

Dynamic Structures of Awareness.

Anthony Blake, ANPA August 13th, 2015

My title was chosen to suggest some guiding ideas. The first word 'dynamic' to suggest that movement is primary. The second, 'structures', to imply articulation: as in being composed of interlocking parts and also related to language and expression. The word 'awareness' simply points to the universal sense we have of not only things going on but also that we register or echo them in us. By associating it with the other terms I wanted to imply that it was not just a static state but allied to movement.

Our given situation is one often expressed by the phrase *being in a body*. The phrase implies a belief that there is something in the body which is not just the body. This can be described – and hence felt and seen – in many ways. For example, that there is some other kind of body inside this obvious one. This relates to the common traditional belief of a 'soul' somehow inside the body. A different idea is that what is in the body is its movement or animation, which Aristotle ascribed a 'form' (as in his duality of Form and Matter [ref 1]). The view of our inwardness as a process, a movement, is found in Heraclitus [ref 2]. Another idea divides us into two parts, one of which is the body and the other mind or consciousness, rather as Descartes says [ref 3].

These ideas and many others are ways or forms of articulating the 'given sense' of being in a body. Every form has its own merit and limitations and each can make a contribution to understanding.

I want to consider thinking in relation to the body. At first impression, as Descartes says, thinking is unlike the body and is, in fact generally still viewed as some process that operates somehow *through* the body rather like, in a common contemporary simile, software runs in a piece of hardware. Reflection, however, can lead us to contemplate the idea of thinking must be as bodily as breathing and digestion are. This was Bohm's approach as discussed in his book *Thought as a System* in which he considers thinking, feeling and moving as a system, making together a whole. [ref 4]

To have the idea that thought is physical is one thing; to experience or realise it is another.

I want to introduce the term 'experient' to signify a complement to experiment. The latter is outer-directed into the external world and uses instruments to make measurements. An experient, on the other hand, is an *operation in experience*. What this means is that we can do something to change or refine how we see ourselves. An experient is not a concept but a realisation in action. Both experient and experiment are active but in quite distinct ways.

Bohm drew attention to the intrinsic sensory ability we have called *proprioception*. This is the sense that tells us what our bodies are doing – where our feet, arms and head are in space – without us having to look in a mirror. With eyes closed we can tell how our bodies are disposed. Bohm sought to extend this type of inner cognition to thought. He spoke of a proprioception of thought. The underlying reason for this was probably to allow him to discuss the reform or redemption of thought that deeply concerned him. This was to pass from its present incoherence – that produces hate, confusion and violence – to intelligence, a topic he often discussed with Krishnamurti as in the dialogues *The Ending of Time*. I suggest that a contribution to this sort of transformation of thought

can begin with realising that proprioception in its ordinary bodily sense can be *developed*. In developing it, it naturally extends to the total system we call ourselves. It leads to insight.

[We then did some exercises on this]

Proprioception can be exercised. It requires action. It requires dealing with the body in a dynamical way. In working with proprioception, we engage more with the body than we usually do in life and treat it not as a thing but as a movement.

I can here briefly refer to Bohm's idea of *holomovement*. As I think we can generally agree, there is a habitual mindset most of us have in which we regard existence as consisting of things that move about and interact. But existence may be regarded more as a structure of movement, a whole movement, out of which are derived what we call things.

We can put it tersely: *there are not things that move but moves that thing*.

[Members of ANPA will be able to link this with, for example, Kaufman's self-referential mathematics and the idea of eigen forms *ref 5*]

Here I want to remark that physics must obviously rely on being in a body. For some of you this may be far from obvious or even wrong. I can only suggest that such qualities noted in some physicists such as 'physical intuition' must surely stem from some relatively unmediated insight from the body itself. Whatever it means to be in a body it must include an *intimacy* that makes our bodies very special to us.

David Hume argued that physics as practised drew on physical experience for its basic concepts. For him, this meant that science must be subject to the limitations and subjectivity of bodily experience. Newton, of course, eschewed the subjective–physical – what he called the occult or hypothetical – in favour of abstract relationships. This is not the place to discuss philosophy of science in any depth. It is just important to keep in mind the prospect – as Feynman would certainly agree – that science has no place in saying what things are; it can only deal in relationships such as between movements.

This might make it seem we can forget the body and keep to abstractions. But what is the value of the view – which is being increasingly adapted as a vantage point – that we are in *embodied* cognition? [ref. 6] That is to say, whatever we can think *must* arise out of our existential concrete reality.

A pivotal idea is the abstract and the concrete are, at a certain level, non-distinct. In other words, the dynamic of abstract thinking and the dynamic of active movement must be of the same nature. How could this be possible?

To return to Bohm. He very much emphasised the difference between thought and thinking. Thought is memory. We are inhabited by and run by thoughts. This is evident, Bohm would say, everywhere in the world of human conduct. Our thoughts are contradictory, mixed and producing confusion. Thinking however is not confined to memory.

The same consideration can be applied to bodily movement. Our movement (in the world) is composed of a set of typical or recurrent postures. We walk in a certain way, talk in a certain way,

and sit in a certain way. These ways are finite and limited. Most people's movement exhibits considerable waste of energy.

This leads us to Gurdjieff [ref.7]. Bohm knew about Gurdjieff's ideas though he denied this when talking to his biographer David Peat [private correspondence]. From what I know of Bohm's background I guess that he wanted to find a way of talking about what Gurdjieff addressed in his own language, to preserve and support his attitudes or worldview which centred on undivided wholeness.

Briefly, Gurdjieff drew attention to our limited repertoire of postures and movements and said it included feelings and thoughts as well. Thoughts, feelings and movements are linked together in a mechanical way. [ref.8] But beyond this mechanical system it was possible to achieve a non-mechanical one. Whereas Bohm could never undertake anything physical to transform or change the mechanical repertoire, Gurdjieff devised an appropriate method known sometimes as *sacred gymnastics*. The rough meaning of this phrase is that the intention is not physical fitness but awakening to some 'inner' existence.

Both Gurdjieff and Bohm present us with a vista of ourselves as a composite totality, a collection of habits. These composites work well enough to enable us to live and go about our business. But they include contradictory elements, disjunctions, blank spots and so on. As I said, the way we move about in life creates many tensions that lead us to wasting energy on even the simplest tasks. The less obvious example is how we might harbour quite contradictory impulses - such as saying and doing opposite things – without realising this is the case.

There is an impulse to minimise awareness of contradiction – because it is disturbing – but many creative methods do the opposite – that is, they increase contradiction.[Example of TRIZ ref.9] The word 'contradiction' is used here in a rough sense to embrace all kinds of conjunction of contrasting elements or dualities. In other words, faced with the prospect that we are just a collection of mechanisms, habits or thoughts the way through might be to activate or even amplify what is contradictory, or the clash of distinctive elements, and process what ensues.

The activation and bringing together of distinct elements need not be felt as painful – it might even have a sexual and joyous kind of feeling – but it has to be done intentionally. A consequence is that it appears, and is, *artificial*. It is done only because we decide to do it. It will not come about naturally; what feels 'natural' to us is the familiar or mechanical.

I will try to clarify the modus operandum. For the active realisation of the body in thinking, we need clarity *in bodily terms*. Physical clarity is a starting point for what might develop for feeling and thinking in their turn. Clarity in bodily terms consists of taking definite, precise postures or gestures. To do this we sharpen proprioception, because it is deeply involved in establishing a definite posture which can be taken exactly at will.

Often, geometrical forms are used because these are easier to discern than more complex ones. What is most important is that we work to be able to improve the gestures which we have decided to take. For this we must be aware of differences between the intended gesture and the actual posture we take. We practice taking a set of postures – say, with just the arms. It takes time and

effort to be able to take them exactly. It is the development of this that is of value, rather than any endpoint or 'success'.

When we take a series of postures there are, of course, movements between them. This introduces another level of attention. It can only be indicated here but awareness of a 'right transition' between postures involves a deeper consciousness; the first step of which is to recognise that largely we have little or no awareness of transitions, of the in-between.

Since a series of movements takes place in time, we need to establish ourselves in time. This is done by rhythm. Bohm seems to have had no idea about this: his proprioceptive model was spatial in character and as far as I know he had little sense of music, his interest lying more in the visual arts. It is interesting to note that humans are just about the only species that has a sense of rhythm.

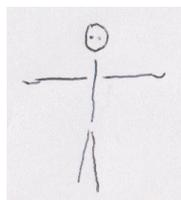
[We practised a basic rhythm 1 – 2-3-4 (the letter B in Morse code) to echo quaternions (one real and three imaginary) and dimensions (e.g. one of time and three of space)]

Rhythm introduces timing and timing is required aspect of precision in movement: a series of postures are taken at their intended times. The taking of a posture at the intended moment is a subtle thing: it is to be done as speedily as possible without any force or jerking. The requirement of precision in time and space necessitates a development in awareness. First of all, simply because the person has not previously been aware of where precisely they are in time and space. Secondly, the requirement of precision unfolds as more work is done, becoming ever more subtle.

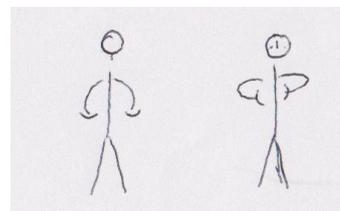
Since we have invoked time and space we play with gestures symbolising these and add ones symbolising mass and charge – in honour of Peter Rowland's talk [ref 9].



TIME



SPACE



MASS

CHARGE



*Seeking gestures for
Time and Charge*



Rhythm is centred in the legs. Gestures using the arms are more expressive, linked to feelings. But just as distinct patterns of movement they are independent. For example, the arms can move in flowing patterns in contrast with a staccato movement of the legs. This contrast in itself can be challenging, because the two patterns of movement seem to interfere with each other. But what comes into play can be described as a 'dividing of attention' such that the person can embrace both the flow of the arms and the linear marching of the legs *at the same time*. Instead of being in conflict, they can be experienced as complementary.

Further elements can be added. The head can have its own pattern of movement distinct from that of the arms and legs. Then there can also be displacements wherein individuals move from their spot in patterns relative to other people. In fact, the practice known as Gurdjieff's movements is for groups and makes much use of displacements such that people interweave with each other, exchanging places and postures in symmetries and rotations.

The building of complexity and movement is intentional. It should neither be too much or too little, depending on the person. It draws on instruction from outside. Usually, there is a teacher who instructs a class; it is difficult for an individual to create sets of postures to challenge herself, though not impossible.

Combining distinct elements can be felt as disturbing [this has some similarities to how dialogue is experienced, when different people are producing a combination of viewpoints]. This signifies a release of energy. I am using the term 'energy' here somewhat in the sense of *free energy*, as energy not being used in a habitual function. The experience and processing of this energy is up to the individual. It can, so to say, go up or go down. To go up means to realise a higher level of organisation, marked by a sudden sense of wholeness and simplicity. What was many is now one. To go down means to get reactive and upset – with oneself or with the instructor or with one's neighbour, et cetera.

The general approach may be summarised thus:

First a recognition of our ordinarily state of existence as confused and contradictory

Second, an amplification of this recognition by doing something, starting in the body

Thirdly, creating an experient by building a movement composed of many distinct elements

Fourthly, going through the energy generated to another level of experience in which there is no difficulty or conflict.

The last stage will only be temporary: it is to enable us to understand. There are three phases:

1. to do
2. to experience
3. to understand

The method belongs to the class of experients called *intentional suffering*. It is reflected in the famous line by T. S. Eliot: *to grow well our sickness must grow worse*. [ref 10]

What we can experiment and experient with here is just the rudiments of what is involved in the Gurdjieff movements. Gurdjieff composed hundreds of dances, each with its own special music and many of great beauty. They enable people to come under the attractor of harmony and beauty. Thence: to *under-stand*. [ref. 11]

References

Ref. 1 Aristotle *ON THE SOUL*

Among substances are by general consent reckoned bodies and especially natural bodies; for they are the principles of all other bodies. Of natural bodies some have life in them, others not; by life we mean self-nutrition and growth (with its correlative decay). It follows that every natural body which has life in it is a substance in the sense of a composite.

But since it is also a body of such and such a kind, viz. having life, the body cannot be soul; the body is the subject or matter, not what is attributed to it. Hence the soul must be a substance in the sense of the form of a natural body having life potentially within it. But substance is actuality, and thus soul is the actuality of a body as above characterized. Now the word actuality has two senses corresponding respectively to the possession of knowledge and the actual exercise of knowledge. It is obvious that the soul is actuality in the first sense, viz. that of knowledge as possessed, for both sleeping and waking presuppose the existence of soul, and of these waking corresponds to actual knowing, sleeping to knowledge possessed but not employed, and, in the history of the individual, knowledge comes before its employment or exercise.

Ref. 2 Heraclitus *ANCIENT THEORIES OF SOUL* *Stanford Encyclopaedia of Philosophy*

Heraclitus thought that the soul was bodily, but composed of an unusually fine or rare kind of matter, e.g. air or fire.

This world-order [kosmos], the same of all, no god nor man did create, but it ever was and is and will be: everliving fire, kindling in measures and being quenched in measures.

Ref. 3 Rene Descartes *MEDITATIONS ON FIRST PHILOSOPHY*

"I am not a collection of members which we call the human body: I am not a subtle air distributed through these members, I am not a wind, a fire, a vapour, a breath, nor anything at all which I can imagine or conceive; because I have assumed that all these were nothing. Without changing that supposition I find that I only leave myself certain of the fact that I am somewhat."

Ref. 4 David Bohm *THOUGHT AS A SYSTEM* p. 122

Normally this quality of proprioception exists for the body. And one of the things we need to see is the relation between the intention to move and the movement - to see immediately that relation, to be aware of it. We're usually not very aware of this intention to move, but we can be. If somebody wants to make his movements more accurate or skilled he will find his intention is not that well defined - he doesn't move the way he hopes. Somebody who wants to play the piano, for instance, has to learn that relation better so that his fingers will do what he wants them to do. So a greater quality of proprioception occurs in that regard.

The essence of the movement may be in the intention to move, which unfolds into the whole movement. For example, we knew of a man who had a degenerative disease and was unable to move at all. He could barely talk. And yet he taught movement in a university. The question is how he could do it. You could guess that, being very intelligent and unable to move, he was somehow much more aware of the intention than we are, because we focus our attention on the result. Therefore, getting the intention right may be very crucial to making the movement right. Thus there is some relation between the intention to move and the movement; and there is something in between that you are vaguely aware of, which is proprioception.

There is one point I would like to bring up now which is related to this. I'm going to say that thought is a movement - every reflex is a movement really. It moves from one thing to another. It may move the body or the chemistry or just simply the image or something else. So when 'A' happens 'B' follows. It's a movement.

All these reflexes are interconnected in one system, and the suggestion is that they are not in fact all that different. The intellectual part of thought is more subtle, but actually all the reflexes are basically similar in structure. Hence, we should think of thought as a part of the bodily movement, at least explore that possibility, because our culture has led us to believe that thought and bodily movement are really two totally different spheres which are not basically connected. But maybe they are not different. The evidence is that thought is intimately connected with the whole system.

Ref. 5 Louis Kauffman FORMAL SYSTEMS – EigenForm

<http://homepages.math.uic.edu/~kauffman/Eigen.pdf>

Ref. 6 Varela THE EMBODIED MIND

Ref. 7 Gurdjieff

Ref. 8 G. I. Gurdjieff quoted in P. D. Ouspensky *IN SEARCH OF THE MIRACULOUS* p. 352

“The character of the movements and postures in every epoch, in every race, and in every class is indissolubly connected with definite forms of thinking and feeling. A man is unable to change the form of his thinking or his feeling until he has changed his repertory of postures and movements. The forms of thinking and feeling can be called the postures and movements of thinking and feeling. Every man has a definite number of thinking and feeling postures and movements. Moreover moving, thinking, and feeling postures are connected with one another in man and he can never move out of his repertory of thinking and feeling postures unless he changes his moving postures. An analysis of man’s thoughts and feelings and a study of his moving functions, arranged in a certain way, show that every one of our movements, voluntary or involuntary, is an unconscious transition from one posture to another, both equally mechanical.

“It is illusion to say our movements are voluntary. All our movements are automatic. Our thoughts and feelings are just as automatic. The automatism of thought and feeling is definitely connected with the automatism of movement. One cannot be changed without the other. So that if a man’s attention is concentrated, let us say, on changing automatic thoughts, then habitual movements and habitual postures will interfere with this new course of thought by attaching to it old habitual associations.

“In ordinary conditions we have no conception how much our thinking, feeling, and moving functions depend upon one another, although we know, at the same time, how much our moods and our emotional states can depend upon our movements and postures. If a man takes a posture which with him corresponds to a feeling of sadness or despondency, then within a short time he is sure to feel sad or despondent. Fear, disgust, nervous agitation, or, on the other hand, calm, can be created by an intentional change of posture. But as each of man’s functions, thinking, emotional, and moving, has its own definite repertory all of which are in constant interaction, a man can never get out of the charmed circle of his postures.

Ref. 9 TRIZ (acronym for Russian title which translates literally as *theory of the resolution of invention-related tasks*) is a method of innovation created by Genrich Altshuller (1926-1998) who realised that “a problem requires an inventive solution if there is an unresolved contradiction in the sense that improving one parameter impacts negatively on another” (Wikipedia). Focus on, amplification and analysis of the ‘basic contradiction’ is a crucial element of TRIZ.

Ref. 10 Peter Rowlands HIERARCHY OF SYMMETRIES ANPA 2015

Ref. 11 T S Eliot EAST COKER (Four Quartets)

Our only health is the disease
If we obey the dying nurse
Whose constant care is not to please
But to remind of our, and Adam's curse,
And that, to be restored, our sickness must grow worse.

Ref. 12 Margit Martinu You Tube interview and illustrations

<https://www.youtube.com/watch?v=FRXcft8Cgrc>

Wim van Dullemen You Tube extract from festival in Konya

<https://www.youtube.com/watch?v=740PhEOdx1M>