

**COMMITTEE VI**

Eastern Approaches to Knowledge and  
Values: With an Emphasis on "QI"

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**THE CONCEPT OF "KI" IN ORIENTAL MEDICINE  
AND PSYCHOSOMATIC MEDICINE**

by

**Yujiro Ikemi, M.D.**

President

Japanese Society of Psychosomatic Medicine

Kyushu University

Fukuoka City, JAPAN

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The Concept of "Ki" in Oriental Medicine  
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Yujiro Ikemi, M.D.  
Emeritus Professor of Kyushu University  
President of the Japanese society  
of Psychosomatic Medicine

INTRODUCTION

Oriental medicine has, from ancient times, established itself upon the foundation of wholistic understanding of man. The cause of illness was attributed to the disturbances of homeostatic (self-healing and self-actualizing) energy which regulates not only the somatic, but also the psychosocial and the ecological aspects of man. This energy was called "Ki", a vital energy connected with the natural forces.

"Ki" which is working in the human body is called "Wisdom of the body" in the Oriental school of psychosomatic (holistic) medicine. Our study on "Ki" from the viewpoint of modern psychosomatic medicine may contribute not only to the studies of "Ki" in traditional Oriental medicine but also to those of "Ki" in a broader sense such as "Ki" in transpersonal communication, personal aura, "pneumo", ecological vital energy and others. In addition, we feel that fundamental researches on mind-body relationships and holistic medical treatments centering around the Oriental systems of self-control may act as a core

of the integration of mind and material, and various sciences.

### 1. WESTERN MIND·BODY DUALISM

Western culture has developed on the foundation of Cartesian mind·body dualism, with the human spirit or psyche separated from the body and the body itself degraded to the level of animal or machine-like functions. In the course of this development, spiritual concerns were reserved for conceptual theology and confined to expression as belief in extra-terrestrial God. For the Westerner, this dualism dictated two contradictory ways of life: one based on the body and affirmed through materialism and the other serving the spirit through isolated 'church' activities.

Although these cultural foundations have both permitted and stimulated a remarkable progress in scientific research, they have also created a medical orientation which seems to discriminate little between men, machines and animals. On the other hand, mind·body (mind·material) non-dualism seemed to prevent a rapid progress in sciences in Eastern countries at the beginning stage of modern scientific age as compared with that in Western countries.

### 2. EASTERN MIND·BODY NON-DUALISM

In Oriental thought, the body has been appreciated as the sacred seat of the soul or spirit. In this tradition, mind and

body are regarded as integral and human experience is expected to engage the whole man. Such an orientation does not allow an isolated approach to bodily functions and resists their interpretation at the level of zoological existence.

Oriental thought has also respected the body as man's direct link to nature and to the lessons which nature can teach. The human body is ruled by the laws of nature, which are both stronger and 'wiser' than the individual man. Thus the body, linked to nature and ruled by its laws, is further valued as a source of 'wisdom', and somatic awareness appears as a path to heightened psychic awareness or even enlightenment. Such a wisdom of the body corresponds to "Ki" in Oriental medicine. Self-identification is consequently rooted in the awareness of bodily feelings, and moreover, in the perception of nature in one's own body, a perception which is qualitatively different from conceptual understanding.

The basic principle of traditional Oriental medicine has as its goal the maintenance or stimulation of this natural 'wisdom of the body'. Oriental medical approaches such as acupuncture, moxa cauterization, massage, Kampo medicine, etc., aim at the restoration or the stimulation of "Ki" ('wisdom of the body'). Accepting that somatic awareness can contribute to mental insight, body control or 'somatopsychics' has been emphasized as the method of choice for controlling or treating not only the mind but the whole man.

### 3. MIND·BODY PROBLEM IN HOLISTIC MEDICINE

In spite of the fact that psychosomatic medicine espouses a mind·body non-dualism as a basic assumption, there still seems to be a resistance to the acceptance of the unity of mind and body, particularly in the West. According to M. Reiser's presidential address at the 4th Congress of the International College of Psychosomatic Medicine (1977) this resistance may be related to common understanding of the tradition of Western religions and philosophies in which the separation of mind and body is often related to the separation of immortal soul from mortal body. Thus, maintenance of this sense of separation serves to protect the concept of immortality of the soul and therefore, our acknowledging unity of mind and body might be regarded as abandoning all hope for immortality of the soul (M. Reiser, U.S.A., 1977).

If Western cultures maintain this dualism and Eastern cultures maintain a non-dualistic standpoint, it is feared that the two would remain forming a conflicting polarity without any possibility of realizing the integration or synthesis of the two traditions. Hence, in this chapter I would like to clarify some basic assumptions of what we mean by "non-dualism", in order to work our way out of this kind of polarity.

#### a. Some Erroneous Ways of Thinking about Mind·Body Non-dualism

In discussing mind-body non-dualism as a science, it should not be forgotten that mind and body are organically related in a mutually dependent way, and at the same time, in terms of their functions, their research methods should be clearly distinguished, as they have mutually independent properties.

It is the brain that is related most intimately with the functions of the mind, and simultaneously the brain controls the organic functions of the other organs of the body. The functions of the mind and the functions of the heart or stomach, being regulated by different laws, have mutually independent properties. At the same time, they have mutually dependent properties as the former has a strong influence on the latter and the latter continuously influence the former. It follows then, that from a scholarly (analytic) or from a therapeutic standpoint, it must be remembered that there is clear distinction between the approaches to the heart or stomach, and those to the mind.

Hence, when we speak of holistic approaches, we must keep in mind that, although as a methodology mutually independent approaches are required, without being limited there, we must consider mutually dependent aspects to deal with issues of health and self-actualization. In other words, as a methodology, we need a kind of paradoxical logic that expresses "the mutually independent and, at the same time, dependent relationship"

that mind·body has. The same can be said about other organs of the body, so that even in the treatment of the heart, we must always keep in mind its organic associations with the lung, stomach, and other organs, otherwise, even somatic medical treatment would not be successful.

Moreover, these dependent relationships exist in different degrees not only within the individual, but between man and society, man and nature. Philosophers as Heidegger pointed out these relationships in the concept of "being-in-the-world", and psychologists and psychosomaticists are gradually beginning to realize such concepts, for example, in the bio·psycho·social medical model based on the general system theory (G. Engel).

#### b. Non-dualism in Buddhism and Christianity

In Western culture, an erroneous idea that Christianity has been a source of mind·body dualism is still prevalent. As a matter of fact, the concept of immortality of the soul by its own nature has not originally come from the essence of Christianity. Such a misunderstanding is said to have taken place during the process of the philosophical interpretation of Christianity through Greek philosophy, which originally has had the undercurrents of the dualism between mind and material (soul and body) from the Platonic or rather Orphic tradition, which rigidly differentiated the body and soul. This kind of separation, however, is not representative of Greek philosophy

as a whole, since in the pre-Socratic philosophy of nature man was considered to be a part of nature itself, and one does not find any trace of dualism between mind and body. In Christianity, as God is the creator of mind·body and not only soul but also body should be considered immortal as a whole. Of course, this immortality of person (mind·body) is believed to be solely gifted by the grace of God ultimately.

It may be said that there are no ultimate difference in the concept of mind·body relationship between Christianity and Buddhism although there is apparent difference in religious approaches between the two. After all, the Ultimate Reality Itself is neither dualistic nor monistic in both Christianity and Buddhism.

### c. Spinoza's Philosophy of Identity

Comparatively speaking, the approaches of grasping existence from dualistic points of view have been rather prominent in religions and philosophies in the West, and this has caused difficulties in harmonizing them with the hidden non-dualistic aspects of existence. On the other hand, monistic tendencies have become manifest in those of the East because of the emphasis of non-dualistic aspects of existence. However, strictly speaking, the Eastern conception of mind·body non-dualism should not be considered a simple monism. We could say in brief that it can be reconsidered as an expression of



"coincidentia oppositorum (N. Cusanus)". This concept is similar to Nishida's philosophy, the most prominent Japanese philosophy, in which mind-body relationship should be considered mutually independent and at the same time dependent, as mentioned above. Hence, the mind-body relationship is considered to be "non-dualistic" rather than "monistic".

In Spinoza's "philosophy of identity", mind and body form originally indivisible union and integration in that an existence is internally being considered "mind" and externally considered "body". His philosophy is extremely close to Oriental mind-body non-dualism because he overcame the traditional mind-body dualism in the West and a view of man with the superiority of mind which despises emotion due to its bodily nature. However, in Spinoza's philosophy, the monistic aspects of the mind-body problem is too strongly expressed, although the non-monistic nuance is not completely neglected. That is, he did not clarify its non-monistic aspects thoroughly.

The sound development of the international movement of holistic medicine should be supported by efforts for attaining a common mind-body philosophy. Non-dualism which is mutually independent and at the same time dependent overcomes both monism and dualism and this can be a sound basis for psychosomatic medicine.

The urgent problem we are confronting today is to open a way for comparative understanding of the characteristics of

East and West as the differences in points of emphasis. In fact, there has been a noticeable movement for deepening mutual understanding and finding common points between Christianity and Buddhism, Eastern and Western philosophies.

#### d. Oriental Non-dualistic Approaches

One way in which to illustrate the different approaches in Eastern and Western religions is the notion of "ascending transcendence" (transcendent immanence) and "descending transcendence" (immanent transcendence). While the concept of "ascending transcendence" directed towards God in heaven is common in Western religions, that of "descending transcendence" directed towards nature (earth) is popular in Oriental religions (Buddhism). Religious approaches based on the latter aim at the heightening of awareness of body feeling which is directly in touch with the implicit natural laws which govern the human being including the whole universe through the control of the body such as Zen-sitting and Yoga exercise. Oriental people used to consider it the highest virtue to obey the natural law like the worship of God in Western culture. The practice of these Oriental religious approaches restores the 'wisdom of the body'. These Oriental approaches hardly induce mind-body dualism and are less contradictory to the natural sciences. On the other hand, it is felt that religious approaches based on the former are sometimes apt to fall into

the separation of soul and body and are consequently more or less contradictory to the natural sciences.

Recently, a number of notable Western (Christian) religious thinkers have begun to attempt the approaches of "descending transcendence" to "re-search" the wholeness of man, as a being which exists harmoniously with the body and nature. It may be said that even in the approaches of "ascending transcendence", existential wholeness can be better actualized with its integration of the approaches of "descending transcendence".

Furthermore, the lucid understanding of the non-dualistic relationship, that is recognizing mutual dependence and respecting functional independence, not only between mind and body, but also between man and woman, man and society, man and nature, East and West and between various scientific disciplines may greatly contribute to the resolution of many conflicts in the present world and may pave the way to valuable holism.

#### 4. HOLISTIC AWARENESS

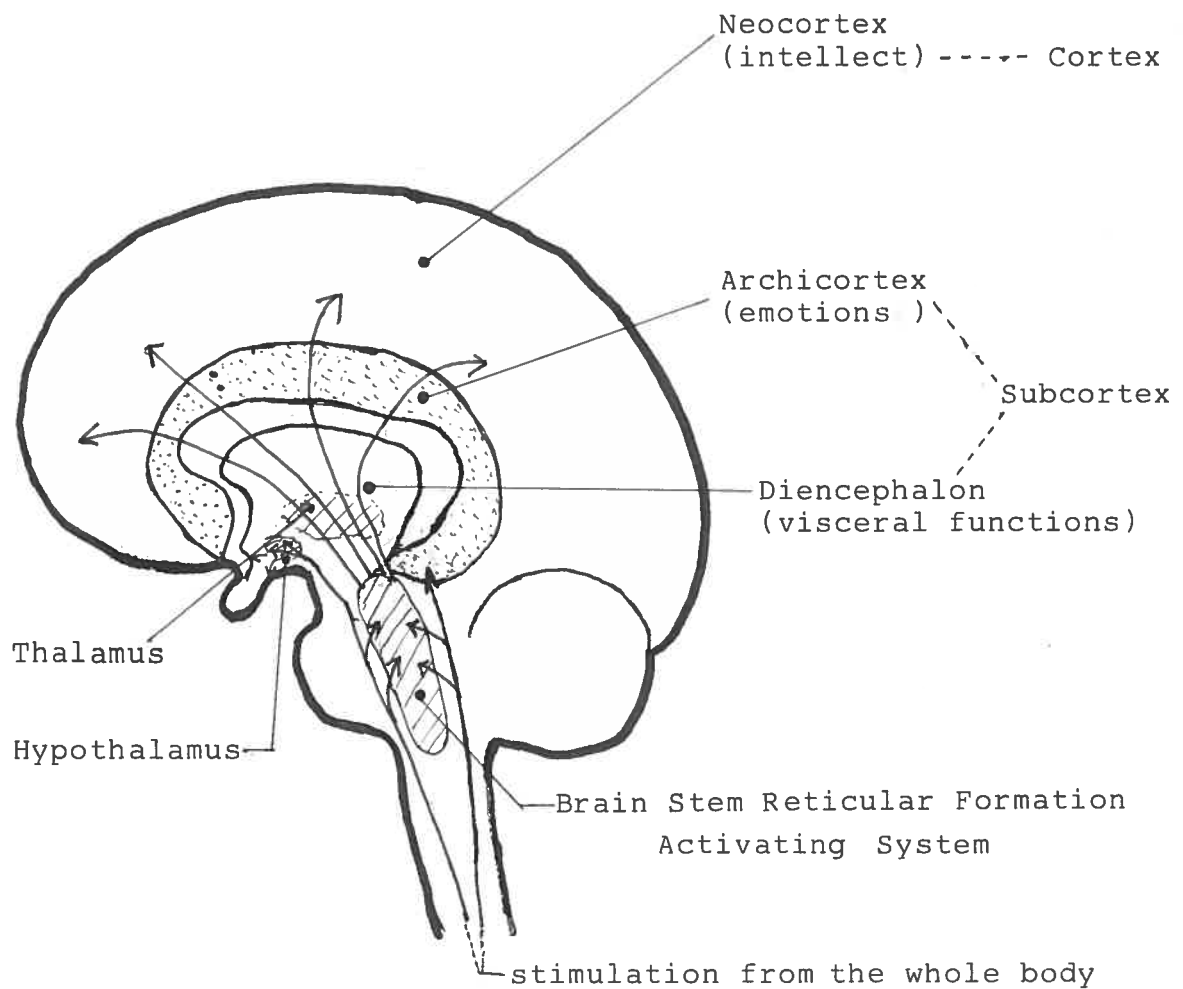
It can be said that the basic principle for human health and self-actualization is the awareness of the whole person. Awareness is made possible by the brain. Thus, the brain can be considered the core of mind-body non-dualism.

The different functions of the brain are controlled by the three parts of the brain: the neocortex which is related

to knowledge: the archicortex which is related to both emotions and instincts; and the diencephalon which is related to the control of internal organs. It can be said that holistic awareness requires the harmony of these aspects. Similarly, it has recently been found that the functions of social adaptation and that of natural adaptation can be roughly differentiated between the left and right hemispheres of the brain. That is, if such a over-simplification is acceptable, the left hemisphere is related to the analytical, verbal and logical capacities, while the right hemisphere is related to the intuitive, non-verbal and emotional capacities and bodily awareness. Such a division of work between the two hemispheres roughly corresponds to that between the cortex (neocortex) and the subcortex (archicortex, diencephalon) of the brain (Fig.4-1). The functions of the hemispheres of the brain implies that human beings are social beings, capable of adapting to the social environment, as well as natural beings, who lives in accord to the laws of nature. It can be said, furthermore, that human beings do not "live" among the laws of nature, but are "let-alive" by nature and its order.

Modern industrial societies have a tendency of emphasizing the left hemispheric functions of the brain. In other words, such functions as the intellectual ego and social ego are valued in modern industrial societies. Education and business enterprises attempt to develop such social aspects, capable of

Fig. 4-1 DIVISION OF FUNCTIONS  
IN THE BRAIN



adaptation to the man-made society. As this tendency continues, psychosomatic medicine witnesses "alexithymia" (Sifneos), the dissociation between intellectual and emotional activities, and furthermore, a general weakening of awareness towards the right side of the brain. Further, the lack of attention to the right hemisphere of the brain, and subsequently the lack of awareness towards nature, can be cited as one of the roots of modern day crises affecting today's advanced societies.

Moreover, in many cases of "alexithymia", where there is an observed difficulty in the awareness and expression of feelings, there also seems to be a difficulty in the awareness and expression of bodily feelings. I have coined the term "alexisomia" to designate this condition, where certain persons have difficulty in expressing how their bodies feel.

Clinicians notice in their everyday practice that modern diseases, especially diseases of aging, seem to have their bases in the weakening of awareness to the balanced bodily sensations, such as the need for proper nutrition and exercise, which serves as the first signaling system essential for homeostatic self-regulation. For instance, the signals from the feeding center and the satiety center in the hypothalamus (in diencephalon) cannot be detected precisely by those whose attention is absorbed into outer society. This insensitivity to the body obstructs awareness towards the laws of nature with which the body is implicitly connected.

The pathological roots of modern society may rest upon modern man's neglect of the harmony between his natural being and his social being, between living and let-aliveness which is essential for the full activation of "Ki" (vital energy).

#### 5. THE PSYCHOPHYSIOLOGY OF ZAZAN

Thus, in Japan, many mind-body unitary disciplines which facilitate holistic awareness were developed as a "path of life", or as a way to self-actualization.

Among these paths of life, Zazen or Zen meditation has been considered as one of the most prominent approaches to restore innate potentials for self-control based on mind-body non-dualism ("Ki"). Much work has already been done on the physiology of Zazen and related meditation exercises (T. Hirai, 1978, P. Chauchard, 1979, Gellhorn & Keily, 1972). Through these researches, neurophysiologists seem to suggest that Zazen and related body-oriented practices heighten awareness to the right hemispheric functions of the brain and overcomes the pre-occupation with the neocortical (intellectual) functions. In this regard, such somatopsychic approaches help to reintegrate the bias of awareness mentioned above and restore "wisdom of the body".

"Think about non-thinking", or "Hishiryo", is one of the practice in Zen. By thinking about non-thinking, one becomes aware of the implicit order of nature which support his exist-

ence. This realization frees him from the intellectual ego, which is concerned and absorbed by the social being. The state of Zen meditation is often conceived as a state of nothingness. However, this does not indicate becoming nothing as the thoughts subside, but it signifies going beyond the intellectual reasoning, going into passive concentration, where the implicit order of nature becomes manifest. At this state one becomes in touch with natural energy ("Ki"). This concept is similar to recent advances in physics. A British physicist, Prof. Bohm insists that "we should try to tune into the implicit order of nature, without remaining under the control of explicit (verbalized and materialized) order".

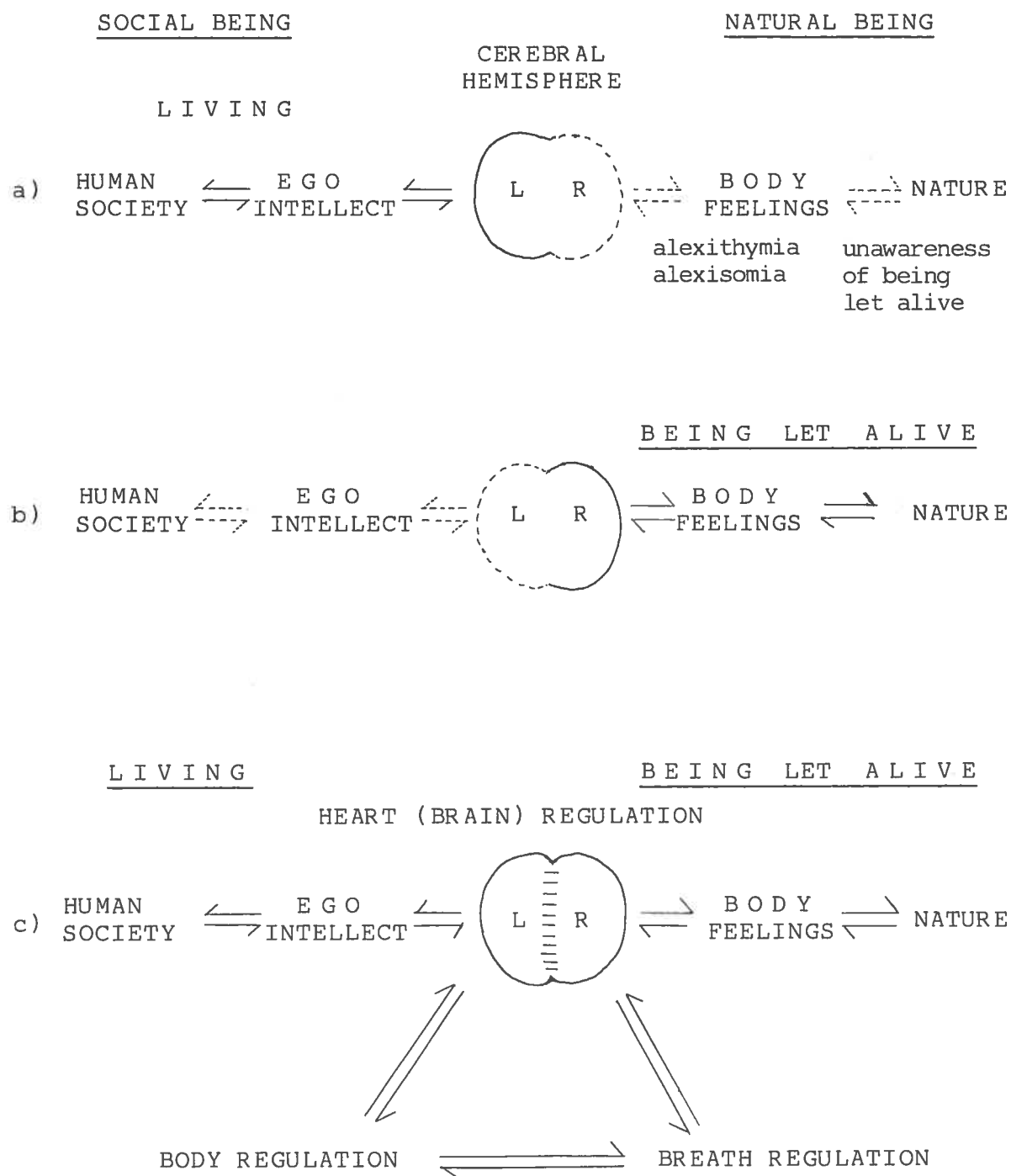
As shown in Fig. 5-1a most people in today's society live as a social being, biased to the functions of the left hemisphere. Some, however, estrange themselves from society in search of nature (Fig. 5-1b). A holistic awareness requires, however, a balanced awareness towards both the natural and social aspects of man. As a metaphor, it can be said that the right hemisphere is a horse, and the left hemisphere is the horserider. When the two are riding ideally, the horserider does not need effort to steer the horse. In fact, neither the horse nor the horserider is steering them. This type of self-control in Zazen is achieved through somatopsychic techniques, such as breathing and bodily regulation (Fig. 5-1c).

#### References



Fig. 5-1

## PSYCHOPHYSIOLOGY OF ZAZEN



1. Hirai, T., 1978, Scientific Approach to Zen Practice.  
Tokyo: Japan Publications.
2. Chauchard, P., 1979, Cerebral Control and Attention.  
Psychotherapy and psychosomatics, 31, 334-343.

#### 6. ZAZEN AND EXPERIENTIAL PSYCHOTHERAPY

E. Gendlin, Professor at the University of Chicago, has worked out a psychotherapeutic and self-help technique called experiential Focusing. In Focusing, clients are taught to sense the bodily feelings that accompany verbalizations. His technique is based on researches in psychotherapy which found that successful clients in psychotherapy often experience not-yet clear, implicit, bodily sensations as they verbalize about experiences. Focusing attempts to expand one's awareness towards not only explicit feelings, but also to bodily sensing which implicitly holds meaning to the client. In Focusing, as in the discussion of Zen mentioned above, there is a tuning into the body, a passive concentration to the implicit meaning which the intellectual ego cannot grasp by itself. In other words, Focusing is a "somatopsychic technique" whereby psychotherapy (mind) is supported by an awareness of the body. Furthermore, Focusing is done in a mode of consciousness in which there is as "experiential space" between the ego and the feeling. In other words, to use R. Assagioli's terms, in Focusing, the ego is disidentified from the feeling, for

example, I have anger rather than i am angry. This mode of awareness, where one is "watching" the feelings that arise, seem to be common in many Oriental meditative practices. In Focusing one may be witnessing one form of integration of Occidental researches in psychotherapy and Oriental somato-psychic techniques.

#### References

1. Gendlin, E.T., 1969, Focusing, Psychotherapy: Theory, Research, Practice, 6:1, 4-15.
2. Gendlin, E.T., 1981, Focusing, New York, Bantam Books.

#### 7. DYNAMIC DISCIPLINES

In recent years a traditional Chinese "Kiko" such as T'ai Chi Ch'uan has become internationally famous as an excellent method for the activation and control of "Ki". Various studies on the practical use of "Kiko" for the improvement of health and the treatment of diseases are becoming active in China. In Japan also various dynamic disciplines which have Oriental philosophies and techniques basically similar to those of "Kiko", have developed from ancient times.

'Taitoku' is a commonly used Japanese expression which means 'understanding through the body'. Many activities, including Noh play, Japanese dance, Kendō (Japanese fencing), Jyudō, Sadō (tea ceremony), Kadō (flower arrangement), and Kyudō (archery) were raised to the level of disciplines (Michi or Dō)

offering mental self-control, self-actualization, or even 'Satori' (enlightenment). Dō itself is defined as a path or road to be followed in order to attain enlightenment. It has been said that Oriental self-control methods of dynamic type are often far superior to those of static type such as autogenic training, Zazen etc. in the activation of "Ki" and can more easily spread themselves into daily lives of the citizens.

In each of these disciplines, the ceremony stresses control of posture (erection of lumbar spine, muscular relaxation) and of respiration (natural breathing) in particular. These ritualized bodily controls are regarded as a vehicle for reaching 'control without control': a self-control achieved when regulation of conscious activity permits the wisdom of the body ("Ki") to assert itself.

Participants in the tea ceremony, for example, can achieve so-called 'altered state of consciousness' as a result of altered patterns of sensory stimuli such as those resulting from stable postures, refined, natural movements, the regulation of respiration, the smell of burning incense, the monotonous but peaceful sound of boiling water in an iron tea pot, the delicate taste of tea, and other tranquilizing aspects of the special tea room. Upon this psychophysiological background, the philosophy of the tea ceremony is taught, which is succinctly expressed in the words 'Ichigo Ichie', or 'one chance, one meeting'.

Such a philosophy accepts that the ceremony may be the first and last chance of making tea and meeting certain guests in this room. It is a lesson of nature that everyone is destined to death, although people are apt to forget it in their daily lives. Such a lucid acceptance of nature and the law of existence activates "Ki" to maximal degree and makes one do his best in making each bowl of tea with deep affection for each guest. The tea ceremony is, therefore, considered to be a way of enlightenment, such as Zen, and not a mere pastime. The same philosophy can be applied to all kinds of disciplines mentioned above.

#### 8. LIMITATION OF PSYCHOTHERAPY

As previously stated, someone trained in traditional Oriental thought might well assume that Western medicine despises the human body. Such an impression receives support from growing pressure to correct a dehumanized medicine, to move beyond expert depersonalized care of the body to concern for the quality of life, and to raise psychosomatic medicine to the level of broad clinical application.

The psychosomatic concept itself appears as a natural response to a distorted medicine which delivered expert technical care while denying mental needs. The stated goals of this concept were to transcend dualism and establish a holistic medicine. The basic therapeutic methodology, however, remained in the realm of Cartesian dualism, consisting of a combination

of highly sophisticated dynamic psychotherapy and dehumanized organic medicine, with greatly limited therapeutic effects.

Psychoanalysis, the dominant approach in traditional psychotherapy, has focused on developmental failure induced by interaction with parental figures and significant others in the early stages of life. Concern with bringing the unconscious to consciousness has been limited to the need to disclose the process of formation and pattern of this developmental failure. If insightful therapy rests within these limitations, however, it can be successfully applied only to those patients whose somatic symptoms are closely related to developmental failure - that is, psychosomatic cases in the narrowest sense. Such a therapy cannot broaden its scope to the level of comprehensive medical care for patients suffering from various stresses induced by high-technology and severe human relationships in our modern society, and cannot include patients who are distressed with anxiety of an existential nature as in various clinically extreme situations, including chronic or terminal illness.

If psychotherapy is to meet the growing pressure for comprehensive application, its concern with the unconscious must be extended. The greatest gains will come when both patient and therapist acknowledge the importance of unconscious bodily functions and value their understanding as a source of knowledge far broader and more immediate than that derived from analysis of mind and memories alone.

In recent years the awareness for unconscious bodily functions can be stimulated by biofeedback which are mechanical devices to monitor and facilitate awareness towards changes in autonomic visceral functions. Biofeedback can be used in the treatment of such diseases as muscle contraction headache, bronchial asthma, hypertension, etc. through the heightening of awareness to those parts of the body. While conventional psychoanalysis bring to consciousness the psychic unconscious, biofeedback brings to consciousness the bodily unconscious. These two modes of bringing into consciousness or awareness are deeply interrelated at their bases. For example, an increase in the awareness of the body through biofeedback frequently facilitates an awareness towards the hitherto repressed feelings and memories. Psychotherapists have noted that psychodynamic insight attained intellectually have little effect in personal transformation. Insights which is related to autogenic self-transformation is accompanied by changes in bodily awareness.

Research has also disclosed that Oriental systems of concentration can result in so-called altered states of consciousness, states in which unconscious functions of both psyche and soma can be brought to consciousness as two aspects of a single process.

#### 9. ORIENTAL CONTRIBUTIONS TO HOLISTIC MEDICINE

Oriental psychotherapeutic approaches, such as Morita therapy, Zen and Yoga, go beyond analysis of developmental

failure to emphasize the importance of utilizing inherent homeostatic and self-actualizing potential (wisdom of the body or "Ki"). The effectiveness of the Oriental approach has led to growing Western application of 'non-verbal' somatopsychic methods, including bioenergetic therapy, meditation, concentrative movement therapy, scream therapy, art therapy etc..

The idea that the 'body knows best' also seems to be the basis of Vogt's idea of 'prophylaktische Ruhepause' in self-hypnosis (self-relaxation) as well as Schultz's formulation of autogenic training (self-activated ASC method). Luthe has developed a technique of autogenic discharge and autogenic neutralization based on a belief that homeostatic potential ("Ki") becomes most active during a kind of altered state of consciousness (ASC) induced by autogenic training (Ikemi, et al. 1975). He insists that under the autogenic state the authentic self (natural self) displays the biologic wisdom of self-regulatory mechanism through which antihomeostatic brain-disturbing materials are discharged and neutralized.

Growing concern with somatic awareness is also evident in the work of Reich, the first psychoanalyst to treat the body as well as the intellect. Reich defined the schizophrenic as having a total split between ego-identity and body-identity. His pupil, Lowen, in his bioenergetic therapy, has demonstrated that the ego of the healthy person is identified with his body and that conflict between the ego and the body is equivalent



to a conflict between knowledge and feeling. Lowen has also noted that such a conflict or dissociation is present in many 'normal' as well as pathological conditions.

Both Reich and Lowen believed that childhood emotional conflicts became structured into the body as chronic muscular tension and thus concentrated on techniques for breaking down the muscular armor which inhibits the awareness and expression of emotion and body sensation and induce similar conditions to 'alexithymia' and 'alexisomia' mentioned above. Lowen's primary emphasis is on getting patients to use their bodies through corrective postures and breathing, expressive movement, and vocalization techniques. One sees a strong influence of Yoga and other Oriental methods of self-control in this bioenergetic therapy as well as Schultz's autogenic training.

#### References

1. Nakao, H., 1979, Emotional Behavior and the Brain. Psychotherapy and Psychosomatics, 31:156-160.
2. Ikemi, Y. and Luthe, W., 1975, The Biologic Wisdom of Self-regulatory Mechanism of Normalization in Autogenic and Oriental Approaches in Psychotherapy, Psychotherapy and Psychosomatics, 1:99-108

#### 10. SOME NEUROPHYSIOLOGICAL BACKGROUNDS OF "KI"

The carrier of vital energy ("Ki") is called "Chi". According to modern medicine, the autonomic nervous system, the endocrine system and the immunological system play the

principal role in the homeostatic mechanism of the body and act as the major routes connecting our brain (mind) and body (organs). They can be the main carriers of "Ki" from the viewpoint of modern medicine. Furthermore, "Ki" is controlled by the "centro-encephalic system" in the brain stem named by Penfield and Luthe which regulates the harmonized function of the intellect in the neocortex, emotions and instincts in the archicortex and the activities of internal organs in the diencephalon through the psycho.neuro.endocrino.immunological system. In other words, "Ki" is activated by the functional integration of left and right cerebral hemispheres (functional integration of the cortex and subcortex of the brain) induced by the "centro-encephalic system" (Fig. 1).

Gellhorn and Kiely (1972) have reviewed the work of Hess and others to show how various cognitive and emotional states depend on the mutual interplay of the ergotropic and trophotropic systems of the autonomic nervous system. The autonomic nervous system consists of sympathetic and parasympathetic nervous systems. The dominance of the former induces ergotropic (energy-consuming) state and that of the latter trophotropic (energy-restoring) state. Somatopsychic approaches apparently alter proprioceptive afferent discharge to the reticulohypothalamic activating system (somatopsychics help the regulation of stimuli which come up to the brain stem from the whole body) (Fig. 1) through relaxation of the muscular system, and control

of breathing in particular, inducing an optimal state of hypothalamic (ergotropic-trophotropic) balance. In such a state of balance, hypothalamic-cortical discharges are diminished, resulting in lowered cortical excitation and dominance of the trophotropic system which facilitates the activity of "Ki". In the brain of the person who lives in a highly industrialized society the excessive cortical (intellectual) excitation usually inhibits the activity of subcortical brain (emotions, instincts, control of internal organs) and disturbs the harmony of the brain functions.

The balance of brain function induced by somatopsychic self-control has been referred to as 'a state of emptiness of consciousness without loss of consciousness'. The emptiness of consciousness is the psychological concomitant of the shift to the trophotropic side. To maintain this state requires a conscious effort, which may be reflected in a mild stimulation of the ergotropic system. This particular review work has also noted that none of the techniques of autogenic training, progressive relaxation and transcendental meditation show such remarkable subcortical-cortical patterning changes (inter-hemispheric integration in the brain) of electrical activity as in Zen meditation and Yoga exercises. Such a state of Oriental self-control has erroneously been called an altered state of consciousness. We believe, however, that this is a 'natural' or 'original' state of the brain rather than an

'altered' state.

An Experimental Study on the Cortico-Subcortical  
Patterning Change by Autogenic and Meditative Training

METHOD: Four Parkinsonian patients were trained in autogenic training and meditative training for three months. Thereafter, they were transferred to the department of neurosurgery to undergo stereo-surgery. In this surgery, it was possible to record the electrical activities of various regions of the brain by attaching 14 recording-tips to an electrode which was inserted into the brain to coagulate the thalamus for the purpose of treating symptoms. This electrode was fixed in the brain after insertion. Before the coagulation of the thalamus two weeks were spent conducting various tests to examine clinical symptoms and to confirm the location of the electrode in the brain.

During this period we also observed the effects of autogenic training and meditative training upon the PEP.

PEP (photic evoked potential) was induced by flashing a light (xenon tube) into the eyes from 30 cm away for 100 times at one second intervals. PEP is a reactive change in the electroencepharogram induced by photic stimulation.

RESULTS: As shown in Fig.10-1 a, PEP showed a general suppression of amplitude in the cortex (neocortex), subcortex (archicortex) and thalamus (diencephalon) under light and medium degree of meditation as compared to the waking state.

This suppressive tendency was particularly marked in the cortex.

Under deep meditation, in which the maximum relaxation was induced, the suppression became more manifest with no appearance of PEP showing a flat pattern. In the records obtained in the awake condition, the suppression of the amplitude of PEP disappeared immediately at the thalamic and subcortical levels, the wave pattern returning to that in the waking state. But this restoration seemed to occur rather slowly on the cortical level. These meditative exercises were conducted for the purpose of achieving the maximum relaxation of mind and body.

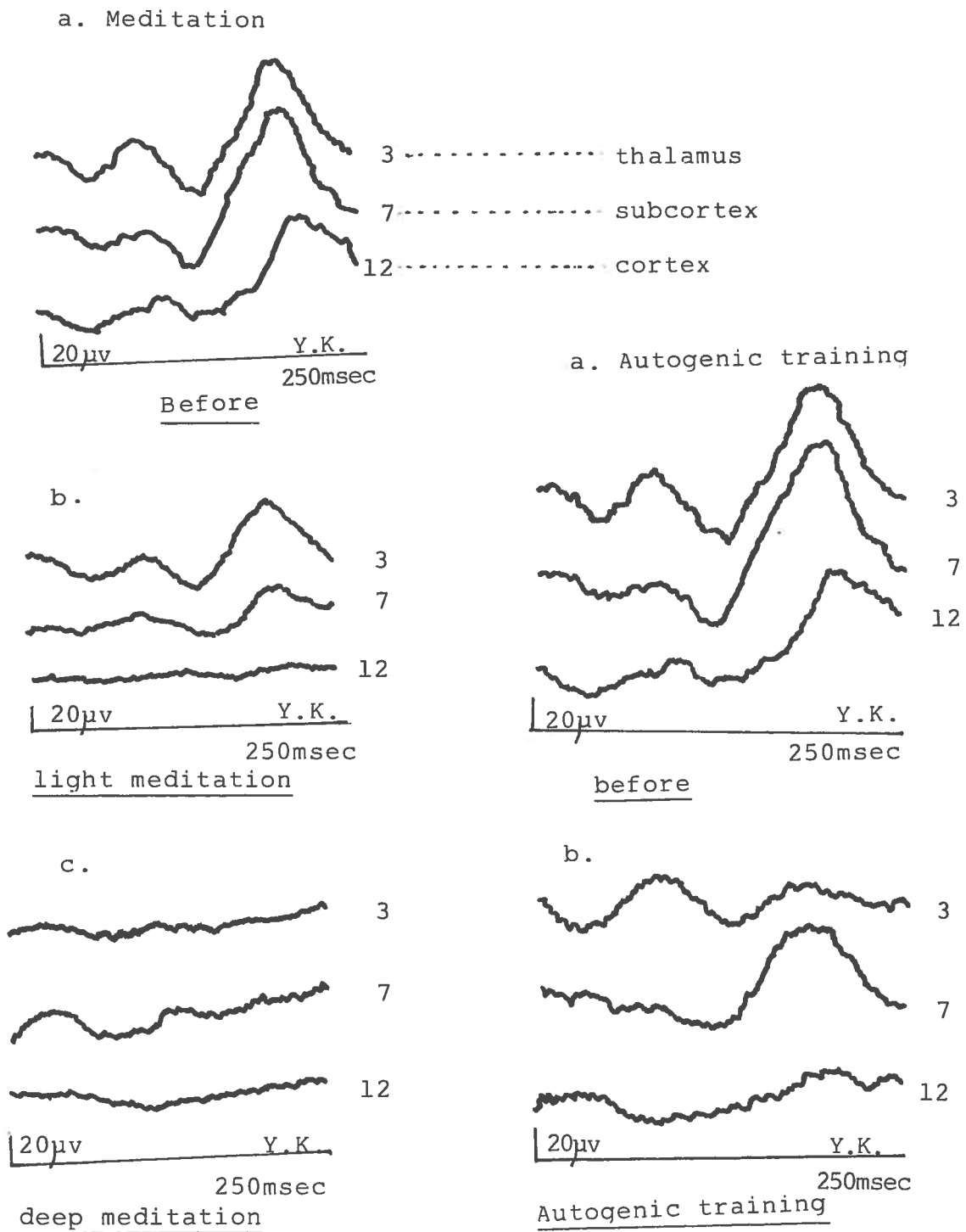
In autogenic training, PEP showed a lesser degree of suppression, which was different from the reaction pattern observed under meditation (see Fig.10-1b). Here again, the suppression of PEP apt to be more marked on the cortical level. Moreover, the peak latency was shortened.

Thus, it was learned from the findings about PEP, that PEP was gradually suppressed from the surface of the cortex down to the thalamus with the progress of meditation (relaxation).

These findings seem to suggest that the suppressive effect of meditation and autogenic training upon PEP is stronger in cortical region than in subcortical region.

They can be an experimental proof for the subcortical-cortical patterning changes (interhemispheric integration in the brain) induced by somatopsychic approaches mentioned in Gellhorn's review work.

Fig.10-1 CHANGES OF PEP DURING MEDITATION  
AND AUTOGENIC TRAINING



## Reference

Gellhorn, E. and Kiely, W.F., 1972, Mystical States of Consciousness. Neurophysiological and Clinical Aspects. Journal of Nervous and Mental Disorders, 154:399-405.

## 11. THE INTEGRATION OF ORIENTAL AND OCCIDENTAL APPROACHES

It has already been mentioned that a high level of experiencing is essential to successful psychotherapy. A high level of experiencing is, in turn, facilitated by techniques of bodily control which are, in themselves, therapeutic for many kinds of psychological and somatic disorders. Hence, successful psychological and psychosomatic approaches can be facilitated by body-oriented or somatopsychic approaches that raise the level of experiencing and stimulate "Ki" (wisdom of the body). Once a high level of experiencing is attained, psychological approaches may help to clarify, conceptualize, and articulate the experiential process. Therefore, Western psychological approaches and Oriental body-mind approaches can serve to complement each other.

At a high level of awareness, we have noted that psychotherapy clients conceptualize their illness experience, with the help of their therapists, in the following way: (1) misunderstanding of bodily functions or psychological states; (2) situational stress; (3) distorted conditioning and living habits; (4) personality problems (developmental problems); (5) constitutional problems; and (6) existential anxiety (Fig. 11-1). At each of these levels, Western psychological approaches and

Oriental somatopsychic approaches can work concomitantly in therapy.

Working with patients with biopsychosocial disorders as we do, we note that reassuring the client about his bodily functions or psychological states, can be augmented by somatopsychic approaches which help the feedback of normal bodily functions. At the second level of situational stress, supportive counseling can be complemented by the anti-stress cushioning effects of Oriental bodily approaches. These approaches can also facilitate a discharge of suppressed feelings which have been disturbing homeostatic function of the brain or heighten the level of awareness which can set the stage for counseling. At the third level of distorted conditioning and living habits, behavioral or educational approaches can be augmented by somatopsychic approaches for relaxation, tension reduction, and the self-normalizing (homeostatic) aspects of somatopsychic approaches. At the fourth level of personality problem, Western insightive psychotherapy can be facilitated by Oriental somatopsychic approaches which help the abreactive (discharge of emotions) and insightive process. As mentioned above Lowen's "bioenergetic analysis", which owes much to Oriental somatopsychic approaches such as Yoga and Tai Chi Ch'uan is an example of utilizing the body's abreactive process in the therapy of characterological problems. At the fifth level of constitutional problems, understanding of constitutional factors can be complemented by



somatopsychic approaches which may facilitate the development of homeostatic, self-normalizing, and self-actualizing potentials ("Ki"). At the sixth level of existential anxiety, Oriental approaches helps the positive acceptance of existential anxiety and helps the awakening of holistic awareness.

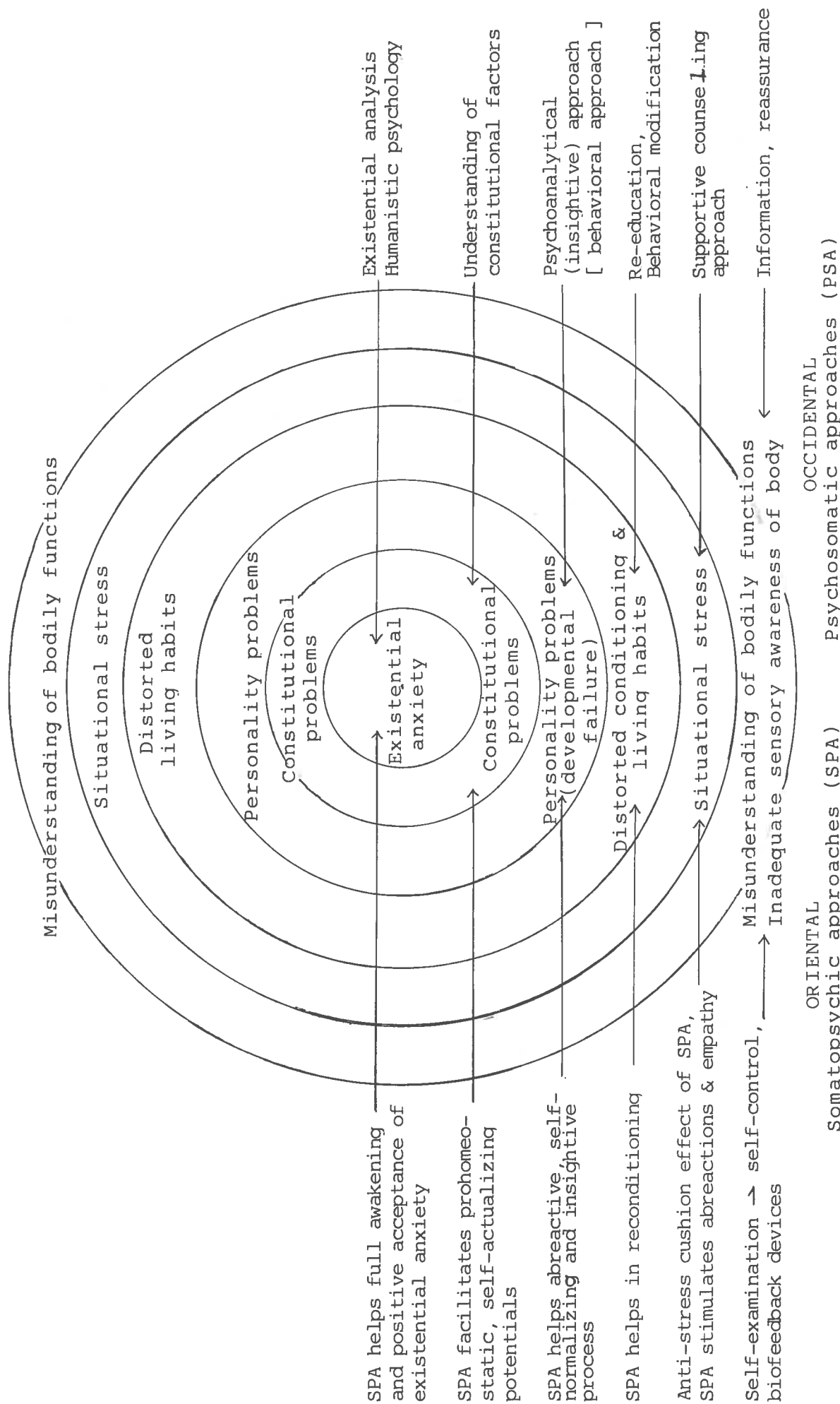
For a practical use of this model, the following points must be kept in mind.

- (1) As in many cases of biopsychosocial disorders, various problems belonging to different layers of the concentric circles may overlap, various therapeutic approaches mentioned on both sides of the circle must be combined accordingly.
- (2) Each problem mentioned in any one layer may not necessarily be solved by the exclusive use of the one particular therapeutic approach connected to this layer. For instance, personality problems may be often treated by the combination of psycho-analytical, behavioral and some somatopsychic approaches.
- (3) As a rule, the therapeutic approach is desirable to begin with the problem in the most superficial layer and proceed to the ones in the deeper layer.
- (4) The different therapeutic approaches mentioned on both sides of the circle are recommended to be used concomitantly, from the selective instead of the eclectic point of view.

Thus, the psychosomatic approach and the somato-psychic approach can be used concomitantly, so that therapeutic work can be done in a physiologically optimal state of consciousness

Fig. 11-1.

Therapeutic approaches according to the level of the psychological problem ( anxiety, frustration, etc. )  
( To be read from outside to inside of the circle )



Whenever necessary, psychopharmaceuticals can also be used to help control different levels of anxiety.

and brain functioning. Such an integrative use of Oriental and Occidental approaches combined with ordinary somatic treatments based on Western medicine is recently becoming the core of holistic and humanistic medical management.

Oriental approaches to psychotherapy and psychosomatic treatment aim at raising the client's level of experiencing which facilitates physiological homeostasis and the control and enhancement of the organism as a whole. These approaches promote health and self-actualization, rather than being only a specific "cure" for a specific condition. Oriental approaches promote the realization of human potentials inherent in experiencing, rather than mechanically readjusting the person to "normality". It helps to balance the analytic and the intuitive, thinking and feeling, and the "social being" and the "natural being" implicit in each person.

#### References

1. Ikemi, Y. and Ishikawa, H., 1979, Integration of Occidental and Oriental Psychosomatic Treatments, Psychotherapy and Psychosomatics, 31:324-333.
2. Ikemi, Y., 1979, Eastern and Western Approaches to Self-regulation, Canadian Journal of Psychiatry, Vol.24, No.5.
3. Ikemi, Y. and Ikemi, A., 1981, A New Model for Integrating Occidental and Oriental Approaches in Psychosomatic Medicine, Journal of Indian Psychology, Vol.3, No.2, 16-22.

#### 12. ORIENTAL APPROACHES TO A TERMINAL ILLNESS

Oriental philosophy and self-control can contribute to many areas of holistic medicine, including the medical management of

terminal illness. To illustrate this point, some of our works on psychosomatic oncology will be presented. In one study that we conducted, we studied 65 cases of the spontaneous regression of cancer (SRC), where cancers disappeared or were reduced in size, and where the host bodies survived for unexpectedly long periods of time. 28 cases out of them were carefully studied from psychosocial point of view. In 27 of them, dramatic changes of the outlook of life, or "existential shift", as called by Dr. Booth, seem to have played an important role in the full activation of the patient's self-recuperative potentials ("Ki"). As Booth mentioned in his report, most of them were capable of an "existential shift" only after they have found support and encouragement from religious encounters or from medical and psychological interventions. In fact, in 12 of our cases, their strong religious faith and in 15 dramatic changes in the psychological environment seemed to help them get rid of anxiety and depression.

Moreover, it was felt that the background of Oriental culture might have helped them reach this "existential shift". Japanese culture has had existential concepts of "wabi" or "sabi" as mentioned in the philosophy of "Ichigo Ichie" in tea ceremony. These experiential trainings act as a systematic desensitizing training for the fear of death, and may be serving as a gracious form of death education. In addition, Oriental meditation, that stimulates the awareness of the body, which is directly under

the command of nature, may have facilitated "existential shifts".

F. Capra, an acclaimed physicist, stated in a symposium on "Science and Consciousness" held in Cordoba, Spain on October 1st, 1979 (I participated in it as a symposist), that the world of atoms that structure all substances are dominated by the law of "ever-changing fluidity" and "interdependency". This is strikingly similar to the Oriental philosophy (Taoism) of "mujiyo" and "soesokan". According to Capra, atoms should not be understood as independent entities, but rather as an interrelatedness. The Orient has emphasized the view that human beings are an interrelatedness, not only as "being-in-the-world" in Heidegger's sense, but also as "being-in-nature", or "being-let-alive-in-nature". The cases of the spontaneous regression of cancer may be a case in point to show that the realization of man as being let alive by nature, may help accepting life even at the terminal stage.

When the problem of "Science and Ethics" was discussed in the morning session of this symposium on October 3rd, I talked about my opinion on this problem from an Oriental point of view as follows. According to Oriental teaching, if the work by physicists mentioned by prof. Capra guides us to the realization of the true nature of our existence (which can be a great satori), we will be able to find a meeting point of science and ethics. That is, if we become truly aware of the reality that we are inevitably approaching death, every moment of our daily life will become

oriented to the "here and now" type of living, doing our best at this very moment. And if we lucidly become aware of the fact that we are living only by the support from other people, all creatures on the earth and the whole universe, such a satori itself develops into true love to all others as it happened in our patients with spontaneous regression of cancer. On the bases of such an awareness, man may achieve a truly autonomous self-actualization in harmony with all other existences and the whole universe. This can be an ideal goal of Oriental approaches based on wisdom of the body ("Ki").

Of course, we have no intention of drawing any conclusions on the healing mechanisms of cancer from our observations in only 65 cases of SRC. As to the underlying somatic mechanism of SRC, immunological aspects of cancer patients have recently been regarded as important. As one of the somatic conditions which might contribute to the spontaneous regression of cancer in them, the unchanged or rather elevated immunological capacity (Lymphocythoblastogenesis) which was usually lowerd in cancer patients has been confirmed in the majority of them. This fact suggests that "Ki" may be activated to the maximal degree in terminal cases of S R C through a psychoimmunological system.

I wonder if such concepts can be acceptable to Western people, who have a different sociocultural background. In any case, these facts must be realized by the "whole self" instead of by intellectual understanding. When I had chance to talk to

Dr. M. Boss, a noted Daseinsanalyst, authority of medical philosophy on this matter several years ago, he told me that he had progressed from "nothing nichts" to "full nichts". I understood his experience could be a kind of "existential shift" and asked him how he could make such a progress. He answered me that he had been meditating for 25 years for the purpose of "sinking down to the basic self ('wisdom of the body' ? )" in which dualism between mind and body, East and West, life and death, ego and universe no longer exists. This can be an intuitive understanding of what Bohm calls "implicate order" which implicitly regulates all existences.

#### Reference

Ikemi, Y. and Nakagawa, S., 1975, Psychosomatic Consideration on Cancer Patients Who have made a Narrow Escape from Death, Dynamic Psychiatry, 31:77-92.

#### Closing Comment

The field of psychosomatic medicine has developed from its narrow meaning, towards a movement which promotes holistic health and self-actualization. This is made possible by researching into holistic awareness which stimulates "Ki". In these researches, fundamental similarities are found between Oriental and Occidental concepts. I hope to find a meeting ground of East and West, science and philosophy, and of various scientific disciplines in Oriental medicine and Oriental school

of psychosomatic medicine where the social and the natural, where living and let-aliveness come together.

Furthermore, what has been called "that which is truly religious" from ancient times is the holistic awareness of the self and self-control. From this, I am convinced that the way to true health, the way to true self-actualization, and the way that is called truly religious is indeed at one. I wish to close my presentation by citing Toynbee's famous comment.

"When the historian of thousand years from now comes to write of this 20th century, he will be little interested in the domestic squabbles of the democratic free enterprise and communistic politics, but what will really grip him will be what happened when, for the first time in history, Christianity and Buddhism deeply interpenetrated each other.

May I take the liberty to change the last part of the comment as follows:

"Occidental approaches and Oriental approaches  
deeply interpenetrated each other...".

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