

CONSERVATION IS PERPETUAL CREATION

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CONSERVATION IS PERPETUAL CREATION A PRESENTATION ON HOW TO SEE THE SPIRITUAL IN THE NATURAL.

In 1987 Bishop George deCharms was in the hospital in his late 90's, and my wife encouraged me to visit him, as it might be the last opportunity. What he said to me in our visit had a profound effect on my thinking about what New Church Science is all about. But it is only recently that I came to realize just how profound. He referred me to the conversation in the spiritual world between Hans Sloane and Martin Folkes, as recorded in *Divine Love and Wisdom* 344, which reads as follows:

I heard two presidents of the English Royal Society, Sir Hans Sloane and Martin Folkes, conversing together in the spiritual world about the existence of seeds and eggs, and about productions from them in the earths. The former ascribed them to nature, and contended that nature was endowed from creation with a power and force to produce such effects by means of the sun's heat. The other maintained that this force is in nature unceasingly from God the Creator.

To settle the discussion, a beautiful bird appeared to Sir Hans Sloane, and he was asked to examine it to see whether it differed in the smallest particle from a similar bird on earth. He held it in his hand, examined it, and declared that there was no difference. He knew indeed that it was nothing but an affection of some angel represented outside of the angel as a bird, and that it would vanish or cease with its affection. And this came to pass.

By this experience Sir Hans Sloane was convinced that nature contributes nothing whatever to the production of plants and animals, that they are produced solely by what flows into the natural world out of the spiritual world. If that bird, he said, were to be infilled, in its minutest parts, with corresponding matters

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from the earth, and thus fixed, it would be a lasting bird, like the birds on the earth; and that it is the same with such things as are from hell. To this he added that had he known what he now knew of the spiritual world, he would have ascribed to nature no more than this, that it serves the spiritual, which is from God, in fixing the things which flow in unceasingly into nature. (DLW 344)



Figure 1. A portrait of Sir. Hans Sloane.
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Figure 2. A picture in his book
Voyage to Jamaica
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The following is a short article by Bishop deCharms in *New Church Life*, 1982.

The teaching concerning Sir Hans Sloane's bird, recorded in *Divine Love and Wisdom* 344, is of tremendous importance to the New Church. It applies to all living creatures that have ever been created on the earth, and indicates how they are to be regarded as representative forms of use.

After quoting *DLW* 344 he writes:

It is the constant teaching of the Writings that material substances are not part of the living embodiment of any organism that is grown from seed. The function of the mineral kingdom is to clothe, fix and render permanent the real living body of any vegetable or animal creation. The real body of any living creature is a representative form of use.

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If we identify the living organism with the material substances that clothe it, we fail to see the Divine purpose for which it is created. We regard it then as a marvelous mechanism that has no connection with the Divine Source of life. It conveys no message of love and wisdom from God to men, and performs no spiritual or eternal use to mankind.

When we look at a bird, or anything else in this world, we are seeing something in the spiritual world, and yet clothed with physical material or chemicals. This is what Sir. Hans Sloane learned when he saw a bird in the spiritual world which was virtually identical to a bird in the natural world, perhaps the hummingbird of Jamaica which he called “the most beautiful bird he ever saw.”

The following teaching from the *Apocalypse Explained* explains in more detail what Sir. Hans Sloane learned when he held that spiritual bird in his hand:

All the objects in the spiritual world are similar [to those in the natural.] ... the things which are seen and felt there are not material, but substantial from a spiritual origin, and that they are notwithstanding still real, because they exist from the same origin as all the things in the natural world. The only difference is that an additional covering, an over-garment, so to speak, from the sun of the world, has been given to the things which exist in the natural world, and from this they have become material, fixed, stated, and measurable. I can positively affirm that the things which exist in the spiritual are even more real than those in the natural world; for that which in nature is added to the spiritual is dead, and does not produce reality, but diminishes it. (AE 1218)

Or put another way:

The mineral kingdom is simply a storehouse, in which are contained and from which are taken the things of which the forms of the other kingdoms, the animal and the vegetable, are composed. (AE 1209)

From these teachings we learn that the various elements are not unlike the lumber, and other materials, gathered to build a house. Imagine watching a house being built and not seeing the carpenters, plumbers, electricians, and other workers. We would soon be attributing various functional properties to the wood, to the pipes, and to the wires and fixtures. This can be illustrated by looking at a ruby, a diamond and graphite. Although a diamond and

graphite are both made of pure Carbon, in many other ways the ruby (mostly Al_2O_3) and a diamond have much more in common, and this because of their correspondence, or spiritual cause.



Figure 3.

The following teaching from the work *Divine Providence* gives to us a wonderful new and delightful way to view the world of nature and the subject of science.

That the universe, with each thing and all things of it, was created from the Divine love by means of the Divine wisdom can be confirmed by all things submitted to sight in the world. Select any particular object and examine it with some wisdom, and you will be convinced. Take a tree, or its seed, its fruit, its flower, or its leaf, gather up the wisdom that is in you, examine the object with a good microscope, and you will see wonderful things; while the interiors that you do not see are still more wonderful.

Observe the order in its development, how the tree grows from seed even to new seed, and consider whether there is not at every successive step a continual endeavor to propagate itself further; for the final thing to which it aims is seed, in which its reproductive power exists anew. And if you are willing to think spiritually, which you can do if you wish, will you not now see wisdom here?

Moreover, if you are willing to go far enough in spiritual thought, will you not see also that this power is not from the seed, nor from the sun of the world, which is pure fire, but is in the seed from God the Creator, whose wisdom is infinite; and in it not only at the moment it was created, but continually afterwards? For conservation is perpetual creation, as subsistence is perpetual existence [or coming forth].

In fact, every such created thing is endowed with power; but power acts not from itself, but from Him who bestowed the power. Examine any other object on the earth, as a silkworm, a bee, or any other little creature; look at it

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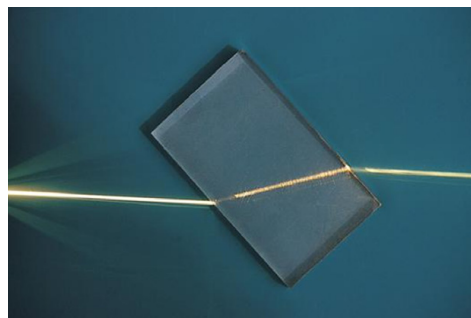
first naturally, afterwards rationally, and at length spiritually, and if you are able to think deeply, you will be astonished at it all; and if you will let wisdom speak within you, you will say in amazement, "Who can fail to see the Divine in these things? All things are of the Divine wisdom." (DP 3)

In 1744, Louis Maupertuis, saw this Divine Wisdom in nature of light and motion, and proposed one of the most fundamental principles in all of science, "the principle of least action." We see this in what he wrote:

Now I have to define what I mean by "action." When a material body is transported from one point to another, it involves an action that depends on the speed of the body and on the distance it travels. However, the action is neither the speed nor the distance taken separately; rather, it is proportional to the sum of the distances travelled multiplied each by the speed at which they travelled. Hence, the action increases linearly with the speed of the body and with the distance travelled. This action is the true expense of Nature, which she manages to make as small as possible in the motion of light. . . .

One cannot doubt that everything is governed by a supreme Being who has imposed forces on material objects, forces that show His power, just as he has fated those objects to execute actions that demonstrate His wisdom. . . . To unify the certainty of our research with its breadth, it is necessary to use both types of study. Let us calculate the motion of bodies, but also consult the plans of the Intelligence that makes them move. . . . It seems that the ancient philosophers made the first attempts at this sort of science, in looking for metaphysical relationships between numbers and material bodies. When they said that God occupies himself with geometry, they surely meant that He unites in that science the works of His power with the perspectives of His wisdom.

The picture on the right illustrates the principle of least action. The light bends into the glass as it enters and then back again as it leaves the glass. In this way the light, which goes about $2/3$ as fast in the glass than in air, spends less time or action, to arrive at where it will eventually end up. It is as if the light knows what path to take to spend the least time or action getting there.



Given the way modern science is presented today, it seems almost surprising to see a scientist, especially one proposing for the first time such a fundamental principle, ascribing this to the wisdom and power of God. Yet this was not uncommon in science as it developed in its beginning, in fact, until fairly recently scientists were still discussing how God operates in nature, or what properties and power God put into natural substances when they were created. It was this second view that gradually led to leaving God out of the equation, and attributing creation to the big bang, and the properties and forces to the substances themselves.

One would think, with God's love and wisdom so clearly visible in the world around us, men would not lose sight of this. But since the beginning the Lord has given us the freedom to choose how we believe and what we see, for "faith is the eye of love." (AC 3863:12) As we are taught in the work *Divine Love and Wisdom*, "Thought from the eye closes the understanding, but thought from the understanding opens the eye." (DLW 46). This choice is the same as the first choice given to man between the two trees in the Garden of Eden. (see AC 217–219). It will all depend on what principle or starting point we decide to begin with. (AC 2568, 2588, 6047, etc.)

But does this mean that we are to abandon science in favor of God's Word. Some have made this choice, and have found themselves in blind faith or faith alone. But if "faith is the eye of love" then faith should open our eyes, and we will be able to see the things of nature and science in the light of heavenly truths. And so we are taught:

The true order is for man to be wise from the Lord, that is, from His Word, and then all things follow, and he is enlightened even in matters of reason and of science (*in rationalibus et scientificis*). For it is by no means forbidden to learn the sciences, since they are useful to his life and delightful; nor is he who is in faith prohibited from thinking and speaking as do the learned of the world; but it must be from this principle: to believe the Word of the Lord, and, so far as possible, confirm spiritual and celestial truths by natural truths, in terms familiar to the learned world. (AC 129)

We can see this from so much of what is written in the *Heavenly Doctrine*, where the truths of heaven are illustrated and confirmed by the science of the learned world, and in doing we gain amazing insights into how to view the physical world around us, the human body and even the universe.

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We learn in the Spiritual Diary that “since sciences have shut up the understanding, therefore, sciences may also open it; and it is opened so far as men are in good.” But for this to happen we also need to see the sciences from a new perspective, which the Lord has given us in His Second Coming. For example let us look at what we are taught in the *Apocalypse Explained* concerning the five senses, and the laws inscribed on the nature of all things:

The sensory of sight, which is the eye, sees objects out of itself as if it were close by them, when, in fact, the rays of light convey with wings of ether their forms and colors into the eye, and these forms when perceived in the eye are observed by an internal sight that is called the understanding, and are distinguished and recognized according to their quality. ... The five bodily senses by virtue of an influx from within are sensible of what flows in from outside; the influx from within is from the spiritual world, and the influx from outside is from the natural world.

With all this the laws inscribed on the nature of all things are in harmony, which laws are:

1. That nothing exists or subsists from itself, or is acted upon or moved by itself, but only by something else. From this it follows that everything exists and subsists and is acted upon and moved by the First that is not from another, but is in itself the living force, which is life.
2. That nothing can be acted upon or moved unless it is intermediate between two forces, one of which acts and the other reacts, that is, unless one acts on the one side and the other on the other, and unless one acts from within and the other from outside.
3. And since these two forces when at rest produce an equilibrium, it follows that nothing can be put in action or moved unless it is in equilibrium, and when put in action it is out of the equilibrium; also that everything put in action or moved seeks to return to an equilibrium.
4. That all activities are changes of state and variations of form, and that the latter are from the former. (AE 1146)

So much is revealed in just this one teaching “about the laws inscribed on the nature of all things” that we could go one for days and years just

following up on these details. However, let us be satisfied with just a couple of observations:

At first glance we see a similarity between the first three laws above, and the three laws on motion proposed by Sir Isaac Newton, but a closer look will show they are quite different. Newton's laws are concerned mostly with the external force on a body, whereas these laws inscribed on the nature of all things, speak of a force from within and a force from outside. This equilibrium can be seen more clearly in Newton's second law, as rewritten by d'Alembert, as a "dynamical equilibrium": $F - ma = 0$, which equilibrium is very similar to the principle of least action proposed by Maupertuis spoken of earlier in this article. Also the last of these laws in a certain way anticipates quantum mechanics and the equation of state (see also *AE* 726).

Another view of how these forces work can be seen in a similar teaching from the *Apocalypse Explained*:

In everything spiritual [and natural] there are three forces, an active force, a creative force, and a formative force.

The active force, because it is spiritual, proceeds from the fountain of all forces, which is the sun of heaven, and that is the Lord's Divine love, and love is the active itself, from which the living force which is life proceeds.

The creative force is the force that produces causes and effects from beginning to end, and reaches from the First through intermediates to the last. The First is the sun of heaven itself, which is the Lord; intermediates are things spiritual, afterwards things natural, also things terrestrial, from which finally are productions. And as in the creation of the universe that force proceeded from the First to the last, so afterwards it proceeds in like manner in order that productions may be continual; otherwise they would fail. For the First continually regards the last as an end; and unless the First looked to the last continually from itself through intermediates according to the order of creation, all things would perish; therefore productions, which are especially animals and plants, are continuations of creation. It does not matter that the continuations are effected by seeds, it is still the same creative force that produces. Moreover, it is according to the observation of some that certain seeds are still being produced.

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The formative force is the last force from ultimates, for it is the force that produces animals and plants from the ultimate materials of nature, which are collected in the earth. The forces that are in nature from its origin, which is the sun of the world, are not living forces but dead forces. These do not differ from the forces of heat in man and animal, which keep the body in such a state that the will by means of affection, and the understanding by means of thought, which are spiritual, can flow in and do their work in it. They do not differ from the forces of light in the eye, which simply cause the mind, which is spiritual, to see by means of its organ, the eye. The light of the world sees nothing, but the mind by the light of heaven. The same is true of plants. He who believes that the heat and light of the sun of the world do anything more than open and dispose the things proper to nature that they may receive influx from the spiritual world is very much deceived. (AE 1209)

The active force can be thought of as the omnipotence, omniscience, and omnipresence of the Lord in all of creation, both spiritual and natural, what could also be described as the immediate influx from Lord. We see this also reflected in this teaching from *True Christian Religion*.

The following things are not creatable, namely: (1) The infinite is not. (2) Love and wisdom are not. (3) Consequently life is not. (4) Light and heat are not. (5) Even activity itself viewed in itself is not. (TCR 472)

The creative force can also be described as correspondences, the Divine in the spiritual by correspondence, and the spiritual in the natural by correspondence. This force works by the discrete degrees of celestial, spiritual and natural, or end, cause and effect. It is the spiritual bird in the physical bird, the spiritual giving direction and energy to the physical substances which clothe the natural bird.

But the formative force is a dead force doing nothing more than giving fixity to the spiritual forms coming into the natural world, disposing the physical substances to receive and respond to that influx from within. A comparison might be made to the floor we walk on, which allows us to walk in any horizontal direction. Without the floor we would have nothing to push off on, but it is not the floor which determines which direction we walk. So also are the physical forces in nature.

From the point of view of modern Physics, physical force is the only force, and they divide them into four: the force of gravity, the strong force of the nucleus, the weak force related to nuclear decay, and the electro-magnetic force. But they see these forces all acting on the same plane. Whereas in the Heavenly Doctrine we find that even these physical forces act one within the other. Swedenborg himself, in his scientific works, especially in his work he called the *Principia*, or the principles of natural things, he saw these forces or elements each within the other. We find in the *Principia* he describes five elements, the first being the solar vortex, or gravity, the second being magnetism, the third being the ether, with light and electricity, the fourth element he calls air, and the fifth was water vapor, each one within and forming the one that follows.

Gravity \implies Magnetism \implies Light and electricity \implies
Air and sound \implies Water vapor

By the early *Spiritual Diary* Swedenborg writes concerning four natural atmospheres produced by the natural sun:

There are four natural spheres arising from the sun.

The atmosphere which produces hearing is known, [air];

A purer atmosphere separate from the aerial is that which produces sight or visual images by the wonderful reflections of all objects, [ether and light];

Another atmosphere—the still purer ether—is that which produces the forces of magnets, which reign not only about the magnet in particular, but also about the whole globe, but there is no need to describe to what extent, [magnetism];

The purest ethereal sphere is the one that is universal in the whole world, . . . [gravity]

These spheres are of the sun, and may be called solar, and thus natural. (*SD* 222)

Gravity \implies Magnetism \implies Ether and light \implies Air and sound

But later, in the Heavenly Doctrine, the number becomes three, in correspondence with the three heavens, as can be seen in the posthumous work on the Last Judgment:

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There are three natural atmospheres arising from the sun of the world, and there are three spiritual atmospheres arising from the sun of heaven, which is the Lord. The three natural atmospheres arising from the sun of the world are the purer ether, which is universal, from which is all *gravitation*; the middle ether, which forms the vortex around the planets, in which are the moons and the satellites, from which is *magnetism*; and the ultimate ether which is the *air*.

By these three atmospheres all the corporeal and material things of the earth are held together, which are so composed as to be applicable to those three degrees. (LJP 320)

Gravity \implies Magnetism and Light \implies Air and Sound

This teaching, tucked away in a manuscript, together with two other unpublished works of the Heavenly Doctrine, brings together, for the first time light and magnetism. The scientific world did not discover this until more than 100 years later. Swedenborg's personal system, which he still held in part in the early Diary, had these as two distinct forces, or atmospheres, or elements. But in this teaching, in correspondence with the three degrees of heaven, and the trine of good, truth and use, we find that magnetism and light both relate to the middle atmosphere, and the idea of truth.

We should note that the force of gravity always attracts, and the force of air pressure always pushes away, and that this middle force, light, or electric and magnetic force, can either push or pull. It is also easy to see the correspondence of love in the force of gravity, which like love always attracts, and if we compare good to mass, the more good each has the greater the attraction.

We find something similar to the teaching from *Last Judgment Posthumous* in the work *Divine Love and Wisdom*, although we do not find gravity and magnetism explicitly mentioned:

The atmospheres, of which there are three both in the spiritual and in the natural world, in their outmosts close into substances and matters such as are in lands.

[These] three atmospheres both in the spiritual and in the natural world, which are distinct from each other according to degrees of height, and which, in their progress toward lower things, decrease [in activity] according to degrees of breadth.

And since atmospheres in their progress toward lower things decrease [in activity], it follows that they constantly become more compressed and inert, and finally, in outmosts, become so compressed and inert as to be no longer atmospheres, but substances at rest, and in the natural world, fixed like those in the lands that are called matters.

As such is the origin of substances and matters, it follows, first, that these substances and matters also are of three degrees; secondly, that they are held together in mutual connection by encompassing atmospheres; thirdly, that they are fitted for the production of all uses in their forms. (*DLW* 302)

Now the teaching in the Last Judgment Posthumous is followed by a teaching revealing something we do not find directly stated elsewhere in the Heavenly Doctrine:

But it should be known, that the atmospheres arising from the sun of heaven, which is the Lord, properly speaking, are not three, but six, there are three above the sun of the world, and there are three below it. The three below the sun of the world constantly accompany the three natural atmospheres, and enable a man in the natural world to think and to feel. For the atmospheres arising from the sun of the world have not life in themselves, because they originate from a sun which is pure fire; but the atmospheres arising from the sun of heaven, which is the Lord, have life in themselves, because they originate in the sun, which is pure love and pure wisdom. The atmospheres which originate from the sun of the world, which is pure fire, cause those things on the earth, and in the human body, to subsist and be held in connection together, and they are not changed except according to the laws of natural order. Hence is the difference between things in the natural world and in the spiritual world. (*LJP* 321)

In this teaching from the posthumous work on the Last Judgment, it seems that the spiritual atmospheres above the natural sun find a formative force in the spiritual world, thus their forms are spiritual, and can come and go with the spiritual states of those in the spiritual world. But the atmospheres from the spiritual sun which are below the natural sun, are spiritual atmospheres (or creative forces) inflowing into the physical atmospheres (formative forces) propagating and conserving the physical forms which give them fixity and presence in the natural world.

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What this means is that the world we live in has within it not just three natural atmospheres or forces, which at the end of the Heavenly Doctrine are simply called, “the aura, the ether, and the air.” (*Coronis* 17). This also means that in each of these atmospheres the spiritual is contained, a spiritual said to be below the natural sun, because it is contained. Which means everything we see and feel around us is both spiritual and natural. Indeed we could not see and feel it if the spiritual was not within it, and if we were not connected to it, so to speak, both spiritually and naturally; for it is not the eye that sees, but the understanding which corresponds to it.

So the bird held by Hans Sloane in the spiritual world was altogether similar to the bird he examined in the natural world, but the outer form was composed of spiritual substances, rather than physical matter. Both would have cells and tissues, and organs, feathers and wings. But the one in the natural world would be clothed and fixed, and thus more permanent. However, its spiritual reality would be diminished, and in the end mortal. Still both are spiritual birds in reality, but one is actually physical as well. What we see will depend on what we willing to see, or rather we will to see; a true nightingale or a mechanical bird taking its place?

