MOTION AND THE TONE SCALE

A lecture given on
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Heart and Soul of Aberration

The first thing I would like to do is give you a very quick review of what was covered earlier on the subject of motion and emotion. These two things are very closely related. I want to give you a very precise example of how motion and emotion go together.

A human being has two strips on either side of his brain. Each strip is a duplicate of a human being. It is actually a little man hanging by his heels, a thin sheet of nerve fiber. Actually, they seem to be switchboards. The hand is very exaggerated and the tongue is very exaggerated, but otherwise these are quite close to a real human being.

One of these goes to the motors—you might say the muscles. That is the motor switchboard. The other is evidently the thought switchboard; at any rate, that is a good analogy.

This motor switchboard is very interesting. A fellow thinks, "Move the index finger," and the thought "Move the index finger" causes the sensory switchboard to wiggle. First there is a thought impulse, and then he gets a buildup—possibly on the order of a photoelectric relay system, whereby a thousandth of a watt can build up to a kilowatt. So maybe only a thousandth of a watt of thought permits the sensory index finger to move, and possibly some mechanism in there builds it up to maybe a watt of current, which transfers down through the nerve trunks and out to the fellow's index finger, and the index finger moves. In other words, he thinks, "Move the index finger"; that registers on the sensory switchboard and kicks over into a higher magnitude on the motor switchboard, and the index finger moves.

Now, these switchboards are certainly more complex than anything Bell Laboratories is building or working on.

A professor of psychiatry at the University of Illinois did a good piece of work. (I am very glad he did that; it makes it so the whole field isn't completely barren.) He figured out that if the human mind were done in terms of modern electronics—if you built a machine with vacuum tubes and electricity which could do a lot of the things the human mind could do—it would require enough electricity to light the city of New York, it would require Niagara Falls to cool it and it would require, if vacuum tubes were one cent apiece, a million dollars' worth of vacuum tubes. The life of a vacuum tube lets you figure out how long that machine would run uninterrupted, doing computations and calculations such as the human mind will do: it would run uninterrupted for one eighteenth of one second. Then you would have to replace a tube.

This machine, this computer we have, is a very interesting one. It does all these various computations, handles all of these various motor impulses, and it takes three-dimensional television in color and sound, records it and makes tapes for replay of those things. It does an enormous amount of memory storage and so forth, and in addition to all that it is portable. So you can see that there is quite a piece of equipment here which is all boiled down into a small package. That is why hardly anyone knows anything of structure. They can get into the brain with a probe or something of the sort and wiggle part of it and some other part of it will wiggle, but this is experimentation on the level of crudity of galvanometers and frogs. If you take a dead frog and shoot him full of static electricity he will jump; you get a nerve reflex action. Very little is known about this.

These assumptions being made seem reasonable, although I am taking this data from a field which is in poor repute as far as accuracy is concerned —psychiatry, psychology. Nevertheless these panels would seem-to answer no other purpose than just that. They give you a picture of a switchboard system by which every nerve line in the body can connect up.

Every nerve in the body, every nerve ending in the arms, the legs, the torso and so forth, seems to have a connection in here. This makes a great big switchboard which is running on a certain amount of current.

Now, in order to make this thing work there has to be some kind of a buildup system. This is the only reason for these two strips that I can see, because the medical textbooks have so little concept of what it takes to make an item run that they just keep assigning things the most beautiful, wonderful names you ever saw in your life, and they don't tell you what these functions are.

Certainly we have a computer system in here—at least the switchboard of one—because we don't even know that thought is done in the body. We know that there is a system running and we know that the nerve fibers do carry something very like electricity. That, interestingly enough, doesn't seem to be life force. It seems to be current force. It is definitely physical universe energy of some sort and it travels at the rate of about ten feet a second along these nerve lines.

That is why the brontosaurus had to develop a sub-brain in his tail. He was about eighty feet long, and some tyrannosaurus would come along in a puckish mood and stamp on the brontosaurus' tail, but the brontosaurus wouldn't know about it until quite a few seconds later. So he would turn around and there would be a piece of his tail gone; this was nonsurvival. To move that tail, he would have to think "Impulse received from tail.... Pain.... Move tail!" The impulse would go back to the tail, but by that time it would be too late—the tail would be gone.

The structure of this whole nervous system that goes along with mammals, reptiles and so forth very rapidly becomes nonoptimum above the size of a man. Actually, even a man is just a little bit too big for an efficient level on this system. It takes a man about a sixth of a second to pull his toe out of the way.

So, here you have this switchboard. "I" thinks something and that goes into an impulse. Now, you have probably seen pictures of these big telephone exchanges with all the transcontinental calls going through the switchboard, and there is a very angry and efficient supervisor and all the girls are working at top speed with their hands full of cables and lines, plugging them in and saying "Number, please," and so forth. That would be about the amount of activity it would take to run this switchboard, because there are so many structures and actions involved in getting a message down to a channel.

I don't think there are enough plugs and so forth at a local telephone exchange to handle as many message impulses as it would require to make a simple muscle movement. Stop and think of the number of muscles, the number of bones and the number of joints involved, the skin tension, the endocrine rebalance, the energy, the oxygen input—on and on and on. The whole body is kept informed about the body's operation continually.

I wanted to impress that upon you as a complex system which is nevertheless very simple. The system is simply this: "I" receives a stimulus from somewhere in the body. He does a computation on this system according to past experience or education or genetic memory. (It is hard to keep from personifying the awareness-of-awareness unit, "I.") This impulse comes in from the body. Possibly there are other switch impulses that come in straight from the sight to this sensory panel without coming through the motor panel, although you have to go to the motor panel in order to shift the eyes. The message coming in through the eyes probably goes in the sensory panel.

Now, this unit probably works both ways. As the impulse comes in, this unit probably takes the current impulse down to where "I," which is very sensitive, can register. The impulse would have a certain intensity and it would be broken down into the sensory strip, so that a watt coming in, by the time it gets to the sensory panel, may have gone down to a millionth of a watt, and then it goes over to "I" as a little impulse.

“I” thinks something, it goes out and builds up into the motors and something happens in the body. “I” puts in an impulse to this sensory panel that says “Thumb nose at Bill,” and this builds up to a higher impulse and then all the messages necessary to complete this action go out.

If you are wondering why I am stressing this, you are looking right now at the very heart and soul of aberration. It would take a lot of channels to resolve all the computations and put them into effect, and this switchboard could really get fouled up.

As long as “I” can receive stimuli, resolve the stimuli according to past experience and return an impulse to answer the situation or plan an impulse which can go into effect, “I” remains in control of the situation. But remember that “I” is not a hundred-thousand-watt station; as powerful as the awareness-of-awareness center is, the whole brain operates on 2. watts, so the amount that can be handled there is not a very high volume.

This load quite normally, let’s say, is along the line of a tenth of a watt, which steps down to a millionth of a watt when it hits “I.” Now suppose that all of a sudden two watts came over that line and hit this switchboard and this damping operation here were insufficient, so that “I” got hit with a tenth of a watt. What would happen is that “I” would blank out. There is evidently a fuse system in there and the fuses blow. But these switchboards, under a sudden impulse of that character, are not well protected.

Suppose lightning hit a telephone line and there were insufficient fuses on that telephone line, and you had a couple of thousand plugs in a couple of thousand switchboard holes and the lightning hit in such a way as to carry through those lines and fuse those plugs in those holes. Those calls are then in forevermore. That is an analogy of what happens when pain strikes the brain.

Pain creates an energy impulse in the nervous system. The whole nervous system, by the way, was designed to handle, evidently, the impulse of energy and output of energy created on the injury of cells.

Matter in general, when condensed, stretched, stamped on, pulled apart and so forth, generates a current. A small group of cells, when struck, will generate a current. You can actually put a galvanometer on one. I imagine if you hooked up a couple of electrodes to a frog and hit him with a sledgehammer it would really make a galvanometer jump. That experiment was overlooked when they were putting electricity into the dead frog and making the dead frog jump. What is the matter with hitting the frog with a sledgehammer and measuring the current that comes out of him? You would find there was current there.

In other words, cells release current when injured. This is survival. This current or impact is damaging. In order to keep an injured cell from damaging its immediate neighbors, then, the body evidently built up a nerve conduit system to take away this energy. This energy required a shock absorber, so specially adapted cells were developed that could stand such an impulse. A big cushion finally came into being at that point of the body which is the most liable to impact—normally the forward end, the head.

The body not only developed a terrifically twisted nerve system there to absorb impact, but also got a skull to protect it, which is a special kind of nerve cell re-formed into bone. If you looked that up you would find out they have known that for a long time, but they never added it up. I am just giving you a postulate as to what happens.

Injury, then, shoots a current through the body and it gets absorbed throughout the nervous system. The nervous system is actually a blunting, a shock absorber or something of the sort for those inputs. When “I” starts to make an action and gets a heavy impulse in return, there is three or four—maybe a hundred—times the energy that “I” could put out at that moment. “I” can put out a millionth of a watt or something like that, and he is putting out this impulse and getting an impulse back which is very high. This system is not sufficient to fuse it out so “I”

loses control of the organism and goes unconscious. The intended action of "I" has been swamped by a muscular demand, position and action from the exterior.

Now, just as "I" can say "Move arm" and this impulse goes on through and moves the arm, so does the arm with a pain impact get moved; the whole system will just operate backwards and "Move arm" will fuse in on this switchboard. When "I" tries to move the arm against that impact it locks up the switchboard.

Let me give you a much better analogy. Let's take a little guy, and he has a job. He lives in a cubicle and this cubicle has a number of hoses coming into it and it is this person's job to keep these holes plugged up. He doesn't do too badly; a squirt of water comes in and he goes over and plugs up that hole, and then a squirt of water comes in somewhere else and he plugs up that hole, and a squirt comes in another place and he plugs that one up. He is being very successful. But all of a sudden one plug blows, so he plugs it up again. Another one blows and he rushes over and plugs that up. And then some of the others blow and he plugs those up. He can go along for a long time plugging up these holes.

But what happens with him? He will get sore after a while. First he will get antagonistic—he will say, "To heck with these darn things! You stay plugged!" Then he will get mad and he won't care whether he plugs them thoroughly or not, just as long as he plugs them savagely.

And then he will get scared that he is going to get swamped, because that place is going to fill up. So he will plug holes at a great rate but he still won't be able to keep them all plugged. He will finally say "To heck with it" and sit down.

That would be "I" on current returns, if these hoses were current returns which were coming back in to the central awareness-of-awareness unit. "I" is trying to compute and figure things out. But every once in a while as life goes along he will get too heavy an impact—he will get knocked unconscious or operated on by a doctor, or some other calamity will occur.

It is just a little more complex than this. These two panels in the head—these switchboards—get jammed up. They fix up the fuses. The fuses have to get heavier and heavier because experience has dictated that the pain coming through is pretty heavy. So these fuses have to be kept pretty heavy and the ability of the impulse to filter through isn't good.

This whole structure has to get to a point finally where these heavy pain impacts can be stopped. The only way to do that is to arrest them as they come in. So these switchboards don't let through quite so much in the way of energy, because there has been a lot of pain; there is pain on this switchboard. They make it a little bit harder for energy to get through and hit "I." "I" will then go unconscious less, but the same thing happens in reverse: "I" has a harder time getting an impulse out. As time goes on, "I" starts to operate with more and more realisation that he is going to be kicked back every time, so a light order doesn't go out; it has to be a fairly heavy order.

He can't say cheerfully, "Would the right index finger please move." No, he gets to the point after a while where he is saying, "The right index finger had better move!" He has to put out a heavier impulse, in other words. He has to make this impulse heavier, actually, to get the right finger to move.

After a while, so much pain has come back and his switchboard has been arrested so much—his actions have been so impotent, you might say, from time to time—that the awareness-of-awareness post of command will begin to consider that there is nothing there but resistance. So every time an order goes through, he puts it all ahead flank. There is no more of this coasting up and down the river very nicely; it is all ahead flank all the time. He says, "Move, and I mean move!" He turns on the endocrine system at the same time—anger. He demonstrates anger in practically every motion because he has to tone everything up; he has to pull up the endocrine system to actually almost an emergency level twenty-four hours a day just to get his messages out, just to get his computations out and get them resolved physically. Of course, as soon as he

starts that, stuff comes back more heavily and he will go down the line to fear, he will go down to grief, he will go down to apathy, in direct ratio to the amount of jam-up there is on this switchboard. This switchboard gets badly jammed up after a while and "I" can't get it out.

Also, there is a circuit response in there whereby other elements can command the body. When the pain made the arm move, this was more forceful than "I" trying to make the arm move, and as a result the exterior world began to command the body. The exterior world began to command the body, not "I."

The decline of the individual on the tone scale is in direct proportion to his inability to move his body in his environment. In other words, as a person comes down the tone scale he is less and less able to command and move the body and is then, because of these jams on the switchboard, more and more susceptible to exterior stimuli. He sees exterior stimuli and the exterior stimuli goes straight to work on the motor control board; it does not go through the sensory board to amount to anything. And the body moves.

The sensory board, in other words, is short-circuited straight into the motor control board and "I" hasn't got a thing to say about it. All these connections get frozen on the switchboard. So the fellow sees a dog and he has a jam-up in there which says "Dog! Dog, bite; pain, run," so he turns around and runs—only it is a Pekingese. That is aberrated!

By the way, when they are doing this, people sometimes get a glimmering themselves; they observe themselves doing these confounded foolish things and they don't seem to be able to do anything about it. For instance, a man gets mad at his wife and hits her over the head with a flatiron or does something of that sort—something "mild." And he will keep doing it. He would like to be able to check himself but he seems powerless to do so. What he has is a jam on the board; his sensory perceptions have perceived certain voice tones and certain other things in his wife that are jammed into the board, and the board just goes into automatic operation. In other words, the environment around this man is handling him; he is not handling himself. And the more the environment can handle him, the less able he is to behave rationally in the environment—even though he can still think; he can't put the thoughts into proper execution.

By the way, this is hypnotism too. People in grief and people in apathy are very hypnotic. They are so hypnotic that when you say something to them they just accept it literally. As a matter of fact, if you weren't aware of this, you had better be, because you can talk to somebody who is on that grief or apathy level of the tone scale and just tell him quietly to do something, and unless there is too much conflict otherwise in the environment he will do it. In other words, you can take over his body just by talking to him because you are exterior stimuli. That is hypnotism. You are exterior stimuli, so you just substitute for his "I."

A lot of people, particularly laymen, are very misinformed on this; they think hypnotism has something to do with spiritualism. Hypnotism has been around for a long time. It is a mechanism by which the self-determinism of the individual can be submerged so that he will obey literally the orders given to him by another individual. That is all hypnotism is.

And the process of hypnotism is to tire the sensory strip, to tire the perceptions—that is to say, get this strip shaken up—and to get the person's muscles to relax. In other words, what the hypnotist is doing is, just by talking to the fellow, getting him to take all of his own keys out of the switchboard and then the hypnotist purringly puts his in, and they will stay there!

It is interesting, however, that a person to be hypnotic has to be pretty well down the tone scale. The environment must have taken over already. What the hypnotist is doing is simply taking advantage of an enormous amount of preparation.

Now, people who are hypnotic are very bad people to have around on a job. They will look fixedly at a board, for instance, that they are supposed to operate and throw switches on, and if they have to fix their eyes too long on that board they will go out. They will sit there with their

eyes wide open, inactive. Sometimes that period of inaction will only last for seconds, sometimes it will last for minutes. They appear to be abstracted and they think they are; they think they are thinking or dreaming about something. Actually, they have just become fixated on a piece of bright metal or something of the sort.

People low on the tone scale will fixate. They will fixate suddenly, particularly when they are tired, because when the body is tired "I" is less able to make a connection and the environment is more able to make a connection. There is evidently insufficient internal energy to drive the body. That is what is known as being tired. And at a time the body is tired, the environment can take over the body and push it around because there is less resistance.

People, then, would be low on the tone scale to the degree that they were unable to handle their own bodies, and as they drift down the tone scale a standard or fixed level of endocrine response would be necessary for them to handle themselves. For instance, the fellow has to be mad all the time to handle himself because he requires that much output just to get over the level of energy charge. Furthermore, he has to turn on so much velocity or so much volume with "I" that he turns on the endocrine system too, and it will stay on.

Quite in addition to that, the exterior environment will start hooking him up and it will hook up his endocrine system just like it hooks this switchboard up, because that is just another switchboard. He will stay hooked in permanently.

Any person who is highly rational is able to hook in and pull out his switch links at will. In other words, he can call any part of the body at will; he can start or stop any operation of the body at will. And when he turns up a little bit of anger or something of the sort, he can also turn it off.

Actually, a person who is very high on the tone scale doesn't get angry so much as he just turns on more energy. This anger response is minor. It is when the whole endocrine system becomes aberrated that it starts to grow up to where the adrenals will get way oversized and so forth.

That is an extrapolation, then, on the difference between self-determinism and exterior-determinism. As the exterior world begins to take over an individual more and more, so that individual becomes less and less efficient, less and less able to survive, and less and less desirable to have on a job or in your periphery.

For instance, take a person who is at 0.5. You find it very easy to handle this person. You say, "Go here, go there, do this, do that," and you have this person well under control. He is very amenable to what you are saying and you trust this person.

You are trusting a robot. Anybody can come along and throw the switch. Now your worst enemy that wants to know anything and everything you are doing comes along and he wants to louse you up. All he does is get a cross-reference on your subject; he just says so-and-so and so-and-so and so-and-so, and your subject turns around at 0.5 just like a robot.

A 0.5 can be talked to by a union leader at a great rate: "Capital is selling you out! The reason we are at war is because American industry and American executives want us at war!" And he says, "Now, here's this gun. You take this gun and you shoot the next executive who walks out of that door."

"Uh-huh"—bang! There is no moral interruption. In order to be moral, in order to be ethical, "I" has to have something to say about it.

On this tone scale, 2.0 is the dividing line; above 2.0 the person is tending toward survival and from 2.0 down they are tending toward destruction and death. There are two reasons for this: The first is that the mechanism of death becomes necessary after the individual is no longer able to assist life in its conquest. The other is that, when the individual is getting down to a point

below 2.0 where he is more than 50 percent being handled by the exterior environment, the people and items around him are regulating his conduct to such a degree that his conduct is irrational. It is as rational as his environment. If everybody around him is acting rationally, then he will act rationally—no more, no less.

You walk in on a person at 1.5 or 1.1 or something like that, and you start acting in some other fashion, and you will get the response.

Down in the Malay Peninsula when I was a kid (I was young and open-mouthed and chewing on a straw, practically) I walked down a street with a friend, and he pointed at someone and said, "There is a slayer."

"A what?"

"A slayer."

"Oh, he kills people?"

"Oh, no, no, it's a native word. Watch." He looked at the fellow and sort of whistled to get his attention. Then he moved his hand, and the other fellow moved his, too. Then my friend bent down, and the other guy bent down too. The fellow was a mirror image—anything you did he would do too. Finally my friend took a rock and threw it at him, and that broke the fellow's rapport and he went off down the way.

My friend told me, "There are quite a few of them around here. There is evidently some drug they smoke that does this." Actually, that fellow was way down on the tone scale.

Imagine my surprise to go into a psychiatrist's office in a southern town about two and a half years ago (I was still trying to work with psychiatry) and find a psychiatrist who was a slayer. He didn't know it—poor guy. He was all ready to pass in his chips.

I noticed it when I first reached for a cigarette. He reached for a cigarette a moment later. So I dropped my cigarette and he dropped his cigarette, and he went on talking to me as though nothing were happening. I crossed my legs and he crossed his legs; I crossed my legs the other way and he crossed his the other way, too.

The last thing in the world that man should have been doing was associating with psychotics, because look at the behavior patterns he was getting! That is what happens to those poor guys, by the way. They are up against this terrible environment continually and they start skidding; they get low on the tone scale, and the next thing you know, they are picking it all up on a hypnotic level and jamming through.

The way an individual goes down the tone scale is this: A movement is ordered by "I" but countermanded by the environment. A stimulus comes in, "I" tries to react to this stimulus by ordering a movement, the environment says, "Move otherwise," or "Don't move," and "I" is balked and is unable to direct the motion of the body.

That, really, is all there is to know about human aberration.

An impulse comes in and tells "I" to do something and "I" tries to do it and the environment countermands it. The impulse says, "It hurts here— move!" so "I" tries to move. He says, "Move," but nothing is happening. He says, "Move the arm," but the arm doesn't move. "Move the arm! The arm is hurting," and it doesn't move. So "I" says, "Get up and walk out of this place!" but the body doesn't move. So "I" starts throwing over all kinds of switchboard mechanisms and so forth to get the body moving, and those are liable to be canceled out and the environment switchboard connectors are liable to fuse. That is a holders on the time track, for you auditors.

However, if “I” gets up a tremendous effort to move and finally accomplishes it, the effort to move is such that he leaves everything plugged in at such a heavy rate that he has what we call a bouncers

If “I” has had to throw out so much energy and has had so much energy coming in that the whole board shorts, he has a grouper. But it is the same thing; it is the environment countermanding the orders of “I” and “I” trying to countermand the orders of the environment, resulting in fixed behavior patterns which reduce the self-determinism of “I.” And so you get an individual going on down the tone scale.

You get a person who chronically, because of the exterior environment, can only get through this maze of locked panel connections (and by the way, that is what a lock is) by being angry. He has to get angry to push through the board to get any motion at all, and his motions are all anger motions one way or the other.

Below anger, he has to get up the stimulus—the run preparation—of fear in order to get through the board, so he has to tell the body “You’re in deadly danger” all the time just to get any motion out of the body. Or he tells the body, “You can’t get through at all,” and the body is mostly left unmanned. Here, he is in the hypnotic levels of grief and apathy.

Notice an individual when he tries to move a piece of MEST. First he gets conservative about it, then he gets antagonistic and then he will get angry if it doesn’t move. Then he will get scared of the thing if it still doesn’t move; he will decide that it is really something to be afraid of.

In the same way, if you take a foreman trying to handle a group of men and these men don’t do what he says, he will get kind of antagonistic toward them. If they still don’t do what he says, he will start to get angry at them. And if he can’t move them after that, he will begin to believe he has lost his grip and he will back up on the job. That would be just the normal cycle, where he isn’t securing cooperation. If he is at the level where he is angry at them all the time, they get afraid.

That is another extrapolation of the tone scale.