treaty)	press	tyranny
accredited	empire	leader	promulgated	tension (between
acquiescence	elect -ion	legislate	propagation	nations)
administer	economy	liberal	question	term (of office)
agent	enactments	liberation	quelling	tithe (tax)
allegiance	enemies	liberty	(revolt)	tribunal
ambition	established	loyalty	radical	ultimatum
appointed	exploiting	ministry	rally	unanimous
asylum (political)	foreign	mandate	rebellion	united
authority	fought (election)	member	regulations	universal
broadcast	franchise	motion	reins (of govnt)	unscrupulous
benevolent	freedom	masses	relief (tax)	vote
(neutrality)	fellow-countrymen	majority	representative	victorious
Bill of Rights	followers	minority	responsibility	waning
Board of Health	govern -ing -ment	nation -al	returns (tax)	(power)
bondage	grant	number -s	resolve (parl.	welfare
censure	guardians	oath	motion)	worker
coalition	guiding	obedience	restrain	wrested
constitution	history	office -rs	(dictator)	(power)
council	head	opponents	revolutionary	warfare
charter	institution	opposition	rights of man	wisdom
commission	informer	outrule	righteous cause	
committee	imported	overthrow	rule -s -ings	
commonwealth	impoverish	overtaxed	run (for office)	
conservatism	incites	peace	state	
debate	(propaganda)	people	statute	
decisions	individualism	plans	subordinate	
decree	industry	policy	superior	
department	inflames	politicians	supress (revolt)	
dependency	(propaganda)	popularity	system (of govt)	
(colony)	information	proceedings	swayed	
depose	intolerance	prosperity	(propaganda)	
despotism	intelligence	public -ly	tradition	
dictate -d	(service)	pernicious	traitor	
dissolution	judgment	(propaganda)	treason	
disappoint (deprive	just -ice	powers	trouble (time of)	
of office)	law -s	precedence	trustworthy	

S O C I O L O G Y

14. GOVERNMENT

(monarchy, class society, heraldry)

appeased	enthrones	knavish	power	superior
ascend (throne)	entitled	knights	predecessors	supremacy
arms	establishment	knelt	prerogatives	surround (the king)
audience	extravagance	labour	prince	swear (loyalty)
authority	fame	lord -s	privilege	tatters
absolute	favourite	loyal -ty	proclamation	throne
banner	fidelity	luxury	queen	title
behest	figure (head)	lifelong	rank	tradition
benevolence	flatteries	monarch	realm	traitor
bidden	foremost	majesty	rebellion	treason
blazon	formal	masses	regions	triumph
conspiracy	(occasion)	mercy	reign	tyrant -nical
crown	grace	mighty	renounce	unjust
cross	great -est	misrule	(title)	unscrupulous
(heraldry)	(class)	monoply	religion	usurper
circle	grand -eur	mythology	respect	unpretentious
class	guard	nabob	resplendent	us
clique	gorgeousness	nobility	rests (crown)	vested
deify (king)	head (of state)	national	revolution	vicegerent
depose	heir	nobody	riches	vulgar
despotism	herald	oath	rightful	want (poverty)
dethrone	homage	obey	(successor)	wealth
devolved	heredity	occupy (throne)	risen	wield (sceptre)
(succession)	hierarchies	oppression	(socially)	withhold
discrimination	high-caste	outsiders	robes	(assent)
(class distinction)	high -er -est	pay (homage)	royal	workers
dispensation	humble	palaces	ruler	worldling
displayed	I	pampered	servitude	
(heraldry)	idolatry	paraphernalia	splendor	
dominion	imperious -al	people	squire	
duty	impostor	petitioner	standard	
dynasty -ies	infallibility	pinions (heraldry)	(heraldry)	
escutcheon	inferior	plot	status	
empire	inheritance	pomp	subject -ion	
elevated	intolerance	poor	submissive	
(peerage)	king	popular	subordinate	
enslaves	kingdom	potentate	succession	

S O C I O L O G Y

14. GOVERNMENT

(occupations, professions)

actor	follower	mind-reader	ruler
agent	governor	missionary	saint
agriculturist	guardian	monotheist	sage
apostle	gymnast	naturalist	scholar
architect	handmaid	navigator	scientist
artist	harbinger	necromancer	sculptor
astronomer	harlot	nurse	seaman
author	healer	officer	servant
bard	health-officer	operator	shepherd
blacksmith	helmsman	orator	sheriff
botanist	herald	outlaw	soldier
builder	heretic	painter	sovereign
buyer	high-priest	parent	spiritualist
career	hireling	partner	squire
chemist	historian	pastor	steward
Christian	husbandman	patriarch	student
clairvoyant	hypnotist	patron	surgeon
clergyman	importer	philanthropist	teacher
cook	informer	philosopher	translator
copyist	instructor	physician	traveller
counsellor	interpreter	physiologist	trickster
criminal	judge	pioneer	usurper
critic	juror	poet	visitor
detective	king	politician	watchman
disciple	lawmaker	practitioner	wayshower
discoverer	leader	preacher	woodman
doctor	legislator	priest -ess	writer
druggist	learner	prince	worker
editor	magistrate	printer	
educator	malpractitioner	professor	
employer	mariner	prophet	
entertainer	martyr	psalmist	
executioner	mathematician	publisher	
exemplar	matron	queen	
expounder	matter-physician	reader	
felon	mesmerist	recorder	
florist	metaphysician	revelator	

S O C I O L O G Y

14. GOVERNMENT

(Law - criminology, police, etc.)

accuser	debate	inhuman	plea	stealing
acquit	Decalogue	injustice	plead	strangled
adjudged	decree	innocent	power (of	suit
administer	defendant	invoke	attorney)	summons
advocate	defense	judge -ment	prison -er	supreme bench
appeal	define (law)	judgment-day	prison-cell	" court
apprehend	demise (con-	juries	probationary	" judge
arrest	veyance)	jurisdiction	promise	swear
assassin	detection -ive	jurisprudence	(breach of)	system (legal)
attorney	disabled (deprived	justice	pronounce	testify -mony
authority	of legal rights)	keep (the law)	(judgment)	thief
award	discharge	lash	proof	title
bar	discipline	law -s	prosecution	transgression
bear (witness)	due (punishment)	legal	punishment	trespass
bench	dungeon	legislation -ors	ransom	trial -s
Blackstone	duty	lie	reclaim (person	tribunal
bonds (covenant)	enforce	liar	under int.law)	truth
breach (of	equity	magistrate	recommend (for	unbiased
promise)	evidence	murder	mercy)	unfair
break (prison)	execution -er	major (offence)	release	unlawful
bring (charge)	fact -s	manacled	remit	unjust
burden (of proof)	fair -ness	material law	render	untrue (perjury)
camera	falsehood	misdeed	(judgment)	uphold (the law)
charge	felon	moral law	repentant	verdict
cheat	fettered	neutralize (int.	restitution	vested (rights)
chief of justice	fraudulent	law)	restrain (crime)	vindicated
civil	freed	oath	reverse	void (no legal
code (of laws)	gallows	obedience	(judgment)	force)
common (law)	guillotine	offence	right -s -ful	ward
compensation	guilt	overrule	robbed	warrant
consult	homicidal	outlaw	ruling (of	warning
contempt	honesty	pardon	court)	watching (brief)
court-room	honour	pay (penalty)	security	whipping-post
covenant	illegal	penal -ty	sentence	win (case)
crime	imprison	perjury	sheriff	withdraw (charg
cross-question	invalid	peroration	slander	witness
death-sentence	infringement	plaintiff	solemn	wrong-doer

S O C I O L O G Y

15. HUMAN CONFLICT – the purpose of all righteous government is to rid human society of its self-destroying wars and conflicts
(Warfare – armed conflict, on guard, etc.)

adversary	confronts	general	prevails	turn (back enemy)
against	danger	gains	pursue	two-edged (sword)
action	dauntless	glory	push	ultimatum
aggression	declare (war)	guarding	quelling	uniform
allied	defeat	halt	quail	uprising
ambush	defense	hit	rallying	unit
annihilate	dead	hostility	ranks	vanquished
appeased	deliver	invaded	recover	vengeance
anger	despoil	invincible	(territory)	versus
arena	destroy	impassable	relieved	victim
army	disarm	inflammatory	repel (attack)	victory
atrocities	discipline	information	rescue	vigilant
attack	disorder	intelligence	revenge	violent
barbarity	drilling	jealousy	reversal	virgin (uncaptured city)
base	duty	join (forces)	rewarded	walls (defense)
battle	deserted	keep (watch)	(valour)	war -s -fare
battle-axe	encounter	kill -s -ed	routed	warn -ing
bayonet	enemy	legion	run	watchful
betrayal	engage	launched	seize	watchman
bloodshed	enlisted	loss	sentinel	watchtowers
breastplate	encompass	march	slaughter	watchword
bullet	ensnare	merciless	soldier	weakness
beware	escape	misfortunes	shield	weapons
between	exchange (fire)	movements	spear	wield (sword)
campaign	face (each other)	numbers	stab	win
cannon	falls (enemy)	offensive	sling	withdrawn
captive	fear -less	officer	struggle	withstand
challenge	feuds	operation	subdue	(attack)
combat	field	obedience	supplies	won
command	fighting	occupy	supremacy	wounded
conflict	fire	open	surrender	
coward	flee	overcome	surround	
conquer	forces	overthrow	sword	
courage	formation	peace	take (life)	
cross-fire	front	perish	thrust (forward)	
concealed	garrison	powerful	triumphant	

S O C I O L O G Y

15. HUMAN CONFLICT (sports, games)

aim	enthusiasm	lost	record	unclasp
amusement	equal	love	regain	unfair
arena	excitement	mastery	relax	unison
athlete	exercise	match	rest	unsurpassed
award	fair	meeting	result	untiring
ability	fatigue	mountain-peak	reward	utmost
accurate	fault	movements	rules	vainly
adroitness	favourite	muscularity	run	victor
ambition	feats	national	self-aggrandizement	vigor
applause	fellowship	natural	self-defense	vitality
attack	field	obey (rules)	self-reliant	walking
battling	fight	obstacle	self-seeking	water
between	final	offensive	serve	wielded
break (record)	fit	one-sided	sides	will-power
challenge	friendly	opening	skill	win -ning
chance	glory	opponent	spectators	won
chase	goal	overmastering	speeds	work
climb	goodwill	overtake	sport	wrestle
collective	grapple	overwhelm	starting-point	young
combat	ground	pace	statuesque	youth
compansionship	gymnast	participant	steer	zeal
contest	hands	partnership	straight	
cooperation	healthy	penalty	strive	
counter	helmsman	perform	struggle	
dare	hold	physique	subdue	
decision	home	play -ing	success	
defeat	horse	pleasure	superior	
defend	ideal	popular	supple	
display	individual	practice	take (part)	
draw	infringe (rules)	prevail	talent	
each other	interchange	pride	thought-forces	
eliminate	joined	prize	(muscles)	
encounter	judge	public	throw -n	
encourage	knights	professional	thrust	
endurance	keeper	quick	title	
engage	leader	range	train -ed	
enjoyment	lift	reach	trial -s	

S O C I O L O G Y

15. HUMAN CONFLICT (General human relationships)

accord	coward	gossip	neglect	self-seeking
affection	cruelty	grateful	neighbour	sensual
affiliation	debtor	grovel	nervous	servant
afraid	deceitful	guardian	obedience	sincere
agreement	defrauds	guest	obstinate	slander
appreciation	desired	guilty	offensive	sorrowing
arbiter	despotic	handmaid	outraged	stranger
arrogance	dignified	harlot	overpowering	surrendering
attraction	disagreement	healer	pardoned	swayed
beguile	disbelieving	homage	parental	teacher
belittle	disciple	honouring	partnership	tender
benefactor	disdain	hospitable	peaceful	thankful
benign	dishonest	humble	penitent	thwarted
betray	distrust	hypocrite	personal	traitor
bigoted	divorced	ill-tempered	pleading	trespasser
blameworthy	emotional	immoral	praise	trusting
borrow	employer	impartial	prejudice	tyrannical
brethren	empty	impatient	preying	ungrateful
captive	enamoured	incompatible	prodigal	unjust
charitable	enrages	inquisitive	progenitor	unselfed
charming	enraptured	insincere	pupil	unwelcome
cheat	entertaining	intimate	quarrel	usurper
cheerful	envy	jealous	rebel	vengeance
Christly	ethical	judging	reasonable	venomous
clings	exchanging	kindly	rebuking	vicious
comforter	exploiting	learner	reconciled	violent
compassionate	expounds	liar	religious	visitor
conciliate	faithful	listener	remorse	wedded
condemning	fearless	lover	repentant	welcome
confides	fighting	malevolent	reverence	withdrawn
consoles	forbearance	maternal	robbing	wrathful
consultation	foreign	mEEK	right-doing	yearning
contempt	forgiving	merciful	sacrificing	etc., etc.
contrition	fratricidal	mother-love	saintly	
converted	friendly	mocking	self-abnegation	
courtesy	generous	misunderstood	self-defense	
covetous	gentle	murder	selfish	

S O C I O L O G Y

16. CIVILIZATION – humanity's journey out of ignorance and mysticism into the light of SCIENTIFIC UNDERSTANDING, the CITY OF WORLD PEACE (History – time, place)

aeon	direction	Israel	paganism	starting-point
aforetime	dynasties	journeying	passage (of	sweeping (down
after	during	late -r	time)	centuries)
ages	early -ier -iest	life-long	past	temporal
anciently	end	links (chain of	patterns (in	thereafter
antiquated	ephemeral	events)	history)	throughout
ago	epoch	long (ago)	perennial	time -s
Assyrian	era	longevity	period -s	time-honoured
Athenians	events	logic (of events)	perpetual	time-tables
Babylonian	evermore	Logos	Pharaoh	today
barbarians	Egypt	millenarianism	predecessors	tomorrow
backward	emergence	millennium	prefigured	trace (course
becoming	England	modern	primal	of history)
beforehand	Europe	month	primeval	transitional
beginning	evolution	mankind (history	primitive	take (time)
bygone	extinct	of)	progenitors	temple
Caesar	facts	march (of history)	progress -ion	(tempus=time)
Calvary	far-off	measure (time)	Ptolemy	towards
centuries	flow (time)	Mohammedan	prophecy	ultimate
calendars	fullness (time)	mythology	push (onward)	until
chronological	future	never	reach	untimely
civilization	forefathers	next	reappearing	unborn
cycles	fossils	now	remote	undiscovered
course	Franklyn	nations	revolutions	unknown
continual	generations	Nazareth	races	waiting
Copernicus	geology	o'clock	recorded	wear (out)
Chaucer	Greece	old -er -en	(history)	would-be
Christian Church	habits (customs)	onward	recurring	wasted (time)
Constitution (U.S.)	historian	origin	remembrance	Word
date	history	oftentimes	repeated	world
dawn	hitherto	old-school	rhythm	Xantippe
decaying	Hebrews	order (of events)	Rome	Yawah
Declaration of	Homer	Orient	rooted (in past)	years
Independence	immediate	outgrown	self-evolution	yesterday
deep (in time)	interval	outlived	self-government	yore
development	India	over (in time)	simultaneous	Zion

S O C I O L O G Y

16. CIVILIZATION (journey and destination)

absence	destination	healing	obstacle	skyward
across	devious (routes)	heavenward	onward	slippery
advance	direction	heavy-laden	outgrowing	slowly
afar	discovery	hereafter	overtakes	solving
astray	distance	highway	pace	space
approach	ditch	history	passage	stages
arrive	downward	home	passport	starting-point
ascend	drawn	(destination)	pathway	stepping-stone
attain	drifting	impediment	pilgrimage	streets
away	earthward	impulsion	pleasure-trip	student
backward	eastward	instantaneous	privations	subjective
baggage	education	journey	process	(destination)
banishment	emigrant	ladder	progress -ion	swerved
base	endeavour	lameness	promise	striving
bearing	en route	landmarks	Providence	teaching
becoming	entrance	learning	purpose	throughout
bridge	eventually	lessons	pursuit	time
burden	evolution	locomotion	question (manna= what is it?)	towards
carried	expectation	lost	quick	transference
circulation	exploring	lonely	radiates	transition
climb	far-off	map	range	translation
coming	fast	march	reaches	transplant
communication	feet	mariner	remoteness	traveller
compass	finding	mazes	resting-place	traversing
continuation	fingerposts	mediator (travel thro')	restitution	undergoing
course	flight	messenger	restoring	unobstructed
creeping	footsteps	misdirected	retrogression	uphill
cross-bearing	foreseeing	mission	returning	uprooted
crown	further	motive-power	road	upward
(destination)	gateway	mountain	rotations	visitant
crusade	getting	movements	search	walking
cultivating	gravitates	narrow (way)	seek	wandering
city foursquare	growing	nearing	self-evolution	way
(destination)	guidance	northward	sent	wilderness
daystar (guide)	halfway	objective	separation	wheel
descending	halting	(approach)	shore	zigzag
desert	hastening			