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The Human Limb System

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There are two opposite ways of considering the form and composition of the human body. In the first it is thought of as an instrument of survival, conditioned by the necessities of its own continued existence on the earth. In the second it is regarded as an instrument of spiritual expression, conditioned by the need of spiritual faculties to incarnate and express themselves in the sphere of physical matter. The first method of regarding the body is that of Natural Science, and its modern exponent is Sir Arthur Keith; the second is that of Spiritual Science, or Anthroposophy, and its protagonist is Rudolf Steiner. Arthur Keith holds that the spiritual faculties of man arose by a kind of accident through the reserve of brainpower with which man was intended to meet the emergencies of physical survival. Rudolf Steiner worked throughout his life to establish in scientific detail that imagination of man, which could say of him: In Form and Apprehension how like an Angel!

It is, of course, true that whenever there is an interpenetration of matter by Spirit, whenever Mind is working as a formative force on matter, there are two points of view to be considered, and the question of use may be answered from the physical or spiritual standpoint. To take a crude example: a man who wishes to investigate the nature of music may begin by examining the inner works of a piano; or he may endeavor to experience spiritually the forms of music and the qualities of its notes and tones. You cannot say that the man who examines the piano is wrong, for there is a sense in which the piano creates and conditions the music. But there is a far more important sense in which Music creates and conditions the piano; and the man who has grasped that sense and that importance may he pardoned for sometimes feeling some impatience with his fellow who only examines the piano, however careful and painstaking his researches.

It is not very different with the consideration of the meaning and origin of the members and organs of the human body. If we ask: for what are the human teeth? The obvious answer is, to bite with. If we ask: for what are the human legs? the obvious answer is, to go from one place to another. In fact, one might ask all the questions that Little Red Riding Hood asked the Wolf, and give all the answers that the Wolf gave to Little Red Riding Hood, and not one of them could be said to be a wrong answer. Yet these are not always the important answers; and the strange thing is that the important answers are sometimes the direct opposite of the unimportant ones, and yet both, at their different levels, are true. For the important thing about the human teeth is not that they bite, but that they are comparatively so little adapted for biting. They do not constantly grow, as they are worn out, like the teeth of a rabbit or a mouse; they are not again and again replaced like the teeth of a shark. The Wolf could say of his fine long teeth: "All the better to bite you with!" But if it had been her true grandmother whom Red Riding Hood had found under the bedclothes, what could she have said? Probably she had no teeth, or such as she had were ground down to useless stumps.

In the same way the important thing about the human legs is not so much that they carry the human body about, as that they are *not* adapted for carrying to the same extent as are the legs of a horse or of a frog; of the human arms and hands that they are so little calculated to serve the physical needs of the body as compared with the claws of a tiger or the prehensile hand of an ape. Indeed, it is precisely through this reserve of forces, the fact that his organs are not carried to their logical conclusion, as Dr. Steiner has shown, that man is able to develop in life his spiritual powers. His unspecialized hands, his undeveloped teeth, can become instruments of spiritual perception. His limbs are not only instruments of motion, they are the expression of one of the greatest of human faculties. Without his limb system man could not have developed his life of *Will*.

The intimate connection between the act of Will and the human limbs must be a matter of personal experience and common observation to everyone. Who has not instinctively planted his feet more firmly on the ground (put his foot down, in common language) when called upon to make some important decision? Who has not contrasted the firm step and broad gestures of men of determined will, with the feeble, uncertain movements of the irresolute? But what has not been understood, until the patient investigations of Dr. Steiner brought light on the subject, is the working of the human limbs as one part of a threefold system penetrating the whole human body, and the way in which the life of the human soul in childhood is centered in turn in each part of that threefold system, beginning in the earlier years with the limbs themselves.

For it would be altogether wrong to consider the limb system alone as separate from the other members of the threefold human organization, from the rhythmic system and the head-nerves system, or as bearing to these other systems merely the external relation of servant to master. On the contrary, the limb system penetrates every part of the body; it can only be separated from the other systems as one note of a chord may be separated from the rest for some special consideration. In this respect the systems of the body show an exact correspondence with the faculties of the human soul of which they are the expression. An act of will (for example) is in many respects the exact opposite of an act of thought. Yet in every process of thought there must be an undercurrent of will; every form of willing must be penetrated by some element of thought, on however low a level. The *Willing* must always enter to some extent into *Thinking*; and the limb system - the system of the will - has its representative in the human head. That representative is the human jaw, which is not a mere organ of mastication, but is of infinite importance for human spiritual life.

This close connection between the limbs and the jaw was once demonstrated in a very pathetic way when Dr. Steiner was in England. Some parents brought him a child who had some difficulties in its speech and asked his advice. He soon brought to light the fact that some years previously the child had developed the habit of biting its nails and finger-ends so severely that at last they had felt themselves compelled to tie its hands down. The child had therefore failed to develop its natural freedom of movement, and in course of time the mobility of the jaw had been affected. The remedy for such a child was not to exercise its jaw, but to recover by movements of the arms the freedom that it had lost. For in children especially, all defects of speech are best corrected by suitable eurythmy exercises with the arms and legs - the larger movements of the limbs reflecting themselves (sometimes with extraordinary rapidity and effect) in the smaller movements of the jaw. With adults, too, it is interesting to observe how closely the character of a man's speech and thought corresponds to the way in which he walks. And much again can be seen of the quality of a man's thought in the set of his jaw. It is impossible to imagine an incisive thinker, a man with a strong will element in his thinking, except as the possessor of a firmly set jaw, which will again bear its relation to his whole limb system.

Coleridge's thought is torrential, tempestuous, and choleric; Wordsworth's, calm, tidal, phlegmatic. It is recorded that the latter liked to compose his poems walking gently on a level path, the former rushing down steep declivities or breaking his way through thick undergrowth.

Such a method of considering the powers of man in relation to the threefold organism of his body is of especial importance in the education of children for the following reason: whereas the adult enjoys all his powers in their full fruition together, the child develops them, builds his life in them, in a natural rhythmical succession. A child of a few years old (genius being excepted) does not solve mathematical problems; he is too preoccupied with the movements of his limbs. From the moment he wakes to the moment he goes to sleep his arms and legs are in a perpetual motion, and without this motion he could not build up his strength of will. If the adult who always says "Sit still" to the child could have his way (fortunately he very rarely does, because a child has generally a much more vigorous will than an adult) the child could not develop a strong character in later life. Nothing is so important for the child during the first six or seven years of his life as that he shall be free to develop the right kind of limb activity.

But it must be the right kind of limb activity - it must spring (if this expression may be used) from the heart of the limb system itself. The system of the head and nerves penetrates into the limbs no less effectively than the limb system into the head. It is the function of the nerves, radiating from the head as their center, to incorporate a certain element of thought in the limbs. Therefore the human hand, for instance, may be used as an instrument of thought rather than as a member of the limb system proper. A clock-maker or a draughtsman thinks with his hands; a sawyer or a hay-maker wills with his hands.

It is one of the troubles of modern childhood that children, especially in towns, see less and less genuine limb activity for them to imitate, and in imitating to develop their own life of will. It is very instructive to compare two children, one of whom is pretending to drive a team of horses, and the other a motor-car; the former shaking and pulling at the reins, cracking his whip of string, and imitating in his cries of "Whoa!" those deeper tones of the voice which rise from the lower part of the body, with all the strength of the human will; the latter clutching an imaginary steering-wheel, buzzing through his teeth in imitation of the engine, and occasionally pinching an imaginary horn and uttering a "Toot-toot" - feeblest and most nervous of sounds! The former child is living in movement, the latter only in idea. Nor is it only in their surroundings that modern children are unfortunate. The characteristic toys they are given to-day are toys to develop the intellect. The child who uses his hands to fit jig-saw puzzles together, or to build with Meccano, or to construct with any of the hundred and one kinds of wood, metal, or plastic segments which abound in children's toy shops, is working with his nervous system no less truly than if he were set to solve mathematical problems or cross-word puzzles. Only he is developing that intellectual quality in the sphere of the limb system, instead of directly in the system of head and nerves. In schools, too, a great deal of teaching apparatus is often brought to little children boxes in which they can fit letters together to make words and many such devices - which are only calculated to develop the intellectual element in a child's movements.

Parents and teachers, however, who have once grasped the importance of the limb system as an expression of the human will, must endeavor to work in precisely the opposite direction. So far from bringing the thinking element, which belongs to later years of life, into the limb movements of young children, they will endeavor to bring the will element into the thinking powers of later life. In this respect, above all others, education must become a corrective, a healing, for the tendencies of the age. To speak in an example, a boy of seven years has been taught arithmetic considerably beyond his years, and the sums he does are both neat and accurate. He is a very quiet boy, and is found to have much less capacity than the average child for making pictures with chalks or water-colors. He shrinks from creating a picture of his own and would like to have something to copy. One day his teacher notices that, as the children march round the room counting some multiplication table, he cannot keep step with the rhythm of what he is saying. Taken later by himself, he cannot count his own paces as he walks, or the treads of the stairs up which he goes; his will, the system of his limbs, has never brought its movement into his imagination and thinking. Yet the judgment, the conclusion of thinking, arises from the will element in the thought, and if children do not develop a firm grasp of things in their limbs when they are young they will hardly develop a grasp of thought when they are older, the realities of life will elude their thinking. So that (if arithmetic may be taken as a typical example) the wise teacher will see that all counting and reckoning grows out of movement as the trunk of a tree grows out of its roots. That little children should jump and run and skip and clap as they count, forward and backward, is far more beneficial for them than to do bookwork sums, when they have not yet sucked the honey out of their age, developed to the full that strength of will which only their earlier years can give them. There is a pretty story told of Isaac Newton as a boy bringing his limb activity into his mathematics. During the great storm which raged over England at the death of Oliver Cromwell, he wished to measure the force of the wind. This he achieved by first jumping as hard as he could with the wind, and then against it. The difference between the two distances he jumped gave him the means of making the measurement he desired.

When teachers and parents begin to look upon children in their development with a more artistic eye, they will find quite different standards for measuring their progress than those which now obtain. They will not ask of a child of five or six (before the change of teeth), Can he read and write, and do this or that kind of sum? Rather they will look lovingly at the way he walks and plays. Are his hands capable? Does he move with a swing, rhythmically? Do his feet seem to grasp the ground as he walks? If so, they will be happy in the knowledge that he has laid the foundation of a strong character. But if his movements are weak and agitated, if he trips excitedly more on his toes than on the whole of his feet, if his actions are checked and paralyzed (as they not infrequently are with modern children) by his ideas, if his complexion is "sicklied o'er with the pale cast of thought," then they may be sure that, unless help is given him, he is in danger of growing up nervous or irresolute.

This education of the limb system, of the "limb-man," is not of course confined to the first seven years of life, although it is then of paramount importance. It must be continued into the second seven years of childhood, when the life of the rhythmic system, the life of feeling, should preponderate; and into the age after puberty when the intellectual powers are awake and alert. But it is in this education of the limb system, in the first place, and of the rhythmic system in the second, as well as of the intellectual powers, that the answer lies to the modern problems of education. For the question, How shall my child be educated? becomes of ever-increasing importance for all classes of a modern society. On the one hand there is the deep and true feeling that every child should be helped to enter into the spiritual and cultural heritage of humanity, to realize and develop itself as an individual, as an Ego. On the other hand there is the experience that the education which has endeavoured to lead children into this heritage has often seemed unfit to them for the necessary tasks and occupations of life. Hence arises a characteristic desire that education should be more technical, that children should learn the elements of a trade or commerce. But what is needed for a child's spiritual and cultural life is not really in opposition to the practical demands the world will make of him. For, as the more farseeing industrialists recognize, what industry needs is not children trained in technical processes which, as likely as not, will be out of date by the time they come to put them into practice; but children wth an all-round capacity for undertaking whatever task the changing conditions of life may present them with. And when children are educated in such a way that their limb activity is fostered in their younger years, they are indeed preparing the will to enter into their thinking in later years, but at the same time they are becoming inventive, resourceful, adaptable in their limb activity itself. Hence it was that, although his methods of education are founded on a purely spiritual science, Dr. Steiner always claimed that the object of those methods was to produce *capable* men and women. The foundation of that capability lies in the fostering of the will, in the right education of the human limbs.

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