

13 June 1960

READING 5**ALL GROUPS**

In order to complete the account of 'Energy in the Human Organism', let us tonight read two quotations:

PART 1. ENERGY COMES FROM THREE KINDS OF FOOD

Report from 1939 New York Meeting:

- Q. Can one kind of energy be changed into another kind?
- A. It changes by itself when it is necessary. Every centre is adapted to work with a certain kind of energy, and it receives exactly what it needs, but all centres steal from each other, and a centre that needs a higher kind of energy has to work with a lower kind, or a centre suited for working with quiet energy uses explosive energy, and so everything is quite wrong. That is how the machine works. Imagine certain stoves – one has to work on oil, one on wood, and a third on benzene. Suppose the one adapted for wood is given benzene; only explosions can happen, nothing more; and also imagine a machine adapted for benzene, and see how it cannot work on wood or coal.
- Q. Are there different kinds of energy; that is to say, can we talk of emotional energy, intellectual energy, etc., as if they were different kinds of energy?
- A. Not exactly like that, but we can speak about centres and we can speak about energies – one centre with one kind, another centre with another kind; and energies can be designated by the kind of hydrogen in which they are contained. Intellectual centre works with H48; moving and instinctive with H24, and so on.

We must distinguish four kinds of energy working through us: physical energy (for instance, moving this table); life energy (which makes the body absorb food, reconstruct tissues, and so on – this process of the transformation of cells goes on constantly); psychic, or mental energy, with which the centres work, and, most important of all – energy of consciousness.

For every kind of action, thought, or for being conscious, we must have corresponding energy. If we have not got it, we go down and work with lower energy – lead simply an animal and vegetable life. Then again we have thoughts, again we accumulate energy and can be conscious for a short time.

Even an enormous quantity of physical energy cannot produce a thought. For thought, a different, a stronger solution is necessary.

Before thinking of storing energy we must stop waste. We waste energy in imagination, considering, identifying, negative emotions, idle talk – these are the chief leaks. This is why it is necessary to stop identifying.

Psychic energy is the energy with which centres work. You call it mental or psychological energy.

All kinds of physical energy can be reduced to movement. Physical energy cannot be accumulated beyond a certain limit. Psychic energy cannot be limited.

The energy of consciousness is quicker, more explosive than the other kinds.

But, though conservation and increase of energy is very important, it is not the whole secret in the development of consciousness. It would not be enough, for one has to know how to control it. Energy is the mechanical side of consciousness.

Q. How can one learn to control energy better?

A. One cannot begin with the idea of control. In order to control one small thing we must know the whole machine. First we must control ourselves from the point of view of consciousness, must try to remember ourselves. Then stop unnecessary waste of energy – considering, lying, expression of negative emotions. So first of all we have to stop waste of energy; second, collect it by self-remembering; then, adjust things. We cannot begin in any other way.

Q. Is there always the same amount of energy in the big accumulator?

A. That depends on many things; work of the machine, food, waste or not waste of energy. The normal organism produces enough energy not only for all centres but also for storing. Production is all right, but spending may be wrong.

PART 2. THE ORIGINAL ACCOUNT OF ACCUMULATORS OF ENERGY

I returned to St. Petersburg, in the summer of 1916.

Soon after our group, or 'preparatory group' had been formed, there was a conversation about efforts in connection with the tasks we had been given:

'You must understand,' we were told, 'that ordinary efforts do not count. *Only super-efforts count.* And so it is always and in everything. Those who do not wish to make super-efforts had better give up everything and take care of their health.'

'Can not super-efforts be dangerous?' asked one of the audience who was usually particularly careful about his health.

'Of course they can, but it is better to die making efforts to awaken than to live in sleep. That's one thing. For another thing it is not so easy to die from efforts. We have much more strength than we think. But we never make use of it. You must understand one feature of the organisation of the human machine.

'A very important role in the human machine is played by a certain kind of accumulator. There are two small accumulators near each centre filled with the particular substance necessary for the work of the given centre.

'In addition, there is in the organism a large accumulator which feeds the small ones. The small accumulators are connected together, and further, each of them is connected with the centre next to which it stands, as well as with the large accumulator.'

A general diagram of the 'human machine' was drawn and the positions of the large and small accumulators and the connections between them pointed out. (See Figure)

'Accumulators work in the following way. Let us suppose that a man is working or is reading a difficult book and trying to understand it, in which case several 'rolls'[†] revolve in the thinking apparatus in his head. Or let us suppose that he is walking up a hill and is getting tired, in which case the 'rolls' revolve in the moving centre.

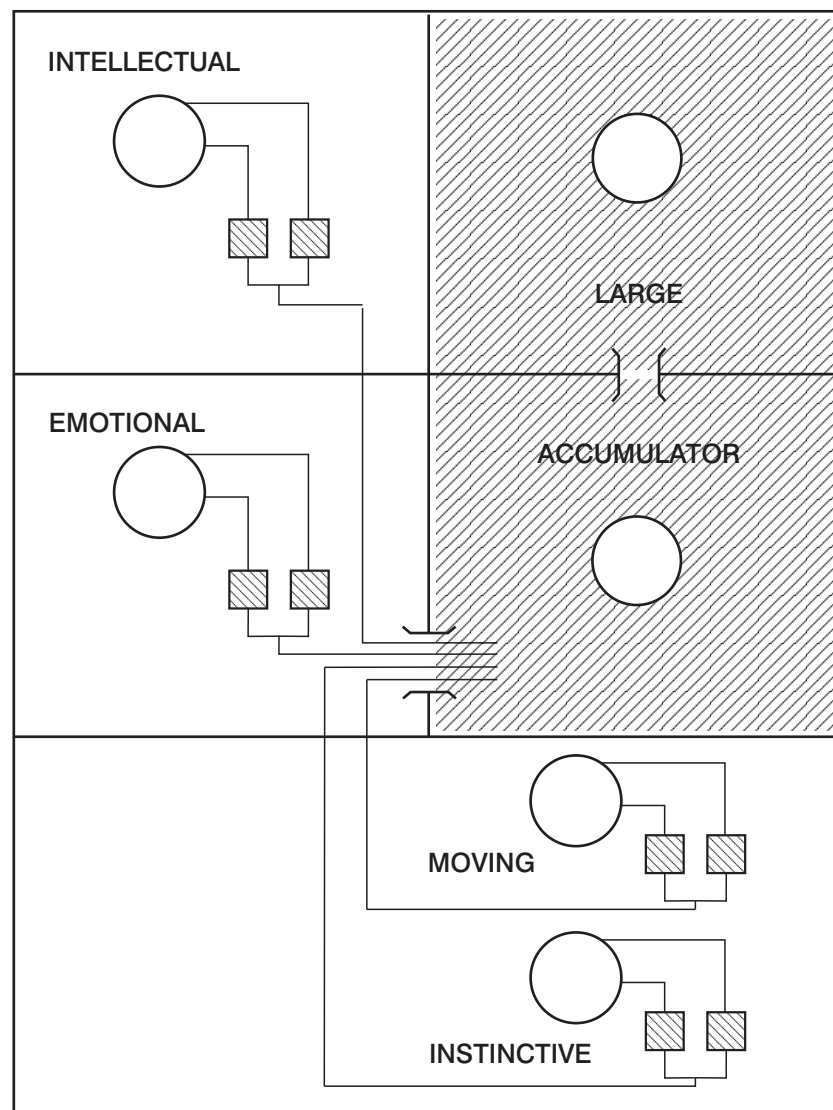
'In the first instance the intellectual centre, and in the second the moving centre, draw the energy necessary for their work from the small accumulators. When an accumulator is nearly empty a man feels tired. He would like to stop, to sit down if he is walking, to think of something else if he is solving a difficult problem. But quite unexpectedly he feels an inflow of strength, and he is once more able to walk or to work. This means that the centre has become connected with the second accumulator and is taking energy from it. Meanwhile the first accumulator is refilling with energy from the large accumulator. The work of the centre goes on. The man continues to walk or to

[†]N.B. The word was taken from phonographic rolls, for which we might now use the term gramophone records.

work. Sometimes a short rest is required to ensure this connection. Sometimes a shock, sometimes an effort. Anyway, the work goes on. After a certain time the store of energy in the second accumulator also becomes exhausted. The man again feels tired.

'Again an external shock, or a short rest, or a cigarette, or an effort, and he is connected with the first accumulator. But it may easily happen that the centre has drawn energy from the second accumulator so quickly that the first one has had no time to refill itself from the large accumulator, and has taken only half the energy it can hold; it is only half full.

'Having become reconnected with the first accumulator the centre begins to draw energy from it, while the second accumulator becomes connected with and draws energy from the large accumulator. But this time the first accumulator was only half full. The centre quickly exhausts its energy, and in the meantime the second accumulator has succeeded in getting only a quarter full. The centre becomes connected with it, swiftly exhausts all its energy, and connects once more with the first accumulator, and so on. After a certain time the organism is brought to such a state that neither of the small accumulators has a drop of energy left. This time the man feels really tired. He almost falls down, he almost drops asleep, or else his organism becomes affected, he starts a headache, palpitations begin, or he feels sick.



‘Then suddenly, again a short rest, or an external shock, or an effort, brings a new flow of energy and the man is once more able to think, to walk, or to work.

‘This means that the centre has become connected directly to the large accumulator. The large accumulator contains an enormous amount of energy. Connected with the large accumulator a man is literally able to perform miracles. But of course, if the ‘rolls’ continue to turn and energy which is made from air, food and impressions continues to pour out of the large accumulator faster than it pours in, then there comes a moment when the large accumulator is drained of all energy and the organism dies. But this happens very seldom. Usually the organism automatically stops working long before this. Special conditions are necessary to cause the organism to die exhausted of all its energy. In ordinary conditions a man will fall asleep or he will faint or he will develop some internal complication which will stop the work a long time before the real danger.

‘One need not, therefore, be afraid of efforts; the danger of dying from them is not at all great. It is much easier to die from inaction, from laziness, and from the fear of making efforts.

‘Our aim, on the contrary, is to learn to connect the necessary centre with the large accumulator. So long as we are unable to do this all our work will be wasted because we shall fall asleep before our efforts can give any kind of results.

‘Small accumulators suffice for the ordinary, everyday work of life. But for work on oneself, for inner growth, and for the efforts which are required of a man who enters the way, the energy from these small accumulators is not enough.

‘We must learn how to draw energy straight from the large accumulator.

‘This however is possible only with the help of the emotional centre. It is essential that this be understood. The connection with the large accumulator can be effected only through the emotional centre. The instinctive, moving, and intellectual centres, by themselves, can feed only on the small accumulators.

‘This is precisely what people do not understand. Therefore their aim must be the development of the activity of the emotional centre. The emotional centre is an apparatus much more subtle than the intellectual centre, particular if we take into consideration the fact that in the whole of the intellectual centre the only part that works is the formatory apparatus and that many things are quite inaccessible to the intellectual centre. If anyone desires to know and to understand more than he actually knows and understands, he must remember that this new knowledge and this new understanding will come through the emotional centre and not through the intellectual centre.’

In addition to what he said about accumulators there were some very interesting remarks about yawning and about laughter:

‘There are two incomprehensible functions in our organism inexplicable from the scientific point of view, although naturally science does not admit them to be inexplicable; these are yawning and laughter. Neither the one nor the other can be rightly understood and explained without knowing about accumulators and their role in the organism.

‘You have noticed that you yawn when you are tired. this is especially noticeable, for instance, in the mountains, when a man who is unaccustomed to them yawns almost continually while he is ascending a mountain. Yawning is the pumping of energy into the small accumulators. When they empty too quickly, that is, when one of them has not time to fill up while the other is being emptied, yawning becomes almost continuous. There are certain diseased conditions which can cause stoppage of the heart when a man wishes but is not able to yawn, and other conditions are known when something goes

wrong with the pump, causing it to work without effect, when a man yawns the whole time, but does not pump in any energy.

‘The study and the observation of yawning from this point of view may reveal much that is new and interesting.

‘Laughter is also directly connected with accumulators. But laughter is the opposite function to yawning. It is not pumping in, but pumping out, that is, the pumping out and the discarding of superfluous energy collected in the accumulators. Laughter does not exist in all centres, but only in centres divided into two halves – positive and negative. If we have not yet spoken of this in detail, we shall do so when we come to a more detailed study of centres. At present we shall take only the intellectual centre. There can be impressions which fall at once on two halves of the centre and produce at once a sharp ‘yes’ and ‘no’. Such a simultaneous ‘yes’ and ‘no’ produces a kind of convulsion in the centre and, being unable to harmonise and digest these two opposite impressions of one fact, the centre begins to throw out in the form of laughter the energy which flows into it from the accumulator whose turn it is to supply it. In another instance it happens that in the accumulator there has collected too much energy which the centre cannot manage to use up. Then every, the most ordinary, impression can be received as double, that is, it may fall at once on the two halves of the centre and produce laughter, that is, the discarding of energy.

‘You must understand that you are only being given an outline. You must remember that both yawning and laughter are very contagious. This shows that they are essentially functions of the instinctive and the moving centres.

‘Why is laughter so pleasant?’ asked someone.

‘Because laughter relieves us of superfluous energy, which, if it remained unused, might become negative, that is, poison. We always have plenty of this poison in us. Laughter is the antidote. But this antidote is necessary only so long as we are unable to use all the energy for useful work. It is said of Christ that he never laughed. And indeed you will find in the Gospels no indication or mention of the fact that at any time Christ laughed. But there are different ways of *not laughing*. There are people who do not laugh because they are completely immersed in negative emotions, in malice, in fear, in hatred, in suspicion. And there may be others who do not laugh because they cannot have negative emotions. Understand one thing. In the higher centres there can be no laughter, because in higher centres there is no division, and no ‘yes’ and ‘no’.

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