

## WHAT IS MEMORY?

FROM SWEDENBORG'S WORK ON THE FIBRE

Memory cannot be an image pictured in the cerebrum, or spread, one over the other, upon a tablet; nor can it be an impressed image laid up in little pockets from which it may be summoned for uses; this is diametrically repugnant to nature and reason. But memory must be a change of the state of some organic substance wherein the soul actuates its rational mind; thus, it necessarily depends on the change of state of this organism, that images and the little modes of the senses are retained in the memory. But if change of state is the cause of memory, we must inquire what is change of state.\* Speaking briefly, the state of the corticals and of the cerebrum is changed in divers ways, whether it be that those substances are expanded or constricted, hard or soft, active or passive, hot or cold, tremiscent or tranquil; naturally, whether they be gross or fine, consist of abundant fiber or of little, besides an intrinsic variety which is infinite. But to enumerate all the genera and species of the changes of state would be prolix. Meanwhile this truth is clear, namely, that the perfection of purer substances consists in their being able to undergo, to put on, and to suffer to be induced on them, every variation of state. Whatever therefore cannot change its state, that same is imperfect. The entities of purest nature are therefore most perfect, in that they are able to be accommodated to every change of state, and, in a moment, to run through the several states with such great variety that there is not the minutest phase of variety—singular and universal and general—that can possibly be thought of, to which they may not be applied. I know that I speak strange things, but what does it matter since they are true! Let us be enlightened by an example: The eye, which is the organ of sight, while grasping its objects and images, undergoes by that very fact, innumerable changes of state; that is to say, a different change for each species of color, harmony, disharmony; for each degree of shade and light; for each degree of distance, multitude, magnitude. In each one of these cases it

\* "Order is the quality of the disposition, determination and activity of the parts, substances or entities which make the form, whence is the state, whose perfection wisdom from its love produces, or whose imperfection the insanity of reason from cupidity forges" (TCR 52).

variously contracts, expands, pushes out, draws in, turns its pupil, iris, tunics, humors, retina; and applies itself to the object in such way that it receives and is affected exactly as the state of the object requires. This cannot be unknown to any one who pays attention. The like also happens to the drums, fenestrae and cochleae of the ear; to the papillae in the tongue, and to the universal body, from the diverse state of the things in contact therewith; who then doubts it of the cerebrum?

From the organ of natural sight let us now pass to the organ of rational sight or of the ideas of the mind, that is, to the cortical substances which are the organs of the internal sense corresponding to the organs of the external senses, being so many little cerebra or so many minute eyes. Since these substances are entities of purer and more perfect nature, it is necessary that they be able to undergo changes of state infinitely greater in number and perfection than can the eyes; that is to say, to be disposed to every influx and reception of images and modes from the external senses—potentially in infancy and effectively in the following age.

But the question is asked whether change of state can be the same thing as memory. I say that it is; for purer organic substances are apt of themselves to the putting on of every state; and the state is induced by influx from the senses, thus by use and cultivation; and a state that is induced, remains, and it returns just so often as the mind or its organic substance, that is, the cortical substance, revolves and turns itself from that state in which it is, or into which it has been reduced, to all similar states. That which flows in is perceived or sensated; hence by the changes of state resulting from the state induced, thought is aroused, from thought, judgment, and so on.

But these operations appear to be too physical, and therefore there cannot but be a doubt as to how that which is metaphysical and spiritual can be accommodated to these same laws. This, however, comes for demonstration in our Psychological Transactions. Meanwhile, let us agree in this, namely, that memory is a state induced on the organic substances or corticals of the cerebrum wherein the soul actuates its rational mind.

In order that the causes may be perceived, we must add that there is a memory of universals and a memory of particulars. The memory of universals is that which corresponds to our thought,

and the memory of particulars that which corresponds to the imagination. The memory of universals is the intrinsic or internal memory of the corticals, while the memory of particulars is the extrinsic memory of the corticals, or their common state.\* But these statements are still obscure, for the matter is one that cannot be expounded in a few words. Thought itself is an active state of the memory of universals, and imagination is an active state of the memory of particulars. They may be conjoined and they may also be separated; for there are those who excel in the memory of universals and consequently in judgment, and there are those who excel in the memory of particulars or in imagination; rarely are the two memories entirely conjoined. (*The Fibre*, nos. 520-21.)

\* "I have been instructed that, regarded in itself, the exterior memory is simply something organic formed from the objects of the senses—especially those of the sight and of the hearing—in the substances which are the beginnings of the fibers; and that according to the impressions from these objects are effected variations of form, which are reproduced; and that these forms are varied and changed according to the changes of the state of the affections and persuasions; also that the interior memory is in like manner organic, but purer and more perfect, being formed from the objects of the interior sight; which objects are disposed into regular series, in an incomprehensible order" (AC 2487).