

# Biofeedback and the Higher States of Consciousness

# By The Maxwell Cade Foundation

Description of Biofeedback and Biofeedback Instruments Used \* Bodily Correlates of Higher States of Consciousness \* Brainwaves and Brain Function \* Description of Illumined Consciousness \* Meditation and the Higher States \* Signs of Mystical Ecstasy \* Passive Awareness \* 3 Mental Training Exercises, Exercise on Pure Consciousness

#### Publisher's note

The workshops for training in biofeedback devised and led by C. Maxwell Cade consisted of talks interspersed with exercises. The Foundation is publishing selected talks, with associated exercises, for those interested in Max's work and as material for those devising their own training courses.

In this publication, the introductory notes provide the context for understanding the subsequent talk. The contents of the introduction outline Max's approach but are not taken verbatim from a specific talk.

Most of the biofeedback technology described is relatively new, and the correlates of bodily measurements to states of consciousness were mostly established in the latter part of the 20<sup>th</sup> Century. The traditions from which the references to transcendence, Samadhi and illuminated consciousness are taken have been recorded in the East, if not the West, for millennia.

#### INTRODUCTORY NOTE: WHAT IS BIOFEEDBACK?

# <u>Biofeedback – learning about ourselves</u>

Biofeedback provides a new way of learning about ourselves, or a way of re-learning what the body already knows – how to be attentive, how to respond, even how to heal – if we listen to it. The biofeedback instruments and techniques allow one to develop the art of listening to one's internal cues and acting on them.

Before one can have choice, one must first have awareness. Biofeedback provides the means to become aware – acutely aware – of oneness and thereby to gain the possibility of self-control and with it, choice of action.

The Biofeedback Principle states:

"If one is able to perceive a bodily process that one is not normally aware of, then one can learn to control it".

The biofeedback instruments monitor changes in the body and reflect them back, like mirrors. They are an aid to the process of self-discovery and self-mastery. By practicing changing one's attention or behavior and using the feedback signals from the instruments to discriminate and discover which changes are helpful, one soon learns (or re-learns) the ability to direct and choose the pattern of changes.

# Changes in the mind are reflected in the body

Because the mind and body are but two aspects of the same living being, a change in the mind – a thought, an emotion – produces a corresponding change in the body. The biofeedback instruments monitor changes in the body and with training, one learns to associate the bodily changes with the changes in the mind which accompany or precede them.

#### The applications of biofeedback

The scope of biofeedback is restricted only by the scope of the bodily changes which can be monitored by the biofeedback instruments and by the creativity and perception of those who use them. The applications range from the simplest, like using the bathroom scales to help maintain a certain weight, to learning deep relaxation and relief from stress, improving circulation, attaining meditative states, improving creativity and developing the intuition.

# The formula for good biofeedback

Whatever instruments are being employed, the formula for effective biofeedback is always the same, and has three elements:

- 1. Identify the internal process one wants to develop more choice or flexibility over, and recognize how this increased ability will be shown by the measurements of the biofeedback instrument(s)
- 2. Practice a method of technique to develop this ability in oneself and monitor the bodily changes using the biofeedback instrument(s)
- 3. Check whether the practice of this method or technique is effective using the feedback signals from the instrument(s). Then continue with it, adjust it or even discard it and find another technique according to whether the changes in oneself are moving towards those desired, moving away from them, or there are no real changes at all.

The Biofeedback Principle makes no implicit claims as to which methods or techniques are effective for encouraging a particular change, and indeed, different people setting out to achieve the same changes, apparently using the same method, may meet with quite different degrees of success. Biofeedback allows each individual to discover for himself the effectiveness of the approach he uses, regardless of its success when used by anyone else.

# Outgrowing the instruments

The aim ultimately is for the individual to develop an increased awareness of the inner signals which are present, but often unnoticed when the biofeedback instruments are signaling change, and to establish the connections which allow conscious choice of the "subconscious" processes. When these messages are recognized and understood, and the individual has learned what the instruments are showing, he has outgrown the need for the instruments.

#### INTRODUCTORY NOTE: BODILY CORRELATES OF HIGHER STATES OF CONSCIOUSNESS

#### States of consciousness

The use of the term "state of consciousness" is awkward because, by its very nature, it stands apart from the things which can be experienced through the five senses and because a description of its nature reflects the innate quality of "the state of consciousness" of the one who is describing it!

The importance of biological measurements in seeking higher states of consciousness is that correlations have been established between the quality of "consciousness" and patterns of electrical activity in the cerebral cortex and in the nervous system as a whole. Indeed, the extraordinary potential of Max's work

in biofeedback lies with the ability to identify some of the qualities which are a pre-requisite to higher states of consciousness using the measurements of the biofeedback instruments.

# Higher states, awareness and responsiveness

The term "higher states of consciousness" implies a value judgment that some "inner states" are more effective, more powerful or more highly valued than others. The basis for this assessment is the scope and subtlety of the stimuli that the individual has awareness of and can respond to, and the flexibility and effectiveness of his responses. For example, deep, dreamless sleep is at the bottom of the hierarchy of states because in this state the individual has little responsiveness to internal or external events, and to respond actively generally involves switching to another state (such as waking up).

### What the biofeedback instruments measure

The biofeedback instruments commonly used in Max's classes were the ESR (electrical skin resistance meter), the temperature meter, the EMG (electro-myograph) and various forms of EEG (electro-encephalograph). The models used were those designed and manufactured by Audio Ltd.

The ESR measures the electrical skin resistance in the palm of the hand, which corresponds to the level of activity of the autonomic nervous system.

The temperature meter measures peripheral temperature, which corresponds to the level of blood circulation at the extremities, such as finger tips.

The EMG measures the electrical activity from muscles, which is used to detect the tensing and relaxing of muscles.

The EEG measures the levels of electrical brain activity in the cerebral cortex. The Mind Mirror is one such EEG, designed specifically to give a moment-to-moment display of all the various types of electrical brain activity from the two hemispheres of the cerebral cortex.

The electrical activity from the brain is understood as four principal frequency bands, which reflect four different types of brain function. While there are many differences of opinion about these functions, the following descriptions give a sense of their nature:

### Beta (13-40 Hz)

The normal waking rhythm of the brain, associated with active thinking or active attention, focusing on the outside world or solving "tangible" problems.

# Alpha (8-13 Hz – typically slower for children)

On its own, alpha denotes an empty mind, more "unfocussed" than "focused". Alpha may be present when waking from sleep, where there are images, but perceived as by a dispassionate observer. When present with other brain rhythms, the quality is "the witness", aware, but unmoved.

#### Theta (4-7 Hz)

On its own, theta appears with dreaming and when consciousness slips toward drowsiness. The theta state may have rich imagery, but with the sense of involvement or close attachment. When present with other brain rhythms, theta indicates a connection to unconscious material, for example in creative inspiration or deep meditation.

# Delta (0.5-4 Hz)

On its own, delta appears with deep, dreamless sleep. When present with other brain rhythms, delta indicates "unmanifest" activity, for example in intuition and ESP or searching for "subconscious" memories.

# Correlates of biofeedback measurements to higher states

To describe the known correlates of all the various measurements from these instruments to changes in biological activities in the body and changes in patterns of consciousness is beyond the scope of this paper, and the reader is referred to the book "The Awakened Mind" by C. Maxwell Cade and Nona Coxhead (third edition published in Great Britain in 1989 by Element Books). Some of the important bodily indicators of the higher states of consciousness are given below:

- 1. The changes in activity of the autonomic nervous system, as measured by the ESR, are "free flowing", from calm to aroused according to the need to respond. The body is able to shift from high levels of activity when there is a need for sudden physical activity and able to readily shift back to low levels of activity once the need for this "physical" response has passed. The body can remain relaxed (low levels of activity in the autonomic nervous system) when the mind is alert and highly attentive.
- 2. **The peripheral temperature is high** (within a few degrees of blood temperature), and remains high while the body is in relaxation, even if the mind is highly active. If the peripheral temperature falls, for example, due to physical exertion, it rises again soon after the physical exertion is over.
- 3. **The level of brain activity in the cortex is balanced** (i.e. similar levels) in the two hemispheres. There is activity in the beta, alpha and theta frequencies and the level of beta activity typically does not exceed the level of alpha activity for prolonged periods. There may or may not be delta activity.

The two hemispheres of the brain have a degree of specialization of function, and reflect a bilateral symmetry in the layout of neural connections in the body as a whole. For example, the "left brain" functions are more analytic, conceptual, sequential (as in language), and the "right brain" functions are

more gestalt, whole-body, direct (as in feelings). The balancing of the level of brain activity in the two hemispheres implies the use of both ways of perceiving.

The scenario outlined above corresponds to the state Max termed "State 5(a)", "active State 5" or "The Awakened Mind". In the personal evolution of an individual, this state is only likely to be mastered after considerable experience of "State 5(b)" or "passive State 5". This latter state is more transient, often disappearing when the individual has to respond under stress. The passive form of "State 5" may produce similar EEG patterns to the active form, but usually shows less flexibility of movement on the ESR. For example, the state is lost when there is a large shift to arousal.

# Potential for higher states

The experience of higher states of consciousness obviously has many other aspects than just the pattern of electrical activity in the brain and nervous system, and the production of similar patterns on the EEG by two individuals does not mean their subjective experience is also the same. There are two important consequences to consider when attempting to correlate measurements with states of consciousness. First, there are many aspects of an internal "state" which are simply beyond the scope of measurement of the biofeedback instruments, and second, the instruments do not indicate what use the individual is making of the state.

In other words, the measurements indicate a potential in the individual rather than the degree of its actualization. An analogy is the motor car: cars can be used to travel far and wide, but simply owning a car may never involve taking it beyond the end of the street! And if one does not know how to drive the car, or the engine is broken or there is petrol in the tank, there is not even the possibility of driving it that far!

#### **BIOFEEDBACK AND THE HIGHER STATES OF CONSCIOUSNESS**

#### The Search for the Transcendent

The present wave of interest in higher states of consciousness and the exploration of the inner worlds now sweeping the West has a deeper-rooted cause than is usually understood by those engaged in the study of the human mind. This is not just a passing phase, a fashionable switch of interest from the material to the spiritual. It is a part of human evolution; the point where consciousness turns its search on to itself to unravel its own mystery.

The same phenomenon has occurred many times in the past when a people attained a certain level of civilization which (for the well-to-do at least), provided the means for this inner exploration. Records of what their research revealed still exist, for example, the ancient civilisations of Egypt, India, China and Greece.

The reappearance of the same thirst in this "age of reason" is attended with special problems, for it has to contend with the dominating intellect, and the insistence of the intellect that the psyche can be understood on its terms. This has led inevitably to a point of conflict – between this growing thirst for spiritual experience and the still skeptical reaction of the rational.

# Recognising the Transcendent

There are many intellectuals who perceive the states of illumination which many thousands of people are seeking as no more than inner mental states which border on the subconscious. They believe that these states can be evoked in hypnosis or with no more than alpha and theta biofeedback training. This is a misconception.

The nature of the consciousness of an individual reflects the nature of the biological organism through which it expresses itself: for instance, in the degree of development of the myriad inter-neural connections in the nervous system and the brain and in the options for activation of these neural pathways. There is a corresponding difference in the structure or spectrum of the consciousness of each individual. Everyday language has metaphors for some of these differences: "bright" (for example, intelligent), "brilliant", "see the light", "enlightened".

The very texture of the state of "illumined consciousness" is distinct and different from other states, not just in that one has visual feasts of light and colour or extended awareness, but in a wholesale transformation of consciousness. During the course of a genuine mystical experience, a higher dimension of consciousness intervenes, eclipsing the normal individuality partially or wholly for a period. It then seems as if a new world, a new order of existence, or a superhuman being has descended into view; there is an unmistakably enhanced perception of light, colour, beauty, goodness, virtue and harmony which lend a superworldly appearance to the whole experience.

Do we not see this enhanced appearance of light, harmony, ideals and creative joy in the great geniuses of mankind – the great painters, sculptors, musicians, writers, philosophers, poets, scientists, mystics and reformers of both past and present?

#### The traditional Yoga teachings

The ancient Yoga sutras of Patanjali, (as well as every other time honoured manual of Yoga), are emphatic that the individual cannot attain Samadhi or mystical consciousness without adequate preparation. The mind has first to pass through two stages of concentration, namely "dharana and "dhyana", that is, a primary stage of concentration and a prolonged form of it. The practice of

meditation (which is undertaken in all the Yoga disciplines) has to be active in nature, not passive, and the mind has to be kept fully alert, focused upon only one thought or image.

It is well known that this state of one-pointed attention and absorption is far better developed in the highly-intelligent mind and that it is a prominent characteristic of every form of genius, regardless of the particular method of training. Whereas on the contrary, vacant or idiotic minds are completely lacking in the power to focus the attention intelligently on any subject at all even for a comparatively short time.

# Meditation and the higher states

Irrespective of the method of meditation being practiced, three distinct aspects can be recognised in the changes which may be experienced by the meditator.

First, there are the restful "hypometabolic" states – deep relaxation, mental and bodily stillness, leading to relief of stress symptoms and all kinds of physical benefits.

Then there is the great change in one's self awareness as one continues the meditative life, leading to that state of unvarying and acute mindfulness called in the East "every-minute-Zen", or "the term used by Gurdjieff), "self-remembering".

Finally, we have, even if the experience is of the briefest duration, the extension of our awareness into Satori, "religious ecstasy", Cosmic Consciousness or "enlightenment".

With the change in one's self awareness comes an extension of awareness back through time, even so far as earliest childhood, leading frequently to a form of autoanalysis, occasionally to abreaction of early emotional traumata, and a general cleaning out of "hang-ups".

There is also the extension of awareness into an immense range of altered states of consciousness through the gradual development of "lucidity". That is to say, the ability to be in an altered state of consciousness and yet be aware of normal "reality" at the same time, much as in a lucid dream, where the dreamer is fully involved in the dream yet also aware of being the dreamer and able to influence the course of the dream.

The unmistakable signs which accompany experience of mystical ecstasy are well documented. These include:

- Vivid sensations of light, not only within, but without
- A feeling of extreme rapture, which is reflected in the whole appearance of the individual
- Streaming tears, gooseflesh, and a sense of proximity to an infinite presence
- A sense of contact with an infinite source of knowledge, with unbounded wonder and awe, and an intellectual illumination.

During the period that this ecstasy endures (never more than a few seconds' actual time), the awareness is greatly intensified. The individual becomes more fully conscious than he ever was before, and the impact of his experience is often so overwhelming that even one excursion remains imprinted in his memory for the rest of his life.

#### Passive states

There are teachers of Yoga in the West who prescribe "negative" forms of concentration, forbidden by the ancient masters, which allow the mind to think loosely or wander ceaselessly during meditation, leading to passive, somnolent or quiescent states (indicated by the alpha signal with absence of beta). They say that the visionary experiences or the creative flashes that sometimes occur in this state, as they do sometimes in dreams, are the landmarks of genuine mystical experience.

Is it not to be wondered that Western scientists, misled by these statements equate the transcendental state of mystical ecstasy with the self-induced, daydreaming, vacant or passive states of mind?

But spiritual genius is as much a higher faculty of the mind as any other form of genius and talent. If constant application and continuous endeavor are the prerequisites for the culture of the mind and the expression of genius in all other branches of knowledge, can it be conceived that religious genius forms the one single exception to this rule? Can deep spiritual insights and sublime experiences be gained by allowing the mind to wander and sink into semi-awake states in which active effort is completely ruled out?

Too much recourse to passive mental states – daydreaming, mind-wandering, stillness, quietude or vacuity of thought – provide easy ways of escape for millions from facing the hard realities of life. Thomas Edison said: "There is no expedient to which a man will not go to avoid the real labour of thinking". We see this happening every day – the well-conducted publicity or advertising campaign to successfully popularise a product, idea or personality; anything to save people from the effort of thinking for themselves.

Passive states of mind and body provide rest from tension and can, undoubtedly, have a curative and calming effect in the often highly-stressful environment of our age. But, like sleep or hypnosis, they should be recognized as such and not mistaken for active spiritual disciplines which are designed to lead to extended states of consciousness.

The brain states that produce only alpha and theta activity are also the very antithesis of the attentive or concentrated states of mind essential for the development or evolution of the brain. They have their own value for rest, release and relaxation, but it would be a great mistake to pass them off as illuminative or creative states. The illuminative and creative states always have an element of beta activity with the alpha and theta, showing the focused attention and the potential for inner awareness.

#### The potential for illuminated consciousness

The highly-attentive state of mind of a great writer or thinker, musician, or psychologist..., greatly absorbed in work, is a state of effortless concentration, matured with practice, in which the mind remains actively engaged all the time. From this state one can pass quietly into Samadhi, with the consciousness now contemplating itself in place of the object contemplated, in all of its unbounded expanse.

There is a difference only of degree between the brain of the great intellectual and an enlightened mystic, and an illuminated consciousness can never be attained with a meditational trick or the miraculous gift of a saint. It needs the same application of attention and energy and the same hereditary disposition as any other extraordinary faculty of mind.

# Exercises

These papers were often used as a talk within a workshop, which would be followed by practical exercises. The first three exercises given here can be used as a sequence to establish an internal awareness and then expand it to also encompass the external. The fourth exercise is a guided imagery which leads the meditator to a sense of expanded consciousness.

All these exercises, if practiced correctly, will bring about a level of relaxation in the body. In the biofeedback workshops, participants monitor this change using the electrical skin resistance meter. (The model used in Max's workshops was normally the Omega 1, manufactured by Audio Ltd). To avoid drowsiness, participants are seated in an upright posture. Breathing should be from the abdomen – a relaxing breath, filling the lungs no more than three-quarters full, so the rib cage will remain still.

The presentation of these types of exercise to a group obviously requires a level of experience in maintaining rapport, appraising the state of the group, timing and so on. Some instructions have been included in square brackets throughout the exercises.

# Exercise 1: One-minute alpha

"This exercise takes only one minute of your time and is designed to lead the mind to an 'alpha' producing state. It is ideal for creating a space in an otherwise busy time where the mind can free itself from tension and recuperate. Although the exercise can be practiced for longer periods, it is more effective to practice it for one minute several times a day, particularly AT THE TIME WHEN YOU ARE OVER-STRESSED.

"This exercise is best practiced in a seated position, upright but relaxed, hands in the lap or resting on the thighs, legs uncrossed, with soles of the feet flat on the floor and with eyes closed...Take a few moments to become centred and relaxed...breathing easily from the abdomen...relaxed lips, tongue and throat...

"I would like you to place your attention on one point within your body. Any point will do — I suggest a point on the torso. Take a moment to find the point on which you are to place your attention...I would like you to get the sense of your mind touching this point, almost as though your finger is lightly touching it...although it is actually the focus of your mind...

"Now for one minute – and I will time you – with eyes closed, keep the attention on this point...one minute, starting from now..."

[The group leader times for 1 minute]

"And that is one minute. Bring your awareness fully back to the room, open your eyes, and take a deep breath to fully wake yourself up."

#### **Exercise 2: One-minute beta**

"This exercise is similar to the first one, but is designed to take the mind to a 'beta' producing state. Not overload, where the mind is racing away like the engine of a car stuck in first gear, but a state of centred, external awareness.

"As for the first exercise, this is best practiced seated, with an upright but relaxed posture, breathing from the abdomen. This time the eyes must be open. I would like you to find a point in the room within your normal line of vision on which you can place your attention for the next minute. Avoid looking at someone else's face or at the biofeedback instruments. Take a moment to find such a point...The exercise is simply to keep your visual awareness on this point, not staring at it, keeping the eyes relaxed, the attention just resting on this point...

"Again, take a few moments to become centred and relaxed...breathing easily from the abdomen... relaxing the lips, tongue and throat, but keeping eyes open...

"Now for one minute – and I will time you – with eyes open, keep your attention on this point in the room....one minute, starting from now..."

[The group leader times for 1 minute]

"And that is one minute. Bring your awareness fully back to the room, look around, and take a deep breath to fully wake yourself up."

### **Exercise 3: One-minute alpha and beta**

"This exercise is a combination of the first two, and is designed to develop the state of connected internal and external awareness. The brain pattern is 'alpha' and 'beta' together, again with the external awareness centred, not in overload. This is an important aspect of the Awakened Mind state.

"As for the other one-minute exercises, this is best practiced seated, with an upright but relaxed posture, breathing from the abdomen.

"First of all, close your eyes for a moment and reestablish the contact of your mind with the point in your body, as you did for the first one-minute exercise. Take a moment to get that sense of your mind touching the point on your body....Now open your eyes and place your visual attention on the point in the room in your line of sight, remembering the keep the eyes relaxed, without staring...

"The exercise is to maintain your awareness on both of these at the same time for one minute: the feeling of the point on your body and the visual attention on the point in the room. There is a tendency for people to lose the feeling of the point on the body once the eyes are open, so I would like you to 'favour' the awareness of the feeling in preference to the seeing. If you become aware during the exercise of losing contact with the point on the body, just close your eyes for a moment and re-establish this contact. Then open the eyes again and continue the exercise.

"Again, take a few moments to become centred and relaxed...breathing easily from the abdomen... relaxing the lips, tongue and throat...

"Now for one minute – and I will time you – with eyes open, of course, keep your attention on both the point on your body and on the point in the room...one minute, starting from now..."

[The group leader times for 1 minute]

"And that is one minute. Bring your awareness fully back to the room, look around, and take a deep breath to fully wake yourself up."

#### Exercise 4: Exercise on pure consciousness

"Suppose that all the stars that you can see in the heavens on a clear night are now beginning, one by one, to disintegrate and to blink out...Larger and larger areas of the sky are becoming absolutely black...With not a single point of light to relieve the Stygian darkness...Never mind how many billions of stars there are, just suppose that one by one they are dissolving into absolute nothingness as you watch them. See the sky becoming blacker and blacker as they go out in ones and twos and small groups until all the stars are gone, every last one of them, leaving vast, incalculable areas as just yawning black caverns...

"Now the only lights left in the heavens are our own Sun and the planets of the solar system, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto and their various moons. Suppose that even these begin to go out, one by one...So long as we still have Mars and Venus in existence, we on Earth still know 'where we are'. We can locate our position in the cosmos with reference to these two planets...

"Then suppose the time comes when Mars too goes out. We can only say that we are outside the orbit of Venus. When Venus goes next, we are just a sort of planetary moon revolving around the Sun. Now our position in the cosmos has changed from being just one of a whole group of planets revolving around just one star of a local galaxy, to just being the 'moon' of a solitary star.

"Let us imagine that the Sun itself goes out...Here we are, lonely human beings living on an isolated sphere in the cold utter darkness, with nothing anywhere to mark our position in the vastness of the Universe, and no light anywhere. But where can we be, as a location? Without landmarks or points of reference of any kind, we are NOWHERE.

"Now suppose that all the people on this inky-black Earth begin to disappear, one by one, then at an accelerating pace, and with no births to replace them until, presently, every one is gone except you! Your own consciousness and body have persisted, but you have no other being with which to compare or evaluate yourself – no one to talk with or give you companionship. Then, quickly following this discovery of utter aloneness, you sense that the very planet beneath your feet is beginning to disintegrate, becoming lighter, porous, and then gossamer-like, then vaporous and etheric, and you finally know that there is absolutely nothing beneath your feet, except that you cannot now say 'beneath' or 'above' for you have no points of reference at all.

"There you are, suspended without feelings, but deathless, immortal, and with the knowledge that there is not another soul in the Universe but you...

"Finally, in the last stage of all, you notice that your organic body is evaporating, leaving only your self-aware mind in a complete cosmic void. Without matter, or companions, you are only a self-aware state of consciousness, and the only happenings of any kind are your own thought processes. You have

become a self-conscious mind or spirit...All around you, above and below, there is only infinite undifferentiated space, with nothing to see.

"Now comes the transition. KEEPING THE SAME FEELING OF COMPLETE AND UTTER DETACHMENT, of being by yourself and of yourself, re-construct the Universe around you. Your body, the Earth and the sun, Venus and Mars, and the other familiar planets: Mercury, Saturn, Jupiter, Uranus, Neptune and Pluto and their various moons. And then the stars that make up the nearer clusters, the Milky Way, the nearer and then the more distant galaxies...continuing on into the most distant corners of the Universe...

"And now, expand yourself, your 'I', your pure consciousness, in all directions simultaneously. Starting from the ajna chakra, between the eyebrows...Gradually expand into space. First, grow beyond your body...this room...this building...this town...this country...and planet...Not pausing even for an instant, keep expanding...always expanding.

"Proceed further and further, beyond the solar system...the nearer star clusters...the further constellations..beyond the rim of the Milky Way and into extra-galactic space. Further and further, beyond the nearer galaxies, always as from the centre of a sphere, in all directions together. Go as far as you can – no one else will limit or circumscribe your flight...

"Pay no attention to the surroundings through which you must pass. No words or thoughts should enter your mind. Just be aware of the never ending expansion, always greater and greater, faster and faster. Keep expanding, keep expanding...Continue now and be aware of yourself bathed in the intense light of pure consciousness..." [2 minutes]

"This is Kevala Nirbikalpa Samadhi, or temporary formless superconsciousness. No one can say what form the experience, if it is attained, will take or how long it will last. It may seem like a few seconds dropping off to sleep, it may seem like a flash of indescribable understanding, it may seem like a prolonged experience of things that cannot be expressed in words at all."

[Group leader returns group fully to external awareness]

# Maxwell Cade Foundation - Biography of C. Maxwell Cade

C. Maxwell Cade, known by friends and students simply as "Max", was a highly respected teacher of meditation and a pioneer of Biofeedback. In an age of over-specialization, Max was both specialist and eclectic, bringing his knowledge of science, medicine and psychology and the practice of meditation together to make a bridge between the Eastern and Western philosophies.

Max was a fellow of the Institute of Electrical Engineers and the Royal Society of Medicine and member of the Institute of Physics and the Institute of Biology. He wrote and presented many scientific and technical papers, and his book "The Awakened Mind" records the nature of his work in the development of biofeedback and its applications in relaxation, healing and the search for self-realization.

Max's extraordinary personality and unswerving direction helped many people to understand their inner lives and find the inspiration for its true expression. The Maxwell Cade Foundation was established by former students to support the continuity and development of his work and ideals.