

THE NEW PHILOSOPHY
SWEDENBORG SCIENTIFIC ASSOCIATION

**The Philosophy of
Swedenborg's
*Principia***

George de Charms

Seven lectures delivered by Bishop de Charms at the Educational Council meetings of Schools of the General Church of the New Jerusalem held in Bryn Athyn, in August 1963.

Published in The New Philosophy 1963-1964
Swedenborg-philosophy.org

THE NEW PHILOSOPHY

VOL. LXVI

OCTOBER–DECEMBER, 1963

No. 4

LECTURES ON THE PHILOSOPHY OF SWEDENBORG'S *PRINCIPIA*

GEORGE DE CHARMS

- Lecture 1. Introduction. The assumptions on which Swedenborg based all his thinking.
- Lecture 2. The process of creation is not merely mechanical.
- Lecture 3. Creation by means of motion. Various interpretations of Swedenborg's philosophy.
- Lecture 4. The doctrines by which Swedenborg sought to discover the soul. The natural sun, its atmospheres and planets.
- Lecture 5. Light and heat, the ether and the air, the formation of seeds.
- Lecture 6. The philosophy of the return kingdom.
- Lecture 7. The value of Swedenborg's philosophical works to New Church education.

ASSUMPTIONS OR POSTULATES ON WHICH SWEDENBORG BASED ALL HIS THINKING

1. That there is a God and that He is one. [Letter to Dr. Beyer November 14, 1769] (TCR 16)
2. That God created and perpetually maintains the universe. (*Principia*, Part I, Chapter 1, pages 36, 37)

(*Ed. Note.* These lectures were delivered by Bishop de Charms at the Educational Council meetings of Schools of the General Church of the New Jerusalem held in Bryn Athyn, in August 1963. The first two lectures are here published. It is planned to present the remaining lectures in the 1964 issues.)

3. That in God there is nothing geometrical or mechanical, yet in Him is the cause of everything that is geometrical and mechanical. (Preface to the *Principia*, page xvi)
4. That in the created universe also are things which are not geometrical or mechanical. (*Principia*, Part I, Chapter 1, pages 25–28)
5. That the force which created the universe was not mechanical, but was the force of love, or the Divine will. (*Principia*, Part I, Chapter 2, page 50)
6. That because there are things in the created universe which are not geometrical or mechanical, there must be a spiritual world, and in it a spiritual or “moral” sun. (EAK Vol. II, nos. 238, 251; *Principia*, Part III, Chapter 1, Vol. II, pages 231, 232.)
7. That there must be an unbroken chain of connection from the outmosts of creation, even to the infinite. (*Principia*, Part I, Chapter 1, pages 20, 21)
8. That the chain of connection between the Infinite and the outmosts of creation is effected by a series of discrete degrees. (EAK Part I, nos. 621, 622, 625, 626)
9. That between these discrete degrees there is an understandable relationship, so that from the knowledge of the ultimate degree it is possible to attain a knowledge of the higher degrees. The pathway to this higher knowledge, Swedenborg discovered by means of the doctrines of forms, of order and degrees, of series and society, of communication and influx, of correspondence and representation, and of modification. (AK Vol. I Prologue, page 11)

LECTURE I

INTRODUCTION. THE ASSUMPTIONS ON WHICH SWEDENBORG BASED ALL HIS THINKING

We have accepted with considerable trepidation the kind invitation of the Rev. David Simons to give a series of lectures on the value and importance of Swedenborg’s philosophical works to the development of New Church education, because we hardly feel qualified to do the subject justice. Although we have been deeply

interested in these works, and have been fully convinced of their importance, the duties to which we have been called have left us but small opportunity, over the past many years, to give concentrated study to them. Others have been more fortunate in this respect, and in consequence have been able to acquire a far greater mastery of the subject. I wish particularly to acknowledge my own indebtedness, and that of the General Church and the Academy, to the late Bishop Alfred Acton, whose profound study of Swedenborg's life, and of his philosophical works, is well known and deeply appreciated by the Church. I would also express grateful recognition of Dr. H. L. Odhner's work in this field. In connection with his teaching in the Theological School and in the College, he has made a truly scholarly study of Swedenborg's earlier works. Finally, I would give expression to the delight with which I have followed the articles written by Prof. E. F. Allen in the *NEW PHILOSOPHY* and elsewhere, in which he has endeavored to bring the scientific knowledge of modern physics to bear upon the more accurate understanding of Swedenborg's philosophical system.

Because it is impossible to give anything like an adequate account of Swedenborg's philosophical works within the time available, I have found it necessary to confine myself to a consideration of the *Principia*, with only a brief reference to the even more extensive areas of physiology and psychology. I shall therefore start at the beginning and advance as far as the time may permit, because the *Principia* theory of Divine creation is basic, and without it the works on physiology and psychology could hardly be understood.

I am well aware that at these meetings I shall be addressing some who are well versed in Swedenborg's philosophy, and also some who have very slight knowledge of it. This poses a problem, and I must ask the indulgence of both as I attempt to make the highly abstract concepts involved understandable at all without overtaxing the patience of the initiated.

For reasons that will become abundantly evident as we proceed, Swedenborg's *Principia*, when viewed in relation to the teaching of the Writings, is open to various interpretations. As a matter of fact, among the leading New Church scholars who have essayed to discover and define this relationship, there has been considerable divergence of opinion. Each one has assumed certain premises from which a logical system of interpretation has been adopted.

But as is inevitable, because our present knowledge is so limited, each such interpretation leaves serious questions still unanswered, and reveals apparent contradictions with the plain teaching of the Writings. This fact obviously points to the need for further exploration, study, and analysis. My own attempts to discover a solution are equally open to the same objection. They admittedly represent no more than certain hypotheses which it seems to me are clearly indicated by Swedenborg's own statements, and from which there appear to follow certain unavoidable conclusions. These conclusions, however, are fully acknowledged to be tentative and subject to change, because they are based on altogether insufficient evidence.

But let us ask at the outset just what we mean by philosophy. Strictly speaking, the word means the love of wisdom, and it implies the search for truth in an endeavor to understand the nature of the world in which we live. It seeks to penetrate beyond the knowledge of sense experience, and to explore causes through the exercise of logic and reason. It seeks to discover the deeper meaning and purpose of life by means of intelligent observation, reflection, and deduction. What we know as modern philosophy had its rise shortly before the time in which Swedenborg lived. It began when men challenged the authority of dogmatic theology, and insisted upon freedom to draw conclusions directly from scientific observation. It was the product of the scientific attitude of mind which has dominated philosophical thinking ever since. It has developed hand in hand with science, and has been modified progressively as scientific knowledge has increased, and as new theories, based on more modern discoveries, have been adopted.

Modern philosophy began with an effort to explain the process of creation; but this endeavor was later abandoned on the ground that the purpose of scientific investigation is to explain phenomena rather than to speculate in regard to things that transcend the realm of physical sensation and experimental proof. Even the earliest modern philosophers refrained from any attempt to explain how God created the universe, or how He continues to influence His creation. This is on the ground that what lies beyond the perception of the senses transcends all human understanding, and that therefore there is no way in which the relation of natural things to things supernatural and Divine can possibly be discovered. The

existence of such things may be taken for granted; but what they are, or how they operate, must be regarded as miraculous and altogether unknowable.

We would recall to your minds the leading philosophers with whom Swedenborg was or at least could have been familiar, in order to give some idea of the intellectual environment in which Swedenborg lived, and the climate of thought in which he worked. The sixteenth, seventeenth, and eighteenth centuries are a remarkable period in the history of philosophic thought. An astonishing number of men lived during this period whose writings on the subject of philosophy have left a lasting impression upon succeeding generations—men whose works are still read and highly esteemed. They were truly pioneer thinkers, who essayed a task never before undertaken, and one that had always been considered impossible, namely, to discover causes by the analytic or the scientific method alone. We can of course give no more than a bare suggestion of what these philosophers contributed to the development of modern thought; but we take for granted that most of you are more or less familiar with their works. Our purpose is merely to draw a sharp contrast between the early attempts of these men to solve the mystery of life, and that entirely different approach which characterized Swedenborg's philosophical thinking.

SIR FRANCIS BACON (1561–1626) has been called the “herald of modern philosophy.” He rejected the syllogism, which had been the accepted basis from which to reason, and attempted instead to establish his conclusions on careful and painstaking experiment.

RENÉ DESCARTES (1596–1650) began with the necessity of doubting all things, and of accepting only what can be indisputably proved. He concluded that the only thing certain is that he exists because he thinks and is conscious. From this he proves the existence of God, but attempts no explanation of how God operates. He affirms a great distinction between mind and matter, the latter consisting of parts, and the former having no parts.

THOMAS HOBBES (1588–1679) did not treat of cosmology, but explored the nature of the human mind, of government, of society, and sought to discover the secret of mutual cooperation, whence comes peace and happiness. He tried to analyse the instinctive curiosity that leads men to search out causes.

BARUCH SPINOZA (1632–1677) stressed the necessity of a universal substance from which all things are, and the need for an unbroken chain of connection, through successive causes, running through all things of this primal substance. He conceived of the operations of God as being fixed and unalterable, and on this ground denied the reality of free will.

JOHN LOCKE (1632–1704) wrote on the human understanding, contending that there are no innate ideas. He sought to define the nature of ideas, both simple and complex.

GOTTFRIED WILHELM LEIBNITZ (1646–1716) postulated the existence of *monads* or simple substances as the first elements of all things. He held that matter is the product of motion, and believed in pre-established harmony between the mind and the body.

SIR ISAAC NEWTON (1642–1727) discovered important laws of mathematics, and in his *Principia* explained for the first time how the movements of the stars and the planets could be understood according to these laws. His theories were at first rejected; but later they were almost universally accepted and for more than two hundred years all ideas of cosmogony have been based on the principles which he laid down.

CHRISTIAN WOLFF (1679–1754) is mentioned adversely by Swedenborg because he postulated simple substances or *monads* which were created out of nothing, and which he said were indivisible.

GEORGE BERKELEY (1685–1753) did not, as some have charged, deny the existence of matter, but did contend that what we can know of the external world is only what is revealed by our sensations.

EMANUEL SWEDENBORG (1688–1772) must be placed here in the chronological sequence of philosophers with whom he was acquainted; but he was probably familiar also with the writings of the two who immediately followed.

DAVID HUME (1711–1776) is considered to be one of the most important of all British philosophers. He was characterized by extreme skepticism.

IMMANUEL KANT (1724–1804) reacted strongly against the skepticism of Hume. His *Critique of Pure Reason* exerted a profound influence upon all subsequent thinkers.

Swedenborg's philosophy was similar to that of the other thinkers of his day in this, that he sought, as they did, to discover the deeper truth concerning the world and human life by the way of experience and human reason. However, Swedenborg, unlike the others, based all his thinking on the teaching of the Word. In this respect his philosophy was in accord with that of the New Church, which we would define as being a search for the true relation between the facts of science and the teachings of Divine revelation. In the Writings we now find universal principles on which we seek to base all our thinking. Because of this we enjoy a tremendous advantage which the philosophers of Swedenborg's day did not possess, and which Swedenborg himself lacked. We must bear this in mind when we pass judgment upon their efforts to penetrate the secrets of nature.

Swedenborg based all his thinking on certain assumptions or postulates by which he was sharply distinguished from the philosophers of his day. It should be noted that no one can produce any philosophy without starting from certain assumptions. There must be something fixed and positive from which to reason. Just as no surveyor can plot a chart with any meaning unless he has a bench mark to start from, a knowledge of the four quarters, and perhaps a measure of altitude above or below sea-level, so no one can successfully construct a reasoned argument without some hypothesis which is assumed to be true. The philosophers of Swedenborg's day based their reasoning on certain assumptions, the most prominent being this: that a philosophic understanding of the universe may be achieved by the exercise of human reason founded solely upon the evidence of experience, and without resort to Divine revelation. This was because they were in revolt against the dogmatic interpretations of Scripture which had been accepted by the Christian Church, and which had been insisted upon in defiance of any scientific discovery to the contrary. Swedenborg, by contrast, while ignoring the dogmas of the Church, acknowledged the necessity of Divine revelation, and based all his thinking in the first place upon the Word.

It is extremely important that we have in mind those things which Swedenborg assumed to be true, because they have a vital bearing upon our interpretation of what he wrote. I wish to call them to your attention therefore, at the outset of our enquiry, and

I would urge you to keep them actively before you in connection with what is to follow. These are not assumptions that I have merely ascribed to Swedenborg. They are quoted literally from His pre-theological works, and record what he thought as a philosopher before his spiritual eyes were opened.

SWEDENBORG'S POSTULATES

I. *That there is a God, and that He is one.*

From my fourth to my tenth year I have been even in thoughts concerning God, salvation, and man's spiritual passions. (Letter to Dr. Beyer, dated November 14, 1769. See *Letters and Memorials of Swedenborg*, Vol. 2, page 696.)

From my childhood I have not been able to admit into mind any other idea than that of one God. (TCR 16)

II. *God created and perpetually maintains the universe.*

Now as all nature—the whole mundane system, is the work of God; as all contingent circumstances, before the world was produced and completed, are to be ascribed solely to His wisdom; so also, in case He should be pleased to display by other contingent causes new phenomena, whether foreign and contrary to the nature of our world, or agreeable to it, yet such as cannot be produced by any other active principle than the Deity,—to the same Infinite Wisdom must these also be ascribed. Thus true philosophy leads to the most profound admiration and adoration of the Deity; nor can anything be found to diminish, but infinite things to increase, this admiration: as when a man sees that all things are of the Infinite, and that in respect to the Infinite he himself, as a finite being, is nothing: when also he sees that all his own wisdom and philosophy are, in respect to the Divine, in the same proportion as the finite to the Infinite,—that is, as nothing. (*Principia*, Part I, Chapter 1, pages 36, 37)

III. *In God there is nothing geometrical or mechanical, yet in Him is the cause of everything that is geometrical and mechanical.*

In a Simple, however, in which there can be nothing substantial to be put in motion, nor any medium in which motion can exist, we must conceive that instead of a mechanical and geometrical motion, such as there is between parts and in a medium, there is as it were a total or pure motion, that is to say, a state and a conatus hence arising from a similar into a similar *quasi* motion; in which is latent the one only cause and primitive force that produced all the entities subsequently existing. (*Principia* Preface page xvi)

IV. *In the created universe also there are things which are not geometrical or mechanical.*

But though the world is constituted in a mechanical manner, and is composed of a series of finite things which have their origin by means of the most various contingents; and though the world, being of such a nature, may, with the aid of geometry, be explored by means of experiment and the phenomena that exist in it; it does not therefore follow that all things whatsoever that are in the world are subject to the empire of geometry. For there are innumerable things which are not mechanical, nor even geometrical; such as the Infinite, and whatsoever is in the Infinite. Geometry is conversant only with things that are finite and have limits, and with the figures and spaces thence originating, together with their several dimensions; but that which is infinite is without and above the sphere of geometry, being regarded by it as its origin and first beginning. For the finite has its origin in the infinite without which it can neither begin nor continue to exist: to this infinite it is that everything finite has reference, not excepting geometry. Geometry, therefore, is itself subservient to that most vast Infinite, from which as from their fountainhead such an infinite number of finite things emanate, and owns that there is nothing in itself either similar or analogous to it. There is then an Infinite, which can by no means be geometrically explored, because its existence is prior to geometry, as being its cause. There are also many other things, the nature of which, though they originated from the Infinite, and began to exist together with the world, has not yet been discovered by any geometry or any reasoning philosophy: for instance, that intelligent principle which exists in animals, or the soul, which, together with the body, constitutes their life. . . . In the soul of brutes there is some idea of this intelligence: in man it is more distinct and rational: in the Infinite it is infinite, and infinitely surpasses the comprehension and sphere of the most rational intelligence. There are also many other things which occur in the world that cannot be called geometrical. Thus there is a Providence respecting all things, which is infinite in the Infinite, or in the Being who is provident in the highest degree; and there follows from hence a connection or series of consequents, according to which all circumstances are determined and arranged, by causes and the causes of causes, toward a certain end. We see from experience, and *a posteriori*, that there is such a connection of contingencies, from causes and their causates, in producing a given end; but to know the nature of this connection, *a priori*, is not within the province of man or of geometry. There are also innumerable other things which we in vain endeavor to explore by geometry and *a priori*; as, perhaps, the nature of love. We see, *a posteriori*, that it has its consistence in the connection of things; that it exists independently of the organic body; is antecedent to corporeal pleasure; and, being conjoined in the animal with intelligence, produces everything which can conduce to the preservation and continuation of its kind. The ancients regarded love as being of great moment, attributing to it the production of the universe; and many will assert that traces of intelligent love are to be found in vegetable and inanimate subjects. There are probably infinite other things, of which

we have no knowledge whatever, that own no obedience to the known laws of mechanics. Hence we may conclude, that there are qualities in the soul that are still very remote from mechanical apprehension: so that, did we even know all the mechanism and geometry of the visible world, of animal organization, vegetation, or any other department of nature, there still are infinite things with which we are unacquainted. (*Principia* Part I, Chapter 1, pages 25–28)

V. *The force that created the universe was not mechanical but was the force of love, or the Divine will.*

If then it be admitted that the first simple was produced by motion from the Infinite, we are at the same time bound to suppose, that in the producing cause there was a will that it should be produced; something of an active quality, which produced it; and something of an intelligent nature, determining that it should be produced in such a manner and in no other, or in one mode in preference to another; in a word, something infinitely intelligent, infinitely provident, infinitely active, and infinitely productive. Hence this first point could not exist by chance, nor by itself, but by something which exists by itself; in which something there must be a will, an agency, and an intelligence, to produce the effect in one mode rather than in another. There must likewise be something of a provident design, that the effect produced should be successively modified in a given series; and that, by means of a series of modifications, certain specific contingencies should take place rather than others. All these must of necessity have been in some sort present in this first mode of motion; for in respect to this single and primitive motion of the Infinite, things future and contingent can be considered in no other light than as actually present and already in existence. (*Principia* Part I, Chapter 2, Number 5, page 50)

VI. *Because there are things in the created universe which are not geometrical or mechanical, there must be a spiritual world, and in it a spiritual or "moral" sun.*

(Referring to the statement that "Nature, in respect to life, is dead." EAK Vol. II, page 224)

Hence we must look higher for its principle of life, and seek it from the First Esse or Deity of the universe, who is essential life, and essential perfection of life, or wisdom. Unless this First Esse were life and wisdom, nothing whatever in nature could live, much less have wisdom; nor yet be capable of motion. God is the Fountain of Life, the Sun of Wisdom, the Spiritual Light, the Very Esse, and I AM; in whom we live, and move, and have our being; from whom, by whom, unto whom, or for the sake of whom, are all things; who is the First and the Last. This we are forbidden by Holy Scripture to doubt; we are forbidden also by sound reason; for the ancient philosophers acknowledged it out of the mere light of their own understandings. (EAK Vol. II, number 238, pages 227, 228)

But to know the manner in which this life and wisdom flow in, is infinitely above the sphere of the human mind; there is no analysis and no abstraction that can reach so high: for whatever is in God, and whatever law God acts by, is God. The only representation we can have of it is the way of comparison with light. For as the sun is the fountain of light and the distinctions thereof in its universe, so the Deity is the sun of life and of all wisdom. As the sun of the world flows in one only manner, and without union, into the subjects and objects of its universe, so also does the sun of life and of wisdom. As the sun of the world flows in by mediating auras, so the sun of life and wisdom flows in by the mediation of his spirit. But as the sun of the world flows into subjects and objects according to the modified character of each, so also does the sun of life and wisdom. But we are not at liberty to go further than this into the details of the comparison, inasmuch as the one sun is within nature, the other is above it: the one is physical, the other is purely moral; and the one falls under the philosophy of the mind, while the other lies withdrawn among the sacred mysteries of theology; between which two there are boundaries that it is impossible for human faculties to transcend. Furthermore, by the omnipresence and universal influx of this life into created matters, all things flow constantly in a provident order from an end, through ends to an end. (EAK Vol. II, Number 251, page 236)

Now inasmuch as man is not created prone to the earth like beasts, but is endowed both with an upright mien in order to enable him to look upward to the heavens, and with a soul derived from the aura of a purer and better world, in virtue of which he is allied to heaven; let us avail ourselves of this privilege to exalt our thoughts to the regions above. Perhaps some one may observe—Supposing we do, what then? Shall we be wiser?—Alas! we are but finite beings, and the objects we survey are themselves but finite. Our wisdom therefore will be but that of a finite man; a wisdom derived from a knowledge of finite things, which must itself be consequently finite, and which therefore in relation to that which is infinite must be nothing. In this case, what remains for us to do? To let all our wisdom terminate in admiration of that Infinite Being who is the author of the finite universe; even as when our survey of a skillful piece of mechanism leads us into admiration of its maker. (*Principia*, Part III, Chapter 1, pages 231–232)

VII. *There must be an unbroken chain of connection from the outmosts of creation, even to the Infinite.*

As nature operates in the world in a mechanical manner, and the phenomena which she exhibits to our senses are subject to their proper laws and rules, it follows, that nature cannot thus operate except by means of contiguity and connection. Thus the mechanism of the world consists in contiguity, without which neither the world nor its mechanism could exist. Unless one particle were to operate both upon another and by means of another, or the whole mass were to operate by all its particles respectively, and at the same time at a distance, nothing elementary, capable of affecting or striking the

least organ of sense, could exist. Contiguity is necessary to the production of every operation. Without a perpetual connection between the end and the means, the existence of elementary nature, and of the vegetable and animal natures thence originating, would be impossible. The connection between ends and means forms the very life and essence of nature. For nothing can originate from itself; it must originate from some other thing: hence there must be a certain contiguity and connection in the existence of natural things; that is, all things, in regard to their existence, must follow each other in successive order. Thus all things in the world owe their existence to their mutual dependence on each other, there being a connection, by mediums, from ultimate to ultimate, whence all things have respect to their first source from which they derive their existence. For if all things had not respect to their first source, but only to some intermediate link, this intermediate would be their ultimate: but an intermediate cannot exist but from something prior to itself, and whatever exists from something prior to itself cannot be the ultimate, but only an intermediate; or else if it were the ultimate, the world would stop short at this ultimate and perish, because it would have no connection with its proper ultimate by something antecedent. These remarks have reference to the subject of existence. With respect to the subject of contingencies, or modes and modifications, which exist both from ultimate and simple, and from intermediate substances, neither can these be otherwise than continuous and mutually connected, depending successively on each other from one end to the other. Thus must all things, both such as are essential and such as are contingent, necessarily have a connection with their first substantial principle: for they proceed solely from simple or compound substances; and as these substances depend for their existence, mutually upon each other, it follows that the modifications related to those substances must be dependent on the same connection. (*Principia* Part I, Chapter 1, pages 20, 21)

VIII. *The chain of connection between the Infinite and the outmosts of creation is effected by a series of discrete degrees.*

By the doctrine of series and degrees we mean that doctrine which teaches the mode observed by nature in the subordination and coordination of things, and which in acting she has prescribed for herself. Series are what successively and simultaneously comprise things subordinate and coordinate. But degrees are distinct progressions, such as when we find one thing is subordinated under another, and when one thing is coordinated in juxtaposition with another: in this sense there are degrees of determination and degrees of composition. In the mundane system there are several series, both universal and less universal, each of which contains under it several series proper and essential to itself, while each of these again contains series of its own; so that there is nothing in the visible world which is not a series, and in a series. Consequently the science of natural things depends on a distinct notion of series and degrees, and of their subordination and coordination. (EAK Part I, number 580)

IX. *From a knowledge of ultimate creation it is possible to ascend to a knowledge of the higher degrees by means of doctrines which Swedenborg propounds.*

But since it is impossible to climb or leap from the organic, physical, and material world—I mean the body—immediately to the soul, of which neither matter, nor any of the adjuncts of matter are predicable (for spirit is above the comprehensible modes of nature, and in that region where the significations of physical things perish); hence it was necessary to lay down new ways by which I might be led to her, and thus gain access to her palace,—in other words, to discover, disengage, and bring forth, by the most intense application and study, certain new doctrines for my guidance, which are (as my plan shows) the doctrines of forms, of order and degrees, of series and society, of communication and influx, of correspondence and representation, and of modification; these it is my intention to present in a single volume under the title of *An Introduction to Rational Psychology*. (AK Prologue, page 11)

From these postulates we conclude that Swedenborg was set apart and distinguished from the philosophers of his day, and indeed from the scientific philosophers of our own day, by his attitude of profound humility before the Divine Creator, and by his insistence that this Divine Being is the actual creator, the actual preserver, and the immediate cause of all created things, and that no genuine philosophic answer to the questions that confront every one who essays to investigate the underlying truth of nature, can be discovered without acknowledging this, and taking it into consideration.

LECTURE II

THE PROCESS OF CREATION IS NOT PURELY MECHANICAL

We have defined New Church Philosophy as the search for the true relationship between the facts of nature and the truths of Revelation. The discovery of this relationship is now possible as never before because the Lord has made His second coming, and has brought the Divine Natural within the grasp of man's rational mind. Is not this what is meant when it is said that "Now it is permitted to enter intellectually into the mysteries of faith"? (TCR 508) Before His Advent the Lord was present with man and angels in the two prior degrees, the celestial and the spiritual;

but He was present in the natural degree only in potency. We take this to mean that although the Lord was actually omnipresent in His creation, even to its lowest ultimates; and although His presence there was known and acknowledged from perception; yet how He was present there was not known. He was not seen in the operations of nature. He was known and worshipped as the Angel of Jehovah who appeared in spiritual vision; but He was not seen as a Man on earth. He could not be known as the risen Lord Jesus Christ who is the Divine Human, in whom was fulfilled the prophecy of the Apocalypse: "Behold, the tabernacle of God is with men, and He shall dwell with them, and they shall be His people, and God Himself shall be with them, and be their God." (Rev. 21: 3)

When He came into the world and glorified His Human, the Lord took to Himself the power to reveal His presence in nature, to make known the relation between the spiritual and the natural worlds, and thus to disclose the laws of His providence, and the modes of His operation for the regeneration and salvation of man. For this reason it is said that now, for the first time, He can be worshiped as a visible God, an Infinite Divine Man.

Even though the Second Advent had not yet taken place, the search for this relationship was the inmost purpose and the distinguishing characteristic of Swedenborg's philosophy. As we have pointed out, Swedenborg lived at the beginning of the scientific era, when men first began to consider factual evidence as the paramount requirement in the search for truth. Philosophers tried for the first time to explain the origin and the nature of the world by logical deduction from the facts of experience and experiment. Although they professed a belief in religion, and in this were quite sincere, they did not base their investigations or their theories on the dogmas of the Church, nor did they reason from religious principles. They believed that everything super-natural was mysterious, miraculous, and unknowable, and that it stood in no understandable relation to the things of physical sensation. Swedenborg, on the other hand, believed that while things supernatural were transcendent, they were nevertheless the actual cause of natural things, and that, because of this there must be a discoverable relation between the two. To demonstrate this relationship was the whole purpose of his philosophy.

In regard to the origin of all things, the philosophers of Swedenborg's day adopted various theories :

Spinoza postulated an original substance from which all things were derived ; but he did not attempt to define that substance, or to explain how it came into being.

Leibnitz said that matter was the product of motion, but left unanswered the question as to what kind of motion it was, or what force propelled it.

Euclidian Geometry was based on the idea that all things arose from a mathematical point of no dimension. As this point moved it produced a line of one dimension, namely length. As the line moved it produced a plane of two dimensions, length and breadth. And as the plane moved it produced a solid of three dimensions, length, breadth, and thickness. According to this theory the universe was created out of nothing, since a point of no dimension is nothing. Nor did the theory include the concept of any power capable of moving the point.

Wolff supposed that there were "monads" or "simple substances" which were uncreate, and thus present from the beginning, and which he said were indivisible.

None of these philosophers suggested any part that God might play in the process of creation, or in the operation of the created universe, but attempted to explain everything by the exercise of human reason unaided by Divine Revelation. Swedenborg, on the other hand, began, as we have already pointed out, with the assumption, not only that God exists, but that He is the actual Creator of the Universe, and that He created all things from love by wisdom, and thus with a definite end or purpose in view. Swedenborg accepted the necessity of basing all his reasoning on factual evidence ; but he insisted upon interpreting this evidence in accord with the principles of religion derived from the Word. His oft-repeated purpose was to check the trend toward skepticism, unbelief, and atheism, which was so apparent in the thinking of his day, by proving the existence of the soul, and inmosty the existence of an immanently present God, on the basis of factual evidence.

These pages of mine are written with a view to those only who never believe anything but what they can receive with the intellect ; consequently, who boldly invalidate, and are fain to deny the existence of all super-eminent

things sublimer than themselves, as the soul itself and what follows therefrom—its life, immortality, heaven, *etc.* These things, perhaps, since such persons do not perceive them, they reject, classing them among empty phrases, *entia rationis*, phantasms, trifles, fables, conceits, and self-delusions; and consequently they honor and worship nature, the world, and themselves; in other respects, they compare themselves to brutes, and think that they shall die in the same manner as brutes, and their souls exhale and evaporate; thus they rush fearlessly into wickedness. For these persons only I am anxious; and as I said before, for them I indite, and to them I dedicate my work. For when I shall have demonstrated truths themselves by the analytic method, I hope that these debasing shadows, or material clouds, which darken the sacred temple of the mind, will be dispersed: and thus at last, under the favor of God, who is the sun of wisdom, that an access will be opened, and a way laid down to faith. My ardent desire and zeal for this end is what urges and animates me. (*AK Prologue* pages 14, 15)

This being the case it is obvious that Swedenborg had to present his case in the language, and the only language, which those to whom it was addressed were able to understand. This explains why, to all appearance, he sets forth the whole of creation in terms of geometry and mechanics.

Swedenborg agrees with Leibnitz that all creation is the product of motion; but he differs from Leibnitz in holding that the origin of all motion is in the Infinite, that is, in God, and indeed in the Divine love. In the Infinite, he says, there is only "pure and total" motion, by which he implies that it is motion without limit and without direction, yet containing the potency of all limited and directional motion, being in the nature of a "conatus" or endeavor to motion. The first proceeding from this "conatus" he calls the "first natural point." The mental picture of how this "point" is formed is that of a whirlpool within the Infinite Substance—a whirlpool that produces a point, which is said not to be finite because it has only one limit, and according to Swedenborg's philosophy, nothing can be called finite which does not have at least two limits. This first natural point differs from the mathematical point, which is said to have no dimension, in that it does have one limit. It is said to be intermediate between the Infinite and the finite in that, although it is infinite, it still is pointing, or looking toward the finite. It differs from the "monads" of Wolff, which were said to be solid and indivisible, in that it is infinitely active, and contains all things within it in potency. If we think of this in a human way, rather than as something purely mechanical, we

can regard it as the Divine intention, the focusing of the Divine love upon the supreme end or purpose of creating a heaven from the human race. This Divine love contains all things within it in potency because it has within itself the infinite wisdom required to produce all things essential to the achievement of its purpose.

Swedenborg, however, describes the first natural point as if it were purely mechanical. He postulates that it is endowed with a motion which, once started, cannot fail to continue producing new motions. Thus he describes the point as having a local motion, or a motion in space which produces a perpetual spiral. That is, it moves in a helix like the thread of a screw, but a helix that turns in upon itself, and in so doing produces a global figure flattened at the poles. Furthermore, this motion does not return to the point from which it started, but to a point slightly removed therefrom, and so doing it tends to put the entire globe into a local motion that produces another perpetual spiral, much larger, and much slower than the first. The first globe is called the "first finite" and the second one the "second finite." If we accept this description literally we must come to the conclusion that Swedenborg is postulating a purely mechanical, and geometrical universe. Consider for instance the following statement:

Geometry, therefore, and mechanism, in relation both to the parts and to the whole of a body, and also in relation to the world itself, consists in this, that the first figure of motion, state and conatus is spiral; and that by virtue of such a figure there succeed a motion of the whole composite, or an axillary motion; a motion of its parts, or a progressive motion: and lastly, from or by virtue of these, a local motion. Such is the sum of our whole work and of its principles; and such the cause of all the parts and compositions in our mechanical world. (*Principia* Part I, Chapter 2, page 67)

By "axillary motion" is meant a turning of the globe on its axis, even as the earth turns to produce night and day. By "progressive motion" is meant the motion of the point in successive circles that progress from one to the other until they almost meet at the point from which they started. And by "local motion" is meant the motion of the entire globe in another vortex, similar to the first but much larger. Furthermore, Swedenborg says:

That the first substantial is geometrical; that it is limited, but limited in its least and fewest boundaries. This follows from what has been said, since it is the least finite; being finited or limited in its least boundaries. It follows also that it is the least geometrical finite. Nothing is geometrical

which has not limits; for geometry treats of the variations pertaining to limits, together with the limits themselves. Geometry, therefore, begins with this first finite; whence this first is likewise the least geometrical finite. (*Principia* Part I Chapter 3, page 75)

There are indications, however, even in the *Principia* that when Swedenborg refers to the figure of this first finite he has in mind something which can be called geometrical only in potency, or by analogy, for he says :

In the series of finites there cannot possibly be a more perfect figure than that of the finite which comes proximately from the most simple, or from points; which cannot admit into themselves anything but what is most perfect, because they exist immediately from the Infinite. Now if the figure of this finite be the most perfect of all finite figures, then a more perfect figure will be that of the simple. (*Principia* Part I Chapter 3, page 76)

Note that while the first finite is said to be the beginning of geometry, the "simple" or the first natural point is said to have an even more perfect figure. Since this "point" is above all geometry, it can have "figure" only by analogy.

That there is a higher or more interior form which may by analogy be called geometrical or mechanical is stated elsewhere as follows :

Men doubt concerning God because they are ignorant of the soul, and doubt its existence. Moreover, if a thing is mechanical, they think that therefore it will perish. The soul is indeed mechanical, but there is a mechanical which cannot perish; and if this were shown, I do not think so much doubt would arise. From preconceived ideas, men think that mechanically a communion of souls is [not] possible, and this because they cannot suppose the soul to be mechanical; but if they know, they will think differently. They say that spirits are not material or mechanical, and that therefore they ought to doubt concerning their existence,—at which I do not wonder. For spirits are created, and consequently are finite and not infinite; and therefore, since, according to the common opinion, spirits are neither finite nor infinite; and since men know of no third possibility; therefore, being unable to have any conception of them, they come to denial, the refuge and last boundary of ignorance. Since they do not know that the soul can enjoy a most subtle sense,—a sense of things deeply concealed,—therefore, being ignorant, they deny; if this were to be shown of the soul they would not deny. With the opening of the mechanism of the soul, they will come to know the nature of the soul in life, its nature as formed in life by means of the body, and what its nature, thus formed, will be after death. They will come to know that the soul can derive its origin only from the Infinite, in whom is the cause of every finite,—a fact which spirits themselves know, and which consequently they highly venerate. (*Psychologica* Number 52)

If it is shown in this way that the soul and its operations are a mechanism, not only is the doubt removed which we entertain concerning the soul and its existence and immortality, but we shall then be able to make further progress and to learn the nature of the memory, the intellect, the imagination, and the passions of the animus and body, all which are most utterly unknown to us because we do not know the mechanism [of the soul and its operations].

Therefore we doubt concerning the existence of the soul and its immortality; for we reason so grossly as to suppose that everything which is mechanical will perish; that everything of this nature will rot away; that everything of this nature is subject to change;—as though there were not a mechanical which can never perish, and which is immortal. (*Psychologica* Number 116)

It is further stated that this higher kind of mechanical and geometrical, which is ascribed to the soul or spirit, has none of the attributes of matter, but is purely spiritual.

Since it is impossible to climb or leap from the organic, physical, and material world—I mean the body—immediately to the soul, of which neither matter nor any of the adjuncts of matter are predicable, (for spirit is above the comprehensible modes of nature, and in that region where the significations of physical things perish); hence it was necessary to lay down new ways by which I might be led to her, and thus gain access to her palace,—in other words, to discover, disengage, and bring forth, by the most intense application and study, certain new doctrines for my guidance, which are, (as my plan shows) the doctrines of forms, of order and degrees, of series and society, of communication and influx, of correspondence and representation, and of modification; these it is my intention to present in a single volume, under the title of *An Introduction to Rational Psychology*. (AK Volume I Prologue, page 11. See also *Rational Psychology*, Preface, page 3)

Finally, Swedenborg's contention is, that from a knowledge of natural things, that is, of geometry and of mechanics, spiritual things can be inferred and understood by analogy.

Inasmuch as the soul is the model, the idea, the first form, the substance, the force, and the principle of her organic body, and of all its forces and powers; or, what amounts to the same thing, as the organic body is the image and type of its soul, formed and principled to the whole nature of the soul's efficiency, it follows, that the one is represented in the other, if not exactly, yet quite sufficiently to the life; and that an idea of the soul is suggested to the mind by elevating the forms of singulars, and extracting from them a higher meaning, and by analogies and eminences, as will be seen in our doctrine of forms, of order and degrees, of correspondences and representations, *etc.* Thus, by the body we are instructed respecting the soul; and by the soul respecting the body; and by both respecting the truth of the whole: and in this way we are led to an ample knowledge of the animal kingdom. (AK Prologue, page 13)

In the light of these quotations the conclusion is inescapable, that although in the *Principia* Swedenborg describes the process of creation in terms of motion producing geometrical figures, yet, back of all this is something deeper, namely, the acknowledgment that God, or the Infinite, is not mechanical or geometrical, although He is the source of both; and also that there is a soul and a spiritual world in which it lives that is purely spiritual, possessing none of the attributes of matter, and yet possessing something which is wholly analogous to the geometrical and the mechanical. In spite of the appearance to the contrary, we cannot possibly believe that Swedenborg intended to convey the idea that energy, mechanical motion, or dead force was the origin of all things. The conclusion is unavoidable that he was speaking philosophically in adaptation to the natural-minded men to whom his writings were addressed, and therefore couched his thought in terms of mechanical motion and geometrical figure. But looking more deeply into his thought, it becomes perfectly evident that he regards this mode of speech merely as a means of helping men to picture the spiritual activity of love. Therefore he describes the first natural point as a finiting motion in the Infinite Substance; yet he insists that this motion is the living origin of all created things. He ascribes to it a goal, a purpose, and a love that embraces the entire universe. He endows it with wisdom to achieve that purpose; and because of this, he thinks of it, not as a mechanical force, but as the spiritual activity of the Divine love. This is specifically stated in the *Principia* as follows:

No rational and intelligent philosopher can deny that the first *ens* was produced from the Infinite, as well as the rest in succession, or all the parts of which the world is composed. . . . Nothing can exist without a cause except the Infinite. . . . What is finite, therefore, takes its origin from what is infinite, as an effect from its cause, and as a thing limited from what is in itself unlimited, yet having the power to limit all other things. Whatsoever of a finite nature was produced, could not be finited by itself; nothing finite can exist by itself, because it must needs be finited before it exist; and if so, it must be finited by something else: whence it follows, that a finite must necessarily exist by that which has the power of finiting it, and which of itself is infinite. (*Principia*, Part I, chapter 2, pages 46, 47)

The Holy Scriptures themselves also give us plain information on this subject, and teach us that the world was created by God, and by the Infinite; that it was created successively: that it was created in time; and that the Infinite is an *Ens* in itself, that it is an *Esse* which is, that it is all in all, that it is the universe. (*Principia* Part I, Chapter 2, page 49.)

Rational philosophy will not admit that anything can exist without a mode; and since a mode in things limited and finite, or in things physical, consists solely in the variation of limits, it therefore follows that nothing can exist without motion. Whatever is void of motion remains just as it is: that which is in a quiescent state produces nothing: whatever is to be produced, must be produced by a mode or by a motion: whatever is to undergo change, must be changed by a motion: for without motion or change of place, or to speak more generally, without a change of state, no new existence, no production, no contingency can be conceived; in other words, nothing is capable either of existence or of change, except by means of motion. It follows therefore that this first simple *ens*, or point, was produced by motion: and since everything is derived from the Infinite, it follows also that this natural point, or simple *ens*, was produced by motion from the Infinite. (*Principia* Part I, Chapter 2, pages 49-50)

If then it be admitted that the first simple was produced by motion from the Infinite, we are at the same time bound to suppose, that in the producing cause there was a will that it should be produced; something of an active quality which produced it; and something of an intelligent nature, determining that it should be produced in such a manner and in no other, or in one mode in preference to another; in a word, something infinitely intelligent, infinitely provident, infinitely active, and infinitely productive. Hence this first point could not exist by chance, nor by itself, but by something which exists by itself; in which something there must also be a will, an agency, and an intelligence, to produce the effect in one mode rather than in another. There must likewise be something of a provident design, that the effect produced should be successively modified in a given series; and that by means of a series of modifications, certain specific contingencies should take place, rather than others. All these must of necessity have been in some sort present in this first mode and motion: for in respect to this single and primitive motion of the Infinite, things future and contingent can be considered in no other light than as actually present and already in existence. (*Principia* Part I, Chapter 2, page 50)

THE NEW PHILOSOPHY

VOL. LXVII

JANUARY-MARCH, 1964

No. 1

LECTURES ON THE PHILOSOPHY OF SWEDENBORG'S *PRINCIPIA*

GEORGE DECHARMS

LECTURE III.

CREATION BY MEANS OF MOTION. VARIOUS INTERPRETATIONS OF SWEDENBORG'S PHILOSOPHY

We have expressed the opinion that Swedenborg, when he wrote his *Principia*, thought of the first natural point as the activity of the Divine love proceeding to create, even though he describes it in terms of mechanical motion. We indicated that he must have done this in adaptation to the understanding of the natural philosophers for whom his writings were especially intended. But there was another and an even more important reason why he did this, namely, because no one can conceive of anything apart from the appearances of the senses. It was essential, therefore, that, in treating of spiritual and Divine things, he should provide a mental picture, in terms of time and space, as the only means of conveying to the mind of the reader a tangible idea. That spiritual truth cannot be taught in any other way, the Writings clearly testify.

Things that are Divine, or that are infinite, are not apprehended except from finite things of which man can form some idea. Without an idea derived from finite things, and especially an idea from things of space and time, man can comprehend nothing of Divine things, and still less of the Infinite. Without an idea of space and time man cannot have any thought at all; for in respect to his body he is in time, and thus in respect to his thoughts which are from the external senses; whereas the angels, not being in time and space, have ideas of state, and therefore spaces and times in the Word signify states. (AC 3938)

Nevertheless, we are taught that from natural ideas spiritual things can be understood, as in the following passage :

The Divine is not in space. That the Divine, namely God, is not in space, although the Divine is omnipresent, and with every man in the world, and with every angel in heaven, and with every spirit under heaven, cannot be comprehended by a merely natural idea, but may by a spiritual idea. It cannot be comprehended by a natural idea, because there is space in that idea ; for it is formed out of such things as are in the world ; and in each and all of these things, which strike the eye, there is space. Everything great and small there is of space ; everything long, broad, and high there is of space ; in short every measure, figure, and form there is of space. It has therefore been said that by a merely natural idea it cannot be comprehended that the Divine is not in space, when it is said that it is everywhere. A man, nevertheless, may comprehend this by natural thought, provided he admits into it something of spiritual light. We shall therefore first of all say something concerning the spiritual idea, and the thought therefrom. A spiritual idea does not derive anything from space, but it derives its all from state. State is predicated of love, of life, of wisdom, of the affections, of the joys thence ; in general it is predicated of good and truth. A truly spiritual idea of these things has nothing in common with space ; it is higher, and beholds the ideas of space under it, as heaven beholds the earth. But as angels and spirits see with eyes equally with men in the world, and objects cannot be seen except in space, therefore in the spiritual world where angels and spirits are, spaces appear similar to the spaces on earth ; and yet they are not spaces, but appearances. Thus they are not fixed and settled as on earth ; they can be lengthened and shortened ; they can be changed and varied ; and so because they cannot be determined by measure, they cannot in that world be comprehended by any natural idea, but only by a spiritual idea. And the spiritual idea concerning the distances of space is the same as concerning the distances of good or the distances of truth, which are affinities and similitudes according to their states. (DLW 7)

We would point out that, according to this teaching, although there are no measurable spaces in the spiritual world, there are distinctions there which cannot be comprehended except according to the appearance of space. Nevertheless, man, if he thinks spiritually, does not rest in the appearance, but regards it merely as a means of grasping the idea of spiritual distinctions. Therefore, man can comprehend spiritual spaces and times by natural thought, provided he admits into it something of spiritual light ; and indeed, apart from natural thought, nothing whatever can be comprehended.

Concerning the importance of natural science as a means of providing sensual ideas on which spiritual concepts may be based, we read :

In this fourth part the creation of the universe by God will be treated of. The reason why these and the former subjects are treated, is, that the angels have lamented before the Lord, that when they look into the world they see nothing but darkness, and among men no knowledge of God, of heaven, and of the creation of nature, for their [angelic] wisdom to rest upon. (DLW 284)

We take this to mean that they see no natural ideas into which something of spiritual light is admitted, but only ideas confined to physical space and time. This is because modern scientific thinking concerning the nature of the universe, concerning outer space, concerning evolution, is completely divorced from religion. Everything is understood in terms of time, space, geometry, and mechanics, with no suggestion of purpose, or of wisdom as having any part in the structure of the universe. Swedenborg, on the other hand, was attempting to provide natural ideas that would be open to the concept of Divine love and wisdom as the creating and sustaining force back of all things. It is our belief that he did not himself rest in the natural ideas of mechanics and geometry, but from them as appearances lifted his thought into the realm of what is spiritual, even as the angels do when they look upon the objects of their world. This we think applies especially to what he writes concerning the first natural point, the first and second finites, and the first aura, all of which were prior to the creation of the natural sun.

It is important to note, however, that even on the plane of geometry and mechanics, Swedenborg's description of how the universe was created provides a rational explanation of how God could be the actual Creator of the universe, and yet could remain totally distinct from that which He created. He shows how God can be omnipresent in His creation, and at the same time avoids the error of pantheism. He teaches that the universe was not created out of nothing, but out of the Divine substance; not by producing some new or different kind of substance, but solely by creating limits. God is infinite, that is, He has no limit. Whatever, therefore, is limited is the very antithesis of God. The entire universe consists of nothing but limits, and therefore it is outside of God. It is just what God is not. Nevertheless, because these limits are created within the Divine substance; because they are being perpetuated moment by moment by the immediate activity of

God, therefore God is omnipresent throughout His universe, without in the least being limited thereby. A partial explanation of how this is possible may be seen in this simple experiment: If one has a piece of lighted punk in a dark room, and spins it round very rapidly, it will create the appearance of a ring of light. This circle encloses a space, and describes a limited area; yet in reality there is nothing there except a single point of light. If we could imagine this circle, not returning upon itself, but to a point slightly removed from the point of origin, it would create the appearance of a spiral, like the thread of a screw. And if now we could imagine this spiral turning in upon itself to form a circle of spirals, it would produce the appearance of an orb flattened at the poles. Yet even then there would be nothing there except a single point in rapid motion. Swedenborg's postulate is that all things in creation are produced by motion within the infinite substance—by the first natural point producing the first finite; by the first finite producing the second finite; and by the two together producing the first aura, all by a motion that turns in upon itself and creates limits, or boundaries. Now note in this connection the scientific fact that all material things consist, in the last analysis, of motion, or of pure energy. The atoms, of which all substances consist, when minutely examined, are found to contain electrons, protons, and neutrons in motion so rapid as to be beyond all imagination. The whole interior of each atom can only be described as a "field of force."

Now I would ask the question as to whether God, in accommodating His infinite life to reception of men and angels, may not produce limited forms of love and wisdom in a corresponding way? This is pure conjecture, and I know of no direct statement to substantiate it in the Writings; but how else can we understand what is there taught concerning the atmospheres, as in the following number?

As regards the atmospheres, which are called ethers and airs, they are alike in both worlds, the spiritual and the natural, with this difference, that those in the spiritual world are spiritual, and those in the natural world are natural. The former are spiritual because they exist from the sun which is the first proceeding of the Divine Love and the Divine Wisdom of the Lord, and from Him receive in themselves Divine fire which is love, and Divine light which is wisdom, and carry down these to the heavens where

the angels are; and cause the presence of that sun in the greatest and in the least things there. The spiritual atmospheres are discrete substances, or least forms, originating from the sun; and as they each singly receive the sun, therefore the fire of the sun, divided into so many substances or forms, and as it were enveloped by them, and tempered by these envelopments, becomes heat adequate at last to the love of the angels in heaven, and of the spirits under heaven. So likewise the light of the sun. The natural atmospheres are similar to the spiritual atmospheres in this respect, that they also are discrete substances and least forms, originating from the sun of the natural world; which also singly receive the sun and store up its fire in themselves, and temper it, and carry it down as heat to the earth, the dwelling-place of men; and in like manner the light. (DLW 174)

The cosmogony of the *Principia*, however, may be, and indeed has been, very differently interpreted by different New Church scholars. Each one has based his interpretation on certain specific statements which he has regarded as the key to unlock the understanding of all the rest. He has therefore interpreted everything in accord with this key. To do this is perfectly legitimate, and indeed without some primary assumption, as we have already pointed out, no solution could ever be found. By doing this each separate student has contributed something of great value to the thought of the Church. Yet every such interpretation falls short of an explanation that satisfies all the requirements of both the Writings and the philosophical works. Every explanation to date has left unanswered many important questions, and has involved ideas that contradict the plain statements of revelation. This is just as true of my own attempts to understand the real meaning of the *Principia* doctrine in its relation to the teaching of the Writings. For this reason I claim no more than to be one of those famous blind men of Hindustan, who drew plausible conclusions from an altogether inadequate fund of knowledge. In spite of these deficiencies, I believe it is important to examine every suggested solution, to compare them all, not in any spirit of controversy, but with a view to the benefit that is to be derived from each one. How else can we help one another to correct our mistakes, and to gradually increase our knowledge, and perfect our understanding? I believe this process must go on for a long time before the complete answer can be discovered.

Among those who have made a valuable contribution to the study of Swedenborg's philosophy are the following:

The late Rev. R. W. Brown carefully examined Swedenborg's works in their relation to the known laws of Euclidian mathematics, and Newtonian physics, pointing out certain obvious discrepancies. In so doing, he performed a valuable service by insisting that we base our thought on accurate scientific knowledge, rather than yield to the natural temptation to build up imaginary theories devoid of any demonstrable foundation. Mr. Brown, however, did not attempt any general correlation of Swedenborg's earlier works with the Writings.

Professor C. R. Pendleton made a special study comparing Swedenborg's first natural point with the point of Zeno, distinguishing the man who proposed this point from other historic characters by the name of Zeno, and giving the background of philosophic thought which must have been known to Swedenborg, and out of which his concept of the point must have arisen. In another learned treatise Dr. Pendleton endeavored to explain what Swedenborg meant by space and time, or by extense and duration in the spiritual world. Here again he has contributed something of unquestioned value to the thought of the Church by calling our attention to important factors in the historic development of the philosophic concept of space and time—factors which could hardly help having some influence upon Swedenborg's thought.

The late Bishop Alfred Acton, who is greatly revered for his profound scholarship in connection with the study of Swedenborg's life, and for his keen insight in matters both of philosophy and of doctrine, undertook to formulate a correlation of the philosophical works with the Writings, based on two fundamental hypotheses. The first of these was that the natural point of the *Principia* was in fact the first proceeding from the Infinite; and the second was that this point was actually the beginning of nature, as its name implies, and that to it must be ascribed all the properties of material things, because it is finite and created; and nothing, he contended, could exist in finite form that does not possess the essential attributes of matter. Therefore he ascribed to the point the beginning of motion in space; and he assigned mechanical energy and geometric figure to the first finite, the second finite,

and the first aura of the *Principia*, even as Swedenborg obviously appears to do. Bishop Acton held, therefore, that the spiritual atmospheres spoken of in the Writings were so called, not because they differed in kind from the natural atmospheres, but because they performed a different use, namely, to transmit love and wisdom instead of natural heat and light to angels and to men. In accord with this reasoning he held that there is only one created world, namely the natural world, and that the phenomenal spiritual world is uncreate. The spiritual world, he said, consists of appearances produced by the influx and reception of the Divine of the Lord by angels and spirits. This of course is in accord with the direct teaching of the Writings that all the objects of the spiritual world are appearances of the states of spirits and angels. According to this theory, the spiritual sun itself, regarded as to its least constituent parts, must be the beginning of nature, and therefore must be mechanical and geometrical, for the Writings distinctly teach that it is finite. Thus we read :

God is infinite, that is, not finite; since He Himself, as the Creator, Former, and Maker of the universe, gave finiteness to all things; and this He did by means of His sun, in the midst of which He is, and which is constituted of the Divine essence that goes forth from Him as a sphere. There, and from that, is the first of the finiting process, and its progress reaches even to the outmost things of the world's nature; consequently in Himself God is infinite because He is uncreated. To man, nevertheless, because he is finite, and thinks from finite things, the infinite seems to be nothing; and therefore he feels that if the finite which adheres to his thought should be taken away, what would be left would amount to nothing. And yet the truth is that God is infinitely all; and man of himself in comparison is nothing. (TCR 29)

The postulates adopted by Dr. Acton are entirely legitimate as a starting point from which to reason. And the conclusions he has drawn from them are altogether logical. Indeed they are the only conclusions that could be drawn. Yet they appear, to our mind, to run counter to certain specific teachings of the Writings, and this fact leads me to the view that further study is necessary before a completely satisfactory answer to the problem of correlation is found.

Dr. H. L. Odhner has proposed an altogether different interpretation, based on the following premises :

1. That there is a created spiritual world, consisting of finite or limited spiritual substances.

2. That Swedenborg, prior to his intromission into the spiritual world, had no knowledge whatever of such a world, although he believed in its existence.

3. Because he did not know anything about that world, he thought of it in terms of the Infinite, or of a *conatus* to motion.

4. Therefore *Dr. Odhner* considered the first natural point of the *Principia* to be, as *Bishop Acton* also thought, the actual beginning of nature, and as producing the natural sun in a universal aura that was natural.

5. Whatever was prior to this, *Dr. Odhner* believed, was identified in Swedenborg's mind, at the time when he wrote the *Principia*, with the Infinite, and for this reason it could be said that the first natural point was the first of finition, although it actually came into being subsequent to the creation of the spiritual sun, and the three spiritual atmospheres of the Writings.

6. The entire spiritual world, therefore, must have been regarded by Swedenborg at that time as something unknown, so that the creation of the natural world had to be explained without reference to it.

This also, like the theory propounded by *Bishop Acton*, is an entirely logical and legitimate conclusion drawn from the premises.

My own view, as indicated by what has already been presented, is based on the following premises :

1. That Swedenborg, from the very beginning, knew that there was a spiritual sun, and from it a spiritual world.

2. He knew that that sun, and that world, were discretely different from the world of nature.

3. He believed, nevertheless, that from an accurate knowledge of the material world there could be derived by analogy a correct idea of spiritual things.

4. This must be so, he argued, because the spiritual is the

cause of the natural, and must contain in potency every quality and characteristic of the natural.

5. Wherefore he hoped, by discovering certain doctrines, such as those of discrete degrees, of forms and modifications, and of correspondences and representations, that he could lead even the natural-minded skeptic to acknowledge God and the immortality of the soul.

6. I have taken for granted, therefore, that when Swedenborg spoke of the first natural point, he really regarded it as the first proceeding from the Infinite.

7. Although he described it in terms of geometry and mechanics, he nevertheless acknowledged that it must be produced by the Divine love and wisdom of the Creator.

8. In speaking of the first and second finites, therefore, he was trying to describe, in philosophic terms, how the Divine proceeded to create the spiritual sun. In confirmation of this, we read in *The Intercourse Between the Soul and the Body* number 5:

Spiritual things cannot proceed from any other source than from love, and love cannot proceed from any other source than from Jehovah God, Who is love itself. Wherefore the sun of the spiritual world, from which all spiritual things flow forth as from their fountain, is pure love from Jehovah God, who is in the midst of it. That sun itself is not God, but is from God, and is the nearest sphere around Him, from Him.

9. When Swedenborg spoke of the universal aura, therefore, we believe that he had in mind an aura of the spiritual world. Only with the formation of the third and fourth finites, by the compression of this first aura, did he intend to depict the creation of matter, that is, of a seemingly dead resistant substance, excited into incandescence by actual motion in space. Only after these resistant finites had been brought into existence could natural atmospheres be formed to convey natural heat and light to the surface of the earth.

Now this also is a legitimate conclusion drawn from the postulates which I have assumed to begin with. Those postulates are based on what Swedenborg himself writes prior to his intromission into the spiritual world. That it raises many questions which I cannot answer, I freely admit, as also that in certain respects it appears

to controvert specific statements to be found in the philosophical works. I claim it to be no more than an hypothesis; but I contend that it can be substantiated just as logically as can either of the other two theories.

On the basis of this hypothesis I have taken for granted that, although Swedenborg described the first and second finites, even as he described the first natural point, in terms of geometry and mechanics, he was, in his own mind, ascribing to these two also living qualities of love and wisdom. Accepting this view, I have associated them in my mind with what the Writings describe as the "two radiant belts surrounding the spiritual sun." Certainly they were the first two successive degrees of the Divine Proceeding. They are so described in the *Principia*, and the fact that they are depicted as geometrical figures, moved by a mechanical force, does no more than present a natural picture on which may be based a spiritual idea of the Divine Proceeding to create by means of love and wisdom. They may then be regarded as that "natural idea" from which one may comprehend spiritual spaces and times, "provided he admits into it something of spiritual light." (DLW 7)

That Swedenborg could not, at the time when he wrote the *Principia*, ascend from this natural idea to anything like a full understanding of the spiritual truth later to be revealed to him, is of course admitted. Yet we conceive that he knew there must be this more interior idea—an idea which in some way must correspond to the geometric and mechanical picture he was drawing. This must have been the case, because he was well aware that he was really speaking of creation by Divine love and wisdom, and not by a purely mechanical process. Is there some intimation of this in his statement, made after his illumination, that on looking back upon his *Principia* he was astonished to note how closely it was in accord with revealed truth?

In accord with this same point of view I have been led to consider the first aura, which was formed by the interaction of the first and second finites, as a universal spiritual aura, proceeding from the spiritual sun. This aura is said to consist of "bullae" formed of second finites passive, serving as a shell or covering around a central space in which are first finites active. The picture presented to the mind is that of a geometric figure impelled by a mechanical force; but to me it can suggest the conjunction of love and wisdom by which alone the Divine life can be adapted to the

actual task of creating a world in which human beings might live. By the conjunction of love and wisdom we here mean the conjunction of an active and a passive. This conjunction, Swedenborg teaches, is necessary to the production of all things in the universe. Here the "passive" is represented by the shell of each bulla; but the passivity of this shell is only relative. It is formed by the second finites being linked together pole to pole, which linkage restricts their free motion. Nevertheless, they are described as forming a highly elastic covering around an intensely active center. Thus the two together may be thought of as producing a living atmosphere which may be contrasted with the natural atmospheres, whose shell or covering is composed of third finites, these being hard and resistant.

The *Principia* describes how the hard and relatively dead third finites are formed from the first aura. The mental picture given is of a large mass or extent of first aura bullae, with first and second finites active filling the interstices between them. But in a certain area, these active finites tend to expand their gyrations, and to press against the surrounding bullae of the aura. This pressure clears a global space which, as it gradually enlarges, tends to crush the bullae nearest the surface of this active globe. At length the pressure becomes so great that the bullae are broken down, the actives in their center are released, and the second finites which had formed the shell are compressed into a hard and resisting mass called the third finite. Thus first arose that apparently inert and dead substance which we call "matter." That this "deadness" is only an appearance scientific analysis clearly demonstrates. For when the atoms, or least parts of material substance, are closely examined, it is found that interiorly they are intensely active, so intensely, in fact, that they can exert forces of unimaginable power. All appearance of inactivity disappears, and what is left is what can only be described as a "field of force," or "atomic energy."

According to the *Principia* the natural sun is composed of these third finites. It must be understood, however, that as they exist in the sun these substances are in the form of gases, stirred to such activity that they become incandescent, and appear from the earth as the fire of the sun. This activity of the third finites, however, is imposed from without; for these finites themselves are said to be solid, hard, and inert. In this respect they differ from the first and

second finites, which are pictured as being inherently active. This suggests to us what the Writings say is the difference between the spiritual sun, and everything that proceeds from it, and the natural sun and everything that proceeds from this.

Nature and life are two distinct things. Nature has its beginning from the sun of this world, and life has its beginning from the sun of heaven. The sun of the world is pure fire, and the sun of heaven is pure love. That which proceeds from the sun that is pure fire is called nature; and that which proceeds from the sun that is pure love is called life. That which proceeds from pure fire is dead, but that which proceeds from pure love is living. This shows that nature in itself is dead. (AE 1207)

Compare this with the following from Swedenborg's earlier works :

God is the Fountain of Life, the Sun of Wisdom, the Spiritual Light, and the very Esse and I AM . . . (EAK Vol. 2, no. 238)

As the [natural] sun is the fountain of light and the distinctions thereof in its universe, so is the Deity the sun of life and of all wisdom. As the sun of the world flows in one only manner, and without unition, into the subjects and objects of its universe, so does the sun of life and of wisdom. As the sun of the world flows in by mediating auras, so the sun of life and wisdom flows in by the mediation of his spirit . . . the one sun is within nature, the other is above it: the one is physical, the other purely moral; and the one falls under the philosophy of the mind, while the other lies withdrawn among the sacred mysteries of theology. (EAK Vol. 2, no. 251)

Concerning the nature of the third finite we read :

By means of compression the elementary particles retreat into a less space, and as it were into themselves; . . . in their highest state of compression they more and more divest themselves of their elementary nature, and more and more become like a finite; until the whole of their elementary nature becomes changed into that of a finite, their elastic into a hard nature, and their highly yielding into a stubborn resisting nature. Now this can occur in no other place than round the large active space, in its vortex. (*Principia* Part I, Chapter 8, page 192)

To say that this number implies that the substance which is compressed to form the surface of the natural sun is dead, as compared with the substances prior to it, namely, the first and second finites and the first aura, may be an unwarranted conclusion; but to me it is very suggestive: for after all, what is the difference between that which is living and that which is dead? Is it not that living things have a soul, or a source of power and activity within themselves, while dead things have not, and therefore must be impelled from without? Swedenborg speaks of the

first and second finites as "actives." He endows them with inherent powers of motion derived from the first natural point. Even the second finites passive, as we have pointed out, are only less active, and in forming the shell of the first aura bullae they produce something highly elastic. It appears to me that Swedenborg is here trying to describe something living. That he is not thinking of these first and second finites as purely geometrical and mechanical is strikingly illustrated by the following:

Actives of themselves enclose no space, except in relation to the circumambient finites. Space and place are relative to what is contiguous: they can exist only in a contiguous extense from one individual to another, as from one limit to another; for space is always limited, figured, and terminated in real entities. Actives however form nothing contiguous either from one center to another, or from one surface to another; consequently no degrees or moments can be reckoned among actives; nor can any fixed limits be established. They are only the ideas, phantasies, and effigies of figures and surfaces: they are corpuscles only in appearance; which describe not one but an infinite number of centers, and an imaginary surface not in the same but in an infinite number of places. Hence of themselves they enclose nothing; but are themselves to be enclosed and limited. (*Principia* Part I, Chapter 10, page 204)

This would surely seem to imply that Swedenborg was reaching out for something above and beyond nature; seeking to describe something of which, at the time, he could form only a very vague idea, but which was intended to picture, in some way, the activity of love and wisdom, which belong to a super-natural or spiritual realm.

LECTURES ON THE PHILOSOPHY OF SWEDENBORG'S PRINCIPIA

GEORGE DECHARMS

LECTURE IV.

THE DOCTRINES BY WHICH SWEDENBORG SOUGHT TO DISCOVER THE SOUL. THE NATURAL SUN, ITS ATMOSPHERES AND PLANETS.

Because Swedenborg recognized that the human soul was spiritual, possessing none of the attributes of material things, while nevertheless it was the cause of all the geometrical forms and mechanical forces of the natural body, he was convinced that there was a pathway of ascent from a knowledge of the body to a knowledge of the soul. He set out, therefore, to discover that path by means of certain new doctrines, to which he refers in the Prologue to the *Animal Kingdom*.

Since it is impossible to climb or leap from the organic, physical, and material world—I mean, the body—immediately to the soul, . . . it was necessary to lay down new ways by which I might be led to her, and thus gain access to her palace,—in other words, to discover, disengage, and bring forth, by the most intense application and study, certain new doctrines for my guidance, which are (as my plan shows) the doctrines of forms, of order and degrees, of series and society, of communication and influx, of correspondence and representation, and of modification. (AK 17)

Of these doctrines Dr. J. J. Garth Wilkinson says, in his introduction to the *Animal Kingdom*, page xvii, that they are “perpetually illustrated and elucidated throughout the *Animal Kingdom*, but never stated by Swedenborg in the form of pure science.” We take this to mean that they are never categorically defined. It is important, however, that we have a clear idea of what these doctrines are, and we shall describe them briefly from what Swedenborg says concerning them in various parts of his writings.

The Doctrine of Forms is based on geometry. The lowest form is said to be the *angular*, which is also called the terrestrial and the corporeal. The next higher is the *circular*, which is said to be the perpetual angular because the circle is composed theo-

retically of an infinite number of tiny angles. The form next higher is the *spiral*, which is perpetually circular because the circle does not close upon itself, but returns to a point somewhat removed from its point of origin, and thus produces a progression of circles such as we find in the thread of a screw. Beyond this lies the *vortical*, or perpetually spiral, which is produced by the spiral turning in upon itself, or bending round until the last circle joins the first. When this happens there is produced an orb flattened at the poles. The next higher form is the perpetually vortical, or *celestial*, beyond this is the perpetually celestial, or *spiritual* form, and beyond this is the *Infinite*. It is important to note that Swedenborg does not attempt to describe the forms higher than the vortical. The imagination cannot picture so complex a figure in terms of geometry. Yet Swedenborg holds that these transcendent forms must contain something analogous to geometry, because all the lower forms are derived from them, and the force that produces them also produces everything that follows in the process of Divine creation. In these higher forms lies the cause of all geometry and mechanics, and they must be related to these by analogy. We believe that here Swedenborg is trying to express spiritual form and spiritual motion, referred to in the Writings as the form of truth, or wisdom, and the activity of love. He is endeavoring to show that these spiritual qualities, while discretely different from the qualities of matter, are nevertheless related to them by analogy, or by correspondence.

The Doctrine of Order is based on the idea that superior forms also exert superior forces, and that a similar law determines the relation of any thing to its parts, and of each part to its constituents, and again of each constituent to the least units of which it is composed. From this law it follows that nature is the same in greatest and in least. The first natural point, for instance, produces the first finite, and this produces the second finite as a perfect replica of itself, save that it is very much larger, and moves with greatly decreased velocity. Because of this law, the second aura, revolving about the natural sun as its center, describes a vast vortex, flattened at the poles. So also the earth is in the shape of a globe flattened at the poles. And even the atom, when examined as to its interior structure, displays a form in some degree comparable to that of the entire solar system.

The Doctrine of Degrees is based on the idea that when a higher

form produces a lower one, the two are utterly distinct, being related to one another by contiguity, or by touch, but not by continuity. They are related as cause and effect, between which there is no continuous ratio. The lower form presents the higher as it were in an image, but under a different form. This might be illustrated by the way in which love or will produces thought, and from this facial expression, speech, or writing. Will is the producing cause in each case; but it stands forth to view, and its quality is made manifest under altogether different forms. Facial expression is entirely different from love, being nothing more than the ordering of the muscles of the face. Speech is only a vibration in the air, produced by the vocal cords and the tongue. Writing consists of marks made on some suitable material, to serve as symbols of thought. Because of this symbolic relationship of material forms to spiritual ideas and affections, the Writings declare that the universal nature is a theatre representative of the kingdom of heaven, although in quality it is utterly distinct from that kingdom.

The Doctrine of Series and Society teaches that all things come forth in a specific series looking to the attainment of a particular end or purpose; and that in each such series there is produced a peculiar relationship of all things to the end proposed. To illustrate: A solar system is a series arising from the sun as a center and a producing cause. The series includes the second aura, and all the planets and satellites that are borne on its current in their respective orbits around the sun. All these circling bodies have a special relationship to the sun, and to one another, which sets them apart from other solar systems, as a distinct society.

So also the human body is a series arising from the soul, which orders all things in its kingdom, creating organs, tissues, and viscera in abundant variety, all of which are brought into harmonious relationship such that together they constitute a perfect unity. In a similar way, every organ of the body has a series of its own, as the brain, the heart, the eye, etc. Each is formed of innumerable parts, brought together for the purpose of performing a specific use. Every such organ, together with all its parts, constitutes a harmonious society. Again, the growth of any plant or animal from a seed produces a distinct series and a particular society.

Here we would note the teaching that the use exists prior to

the organ, and that the organ is created by the use, and for the sake of it. This makes it clear that the doctrine of reception, (which is that the Divine operates the same everywhere, and that variety arises from the fact that this universal activity is differently received, according to the form of the receiving vessel) cannot be the same as the doctrine of creation. The use exists before the organ. It exists in the mind of God, and the Divine Creator must proceed with foresight, with specific intent, in minute adaptation to the particular requirements of the use that is to be performed, in order to create a suitable organ.

The Doctrine of Influx concerns the mode by which higher forces touch, move, animate, and govern lower forms. This influence is effected by contiguity, not by continuity. Nevertheless it is perpetual, operating from moment to moment. If it should be withdrawn for a single instant, the lower form would be dissipated. Thus Divine life flows into the entire universe. The forces of the spiritual world flow into the natural world. The soul flows into the body, creating, sustaining, renewing, constantly. For this reason, preservation is perpetual creation.

The Doctrine of Correspondence and Representation teaches that lower forms, being produced from higher ones, must of necessity be their counterpart, and present an image of them as it were in a mirror. The forms of the human body re-present the forms of the soul, symbolically, in the only way possible on a lower plane or degree. God is Divinely Human because He is infinite love and infinite wisdom, and these, together are the essential human. Because of this, God can be conceived of, or pictured adequately, in no other than the human form and shape. The soul or spirit of man is nothing but his love and his wisdom combined, and when these take ultimate form and are presented to view, either in the spiritual or in the natural world, they can take on no other than the human form and shape. For the same reason, the universal heaven can be rightly thought of only as a Grand Man; every society of heaven can be thought of only as a man; the Church on earth, in the sight of the Lord is as a single man; and all human organizations, great or small, rightly conceived, are men.

Finally, *the Doctrine of Modifications* is based on the idea that all effects are produced by motion, by tremulations, by changes of state. There must be organs, and these must be moved, either in whole or in part, if uses are to be performed. Note here the

tremulation of the vocal cords in speaking or singing; the tremulation of the ear-drum which produces hearing; the tremulation of nerve endings that produce the sense of touch. By analogy, we must conceive of tremulations in the interiors of the brain, and mind, as the cause of thoughts, perceptions and affections. The teaching is that there is no such things as a faculty without an organ; and there is no faculty apart from motion or activity, whether it be the mechanical motion of material organs, or the activity of love which animates the spiritual organs of the mind.

All these doctrines were designed to show the way of ascent from the body to the mind and soul, from the natural world to the spiritual world, and ultimately from the sensual thought of the natural man to the true perception of God. They were intended to afford a ladder, the successive rungs of which were natural ideas, derived from geometry and mechanics, from which spiritual ideas of love and wisdom might be acquired, if only the mind were elevated into something of the spiritual light. Let us point out that, if this were not true; if there were no understandable relation between things material, and things spiritual; if there were not a way of access to things Divine and heavenly from the sensations of the body, then no one could ever attain to a knowledge of God, of heaven, or of the life after death. There could be no Divine revelation, because the Word can only be given in terms of man's physical experience. Literally, the Word is written concerning times, places, and persons. In outward appearance it is merely a record of past events. If there were no relation, no correspondence between these natural word-pictures and the realities of the spirit, then the Word would have no deeper meaning, and could yield for man's instruction no Divine wisdom.

That Swedenborg knew this, even before his spiritual eyes were opened; and that he was trying to discover and convey some idea of these deeper things, he openly declares.

We are not forbidden to approach the Divine sanctuary by the path of comparison; for since it is He for whom we exist, and whose we are to be, and with whom we are conjoined by love, so in order that we may understand His attributes, He has willed that we should understand them through nature; consequently through signs, by the help of which the principles of our minds are formed. There is nothing more usual, even in the Holy Scriptures, than a comparison of the Deity with the sun; of His life with light; of His wisdom with the distinctions of light; of His operation with its rays; and the ascription of clearness to the human intellect, according

to the degree of its elevation; and of shade, darkness, and thick darkness, according to its degree of privation. Therefore let us go on in the path of comparison, remembering always that although comparison illustrates, yet it does not teach the nature of that with which the comparison is made. (2 Econ. 254)

The more any one is perfected in judgment, and the better he discerns the distinction of things, the more clearly will he perceive, that there is an order of things, that there are degrees of order, and that it is by these alone he can progress, and this step by step, from the lowest sphere to the highest, or from the outermost to the innermost. For as often as nature ascends away from external phenomena, or betakes herself inwards, she seems to have separated from us, and to have left us altogether in the dark as to what direction she has taken; we have need therefore, of some science to serve as our guide in tracing out her steps,—to arrange all things into series,—to distinguish these series into degrees, and to contemplate the order of each thing in the order of the whole. The science which does this I call the *Doctrine of Series and Degrees, or the Doctrine of Order*; a science which it was necessary to premise to enable us to follow closely in the steps of nature; since to attempt without it to approach and visit her in her sublime abode, would be to attempt to climb heaven by the tower of Babel; for the highest step must be approached by the intermediate. They who know nothing of this ladder of nature, when they have made their leap, and think they are standing on the summit, are little aware that they are lying flat upon the earth, and will be found at last by their friends, after they have searched the globe for them, in some obscure cavern; for instance, in some occult position, of the nature of which they themselves, and the wisest of men, are equally ignorant. (2 Econ. 210)

It is on the basis of these, and of many other similar statements, that we have concluded that Swedenborg, when he describes the first natural point, the first finite, and second finite, and the first aura, had in mind those superior degrees of the Divine proceeding which transcend the realm of external phenomena, and was striving to lift the mind to the contemplation of those more interior qualities which he ascribes to the spiritual sun, and to the atmospheres which proximately proceeded from it. At least, he is obviously thinking of them as active and relatively living, in contrast to the third and fourth finites which he describes as being produced by compression rather than by composition, and as hard, and stubbornly resistant. It appears to me that in Swedenborg's mind, nature, strictly speaking, began with the creation of these hard substances, and that of them all material things are made.

That Swedenborg believed in the existence of a spiritual, or moral sun, he clearly stated. If my interpretation of his deeper

thought is correct, it would follow that the spiritual sun must first be created, and the natural sun from it. That is why we would identify the first natural point with the spiritual sun, and the first and second finites as the first and second proceeding from that sun, which, in the Writings are called the two radiant belts which make that sun visible to the angels. If this be true, then the first aura must be regarded as a spiritual aura, for only what is spiritual can proceed from the spiritual sun. Yet, according to the *Principia* the first aura was the medium in which the natural sun was formed. We have already described the process by which the first and second finites active, existing in the interstices between the bullae of the first aura, produced an expanding area that pressed against the surrounding bullae. By this pressure the bullae nearest the surface of this expanding space were broken down, the actives within them being released, while the passive shell was crushed into a hard and resisting substance, called third finites. These, lacking any inherent activity, were excited into local motion so intense that they became incandescent gases, whence comes the heat and the light of the natural sun. Whence comes also the mechanical energy present in every atom of matter, and from this all the mechanical forces of nature, by which atoms are gathered together, and molded into all the innumerable geometric figures of the material world.

This formation of the natural sun is described in terms of pure mechanics and geometry; but if we acknowledge that a God of love is the real, nay the actual creator of the universe, may we not perceive that back of the mechanism is the Divine purpose of infinite love, and the foresight of infinite wisdom? Can we not think of this pressure by which matter is created, as the impulse of the Divine will to produce fixed ultimates, from which to build a material world in which human beings might live, and from which they might be lifted up into the eternal habitations of an angelic heaven? Surely every man-made invention, every machine produced to meet a need or a desire that is foreseen by man, comes into being as the result of a love that presses resolutely to the achievement of its purpose. If this seems fantastic, how else can we understand the teaching of the Writings concerning the creation of the universe by God?

The units of the natural sun, however, are extremely various in form and structure. They constitute the source and origin of all

the atomic substances of which the earth consists. This would appear to be demonstrated by the process of spectrum analysis. As we have said, they exist in the form of gases at the surface of the sun. But as this crust of incandescent gas thickens, and is impelled into rapid motion around the sun, it is at last broken in places, and masses of fiery substance are thrown off, still in the form of gas. As they recede from the sun they cool, and solidify; and each finds its appropriate orbit. Thus are formed the planets, the satellites, and the asteroids of our solar system. Prior to this, however, there is formed at the surface of the sun the bullae of the second aura, which consist of an active center of second finites enclosed in a shell, or covering of third finites. As these bullae multiply, they form a sphere, round about the sun, extending to a vast distance, and moving in a vortex with the sun as a center. Swedenborg postulates that the planets are borne round the sun on the current of this vortex. Such is the second, or the magnetic aura of the *Principia*; its least units or bullae are said to be minute replicas of the sun, conveying its heat and its light to all the objects within the solar system. Concerning this aura we read:

In the heaven or finite universe there may be innumerable vortices of this kind, if there be innumerable active centers; or there may be as many vortices as there are suns or stars. (*Principia*, Part III, Chapter 1, p. 232)

One vortex with its active center constitutes one heaven of itself or one mundane system; that several vortices with their centers form together a certain sphere; that a sphere consisting of many vortices of the same kind has its own proper figure, and the figure of every sphere its own proper axis. (*Principia*, Part III, Chapter 1, p. 233)

We take this to mean that from many suns, each having its own family of planets, there may be formed a galaxy, and that galaxies are ordered in definite relation to one another. It is further said that throughout innumerable galaxies there may be an indefinite variety of living things, because creation is continuous and the universe is constantly expanding in response to the infinite love of the Creator. Thus:

Hence may arise new heavens one after the other; in these heavens new vortices and mundane systems; in these vortices and systems, new planets; around the planets, new satellites; and in this manner, at the will of the Deity, new creations may arise in endless succession. Hence how many myriads of heavens may there not be! (*Principia*, Part III, Chapter 2, p. 240)

Nevertheless, in every mundane system, the principles of geometry continue to be similar; as also nature and mechanism, as to first principles and motive forces; and that the diversity consists only in the diversity of the series, in respect to degrees, ratios, and figures. (*Principia*, Part III, Chapter 2, pp. 245-246)

Nature, consequently, cannot be modified in one world in the same way in which she is in the other; nor are the entities in one world capable of being modified in the same manner with those of another. Mechanism presents itself under different conditions; because ratios, moments, and degrees are different: all objects have a different configuration, and thus analysis exhausts all its proportions. In other worlds the air and ether, if there be anything similar to them, do not experience the like tremulations; the organs of sight and hearing are also affected by them in a different manner; nor perhaps are our organs capable of receiving the undulations of their elements, because they are not constituted in accordance with their mechanism and motions. The animals of this world might there, perhaps, be deprived of the use of their senses. Machines of every kind might there be constructed by different rules and by a different application of mechanical powers. (*Principia*, Part III, Chapter 2, p. 246)

From these observations we may be led to conceive, how great is the extent of our ignorance. Every one measures the degree of his wisdom by his knowledge of those things which have fallen within his own sphere. The limit of his own information he considers to be the limit of all that is attainable; for of what lies beyond his own sphere, he has no idea. . . . Could he, however, compare that which he knows with that which he does not know, how contracted would appear his knowledge, how oblivious of himself he would be! . . . There is not a particle in our globe, with the thousandth part of whose nature we are acquainted. (*Principia*, Part III, Chapter 2, p. 247)

WHOSE UNIVERSE?

A REVIEW BY WILLIAM R. KINTNER

THE VIEW FROM A DISTANT STAR. By Harlow Shapley. (New York: Basic Books, 1963.)

This delightfully written book presents the views of America's leading cosmologist as to the nature of the universe and man's place in it. It is my intention to review this work in the light of Swedenborgian philosophy.

It was my pleasure to meet the distinguished author, Harlow Shapley, when both of us were participants in a discussion group held at the Aspen Institute in Colorado. Shapley has devoted his

often appear to flaunt common sense, but they ultimately become the new common sense, exposing the fallacies in older ideas as they explain appearances in simpler and more beautiful terms.

The men who achieved the greatest advances in the mental exploration of space were of many kinds, but they had two characteristics in common: doubt and faith. They doubted enough to keep their minds from being blocked by cherished ideas that might be antithetical to what they were trying to discover. They believed with all their might that the universe was subject to laws of perfect order, and that any appearances of caprice could be resolved. They worked hard to achieve this, struggling with their own prejudices as well as with other people's old ideas and incorrect observations. And they emerged triumphant, reaping rewards greater than any of the creature comforts that they denied themselves for the sake of their cause.

They discovered planets.

LECTURES ON THE PHILOSOPHY OF SWEDENBORG'S *PRINCIPIA*

GEORGE DECHARMS

LECTURE V. LIGHT AND HEAT, THE ETHER AND THE AIR, THE FORMATION OF SEEDS

We have described how, according to the philosophy of the *Principia*, the natural sun was formed within the volume of the first aura—how, at the surface of an expanding center of first finites active, the bullae of the first aura were crushed, and reduced to a hard, resistant substance called third finites. These third finites formed a coating or crust around the central space of first finites, and by the impact of that active center were caused to vibrate at tremendous speed until they became a mass of fiery incandescent gas which appears to us as the sun. We have seen also how, from the third finites as a covering, or shell, enclosing a minute center of second finites active, the second aura was formed, extending in a vast vortex around the sun, conveying but tempering the heat and the light of the sun to reception at the surface of the earth. Finally we have seen how, from the crust of flaming gas at the surface of the sun, the planets, satellites, and asteroids were thrown

off, each to find its own orbit, and to be carried round the sun on the bosom of the second aura. The distance of each earth from the sun is said to be proportional to the size of the planet, or its mass, those that are smaller remaining nearer to the sun, while the larger ones find their orbit at a greater distance from it. It should be noted that this theory is not borne out by astronomical observation. Mars, for instance, which is smaller than the earth, is farther from the sun. Obviously, there are other factors than size or mass that combine to determine the distance of a planet from the sun; but so far as I am aware, modern science has offered no explanation of these factors.

Modern scientific theories as to the formation and the structure of the solar system differ widely from that which was proposed by Swedenborg. Present-day thought is based on tangible evidence alone. Astronomers have no knowledge of a solar atmosphere in which the planets float, such as Swedenborg describes as the second aura. There being no scientific evidence of such a vortex, it is assumed that the planets rotate in a vacuum. Light is supposed to pass from the sun to the earth through this vacuum, at the absolute speed of a hundred and eighty-six thousand miles a second. This light, as it is received at the surface of the earth, seems to consist of wave-motions of varying length. These can be accurately measured, and waves of specific length produce light of a specific color, as may be seen in the rainbow, or the spectrum. Not only this, but waves of light invisible to the human eye, yet demonstrable by other means, are found to extend beyond both ends of the spectrum, being known as ultraviolet and infra-red.

Judged on the basis of our sense experience, waves would seem to require some medium in which the activity takes place. A wave in a vacuum would appear to be a contradiction. To meet this difficulty, and explain how light can reach the earth from the sun, a theory has been suggested that it may consist of minute pellets, travelling from the sun at tremendous speed. Neither the wave theory nor the pellet theory, however, satisfies all the observed facts, from which it is apparent that, although we know many things about light, and can apply that knowledge successfully in many ways, no one has yet discovered what light is.

In regard to this Swedenborg says that the active center of the sun is like a living soul, in that it expands and contracts alternately, and thus, as it were, breathes. This animatory motion sends a

pulse through the whole mass of the surrounding aura, and thus imparts a constant activity to the entire solar system. Thus we read in *The Economy of the Animal Kingdom*:

Undulation is the mode of propagating local motion once begun, from one distance to another, and hence even to the remotest. This we may see exemplified in water and other liquids, which when disturbed by any percussion, when touched or moved by any living force, immediately from the disturbing points as from a center evolve situations and spreading circles; whence this species of motion has justly obtained the name of *undulation*. We may see it exemplified in air; for when a string is made to vibrate, such as that of a harp; when a membrane is struck, such as the parchment of a drum; when a volume is propelled, as when air is blown through a horn, a pipe, or the trachea; immediately we find that from the first disturbing point, as from its center or axis, the air is rolled forward to a distance,—a motion which is properly called *modulation* . . . so also is that general modification, which by the organ of sight is recognized as illumination, and which probably arises from the animatory motion or animation of the solar ocean, or of some star, continually exciting itself into an undulating motion, and which effuses itself beyond the bounds of its own proper universe. (EAK Vol. I, p. 126)

Something similar is also taught in the Writings. Speaking of the correspondence of the heart and lungs with the will and understanding of man's spirit, which latter are said to have a corresponding cardiac and pulmonic motion, we read:

These two motions, the cardiac and the pulmonic, exist and persist, because the universal angelic heaven both in general and in particular is in these two motions of life. And the universal angelic heaven is in them because the Lord, from the sun where He is, and which is from Him, pours them in. That sun acts these two motions from the Lord. And because all things of heaven and of the world depend on the Lord through that sun in such nexus born of form that they are a concatenated work from the prime to the ultimates, and because the life of love and wisdom is from Him, and all the forces of the universe are from life, it is plain that the origin is none other. (DLW 392)

Elsewhere in the Writings the source of heat and light is described as follows:

From the sun of our world auras and atmospheres proceed as from their fountain; these are called ethers and airs. From this source (that is, the sun) nearest about it is pure ether, at a greater distance from it are less pure ethers, and at length airs; but these ethers and airs are around the earths. These ethers and airs, when made active in mass (*volumatim*) produce heat, but when modified in their least parts (*singulatim*) give light. Through these the sun exercises all its power and produces all its effect outside of itself, thus through ethers and airs by heat as a means, and at the same time by light as a means. (AE 726:3)

May this teaching have some bearing upon the unresolved scientific question as to whether light is a wave motion or is produced by tiny pellets? The bullae, or "least parts" of the ether may be compared to pellets; yet when these are modified by expansion and contraction, may they not also produce a wave motion?

It is evident, from what has here been said, that Swedenborg derives the origin of heat and light in the natural world from the living animation of the Lord's love and wisdom, operating by means of the spiritual sun, and producing the expansion and contraction of the natural sun which pulses through the entire solar system.

The *Principia* describes the creation of two other atmospheres through which heat and light are transmitted from the sun to the earth, namely, the ether and the air. These two, he says, arise not directly from the sun, but from the surface of the earth. The fourth finites, of which the central mass of the earth consists, are tightly bound together, and held in by pressure on every side. Only at the very surface of the earth are they set free from this confining pressure, and are thus enabled to move freely. Here they are caught up in the gyre of the first aura, which is interstitial throughout the entire volume of the second aura, and are formed into a shell which encloses a tiny volume of the first aura. Thus they rise up from the earth as if by evaporation, and this in such enormous quantities that the earth is somewhat diminished in size. Yet, because it is constantly rotating on its axis, the loss of these fourth finites does not change its shape. The atmosphere thus formed extends to a height of many thousands of miles above the earth, and embraces the moon, which is said to be carried around the earth on the current of this atmosphere, or ether, even as the planets are carried around the sun on the current of the second aura. The bullae of the ether differ from those of the higher atmospheres, because, instead of enclosing a volume of active finites, they enclose instead a volume of the first aura. This fact alters their shape from an orb flattened at the poles to one that is perfectly spherical.

The ethereal particles are much larger than the first and second elementary particles: the two kinds of particles differ also in this respect, that the ethereal possess an internal space consisting, not of actives but of elementaries, while the first and second elementary particles consist of pure actives, as we have before stated. Consequently that the two kinds of particles are

not similar in figure, but that the ethereal are exactly spherical, while the first and second elementaries have poles, or polar cones. (*Principia*, Part III, Chapter 5, p. 279)

The air is said to consist of fifth finites, likewise rising up from the surface of the earth as a sort of evaporation. They are larger, grosser, and indefinitely less active, or slower in movement, than the fourth finites. They are, however, caught up by the second aura, and form bullae, each of which encloses a minute volume of that aura. This atmosphere is heavier than the ether, and it rises above the surface of the earth to a distance of no more than a few miles, becoming thinner or rarer in proportion to its height. Concerning the air, it is now known to consist of gases, which do indeed rise from the surface of the earth. To this extent modern science confirms Swedenborg's philosophy. It is, however, found to be a mixture of a number of different gases. Oxygen and nitrogen together account for about 98 per cent of its volume. The remainder is made up of a number of other gases in various proportions, and these proportions differ in different places, and under different conditions. Whether there is anything beyond the air that might be called an ether has been cast into doubt because all efforts to prove its existence have been negative. Nevertheless, quite recently, some scientists of note have again raised the question as to whether there may not be some such atmosphere.

This much is certain: there must be media of communication between the Infinite and the lowest ultimates of creation. It is to provide for such media that the Writings proclaim the existence of successive atmospheres, three in the spiritual world, and three in the natural world. In his *Principia* Swedenborg speaks of four atmospheres, one above the natural sun, and three below it. The universal aura, being above the natural sun, must proceed from the spiritual sun. There is no other source from which it can be derived. For this reason we believe that Swedenborg, in his own mind, ascribed to it the properties and attributes of love and wisdom. We have been asked how we can think of the first aura of the *Principia* as a spiritual atmosphere, when it must be regarded as filling inter-stellar space, and as conveying light from distant stars. To this I have no satisfactory answer. I would only point out that we are faced with the same apparent difficulty by the teaching of the Writings. There we are told that nature

begins with the natural sun. It follows that any medium pre-existing the creation of the natural sun—any medium in which and by means of which the natural sun was brought into being—must be spiritual, since it transcends the realm of nature. Since natural suns have been formed, and probably are being formed in enormous numbers, the medium in which they are formed must fill interstellar space. Nor do the Writings anywhere, so far as I know, give the slightest indication as to how light is transmitted from distant stars. We must await further study before attempting to answer that question.

Both the Writings and the *Principia* speak of the ether and the air as atmospheres that do not arise directly from the sun, but take their origin from the earth, and extend only to a more or less limited space around it. I have wondered whether there might not be a parallel in this respect between the spiritual and the natural atmospheres, namely, that the universal atmosphere extends from the sun as its center, while the more local atmospheres arise from the earth. May not the two lower spiritual atmospheres, in which the angels of the lower heavens dwell, arise from the living spheres of angelic life, as if from an "earth," in a manner corresponding to the way in which the ether and the air arise from the physical earth? This is merely a conjecture based on the assumption that there is a close parallel and correspondence between the process of spiritual creation and the process of natural creation. I know of no definite teaching of the Writings, however, to substantiate such an hypothesis.

Considering the question as to why scientific exploration has failed to give any proof that any atmosphere exists beyond the realm of the air, I wonder if we are not thinking too grossly of these higher atmospheres. Are we trying to picture them too naturally in terms of the air, which after all is the only atmosphere of which we are sensibly aware, and the only basis, therefore, on which we can imagine higher atmospheres? Swedenborg in the *Principia* speaks of the ratio between the atmospheres as being in the neighborhood of ten thousand, or possibly a hundred thousand. Professor Allen has pointed out that atomic forces, electronic forces, and nuclear forces are differentiated by an increase of power and velocity unimaginably great, and far exceeding the ratios suggested by Swedenborg in regard to the atmospheres. May it not be true that the natural atmospheres, the ether and the second aura, are

so immensely more active, more tenuous, more subtle, that they cannot be discovered by any known scientific means? Supposing this to be the case, surely the fact that we cannot demonstrate their existence should not lead us to deny the revealed truth that there must be a succession of media, through which there may be unbroken communication between the outmosts of nature and the Infinite Creator.

The function of the atmospheres is not only to provide a chain of connection and communication from the Infinite to the outmosts of creation, but also to bring down the Divine life itself, so tempered and moderated that it may operate effectively on successively lower planes or degrees. By means of them the activity of the Infinite is stepped down gradually, in a manner that might be illustrated by the way an electric current is reduced from a high to a lower voltage in adaptation to particular needs and uses. We learn from the Writings that all the atmospheres, both those that are spiritual and those that are natural, contain living forces within them. These are of three kinds, namely *active*, *creative*, and *formative*, or as elsewhere stated *creative*, *formative*, and *productive*. These are the forces which, acting together in harmony, create all the living organisms on the earth, and also produce all the visible tangible phenomena of the spiritual world. The *active* forces are those of the Divine will, and the Divine foresight, immediately present to create uses. The *creative* forces are those that create souls, or seeds, whereby this Divine will may be focused or directed to the production of a specific organism. The *formative* forces are those whereby the necessary materials are selected, gathered, and ordered from the substances of the earth to produce organic bodies within which the soul may live. The *creative* forces in the universal aura produce the seeds of human beings; those in the magnetic aura produce the seeds of animals; and those in the ether produce the seeds of the vegetable kingdom. (Concerning this see DLW 191-194, 200-201, 307-312; AE 1201-1210)

Now what shall we say of these forces present in the atmospheres? Of course they are un-create, because love itself is un-create, and all the activity and force that proceeds from it is un-create. Yet it is obvious that these forces are not infinite. They are focused, like rays of light, in a particular direction, and channeled with minute particularity to produce a specific kind of living

organism. A seed is the life force that produces a kind, a species of plant, or animal, or human being, with all the distinguishing characteristics that set it apart from every other kind or species. From one kind of seed only one kind of plant or animal can grow. In each case, the creative life-force is limited and finite. These forces, as they exist in the atmospheres, therefore, are spiritual uses, the very uses which are said in the Writings to exist before the organs. We can think of them only as uses in the mind of God—as Divine intentions to produce those things which are foreseen to be necessary for the creation and the perfection of a heaven from the human race. They are the very “things” of which the kingdom of heaven consists, that is, affections, thoughts, loves, and perceptions, whereby God makes himself known to men and angels. They took on concrete forms from the substances of the earth before any human beings were created, and thus provided a world of flora and fauna in the midst of which human beings might live. They provided sustaining food for the body, and delights for the physical senses. And at the same time they provided food for the spirit of man, and heavenly delights, because they contained within themselves a soul of spiritual love and wisdom, of good and truth, which the human mind was created to perceive within the outward bodily form and shape. In other words, man was so created that he could perceive the *use*, the Divine end and purpose, for which these organic forms were brought into being, and so doing could see the kingdom of heaven, and within this the love and wisdom, the mercy and providence of the Lord. So long as man lives on earth, these spiritual and Divine qualities can be seen only subjectively, as if within his own mind. But in the life after death these qualities, these uses, become objective. Only through the medium of human minds can they become objective, and for this reason, the phenomena of the spiritual world did not come into existence until there were human beings to perceive, that is, spiritually to sense and feel these realities of heaven. Because all idea of form must be derived from physical sensation and experience, man must be born on earth, and dwell in a material world, before he can awake to spiritual consciousness, and enjoy the wonders of the spiritual world. And because all appearances in that world are derived from the memory and imagination of earthly objects, therefore it is said that the phenomena of the spiritual world exactly represent and picture forth the changes of state in the minds of spirits and

angels. Nevertheless, these spiritual things, these uses, were present in potency in the atmospheres long before there were any human beings to perceive them. From them, as we have said, arose all the material organisms of plants and animals that adorned the surface of the earth before the first human beings were created. The phenomena of the spiritual world are not created in the minds of men. They are not merely projections from them, like insubstantial dreams and visions. They are objective spiritual creations, which the human mind is created to sense and feel. They exist outside of spirits and angels, in the Divine of the Lord. They are substantial and real, indeed far more real than are the things of earth.

This concept of the atmospheres as containing finite creative forces appears at first glance to controvert the teaching that the Divine operates the same everywhere, and that all variety arises from the various reception of its activity by different organic vessels. This is illustrated in the Writings by the fact that the heat and light of the sun flow in the same everywhere, but are differently received by each different plant or animal. This would seem to imply that the bullae, or least units of the atmospheres, would all be identical in form, in structure, and in activity. Such an idea, however, is not borne out by the teaching of the *Principia* to the effect that variety increases as we descend the ladder of discrete degrees from the Infinite.

That the figures of these finites are most perfectly similar one to another. One, and indeed the principal degree and mode of perfection consists in similitude. Since points or simples are most perfect, in that they are also most exactly similar, because they are produced from the Infinite, from whom nothing but what is most perfectly similar can proceed; and since these finites afterwards proceed mediately from these exactly similar points or simples: it may be said, that of all the figures of finites these are the figures that are the most perfectly similar one to another; and although it cannot be denied that some dissimilitude may exist between these finites and between their figures, still the dissimilitude will be the least that exists in the series formed of successive finites. The dissimilitude itself arises from a series in the modifications, or in the frequent variations of the limits. The more frequently limits are varied, the greater number of causalities and causes there may be to produce dissimilitude; whence in things most compounded, there may exist, as it were, an infinite dissimilitude; so that at length all the compounds in a series of the same degree or genus may be dissimilar. The nearer, however they are to their origin and first limit, that is, the nearer they are to the first similar entity, the first simple, the first and only mode,

the less variation can they undergo; because the fewer are the causes of variation and the fewer the contingents and modes. (*Principia*, Part I, Chapter 3, Page 76)

Concerning the formation of vegetable seeds we read in the *Worship and Love of God*:

The first generating or plastic force, innate in the very seeds of vegetable foetuses, may be likened to a soul, for from this, and in resemblance to it are formed their bodies with their members and muscles, while the stems are continued with their branches, leaves and little tubes, and several other particulars which resemble animal foetuses. . . . But such genitures are the first and ultimate forces and powers of nature herself, excited from the conjunction of her most active forms, constituting ether, with the earth's forces of inertia, through the mediations of the rays of the sun; from which origin, in their first and ultimate principles, consequently in mediate ones also, they derive an image of primitive and most perfect nature, and, in a certain type, relate to superior or living essences themselves. But what the quality of this seminal force is, cannot be known but by unfolding the forms of prior nature, both those which have reference to active and those which have reference to passive powers, also in what manner the solar rays operate to join them together, to evolve which, from lasts to first would be too vast an undertaking. (*Worship and Love of God* No. 20, footnote m)

Further, direct teaching from the Writings:

I have spoken with angels concerning representatives, to the effect that there is nothing in the vegetable kingdom on the earth that does not in some way represent the Lord's kingdom. They said that all the beautiful and graceful things in the vegetable kingdom derive their origin from the Lord through heaven; and that when the celestial and spiritual things of the Lord inflow into nature, such things have actual existence; and that this is the source of the vegetative soul or life. And as this is not known in the world, it was called a heavenly secret. (AC 1632)

The budding and fruiting of a tree represent the re-birth of man—its becoming green from the leaves represents the first state; the blossoming the second, which is the next before regeneration; and the fruiting the third, which is the very state of the regenerate. . . . That such things exist in the vegetable kingdom is owing to the influx of the spiritual world. . . . Such endeavors could never have existed in everything of the vegetable kingdom unless the Divine continually flowed in; for from influx comes endeavor, from endeavor energy, and from energy effect. They who attribute all things to nature say that such things are imparted to fruits and seeds at their first creation, and that from the energy thence received they are afterwards impelled of themselves to such activities; but they do not consider that the effect is the continuation of the cause, and that when the cause ceases, the effect also ceases, and consequently that without a continual influx of the cause, every effect instantly perishes; nor do they consider that what is

unconnected with a first of all things, consequently with the Divine, is instantly annihilated, because the prior must be continually in the posterior in order that the posterior may exist. (AC 5116)

Something shall now be said about the vegetable kingdom, and its soul, which is called the plant soul. By the plant soul is meant the tendency (*conatus*) and effort to produce a plant from its seed progressively even to new seeds, and thereby to multiply it to infinity, and to propagate it to eternity; for there is as it were in every plant an idea of what is infinite and eternal; for a single seed can be so multiplied during a certain number of years as to fill the whole earth, and can also be propagated from seed to seed without end. This, with the wonderful process of growth from root into a sprout, then into a stalk, also into branches, leaves, flowers, fruits, even to new seeds, is not a natural but a spiritual power. (AE 1203)

The forms of the animal kingdom, which are called in a single word animals, are all in accord with the flow of spiritual substances and forces. . . . This animal form derives its *conatus* to such things from the First from whom all things are, who is God, because He is Man. This *conatus* and consequent determination of all spiritual forces can be given and exist from no other source, for it is given in things greatest and in things least, in first things and last things, in the spiritual world and therefrom in the natural world; but with a difference of perfection according to degrees. But the other form, which is the natural form, and which is the form of all plants, has its origin in the *conatus* and consequent flow of natural forces, which are atmospheres and are called ethers; and in these this *conatus* is present from that determination of spiritual forces into natural forces, which are ethers, and through these into the materials of the earth, of which plants are composed. (AE 1208)

DUALISM AND REVELATION

ALISON GLENN *

In *Religion Without Revelation* Julian Huxley asserts that religion without revelation not only can but does exist. Certain social organs, he claims, which cope with the problem of man's destiny and which orient man's ideas and emotions and construct attitudes of mind and patterns of belief and behavior in relation to his destiny, can be and properly are included under the title,

* This paper was originally prepared by Miss Glenn, a former student at the Academy of the New Church, for a course in philosophy at Dickinson College.

LECTURES ON THE PHILOSOPHY
OF SWEDENBORG'S *PRINCIPIA*

LECTURE VI.

THE PHILOSOPHY OF THE RETURN KINGDOM

The final end of creation is that there may be a heaven from the human race. Only man can consciously receive the Lord's love and wisdom, acknowledge their source, and so return them to Him from whom they came. Only if love is returned can there be conjunction; and that man may be conjoined with Him by faith and love is the supreme end and purpose of the Divine Providence. For this reason, the Divine proceeding, at rest in the seemingly dead substances of the mineral kingdom at the surface of the earth (as by means of successive atmospheres the infinite life is stepped down or rendered less active) is not really the last, or ultimate of creation, as is frequently said in the Writings. It is rather the middle point, the point at which the material has been provided, and the ground has been laid, but at which the final goal has by no means been reached. Concerning this we read:

The universal end, the end of all things in creation, is that there may be an eternal conjunction of the Creator with the created universe; and this is not possible unless there be subjects in which His Divine may be as in Itself, thus in which it may dwell and abide. In order that these subjects may be the dwellings and mansions of Himself, they must be recipients of His love and wisdom as of themselves; thus they must be those who shall elevate themselves to the Creator as of themselves, and shall conjoin themselves with Him: without this reciprocity no conjunction is possible. These subjects are men, who are able to elevate and conjoin themselves as of themselves. That men are such subjects, and that they are recipients of the Divine as of themselves, has been pointed out above many times. Through this conjunction, the Lord is present in every work created by Himself. For all has been created finally for the sake of man. Wherefore the uses of all things which are created, ascend by degrees from the last things to man, and through man to God the Creator from whom they are . . .

Creation proceeds continually to this last or ultimate end by these three things, which are end, cause, and effect, because these three are in the Lord the Creator . . . Hence it is evident that the created universe, in its general progression to its ultimate end, is relatively the middle end. For out of the ground, by the Lord the Creator, forms of uses are continually raised in their order up to man, who as to his body is also from the ground. He, man, is next elevated by the reception of love and wisdom from the Lord; and that he may receive love and wisdom all means are provided; and he has been

made so that he can receive, if only he will. From what has now been said it may be seen, though as yet merely in a general manner, that the end of creation exists in the last things, or ultimates; which end is, that all things may return to the Creator, and that conjunction may exist. (DLW 170-172)

From the substances at rest at the surface of the earth, therefore, there must be a return kingdom of the Divine Proceeding. It was with this in view that the Divine proceeded in the first place. This purpose was present, and the means for its accomplishment were provided, at every stage of the descent. It was in order that this return might be made that all the successive atmospheres were endowed with active forces, creative forces, and formative forces. These forces, as we have pointed out, were the means whereby, as soon as suitable materials had been provided, the Lord could produce living organisms. The necessary materials for the production of seeds, and for the building of bodies, had to be provided progressively. From the mineral kingdom alone, only the grossest materials could be provided—materials capable of clothing only the lowest forms of vegetable life: algae floating in the water, and later mosses, ferns and grasses, shrubs of many kinds, and at last trees, each in turn by its life process so refining the materials of the mineral kingdom as to provide clothing for the seeds and the bodies of the next higher forms of life. The forces that laid hold upon these materials, formed from them the clothing of seeds, and acting through the seeds, actually caused plants to grow out of the earth, were already present in the ether, in which were to be found the potential souls of all forms of the vegetable kingdom, from the simplest to the most complex.

At last, the life process of plants gave off into the atmosphere materials so far refined that they could be caught up in the gyre of the higher atmosphere called the magnetic aura. Here were the active, creative, and formative forces capable of producing the seeds of animals, and from the seeds their bodies. Here again, the required materials could be brought into being only by degrees. Creation had to begin from simple uni-cellular animals, and progress by stages to more complex organisms, through worms, fish, reptiles, birds, vertebrates, mammals, to primates, which, in outward form and structure more nearly resemble man. Only when both the vegetable and the animal kingdoms had been developed could there be produced materials—similar perhaps to what the Writings call the “finest things of nature”—which could be

caught up in the gyre of the universal aura, and formed into the covering of human seed, through which human bodies could be built. Here again, only the simplest and most primitive men could at first be created, and only through long centuries of human development, over many generations, could they be endowed with perpetually greater ability and opportunity for the reception of Divine love and wisdom.

The need for such a progressive development in each kingdom, and from one kingdom to the one next higher, is the basis for what modern scientists call "evolution." Such a progression may be confirmed by innumerable facts of observation, and by archeological discoveries. But these facts cannot be rationally understood without some knowledge of the immediate presence of the Divine Creator. Only the Lord, from infinite love and wisdom, could possibly produce these marvels. To claim that they are the result of pure accident, that they are produced by mechanical forces acting without purpose, and without intelligence, is to explain nothing. It leaves one with the picture of a world that has no meaning, a world that had no beginning, and that is progressing toward no conceivable goal. However, when we know that the Divine Creator brought down His love and His wisdom, step by step, degree by degree, atmosphere by atmosphere, in an unbroken chain of connection, even to the substances at rest on the surface of the earth; when we realize that living forces of love and wisdom are present in all the atmospheres, creating living organisms, from the lowest to the highest; then we can begin to understand how so-called "evolution" took place. It is no longer regarded as an inexplicable accident, but as a process ordered by supreme intelligence, for the attainment of a goal of Divine love which is foreseen, and provided by the Creator.

According to Swedenborg's philosophy, man, the most perfect form of organic life, is a microcosm, or little world. He is a least replica of the entire universe. The Lord must be immediately present with him. There must be a medium of connection between him and the Creator, similar to that which exists between the Creator and the whole universe. In the macrocosm, the bond of connection is provided by a series of atmospheres; but in the microcosm, it is provided by a series of bloods.

From the universal aura, by means of what are called the "purest substances of nature," there is compounded a "blood" or "fluid"

which is called the "spirituous fluid." From this is formed the "simple fiber," the first substance, and the universal unit of the human form. This is the inmost of every living cell of which the brain and body are composed. It is the inmost receptacle of life inflowing from the Lord, and in it the Lord is immediately present with creative power, that is, with the active, creative, and formative forces inherent in the universal aura. By the addition of successively heavier, grosser, and more restrictive coverings, all the tissues of brain and body are formed—the "simple cortex" which is the internal structure of the cortical cells, the cortex itself, the nervous system, the heart and lungs together with the vascular system, and from these all the organs and viscera, even down to the cartilages, the bones, and the hair. From the "spirituous fluid" there is produced the "animal spirit" which animates the nerves, and from this the "red blood" which nourishes and continually rebuilds all the tissues of the body.

Such is the general plan of Swedenborg's anatomical and physiological works. We merely mention it here to show that it is founded on his *Principia*. It can be understood only in the light of what he says concerning the successive atmospheres, and how these provide a medium of communication between God and creation. Only from the *Principia* can we learn the source and origin of the human soul, and grasp some idea of how God Himself is immediately present in the soul, and how from it He can create the marvellous mechanism of the body and the brain.

Concerning the human soul we read in the *Economy of the Animal Kingdom*:

From the anatomy of the animal body we clearly perceive that a certain most pure fluid glances through the subtlest fibers, remote from even the acutest sense. . . . That it reigns universally in the whole and in every part of its own limited universe, or body. . . . Wherefore, if the soul of the body is to be the subject of inquiry, and the communication between the soul and the body is to be investigated, we must first examine this fluid, and ascertain whether it agrees with our predicates. But as this fluid lies so deeply in nature, no thought can enter into it, except by the doctrine of series and degrees joined to experience; nor can it be described, except by recourse to a mathematical philosophy of universals. (219)

Yet this does not prevent us from perceiving, solely by the intuitive faculty of the mind, that such a fluid, although it be the first substance of the body, nevertheless derives its being from a still higher substance, and proximately from those things in the universe on which the principles of natural things are impressed by the Deity, and in which, at the same time, the most perfect

forces of nature are involved. Hence that it is the form of forms in the body, and the formative substance that draws the thread from the first living point, and continues it afterwards to the last point of life; and so connects one thing with another, and so conserves and governs it afterwards, that all things mutually follow each other, and the posterior refer themselves to the prior, and the whole with the parts, the universal with the singulars, by a wonderful subordination and coordination, refers itself to its prime form and substance, upon which all things depend, and by which, and for which, each thing exists in its own distinctive manner. (226)

That this spirituous fluid, or soul, is not regarded by Swedenborg as a natural or material substance, but that it is spiritual in nature and quality is clearly taught as follows :

Before we conclude this subject, we must consider the question, whether the soul is to be called *material* or *immaterial*. We have often said above, that in regard to substance the soul is a fluid, nay, a most absolute fluid; produced by the aura of the universe; enclosed in fibers; the matter by which, from which, and for which, the body exists; the supereminent organ . . . nothing here occurs but appears to be fairly comprehended under the term matter. But, pray, what is *matter*? If it be defined as extension endued with inertia, then the soul is not material; for inertia, the source of gravity, enters the posterior sphere simply by composition, and by the addition of a number of things that, through changes in the state of active entities have become inert and gravitating. . . . The first aura of the world is not matter in this sense; for neither gravity nor levity can be predicated of it; but on the contrary, active force, the origin of gravity and levity in terrestrial bodies, which do not of themselves regard any common center, unless there be an acting, causing, directing force. (EAK Vol. II, No. 311)

All this merely leads up to and introduces the subject of Swedenborg's physiological and psychological works, which subject we cannot undertake to pursue in the present series of lectures. We would merely point out, that, having traced the operations of the human soul through its obvious effects—in the physical body with all its numerous organs, and in the brain, with its nervous system that reaches to all parts of the body—Swedenborg is at last equipped with the knowledge necessary for the exploration of the soul itself, and its influx and operation into the body by means of the mind. He sets out, therefore, to show, in the work entitled *Rational Psychology*, “what the soul is, what is its intercourse with the body, and what its state in the body and after the life of the body.” (Preface, p. 5) This is a remarkable work, and it contains a great deal that is of immense value to the psychologist who is seeking to understand the mechanism of the human mind. But

Swedenborg ends it with the confession that he has not solved the ultimate problem.

There is yet an infinity of other means which enter into this series of ends, either mediately or immediately, to wit, in respect to things mundane and corporeal, and in respect to things spiritual. In respect to things *corporeal*, in that men may be (fed and) covered or clothed. Therefore the whole globe and even tiny worms supply clothing, as also food, both being necessary if man is to live in the body. Therefore both are provided. In respect to things *mundane*, that the citizen may live, such as wealth and possessions, besides an infinitude of other things which are in the world; also sciences, etc. In respect to things *spiritual*, in that the nature of heaven is revealed, the nature of the will, how (God) is to be adored, and by what means the state of the soul is to be perfected so as to be a member of heaven, and this in such a way that its liberty is not injured but that it can turn to God. (*Rational Psychology* 560)

Because Swedenborg had traversed the whole gamut of nature, from outmosts to inmosts, and yet admittedly had not discovered the ultimate secret of the soul, he next turned to the study of the Word, and thereby was at last prepared for intromission into the spiritual world, and for his true mission as the servant of the Lord in His Second Coming. Toward this goal the Lord had been leading him secretly throughout his entire life; and all his studies in science and in philosophy had been a necessary preparation for it. Surely some knowledge of his philosophy must be of value to those also who receive the spiritual truth of the Heavenly Doctrine, and who seek to understand its relation to the wonderful phenomena of the material world.

PHILOSOPHICAL NOTES

Change and Permanence. Is there motion within the primordial substance? This question arose among the early Greeks. The names of Heraclitus and Parmenides respectively are preserved as representatives of those who believe that there is such a motion and those who do not.

The question for them is not so much how the change takes place but whether there is any change at all. For Heraclitus change is ultimate and permanence a mere sensory appearance. For Parmenides, the permanent is fundamental and change a mere appearance. For these philosophers, the problem of substance is relegated to a secondary position. (*A History of Philosophy*, Thilly and Wood, p. 17.)

THE NEW PHILOSOPHY

VOL. LXVIII

JANUARY-MARCH, 1965

No. 1

LECTURES ON THE PHILOSOPHY OF SWEDENBORG'S *PRINCIPIA*

GEORGE DE CHARMS

LECTURE VII

THE VALUE OF SWEDENBORG'S PHILOSOPHICAL WORKS TO NEW CHURCH EDUCATION

Having given a very brief and inadequate survey of Swedenborg's *Principia*, we would devote this final lecture to our estimate of the value of his philosophical works in general to the cause of New Church Education.

We believe that their greatest value lies in the fact that they are founded upon an unquestioning belief in the existence of a Divinely Human God, who not only created the universe, but who is immanently present in it, preserving it in existence, and governing all things in it from the greatest to the least, by His Divine love, and according to His Divine wisdom. This is what is either denied or considered to be irrelevant by the scientific thinkers of our day, because they think of what is supernatural as lying outside the realm of science. If, however, God is perpetually present; if all things are under the immediate touch and direction of His Divine hand; and if this can be demonstrated so that man may learn ever more perfectly to understand it; is not then the search for this understanding the ultimate goal of education, and the very essence of all true wisdom?

If we teach science according to some natural, materialistic interpretation, and encourage our students to rest satisfied with such an interpretation as if it were the whole and the final truth, will we not be leading them to adopt a totally false philosophy of life? But, we may ask, is it not sufficient if we instill into our

students a faith in the presence and operation of God in His universe, as is clearly taught in the Writings? If we do this, will it not prove sufficient to preserve their religious belief in God, and in the life of religion, even though we make no effort to demonstrate the relation of their scientific knowledge and experience to the life of religion?

In the face of the strong tendency to materialistic thought which deeply affects the minds of the young in our modern age, we firmly believe that, unless we can show in some way, and to some degree, how the facts of science do confirm the teaching of the Writings, the religious ideas of our students will inevitably be divorced from their natural understanding of the world in which they live. It will appear to them as a product of the imagination, as something un-real, purely subjective, and entirely separate from the problems of daily life. The Writings are given to reveal spiritual truth: the laws of Divine Providence, of influx, and of correspondence; but they do not explain how these laws are related to the mechanical operations of nature. That is why a philosophy is needed. Swedenborg's philosophy supplies a connecting link between the truth of revelation and the evidence of the senses. Such a link is indispensable to any spiritual interpretation of the laws of nature. The connection can be made only by means of natural ideas so ordered that they may open the mind to an understanding and perception of spiritual things. This, as we have already pointed out, scientific and natural ideas can do, if only the mind is elevated into something of spiritual light.

Of course Swedenborg had to speak in terms of the science of his day. He had to speak in accommodation to the natural and materialistic thought of his contemporary philosophers. As we have shown, however, he did both of these things with another purpose in view, namely, to discover for himself, and to show to his readers, a way of ascent, as by the steps of a ladder, from the mechanical and geometrical concepts of the physical senses to the vision and acknowledgment of the living soul, the moving and animating spirit of love and wisdom behind these sensual appearances. In all his studies Swedenborg always led to the acknowledgment and the contemplation of *use* in all things, and through this to the foresight, the providence, and the all-embracing mercy of the Lord. This is the secret reason why he was able to make such astonishing scientific discoveries, and to bring to light things

which the microscopes of his day were unable to reveal. This he could do because he was reasoning in accord with the inner truth, namely that all things are created for use, and so far as this is realized, the mind is led unerringly to a true conclusion. If we had space to do so, this could be strikingly illustrated by many of Swedenborg's anatomical and physiological discoveries, the truth of which was demonstrated scientifically only many years after his death.

Nowhere, except in Swedenborg's works, will we find a philosophic approach to the study of nature which opens the mind to the recognition of the Divine as the real and ever-present Cause of all natural phenomena. Nowhere else will we find a philosophy that postulates one all-unifying purpose behind all the forces of nature. To this idea modern scientific thought is strongly opposed. Materialistic philosophy is dramatically illustrated by the writings of the "International Federation for Internal Freedom." This organization was formed to investigate and discover the effects of certain drugs upon the mental functions. There are drugs which seem to expand the realm of consciousness beyond the limits of ordinary sense impressions, and to produce phenomena similar to those reported by the seers and prophets of old. The purpose is to prove that, while such visions are real, they have no supernatural connotations. They are purely subjective experiences produced by the chemical action of drugs upon the brain. This discovery has opened up a whole new field of psychological study which has been called "Psychedelic." It calls for the invention of a whole new language to express the ideas involved.

"Scientific Religious Humanism" offers a modern substitute for orthodox religion, as we learn from an article on "Religion and Science in Conflict" by Oliver L. Reiser and Blodwen Davies in *The Annals of the Academy of Political and Social Science* for March, 1948, pages 138-139. There the postulates of this new concept of religion are stated as follows:

1. There is a universal guiding field of influence, closer in nature to the cosmic fire (intelligent energy) of the Stoics than to the Creator in the orthodox interpretation of Genesis, which gives coherent form to the evolving realities in space and time.
2. Human consciousness . . . is an expression, or epitome of this cosmic energy.

3. The only knowledge man has is human knowledge, and no ultimate truth can come into his range of understanding greater than the capacity of the human mind to recognize and utilize in a given age. There are no revealed religions containing final and absolute truth.

4. . . . The only "true" religion is the one that encourages the continual creativity of man in his search through science, the arts, philosophy, and religion, for means of expressing his highest insights into the meaning of the evolution of life on earth, and the development of mind in society.

For Scientific Humanism "divinity" is not a "thing"—it is an inspiration toward wholeness. The "god" in humanity is simply this upward striving effort of man to become something more than what man now is. Man's endless capacity for self-evolution is not only the most interesting characteristic of the human being, but it is the most arresting fact in the universe. . . .

All modern philosophy, of course, is not based on the professed denial of God. Many thinkers are merely agnostic, preferring to leave out of consideration the question as to whether there is a God or not. Nevertheless, the whole trend of the times is to seek for a natural and materialistic interpretation of all things. Without recourse to Divine Revelation, indeed, no other interpretation is possible. But how can reasoning apart from Revelation, and without reference to a Divine Creator, lead to a true philosophy of life? Because God is the Creator and the Preserver of all things, the goal of philosophy must be to discover His purpose in creation, the love and the wisdom that brought it into being, and that governs it, perpetually, from moment to moment. And the goal of education must be to demonstrate the actual, the practical bearing of this supreme Truth upon our understanding of the world, and of how we are to live in it. The Academy of the New Church is founded to strive for this goal, and all its education is directed to this end.

But let us make it clear that the attempt to impart to our students a rational concept of how all the sciences are related to the teaching of the Writings does not imply that we must set up a static philosophical system either of creation or of human psychology. If this were done, and there is constant danger of doing it, we would be committing the same error as that which caused the fall of the first Christian Church. We would be ascribing Divine authority to a human dogma, and insisting that all scientific interpretation be forced into alignment with it. We would be

depriving our students, and indeed the members of our faculty, of free judgment in accord with their scientific findings. We would be holding their reason in bondage to a blind faith. This would stifle free enquiry, and penalize independent thought, just as was done by the Church in the Middle Ages.

The most vital requirement of all is that we acknowledge the great limitations of our knowledge, both of nature and of Divine Revelation, and that we impart this acknowledgment to our students as the first requisite of true wisdom. Our present understanding of the Writings is extremely general, and is based on external appearances. Not only the Old and New Testaments, but also the Writings, are necessarily written according to appearances, even though they be rational appearances. It could not be otherwise if they were to be accommodated to our state of ignorance and sensual thought. To illustrate: the Writings speak of a series of atmospheres by means of which the Divine love and wisdom are adapted for operation, on successively lower planes and finally at the surface of the earth. They also speak of a series of bloods by which that same love and wisdom are adapted to the creation of men capable of receiving and perceiving spiritual things, both during the life of the body and afterward in the spiritual world. Now note these terms, "atmospheres" and "bloods." What do they convey to us? Do we not think, unavoidably, of an atmosphere from what we know of the air, and of a blood from what we know of the red blood that flows through our arteries and veins? Yet the essential idea of both an atmosphere and a blood is that of communication. Communication may be effected by something far more subtle than either the air or the red blood. This may be illustrated by what we know of electricity, or magnetism, or of gravitation. All of these are media of communication. Yet they imply something indefinitely more active, something that operates with extreme rapidity, and almost instantaneously.

There is no scientific confirmation, at the present time, that such an atmosphere as the ether exists, nor that there exist any higher atmospheres such as Swedenborg calls the second aura and the first aura. May this not be because men have been searching for something nearly analogous to air, when yet the higher atmospheres are unimaginably more subtle and more active? So also,

what Swedenborg calls the "animal spirit" may be the actual element that constitutes what scientists call "nervous energy," and which they equate, or at least closely associate, with electricity. And what Swedenborg calls the "spirituous fluid" may be an element indefinitely more subtle even than this. Our ideas of a blood may at present be too gross and earth-bound to permit us to admit the existence of such an elusive entity. Nevertheless, the essential principle remains true: there must be an unbroken chain of connection between the outmosts of creation and the Infinite. If this be acknowledged, surely we will not close our minds against the concept of higher atmospheres, or higher bloods, just because we cannot demonstrate their existence by scientific observation or deduction. Nor will we be insistent that such elements, if they are to be found, must answer the requirements of our sensual ideas or else be rejected as non-existent. We will cling to the fundamental truth, and will never cease to search for some confirmation of it. And we will always be prepared to modify our ideas as our knowledge of the Writings, and of the interiors of nature, increases. It is worthy of note that the most modern explorations of the sub-atomic world seem to open up a realm in which the known laws of Euclidian geometry, or of traditional mechanics, do not apply. As we have already indicated, observed facts and mathematical calculations would appear to imply, on the one hand, that sub-atomic energy is in the nature of a wave motion, while on the other hand it can be explained in part only on the theory of a bombardment of tiny pellets. It becomes evident that things are happening in this invisible world that run counter to all the laws of motion with which we have hitherto been familiar. Nevertheless, it cannot be denied that sub-atomic energy is the source and origin of all the forces in our visible world. It must be of such a nature that it can produce these forces and cause them to act according to the well-known laws of mechanics. Here, certainly, there is a hint, at least, of a higher world, a world that can be understood, as Swedenborg says, only by analogy with ultimate nature, and only if the qualities of nature are elevated into a more eminent sphere. We do not imply by this that what has been discovered as sub-atomic energy or a "field of force" is a spiritual activity. We merely ask ourselves if this may not be a realm of natural energy so subtle as to present the appearance of a discrete degree such as Swedenborg assigns to the ether in

comparison with the air, or to the second aura in comparison with the ether, all of these being natural atmospheres.

At all events, we have here a scientific confirmation of the fundamental law, set forth both in the philosophical works and in the Writings, that there is a communication by discrete degrees, from the ultimates of nature even to the Infinite. And since the Infinite is pure love, there must be a definite relationship between the activity of love, which is spiritual, and the dead forces of nature which we sense as energy. How the Divine love and wisdom operate in the material universe still remains to be discovered; but the path leading to this discovery lies through the correlation of scientific facts with the truth of revelation. In attempting to perceive this correlation, we are still frustrated by our ignorance, both of science and of revelation. Yet the world of scientific discovery is before us, and is being explored with astonishing results. Its further exploration offers endless possibilities for the future. It is equally true that the Writings are available for study. They are infinite in scope, and they present the opportunity for unimagined discoveries of spiritual truths concerning the influx and operation of God in His creation. Man's understanding of science has been radically changed within our own life-time. The penetration of the atom, which had been regarded as the indivisible unit of creation, has opened up an entirely new and utterly strange world. The theories of Einstein and other modern physicists have changed the concept of outer space and opened the way to the possible exploration of the moon and of other planets. The application of atomic energy to both military and peace-time uses has introduced new ideas of mechanics. None of this was known to Swedenborg; yet he foretold the splitting of the atom, and postulated the existence of those invisible forces of nature which have now been demonstrated.

Our knowledge of the Writings has also progressed, more slowly indeed because of our natural tendency to cling to purely material ideas; but here also there has been a steady development of thought that gives encouraging promise for the future. Meanwhile, if we would continue along the path of spiritual discovery it is essential that we keep our minds plastic—subject to modification, ready to accept new ideas—even while we think, as is unavoidable, from postulates tentatively assumed for the sake of investigation. We must seek continually for the ultimate answer, and refuse to be

satisfied with anything less. To promote this search the Academy is an indispensable instrumentality. In essence it is a university, that is, a gathering of scholars devoted to the discovery of truth. Its faculty is charged with the responsibility, not only to meet the immediate educational needs of the students who enroll in its courses, but in addition to promote the ultimate goal of developing a truly New Church philosophy. By this we mean a philosophy of subject matter in every field of human enquiry into the arts and sciences, which will increase our perception and understanding of how these branches of learning are related to the spiritual truth of the Writings. This will necessarily be accomplished only by slow degrees, over many generations. It will be accomplished only by the cooperation of scholars who are masters in their own special field of secular knowledge, with scholars who are equally competent in the field of revealed theology. In this work, which is the supreme use of the Academy, I feel confident that the mental concepts provided for us in Swedenborg's philosophical works, even though they are based on the science of his day, will prove to be of inestimable value. Not the obsolete science, but the eternal principles of his philosophy, will be valuable. Their truth will be confirmed, and the understanding of them will be greatly enhanced, when they are seen in the context of modern scientific studies. Even the mental pictures of finites and auras, if only we do not think of them literally, but recognize that they are intended to be viewed "in something of spiritual light," will help to lift our minds above the concepts of space and time, of mechanics and geometry, to some vision of the Lord's immediate presence, and of the activity of Divine love and wisdom, in the entire structure of His universe.

The first six lectures in this series were published in the *NEW PHILOSOPHY*, beginning in Volume LXVI, No. 4, October 1963, and continuing through all four numbers of Volume LXVII, 1964.

- I. Introduction. The assumptions on which Swedenborg based all his thinking, p. 205.
- II. The process of creation is not merely mechanical, p. 217.
- III. Creation by means of motion. Various interpretations of Swedenborg's philosophy, p. 245.
- IV. The doctrines by which Swedenborg sought to discover the soul. The natural sun, its atmospheres and planets, p. 289.
- V. Light and heat, the ether and the air, the formation of seeds, p. 339.
- VI. The Philosophy of the return kingdom, p. 374.

THE NEW PHILOSOPHY
SWEDENBORG SCIENTIFIC ASSOCIATION

Read more in

The New Philosophy

by visiting

<http://swedenborg-philosophy.org/the-new-philosophy/issue-archive/>