

# Zen Practice and Self-control

Shoji Nakamura

Department of Psychology Komazawa University

## [ I ] Characteristics of SATORI (enlightenment) in Zen

Zen consists of two main structures, **SANSHI-MONBO** (attending to the Law personally under a Zen master) and **KUFU-ZAZEN** (single-minded Zen meditation) in which a person uses self-effort to establish their personal ideal situation and then through trial and error tries to reach it step-by-step. **KUFU-ZAZEN** is considered to be one kind of self-control technique. Although different in character, both **SANSHI-MONBO** and **KUFU-ZAZEN** are both necessary for Zen to be holistically complete. The original purpose for practicing Zen was to reach a spiritual enlightenment called **SATORI**. Thus, because the original purpose of Zen was a religious one, Zen practices do not always relate directly to psychological healing or psychotherapy as European self-control techniques tend to do. However, through the practice of Zen psychological healing and psychotherapeutic phenomena are brought about. The process of Zen practice results in an "altered state of consciousness" (ASC) or the "discovery of one's real self" (reorganization of self) in which the "discovery of one's real self" takes the place of the "accomplished boundary of self". Simply stated, practitioners of Zen find that their personalities change in positive ways and the process of these changes brings Zen related closer to psychological healing or psychotherapy than it's original exclusive purpose of religiousness.

Enlightenment in Zen is called "**REIDANJICHI**" (to feel cold and warm through one's own experiences) or "**FURYU-MONJI**" (to free oneself from an attachment to the letters of a sutra.). What these terms fundamentally mean is that **SATORI**, or enlightenment

is not something that can be caught, dissected, and understood through intellectual or analytical means like European psychotherapy but rather is an "intuitive awareness" that can only be experienced and understood through one's own direct actions. We could say that many self-control techniques aim to get such direct "intuitive awareness".

The purpose of this treatise is to clarify the psychotherapeutic aspects which Zen practice has. In Japan there already is the Morita Therapy, which is said to be strongly influenced by Zen practice. This treatise may make up for an insufficiencies that Morita Therapy has.

## [ II ] Purpose of Zen Practice and Motivation

The Purpose of practicing Zen is not just to achieve health of body and mind, but also to aim for the spiritually highest way of life as a human being. Zen classics often describe the life styles of Zen priest who are not attached to anything, accepting everything as it is, and moreover, live every moment freely in fulfillment. this way of living epitomizes Man's ideal existence under Zen precepts.

Zen practices consists of synergism of two functions : physical functions like movements, respiration and posture ; and psychological functions such as concentration and meditation. Simply stated, Zen is a practice in which the body and mind is united indivisibly as one. As previously stated, enlightenment attained from Zen is not an understanding obtained through intellectual analysis, but rather it is an "intuitive awareness" obtained through direct experience. This type of intuitive awareness does not only exist in Zen. It can be found in many other Asian arts as well and can be considered a common characteristic of the austere way of thinking that often is represented in oriental philosophies and arts. The ultimate purpose of Zen practice is to reach the same enlightened state of mind, SATORI, as Buddha did, and to be able to give a clear answer to the question "What is self". Buddhist philosophy hold that human

agony rises from being restrained to the twelve-fold links of the chain of causation. **SATORI** is reached by cutting off this chain of restraint and preventing reincarnation from taking place. To accomplish this feat there are basic Buddhist Practices such as “*sila, samadhi and prajñā*” (precepts, meditation and wisdom). These are designed to prevent the mind from scattering and perplexities, achieve wisdom and ultimately reach **SATORI**.

In addition to previously explained terms, enlightenment is also often referred to as **SHOGYO-MUJYO** (all conditioned things are impermanent), **SHOHO-MUGA** (phenomenal things are in existence only by conditionals : thus they have no substance) or **NEHAN-JAKUJO** (The state reached by extinguishing all illusions and destroying all **Karuma**, which are the cause of reincarnation). Although in different words, these concepts all teach one fundamental lesson ; that one should leave behind any clinging or striving toward extinguishable things, and instead live every moment in a free, natural and fulfilling manner. The formation of this kind of personalities is the purpose of Zen practice, and it's attainment can be gained through all daily activities including Zazen performed in a Zen monastery.

### [ III ] Active Zen (Daily Activities)

Zen Buddhism is said to be the religion of our daily life. Daily activities are regulated by the regulations for the Zen monastic life. A practitioner believes and performs daily activities in Zen monastic life to be the Buddha's Way itself and devote himself wholeheartedly to his activities. Through this kind of concentration, an acting self as a subject unite with an action as an object and then a consciousness of self disappears and only the action remain. By concentrating on his action, his way of experiencing may unconsciously change little by little. Accumulation of these changes will bring about a religious awareness.

Walking, cross-legged sitting, cooking, having breakfast, chant-

ing sutra, prostrating oneself to the Buddhas, bathing, and going to the toilet, etc. are all done according to extremely detailed regulations. Also, although not regulated in detail, fatigue work of a temple, like sweeping the ground or gathering the firewood, is one of important practices. These activities here are all included in the Active Zen. Listed below with brief explanations are several practices of Active Zen, which are designed to effect psychological changes :

- (1) Repetition of actions : many actions can be divided into two types, that is, simple and monotonous actions like standing, sitting, walking, lying and rhythmic actions such as chanting sutras and prostrating oneself three times and nine times. Repeating and devoting oneself to these simple, monotonous and rhythmic actions can cause Altered States of Consciousness (ASC) to be brought about and it makes a practitioner becomes aware of a new way of experiencing.
- (2) Walking Meditation : This is a basic training for learning how to abdominally breathe while performing all actions. In this exercise, a walking action is performed with an abdominal breath taken every half step. Correct abdominal breathing brings about a balancing of the autonomic system.
- (3) Bathing, going to the toilet and fatigue work of temple : Our daily activities are performed automatically and unconsciously. But in Zen monastery, a practitioner's activities are not automatic nor unconscious. He concentrates his attention upon these trifle but immediate daily works and performs thoroughly these works one by one. It could change his way of experiencing or sensing for these activities and make him aware a new meaning for these.
- (4) Having breakfast : Rules of having breakfast are somewhat complicated. Ways of using bowls, chopsticks, small dish-cloths, or eating rice porridge are regulated in detail. Here, I will consider about the process of changes brought about by concentrating his attention on his action and the psychological meanings of them.

Acquiring mastery of these rules is very similar to that of acquiring any techniques in general and follows a sequential procedure. The first stage is to break down rules into smaller components and master them one by one. This is done for the purpose of learning the coordinative of relationship between cognition and behavior. The second stage is to reunite components that had been broken down.

As this process progresses, a practitioner can reach the point where all actions can be performed automatically without conscious attention paid to them. In the third stage, a practitioner's intention to accomplish the rules, and actual accomplishment of them unite completely as one.

This stage is often called **SHUKYAKU-GŌITSU** (unification of subjectivity and objectivity), **MUGA** (selflessness or self-renunciation) or **ZAMMAI** (this word denotes a state in which the mind is free from distraction, is absorbed in intense, purposeless concentration). Concisely stated, in this third stage one's intention disappears and only accomplishment of rules exists. As it can be seen in the examples above, chief characteristic of active Zen is to bring about the new awareness to daily activities through concentrating his attention upon each action and unifying his subjectivity and objectivity by intense absorption.

#### [IV] Static Zen (ZAZEN)

Static Zen (Zazen) essentially does not differ that much from Active Zen in the sense that its goal is to follow the way of Buddha-Way. In daily life, Static Zen is integrated in active Zen. They affect each other, and together they deepens the stage of enlightenment. The mental state attained in Zazen maintains its effect in daily activities.

Zazen consists of an interaction between the following elements : **CHOSHIN** (regulation of body), **CHOSOKU** (regulation of respiration) and **CHOSHIN** (regulation of mind). Following is a brief summary of these elements :

- (a) **CHOSHIN** : Chosin consists of arranging one's posture and controlling one's posture. Having set all relations aside and having put everything to rest, a practitioner sit in either full or half lotus position with eyes open and hands positioned to form the symbol of Cosmic Mudra (**JOIN**). A round cushion is set under the hips, and the back is straight. A right triangle is formed between both knees with the coccyx as the pivotal point, and the center of gravity is placed in the middle of this triangle.
- (b) **CHOSOKU** : Chosoku consists of arranging and controlling one's respiration. In the beginning of this exercise, the practitioner counts his breaths, beginning with one-two-three and so forth. Once accustomed to this, the practitioner then changes to long exhalations and short inhalations. when doing this while seated in a lotus position, the pattern of respiration becomes one of abdominal breathing with the diaphragm working strongly and stomach pressure concurrently rising.
- (c) **CHOSHIN** : Chosin consists of arranging or controlling one's mind through a process consisting of several stages. In the first stage this exercise begins with one's concentration focused upon the respiration. this focusing upon one point is an active attempt to try to exclude all other thoughts from entering the mind. However, paradoxically, doing this focused concentration actually activates the flow of unrealistic mental phenomena. Unrealistic phenomena in this case are defined as images, ideas, thoughts and fantasies that enter the mind. When this occurs, the practitioner should remember that these mental phenomena are unrealistic and the products of undisciplined mind. He should then let them flow through the mind while concentrating upon respiration.

The next stage of Chosin differs considerably from the first one. whereas in the first stage, one is encouraged to concentrate on one

object and exclude the other objects, in the second stage the practitioner is encouraged to concentrate evenly on everything that comes to mind, including physical sensations, images, ideas, thoughts and fantasies. That is to say, One has to pay attention to this very moment, the totality of what is happening right now. This state of attention can be referred to as meditation or mindfulness. As this state continues, various unrealistic mental phenomena appear for a moment, and then disappear the next.

In the final stage of Chosin the practitioner's self-consciousness as the one who sees disappear, and is replaced with the sense that the one who sees has been united with the one who is seen. Stated differently, **MU** (non-attachment beyond being and non-being) and **KU** (non-substance). This state of mind and body is called **HISHIRYOU** (to think beyond thinking and non-thinking) or **SHINJINNDATSURAKU** (state which body and mind has dropped out).

### [ V ] Physiological Studies on Zazen

The effects on body and mind of the full lotus position have not yet been fully clarified, however some effects are known. Results using a gravity meter show that although a minor amount of pitching and rolling can be seen when a well trained monk starts zazen, this motion ceases as time passes. However, when beginners practice zazen this stabilization does not take place (Ikegami, 1974). This contrast in stability between well-trained monks and beginners demonstrates that the full lotus position provides the best condition for the former. In addition, tests conducted on muscles using EMG have found that in the full lotus position muscle have just the right amount of tension, they operate more efficiently, and over time receive a beneficial tonic effect (Nakamura, T., 1975).

Sugi & Akutsu (1964), Ando (1978), Nagashima (1977) have all studied respiration during the practice of Zazen. According to their studies, as seen in table (1), rate of respiration and I/E ratio

Table 1 Respiration During Zazen

Respiratory Rate	↓ →
Ventilation Volume of one respiration	↑
Amount of ventilation of per minute	↓ 20% Decrease
O <sub>2</sub> Consumption	↓ 20-30% Decrease
Amount of Metabolism	↓ 80-85 % of Basal Metabolism
Respiration Pattern (I/E)	↓ Prolonged Expiration
Movement of Diaphragm	↑
Abdominal Pressure	↑
R. Q. (CO <sub>2</sub> /O <sub>2</sub> )	→

increase ↑      decrease ↓      stable →

decrease and breathing becomes done abdominally. In addition, the amount of air taken per breath increases while the amount of ventilation per minute decrease. Finally, oxygen consumption, and the rate of metabolism decrease.

Table (2) shows measurement of brain waves and the autonomic nervous system taken during Zazen. In Hirai's study (1960), and Kasamatsu and Hirai's study (1969) (1984), a series of level of deepening into meditation phenomena such as appearance of  $\alpha$  waves (stage I), increase in its amplitude (stage II), slowing down in its frequency (stage III), appearance of rhythmical  $\theta$  train (stage IV) were seen in monks with over twenty years of practice, although their eyes remain opened. Results of their study also show phenomena like dehabituation of  $\alpha$ -blocking, some increase in rate of heartbeats and activation of spontaneous GSR. Usually,  $\alpha$  waves appear when people have their eyes closed. However, as for monks, although they have their eyes opened, their  $\alpha$  waves appear and increase in their amplitude, and slow down in their frequency. This indicates that their levels of arousal are getting lower. But at the same time, the



Table 2 Brain Wave and Autonomic Nervous System During Zazen

	Hirai	Yamaoka	Hagino, et al.
Technique	Zazen	Zazen	Zazen
Appearance of $\alpha$ wave	+	+	+
Amplitude of $\alpha$ wave	↑	↑	↑
Frequency of $\alpha$ wave	↓	↓	↓
Appearance of $\theta$ wave	+	-	-
$\alpha$ Blocking to Stimuli	+	+	+
Dehabituation to Stimuli	+	?	?
Heart Rate	↑	↑	↑
Amplitude of Plethysmogram	?	+	+
Skin Potential Response (SPR)	↑	?	?
Skin Potential Level (SPL)	?	shift to positive	shift to positive

be recognized the existence            +            increase    ↑  
 don't be recognized the existence    -            decrease    ↓

rate of their heartbeats increase a little and spontaneous GSR activate, which shows that the autonomic nervous system is rather active. In other words, it is a very peculiar state of sympathetic nerves effective while parasympathetic nerves are dominant. This, according to Hirai (1960), is a state in which the level of excitation of the cerebral cortex lowers and at the same time, functions of brain stems are rising as release phenomenon.

Also, another characteristic of brain waves during Zazen is "dehabituation" of  $\alpha$ -blocking. The  $\alpha$ -Blocking is the turning of  $\alpha$  waves into  $\beta$  waves with the repression from sound stimulus while  $\alpha$  wave appearing. However, if the stimuli are presented repeatedly, it becomes habitulized and the  $\alpha$ -blocking will not occur. This phenomenon of habituation could be seen to laymen during Zazen practice but it would not occur to well-trained monks. They could

hear every clicks clearly. This is referred to as “dehabituation”.

Kasamatsu and Hirai (1984) stated “in Zen meditation, the slowing of the EEG pattern is confirmed on one hand and the dehabituation of the  $\alpha$ -blocking on the other. These indicate the specific change of consciousness”.

These are not just a state of body and mind in relaxation. I think, it is rather a well balanced state of body and mind accompanied by tension within relaxation and fulfillment.

These are brought about by, as mentioned before, open eyes, suitable tension of muscle to keep the posture, long expiration, and concentration on respiration and their effects on each other.

I think, various psychotherapeutic effects could be produced in this state of body and mind. For example, Ikemi (1975) observed that “essential role of autogenic self-control method like Zazen, Yoga, AT and TM is to invigorate inborn homeostasis and the function of self-control by leading specific psycho-physiological state”, and Shapiro (1980) also observed that “the person is in a relaxed, comfortable, and physically stable posture, he is able to self-observe with equanimity everything that comes into awareness : fears, thoughts, fantasies, guilts, decisions and other covert events (global desensitization)”.

Recently, studies of Yamaoka (1988) or Hagino et al. (1987) (1989) (Table 2) indicated negative outlooks toward Hirai’s statement ; the slowing down to the  $\theta$  train (stage IV) in frequency of brain wave. Moreover, Taniguchi (1992) stated that “questions concerning the early studies, such as intra-subject variations, inter-subject variations and longtermed alterations were raised not only in Japan but in other countries”.

These are the problems to be solved hereafter.

## [VI] Zen and Health

SATORI in Zen is a kind of personality changes. It is brought about by mutual interaction of Active Zen (daily activities) and

Static Zen (Zazen, in other words, regulation of body, regulation of respiration and regulation of mind). In other words, It is brought about by daily every activities including Zazen. As it has been mentioned before the mental states in **SATORI** are expressed as “**SHUKYAKU - GOITSU**”, “**MUGA**”, “**ZAMMAI**”, etc.. But the personality changes will not occur with just these kind of experiences alone. Such kind of experiences of **SATORI** would affect his cognition and cognitive pattern and they lead him to look at things from new angles. Here, the personality changes refer to the changes of one’s cognition. Then what kind of changes in cognition are brought about by these experiences in **SATORI**. Detailed explanation will be given afterwards, but it seems that these changes can be summarized down to the following 2 points.

- (1) It enables a person to face and observe the reality and accept it as it is.
- (2) One would stop having an ego-centric point of view and start seeing things from altruistic point of view, or would have a wider point of view.

Then, what kind of changes do Zen practices cause to one’s personalities and one’s actions.

- (1) Changes in real life are seen.
  - (a) Inner resource to live every second with all one’s energy occurs.
  - (b) One comes to be able to accept the reality as it is. Tendency to escape or avoid difficult situations decreases.
  - (c) Feelings of fulfillment and vigor appear.
- (2) Anxiety or fear decreases.

Emotions are released and desensitizations arise in state of dynamic equilibrium in Zazen.
- (3) Performing daily acts based on abdominal respirations becomes a habit.
  - (a) Performing physical functions are activated by abdominal respirations.

- (b) Balances in autonomic nervous systems is recovered.
  - (c) Function of internal organs is strengthened.
  - (d) Tolerance against stress is reinforced.
- (4) One is released from attachment of the self.

A person's energy can all be used in actions in reality in state of **MUGA** (selflessness). For example, it is seen in athletic technique, artistic expressions, the perfection of behavior of **NO** (classical Japanese dance drama) or **SADO** (tea ceremony).

- (5) Ego-centric point of view is ceased.
- (a) Seeing things from other people's, or with wider point of view becomes possible.
  - (b) Creative ideas will not be restricted by a rigid frame of thinking.

## SUMMARY

In this treatise, I considered about the relationship between Zen practice and self-control.

Zen practice consists of the interaction between the Activ Zen (concentrating of one's attention upon individual actions in daily life) and Static Zen (Zazen : regulation of body, regulation of respiration and regulation of mind).

SATORI is an intuitive awareness which is brought through changes of the way of experiencing and accumulation of these changes. A state in SATORI is psychophysically very peculiar.

It's rather a well balanced state of body and mind accompanied by attention within relaxation and fulfillment than just a state with body and mind in relaxation. SATORI would influence one's cognitive structure and could be possible for one to look at oneself and one's world from new angle.

These changes of the way of looking at things can be summarized down to the following 2 points.

- (1) It will be possible for person to face and observe the reality

and accept it as it is.

- (2) One will stop having an ego-centric point of view and will start seeing things from altruistic point of view or will have a wider point of view.

## REFERENCES

- Ando, S. (1977). A psychological study on the effects of breath regulation to mental self-control. *Bulletin of the Zen Institute of Komazawa University*, 160-207.
- Hagino, G., Mizuhara, T., Nakamura, S., Shinohara, E., Taniguchi, Y., Chihara, T. (1987). Psychological studies on Meditation (1). *Journal of Faculty of Letters, Komazawa University*, 45, 173-251.
- Hagino, G., Mizuhara, T., Nakamura, S., Shinohara, E., Taniguchi, Y., Chihara, T. (1989). Psychological studies on Meditation (2). *Journal of Faculty of Letters, Komazawa University*, 47, 74-96.
- Hirai, T. (1960). Electroencephalographic study on the Zen Meditation (ZAZEN)-EEG changes during the concentrated relaxation-. *Psychiatry and Neurology Japan*, 62, 76-105.
- Ikegami, R. (1974). Psychological study of Zen posture. *Bulletin of the Faculty of Kyushu University*, 1, 156-159.
- Ikemi, Y. (1975). Medical science of self controle. *Religion and Parapsychology*. Vol. 4, 1 - 22. The International Association for Religion and Parapsychology.
- Kasamatsu, A., and Hirai, T. (1969). An electroencephalographic study on the Zen meditation (ZAZEN). *Psychologia*, 12, 205-225.
- Nagashima, C. (1977). The physiological considerations on the relationship among extracellular fluid of cerebral cortex, hypo- or hyperventilation and  $Paco_2$  from

- the viewpoint of ZAZEN. *Bulletin of the Zen Institute of Komazawa University*, 156-159.
- Nakamura, T. (1975). Psychophysiological study on Zazen. *Bulletin of the Faculty of Education of Ryukyu University*, 18, 153-169.
- Shapiro, D. H. (1980). *Meditation : self-regulation strategy and altered state of consciousness*. New york : Aldine Publishing Company.
- Sugi, Y. & Akutsu, K. (1964). On the respiratory change in Zen practice. *Japanese Journal of physiology*. 26, 72-73.
- Taniguchi, Y. (1992). Psychophysiological Consideration on Zen Meditation. *Japanese Psychological Review*, 35, 1, 71-92.
- Yamaoka, K. (1982). A psycho-physiological study on Meditation. A Doctorial Thesis, University of Nihon.
- Yokoi, Y. (1991). *The Japanese-English Zen Buddhist Dictionary*. Tokyo : Sankibo Buddhist Book-store.