

NOTES BY THE EDITOR

Whatever conclusions may be drawn by the student, it is interesting to note the existence of three definite cycles in the order of Swedenborg's studies. From 1710 through 1719 he studied mineralogy, geology, astronomy, mathematics, physics, anatomy and physiology—all between the ages of twenty-one and thirty-one. Some of the fruits of these initial studies are to be found in interesting little works written while he was publishing *Dædalus Hyperboreus*.

Having traversed these subjects, Swedenborg went back to his starting point, again giving his attention to metallurgy, geology and astronomy. But this was not mere repetition. His work, as we might expect, was more complete, systematic and profound. It was in this second cycle that he wrote his *Lesser Principia* (1720), his *Chemistry* (1721), his *Miscellaneous Observations* (1722), and his *Principia and Concerning the Infinite and the Final Cause of Creation* (1733).

Then, having studied these subjects for the second time, Swedenborg took up again the study of the human body, anatomically and physiologically, but as the kingdom of the soul. *The Cerebrum, The Fiber, The Economy of the Animal Kingdom, Generation, Rational Psychology, The Brain and The Animal Kingdom*, came steadily from his pen between 1738 and 1744, to be followed a year later by his final work, *The Worship and Love of God*.

Swedenborg's first physiological work, and the beginning of his speculative philosophy, is the little treatise *On Tremulation*, written toward the close of 1719, which he described in a letter to his brother-in-law, Erik Benzelius, as "a little anatomy of our vital forces." This was an attempt to discover by anatomy and physiology the universal cause of human sensation; and in it Swedenborg advanced the thesis that all sensations, whether internal or external, are nothing but the perception by the soul of tremulations in membranes. Here we may see his first attempt to formulate a doctrine concerning the soul and its mechanism. In this treatise also, Swedenborg indicated what he was to assert later, that all nature is mechanical and geometrical; and taught that perception,

imagination, memory and sensation are all to be explained geometrically by the tremulations of membranes.

From the same letter to Benzelius we learn that, in preparing himself to write this treatise, Swedenborg had entered into a thorough study of the anatomy of the nerves and membranes, and had proved to his own satisfaction the harmony existing between that and the interesting geometry of tremulations. The theory he willingly credited to others; but the proofs he claimed as new and as his own. "I lay it down as a principle," he says, "that the tremulation begins in the fluid which is contained in the membranes; in order that this tremulation may spread, the membranes require to be in a state of tension with the hard substances as well as with the blood vessels; for in such a case all the lymphatic vessels, or the vessels of the nervous fluid, lie upon the membranes in their proper order, and exert a pressure upon their contiguous parts in an instant, just like any other fluid, and they thus communicate a trembling motion to the membranes, and also to their bones; so that almost the whole body is brought into a state of subtle co-tremulations, which causes sensation."

Swedenborg did not follow up this theory, however, for it was at that time that he temporarily abandoned anatomy and physiology, and again directed his attention to chemistry and metallurgy. But there are references to the theory in later works. Thus in the treatise, *Motion of the Elements* (1733) we find him stating that the elements of the universe operate upon the membranes of the body and there produce undulations and tremulations; and in *Mechanism of the Soul and Body*, written shortly afterwards, he enters more fully into the effects of the elements upon human membranes.

Swedenborg's work in various fields, notably metallurgy and physiology, has aroused the interest and commanded the respect of serious students in those fields. It is doubtful, however, whether there is any profound interest in his work as a whole except among those who regard the study of his scientific and philosophical writings as the study of his preparation for the office of revelator. This by no means includes all New Church thinkers. In the history of New Church thought we find four distinct atti-

tudes toward Swedenborg's works ; and of these two are self-eliminating—one immediately so, the other eventually.

Of these last two, the first is the attitude formed by the decision that it is not necessary to study the works of Swedenborg at all. Everything that the New Church man needs to know about his preparation, if he needs to know anything at all, is to be found in the Writings themselves ; they contain the principles of a true philosophy, and by them contemporary science may be measured. Thus there is no approach to the scientific and philosophical works at all. The second of these attitudes does result in an approach, but one that is entirely negative. Placing its faith in contemporary science, it finds its criteria in that science ; and when Swedenborg's conclusions differ from those currently held, it dismisses him as outmoded and unworthy of serious consideration.

The other two attitudes, although very different, do result in affirmative approaches. The first of these, historically, stems from the belief that Swedenborg's works are the deposit of a fixed system of thought ; that from them is to be developed a new science and philosophy which, together with the Writings, will furnish a complete and final system of thought for the New Church. This attitude, prevalent at the turn of the century and for some years thereafter, gave a powerful stimulus to the study of the scientific and philosophical works. But it is open to serious objections. It does not begin to explain Swedenborg as a human being ; it tacitly assumes that there was no development of his thought, such as is characteristic of the human mind, and thus places him in an unreal and unique situation ; and it leads to a forced and artificial correlation of the Writings with the scientific and philosophical works. Most serious of all, it results inevitably in the reading of the Writings in the light of those works.

Finally, there is the historical approach. This is dynamic and chronological. It leads to a study of the scientific and philosophical works which has as its purpose the tracing out of Swedenborg's developing thought. The belief here is that Swedenborg, although providentially led, was not Divinely inspired in his work as a practical scientist and as a philosopher ; that no more than any other man was he intellectually an island, but was influenced in various ways by his predecessors and contemporaries ; and that he was led, by the Lord indeed, yet through patient advances by

normal human modes. Under this belief the aim in studying his works is twofold: to trace the development of his thought, realizing that this involved the discarding and modifying of earlier positions as well as the retention and expansion of others; and to uncover the substrata for spiritual truth which indubitably exist in them. By this method, it would seem, the greatest rewards are to be gained. Here is no forced correlation, with its inevitable implication that any flaw in the scientific works must cast doubt upon the Writings, but a full recognition that by human methods Swedenborg was led to philosophic truths and doctrines which prepared his rational mind to receive and transmit a rational revelation.

This has an important bearing upon the future of the Swedenborg Scientific Association, which will hold its Sixty-second Annual Meeting in May. The Association welcomes to membership those whose interest in Swedenborg is confined to his scientific and philosophical works, and it acknowledges with gratitude the contributions to the understanding and appreciation of those works that have been made by such men in the past. But it would not be seriously disputed that the Association could not have been founded and sustained except in the way that it was: by the persevering efforts of New Church men and women who, as such, had a special interest in promoting the knowledge and understanding of Swedenborg's own works—who prized those works, not for their contents alone, but as the record of Swedenborg's preparation for his use as a revelator.

Yet those who have expressed that interest by joining the Association have been few. If we take the combined memberships of all the organized bodies of the New Church as 15,000, then the Association's present membership of under 300 is equal to only one and one-half per-cent of all the New Church people in the world!—and not all the members of the Association belong to the Church. Furthermore, the membership of the Association remains dangerously static from year to year. Does this mean that the cause is a lost or a losing one, that the use which once had to be performed has now been done? We think not.

When the Swedenborg Scientific Association was founded there were manifest uses to be performed, and there was a vigorous and sustained enthusiasm born of the appreciation and love of those uses. Many of Swedenborg's works were available only in the original Latin; there was much work to be done in connection with his manuscripts; and the belief mentioned earlier, that out of the study of his works there was to emerge a new science that would supersede the science of the day, gave a much needed impetus to the study of the works themselves. But that view is no longer widely held; the photostating and photolithographing of the manuscripts has long since been completed; except for some minor works, which await a future Latin scholar, the work of translating has been done; and the publication of Swedenborg's works, which has been intermittent in recent years, would certainly be continued by other New Church bodies if the Association should cease to exist.

What, then, are the peculiar uses of the Association today, and in the future—uses which can be performed only by such an association? We do not propose to attempt to answer the question here and now; but we would plead that every member of the Association, and everyone else who is interested in its work, give serious thought to the question. A membership drive is not in itself the answer to our problems, although it would alleviate our condition! Such a drive would eventually lose momentum without a clear and vigorous presentation of uses clearly seen and deemed important. It is our belief that the Association is now in a stage of transition; it is our belief also that within its membership there is the affection, the ability and the determination to adjust and adapt its thinking to the situation in which it now is, and to win support, not for a traditional organization, but for a living form of use.