

CONCLUSION

A concept which is based primarily on a few mathematical equations must be a tenuous idea at best. The reality of the vacuum state seems reasonable although an understanding of that reality does not come easily. However, it is interesting to note that physics has come almost a full circle in the strangeness or profundity of the accepted concepts within the discipline. Swedenborg, Descartes, and others propounded views about layers of existence which were later rejected as unexaminable and therefore unnecessary. But the almost bizarre results of twentieth century physics seem to be reminiscent of the early theories of cosmogony.

Whether the interpretation of the vacuum state radiation field as an ether is acceptable remains to be seen. Undoubtedly other interpretations are possible and may be more meaningful. For example, the work of T. A. Wheeler in the field of geometrodynamics is full of promise for a deeper level of existence. Wheeler interprets fields and particles as geometric properties of space. By invoking Heisenberg's uncertainty principle Wheeler suggests the possibility of very high activity over minute distances; in fact at dimensions of the order of 10^{-33} cm (the Planck length) space consists of a kind of geometric "foam." This author hopes to explore these ideas further in another essay. Certainly they have relevance to our concepts of atmospheres and degrees.

While it cannot be concluded that Swedenborg predicted modern physics, nevertheless it is still possible to claim science as an ally in the effort to confirm revelation through natural enquiry.

IMAGINATION AND RATIONALITY

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IMAGINATION AND REASON

All truth is a form of love. It is an embodiment of love selected and organized out of sense experiences stored in the memory, and pictured in the imagination. Of this process man is not in the least conscious. It takes place instantaneously, miraculously, and with marvelous perfection, so far as the sense-material available may permit. So far as knowledge is lacking, the mental image

* Fourth and last installment of a series based on lectures delivered in 1947.

will be vague, undeveloped, embryonic. If the knowledge is inaccurate the idea may be quite mistaken. In either case, however, the mental image will be a form of the love that produced it, and this form is capable of being corrected and made more perfect indefinitely by research, and by experiment as a result of a persistent endeavor to accomplish the goal envisaged. Every love, whether good or evil, has the power within itself to produce such an idea in the imagination. Yet, as we have pointed out, the image that an evil love produces is fantastic and unreal, while that which is produced by a good love is genuine, and accordant with reality. In both cases, so long as the love prevails, the idea it presents to the mind will appear to be true and good, and will carry with it an inner conviction of reality. Because of this the imagination by itself has no power to distinguish between truth and falsity, or good and evil. If one is to discover truth on which he may place full reliance, he must look to a more interior faculty of the mind, the faculty of reason.

Reason is a more interior kind of imagination. It is a faculty of reflection, calling into review the images formed by the imagination, placing them side by side, analyzing by comparison and contrast their relation to one another, that their distinct qualities may be seen. Especially is it the ability to recognize the relation between cause and effect. This relationship is discovered by the laws of logic, and these lead the mind to perceive abstract forms of truth which are called thoughts. Thoughts are abstract ideas derived from imaginative pictures. Imagination reveals only what things are, while reason alone can discover an answer to the question why they exist. It brings to perception what lies back of the mental picture, the inner quality of the love that produced the image. It enables one to perceive loves, not in their own light, which always makes them appear good, true, and real, but in a higher light, the light of a higher love.

Genuine reason, or rational thinking, is inspired, not by the love of a specific objective, but by the love of truth for its own sake, that is, by a passionate desire to understand. This love releases the mind from the binding chains of a particular affection, or from an emotional bias, and enables one to compare various affections calmly, critically, and so to measure their individual qualities against some standard, or criterion of truth. Appraising the imagination in the light of this higher love is what is called "rational

judgment." It is a corrective whereby one may distinguish truth from falsity, good from evil, the real from the unreal. Prof. Gerard puts it this way:

Reason or logic is applied when judgment indicates that the new (in imaginative ideas) is promising. It acts like natural selection to pan the gold grains from the sand, and insure the survival of the fittest. . . . Imagination supplies the premises and asks the questions from which reason grinds out the conclusions; as a calculating machine supplies the answers.¹

We would note that here the Professor has rather badly mixed his metaphors between gold mining and the theory of evolution, but what he expresses is a partial truth. He describes in part what reason does, without telling what it is, whence it comes, or how it operates.

Reason is a higher kind of imagination. Like imagination it is produced by the spontaneous activity of a love. Just as a love selects sense impressions from the memory, and builds them into an embodiment in which it may live, and through which it may bring its goal tangibly present to the mind as something most desirable, so also the love of truth may select imaginative ideas, and form from them an abstract concept of relations that exist among them. In this way it brings to light the relative qualities of emotions that have, from time to time taken possession of the mind. Note, it is the *love* of truth that does this. There is a widespread idea that reason, in order to assume an attitude of judgment among various affections, must itself be devoid of all affection. According to this view, critical judgment is regarded as being cold, calculating, unfeeling, and stripped of all emotion. But this is a mistake. All the faculties of the mind, whether on the plane of the imagination or on the plane of thought, are in essence an activity of love. Without love, and thus without interest, there is no mental life whatever. Judgment is effected by the inspiration of a higher, and more deeply perceptive love. This may be illustrated by the fact that a judge in a court of law gives an unbiased judgment, not because he is coldly indifferent, but rather because he has deep concern for the protection of justice on which the very preservation of society depends. For the same reason it is an error to suppose that the so-called "scientific attitude of mind" consists in analytical thought divested of all emotion.

¹ "The Biological Basis of Imagination," *Scientific Monthly* for June 1946, p. 478.

The answer to scientific questions does not come by a mere conglomeration of actual knowledges acquired by accident. It is achieved only as the result of intensive and purposeful search, and of careful selection and ordering of knowledges with a definite end in view. Such a search may be directed toward the solution of some specific problem, or it may be inspired merely by an irresistible curiosity, a burning desire to know and to understand. In either case, it is love that leads the way and lights the path of progress. It is a love broader and more inclusive than any particular affection of the imagination, a love that embraces all such affections while being confined to none of them. It is a love that regards no affection of the imagination in its own light, but regards all of them from the vantage point of a higher love and a higher light. This deeper love produces a judicial attitude toward the ideas of the imagination regarding them in relation to its own objective, the love of understanding truth itself.

The mind must not only be inspired by a love but it must be pointed in a particular direction. It must select one idea from the imagination that gives promise of promoting the end it has in view, and without insisting that this idea be true, it must adopt it as a working hypothesis. Until this is done, however strong the desire to find a solution may be, there can be no real progress. The mind remains confused, undecided as to where to turn. It is irresolute and ineffective, as if the eyes were not focused on anything, in which case objects appear blurred, and without definite significance. A premise is necessary as a starting point of all logical thinking. There must be a bench-mark, a fixed point from which to reason. Then first is a definite path of investigation opened, which, by experiment, may be proved true or false. All advance in scientific knowledge is made by trial and error, that is, by adopting a likely idea and seeking to discover where it leads. This is done, not by following it in its own light, but in the light of logical reasoning inspired by a love of truth. If the test proves negative, the idea adopted must be abandoned in favor of another possibility. This process must be repeated until one lights upon an idea which leads to the desired result. Note that the imagination supplies the ideas that may serve as premises, while reason puts them to the test. One may adopt such a premise with great hope, and with passionate conviction of its truth, but at the same time with a deep determination to prove its worth.

Back of such a conviction is a higher loyalty, an allegiance to a higher love, in the light of which the premise is sustained only so far as it may be found to contribute to the goal of that love, and is immediately rejected if it does not do so.

Here, however, we must inject a note of caution. It is quite possible for reason to become the servant of the imagination rather than its judge. One can reason, not in favor of the truth, but in support of a pre-conceived idea, a personal opinion. In this case the laws of logic may be cleverly misused to confirm a falsity. Nor can anyone discover such misuse by reason alone. Reason by itself will not necessarily lead to the discovery of reliable truth. Like the imagination, reason is produced by love, and it can be produced by an evil love as well as by a good one. In either case it may appear to be completely convincing.

Concerning this the Writings state that a skillful reasoner

can make whatever he will to appear reasonable, whether it is reasonable in itself or not. Wherefore some say, "What is truth? Am I not able to make true whatever I wish? Does not the world also do so?" And whoever does this does it by reasonings. Take the greatest falsity and tell an ingenious person to prove it and he will do so (DP 286).

Everything, even what is most false can be confirmed by reasonings, and can also be presented to the simple as true, by means of the arts of eloquence and of inference (AC 7127).

Every one has had the experience of listening to a capable and learned speaker expounding some scientific or philosophic theory, and of feeling fully convinced that he must be right. But if then we listen to another who is equally able and equally learned, but who is advocating a rival theory, our mind may be carried along with equal conviction to an opposite conclusion. This is because the love of a particular opinion, because it is our own discovery, or because we, from our own intelligence have adopted it, leads us to pervert the evidence. We then select what favors our opinion, and present it forcefully while ignoring or belittling whatever is opposed to it. We omit or brush aside essential evidence while emphasizing favorable appearances out of all proportion. From a false premise, logic can produce only a false answer. If truth is to be discovered, judgment must be based on something deeper than logic. It must be based on the love of truth, and this love must transcend any consideration of self pride, or the desire to confirm a personal opinion. Reasoning from the love of self conceals falsity and evil by clothing them in the garments of apparent

truth. Logical reasoning, or argument by itself, can never penetrate such a disguise. Concerning this we read:

He who believes that he can see any truth of the Church from the mere light of reason is much deceived. He may have knowledge of it from another, but he cannot see it in the light. And when he wishes to see it, or to comprehend it in thought, mere shadows from falsities which spring from fallacies, and from man's proprium, hover over him and induce blindness (AE 923).

But if "reason, left to itself, is incapable of seeing (truth) What then is to be done?" This is the question which is propounded in number 165 of the *True Christian Religion*. It leads us to inquire as to how truth is really formed in the human mind, truth, that is, in which we may have complete confidence.

TRUE RATIONALITY

At last, after traversing a long and tortuous path of investigation, we draw near to the goal of our present treatise, namely to discover how dependable truth is formed in the human mind. We have demonstrated that both imagination and reason are wholly unreliable. Imagination by itself cannot distinguish between truth and falsity; and although reason can help by comparing different imaginative ideas, and analyzing their relative merits, it cannot with assurance form a critical judgment as to what is true. Under the impulse of some emotion, or some personal opinion, one can confirm a false idea by logical reasoning, even to the point of complete self-deception. What then is truth, and how can we distinguish it from falsity?

All truth has its origin in God, and its existence in the world of nature which is a Divine creation. It is something, therefore that exists outside of man, something that is independent of the human mind. It is something that possesses fixed qualities that do not change with man's shifting states and moods. It possesses qualities that are intrinsically the same for all men, and for all time. Truths are real things created by God alone. But the mind of man is a receiving instrument or organ, designed to be touched and moved by them, that is to be *affected* by them. This affection is what man perceives as truth. It is called an "appearance of truth." Such an appearance is never perfect, but it is capable of being perfected to eternity. It cannot be perfect because Truth, in itself, is infinite, while the mind of man is finite. Infinite truth

can never be compassed by a finite mind. Nevertheless, the mind of man can grasp a genuine appearance of truth, an appearance that is in accord with Truth itself. Such an appearance can be infilled with ever greater knowledge, and brought into ever greater harmony with Truth itself as man's loves are purified from the things of self and the world. Even a very simple appearance of truth, such as may take form in the mind of a little child, may be produced by an innocent love of the Lord, a love that may be perfected to eternity. Such appearances are called "truths" because they contain truths within them. Such are the appearances of truth to the angels in all the heavens. No human mind, even if regenerated to the celestial degree, can rise above such appearances.

Such truths appear to the angels as outside of themselves. They see them in heavenly forms that constitute the "things" in their environment. They are "real" because they exist in the Divine of the Lord which makes heaven. They are to be sharply distinguished from the false appearances that exist only in human minds as fantasies and pure imaginations. These latter come into being under the influence of the love of self. They arise from the illusion that man has life in himself, and this brings with it a complete denial of God. They are based therefore on a fundamental falsity, and produce images of things that do not exist outside of the mind. This can be known only by one who is in direct touch with reality, that is, one who perceives the existence of God, who is moved by His love, and in whom, therefore the Lord can produce the image of real things, or of genuine truths. It cannot be otherwise for the Lord alone can do this. He is the only Creator. Every Divine creation is a real thing because it exists in God, and from God. It consists of both "form" and "substance." All form is derived in the last analysis from nature. Material objects, perceived by direct touch with the bodily senses, are the basis of all ideas, both in the imagination, and in the rational mind. No one can conceive of any idea that is not founded in sense experience. Nature is the ultimate basis of all the forms in which truth can possibly appear, both to men on earth, and to the angels of heaven. Sensations may be combined in various ways, re-organized, abstracted, and sublimated to produce intellectual ideas or thoughts. Yet the most abstract concept has arisen from actual sensation. To prove this one has only to try and think of something that is entirely new

to him, and that is altogether different from anything he has ever known. All conscious life rests upon physical sensation, and this is the reason why all men must be born on earth before they can live in the spiritual world.

All "substance" on the other hand is derived from Divine love which is Substance itself and the Only Substance. And the sole activity of the Divine love is "use." Nothing can exist apart from use. All things are created by the Lord from use, in use, and for use. Use therefore is the spiritual reality within every created thing, the essence for the sake of which the form exists. One may, accurately sense the outward form of an object, but this has no meaning, no significance unless the use within the form is perceived at the same time. Only then does "truth" become visible. This inner spiritual reality called "use" cannot be perceived by the bodily senses. It is immaterial, and wholly spiritual. Yet the mind is designed to sense it, to feel it, to become aware of it by direct touch. This direct touch is what we feel as love or affection. If it is a love of truth, a love of the Lord, a love of use to others with no thought of self, it is a direct touch with reality, and it produces an inner perception of truth. In such a perception genuine truth appears.

Every appearance of truth that is genuine must come into being by virtue of sense experience on the one hand, and spiritual perception on the other. Sense experience provides the body, the form, the outward appearance; while spiritual perception or love supplies the living soul of every truth.

Strange as it may seem, unless there is some inner perception of love, and thus of use, reasoning can never lead to the discovery of truth. Reason may be defined as the confirmation by logical argument of something that is not really seen, or interiorly understood. Rationality, on the other hand, is the process of confirming by reason and logic something that is perceptively seen and understood to be true. Perception must precede confirmation.

Swedenborg speaks of those in the other life "who reason about everything as to whether it be so or not so, and go no further." He says:

When I spoke with them it was given to perceive that they did not at all apprehend what is true or not true; and the more they reason, the less they apprehend. Yet they seem to themselves wiser than others, for they vest wisdom in the faculty of reasoning. They are altogether ignorant that the chief thing in wisdom is to perceive without reasoning that a thing is so, or is not so (AC 5556).

(Some) persons believe that those are wiser than others who, having once accepted a dogma whatever it may be, can confirm it by various things, and by various reasonings make it appear like truth. But nothing could be less the part of a wise man. It is what any one can do who possesses any ingenuity, and the evil more skillfully than the upright. For to do this is not the part of a rational man, inasmuch as a rational man can see as from above whether that which is confirmed is true or false; and because he sees this, he regards confirmations of falsity as of no account, and they appear to him as simply ludicrous and empty, no matter how much any one else believes them to be taken from the school of wisdom itself. In a word, nothing is less the part of a wise man, nay, nothing is less rational, than to be able to confirm falsities; for it is the part of a wise man, and it is rational, first to see that a thing is true, and then to confirm it (AC 4741).

Consider how some of the arguments of children sound to adults. Consider how the arguments of one wholly unfamiliar with some field of knowledge, may sound to one of learning and experience in that field. Consider all arguments based on special pleading, all forms of propaganda, as they appear to one who knows the facts. One can have confidence in a man's opinions only if it is known that he has had knowledge and experience on which to base his conclusions, and therefore that he sees something as true perceptively before he undertakes to speak of it with authority. How impossible it is to discover truth by reasoning, without first seeing it from perception, Swedenborg illustrates by the case of a man who has never seen a sparrow, nor indeed any other bird, but who is given the brain and the vital organs of a sparrow. Such a one could not, by any process of reasoning based on the examination of the separate dead organs—however minute and accurate that examination might be—discover the truth that these organs had belonged to a living bird. Yet, if the man had seen living sparrows, and had known that the organs presented to him had actually belonged to a sparrow, he could have confirmed the truth in a thousand ways. Similarly, if one had never seen a flower, but was shown parts of the stem and the roots, it would be impossible, by reasoning from these, to foretell what the flower would be like, or even to imagine that such beauty of form and color could be produced from such unpromising materials (SD 3381-2).

Truth therefore must be founded upon a direct touch with reality. The human mind has immediate contact with the forms of all things through the bodily senses, as these are affected and moved by the material objects and forces of the natural world.

But the human mind also has direct contact with the essence of all things, through the love of truth, apart from any affection that centers in self. Where these two kinds of direct touch are combined, that is, accurate knowledge, and love of truth which gives perception of use, there genuine truth is seen. It is indeed only an appearance of truth, but still it is genuine. It is imperfect because knowledge is never complete, and also because the love of truth with either man or angel is never pure, or free from some hidden influence of self-interest. But it can be perfected to eternity as knowledge expands and as love is purified. The same law obtains in regard to both natural truth, and spiritual truth. Both of these must be based on sense experience and spiritual perception combined. Both must be corrected by continual reference to what exists outside the mind in both worlds, and thus measured against a fixed standard of truth. The standard whereby to test all the *forms* of truth is nature, and sense experience; and the standard whereby to test the essence, the use, the soul of truth is Divine revelation. These two therefore are called the "two foundations of truth."

Everyone who would discover truth must begin with the acknowledgment that nature is true because God has created it. He must be prepared to distrust his own impressions, and even doubt his own senses knowing that these are constantly prone to distortion in the imagination. He must be willing to test his own findings by repeated experiments, and by the experience of others. He must willingly modify his own ideas by new-found knowledge, in a persistent search for genuine truth. Such is the "scientific attitude of mind." But he must also begin his search with the acknowledgment that the Word is true because the Lord has spoken it. In regard to spiritual things, he must recognize that these also exist outside of himself, and that they have their origin in the Lord alone. What they are, apart from our personal feelings concerning them, we cannot know except by direct instruction from the Word. We must therefore continually check our ideas against what the Lord actually teaches as against a fixed standard of spiritual truth. In short, the attitude of a spiritual philosopher toward the Word as the sole criterion of faith, must be the same as the attitude of the scientific explorer toward nature. When this is the case, man's mind can be formed and moulded by the Lord Himself, both from without and from within. It can be con-

tinually perfected, and made to conform ever more truly with Truth Itself. Concerning this we read in the Writings as follows:

All theoretical things should be drawn and concluded from facts of experience, and also confirmed by them. For unless the facts of experience, as it were, lead the hand of man in coming to conclusions, he may be deceived in theoretical things, and from some imaginary hypothesis be carried away into false principles entirely opposed to what is true, which he can then confirm by fallacies and appearances to such a degree that a man may believe that they are truths themselves (LJ post 315).

That this applies to spiritual as well as to natural truth is evident from the well-known teaching that doctrine must be drawn from the letter of the Word and confirmed thereby.

Intellectual truth does not become manifest, that is, is not acknowledged, except in so far as fallacies and appearance are dispersed, and these are not dispersed so long as man reasons about truths themselves from things of sense and from scientifics. But it for the first time becomes manifest when he believes from a simple heart that it is true because so said by the Lord (AC 1911).

To acknowledge that the Word is true, not because of the way we see it, but because of the way the Lord has spoken it, has the same relation to the discovery of spiritual truth, that the acknowledgment of nature as the final criterion has to the discovery of natural truth.

Reliable appearances of truth, therefore, are produced in the human mind by the sincere love of truth for the sake of use, by a persistent exploration of both nature and the Word, with the acknowledgment from the heart that these two together are the only dependable standard, against which all ideas must be checked repeatedly, as new knowledge is acquired, and as new light dawns upon the mind from within. And since the truth must be loved for the sake of use, that is, for its application to life, it is the life of truth, the use of what we know, the daily performance of uses to the neighbor while shunning evils as sins against God—this it is that prepares the mind to enter into greater light, and truer intelligence and wisdom, under the immediate leading of the Lord.