correspondences which are closer to the actual thing than are the correspondences in the rest of the body and in nature.

The kind of synthesis we have just adumbrated shows how futile it is to try to decide which of love, wisdom, or knowledge is the most important. In different states of regeneration one or another tends to predominate. As the body cannot live without all, so neither can the soul be regenerated until all the correspondent heavenly things are united as in the image or likeness of the Divine Human. Nevertheless it is abundantly clear that love is the centre and origin from which life flows but that it does nothing without making use of wisdom which also makes use of knowledge [DLW 409].

PHILOSOPHICAL NOTES

349 Introduction to Examples of Connected Wholeness in the Philosophical Works and the Writings. In the two previous sets of notes, connected wholeness was illustrated in current theories in physics concerning the whole universe. Not only is this illustrated by continued radiation evidence of the "big bang" as a theory of creation, but also by Bell's theorem that there is a connectedness of all things in the universe. There are no local causes. The notes that follow discuss selected examples of systems of connected wholeness from several works by Swedenborg, in the order of their writing.

350 Connected Whole of the Universe According to The Principia.

[Everyone may] perceive, that all things in the world originate from what is uncompounded; consequently from one single fountain-head and one primitive cause; that this primitive cause is derived into the various things which are causes;...also that no other cause could possibly have had existence than the one which proceeded by geneological descent, as it were, from its first parent or simple. [Swedenborg's "Preface", Clissold transl., p. xciii]

Thus according to *The Principia* the whole of the universe is connected by originating from a single cause.

⁴ New-Church Magazine, July-Sept. 1979, p. 61.

Now since the world deduces its originary subsequent increments, by a connected and contiguous series, from the first or single end through intermediates to another end; and since there must be present a cause, and indeed an efficient and active cause, before anything can be produced in a series; it follows that there must be present a passive, an active, and as a product from both, a compound, or elementary; if therefore there be anything composite, it must consist of two principles, namely, a passive and an active ["Preface," p. xciv]

Hence there are three superior, universal series:

- 1. of finites
- 2. of actives
- * 3. of elementaries or atmospheres [EAK I, 584].

That there is a common origin of all three in what is called "the simple," is stated as follows:

I have endeavored to evince that in the Finite, which is the first in successive derivation from the Simple, is contained each principle, both passive and active, from which, by the accession of a contingent or physical cause, arose the composite or Elementary ["Preface," p. xciv]

And there is much more in the development of the notion of the connected whole because of a common connectedness of all things by series back to that first thing.

In The Principia the doctrine of series and degrees has not yet been formally described, but it is being illustrated by particular examples. Even the language of series and degrees is appearing in The Principia as outlined in the author's "Preface":

Inasmuch as in all its kingdoms the visible world is of so diversified an aspect, and consists and subsists in the series of parts successively and simultaneously arising, it cannot possibly have its terminations in the same point in which it had its beginning [xcvi]

From this the author goes on to distinctions between "innumerable parts of the mineral, vegetable, and animal kingdoms..."

Hence it is that, my first aim has been to demonstrate, that the first Finite derives its origin from the Simple; the second Finite from the first Finite; the third from the second...Again; inasmuch as all Finites are capable of becoming actives. And

inasmuch as there is thus a series of Finites and of Actives, there will also be a series of Elements such as the first or most universal Element, the second or Magnetic or vortical Elements, the third or Ethereal Element, the fourth or Aerial Element; before the elementary kingdom belonging to the world has yet been fully completed. ["Preface," pp. xcvi-xcvii]

351 The Circle of Creation as a Connected Whole in The Infinite and Final Cause of Creation. Man is described as the means of the turning in the series which descends from ends in the Infinite, and ascends back to ends in the Infinite. In the descent the universe is formed, and the particulars in the earth: the three kingdoms, mineral, vegetable, and animal. All these things come together in man, and man, so created as to be able to acknowledge, love, and worship God, becomes the means by which the turning takes place.

This is the most inclusive series in the philosophical works, the whole of which is devoted to some part of this series.

352 A General About a "circle of things" in "Introduction to Rational Psychology" [EAK, Pt. I, Chapt. VIII]. A general principle is given, that a doctrine of series and degrees is required in order to treat of a "whole circle of things." That doctrine is here referred to by the alternate name of "Doctrine of Order," or briefly "Order."

But whereas all things in succeeding each other follow one another in order, and whereas in the whole circle of things, from first to last, there is not a single one which is altogether unconnected or detached from the rest; I am therefore compelled, as I said, previous to developing the subject of Rational Psychology, to take into consideration this doctrine concerning order and connection, so remarkably conspicuous in the animal kingdom. [EAK I 579]

353 Connected whole of the brain: The Cerebrum. From 1734 until the end of his philosophical period Swedenborg worked on major volumes on the brain. The casual reader will become overwhelmed by the many particulars. Even when treating of one part, namely the cerebrum, there are three Transactions totaling 731 pages (Three Transactions on the Cerebrum, translated and edited by Alfred Acton, 1938). A second volume consists of 179 pages of additions, index and many plates. R. L. Tafel translated and edited two volumes, The Brain, consisting of 794 and 638 printed pages, respectively.

Something about the nature of these 2300 pages, most of which

are about particulars, is contained in this rei ______ Alfred Acton

It may be noted, moreover, that Swedenborg's anatomical extracts sometimes present particulars that can be found only in special brochures, or in medical journals — if even there; for physiological literature gives many instances of modern ignorance of the discoveries of the past. Certainly the voluminous exerpts by Swedenborg show how keen was his never flagging desire for authoritative knowledge, how widespread his reading, and how nice his choice of authors whose words carried weight. [Introductory Note, *The Cerebrum*, Volume II, pp. vii-viii.]

As we become aware of his concern for particulars, we should not forget that Swedenborg's work on the brain was only a part of his total studies on the human organic directed to his stated end: "the search for the soul." In spite of over 2000 pages, largely on particulars, Swedenborg is concerned with the connectedness among the parts.

It is not advisable to direct the thought to each single member of the cerebrum separately; for all the members act in association with each other, and, by the stupendous ordination of an ultimate wisdom and art, tend simultaneously to one and the same end. Hence, to know the work of a single one, is merely to know a single bar and pulley in a machine, and not the nature of the power and force of the whole. [Cerebrum, VoII p. 723]

- 354 Selected arguments from The Economy that lead to the conclusion that there is a first substance in the world.
- 1. "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." [581]
- 2. "In the mundane system there are several series, both universal, and less universal." [584]
- 3. "There is nothing in the visible world, which is not a series, and in a series." [586]
- 4. Substances are manifold; nevertheless, of all that are in the universe, there is only one from which the rest flow." [590]
- 5. "And on which, as their first principle, the principles of natural things are impressed by the Deity." [591]

The conclusion heads the next note.

- 355 "Each series has its first and proper substance, which substance nevertherless depends for its existence on the first substance of the world;" [EKA 592] I enumerate what follows in that number for clarity:
- I. "— as the first substance of the mineral kingdom, the first of the vegetable, and the first of the animal; or the first of every species, that is, of every individual of the respective kingdoms."
- 2. "These first and proper substances are what are called by some elements, monads, primitive and simple substances;"
- 3. "not that they are absolutely primitive and simple, but that they are so in respect to the compound substances of their series;"
- "for if they were absolutely such, they would all differ from the first substance of the world as to essence, or as to form and nature;"
- 5. "and would flow as differences immediately from the first substance:"
- 6. "which nevertheless they cannot do but by an order of succession, from the most universal substance of nature."
- 7. "Consequently, we should then trace up nature to no higher an origin than nature, and should bound the rational analysis of the mind either in things already thus simultaneously created, or in things to be created, successively from one instant to another."
- 8. "Hence all irregularities and imperfections would be made to flow immediately from the first substance, or to be immediately created such, whereas they ought to be ascribed to nature alone."

Thus the world is described as a connected whole, since all of its parts and everything in it owes its existence to being in some series, and every series is such that its first or universal originates in a series whose prior first does likewise, until the first substance of the world is arrived at.

Out of interest for the man Swedenborg himself, and further to suggest all this as a philosophical conclusion and not a dictate of final truth, we note.

I would allow the first substance of any series to be absolutely primitive and simple, if anything in nature would be thereby rendered capable of explanation; but since nothing whatever can be so explained, I think that I ought not to make the admission. [592]

356 A circle of things that involves man in the world in The Word Explained, by selected passages:

There is, indeed, a kind of circle and gyre from external

sensations, through that mind which is properly human, to actions. [969]

In itself, this circle and gyre is as follows: The things which enter by sensations, especially by hearing [and sight], fix themselves in the memory; from here, together with the things which flow in at the moment, they insinuate themselves into the understanding, and from this they pass over into the will and thus into the actions. [970]

From these few words one may comprehend the nature of the circle or gyre of those things which enter from the world and which go forth into the world; and can also comprehend that the hinge or turning point is the rational mind. And now the explanation of these matters can be extended to show how the things which enter in through the senses, especially through hearing and sight, are brought into the rational mind; and then, how the things in the rational mind, while turned over therein, put on the form of a man, as it were; that is, put on that which is more properly the human; and finally, how they then pass out through the will into the actions, which latter, being thus imbued with the things which were in the man's intellectual mind, become truly human actions; that is to say, become such that from them it is clear that the actor is a man, and what kind of a man. [971]

Although there is a kind of completeness in this circle, it encompasses much less than the circle of creation described in *The Infinite*. But man in each case is the "hinge" or the turning point. There is an inversion in the latter case from the former. In *The Infinite* man is related to God as the means of turning. In the latter case man is the turning of things from the world back to the world.

The completeness within the world is of order when its end is for the sake of existing and acting in the world only, yet is not exclusive. A reduced circle of man's relation to the world is expressed in the words of a current beer advertisement: "for one time around."

357 Connected Wholes In the Writings. There are many examples of connected wholes in the Writings. Two are given here. The first is really two; one being God-Man, and the other man. The second describes heaven as a whole.

Because in God-Man there are infinite things which, in heaven, in an angel, in a man, appear as in a mirror, and because God-Man is not in space — as was shown above (n. 7-10), it can, to some extent, be seen and comprehended how

God can be Omnipresent, Omniscient, and Omniprovident, and how as Man He could create all things, and as Man can hold all the things created by Himself in their order to eternity. [DLW 21]

In man there are many and innumerable things, as was said above, but yet a man feels them as one. From sense lexperiencel he does not know anything about his brains, his heart and lungs, his liver, spleen and pancreas, or about the innumerable things in his eyes, ears, tongue, stomach, generative organs and the rest; and because he does not know these things from sense [experience] he seems to himself a unity. The reason is that all these things are in such a form that not one can be lacking, for it is a form recipient of life from God-Man as was shown above (n. 4-6). As a result of the order and connection of all things in such a form, there is presented the sense and then the idea as if there were not many and innumerable things, but as if they were one. From these facts it can be concluded that the many and innumerable things which make, as it were, one in a man, in Very Man Who is God, are one distinctly, indeed most distinctly. [DLW 22]

Every whole exists from various parts, since a whole without constituents is not anything; it has no form, and therefore no quality. But when a whole exists from various parts, and the various parts are in a perfect form, in which each attaches itself like a congenial friend to another in series, then the quality is perfect. So heaven is a whole from various parts arranged in a most perfect form; for the heavenly form is the most perfect of all forms.

That this is the ground of all perfection is evident from the nature of all beauty, agreeableness and delight, by which the senses and the mind are affected; for these qualities spring and flow from no other source than the concert and harmony of many concordant and congenial parts, either co-existing in order or following in order, and never from a whole without many parts. From this is the saying that variety gives delight; and the nature of variety, as is known, is what determines the delight. [HH 56]

358 Some Other Examples of Connected Wholeness. There are many examples of connected wholeness, but they are all subordinate to the most universal one that connects God, man, and the world—the circle of creation as introduced in *The Infinite*. The sequence

universe, solar system, earth illustrates. . Jination within nature. But something is missing as evidenced by the disturbing second law of thermodynamics. If it applies to the whole universe with its suns and all else, the universe flows to a "heat death." But this leaves a question: There it is as it is with its suns, how did it get that way?

Some suggestion within nature is given by the chick and the egg. There is the egg! Complete in itself. All it needs is applied warmth and a chick will be brought forth. "All it needs is warmth!" So the egg by itself is not a complete system. The whole universe is not complete in itself. It too requires a kind of warmth from "above" — beyond the heat in the stars. So with the human body as a whole. If must have a soul so created that its very existence may be perpetuated by Love and Wisdom, which are as heat and light from the Spiritual sun.

COMMUNICATIONS

To the Editor.

Dr. N. J. Berridge is to be commended for his study, "Thinking From Correspondences," commencing with the January-March, 1979 issue of THE NEW PHILOSOPHY. I am impressed with it as a thoughtful effort by a sincere New Churchman to apply the Doctrines. With his scientific knowledge and his study of the Writings he has brought out some very interesting relationships, showing markedly the correspondences between the spiritual realm and the natural. In his Part I: 3, with an expression of humility which necessarily characterizes all such efforts, Dr. Berridge asks for comments or "contributions." It is his Part IV, "A Little Embryology" (THE NEW PHILOSOPHY, July-Sept. 1979, p. 398-402) to which I feel compelled to reply.

In his interpretation of Divine Love and Wisdom 401, Dr. Berridge finds "...a simple error," which, to him, provides a basis for the further understanding of the relationship of respiration. I quote the portion of DLW 401 in question, emphasizing the statement which, as I understandit, Dr. Berridge finds at variance with the truth: "For in the fetus the blood does not flow from the heart into the lungs, giving it the ability to respire; but it flows through the foramen ovale into the left ventricle of the heart; consequently the fetus is unable to move any part of its body, but lies enswathed, neither has it sensation, for its organs of sense are closed. So is it with love or the will, from which the fetus lives indeed, though obscurely, that is, without sensation or action." (DLW 401, my emphasis; cf AC 4931. 4941)

It is unfortunate that nowhere in the first four parts has Dr. Berridge made reference to that important work of the Writings, bearing on philosophical matters, The Divine Wisdom (published, along with The Divine

Love, at the end of Volume 6 of the Apocalyse Explained by the Swedenborg Foundation, but published separately as On Divine Love and Divine Wisdom, by the Swedenborg Society). For The Divine Wisdom has direct bearing on the subject.

In connection with this matter, Divine Wisdom II should be also carefully consulted. But Divine Wisdom III appears to bear more closely on the subject Thus, in the heading of Divine Wisdom III we read of: "THE FORMATION OF MAN IN THE WOMB BY THE LORD BY MEANS OF INFLUX INTO THESE TWO RECEPTACLES [the will and understanding]" (my emphasis). Divine Wisdom III is separated into 6 parts. In Part 1 we read: "1. "The Lord contains Himself to man in the womb of the mather from his first conception, and forms man."

Thus it appears that the Lord is with the embryo and fetus in a most special way, to the extent that He may form man Providentially for good, to the point where the as-of-self may assume its role. Thus the freedom and rationality which are to lead to eternity, whose abode are in the will and understanding, must be ultimated in the world. (See CL 183: 4 and DW III: 2)

We see here the use of the limbus in forming man's body, and in Divine Wisdom III: 4 where—because we are taught in AE 1210: 3 that everything has its ultimate in which it subsists—we read of the spiritual and natural receptacles of the will and understanding: but, keeping in mind that the limbus is not "ultimate enough," for if the fetus is not born, to take a breath of life, that commencing man is not man, which leads us to the most pertinent part of Divine Wisdom III, namely, sub-numbers 5 and 6:

"5. One receptacle is for the will of the future man and the other is for his understanding; and yet nothing whatever of his will or of his understanding is present in the formation. Will and understanding with man do not begin until the lungs are opened, and this does not take place until after birth; then the will of man becomes the receptacle of love, and the understanding becomes the receptacle of wisdom. They do not become such receptacles until the lungs are opened, because the lungs correspond to the life of the understanding, and the heart corresponds to the life of the will, and without the cooperation of the understanding and will, man has no life of his own, as there is no life apart and vivified, as has been said before. In the embryo the heart alone beats, and the liver leaps, the heart for the circulation of the blood, and the liver for the reception of nourishment; from these is the motion of the other viscera, and this motion is felt as pulsative after the middle period of gestation. But this motion is not from any life proper to the foetus: one's own life is the life of the will and the life of the understanding: from these only do the sensitive and motor life in the body exist; and this life is not possible from the beating of the heart alone, but is possible from the conjunction of this with the respiration of the lungs. This is seen to be true in men, who have both will and understanding; when they fall into a swoon or are suffocating, and respiration stops, they become as if dead; they have no sensation, their limbs do not move, they do not think nor will, and yet the heart performs its contractions and the blood circulates. But as soon as the lungs return to their respirations the man comes back into his activities and to his senses, and into his will and understanding. From all this a conclusion may be formed about the quality of the life of the foetus in the womb, in which only the heart performs its motions, and not yet the lungs, namely, that nothing of the life of the will and nothing of the life of the understanding is present in it; but the formation is effected solely by the life from the Lord by which man afterwards is to live. But about this more may be seen in the following article.

"6. There is life in the embryo before birth, but the embryo is not conscious of it. This follows from what has been said above; also that the life from which the embryo in the womb lives is not its life, but the Lord's alone. Who alone is Life." (DW III: 5, 6, my emphasis)

This seems to completely reconcile what was not clear in DLW 401, namely that "[the fetus] is unable to move any part of its body, but lies enswathed, neither has it sensation, for its organs of sense are closed." We read further on this matter in Naw Church Life, October, 1940, p. 467, from Bishop Alfred Acton's Pittsburgh address: "Changes of state are indeed produced in the womb, and life is aware of them, but the vessel itself is not aware of them until its senses are opened to the outer world. Then, and then only, does it excercise free choice and lives as if of itself."

We see that while it indeed moves, the fetus itself is unable to move any part of its body, and that all its movement comes from Divine influx, carried down through the necessary degrees; that it lies enswathed for protection (see p. 399 of Dr. Berridge's article), and that it has no sensation because it is not yet born, birth giving the newly formed man the necessary conjunction of the will and understanding in the heart and lungs, with its attendant sensation. Noting the quotation above of DW III: 5, 6, we see that this motion of the fetus' is not from any life proper to the fetus; one's own life is the life of the will and the life of the understanding; while the life of the infant (fetus) is the life of the commencing will and commencing understanding; from these only [in their fruition] do sensitive and motor life in the body exist; and this life is not possible from the beating of the heart alone, but is possible from the conjunction of this with the respiration of the lungs." (DW III: 5, my emphasis)

Thus it appears that DLW 401 is fully reconciled with the truth, and that no error exists in DLW 401; and we take great consolation in the fact that the Lord alone forms us with what He chooses for life in this world; thus, we are in the hands of Providence.

Columbus, Ohio

V. CARMOND ODHNER

Dear Editor,

I wish to thank Mr. V. Carmond Odhner very warmly for his kindness and charity and labor in repairing a serious omission in Part IV of my series on "Thinking from Correspondences". Divine Wisdom II and III supply very welcome confirmation and amplification of the quotation taken from Arcana Coelestia 3887, namely that "fetuses...cannot have...any voluntary action." It now seems very simple and clear. The embryo cannot move its body, but this does not mean that the embryo's body cannot be moved by the inflowing life from the Lord. I am sorry that I had misunderstood.

We are all prone to error, some more, some less, and it is a comfort to know that one's errors will be detected and corrected. Divine Providence 25 is also a comfort.