

## **THE BIO-FIELD**

NOTE by Bob Hardy:

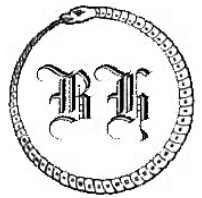
*This is a transcription of two audio-cassette recordings made by Ken Ratcliffe that were made available sometime during the 1970's on IHS Tapes No 207 and 208. (The total length of 'The Bio-Field' then is approximately two and three-quarter hours).*

*Ken is clearly reading this material directly from an essay, and I would claim that this was very obviously written by Eugene Halliday (although Ken does not say as much on these recordings).*

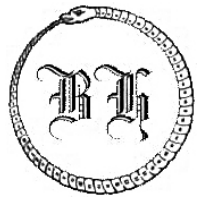
*I would also say that it was probably written at some point prior to 1968. Which was around the time that Ken's daughter, Shelagh, began competing internationally as a member of the UK swimming team.*

### **TAPE 207**

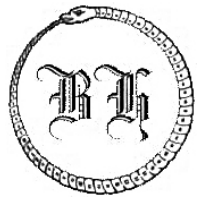
01. What is the bio-field?
02. Let us first consider the basis of any material body.
03. It was current science in the Nineteenth Century to believe in unsplitable atoms. That is, to believe that the material universe and all the bodies in it, were composed of minute particles of matter called '*atoms*'.
04. The word 'Atom' means: 'uncuttable', 'indivisible' (and was borrowed from the Greek) to express the then prevailing view that the minutest particles of matter were not reducible, or breakable.
05. The atom was viewed as an ultimate; a final constituent of the universe of things, which could not be changed into anything else.
06. Matter was thought to be forever matter, and a law was formulated to express this idea: 'The law of the conservation of matter'.
07. And this law was accepted as absolutely true. Matter could neither be created nor destroyed. So it was believed.
08. Now all beliefs have a reason behind them; and all reasons have a Will behind them, to perform certain acts, to establish certain things, or relations.
09. And the reason for the belief in the uncuttable nature of the atom rests in the minds of those who embrace the idea that material possessions constitute the most important things in the world.



10. But the uncuttable particles (the atoms) presented a bigger problem than the one they pretended to solve: the problem of 'relation'.
11. If the atom is a hard indestructible particle, how is it related to other particles? How are the atoms held together in patterned relationships?
12. An attempt to explain the patterned arrangement of atoms, by invoking the concept of 'accident' as the cause of their relationships, failed through lack of logic.
13. If 'accident' could bring uncuttable particles together in the form of a stone, a vegetable, an animal, or a man, accident might equally well dissolve their relationship without warning.
14. To bring in the idea of forces or energies to account for their behaviour and patterning, merely tried to solve the problem by pushing it out of sight. For forces and energies are invisible, and known (if they are known at all) only by their affects.
15. In the attempt to explain the behaviour of atoms, the concept of force or energy was employed, and the law of the conservation of matter was balanced by 'The Law of the Conservation of Energy'.
16. This law stated that the quantity of energy in the universe was unalterably fixed: that energy could neither be created nor destroyed.
17. The two conservation laws of matter and of energy, were accepted as a sufficient explanation of everything in the universe.
18. The difficult problem of the relation of matter and energy was not solved.
19. Not until the discovery that the atom was mis-named, that the atom was composed of still smaller entities, did it become possible to reconsider the problem.
20. The discovery of the electron, and of radium, and radioactivity, began to unmask the pretensions of materialist thinkers to a final solution of the problem of the universe. **(5.00)**
21. The uncuttable indestructible atom had fallen apart. Matter could be destroyed, reduced to non-material energies or forces.
22. What then happened to the so-called 'Conservation Laws'?

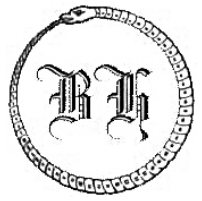


23. Obviously if matter could be destroyed, and could be reduced to energy, the law of the conservation of energy would have to be extended to include the energy that has been released in the destruction of matter. The law could be restated by saying that: 'The total quantity of energy conceived of as a mass of energy (or energy-mass) is conserved, and that matter is merely a mass of energy behaving in a certain manner'.
24. This solution gave a picture of the universe as simply the patterned behaviour of a mass of energy, or a field of forces. This picture has the virtue of beginning to approach to the unity and simplicity that all great concepts contain.
25. A 'field of force' or 'energy' may be defined as 'a zone in which some effect may be detected'.
26. We say a magnetic field exists when we can detect its effect on the swinging of a needle, or finger on the dial of a special instrument, when placed in a certain position, or in relation with something.
27. A permanent magnet is a piece of iron, which has the effect of attracting other pieces of iron. The iron shows, by its effect upon iron filings, that it is surrounded by a field of force, a zone of influence.
28. An electro-magnetic field appears in a certain arrangement of wire and soft iron, when a current of electricity is allowed to run through the wire.
29. But permanent-iron magnetism and electro-magnetism are not the only kinds of magnetism.
30. There is also the kind of magnetism we find in living organisms, and which controls the direction of nervous impulses in them.
31. This type of magnetism is called bio-magnetism – life magnetism.
32. As the zone of influence of a force is called a field; we call the zone of influence of the magnetism of a living organism a bio-magnetic field (or shortly, a 'bio-field').
33. Now it's only in the last few years that the bio-field effects have been measured, but the effects measured have imported a new direction to the theory of the distribution of nervous impulses.
34. It is now seen that a current of nervous energy cannot flow in a nerve, without the prior appearance of a gradient in the bio-field. This means that a muscle cannot contract and do its work of moving the body or its



parts, without the appearance in the bio-field of a difference of intensity of its local action.

35. Now the idea of a gradient is easily understood, if we remember that things tend to run downhill if not impeded. That watch springs tend to run down when they have not been wound up. That water comes out of the tap because the reservoir from which the water comes is higher than the tap. That heat tends to move from hotter bodies to colder bodies, and so on.
36. A gradient in a field force may be defined as 'a difference in pressure between two points in space', providing we remember that what is exerting the pressure is the relative higher intensity of motion in one place compared with another.
37. The whole universe is a field of force or energy, in which different localities show different degrees of intensity of motion. **(10.00)**
38. The ultimate source of the universe is itself pure motion.
39. The differences of things in the universe become differences of the type of motion occupying the zones of those things.
40. The things themselves are nothing but complex systems of motion of the universal field of force.
41. Without going further into the grounds of the differences of motions constituting things, we can say at once, that as all things are complex motion patterns, so the particular motion patterns we call 'living organisms' - of which our own bodies are the most important to us - are merely the result of certain patterns of motion of the universal field force constituting them.
42. It is here, where we begin to see the implications of the source of our organisms in the motion of the universal field force, that we realise our potential creativity and infinite possibility of action.
43. For, if all things and processes in the universe are simply motion patterns of its field force, then our own bodies, and all their inner functions, are also motion patterns.
44. This means that our physical organisms; our impulses to action; our feelings; our thoughts and intuitions, are all motions of the universal field.
45. This means that all things are in their essence identical — for all are motion.



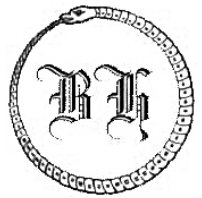
46. 'Like acts upon like' is the great law which binds all things together.
47. And as all things are constituted by motion, and are therefore alike in essence, so all things and processes may act upon each other. And this gives rise to a very important consideration.
48. All things are patterns of motion and, as fundamentally alike, may act upon each other.
49. Therefore 'thought', and 'feeling', and 'physical body', may interact.
50. 'Body' as a 'motion pattern' can act on 'feeling' or 'thought' as a 'motion pattern': and 'feeling' as a 'motion pattern' can act on 'thought' and 'body': and 'thought' can act on 'feeling' and 'body'.
51. This fact of the basic identity of thought, feeling, and body, as patterns of motion is the ground of psycho-somatic medicine. And of the new attitude towards human activities which has resulted in the re-instatement of psychological factors as determinants of physical events.
52. In the last three years the motion patterns of the mind, the processes of thought, of feeling, and of Will, have been demonstrated to exercise tremendous influence in determining body processes.
53. The old division of the universe into 'subjective' and 'objective' facts has now to be reconsidered, for both are motion patterns of the universal field.
54. Formerly it was customary to call our psychological processes 'subjective', and our bodily activities 'objective', and to see the two as quite distinct in type. This is now no longer tenable.
55. 'Subjective' and 'objective' activities are both motion patterns of the once (?) (*BH: Almost certainly this word is 'one'*) universal field.
56. The field energy permeating and surrounding our organisms, conducts all our activities.
57. It constitutes our bodies; our bones; our muscles; our blood; **(15.00)** the air we breathe; the feelings we experience; the thoughts we think, and the actions we perform.
58. **All is motion. All is fundamentally identical. All may be transmuted.**

---

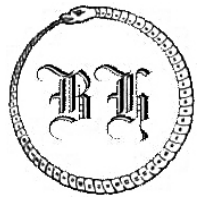
## THE BIO-FIELD

Transcribed from Ken Ratcliffe's original audio-recording

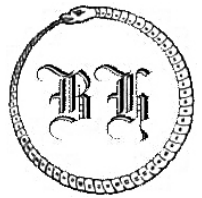
---



59. 'Thought motion' may become 'feeling'. 'Feeling' may become 'Will'. 'Will' may become 'physical action', or vice versa: everything, as motion, may become everything else.
60. When we thoroughly realise this fact, we have in our hands the instrument of unimagined, unforeseen, new possibilities - especially in the field of human activities. We have a new key, a skeleton key, which can open all locks, on all the doors to new achievements.
61. For if 'thought' can become 'feeling', and 'feeling' 'Will', and 'Will' 'physical action', then our achievements are bound only by the concepts we form of their possibility.
62. Think of that.
63. Thought; feeling; Will; and physical action, are all motion patterns. All, as such, interchangeable with each other.
64. The concentration of these four types of motion towards one unific end, can produce effects, undreamed of, under the old dualistic theory of matter and energy as two totally distinct factors.
65. Now the bio-field force in our organism is experienced by us as the feeling of existence.
66. If the bio-field is contracted normally, we experience the feeling in the body that we can call '**Tonicity**' - the simple sense of unity of being.
67. If the bio-field is contracted less than normally, we experience the feeling of '**hypo-tonicity**' - a feeling that we are less unified; more diffuse than normally.
68. If the bio-field is contracted more than normally, we experience the feeling of '**hyper-tonicity**' - with a heightened sense of being; a greater than normal compaction of our bio-field force.
69. We, at Will, induce 'tonicity', or 'hypo', or 'hyper-tonic, states, simply by holding or decreasing or increasing our bio-field's tension states.
70. This fact is the key to the development of strength and ability in all our activities.
71. If we feel very carefully what happens when we contract a muscle, we will find that - just before the contraction begins - we have a heightened sense of awareness in that muscle.



72. This heightened sense of awareness is the first level of 'hyper-tonicity', and will result in action of that muscle if allowed to continue.
73. All practice in controlling the bio-field begins in feeling states of relative 'tonicity', and then extending this feeling to include 'hypo' and 'hyper-tonic' states. **(20.00)**
74. To make sure that we understand what this means we must first focus on a muscle group, and begin to think, and then to feel, about moving it.
75. As the thought and feeling are increased, more energy is condensed from the bio-field into the zone of the muscles, and the muscles begin to feel tenses.
76. If the process is continued, the muscles will finally contract.
77. Condensation of the bio-field into muscle groups produces the field gradient, which allows the nervous impulses to pass along the nerves into the muscles to contract them.
78. The ability to make oneself aware of the various degrees of energy condensations in the bio-field, depends on 'bio-field consciousness'.
79. 'Consciousness' is the great catalyst, which precipitates the gradient in the bio-field along which the nervous impulses run. to move the muscles into action.
80. Now we may distinguish here between four degrees of consciousness:
  - 1: 'Unconsciousness', or 'objectless consciousness'.
  - 2: Sub-consciousness - that in which processes occur without sufficient clarity of form to justify calling them objective.
  - 3: 'Objective' or 'ordinary waking consciousness' - in which we perceive the forms of motion presented to us in a clearly defined manner.
  - 4: 'Bio-field consciousness' - in which we are aware of the field of our organism as an energy which may be controlled and so determine action.
81. Other fields beyond the bio-field are not here under consideration but have their own functions.

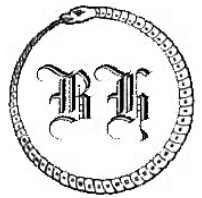


82. When we class unconsciousness as a kind of consciousness, we do so because processes go on in the unconscious similar to those in consciousness, but without the formal definition we know in our normal waking state.
83. There is, in the unconscious, a process of thought, a fluctuation of feeling, and an activity similar to that of the Will, but without the objectivity of the conscious state.
84. By 'Objectivity' we mean clear 'definition of form' - such as we see in geometrical states — the sphere, the cube, the pyramid and so on. Objectivity is usually opposed to 'subjectivity'.
85. And by 'Subjectivity' we mean 'the self-experience of states of thought or feeling or willing which arise in us without definite reference to any objective facts.'
86. We are said to be subjective in our judgement when our judgement of things or events is influenced by our own inner processes of thought, feeling, and Will - rather than by their objective situations.
87. But, as we have seen that matter is merely a certain kind of motion; a pattern of motion; a motion complex, and there is no difference in essence between things we call material objects and the forces or energies which travel through space and act upon these objects.
88. 'Thought', 'Feeling', 'Will', are processes of consciousness or of sub- or un-consciousness, and as processes are patterns of motion. **(25.00)**
89. These processes are called 'subjective' because they apparently belong to oneself as the knowing subject.
90. Objective processes are those which are assumed to be independent of ourselves as knowing subjects.
91. But as all things and processes whatever are simply patterns of motion, there is no essential difference between objective and subjective processes.
92. 'Like acts upon like' and 'subject' and 'object' - as motion complexes - therefore interact.
93. 'Thought', 'Feeling', and 'Will' may therefore act upon our physical body, and our body may act upon our 'Thought', 'Feeling', and 'Will'.

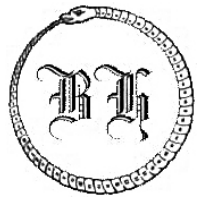




94. But although this is obviously so, the degree of their interaction is hardly realised to the full. The dualism of the 19th century (matter and energy) still tends to colour our view of the possible relations between them.
95. When we remember the essential identity of matter and energy as motion patterns, we can see that the interaction possibilities of mind and body must be very much greater than previously realised.
96. And once we have realised the bio-field as a fact, and experienced its relation with our organisms as a feeling state, then we can see the tremendous influence that the so-called subjective processes of 'Thought', 'Feeling', and 'Will' may have on the so-called objective organism.
97. The essential identity of subjective and objective processes, means that we can influence our objective actions by controlling our subjective processes of 'Thought', 'Feeling', and 'Will'.
98. If we relax our abdominal muscles and simply feel what state they are in, we become aware of the energies of the bio-field in that area. If we now gradually begin to contract these muscles, we can become aware of the increase of bio-field tension as we do so. If we suddenly increase this tension so that the muscles become hard, we can experience what it means to suddenly condense the bio-field.
99. Now when we condense the bio-field energies in this way, and so contract our muscles, we become aware of a heightened sense of existence in them.
100. This heightened sense of existence is a product of the intensification of activity of the bio-field.
101. Every time we condense the bio-field, we induce a degree of tension in the organism, our muscles do a certain amount of work.
102. In this work, the cells of the muscles are to some degree worn down.
103. The process of wear may reach sufficient proportions to necessitate the replacement of these cells by new ones.
104. This means that processes of cell division must take place in order to increase the number of cells.
105. When new cells result from sub-division, and replace the old worn-out cells, the pattern and quality of the new cells is profoundly influenced by the subjective processes which accompany them.

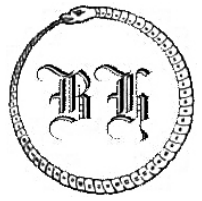


106. Now this is very, very, important, because this means that what we 'Think', 'Feel', and 'Will' influences the quality of the new cells, and therefore the quality of the action we may get from them.
107. Now because this is so, it is important that we define our aim when exercising, and after exercise. **(30.00)**
108. There are two main purposes in exercising the body:
1. To improve its function or performance.
  2. To improve its appearance.
109. Today we see a whole field in which exercise is done for this second purpose — the improvement of the appearance, the field of Mr. Universe. Here men exercise in order to build big bodies with well-defined muscles in good proportion, without aiming for strength or performance as such.
110. And these men get the fruits of their endeavours. They get the bulk, definition, and proportion they seek, but they do not get performance power.
111. When we remind ourselves that 'Thought', 'Feeling', and Will influence the body, we cannot be surprised that the thoughts of muscle bulk (definition, proportion) embody themselves in these men.
112. Their technique is simply to work the muscles with heavy weights until the muscles become hot and blown up with blood. This makes them big and strong. But they do not become as strong as the muscles of men who work for performance, as well as strength, bulk, and proportion.
113. Each purpose held in the mind, develops its own capacities.
114. The professional weight-lifters have a different purpose, and get a different result. The lifter aims to develop strength without unnecessary increase of bulk or weight. For if he gains too much weight he may have to lift in a heavier class of lifters, and so decrease his chance of gaining victory.
115. The man who aims to build muscle bulk, definition and proportion, uses the 'Extensive Method/ of many repetitions of each exercise, and uses a heavy weight, but not so heavy as the lifter who aims at performance.
116. The lifter uses the heaviest possible weights he can lift, using fewer repetitions for each exercise. This method is called 'Intensive Exercise'.

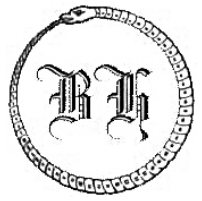


The intensive method alters the quality of the muscle fibres, and in-builds strength, without excessive increase of muscle bulk and weight.

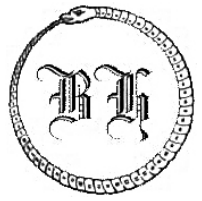
117. Now athletes, as competitive body users, aim at performance rather than appearance And therefore the 'Intensive Method' of training is to be preferred for them.
118. It is here where the theory of the bio-field finds its most useful application. For the bio-field functions by intensification of its activity, and by condensation of its energies into the organism and musculature. If we exercise intensively, that is, with full concentration, we in-build strength and performance.
119. The word 'Concentration' means: 'with centre'. That is, it is that state of mind in which consciousness centres itself upon some thought, feeling, Will, action, relation, or thing, and directs its energies to that centre.
120. When energy is directed to a centre, that centre 'works'. That is, expends the energy supplied to it by acting in some manner.
121. The manner in which it acts is determined by the total subjective purpose of the person directing the energy. **(35.00)** The subjective purpose is the pattern of thought, feeling and Will set up in the psyche or self, in order to realise a goal.
122. This pattern is a motion complex of the whole field of the self, and acts upon that motion complex we call the physical body by re-disposing its motion pattern in accordance with the necessities of the goal or aim to be attained.
123. Now because the manner of action of the bio-field is conditioned by the aim - the goal to be attained - it is necessary to gain what we call 'unity of purpose'.
124. If two purposes are held in the mind and these purposes contradict each-other, the bio-field energies concentrated in the two purposes also contradict each other.
125. A calf born with two heads in England a few years ago illustrated this fact most clearly. Its two heads sent contrary commands to its one body so that it could not adequately obey either, to the exclusion of the other. Its body shook under the influence of contrary nervous impulses, and demonstrated precisely what it means to lack unity of purpose.



126. The man with two contradictory purposes or intentions shows the same inner self-contradiction as this calf. Any man who aims to excel in any field has here a lesson to learn.
127. If one only purpose is held in the self, the whole field of forces in that self concentrates itself upon that purpose.
128. When this happens, success is almost guaranteed.
129. Only a cosmic cataclysm can impede a man of single-minded purpose, and it's not even certain that a cosmic cataclysm would have the last word.
130. It is essential therefore, for an athlete or anyone who wishes to fulfil a purpose - for an athlete who aims to emerge victorious from a competitive event - it is essential for him to gain the power to concentrate all the field energies of his being upon the purpose he has chosen to realise. To be able to do this is the meaning of the word 'dedication'.
131. The dedicated person is dead to everything which might divert him from his purpose.
132. Now most people find concentration upon one purpose rather difficult, which is something of an English understatement.
133. The average mind is unable to select from all the available possibilities open to it the one supreme purpose, which would make it possible to concentrate all its energies upon it. This is why it is called an 'average mind'.
134. If we examine the great men of history, we find that - apart from all their differences - they all evidence one quality. This quality is the power to concentrate upon the job in hand, the power to eliminate the energy loss of non-essential purposes.
135. The great leaders of the human race have all possessed, in the highest degree, the power of concentration, the power to see the essential of the situation, and to bring the whole field of their being and energies to bear upon it. Lao Tse, Buddha, Zoroaster, Socrates, Christ, Mohammed, Michelangelo, Shakespeare, and the rest of the few who have transcended the impossible of their day, and made it into the attained fact of yesterday. **(40.00)**
136. All these have shown in their lives the supreme clarity of mind that spells out the sentence, "There is no utterly impossible."



137. And all their powers of concentration depends only on one thing – self-realisation.
138. For the self of man is only a zone of the supreme field of force which has condensed its motion patterns into the universe that we see around us.
139. To realise the self fully, is to realise the field force which constitutes that self.
140. Complete self knowledge means knowledge of the whole field of force centred on the self.
141. But this field force is power. It is the power to activate; the power to feel; to think; to initiate; to move the body. It moves everybody, the so-called inorganic, as well as the organic. It has functions for each body according to the complexity of its structure. In the stone its function is as simple as the structure of the stone: in the plant its function is more complex: in the animal, more complex still.
142. And in man its function has reached the very high degree of complexity we experience in our own life processes.
143. In man, the field force has refined its patterned complexity to the point where its thought, feeling, volition and physical action are capable of co-ordination and direction to the realisation of the highest purposes.
144. The idea with which we identify conditions our action.
145. If we conceive ourselves to be merely material mechanical beings, we impose on ourselves the limitations of such beings. If we conceive ourselves as 'vegetables', we impose upon ourselves the limitations of vegetables. If we conceive ourselves as 'animals', we impose upon ourselves the limitations of the animal. If we conceive ourselves as 'average men', we impose upon ourselves the limitations of average men. If we conceive ourselves as 'transcenders of limitation', we impose on ourselves nothing but the concept of 'Transcendence'
146. The growth of the idea of freedom in man, has resulted from the activities of those men who transcended the idea of slavery and bondage.
147. From the beginning of history, men have tried to impose limitations on each other's activities. Sometimes the strong have imposed on the weak. Sometimes the weak have banded together to impose on the strong.



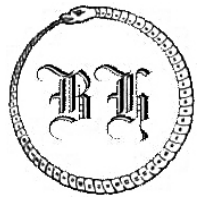
148. But there have been a few men, and these truly of the great, who have determined to impose only upon themselves. These men have been like athletes of the spirit, who have competed only against their own earlier performances.
149. Now there is something here of the greatest importance for all athletes.  
**(45.00)**
150. Absolute unity of purpose is the necessary precondition of the highest attainment in any field of activity. The man who competes against an opponent has split his energies into two. Part of his energy is expended on his actual performance and part is expended on worrying about his opponent. The energy expended on worrying about his opponent is energy lost to the performance. But the man who competes against only his own earlier performance loses only that amount of energy expended in thinking about his earlier performance. Above this there is only the absolutely supreme performance of the man whose gaze is fixed on infinite and absolute transcendence - the man who does not look backwards in time to earlier performance, nor forwards to an imagined future performance, but who is able to centre the whole field of his being energies in the 'Here and Now' act.
151. What has been done is finished and gone. What has not yet been done is not yet here to deal with. Only the present act is really 'Here and Now', and only in the present can we act at all.
152. We cannot act in the past; we cannot act in the future; we can act only in the present.
153. This is so important a concept, that we cannot spend too much energy upon it.
154. When we think about our past, our energy drifts into that part of the brain and bio-field which stores our memories of past events. Energy that drifts into memory centres is energy lost to immediate 'Here and Now' performance.
155. When we think of the future, again our energy drifts into the memory centres. For all our speculation of possible future events depends on our past experience. To think about the future is simply to expend energy on rearranging memory elements of the past, and this energy is also lost to the present performance.

---

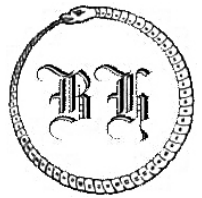
## THE BIO-FIELD

Transcribed from Ken Ratcliffe's original audio-recording

---

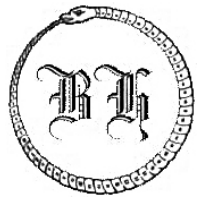


156. When we are able to concentrate all the energies of our field upon the present moment, we are in the best possible condition to transcend all our past performances.
157. We can use the concept of the 'Here and Now' most profitably by abbreviating it through 'H' and 'N' to 'HAN'. The 'H-A-N', the 'HAN' response, is that response we give to a situation with the whole of our field energy without isolating any of it to look either backwards or forwards into the memory.
158. It might be helpful also to know that the word 'han' anciently meant 'grace'. And that word 'grace meant' spiritual freedom.
159. The 'HAN' response is the free responses to a situation, the response unconditioned by anything other than the goal to be attained.
160. To gain the 'HAN' response, practice bringing the mind from a relatively unconcentrated state to a relatively concentrated state.
161. First slowly and gradually, then more quickly and suddenly.
162. Practice until the mind can be brought from the state of near dreaming, musing, instantaneously to a state of total concentration.
163. Practice bringing the field force to a centre in each part of the body separately. **(50.00)**
164. First slowly, then instantaneously.
165. Then involve larger and larger areas of the body, until finally the whole organism is felt as the centre of an infinite field of force.
166. When this is attained, the whole body will function as a unity of power. And whatever is purposed will be precipitated into active reality.
167. To save time, remember to make haste, slowly.
168. Do not at first do the centring and field condensation exercise more quickly than you can do it properly. First do it properly. No matter how slowly.
169. Note the sensations which appear in the bio-field and in the organism, and in its musculature.
170. Note the feeling of 'being'.

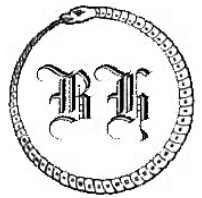


171. Note the relative intensities of sensation, and feeling, and being.
172. Concentrate the thought upon these and mentally describe them.
173. Then when you know what is happening in the process, begin gradually to increase its speed, until at last the whole process can be instantaneously brought into being.
174. Frequent practice of the process will convince the mind of its reality. But when this happens the process will begin to precipitate itself spontaneously.
175. Now during early practice, don't exercise too long. Ten minutes at four intervals during the day, followed by relaxation of effort (induction of 'hypo-tonicity') until the organism feels equilibrated, will be at first enough for most individuals. Although we must always remember that no two individuals are constituted, or energised, in quite the same way.
176. When the capacity to condense and intensify the bio-field energies has been gained, then begin to image the results desired from the exercise.
177. During the exercise, the muscle cells are being worn down, and later will have to be replaced by new ones.
178. The pattern held in the mind of the desired goal, determines how the muscles will be used, and how they will be replaced - their quantity, bulk, and quality, strength, and performance capacity.
179. During the exercise concentrate on the goal to be attained.
180. From this image of the goal comes the patterning of the bio-field forces, and these determine the 'how' of the action and performance.
181. When a cat leaps onto a high wall, it has in its mind only one thing, the place on the wall that it wishes to occupy. High-speed photography of a cat in the middle of a jump is a revelation in one-pointedness of mind - the 'eka-chitta' of the yogi.
182. 'Concentration' is one thing: 'intensification' is another.
183. When we concentrate, we simply place a given object, a thing, or an idea, in the centre of consciousness. We may do this gently or violently, or with any degree of intensity between.
184. 'Intensification' is the increase of energy pressed into a centre.

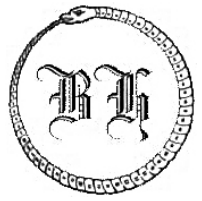




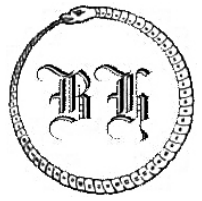
185. To 'intensify one's concentration' **(55.00)** is to press, or condense, the bio-field energy into the centre.
186. Now it is customary in dictionaries to derive the word 'intense' from 'intendere' – 'to stretch out'. But we here derive the word from 'tenere' – 'to hold'. Both words have the same root.
187. Thus an intense person, in our sense, is a person whose energies are held strongly into a centre whether in themselves or outside.
188. It is from holding onto an outside centre that the word came to mean 'Stretch out'.
189. 'Intensive exercise' is that in which we press all our available energy into performing an action. There is here no slackness of mind, no vagueness of thought, no vacillation of feeling, no failure of Will. All our energies, of every level of thought, feeling and Will, is forced into the chosen centre of action.
190. 'Intensive exercise' makes demands on us which can only in-built character and qualities of performance and persistence, that no athlete can do without.
191. Let us say a few words about the 'Will'.
192. Most philosophers are engaged in a battle about the nature of the Will. Those who style themselves 'determinists' believe the Will is merely that one of many conflicting desires that gains the victory over the others, and so passes into activity. This makes the Will the dominant desire.
193. But this is not our view of the Will.
194. By 'Will' we mean that power in us which freely initiates an action and/or continues to maintain it in spite of impeding forces.
195. In this view of the Will, the Will is a 'Here and Now' (a HAN) element - an application of the power of free initiative in the here and now.
196. The Will then, operates, momentarily, in each here and now, in the present.
197. If the Will ceases to operate, the action initiated by it will continue by inertia, until halted by impeding or frictive forces.
198. Now when we start to perform an exercise, we use our Will - that is, our free, initiative power.



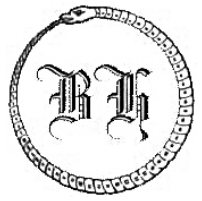
199. But if we do not keep our Will on the exercise, it tends rather quickly to lose its intensity. When this happens the exercise is doing less good than it would if the Will were continually held in it.
200. The exercise that is not re-energised by the Will from one present moment to the next is failing in its object of in-building the energy of transcendent performance.
201. This is why in all our postures, our asanas, it is required that we apply the Will in each moment of time. Very, very important. *(NOTE: I don't believe that this sentence is in the original essay, and that Ken added it for the benefit of his 'yoga' students – Bob Hardy)*
202. The Will then is a 'HAN' function, a 'Here And Now' power, which only operates in each present moment.
203. Some theorists are rather careful of possible misuse of the Will. But what they are really worrying about is something quite different - namely the abuse of the Ego concept.
204. The concept of the ego, or individual self, **(60.00)** is really a group of ideas which have as their centre the name conferred, upon the child at birth, by its parents.
205. The name given to a child at birth is the most often repeated stimulus it receives and around this name is progressively placed, year by year, an expanding vocabulary which is readily integrated with the name, until the consciousness more or less continually refers to it, and it becomes a more or less permanent reference centre in the mind.
206. Now this ego-complex of ideas, feeling, volition, activities, and memories of past events, constitutes a kind of mechanism. The capacities of which are strictly determined by past experiences.
207. So the ego complex thus has in it no capacity to go beyond its previous pattern of behaviour. It has no power to transcend prior performances. It cannot break its own record.
208. And from this it is easy to see that if the highest thing inside us were the ego-complex we would be unable to function in any other than a mechanically determined manner.
209. Now if this is not understood the Will also will not be understood. And if this is so then any effort made will be conditioned by the ego-complex and so held down to the level of performance recorded in the ego-memory, and if this happens, no records are going to be broken.



210. So, this being so, it is necessary to bypass the ego complex when using the Will.
211. 'Egotism' is that state in which the energies of response to a situation are first filtered through the ego complex before passing into activity.
212. Such ego-conditioned responses are necessarily deficient.
213. No great man has ever been egotistic. Though all great men have a true awareness of the real self of man and of the universe in which the self functions.
214. Egotism therefore must cease in the man who aims to transcend, to break records, to become great in his field.
215. No thought of, "I am cleverer than thou," is allowed here.
216. As soon as egotistic self-witness enters, true unity departs. Energy is lost in vain images, and performance drops to a lower level.
217. 'Egotist self-witness' is a very small thing compared with the real purpose behind the effort to excel.
218. The athlete whose ego picture of himself absorbs more energy than does his exercise, is working at a far lower level than he need. Such a man will not be a world-beater.
219. When we think, we use words to represent ideas. The words we use are important because they have, what we may call, and 'indicator power.' They point to ideas and through them to things, relations, events, either in the mind or within the external world.
220. The word 'index', the Latin for the 'forefinger', or 'indicator', or a 'pointer', may be used to express the power of a word to point out any content of consciousness or any concept whatever. **(65.00)**
221. Thus we may use the expression 'index value' as a shorter form of 'indicator power', and sometimes simply 'index'.
222. By this means, we are able to economise on the energy used in thinking.
223. But why should we bother to economise on energy expenditure?
224. Because the less energy we use to perform any act - properly of course) - the more efficient we are.

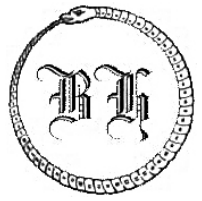


225. 'Least energy expenditure', and the word 'efficiency' may be used as interchangeable expressions.
226. For once we understand that 'efficiency' means 'least energy expenditure in performing properly an action', it is more efficient to use the term 'efficiency' rather than the longer expression.
227. Time consumes energy. By this we mean that, every moment of time, energy is used. either in the mere act of existing; or in producing changes in what is existing; or in bringing into existence what does not already exist; or in destroying something which exists.
228. When we lie, sit, stand, walk, run, fly, fight or work, we expend energy in time. When we think or feel about these things, we expend energy in time.
229. The more energy we expend in an act in a given time, the more intensely the act is performed. 'Intense living' means 'relatively high energy expenditure in a given time'.
230. Thus we may distinguish the relative intensity of an action and the amount of energy expended in a given time unit in performing it.
231. When we condense the significance of many words into one word, we save energy and increase efficiency. This is one reason why the abbreviations like 'UNO' for United Nations Organisation are used. Sometimes we abbreviate an expression, not only for reasons of economy or energy expenditure, but also for reasons of secrecy. As when during the war we used 'PLUTO' for Pipe Line Under The Ocean.
232. What is the relevance of abbreviation to our present purpose?
233. We wish to increase efficiency in performing certain actions.
234. Let's take in the case of athletics, or sport. If the actions we are to perform are adequately understood and embodied in words, and these words are used in their most abbreviated form, we may conjure up in our minds the essentials of these actions by using a very short word.
235. Before a race, we say, simply, "Take your marks. Go!" We are saving energy and aiding consciousness to concentrate on the essentials of good starting.
236. If instead of using these few short words, we were to say, quote "Please prepare yourselves to expend energy in translating your bodies between

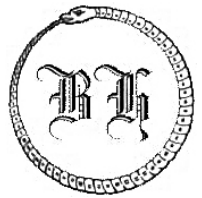


the mark on the ground called starting point and the mark on the ground some distance away called finishing point. Now balance your already referred bodies at the said place called starting point in such a posture as would enable you to accelerate yourself in as short a possible interval of time into your fastest possible swimming speed. Now release your prepared bodies at your highest possible speed and translate them from the before-mentioned place called starting point to the also before-mentioned place called finishing point.” unquote.

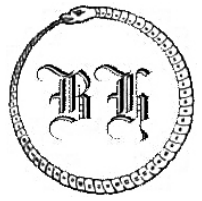
237. Now, we've laboured this example in order to emphasise our point. Assuming the swimmer has not already by this mode of starting (70.00) been reduced to the state of neurosis, we cannot believe that their performance will be thereby improved.
238. The history of science has been called (and not without reason) the history of exploded hypotheses.
239. Not that we mean by this that science is merely abandoned guesswork, and therefore useless - we've seen too much technical and practical application of scientific discoveries to believe this.
240. What we mean is that the science of any given period has not yet said the last word in any given field. There are still things to be discovered which, so far, science has not yet succeeded in demonstrating.
241. We are to use what has so far been discovered without inhibiting our practical applications of these discoveries, by believing them to be the last word in their world.
242. Not very long ago, the four-minute mile was impossible. Now it is a commonplace, destined to be displaced by a three-minute mile.
243. The limits of performance of the human organism are unpredictable, in spite of the sceptical attitudes of minds conditioned by the inertias of past performances.
244. When we use a word to indicate an idea, or this idea to indicate some thing, or action, we do something with the energy stored in the organism.
245. We predispose this energy to act in a certain way.
246. The significance of the word or idea orientates or points the energy towards that thing or action that the word indicates.
247. In the field of athletics, new modes of increasing efficiency of performance are continuously being sought.



248. The new modes begin as strivings for improved performance. These strivings give birth to a new search for new ideas. The belief that improved performance is possible is a precondition of the development of these ideas.
249. Athletics - (the collective name for physical exercises and games requiring skill and activity) implies contending for a prize. The prize stands as a stimulus to release energy from the contenders. 'To contend' is 'to stretch oneself', to strive to exceed a certain level of performance so far attained.
250. Thus the word 'athletics' is based on man's impulse to transcend his previous performance in any given field of activity. This impulse to transcend is probably man's most important characteristic.
251. From the evolutionary viewpoint it has certainly carried man from the level of the amoeba in the pond, above the level attained by any other animal.
252. And the same Will to transcend has no limit that man can in his present state conceive.
253. In aiming to improve athletic performance. the whole organism of man undergoes progressive investigation. Diet and exercise have been studied from various angles. The function of the heart, and circulatory systems of both blood and nervous energy have been studied. The action of the glands and their relation to performance. And the functional relations of most physical organs during physical activity have been studied, and the information turned to good account.
254. The acceptancy of the relation between muscle action and nervous energy, is based on the idea that muscles contract under the influence of nervous impulses which travel along nerve lines.
255. Whatever the process which occurs between the nerve terminals and the muscle cells - whether it is electrical or chemical in type - the theory is still conditioned by the idea of the nerve line as the vehicle of energy transmission. **(75.00)**
256. Now, as the idea we hold of any thing, relation, or action, conditions the distribution or orientation of our energy towards that thing, relation or action, it is obviously most important for us to function on ideas which give us the most efficient orientations and distributions of our energies.



257. When we examine the idea of the nerve line transmission of energy. We see that this idea must condition the distribution of that energy in a linear manner. That is, it must act in some degree as an inhibiting concept, confining the energy to the nerve line conceived to be the vehicle of the nervous impulses.
258. Now in the history of scientific invention, we find that the earliest inventions were generally concerned with the application of mechanical principles.
259. At first, the working parts of a mechanical device were relatively crude. Gradually they were refined more and more, until later mechanisms became marvels of designs.
260. The general movement in design was from large relatively crude machines towards smaller and more efficient ones.
261. With the discovery of electricity and its application to various devices, again the movement was from the relatively large, crude device towards the relatively small, more efficient device.
262. The thermionic value of the transistor shows this movement very well.
263. We may say in principle that efficiency improvement, goes hand in hand with the movement towards smaller and more refined devices.
264. More things can be done today with electronic devices than was conceived possible by the crude mechanical engineers who worked before the discovery of electricity.
265. It is apparent that the nearer we approach towards the microscopic or sub-microscopic levels of existence, the nearer we approach to the ultimate causal energy which underlies the phenomena of the universe.
266. In pursuing increased efficiency in the use of energy, science has been driven into the realm of sub-atomic forces.
267. The nuclear bomb is one example of an approach to efficient use of energy in a purely destructive field. The nuclear reactor shows the same energy put to more useful purposes.
268. It is well known in the field of electronics that electrons have a negative energy charge, and that the field of energy surrounding the electrons does not allow the electrons actually to make contact with each other. It is said, "Like charges repel, as unlike charges attract".

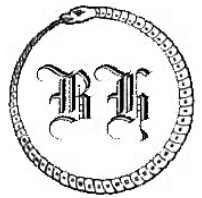


269. The electrons carrying 'like', negative, therefore repel each other. The charges which keep the electrons apart are called 'field forces'.
270. An example of a field force is demonstrated by the behaviour of iron filings in the field of force surrounding the magnet.
271. Ultimately the whole universe and all its phenomena are manifestations of the activity of a field force which extends throughout the continuum of the universal space. Einstein's uni-field theory of the universe deals with certain aspects of this.
272. All so-called material bodies, as we've said, are now known to be functions, or complex behaviour patterns, of this universal field force.
273. When an electron moves, it does so under the influence of the field force which constitutes and surrounds it.
274. The movement of the electron is determined by what is called a 'field gradient', by which is meant a difference of intensity of field activity. The electron is moved away **(75.00)** from zones of relatively high intensity field activity towards zones of lower intensity activity.
275. Now, what does the field force view of the universe indicate for us in the realm of athletics?
276. First it tells us that the linear theory of nervous impulse propagation, relative to the field-force view is as crude as the theory of crude mechanical devices compared with that of electronic ones.
277. Although a nerve impulse may be demonstrated to travel along a nerve line during muscle action, yet the 'field force' is the real determinant of its movement.
278. No nervous impulse can travel along a nerve, except in a direction determined by a gradient of the 'field force'.
279. There are many kinds of 'field force'. Their chief difference being of relative intensity or frequency, and of form of motion.
280. The 'field force' activity has a certain frequency intensity and a certain form. The intensity of any given form may vary.
281. In what we call living beings, the field force operates in a highly complex manner sustaining many functions simultaneously to maintain the existence of these beings.





282. As the field of an iron magnet or an electro-magnet differ in form from that of a living being, we call the field of a living being a bio-field ('bios' means 'life', a 'life field').
283. The 'bio-field' is very fine relative to iron or electromagnetism. The degree of difference of fineness is analogous to that between solar and terrestrial radiations.
284. When an electronic current runs along a wire, a magnetic field may be detected round the wire.
285. It is important to realise that the view that the electronic current creates the field needs more careful consideration: it is the appearance of a gradient in the field, which determines the electronic current.
286. If we realise this we can see that the concept of the linear nature of energy in the living organism is too narrow a concept to cover the facts. Rather we must replace it with another, a more useful concept - that of 'field force condensation' as the cause of nervous energy movements.
287. By field force condensation, we mean that the field force may increase the intensity of its action towards a centre, either 'static' or 'kinetic'.
288. A 'Static Centre' may be demonstrated by tensing a muscle without moving the muscle from the place where it is: A 'Kinetic Centre' may be demonstrated by tensing one part of the body - say the upper abdomen - and gradually reducing the centre of tension to another part, say the lower abdomen.
289. A static centre is a centre which stays where it is: A kinetic centre is one which changes its place.
290. Some theorists use the terms 'isometric' and 'isotonic' for static and kinetic concentrations of energy respectively, but the terms do not adequately express that for which they were intended, and are therefore better not employed.
291. We must remind ourselves repeatedly that the terms we use condition the orientation and distribution of our energies.
292. If we replace the concept of the linear propagation of energy along the nerve line, with the truer concept of the creation of a gradient in a 'field force', by the condensation of that field force upon itself, we remove the inhibiting effect of the linear concept and place ourselves at the centre of a 'field force' which is in principle infinite.



293. It is the development of this truer concept and its operation in the human organism that will place at the athlete's disposal amounts of energy inconceivable on the linear view. **(85.23)**

**END OF TAPE No 207**

294. Now how is the bio-field controlled?

295. The method is so simple in principle that it would be surprising that it is not yet been made an essential of athletic activities - if it were not for the fact that what is most close to man is also what is most ignored by him. There are metaphysical reasons for this ignorance, which we will not enter into at this moment.

296. The bio-field is experienced in our organism as what we call 'feeling'.

297. When we lie down in a relaxed state and simply feel that we exist, what we are feeling is the slight tension of our bio-field force.

298. Normally in health in the waking state, the tension of the bio-field is in what we call the 'tonic state'. Linear theorists think the tonic state is caused by a certain intensity of impulses in the nerve lines and muscle cells.

299. The 'Tonic State' of the bio-field is that minimal degree of bio-field tension, necessary for the generation of a feeling of unity of being.

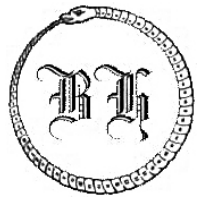
300. The 'Hypo-Tonic State' of the bio-field is that degree of tension, which is insufficient to maintain a minimal feeling of being.

301. The 'Hyper-Tonic State' of the bio-field is that degree of tension, which maintains a heightened feeling of being - more than that necessary for the maintenance of a minimal sense of unity of being.

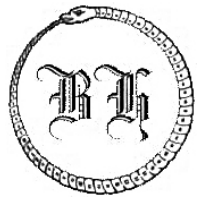
302. The 'Tonic State' may be viewed as half way between the 'Hypo' and 'Hyper-Tonic' states, which may be conceived to admit of variations of intensity below or above the 'Tonic State' respectively.

303. The 'Tonic State' of the bio-field is that in, which in the waking state, the bio-field energies are held in readiness for immediate action, without greater tension than necessary to maintain this readiness.

304. In the 'Hypo-Tonic State' the bio-field forces are not sufficiently condensed to give an immediate response to a command to go into action, but require time to build up to this level.

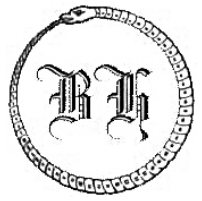


305. This time is time lost and may be a determinant in losing a race.
306. In certain situations of danger, the time taken to condense the bio-field from the 'Hypo-Tonic' to the 'Tonic State' may mean death.
307. The man who is lolling at the wheel of a fast moving car may find that events move faster than his bio-field is able to condense into the 'Tonic State'.
308. The 'Hyper-Tonic State' uses more 'field energy' than the 'Tonic State': the 'Hypo-Tonic State' uses less.
309. During sleep or other off-guard periods, the bio-field is normally in health in a 'Hypo-tonic State'. If during sleep the bio-field is 'Hyper-Tonic', the repair work on the organism is impeded.
310. This repair work is initiated and conducted by another field, finer in its action than the bio-field. This higher field we may call the 'Psycho-Field', above which there is another field we may call the 'Pneuma-Field'.
311. But we need not concern ourselves with these higher fields at this point. The only difference between these fields is the form and frequency and intensity of their vibrational activities.
312. We've said that the bio-field tension is experienced as the 'feeling of being' or 'existing'.
313. The characteristic activity of the bio-field under certain stimulus situations is felt as liking or disliking, desire or aversion, happiness or unhappiness.
314. A 'mood' is a relatively prolonged state of the bio-field (**5.00**) in which the feeling experienced has certain characteristics, such as those we call 'pessimism', 'optimism', 'misery', 'cheerfulness', etc.
315. 'Mood' is one of the big dominants of athletic performance, or any other performance.
316. We may divide moods into three main kinds: 1. 'Tonic'; 2. 'Hypo-Tonic'; 3. 'Hyper-Tonic'.
317. And these three into two phases each – 'Positive' and 'Negative'.
318. Thus we have six divisions, which although admitting many degrees of relative intensity, are useful for identifying prevailing moods, and indicating the direction in which energy is to be applied to change, or

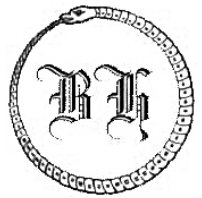


establish, or re-enforce, or reduce them.

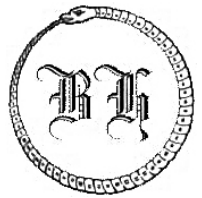
319. The 'Positive Tonic Mood' is that in which we are ready for immediate action of a relatively pleasant kind.
320. The 'Negative Tonic Mood' is that in which we are ready for action of a relatively unpleasant kind.
321. The 'Positive Hypo-Tonic Mood' is that in which we feel relatively happy but do not expect the situation to demand immediate action. Sunbathing in a quiet place might serve as an example.
322. The 'Negative Hypo-Tonic Mood, is that in which we feel relatively unhappy or sad but in which we do not anticipate any call to immediate action.
323. The 'Positive Hyper-Tonic Mood' is that in which our anticipation of happiness or pleasure, increases our bio-field tension beyond the tonic state.
324. The 'Negative Hyper-Tonic Mood' is that in which our anticipation of unhappiness or displeasure, increases our bio-field tension beyond the tonic state.
325. It is clear that the 'Positive Hyper-Tonic Mood' prepares us for positive action: the negative action tending to arise from the 'Negative Hyper-Tonic Mood' will be an avoiding action - a tendency to turn away from the situation anticipated, or a tendency if unduly pressed, to defend oneself against it or even to aggress against it.
326. In the normal state of tonicity the bio-field force is in a relative state of equilibrium, and is experienced simply as the feeling of being.
327. If the bio-field force becomes unbalanced it begins to move. This movement is experienced as 'emotion'.
328. 'Emotion' is movement of bio-field force.
329. 'Positive Emotion' is the movement of bio-field force to establish something as worthwhile in itself.
330. 'Negative Emotion' is the movement of the bio-field force to negate something as in itself not worthwhile.
331. Anything therefore which stimulates emotion, causes the bio-field force to move.



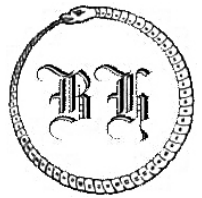
332. The relation between 'emotion' and 'bio-field force movement' is so intimate that it is not surprising to find some thinkers asserting that emotion is life-force.
333. Actually the word 'emotion' is the psychological term; and 'bio-field force movement' is the physiological term for the same fact.
334. When the 'bio-field force' tends to centre on a thing we say that 'interest' is present in that thing.
335. 'Interest' is the centring of the bio-field force on a thing - an idea, a feeling, etc.
336. 'Interest' is thus closely related to 'emotion'. **(10.00)**
337. The movement of the 'bio-field force', or of 'emotion', toward a thing is the generation of 'interest' in that thing.
338. The 'interest' lasts as long as the 'bio-field force' condenses itself upon the thing.
339. Now we must remind ourselves that the linear theory of nervous impulse action is inhibitive.
340. When we remind ourselves that the 'bio-field force' acts upon the organism by condensing itself upon it, so creating a gradient in the nerve lines along which the nervous impulse then runs. We see that concentration of energy in a muscle is not dependent on creating a tension in a brain cell group and then sending a nervous impulse from there, along a nerve line to the muscle.
341. Energy is concentrated in the muscle by condensing the 'bio-field force' in the zone of that muscle. This creates a gradient or difference of field force tension and nervous impulses are then compelled to run down the nerve line to the muscle.
342. The 'nervous impulse' stands to the 'bio-field force', as this stands to the force of the 'psycho-field'.
343. The 'bio-field force' may be conceived as an egg shaped cloud of energy permeating and surrounding the body.
344. Under the influence of the linear theory of nerve impulse movement, only a very narrow zone of this energy cloud is used in an action.



345. But if we conceive the bio-field force as an egg-shaped energy cloud, inside which the organism functions by virtue of the condensation of this force, we make available far more energy for action than the linear conception can give us.
346. Anyone who has seen the energy released under the influence of excessive emotion, must have been deeply impressed by the capacity of the 'bio-field' to store energy.
347. An electronic engineer knows that very large quantities of energy can be stored in the space between the plates of a capacitor, in the electric field.
348. Similarly large quantities of energy can be stored in the 'bio-field' of the living organism.
349. The ability to condense the 'bio-field force' at Will into any given muscle group, is the difference between the performance of one athlete and another.
350. To gain this ability we must remember the relation between 'emotions', and 'bio-field force movement', and 'interest'.
351. 'Emotion' is the movement of the 'bio-field force'; 'Interest' is the centring of the 'bio-field force' upon some thing or idea, etc; 'Concentration' is an essential of interest. ('Concentration' remember, means 'with-centeredness')
352. When the 'bio-field force' condenses itself upon a thing, it centres upon it, or uses it as a centre of reference.
353. As long as concentration is continued, there is a condensation of 'bio-field force', and a movement of that force towards the object of concentration.
354. Thus, to concentrate on a muscle is to supply that muscle with energy from the 'bio-field'. The stronger the concentration, the greater the amount of 'bio-field force' is made available for action in the muscle.
355. Thus, if it were not for one factor, athletic performance would be exactly commensurate with power of concentration, and would be able to maintain action as long as one continued to concentrate.
356. The one factor is that of 'wear'.
357. Muscles, like other users of energy (car engines, etc.), whilst using the energy, wear out.

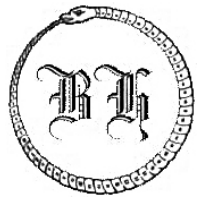


358. If we were to use our muscles **(15.00)** of our organism continuously without rest by supplying them with bio-field force, at a certain critical point they would break down.
359. The Greek runner who ran himself to death in carrying the news of victory showed that concentration can supply more energy to the organism than it can utilise without breaking down.
360. Because muscles wear down during activity, they need repair.
361. The time we take to repair a muscle is related to the amount of wear undergone, and to the efficiency of the repair process.
362. This repair process, to be efficient, requires a period of in-activity, in which the muscles can be relaxed so that the repair agency can operate without impedance.
363. Consequently, after strenuous activity, the body must be given complete physical and mechanical relaxation.
364. If a muscle is not relaxed, the blood cannot flow freely through it and supply the muscle with the elements it needs to replace its worn cells with fresh, new ones.
365. A too tense muscle impedes blood flow. As much attention must therefore be paid to muscle relaxation after exercise, as to the energy input into the muscle during exercise.
366. To omit to relax during repair is to impede proper repair work, and to commit the organism to its next exercise in a worse state than it was in its previous one.
367. It is actually possible by exercise followed by insufficient relaxation to reduce muscle bulk and efficiency and thus to defeat the purpose of the exercise.
368. As muscle tension has its initial cause in the condensation of the 'bio-field', adequate relaxation requires the return of the 'bio-field' to its pre-condensed state.
369. Just as the 'bio-field' condensation is intimately related to interest and emotion, so the 'bio-field's' return to the pre-condensed state requires the removal of interest and emotion.
370. Here there is something very important we have to say about the use of psychological suggestion.

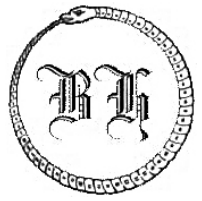


371. The nature, quality, and quantity of the repair work done on a muscle after exertion, depends to a remarkable extent on the idea held in the mind about the results of exercise.
372. If exercise is viewed as positively useful for building of muscle size and performance, the repair work done will tend to realise this view.
373. If exercise is viewed as merely building muscle size, it will do so. But it would not build-in the capacity for performance.
374. To visualise repair work as producing only strength will not build-in the capacity for speed. Every mental image tends to objectify only itself.
375. The psyche is creative or destructive according to the character of the imagery it employs. Now that's a very, very important idea.
376. Napoleon was once asked by a lieutenant how he managed to act so efficiently in new situations. He replied, "They are not new to me, I have already imagined all possible situations and the best responses to them."
377. Now what he meant was that he'd engrammed his organism with the patterns of adequate responses for all occasions. Later, having attained his aim, he ceased to rehearse all possible situations and began to rest on his laurels. Waterloo was not far away. **(20.00)**
378. In competitive sports, concentration is an absolute necessity - especially in starting.
379. The body must be brought into its full tonic state ready for the take-off.
380. Today we measure the time of a race in fractions of a second. A bad start may mean the loss of a race. A lost fifth-of-a-second is hard to make up.
381. And when a late starter sees his readier opponent ahead, mental processes of remorse may induce tensions which may affect contrary muscle groups, and so inhibit proper action.
382. It can not be too strongly stressed that the 'bio-field' is influenced by the character of the mental imagery.
383. The 'psycho-field' produces images which serve as patterns upon which the 'bio-field' condenses its energy.

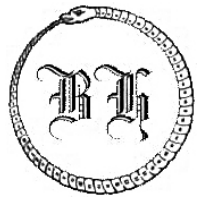




384. And the 'bio-field' condensation determines the gradient which lays down the direction in which the current of nervous impulses must run.
385. To image strength during the relaxation period after exertion is to in-build the elements of strength; to image muscle size is to in-build size; to image performance is to in-build performance; to image good style is to in-build good style; to image speed is to in-build speed; to image speed plus good style is to in-build both.
386. Any combination of qualities, quantities or performances may be in-built by controlling the imagery during the relaxation period following exertion.
387. 'Efficiency' means 'least energy expenditure in performing any given action'.
388. Least energy expenditure is economy.
389. Economic action conserves energy stores, and makes extended performance possible.
390. The more clearly an action is imaged, the more efficiently it may be performed.
391. The imaging of an action involves not merely the creation of a visual form or idea, but the permeating of this idea with 'feeling' (affect), and 'Will' (conation, drive). Only when these three coincide and mutually support each other, can efficient performance be guaranteed.
392. This means that the psyche must clearly visualise the character of the desired performance - charge the visualised form with feeling. That is, positively assert the value of the action, and condense the 'bio-field' with the form, into the organism.
393. Optimal performance will result for any organism if these preconditions are fulfilled.
394. In swimming the race is usually won or lost at the start, and in the turns. For this reason more concentration and clear imagery is needed at these points. The last word has not been said about the technique of the start, and especially the turns.
395. In the practice of Karate it is necessary in breaking thick blocks of wood to concentrate at a point below the wood.



396. Now the reason for this is that energy expenditure tends to be cut down at the point of approach to the visualised end of an act.
397. Thus if the karate expert were to aim at the block of wood, visualising it as the end of the striking action, his energy would cut off before he'd passed beyond it. But by targeting to hit a point beyond the block, he guarantees full energy expenditure at the point of impact. **(25.00)**
398. During the war, a Polish/Austrian writer, told me that by aiming low enough we could guarantee to fulfil our aim. I replied that if we aimed at an infinitely distant target, we could guarantee to fail, but that our failure would be a higher performance than that of the man who deliberately aimed low. *(This is, rather obviously in my opinion, a Eugene Halliday anecdote, and was not something that Ken Ratcliffe was liable to say 'back then – before he met Eugene Halliday - BH).*
399. Frederick Nietzsche developed the idea of the 'Will to Power', in terms of the 'Will to transcend'.
400. 'The Will to transcend' previous performance is the distinguishing mark of man, when functioning at his best level.
401. When finishing a race, the karate rule may be invoked with good effect. The swimmer should aim to swim beyond the finishing point, even to smash through the end of the bath. The extra energy released by this image - duly felt and charged with the 'Will to transcend' - will result in a final acceleration, which could not otherwise occur.
402. It has been said that in exercising with weights, the value of the exercise is over, the moment the inertia of the weight has been overcome.
403. This is not true, for the value of an exercise is gained only if the muscle group involved is taken through the full range of its possible contractions.
404. A partially contracted muscle functions deficiently at the limit of its partial contraction.
405. The karate rule and the 'Will to transcend' indicate that every previous performance will be bettered only by aiming beyond any desired target.
406. In practising the condensation of the 'bio-field force', it is first necessary to gain consciousness of what it means to feel the 'bio-field force' permeating a muscle group.
407. To do this we must first select a given muscle group, say in the hand. Then contract it strongly. Then gradually release the tension and aim at



total relaxation.

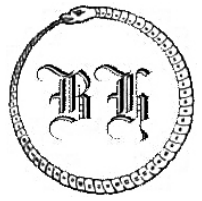
408. Relaxation can only be full appreciated after prior tension. By repeated practice, alternating tensions and relaxations, we become conscious of the meaning of both.
409. Only when we can recall the actual sensations and feeling of tension and relaxation can we be sure that we will be able to get control of the 'bio-field force'.
410. Once we've got proper sensations and feeling of the 'bio-field force', through repeated tension and relaxation of the first muscle group, we can extend this control gradually throughout the whole organism.
411. Finally we shall discover the essential unity of the 'bio-field'.
412. We shall be at the starting point of a new attitude towards competitive activity.
413. When the whole 'bio-field' can be felt at Will and any zone of it condensed at Will, then we have the precondition of optimal performance.
414. The 'bio-field' is to be exercised just as one exercises a muscle - that is, by using it.
415. We must continuously remember that each exercise performed gives only the virtues or powers of that exercise. Working for bulk is one thing; for performance another; for style another; for speed another. So with the exercise of the 'bio-field force'.
416. We may help ourselves by clarifying that: 'Exercise means cutting out errors of action' **(30.00)**
417. When a baby first tries to walk, it does not balance itself economically with its weight placed properly round its centre of gravity. It waves its arms about, it pulls its tongue out, compresses its lips, and so on.
418. Only later on does it learn to eliminate those actions which do not conduce to proper walking.
419. The eliminations of actions not conducive to the desired end is the meaning of the word 'exercise'.
420. In the same way, in acquiring any skill, many actions occur which do not give any help. Therefore we cannot expect immediate optimal

---

## THE BIO-FIELD

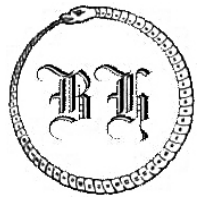
Transcribed from Ken Ratcliffe's original audio-recording

---

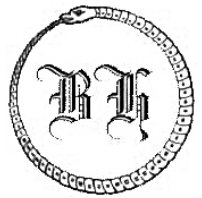


performance in learning to control the 'bio-field'.

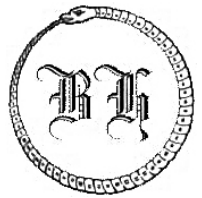
421. We must practice as seriously to get hold of the 'bio-field force' as a concert pianist does to get hold of it in his hands.
422. The 'bio-field' must first be tensed and relaxed locally.
423. Each locus of the bio-field must be exercised separately. Then groups of loci must be exercised, and finally the whole 'bio-field'.
424. Thus do we gain the power to isolate and condense at Will any part of the 'bio-field force'.
425. Ability to condense the 'bio-field force' into particular muscle groups will result in the feeding of these groups by the 'bio-field energies'.
426. In condensing and relaxing the 'bio-field' with regard to the law that: 'Any action only develops itself', great attention must be paid to the imagery of the 'bio-field condensation'.
427. It must be condensed slowly at first. Then gradually the condensation rate is speeded up.
428. Then it must be sprung suddenly: from a hypo-tonic, to a hyper-tonic state; from hyper-tonic to hypo-tonic; from hypo-tonic to tonic; from tonic to hypo-tonic; from hyper-tonic to tonic, and from tonic to hyper-tonic.
429. Every possible sequence should be gone through at every possible speed, and with every possible degree of intensity.
430. In giving orders to the 'bio-field', either for oneself or others, use abbreviations: 'hypo- tonic'; 'hyper'.
431. Give a number value to the degree of intensity of the condensation.
432. Use '0' for greatest 'hypo'; '5' for 'tonic'; '10' for greatest 'hyper'.
433. Call: 0, 1, or 2, or 3, or 4 for 'hypo' degrees; and 5 for tonic.
434. By using such terms, or any other equivalent system, the consciousness is able to direct the 'bio-field force' to any given degree of condensation or relaxation.
435. The more familiar we become with different degrees of condensation, the more efficiently we shall be able to allot to a given action, the degree of 'bio-field force' proper to it.



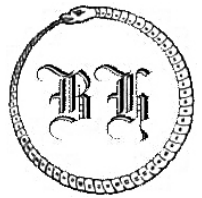
436. Thus we shall be able to conserve energy where useful to do so, and to expend it when the performance requires it.
437. Finally, remind yourself that every action practised gives only the power proper to that action.
438. Define what the situation requires.
439. Define each part of the action needed.
440. Abbreviate signal words.
441. Concentrate.
442. Use your emotions.
443. Be vitally interested.
444. And above all, beware of the inertia of the images of previous performances. **(35.00)**
445. In writing or talking about the bio-field from the point of view of athletics or anything else, the subject must be treated in as simple a manner as possible.
446. Any concept which over-complicates our mental processes, results in a division of our mental energies and so destroys the unity of mind so essential for top performance.
447. An iron magnetic bar is magnetic because all its constituent particles are orientated in one direction. If its constituent particles are made to lie in a random way, the magnetic effect vanishes.
448. So it is with our mind. If all our ideas are orientated in one direction, the mind acts like a magnetic. It has unity of direction of energy - the necessary precondition of efficient performance.
449. If our ideas are allowed to wander aimlessly about, to distribute their energies at random, our unity of energy and purpose vanishes, and with it all hope of transcendent performance.
450. The 'bio-field' is that 'field of force' we find associated with living organisms.
451. We experience it in ourselves as the sense of being or existence.



452. The 'bio-field force' may be focused in any part of the organism by simply concentrating our attention on that part.
453. What we call in psychological terms 'an act of concentrated attention'; we call in bio-field terms 'the introduction of a tension into a selected part of the bio-field'.
454. This part becoming a centre by that fact of the introduction into it of a 'tension'.
455. 'Tension' - is 'holding of energy'; 'At-tention' is 'holding the energy **to** something'; 'In-tention' is 'holding the energy **into** something'.
456. The 'bio-field' responds to every mental image presented to it, either by moving into, or towards the image, or by moving out of, or away from the image.
457. If the image is one which offers a sufficient profit, the 'bio-field force' moves into or towards it.
458. If the image offers a loss, the 'bio-field force' moves away from it.
459. To mobilise the 'bio-field', it is therefore needful to create an image offering sufficient profit.
460. The highest profit consists in the self-realisation of the potentialities of one's being
461. The 'bio-field' is a continuum, and therefore any zone of it may become a centre of 'at-tention': the centre of 'a tension'.
462. Wherever 'a tension' is induced in the 'bio-field', a 'force gradient' is created, and energy moves into the centre of tension.
463. Repeated introduction of tension into any given zone creates a tendency for energy to move habitually towards that zone.
464. This is the basis of the effectiveness of exercise in increasing the strength of the organism.
465. 'Strength' is simply 'The amount of 'field force' we may concentrate into a given zone of the organism'.
466. To utilise our 'bio-field force' to the full, we must convince ourselves that it exists.



467. This may not be so easy as it may appear, **(40.00)** because we habitually tend to identify our sense of existence with tensions in our physical body.
468. We know what it feels like to contract a muscle.
469. We tend to think that what we are feeling is the tension of a material thing; that is, the muscle itself as a material body.
470. When we contract a muscle (say, the biceps of the upper arm), we tend to think that what we are experiencing is the actual pressure of material muscle cells upon each-other, or perhaps the pull of the muscle on its tendons, and through them its action on the levers of our bones.
471. But what we actually experience is a sensation of resistance to the force we are applying.
472. The source of this resistance is really the 'field force' which we've condensed, or concentrated, into the zone of the muscle.
473. Matter is nothing but a behaviour pattern of 'field force'. A pattern characterised basically by the field force's rotation.
474. Every atom is a system of forces quantised by rotation. That is, it is the rotation of a zone of the 'field force' which makes it possible to treat it as quantised - that is, as measurable and locatable in space.
475. The quality of a given kind of matter precipitated by the 'field force' depends on the mode of the field force's action.
476. Thus the quality of the cells in the muscle depend on the way that the muscle is used.
477. If the muscle is not exercised it will have a different quality from that which an exercised muscle possesses.
478. If the muscle is exercised with light resistances. Weights, and many repetitions, it will have a different quality from the muscle exercised with heavy resistances and few repetitions.
479. Exercises using light resistances, and many repetitions, are called 'Extensive Exercises'.
480. Those using heavy resistances and fewer repetitions are called 'Intensive Exercises'.

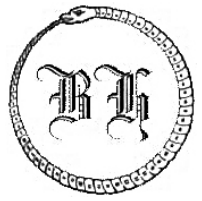


481. The Intensive Exercises in-build the greater strength.
482. Strength is an essential for all top level athletic performance.
483. To gain control of the 'bio-field force' we must learn to think in terms of 'field force' rather than that of 'material muscle force'.
484. We must. to this end, learn to distinguish between the three basic tension states of the bio-field which we have called 'hypo-tonic', 'tonic' and 'hyper-tonic states'.
485. The 'tonic state', to remind us again, of the bio-field is one in which the field force is held in a state of readiness of immediate action. But this action is not actually expressing itself.
486. The 'hypo-tonic' is that in which the 'field force' is at a lower tension than the 'tonic state' and is therefore to that extent unready for immediate action and will require a certain amount of time in order to reach the 'tonic state'.
487. The 'hyper-tonic state' is that in which the 'field force' is held at a higher tension than the 'tonic state' and would pass into immediate action, if not inhibited by a contrary force.
488. This 'hyper-tonic' state is that which causes most of what we today call 'The stress diseases' of over-civilized man.
489. When we are awake and in the 'tonic state' we have a normal sense of existence. We feel interested in life and its opportunities for action.  
**(45.00)**
490. When we are in the 'hypo-tonic' state we feel less existent, less interested in life, and less disposed to action.
491. When we are in the 'hyper-tonic' state we feel our existence too intensely. We are keyed up and tend to respond too quickly to any stimulus which comes to us.
492. Our sense of 'existence' and 'being' depends on our tonicity.
493. We can demonstrate this to ourselves by deliberately tensing one arm and relaxing the other. The tense one gives us the greater sense of 'existence' and 'being', and anyone who has experienced a sudden leg cramp whilst swimming will appreciate this demonstration. No one with cramp in his muscle doubts his muscle's existence.

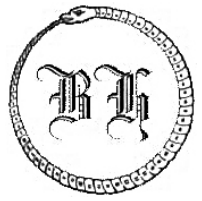




494. 'Intensity' and 'sense of being' are closely related.
495. By practice, we can convince ourselves that our sense of existence depends upon the degree of tension in our 'bio-field'.
496. It does not depend upon our physical material body as such, but only the tension we experience in the zone of the body.
497. Where all tensions are removed and the body is thoroughly 'hypo-tonic', there is very little sense of existence in it. And if it is allowed to continue, the general tendency is towards loss of consciousness and sleep.
498. The 'bio-field' is a 'force'.
499. When it is concentrated in any given zone, the energy in that zone is increased.
500. 'Habitual concentration' means 'habitual energy in the zone of the concentration'.
501. 'Strength' is 'available energy'.
502. To make 'strength' habitually available in a muscle group, is to make that muscle group strong.
503. 'Strength' is a necessity for transcendent performance.
504. Different ideas have different effects on our performance.
505. If we have the idea that our material muscles are the sources or containers of our energies, our performance will be limited by that idea, for our material muscles are visible and finite.
506. The visible image of this finity imposes upon us a corresponding belief that our energy and strength is finite.
507. But if we realise that the real source of our energy is the 'field-force', and that this 'field force' is infinite, then the only limiting factor upon our performance is our own incapacity to control our own mind, and this incapacity can be controlled by exercise.
508. We've said that the 'bio-field' is 'a continuum of life force', and that it can be focused, concentrated and condensed in any zone within itself, and that such concentration means an increase of energy in that zone.

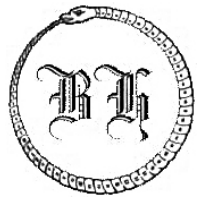


509. In the first stages of exercise for 'bio-field control', probably for most people the most easily controlled zone will be the abdominal zone, from the lower ribs and diaphragm down to the pelvis.
510. This zone is very responsive to the Will, and it is a relatively easy matter to push the abdominal wall out or draw it in. It is therefore a useful zone to make oneself aware of the varying states of 'tonicity'. We can put it quite easily into the 'tonic' and 'hyper-tonic' states.
511. Some of us may need a little practise to gain the capacity to put it into the 'hypo-tonic' state, because general civilised living tends to induce tension into this area. **(50.00)**
512. It is most important to become able to experience the sensation and feeling proper to each of the states of tonicity. Proper sensation is the key to control of the 'bio-field'.
513. We must become able to recognise tension of whatever degree in whatever part of the field of the organism it may present itself. Only when we are able to recognise tension in all its degrees can we modify it and direct it into the zones of our organism where our particular purpose requires it.
514. Tension allowed to persist in a part of our organism not actually furthering our purpose, is resisting it.
515. Tension allowed to persist in a part of our organism - not actually furthering our purpose - is resisting it.
516. It's worth repeating. 'Tension is energy held in check'.
517. To allow any tension which does not conduce to the realisation of our aim, is to devote energy to self-defeat.
518. Tonicity Exercise: Practice first then, with the abdominal muscles and the diaphragm.  
Increase and decrease tension in various degrees, and in different zones of the abdomen.  
Feel what it means to hold different parts in 'hypo-tonic', 'tonic', and 'hyper-tonic' tension.  
Especially feel how the tension is induced.  
Watch the mind and the feeling very carefully.  
Discover where initiation originates. It begins wherever consciousness centres itself.  
If we centre consciousness in the lower abdomen and then condense

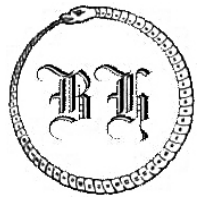


our feeling into that zone, a tension is induced there.

519. Remember that the 'bio-field' is experienced as feeling.
520. To condense the 'bio-field' is to induce a 'feeling intention' or 'in-tension'.
521. To intensify feeling in any zone is to condense the 'bio-field force' in that place.
522. By 'condensation of the bio-field' we mean 'an in-carrying of the bio-field force into a zone': a con-centration of 'mind', 'feeling' and 'Will' into some area of the organism.
523. 'Condensation of field force' is its precipitation into, and onto, the centre; the centre coming into being as the field force is precipitated into it.
524. Now in every condensation of 'bio-field force', three functions are present:
1. There's an 'idea' or 'image' of the zone into which the force is to be condensed.
  2. There is a 'sensation' of 'feeling of existence' or 'being power' in that zone.
  3. There is a 'willed intent' to 'energise' or 'empower' that zone.
525. If these three are not simultaneously present, the resulting condensation will be deficient and action arising from it will also be deficient.
526. It's important to become able to feel the 'field force' as it is prior to the condensation into a zone of the physical organism.
527. We must learn to feel its energy as energy, and break our dependence on the idea that it is the muscle which supplies the energy.
528. To this end when we are about to condense the bio-field energy we must first image it as an energy of infinite extent, but centred on the zone of intended condensation. **(55.00)**; Then we must image and feel the area round the zone of condensation as an 'aura' or 'cloud' of energy; Then we must condense this cloud into and onto the zone of condensation.
529. The whole process is in one in which the three functions of 'idea', 'feeling' and 'volition' (Will) constitute a trinity in unity.
530. Once the abdominal zone exercises have given rise to a sure awareness to what it means to image a zone: to condense field energy into it, and to activate the muscle tissues in that place, we can go on to apply this knowledge in other parts of the organism.



531. The whole chest and shoulder area is to be developed and strengthened, because this area has important nervous and physical connections with the mechanisms of confidence and sense of responsibility.
532. Strong shoulders induce self-confidence to a remarkable degree, even in athletes whose special sport (say running) apparently has little need of them.
533. The chest is the zone in which the essential life function of breathing is centred, is very important.
534. The action of the lungs, and especially the diaphragm, has an intimate relation with our emotional life.
535. To stabilise the one, is to stabilise the other.
536. When exercising any given muscle group, we must before actually contracting the muscles, make the bio-field surrounding the muscles.
537. Then we must get the 'sensation' and 'feeling' of the 'field force', like a 'cloud' or 'aura' of energy, surrounding and permeating that muscle group.
538. Then we must begin to condense the 'field force' into and onto the muscle group, as onto a centre.
539. Only towards the end of this condensation must the muscle group begin to move.
540. To allow the muscles to contract before full field condensation has occurred is to produce a deficient response - lacking in the full energy and strength, which would otherwise have resulted.
541. As condensation of the 'bio-field force' approaches its full condensation and the muscle group begins to contract, it is important to free oneself from the inertia of the image of one's previous performance.
542. When we find ourselves beginning to respond to the image of our previous performance, we must at this point make extra effort to condense the bio-field force more intensely into the muscle group.
543. In principle the bio-field is infinite. How much of it we condense into our organism depends on our concept of what is possible for us.



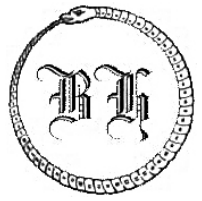
544. Each muscle group is to be exercised in the same manner: the 'bio-field' to be imaged centered upon, surrounding and permeating the muscle group.
545. The 'sensation' and 'feeling' of the muscle group is to be made conscious.
546. The 'field-force' is to be progressively condensed into and onto the muscle group.
547. The muscles not responding in action until the 'field force' begins to reach full condensation, when the muscles will be saturated with 'field force'.
548. Full use of intensive training method is required.
549. Intense concentration on the exercise with few repetitions is more efficacious than lax concentration and many repetitions.
550. Consciousness itself is field force in action.
551. To make ourselves intensely conscious (**60.00**) of what we are doing is to make maximum field energy available to do it.
552. To allow the mind to wander away from the muscle group undergoing exercise is to dissipate needed field energy.
553. Day-dreaming and fantasy during exercise nullifies the exercise's desired effect.
554. We must remember that muscles function by contracting. That is, they press upon their centres. This itself is evidence of the value of concentration.
555. 'Concentration' and 'condensation of field force' is the origin of everything in the universe.
556. To remind ourselves of this, is the key to creative exercise.
557. The threefold process - the creative 'trinity in unity' of 'idea', 'feeling', and 'Will', determines the quality of the muscles built, and of the organism as a whole - the strength and vitality of which determines success or failure.
558. The field itself is infinite.

---

## THE BIO-FIELD

Transcribed from Ken Ratcliffe's original audio-recording

---



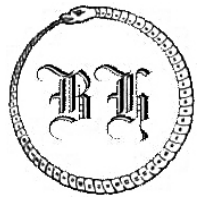
559. The centre of the field is wherever it concentrates itself.
560. In living organisms like our own, the field may therefore concentrate itself in any part of itself. Wherever it concentrates, in that place its energy begins to move.
561. It can concentrate simultaneously in many different parts - each part becoming a centre towards which energy moves.
562. In consequence of this it is possible for the 'bio-field' to induce in itself contrary activities. It can contradict itself. It can initiate an action in one part of itself, and an opposing action in another. This fact is at once of very great value to us and also of very great danger.
563. If we simultaneously contract the biceps on the front of our upper arm and the triceps on the back of the upper arm, we initiate a pair of contradictory actions.
564. The biceps acts to bend the arm; the triceps acts to straighten it. The result is that the arm is made rigid, and if the tension is exactly equal in the opposing muscles, immobile.
565. The value of the field's 'power of self-opposition' is that it allows us to exercise intensely against a self-induced opposition.
566. The danger of the field's 'power of self-opposition' is that self-contradictory tensions may exist in the organism without detection. And these may profoundly impede free action, and thus make top performance impossible.
567. Self-opposition of the field-force may manifest in various ways: as contradictory ideas of what is to be done and how to do it; as contradictory feelings of liking and disliking; and as contradictory impulses of Will.
568. An idea that something would be better done in a certain way may be opposed by a feeling of dislike for that way.
569. An idea that something could not possibly be done in a certain way may be opposed by a strong feeling that it would be very pleasant to do it in just that way.
570. An idea and feeling may be in agreement about something, yet both be contradicted and perhaps overridden by a sudden impulse of Will.

---

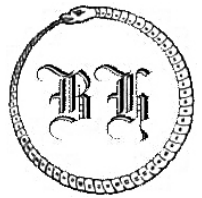
## THE BIO-FIELD

Transcribed from Ken Ratcliffe's original audio-recording

---



571. Now it's obvious that top performance in any field of activity can be possible only if self-opposition is kept under proper control.
572. Unconscious contradictory tensions must be eliminated. **(65.00)**
573. Self-opposition must be used intelligently and directed towards the imaged goal.
574. The proper use of self-opposition consists in the conscious induction of tensions in opposing muscles and muscle groups, so that maximum field condensation may be secured in the organism at Will.
575. To be able to induce total self-opposition of 'bio-field force' at Will is to be able to induce the greatest sense of existence and being, in oneself.
576. This is to be able to incarnate full confidence and performance power in oneself.
577. For confidence, performance power, sense of being, and 'field force control', are all different terms for the same fact.
578. All the usual exercises employed in training athletes may be converted into bio-field exercises by simply: preceding the actual muscle contractions with the imaging of the bio-field, centred on and surrounding and permeating the muscles; sensing and feeling the field force like an aura around the muscles; then condensing the field force into the muscles; only allowing the actual muscle contraction, as the field condensation becomes complete
579. As the muscles begin to contract, the whole surrounding field force must be imaged, felt, and Willed, with the greatest possible intensity, and the greatest concentration of consciousness, into the body of the muscles.
580. This is the meaning of intensive training.
581. Intensive training, properly understood, means; 'The holding in to the action pattern and being of the organism of the full powers of the psyche - thinking, feeling and Willing - to their greatest intensity, always aiming to increase this intensity and to break the limiting concepts of prior performance'.
582. Concentration upon a muscle initiates energy flow towards that muscle.
583. Increased intensity of concentration increases energy flow.

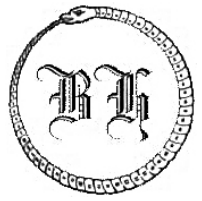


584. Deliberate imaging and feeling of the condensation of energy into a muscle, supercharges it with energy.
585. Doubt about this, or about the possibility of transcendence of previous performances, precipitates the conditions of failure.
586. 'Doubt' means 'double presentation of ideas': the presentation of the idea of success being opposed by the presentation of the idea of failure.
587. Where there is doubt there is self-contradiction of field force.
588. Doubt puts a brake on our endeavour.
589. William Blake rather amusingly embodies this fact in his statement, "If the sun and moon should doubt, they'd immediately go out".
590. To allow doubt in oneself is therefore is to allow the pre-conditions of failure; is to try to win a car race with one foot on the accelerator and the other on the brake.
591. To conquer doubt we must see the illogicality of allowing it in ourselves. We must see that it is the energising of an image of failure, when we are trying to succeed.
592. In certain psycho-pathological states the energies of the organism are divided into opposing camps which continuously make war against each other.
593. A person may want to give something of himself into a relation and at the same time not want to give this same thing. The two desires oppose each other and their conflict may result in a chronic hyper-tension state **(70.00)** which tires the whole organism.
594. In the same way an athlete may with a part of his energy 'Will to win', and with another part of his energy, 'Will not to win'.
595. There may be a hidden personal problem at the root of this self-contradiction - maybe a family or business relation difficulty; or with children sometimes, school relation problems.
596. Whatever the problem, it is important from the viewpoint of top performance, to solve it by intelligent discussion, and so to remove the undesired opposition of energies.

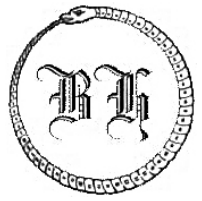




597. Above all, it is necessary to realise fully the absolute necessity of 'Unity of Will and Purpose'.
598. A very good 'psycho-physical' exercise, which greatly aids the attainment of organic unity, is 'The Total Self-Opposition Exercise.'
599. Now, this is performed lying at full length.
600. The object is to contract all the muscles of the body in pairs of opposites.
601. Beginning at the feet, the attempt is made to point the feet downwards and at the same time an attempt is made to pull the feet upwards.
602. The two attempts are equally energised, and the feet stay in their natural position. The opposing muscles however being intensely contracted.
603. Holding these opposing tensions, the attention is now moved up the legs to the knees. An attempt is made to bend, and simultaneously straighten, the knees.
604. Holding these tensions and the first ones, the attention is now carried to the hips, where attempt is made simultaneously to raise, and lower, the whole legs. At the same time an attempt is made to hold together, and to separate, the legs sideways.
605. All these tensions are held and the attention moved to the waist. Attempt is now made simultaneously to bend forwards, and backwards, at the waist - also to the right, and left.
606. Again all these tensions are held and the attention moved up to the shoulders.
607. The arms are now energised as if simultaneously to bend and straighten them, to move them forwards, and backwards; to move them towards, and away, from the body; and the hands are energised simultaneously to open, and close them, and to move them inwards, and outwards, upwards, and downwards. All these tensions are retained.
608. Attention is now placed in the neck. The head is now pulled backwards, forwards, to the right, and to the left, with equal intensity. So again it is stabilised in a central position.
609. The whole organism should now be in a state of total opposition of all its muscles.



610. An attempt should be made to hold this state of total contraction with full intensity of imagery, and feeling, and Will.
611. And to hold this state for one minute requires extraordinary concentration.
612. The whole organism must be equally tensed.
613. For this, the attention must be distributed equally throughout the organism, this being possible only by involving the whole psyche in the exercise.
614. And that's some exercise (*I think this is an off-the-cuff comment by Ken – BH*)
615. This fact of the necessary involvement of the whole psyche in 'the total self-opposition exercise', makes it not only a physical but also a psychological exercise of very great value.
616. To hold all the muscles of the body in full, intense, opposed contraction **(75.00)** is possible only if we completely concentrate all our Self equally in every point of the organism.
617. And this is possible only if we first have complete psychic self-control - a control which is the necessary pre-condition to all transcendent performance, in all fields of activity.
618. The psycho-physical unification resulting from 'the total self-opposition exercise' corrects unbalance, which might otherwise result from too-specialised exercises acting only on specific muscle groups.
619. In consequence of this, the exercise may well be used immediately before going to sleep at night and also on awakening in the morning.
620. The total self-opposition exercise requires full sensitivity to tensions in the 'bio-field', and the attempt consciously to equalise these tensions, increases this sensitivity.
621. Thus the sincere attempt to perform this exercise results in the kind of awareness needed for the attainment of success in all other exercises utilising the energies of the 'bio-field'.
622. In all 'bio-field' exercises, it is essential to remember that the 'bio-field' has its centre wherever one cares to concentrate one's attention.



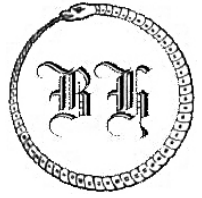
623. To centre one's attention on any part of the field is to start a 'field energy' flow towards that centre.
624. And a centre comes into existence, as soon as one's consciousness is focused in any zone'
625. We are not to think that our centre of consciousness depends on the existence of our physical body.
626. This body itself has come into existence precisely because field energy has concentrated and condensed itself in this form.
627. The form of the body is the function of the 'field energy' made visible by self-condensation.
628. Think of that.
629. There's no physical or material body other than that resulting from the self-condensation of field energy.
630. In doing 'bio-field' exercises, we must therefore pay full attention to the sensation and feeling of the 'bio-field', as a self-sensing, self-feeling energy, able to concentrate, condense, or relax itself, at Will.
631. This energy is our Self at a certain functional level; or is a certain frequency level of our Self.
632. We are not to concentrate on our muscles as physical or material things, but on the zone of the muscles as centres of 'field energy' condensation.
633. Our whole being is to be perceived as a field of intelligent energy, which has by self-condensation, precipitated itself a body as an organ of self-expression.
634. The form of the body is the objectified (or we might say, the solidified), materialised, functional processes of the bio-field energy.
635. 'Function'; 'what a thing does'.
636. 'Function'; 'creates form'.
637. 'Form condensed' is body.
638. The form and quality and performance possibility of our body, its musculature, and organs, depend upon the way we use the 'field energy', which is our very being. **(80.00)**

---

## THE BIO-FIELD

Transcribed from Ken Ratcliffe's original audio-recording

---



639. Concentration - perfect imagery of the desired performance - and full condensation of our 'field energy' will guarantee transcendent performance.
640. To make ourselves conscious of these facts is to place ourselves in a position from which we can control the dynamics of our own 'field energy', and so become master of our own action and destiny. **(80.30 FIN)**