

THE HUMAN MIND

A STUDY BY HUGO L. J. ODHNER

III. THE SENSUAL DEGREE OF THE MIND

In stating that the natural mind of man is being formed in the organics of the natural body, it is well to define what the *natural mind* is. As generally used in the Writings, it means the mind with which man is furnished for his life in the natural world. This does not imply that it may not also be of use after death; especially since only those who are admitted into heaven have any other degree of the mind opened. Nor does it imply that the whole of the natural mind is used consciously and deliberately by man in this world. The New Church doctrine emphasizes that each degree of the mind consists of two essentials—a will and an understanding. Man's consciousness dwells in the understanding belonging to the natural degree, and he becomes aware of the contents of his will only so far as it becomes manifested by gradual stages in his understanding. Thus the will—so far as it is not conjoined with his understanding—is unconscious. This is a provision of Divine mercy. For man cannot be held responsible for something of which he is not conscious; and the native will is so filled with inherited evils that it is totally corrupt.

There is also much in the natural mind which is below our general plane of consciousness, and much that is above it. Just as we would be immersed into the tortures of the damned if we were ever conscious of the horrible passions and untamed ferocity that slumber within our native will, so also our life would become utterly miserable if we were conscious of all the sensations which our environment continually pours in upon us. Therefore the *Arcana* likens the external sensual—the ultimate of man's life—to a "grating" because it first sifts out and separates, as it were, the things which enter with man and are presented to the understanding and the will" (AC 9726). And indeed each level of the mind serves the higher levels in a similar way, acting as a censor or sieve which rules out all sensations which might disturb the higher mental functions. We often find that all manner of things may be going on about us and also within us, as it were on the fringe of our consciousness—things which our eyes see and our ears hear, while our attention is centered on some utterly different

thing. Besides, our memory holds innumerable fields of knowledge of which we are usually never conscious. And attached in intimate fashion to all our memories are affections which also slumber until aroused. Interiorly in our natural mind there stretch other vistas of thought and reasoned philosophy of which we are oblivious whenever our attention is centered upon mundane or corporeal concerns.

It is well, then, to consider the extent of the natural mind—the various levels of our mental life here on earth. The lowest of these is called the *corporeal*. The next in order is the *exterior sensual*, which is connected with the external or corporeal memory, and thus with what is called the scientific. Above this is the *interior sensual*, which is associated with the powers of imagination. This is sometimes called the natural or the middle natural. Above this is placed the *interior natural* or the “interior natural memory,” which serves the *rational* as a plane.

It is our purpose to speak of each of these degrees or levels of the natural mind in their order. But the warning must be given that these distinct levels of the mind are not to be thought of as if they were placed partly one above another like layers of bricks; they are functional levels, based on organic forms so intricate and interwoven that they often seem to lose their identity when they act together. Being of such complex and organic nature, the degrees of the natural mind appear in different series according to man's states. In general, the Writings speak of them as three degrees of ascent (DLW 66, 67, 275, 277; CL 496), which are called the sensual, the natural, and the rational (AE 1147, 739: 2, 1201: 4). Yet by the fact that all these degrees have a common quality of their own which we call “natural,” the growth of the mind is continuous. This common quality is due to the fact that the degrees of the natural mind are all based on sensations of things from the natural world, and are organized in the physical structures of the nervous system.

The Corporeal and the Sensual

“Man is born as corporeal as worms.” Later he becomes sensual, and then natural more and more interiorly (CL 133, 447, 59; AC 4038: 2). The corporeal is like the ground in which natural,

rational, and spiritual things are inserted in their order (CL 59).

In the strictest sense, the corporeal is the lowest and most vile life of the body; which is neither human nor animal, nor even sensitive, but is an almost vegetative life. For—as conceived by biologists—the body is made up of units, or tissue cells, which are bathed by the body fluids, and which individually absorb nourishment, grow and perpetuate themselves by cell-division. As long as these cells are within the community of the body the life which they manifestly have is governed by the soul—which orders and disposes them for the needs of human uses. But it is possible to remove a portion of skin tissue, for example, and place it in test tubes; and as long as food is provided, the cells will indeed continue to grow and multiply—but without any direction towards use. The life which *then* is contained within them is not human life.

Indeed this lowest plane of purely bodily life contributes nothing directly to the upbuilding of the mind. It could not exist apart from the physical tissues, or apart from the chemical compounds which constitute the cells. Yet without that vegetative life the body would become a corpse. This life withdraws on death, returning to its source unchanged. When the vessels are resolved, the life—we may conceive—returns “to the next higher degree” (Cf. AC 5114: 4).

But in a broader sense the corporeal is defined as “that which sees earthly things, hears people speaking, tastes and relishes food, smells what floats in the air, and feels by the touch through the whole body. . . . It is also all action and gesture, as well as speech; and therefore the muscles and that which is properly called ‘the flesh.’” (SD 4627: 2). This “corporeal” is said to serve man for use only in the world, and perishes with his death (*Ibid.*, AC 4618). It is therefore “nothing else than a receptacle of sensations and of the life from them”; for “without the senses the body does not live at all,” for they “constitute all the vital of the body” (AC 5077).

Yet, considered as inclusive of the sensations, the corporeal degree would embrace certain features of another level of man’s life which the Writings call “the external sensual.”¹

By the *external sensual* several different things may be meant.

¹ We adopt the term Sensual (from the Latin *sensualis*) in spite of the fact that the word is used popularly for “libidinous.” But the term Sensuous is used in much the same sense.

Always, the reference is to that in man which is dependent on the five senses or is derived from the sensations. Sometimes it includes the corporeal as to that life of sensation which can never exist apart from the sense-organs and the sensory nerves, and which therefore is not immortal. This life of the senses man has in common with animals, and it perishes with the flesh. It is "the ultimate plane in which man's life is terminated, and upon which it reposes as upon a base. . . . For it stands forth immediately to the world, and through it as an extreme the world enters and heaven goes out" (AC 10236: 2).

It is notable that there are many sensory-motor reactions in the human body which are beyond man's control, and we are apt to call them "purely physical." The science of today points to general "reflex-arcs" and automatic nervous responses like the blinking at sudden light, the twitch of pain, the jerking of the hand away from a hot stove. These simple instinctive reactions are due to no exercise of thought, and are not the result of training. They are conceded to be due to nerve fibres which connect the skin and other sense-organs with the central nervous system and this again by motory nerve fibres to the muscles. These reflex-arcs do not go directly into the seats of conscious thinking and acting in the cerebrum, but are centered mainly in the spine, medulla and pons, and in various places in the lower and central parts of the brain.

This type of sensations or of sensory impulses, as well as the answering motor-responses, must be characterized as unconscious and involuntary. And this holds true also of the functions of the cerebellum, which exercises an automatic control that regulates all our muscular actions so as to produce balanced, smooth, and co-ordinated movements. The cerebellum feels, but is not conscious. It exerts control, but is independent of our deliberate decisions. Swedenborg speaks of this function as the involuntary sense, and also points out that the motions of the heart and other viscera are quite exempt from the will of man (AC 4325, 9683, 8593; SD 3860, SD minor 4714e).

Man's involuntary is said to be twofold—one element being his hereditary nature, composed of what his parents have made second nature or habitual, and the other being a secret and over-ruling influx through heaven from the Lord (AC 3603: 5). Whether the cerebellum itself has been perverted in some manner by man's evil heredity is difficult to ascertain from the Writings. For—on

the one hand—the cerebellum acts spontaneously according to the order of nature, even now. In most ancient times the cerebellum was the seat of their celestial will, but we infer that this voluntary was not conscious, but natural and inborn. It was the source of their wisdom to live in the order of creation (Cf. HH 251). This spontaneous order, as represented in the cerebellum, was their will; while, with them as with us, the conscious understanding was in the cerebrum (Infl. 13). And this, with them, acted as a one with their will.

Through the increase of evil, man departed from the celestial order. The fibres from the cerebellum were in certain cases displaced or overruled by fibres from the cerebrum, which permitted the face to register emotions which were simulated, artificial, and counterfeit, instead of natural (AC 4327). The inmost things of the cerebellum even now remain celestial and unperverted and continue to be the medium for the involuntary sense by which the soul can overrule and amend the action of our conscious voluntary when this continually departs from the order of nature (AC 9683). Unless this were the case, man would perish in a moment (SD min., 4714e).

Yet it would appear that when evil has become dominant, man's conscious will which is seated in the cerebrum takes advantage of the spontaneous action of the fibres from the cerebellum and reduces them into the means for making evil habitual and thus as it were spontaneous, facile, and natural—as if this evil was the intended order of nature and the will of the soul. The consequence is that the cerebellum, at least to that extent, becomes a tool of evil. And therefore it is intimated in the Writings that the lusts of the will dwell in the cerebellum (Infl. 13; TCR 160e, 564e).

These lusts of the will are those of man's sensual inheritance and also those which by much practice have acquired an instinctive nature. And when evil has become spontaneous and delightful, "it can be amended, reformed, and inverted, solely by the spiritual-rational and moral" (TCR 564e). Indeed, salvation from the lusts which have become of the will is possible only through the understanding, which is built up through the cerebrum. The thought of the understanding must be reformed first, and must come to lead or control the love of the perverted will. If this is not done, "the inmost things of the cerebellum, which in themselves are celestial," will as it were collapse into inactivity (TCR 160e).

This, then, must be what is meant in the *Arcana* when it is said that the involuntary of man is two-fold, one part being his inherited lusts which are of man's sensual degree, while the other inflows from the Lord through heaven. If man does not suffer himself to be regenerated the evil lusts are taken over and made his own; but with regenerating men, "the involuntary which is from the Lord . . . manifests itself in adult age, and in the meantime it has disposed and governed each and all things of their thought and also of their will, although not visibly" (AC 3603e).²

The life of the senses and the sensory-motor reflexes of the body is that part of the external sensual which perishes with the flesh. These reflexes are reactions with the world of space and matter, which we have in common with the beasts of the field and the forest. They are, then, not properly a part of the "human" mind. Yet the mind of man inflows into these reactions and gives them quality, invests them with meaning and intention. This is illustrated in the body by the way in which the cerebrum and the cerebellum send out fibres which connect them with the nerve-centers and reflex-centers of the medulla and the spine. We thus find such statements as that the more subtle hells inflow "into the external sensual sphere, and this at the back where is man's involuntary"; and that certain genii belong to the province of the "spinal marrow which emits fibres and nerves to the involuntary parts" (AC 6312e, 8593).

On this account, while the life of the nerve-reflexes is not properly human, man does derive something immediately from the senses which is separable from the mortal body. This part of the external sensual seems to be above the corporeal sensual, and to be formed in the nerve-centers of the brains, the medulla and the spine—formed by a human motivation, a human reaction which conditions his nervous reflexes and builds up not only a memory of things sensed but also a plane of intentional habits, the results of the human act of selection and evaluation. By evaluating and comparing, the human consciousness builds control-channels which cause it to sift and separate sensations from each other, and thus to prefer one type of experience to another and even to exercise

²For a treatment of the relation of the cerebellum to the will, see *NEW CHURCH LIFE*, 1946, pages 465 to 477.

restraints upon natural reactions. It is this external sensual which is especially represented by the grating or network of brass which was to reach to the middle of the altar of burnt offerings; and the *Arcana* gives the significant statement that "this sensual extends with man from the head even to the loins, and there it terminates" (AC 9731). It seems thus to exert a control even upon the intake of sensations and an evaluation of the involuntary spinal reflexes, and the reaction of the autonomic nerves of the viscera, which of course are beyond its control. The remarkable information is added that "from the loins is continued with man the sensual which is next interior"—possibly referring to the fact that the extremities of the body are under a higher control, being ruled by the deliberate decisions of man, and requiring a considerable training before they can be effectively used.

The external sensual is thus the outmost or ultimate of man's life. But because it stands nearest to the world it is wholly destroyed by hereditary evils. Therefore it is the last thing in man to be regenerated—"and scarcely any one at this day can be regenerated so far as that"—i.e., so far that there is not some pleasurable reaction from evil and perverse things (AC 9726). Man's hope must be that he may be elevated out of this sensual—out of the grip of its inherited cravings and out of the thick mental fog which the fallacies and deceptive persuasions of the senses are continually producing. Man must be withdrawn from the sensual (AE 563). This is not only a condition for regeneration, but is necessary if he is to become a natural-rational man.

A special teaching ought here to be mentioned. This is involved as the reason why the Lord washed the feet of His disciples; for by washing the feet is meant the regeneration of the natural degree. While man must be regenerated as to his natural down to the sensual if he is to receive truth and good without perverting them, his sensual degree (being filled continually with material ideas) can be regenerated only "with difficulty" (AC 1742). But it was different with the Lord. With Him, not only was the external sensual—or that which was represented by the grating on the altar—glorified and made Divine; but also that which with man perishes with the body: thus the life of the senses and the flesh was also made Divine. And since this life cannot be divorced from the body, or from the corporeal itself, it is reiterated in the Writ-

ings that the Lord rose from the sepulchre with His whole body. "The Lord made the very corporeal in Himself Divine, as well its sensuials as their recipients" (AC 5078: 2, 2083: 2, 10252: 7).

The Scientific and the External Memory

When man is born he is at first corporeal-sensual. For "the first internal" that is opened in him consists only of animal reactions to bodily pleasures or discomforts. But as the infant grows, the human plane of self-conscious choice develops the external sensual. And very soon "a more interior sensual" begins to be opened, "from which he thinks naturally and is also affected naturally" (AE 543: 2).

This new sensual—which is often classed with the external sensual—is dependent upon the formation of a memory and the introduction of knowledges into the mind.

The *Arcana* states that the memory, in itself considered, is "nothing else than an organic something formed from the objects of the senses—especially those of the sight and the hearing—in the substances which are at the beginning of the fibres; and according to the impressions from these" (i.e., from the sense organs), "variations of form take place which are reproduced; and these forms are varied and changed according to the changes of state of the affections and persuasions" (AC 2487; cf. 4224, Wis. v., DP 279: 6, 9, 319).

In this connection we are warned that "organic forms are not only those that are apparent to the eye, and that can be detected by microscopes; for there are also organic forms still more pure, which can never be discovered by any eye, whether naked or assisted. The latter forms are interior forms such as those of the internal sight. . . . These are inscrutable . . ." (AC 4224, cf. SD 3484e).

The memory is an organic something formed in the substances at the beginnings of the fibres. The fibres here meant are the nerve fibres, which originate in the cells or little glands of the cortex of the brain. These glands of the grey matter are externally affected by the vibratory currents of the sensory impulse, and thus changes of form are recorded in the cortical glands. But the memory does not consist of these natural organics. For the cortical glands are mortal—and suffer death. The memory remains after death. The memory is indeed organic, but it is a spiritual

organic, formed from the "objects" or "material ideas" which the soul produces in correspondence to the order of the sensory streams which reach the brain-tissue.

Such mental imagery is in the appearance of space and time, yet itself is neither spatial nor subject to the attrition of time. It can be reconstructed after death—centuries, millenia later—long after the brain has returned to dust scattered over the earth (HH 461-464; SD 3230, 2755; SD minor, 4545).

Swedenborg had not yet become aware of this when he wrote his *Rational Psychology* in 1741 or 1742. And therefore he then could think no otherwise than that; because the natural brain was destroyed, man after death would have no memory of earth-life, no imagination, nor even any rational thought, but only an intuitive intelligence, equally shared by good and evil spirits (R. Psych. 494, 506, 525, 528, 530). Later he remarks: "Before my sight was opened the idea I cherished concerning the countless things that appear in the other life differed but little from that of others, for instance, that in the other life there could be no light or such things as come forth from light, together with the things of sense. . . . And yet . . . unless spirits were organized, and unless angels were organized substances, they could neither speak, nor see, nor think" (AC 1533; cf. SD 1715-1720).

The memory—and we here speak of the "corporeal" or "external" memory—is founded upon sensation, and could never be formed except in the brain of a man living on earth. We must not imagine the memory as myriads of little pigeon-holes into which knowledges are stuffed for safe-keeping and reference; but rather as the innumerable states of an organism. In the brain, the growth of the memory is accompanied by the maturation of billions of tiny "association-fibres" which bind the cortical cells together in a complex web. Therefore the human brain is unique in the ample space which it provides for such a system of association-fibres connecting all the parts of the cortex. Every sensation may directly stimulate a great number of cortical cells. Swedenborg, allowing that the mental visualization of a sensed object existed in each affected gland separately, also noted that the mental image would be more distinct the more glands were involved (R. Psych. 96). Modern neurologists point out that a "memory" of some simple object or experience is not preserved as structural traces left in individual

cells. Professor Herrick³ asserts that the simplest association of ideas in the mind "may involve the participation of thousands of neurons in widely separate parts of the cortex; and the consciousness must be regarded as a function of the entire process, not of any detached center."

The memory is made up of "ideas." And since we are now speaking of the "corporeal memory," these ideas must be called "material ideas"—which are mental states which represent before our consciousness some object or objects which have affected our corporeal senses from the material world. In the *Rational Psychology*, Swedenborg states that even words or sounds pass over into images of sight, and such ideas may thus be called "objects" of internal sight. The memory is therefore a plane of objects (or objective states with distinct significance) which consciousness visualizes or feels. These objects connect themselves into complex groups and series, or into compound ideas. Swedenborg shows that the internal sight—that is, the sight of the imagination—is so powerful that it may blot out the effect of new sensory impressions that the external world offers. The imagination is thus an internally governed state which the cortical glands assume when a nexus of similar ideas or memories are formed by a recognition of things which agree together. This causes what he calls a sense-perception—which reveals the quality of an object (R. Psych. 91–105).

Memory is thus built up by continual enrichment from the senses. It is nothing but the permanence of the states of "the purely organic substances of the mind"—states that consist in changes and variations. These changes can be repeated when they have once occurred; for in spiritual things there is no time, and the more they are repeated or utilized, the more they are confirmed (see DP 279, cf. 319).

In appearance, the external memory seems to be derived from the natural world. Yet it is not so. Nothing of the mind is of natural origin. The learned of the world look at the brain and assert that "we think with our bodies," although they confess they know not how we do it!⁴ Certainly the brain and the mind, the senses and the memory, are closely conjoined. "Man's spiritual is adjoined to his natural—or the substantial of the spirit to the material of his body—so fitly and unitedly that there is not a fila-

³ Herrick, *Introduction to Neurology*, Philadelphia, 1931, p. 354.

⁴ Herrick, *op. cit.*, p. 356.

ment or fibre or smallest stamen of them in which the human of the spirit is not in union with the human body." "And when the bond between man's body and spirit is loosed, the spirit is in a form like that in which the man was before; there is only a separation of the spiritual substance from the material" (DWis. vii. 4, 2: 4).

What, then, is the difference between that which inflows into the sense-organs of the body and that which inflows into the organic substances of the mind or spirit? Swedenborg answers: "Can there be any other difference than that what flows into the organs of the external senses, or those of the body, are such things as are in the natural world, while what flows into the organic substances of the internal senses, or those of the mind, are such things as are in the spiritual world? Consequently, as the organs of the external senses, or those of the body, are receptacles of natural objects, so the organic substances of the internal senses, or of the mind, are receptacles of spiritual objects" (DP 308: 2).

(To be Continued)

NOTES BY THE EDITOR

In this issue we reprint the Prologue to Swedenborg's *Animal Kingdom* as translated by Dr. J. J. Garth Wilkinson in the 1843 edition. This work is out of print, and the Prologue should be made accessible for its presentation of Swedenborg's philosophical mind, statement of principles, unfolding of the rationale of his mode of investigation, discussion of methods, and enumeration of new doctrines. In anticipating possible objections to his proposed inquiry it makes clear the difference between Swedenborg and contemporary philosophers; for while they held the soul to be unknowable, he believed that it could be approached in its kingdom, wherein it was represented. It is interesting to note that in *Rational Psychology* Swedenborg approves the synthetic method, but observes that the philosopher must first proceed by the analytic way. Reprints of this Prologue are being made and may be ordered at any time.

"Philosophical Notes" are unavoidably held over until the next issue.
