AWARENESS and MINDFULNESS: Effects on the Mind, Brain and Body By:

Thích Không Triệt

Sunyata Meditation Center Riverside, CA

March 2016

CONTENTS:

INTRODUCTION

DEFINITION OF AWARENESS and MINDFULNESS

THE DIFFERENT MINDS IN WORDLESS AWARENESS AND MINDFULNESS

ASPECTS OF KNOWING in WORDLESS AWARENESS and MINDFULNESS

MEDITATION in WORDLESS AWARENESS and MINDFULNESS

THE PRACTICE OF WORDLESS AWARENESS AND MINDFULNESS

OUTCOMES OF DIFFERENT MEDITATION PRACTICES(Mind, Brain and Body)

SUMMARY

SUGGESTED READINGS AND SOURCES

INTRODUCTION

This paper is in response to a request by Zen Master Thích Thông Triệt (TTT) that the author prepare a paper describing the differences between Awareness and Mindfulness meditation and their effects on the mind, brain and body. Many of the definitions of terms and concepts, processes and techniques are taken from Master TTT's writings and teachings (See suggested reading section).

The purpose of this paper is to discuss the differences between the two concepts of awareness and mindfulness in terms of their relationship to the mind, the brain and the body. As Master TTT has explained in many of his writings, the Buddha's teaching or Buddhadharma is primarily about the mind...however Master TTT has also shown in his studies how important the mind is to our brain and physical body and to our wellbeing.

DEFINITION OF AWARENESS AND MINDFULNESS

Mindfulness has become a worldwide term. It has been used by some Buddhists, as a method of improving spirituality, as well as those following other religions and researchers and commercial enterprises to promote mental and physical health as well as conducting research that shows the way in which health and wellbeing is affected. Awareness is often used synonymously with mindfulness. However, it will become apparent in the following discussion that their meanings and approaches are quite different. Thus, it is appropriate to clarify how Awareness compares to Mindfulness.

Definition of Awareness

There are different definitions of awareness, it is the state of knowing, knowing what is present and what is happening in the present moment (here and now). We receive sensory input but we don't think or analyze or discriminate or otherwise process it in our conscious, thinking mind. When we see, we just see; when we hear, we just hear, etc. as is described in the Bahiya Sutra. Awareness does not include alertness or concentration or focus on an object. Bare awareness and bare mindfulness are similar in that there is just perception of or knowing about one's surroundings (not focused on an object) without any thinking or talking about it. The first level of verbal awareness starts with us, where we are, in this mundane world, and then it allows us to open the door to transcendence from our worldly mind to realize our Holy mind. Verbal awareness can include some verbalization (talking or thinking) about what is going on in one's sensory perceptions. Non-verbal or wordless awareness is being aware without thinking or talking about it. The third aspect of knowing is the <u>wordless awareness mind</u> that is our essence or true nature. It is also called the Holy mind. As Master TTT describes, it *"enables us to have a continuous knowledge of what is happening in the environment and inside the body. It is a continuous, permanent,*

uninterrupted knowledge that is always active whether or not there are information or objects to be processed. Wordless awareness is the knowledge that is silent, non-verbal, without differentiation, without choice. Despite being choiceless, it has an innate analytical and intuitive faculty that allows us, when we come into contact with objects, to gain an immediate and clear appreciation of them while not being attached to them. Therefore, if an object is attractive, the wordless awareness mind does not get seduced. If the object betrays or humiliates the self, it stays calm and unaffected. It is our knowing nature referred to as the Buddhita or Buddha nature. It functions in the left rear area of the brain.

The wordless awareness mind has three functions associated with the innate senses of ultimate seeing, ultimate hearing, ultimate touch and ultimate Cognition. As Master TTT describes:

"The knowledge gained through wordless awareness is instantaneous, it occurs at the first unit of time when the senses come into contact with the object before any words have arisen in the mind. This knowledge is clear, complete and insightful but does not involve differentiation, comparison, praise or blame, like or dislike nor any other emotions. Knowledge by the wordless awareness mind is objective. The wordless awareness mind sees the object exactly as it is while the mind is totally at peace, untroubled. This is why it is also called the here-and-now mind."

The wordless awareness mind is innate. It is the potential for enlightenment that all humans possess and allows us to acquire knowledge that does not need to be learned, experienced or created. The Buddha called it the 'unborn.' Each of us has a wordless awareness mind but for most of us it is dormant because it has not been awakened to replace the thinking mind and consciousness.

Wordless Awareness meditation has "Suchness" or the "unborn" as an object. Samadhi meditation in combination with Panna meditation has several levels ultimately leading to Suchness. (See illustration below)

Definition of Mindfulness

Some of the entries in Wikipedia follow: "Mindfulness is a term to describe a modern movement utilized by businesses and researchers to promote well-being, and health as well as improve employee effectiveness. Mindfulness involves being 'aware' moment-to-moment, of one's subjective conscious experience from a first-person perspective. The term "mindfulness" is derived from the Pali term sati which is an essential element of Buddhist practice, including vipassana, satipațțhāna and anapanasati".

"[sati] should be understood as what allows awareness of the full range and extent of dhammas; sati is an awareness of things in relation to things, and hence an awareness of their relative value. Applied to the satipațțhānas, presumably what this means is that sati is what causes the practitioner of yoga to "remember" that any feeling he may experience exists in relation to a whole variety or world of feelings that may be skillful or unskillful, with faults or faultless, relatively inferior or refined, dark or pure."

"sati is literally 'memory' but is used with reference to the constantly repeated phrase 'mindful and thoughtful' (sato sampajâno); and means that activity of mind and constant presence of mind which is one of the duties most frequently inculcated on the good Buddhist."

"Formal mindfulness, or meditation, is the practice of sustaining attention on body, breath or sensations, or whatever arises in each moment. Informal mindfulness is the application of mindful attention in everyday life."

Thus, Mindfulness employs the conscious, thinking aspects of one's mind, or the worldly mind. In addition, it should be noted that the practice of Mindfulness meditation involves concentration on a mental or physical object. It involves alertness and focus on an object, thus, it follows or is attached to that object. With alertness and concentration and with the thoughtful mind one can arrive at worldly insight as to the changeable, illusory nature of worldly existence as well as the ubiquity of suffering or dissatisfaction.

The following illustration shows the differences, discussed above, between Wordless Awareness and Mindfulness and their effect on the brain and body. A more detailed discussion of their effect on the brain and body is found in the section by that name near the end of this paper (see table of contents).



THE DIFFERENT MINDS IN WORDLESS AWARENESS AND MINDFULNESS

This section of the paper will discuss how the Worldly (False) Mind and the Holy Mind (Wordless Awareness and Cognitive Awareness Minds) relate to Mindfulness.

Awareness is seen by some as similar if not the same as mindfulness. Especially when considering bare awareness and bare mindfulness where one just observes or notices ones' perceptions, i.e. seeing, hearing, feelings and such, but doesn't label or name them or think about them. In the teachings of Master TTT, the level of awareness that allows us to begin our journey of entering into the Holy mind is what is termed verbal awareness, where one can speak or think a command to 'not talk'...thus initiating a process of non-thinking awareness that opens us to the innate natures of seeing, hearing and touching in the mind. These can be called ultimate hearing, ultimate seeing and ultimate touch that transcend the worldly sensory input from the eyes, ears, nose, tongue and skin. Thus, we can experience, as the Buddha says, when we see we just see, when we hear we just hear and when we touch we just touch...we experience the sensory input, but don't think or judge or discriminate with our worldly mind. We experience the sensory input just as it is. This is called wordless awareness. We can then send our 'don't talk' signal to our ultimate cognition that will store it and allow us to close our sensory doors further so that even the sensory input stops and we experience <u>awakening awareness</u>, where we begin to <u>awaken</u> to our 'no-self' nature or Buddha nature and to our potential for enlightenment. This is called Cognition Awareness. After we have awakened to our Buddha Nature or Buddhita we will experience <u>Spiritual Wisdom</u>. Wisdom is spiritual knowledge that is spontaneous and unlearned. This is unlike worldly knowledge that we acquire by thinking and reasoning in our worldly mind. This knowledge transcends thought and comes to us intuitively, stimulating creativity and the ability to speak or write without prior preparation or thinking about what we are going to say or write. Spiritual Wisdom also stimulates compassion, loving kindness, and equanimity as a result of purifying our mind of its defilements, and karma. It also ushers us into the formless realm of "no self", or Suchness.

Mindfulness or Sati originally meant memory, and many scholars believe it means our ability to observe and remember our experiences in our phenomenal world. Today many people believe that mindfulness employs concentration or alert attention on a single object of sensory input, the object could be our breathing, our seeing, hearing or feeling input so that we can gain insight or understanding which will teach us about impermanence, suffering and self in this life. Thus, mindfulness is centered in our worldly mind and with this concentrated focus we eventually realize the illusory nature of our worldly existence. Some believe that bare mindfulness when it just observes (notices) worldly phenomena is the same as bare awareness. Some disagree, saying that mindfulness includes observation of phenomena as well as some thinking about it, evaluation, assessment, comparison, etc. that will lead us to insight into the worldly situation we find: suffering, impermanence and false self. Mindfulness, as we will see in the following discussion, does not lead us to the Holy Mind that includes entry into our transcendental natures of hearing, seeing, touching or cognition. It does not lead us to our Buddhita or Buddha Mind as does Wordless Awareness.

While the Worldly or False Mind is different than the transcendental Holy Mind, there are important ways in which they interact. Each mind has a different purpose, yet, while we reside in this physical world we require a worldly mind to adequately function in our formative, mundane world. We need to be able to not only receive sensory input but we need to assess or evaluate it in order to decide what to do. We need to survive and to do so we need to discriminate things in our world that are harmful and things that are helpful to us. We need to procreate, thus we need to have a drive that permits us to have children and families. We need to raise our families so we need to find shelter and food and clothing which require our sensory input, thinking, and doing, we need to think and have an intellect that can reason in order to acquire and accumulate knowledge that will help us build our physical and intellectual structures and technology, etc. We must remember, however, that our mundane world is mind-created, it is constantly changing and illusory.

The following illustration shows the location in the prefrontal area of both hemispheres of the brain where the worldly mind operates and the right rear area (gnostic area) where the wordless awareness or Holy mind operates.



BRAIN: LEFT PRE-FRONTAL CORTEX: THINKING (WORLDLY)MIND AREA, AND THE GNOSTIC (HOLY MIND) AREA, LEFT REAR

Suffering comes to us through our senses and worldly mind. We need to have the experience of being bound by our wants and desires, our satisfactions and dissatisfaction, our joy and sadness to help us understand suffering and also that the world we live in is constantly changing and in fact illusory...it is mind created. When we realize this, we can begin our spiritual journey home.

The following illustration shows the location of the different ultimate areas: hearing, seeing, touching and cognition in the brain where they operate in the Gnostic area in the rear of the left hemisphere.



ASPECTS OF KNOWING in WORDLESS AWARENESS and MINDFULNESS

Knowing as defined by Master TTT is:

"According to common knowledge, we 'know' through our thoughts, judgment, reasoning, differentiating and distinguishing. This knowledge uses two functions that we call the thinking mind and consciousness. The thinking mind and consciousness constitute the mind of the ordinary people that often leads to suffering. But every person has also another faculty, the knowing of the wordless awareness mind. The wordless awareness mind is the essence of what it is to be human, it is the innate faculty for knowing, is not learned, is continuously activated and is objective (unattached). The wordless awareness mind is called the holy mind in Buddhism. To live with the wordless awareness mind is to be free from suffering and foster our spiritual wisdom."

The following discussion will summarize Master TTT's teaching on the three aspects of knowing and how they relate to mindfulness and awareness.

The <u>Thinking Mind</u> is where we think, reason, argue and infer. This is where we learn and is the origin of much of our personality. This mind acts in the left front part of our brain. Only humans, and perhaps to a lesser extent some members of the animal kingdom, have the ability to think. Thinking is primarily about past experience (long term and short term memory) where we analyze, visualize, judge and compare and learn from past experience. This is where our busy mind originates and causes us both joy and sadness, pride and regret, as well as greed, jealousy and anger. This thinking mind allows us to reason and to imagine and predict the future (called the intellectual aspect of the thinking mind). The thinking mind is associated with language and inner self-talk and is the source of much of our constant mental activity. This mental activity is what is attended to in some types of mindfulness. It is what allows the practitioner to acquire insight into 'what is' i.e. suffering, impermanence, self. The thinking mind is also connected to our previous lifetimes and becomes the basis of our egotistic self in this life.

<u>Consciousness</u> is the aspect of mind that is oriented toward the present and functions to identify objects when they come into contact with the senses and is the seat of knowing by differentiation (dualistic knowing). Consciousness requires an object and it differentiates and compares qualities of the object in order to know it. Once our sense organs come into contact with an object (sensation), they communicate with our consciousness faculty that compares and differentiates the object in order for our mind to know what it is. Then our consciousness can then send this information to our thinking mind so that we can recall past experience with that object or we can decide if any action needs to be taken or if we just put the knowledge into our memory for later recall. This aspect of mind combined with our thinking mind comprises what is termed the ego, that is based on dualistic comparison in order to determine if the sensory input, for instance, is a threat or not to our 'self,' so that karmic action can be taken.

In Mindfulness meditation the breathing technique is where we are conscious of our breath in each moment and we observe the breath as we inhale and exhale, without thinking about anything else. This involves being attached to the object of concentration. In the counting technique where we count the number of times we breathe in and out or we tell ourselves 'I am breathing in.' or 'I am breathing out." this involves some thought. Also, some types of Mindfulness involve not only concentration on our breath, but being alert to other sensory stimuli and or thoughts as they arise and dissipate in our mind as we meditate. These experiences may allow us to contemplate the impermanence of worldly existence, the suffering we experience in this world and the concept of no-self.

Thus, <u>Mindfulness meditation practice</u> is primarily concerned with consciousness, thinking of our <u>worldly mind</u>. While these aspects of mind help the practitioner to achieve some insight into worldly reality, they are also those aspects that create suffering, are

impermanent and the source of our notion of who we are (self) and of attachment to worldly phenomena and as a result create intention, thinking and action karma.

The third aspect of knowing is the <u>wordless awareness mind</u> that is our essence or true nature. It is also called the Holy mind. As Master TTT describes, it *"enables us to have a continuous knowledge of what is happening in the environment and inside the body. It is a continuous, permanent, uninterrupted knowledge that is always active whether or not there are information or objects to be processed. Wordless awareness is the knowledge that is silent, non-verbal, without differentiation, without choice. Despite being choiceless, it has an innate analytical and intuitive faculty that allows us, when we come into contact with objects, to gain an immediate and clear appreciation of them while not being attached to them. Therefore, if an object is attractive, the wordless awareness mind does not get seduced. If the object betrays or humiliates the self, it stays calm and unaffected. It is our knowing nature referred to as the Buddhita or Buddha nature. It functions in the left rear area of the brain.*

The wordless awareness mind has three functions associated with the innate senses of ultimate seeing, ultimate hearing and ultimate touch and ultimate Cognition. As Master TTT describes:

"The knowledge gained through wordless awareness is instantaneous, it occurs at the first unit of time when the senses come into contact with the object before any words have arisen in the mind. This knowledge is clear, complete and insightful but does not involve differentiation, comparison, praise or blame, like or dislike nor any other emotions. Knowledge by the wordless awareness mind is objective. The wordless awareness mind sees the object exactly as it is while the mind is totally at peace, untroubled. This is why it is also called the here-and-now mind."

The wordless awareness mind is innate. It is the <u>potential for enlightenment</u> that all humans possess and allows us to acquire knowledge that does not need to be learned, experienced or created. The Buddha called it the 'unborn.' Each of us has a wordless awareness mind but for most of us it is dormant because it has not been awakened to replace the thinking mind and consciousness.

The practice of <u>Wordless Awareness meditation</u> has four stages in which the practitioner moves from verbal awareness, and progresses to non-verbal or wordless awareness leading to awakening wordless awareness that awakens the natures of ultimate hearing, ultimate seeing, ultimate touch and ultimate cognition. The highest level of wordless awareness is that which results in the arising of <u>spiritual wisdom</u> that results in the release from our illusory self and our karmic cycle of births and rebirths, and awakens us to our Buddha nature or Buddhita.

Our Conscious and Thinking minds lie within the mundane world and are subject to sensory input from the world around us. They produce knowledge based on stimuli we receive from our five senses and processed by our mind through discrimination,

comparison, judgment and dualistic thinking, whether it is good or bad, more or less, etc. and deciding what to do; whether to say something or do something that will create some karmic result. Thus, knowledge obtained from these minds and our egotistic self are the source of our suffering in this world, as well as the suffering we inherit from previous lifetimes. The knowledge we learn from these sources is ultimately unreal or illusory, and constantly changing. Our sense of who we are (self) derived from this kind of knowing is also unfounded and unreal and is therefore called 'empty.'

The Wordless Awareness Mind "lies outside the realm of knowledge by differentiation of the consciousness, knowledge by reasoning of the intellect or knowledge by thinking of the thinking mind."

Thus, knowing from the consciousness and thinking mind are part of our worldly (false) mind, which creates an impermanent, illusory world, and creates suffering and karma for us. The knowing arising from the wordless awareness mind provides knowledge that is clear, complete and insightful. It does not provide dualistic thinking or emotions, it is objective without defilements. The wordless awareness mind sees objects as they are, "here and now," without any judgment, comparison, or attachment. It is untroubled and at peace. It provides knowledge that is permanent and unchanging that we all possess but for most humans remains dormant.

MEDITATION in WORDLESS AWARENESS and MINDFULNESS

In this section, we will discuss several methods of meditation, including four methods as taught by Buddha. During his teaching of the dhamma, Buddha adapted his teaching to be appropriate for the spiritual level of his audience. This section will discuss meditation practices: anupassanā meditation, samatha meditation, samādhi meditation, and paññā meditation, as discussed by Master TTT. Also we will discuss mindfulness and vipassanā meditation. These methods will be discussed in terms of their purpose and techniques and how they are related to Mindfulness and to Wordless Awareness.

<u>Mindfulness Meditation</u> is concentration on one object, such as breathing. During this focused attention on the object, thoughts may arise in the mind if the practitioner's degree of concentration is not adequately focused. It involves the consciousness portion of the mind that processes sensations received from our sense organs, and is present oriented, and not oriented in the past or future.

Master TTT describes that concentration does in terms of knowing. "Only knowing" means knowing only the task that we are performing and not letting the mind wander to other thoughts. "Only knowing" requires paying attention, it requires an effort to stay focused on the task and, therefore, it involves the will to achieve and the ego."

The purpose of concentration on one object is to quiet the mind by "curing" the thought process, although not getting rid of it entirely. Mindfulness is concerned with the worldly mind. Focused attention to an object involves consciousness and attachment to that object, whatever it is. Mindfulness can be practiced while sitting, walking, standing and in one's daily activities, such as eating, working, etc. It is simply paying attention to what one is doing in the present and not have one's mind cluttered with extraneous thoughts or feelings. It can even involve verbalizing what one is concentrating on, such as counting one's breaths, or naming an object or describing what is seen, heard or felt. If one has bare mindfulness, one just observes an object without verbalization. This would be similar to bare awareness.

<u>Vipassanā-meditation</u> is described in Wikipedia as including four foundations of mindfulness (satipatthana) or "*mindfulness of breathing (anapanasati)*". It means to become aware of the impermance of everything. It leads to insight into the true nature of worldly phenomena, as it is. Theravada Buddhism says that insight includes worldly knowledge of impermanence, suffering and dependent origination of all phenomena including the self. Thus, all phenomena are empty. This is mentioned in the Sutta Pitaka. Theravada believes that samatha pacifies and strengthens the mind that leads to vipassanā which in turn leads to insight about worldly phenomena (dependent origination, change, suffering and self). Thus vipassanā involves knowing through conscious awareness of objects through concentration that produces a focused, non-wandering mind. Unlike mindfulness, discussed previously, vipassanā also employs wordless awareness that leads to a (pure) mind and ultimately leads to insight wisdom and Nirvana.

Anupassanā Meditation, as described by Master TTT, that:

"...anupassanā means looking continuously at worldly phenomena to recognize their true nature."

"When the Buddha was enlightened, he recognized that the true nature of worldly phenomena consists of suchness, illusion, emptiness, change and transformation and specific conditionality. He also recognized the Three Characteristics of Worldly Phenomena: impermanence, suffering, and no-self. When we study the Buddha's teachings, reflect on them, observe the world around us to reconcile with them and practice them in our daily life, we are practicing anupassanā meditation. In this practice, we use our consciousness to listen, understand and differentiate right from wrong; we use our thinking Mind to reflect; we use our intellect to reason and predict. Therefore, anupassanā meditation still uses language and the pre-frontal cortex."

"However, the Buddha's teachings have started to change our perspective of life and our intellect has awakened to spirituality. Our mind has started to become objective and quiet, and we have started to recognize our true nature and that of worldly phenomena. This is why the Buddha has said that, at this stage, we have "entered the holy stream". Thus, Anupassanā meditation is different from what is practiced in Mindfulness meditation and Vipassanā meditation. Anupassanā meditation, however, like mindfulness and the beginning level of vipassanā, does involve the consciousness, thinking and reasoning of our worldly mind, and does quiet our mind and helps us acquire insight into our worldly situation, that it is illusory, constantly changing, and realization that we are attached to this world through our senses and that our worldly self is unreal. These are the beginning steps of our spiritual journey.

Samatha Meditation

Samatha meditation takes us a step further along in our spiritual journey in that it brings us to the threshold of the Holy mind by employing wordless awareness. Master TTT describes samatha meditation as follows:

"In Pāli (and Sanskrit), samatha means "serenity", "tranquility", "calmness", "quietness of heart". Samatha is often used together with bhāvanā which means "practice". Therefore, samatha bhāvanā means the practical techniques to achieve a quiet, silent, serene mind."

"When the state of serenity and quietness is still unsteady and does not last long, we call it samatha meditation. When it is solid, stable and long-lasting, we call it samādhi meditation."

Master TTT also points out that samatha meditation involves "just knowing" that occurs when the senses first come in contact with an object. This is wordless awareness knowing.

"It is also the Right Awareness of the Noble Eightfold Path: "awareness without differentiation", "awareness without the mind being agitated, disordered", "awareness with the mind getting attached to the objects of the six senses", or "awareness while the mind does not think good or evil".

It is not the same as "only knowing," described previously in the discussion on mindfulness, as knowing only the task that we are performing and not letting the mind wander, as in mindfulness.

Samātha meditation can be applied to sitting, as well as walking, lying, standing and all of our daily activities. Since it is wordless and does not involve the worldly mind, we are able to avoid attachment to the six senses since there is no sensory object(s) involved. We live constantly in the "here and now".

Samādhi Meditation

Master TTT discusses what is meant by samādhi.

"There are several Pāli and Sanskrit words describing Buddhist and non-Buddhist meditation practices to attain stillness and stability of the mind that coalesce into one Chinese/Vietnamese word: "Định". We will use the word samādhi throughout this text. The Buddha, at times, defines the state of samādhi as the "pure mind" (P: cetaso-ekodibhāva, V: Tâm Thuần Nhất), meaning "the mind that contains only itself, does not have anything else in it". Elder Moggaliputta Tissa who presided over the Third Buddhist Council sponsored by King Ashoka in the third century BC defined samādhi as the "onepointed-mind" (P: Citta-Ekagattā, V: Nhất Tâm). This led to some translations of samādhi as "concentration" or "mindfulness". These translations are not consistent with how Zen Master Thích Thông Triệt views samādhi. Master Thích Thông Triệt defines samādhi simply as wordless awareness. It does not involve paying attention, or concentrating on an object. Consequently, when we practice samādhi meditation, our mind is totally relaxed."

There are four levels or stages of samādhi: preliminary samādhi; samādhi without inner talk and inner dialogue; letting go of elation, dwelling in equanimity, attaining full and clear awareness, and; immobility samādhi.

The Buddha attained the first stage by sitting in meditation and saying silently, "*I know I am breathing in, I know I am breathing out.*" The focus of this stage is *"awareness with inner talk",* or "single thought of awareness." This shuts down the habit of inner verbal chatter of the thinking mind, intellect, and consciousness. This stage silences the false mind.

The second stage maintains a clear awareness of the breath coming in and going out, whether is long, short, deep or shallow, without any words, a silent awareness. Master TTT describes it: "His (Buddha's) mind became clear, still and very aware of all sensations from his body. A feeling of joy and elation enveloped his whole body, but, as he recounted, "pleasant feelings arose and remain in me, but they did not influence me". When we are in a state of samādhi without inner talk and inner dialogue, the feeling of peace comes from our wordless awareness mind, which generates an uninterrupted flow of wordless awareness. Inside the mind, the language formation process becomes completely silent. What remains is a wordless "single thought of awareness" which is an uninterrupted and steady flow of wordless awareness."

Master TTT describes the third stage: "The Buddha's mind was no longer attached to the feeling of joy and pleasure, although this feeling still existed. He dwelt in a state of equanimity as his mind was no longer attached to any objects. He attained "full and clear awareness", i.e. he had a clear and complete awareness of the internal and external worlds without the mind being affected. At that point, not only the language formation process but also the thought formation process became silent. This was caused by the feelings and sensations and perception aggregates becoming silent. His mind was tranquil and detached. At that stage, his awareness took the quality of awakening wordless awareness." This is the stage at which the practitioner realizes their Buddha Nature or Buddhita or potential for enlightenment.

Master TTT describes the fourth stage: "The Buddha's mind stayed deep in stillness without any interaction with objects. The energy of his wordless cognitive awareness shone through. The body process became silent, in addition to the language formation process that already reached that state in the second stage and the thought formation process in the third stage." "At that point, the

differentiation between the subject who is aware and the object of awareness no longer exists. What remains is a flow of cognitive wordless awareness, real and steady. The ego (and self) totally fades away. In this state, new and prodigious energies and discoveries progressively emerged in the clear and pure mind of the Buddha." The Buddha Mind is known as the Buddhata, the awakened or enlightened mind.

Pañña meditation

Master TTT describes some of the characteristics and outcomes of Pañña Wisdom:

"Paññā Wisdom refers to the highest form of wisdom. People have the ability to attain Paññā Wisdom through specific practice methods that go beyond the realm of reflection or contemplation. Paññā Wisdom is wisdom that springs spontaneously; it does not come from learning but is novel, creative, intuitive. It also generates benevolence, compassion, empathetic joy, equanimity and eloquence. People are capable of achieving Paññā Wisdom by meditating on themes that go beyond logical reasoning and using wordless awareness, by internalizing transcendental topics such as Suchness, Emptiness and Illusion. Paññā Wisdom is also considered as the Buddha mind completely cleansed of all mental defilements."

Master TTT describes Pañña meditation and samādhi and paññā meditation practiced together:

"Pañña meditation technique for beginners is the "Not Labeling Objects" technique. When we look at someone, our perspective about this person is often distorted by our subjectivity, biases, fixed opinions, prejudices, self-interest and egotistical desires. When we look at a person without labeling, we look at him/her objectively just as he/she currently is. In this way, we are not affected by emotions, do not like or dislike, or feel sad, anxious, fearful or angry. We are not attached to the object and our mind is serene and at peace." "When we practice samādhi meditation together with paññā meditation, we activate our potential for enlightenment and realizations of things that we have never known before suddenly occur to us. This potential for enlightenment is an innate capacity of every human being. When our wordless cognitive awareness stays steady over long periods of time, spontaneous wisdom or paññā wisdom bursts forth."

We must keep in mind, that the Buddha taught a variety of people during his ministry and he adapted his teachings to their spiritual level, thus he taught the appropriate method of meditation to each audience he addressed. The different methods of meditation allow practitioners to adapt their meditation practice as they progress along their spiritual path, in order that they can reach their ultimate goal of nirvana, deliverance, awakening or enlightenment.

THE PRACTICE OF WORDLESS AWARENESS AND MINDFULNESS

Practice means the use and application of what we know. Whether we realize it or not, we constantly practice...we apply our worldly knowledge to manage our family to pursue our career, to perfect our talents and to overcome our weaknesses. In Buddhism, practice is essential. Buddha constantly reminded his followers to practice his Dharma teachings assiduously because they are responsible for their own deliverance from suffering and they can also assist others in their deliverance. Practice is essential to purify our minds and to have full realization and release from suffering, karma and the cycle of birth and death.

Mindfulness, if followed, will help us realize the impermanence of this world, suffering, the cause of and release from suffering, and the emptiness of self. The 'following the breath' technique of meditation enables practitioners to focus (concentrate) on one object and to remain present (not thinking about the past or future). It quiets the mind and slows, but doesn't stop, the thought process. Practitioners can also be alert to their sensory input and to recognize it and even in some techniques to assess or evaluate it and to remember it. Thus, mindfulness allows practitioners to achieve a deeper understanding and appreciation of their life and to understand the impermanence, illusory nature of this world and the cause of suffering. They can also understand that the self is an illusion.

Awareness has several levels of practice. As mentioned previously, bare attention or mindfulness is the same as bare awareness, where sensory input is received without thinking about it. Thus the first level of verbal awareness starts with us, where we are, in this mundane world, and then it allows us to open the door to transcendence from this world to realize our Holy mind. The technique developed by Master TTT is called the 'no talk' technique, where initially we say to ourselves 'don't talk.' When we do this repeatedly while sitting, walking, standing in our daily activities, the signal or code 'don't talk' is implanted in our ultimate cognition area memory to be recalled as needed to prevent our mind from engaging in 'false thoughts'. We can progress in our meditation practice to the wordless awareness stage where instead of saying 'don't talk' we think it silently. Eventually 'Don't talk' will be coded in our memory to be recalled simply by 'evoking' or manifesting it so that it is transmitted to our innate sensory areas: ultimate hearing, ultimate seeing and ultimate touch.

When we see, hear or touch something in our world we can order ourselves to manifest or evoke the signal 'don't talk' so that we will not allow the sensory stimuli to be labeled or named, thus <u>preventing</u> us from thinking about it. Once, a stimulus is labeled or named it is transmitted to the consciousness area of our brain to be evaluated, compared, etc. and then to our thinking area to become part of our ongoing thoughts. When we can catch the stimuli <u>before</u> it has a chance to be thought about, then we can access the ultimate or natural hearing, seeing and thinking in our Holy mind. This area stops us from processing the sensory stimuli; we just know it but don't think about it or do anything about it. This process quiets our worldly mind and expands our Holy mind. It prevents us from thinking,

intending or doing anything about the sensory input, thus eliminating the creation of intention, thinking and doing karma. This is the meaning of Right Thought and Right Action that are steps in the Eight fold Noble Path to release us from suffering, as taught by the Buddha. Our minds become 'pure' in the sense that they don't follow old habits of thought, and reactions and memories that bring us much suffering in our present life, i.e. unattached to worldly phenomena. Thus we can rise above thought and move into a transcendental realm of no thought. Then Spiritual Wisdom arises and we can manifest such qualities as: Compassion, Generosity, Loving Kindness, Extra Sensory Perception, Ultimate Knowing, etc. This is why the Holy Mind is called 'no mind,' or the Buddha Mind by some Buddhist masters. This is when the self is dropped and accumulated karma drops, and we cease creating new karma and we escape the cycle of birth and death and rebirth. We enter the formless realm of Suchness that is unchanging, where there is no self, no karma, and no suffering. This level of awareness is called by Master TTT the cognitive wordless awareness which is the highest level of Samadhi. This will be discussed in more detail in the section on methods of practice.

There are several ways in which one acquires knowledge by practicing Mindfulness meditation. A common Mindfulness practice is to concentrate on one object at a time, such as breathing or focusing on one of the senses. It can also involve just noticing as well as thinking about the sensory input. This alertness of sensory input focuses our attention on the present as it unfolds and changes. The practitioner learns about the impermanence of worldly phenomena. Also, one can focus on internal emotions or evaluations of perceived phenomena, thus teaching one about the self and how impermanent it is. One can also contemplate sensory input as well as internal emotions and thoughts in order to realize not only how they change but also how unreliable and dependent they are upon the illusory and changing world in which one lives. Thus, one can begin to understand not only that suffering exists but also its cause.

As in Wordless Awareness meditation, Mindfulness meditation can be employed while sitting, walking, standing or engaging in one's daily activities. In the mindfulness practice, one employs both 'noticing' what is going on, but may also involve some thinking about it. The source of suffering is our clinging or attachment to our sensory input and our thoughts and emotions and memories. While one meditates one can quiet one's mind, reducing the number and frequency of thoughts by just watching what is going on, thus relaxing the mind somewhat. However, the concentration of one's attention on an object actually activates rather than relaxes, because of thinking. In terms of knowing, Mindfulness helps us acquire a greater insight into the nature of our worldly experience. It helps us understand more about suffering, caused by our attachment to mind and sensory stimuli. Contemplation and thinking and paying attention to worldly phenomena will lead us to worldly insight about our present existence, yet we, at that point, will still have failed to transcend our mundane world.

Wordless Awareness meditation practice begins with our observation of worldly phenomena, bare awareness. This level of awareness is the same as bare mindfulness, where there is observation but no naming of sensory input. Next is what is called verbal awareness where one tells oneself to "don't talk." This uses our thinking mind initially to order the mind to be silent. This method is used to prevent thoughts from arising, rather than allowing them to arise and then having to quiet them as in Mindfulness. The next step is to silently (wordlessly) order the mind to "don't talk." This order is received by the mind's innate senses of ultimate hearing, seeing, touch and cognition. These innate senses are transcendent and not the same as our worldly sense organs involving hearing, seeing and touch. According to Master TTT, they comprise the Wordless Awareness Mind that "lies outside the realm of knowledge by differentiation of the consciousness, knowledge by reasoning of the intellect or knowledge by thinking of the thinking mind. Every one of us has the wordless awareness mind." "When we practice wordless awareness, our mind is completely still and this stimulates one or several of ultimate seeing, ultimate hearing, ultimate touch, and ultimate cognition. This, in turn, causes spiritual wisdom to burst forth." Thus, wordless awareness meditation allows us to transcend worldly knowledge that is learned and obtain knowledge from our spiritual source that we all have, but lies dormant until we awaken spiritually.

The following illustration depicts how meditation with the worldly mind in which the self is present and how it relates to meditation with the Holy mind, where the worldly self is abandoned and the true spiritual self (no self) is acquired, this is called the Buddha Mind.



AWARENESS PATHWAY TO BUDDHA MIND (Process of dropping the False Self and Experiencing the True Self)

Now we will discuss the relationship of the mind, brain and body that will show how different types of meditation affect the brain and in turn affect the body.

OUTCOMES OF DIFFERENT MEDITATION PRACTICES (Mind, Brain and Body)

There are two types of knowledge or insight that are found in Buddhist teachings on meditation. The first type of knowledge comes from Mindfulness meditation, and the second comes from Wordless Awareness (Samadhi-Panna) meditation.

"1) Knowledge faculty, or ñāṇīndriya in Pāli: this is the faculty or inherent capacity that generates knowledge and insight. It is located in the pre-frontal cortex of the brain.

2) Paññā Wisdom faculty, or paññīndriya in Pāli: this is the faculty or inherent capacity that generates paññā wisdom. It is located in the left rear hemisphere of the brain. The paññā wisdom faculty is associated with Samādhi stillness. The Samadhi stillness faculty, or samādhīndiya in Pāli, is also located in the left rear hemisphere of the brain."

These two areas of the brain, i.e. the pre-frontal cortex and the left rear hemisphere are the areas of the brain of greatest interest in explaining the effects of meditation on the brain, because the pre-frontal cortex is where worldly knowledge is processed through consciousness, thinking and the intellect. The left rear hemisphere is the area of the brain where the Holy mind operates and where spiritual wisdom arises. The process of meditation generally starts with the worldly mind that involves our five senses, as objects of contemplation and meditation resulting in worldly insight. As meditation progresses to wordless awareness the brain activity is centered in the right rear hemisphere of the brain.

Master TTT describes what is called 'biofeedback' where the mind affects the body and the body in turn affects the mind. When meditating with wordless awareness there is a different effect on the body than when meditating with the thinking mind, i.e. in concentration.

"A correct meditation practice triggers a beneficial chain reaction from the wordless awareness mind to the central nervous system, the parasympathetic nervous system and the endocrine system. The result is a healthy body, a peaceful mind, a body and mind in harmony, spiritual wisdom bursting forth and benevolence, compassion, empathetic joy and equanimity emerging. On the other hand, when we practice meditation incorrectly, we use the verbal knowing that comes from the thinking mind, intellect and consciousness. Under this process, we differentiate, compare, make an effort, pay attention, feel emotions and get attached. This impacts the central nervous system, the sympathetic nervous system and the endocrine system. Bodily functions are disturbed, the mind becomes anxious and confused, spiritual wisdom does not burst forth and benevolence, compassion, empathetic joy and equanimity do not develop."

"When we practice meditation, our brain reacts to signals from the mind, and, in turn, the brain impacts on the body."

Master TTT describes the different brain/body systems. To begin he talks about the Limbic System.

"The largest brain structure in the <u>limbic system</u> is the thalamus. The main function of the thalamus is to receive signals from the sense organs and distribute them to other areas of the brain for processing. For example, when we see in wordless awareness, the signal is transmitted by the thalamus to ultimate seeing. When we hear in wordless awareness, the thalamus transmits the signal to ultimate hearing. When emotions are involved in our perception, the thalamus sends signals to working memory and long term memory areas located in the pre-frontal cortex."

"Below the thalamus is the hypothalamus. The hypothalamus fulfills a very important function because it is where our states of mind - such as tranquility, anger, sadness, sorrow, envy, loathing, greed etc. – are formed. The hypothalamus' role in our physiology is to maintain homeostasis. It links the nervous system and the endocrine system. It secretes hormones that act to up-regulate or downregulate the release of other hormones. It is also closely linked to the automatic nervous system."

The following chart shows how the four meditational practices of Anupassana, Samatha, Samadhi and Panna employ Wordless Awareness that affect the brain which stimulates the parasympathetic nervous system that creates biochemicals that balance and relax the body organs and have a positive/beneficial effect on the body which also produces a positive effect on the mind. This compares with Mindfulness meditation and other 'incorrect' meditational practices affect the brain using concentration, effort and attachment and produce a negative effect on the body by stimulating the sympathetic nervous system that creates biochemicals that activate and stress the body and in turn have a negative effect on the health.



Master TTT continues by describing the function of the <u>Endocrine system</u>:

"The endocrine system consists of two types of glands, those that are located inside the brain and those located in the body. Inside the brain are three endocrine glands: the pineal gland, the hypothalamus, and the pituitary gland. When we practice looking at the sunlight, the signal gets to the thalamus then onto the pineal gland. The pineal gland then releases serotonin and melatonin hormones.

The hypothalamus is itself an important endocrine gland and is often called the master gland. It secretes several hormones including acetylcholine and melatonin. When we practice looking at darkness, the signal gets to the hypothalamus. There it activates the secretion of melatonin that helps alleviate insomnia, prevent tumors (especially in the chest and the brain) and strengthen the immune system.

Immediately below the hypothalamus is the pituitary gland. It helps transmit signals from the hypothalamus to other endocrine glands. Inside the body, there are a number of endocrine glands such as the thyroid gland, the parathyroid gland, the thymus (which controls the immune system), the adrenal glands, the pancreas, the reproductive glands, the salivary glands etc."

Master TTT also describes the memory structures of the brain and their function. "Everything that we do, say, think, perceive and feel in our daily life is automatically stored in memory."

"Also, forming part of the limbic system are memory structures, in particular, the hippocampus involved with long term memory and the amygdala with emotional memory. The long-term memory stores everything about events that we have experienced in the past. The emotional memory stores past negative emotions like fear and hate, as well as more positive emotions like pleasures and passions. In particular, it stores the strong, violent emotions like jealousy, hate or what Buddhism calls underlying tendencies. It can trigger instinctive and explosive reactions such as pulling a gun to shoot an enemy without having the time to think of consequences. The amygdala is a small, almond-shaped structure. It is where emotional actions are taken; it is where evil karma is generated."

"Another form of memory is the working (short term) memory functioning in the frontal lobe of the brain. This is where images, sounds, numbers, concepts and words are kept in our consciousness for a short period of time to allow us to perform certain tasks. For example, when we want to dial a telephone number, the digits are brought up in the working memory to allow us to perform the task. Likewise, when we perform mental calculations, we keep all the numbers, intermediate results and calculation processes in working memory in order to do so."

Master TTT continues by describing the autonomic nervous system that connects the limbic system to different organs in the body.

"When we practice meditation, a signal is sent to the limbic system. When it reaches the hypothalamus, it activates the autonomic nervous system. This system has nerves that connect to and influence our internal organs. It is called autonomic because it acts largely unconsciously and

regulates bodily functions under the direction of the hypothalamus. The autonomic nervous system has two branches: the sympathetic nervous system and the parasympathetic nervous system. "

Master TTT explains the effect of meditation on the parasympathetic nervous system:

"When we practice meditation correctly, we first relax the mind or relax our thoughts. This is an important factor in starting the biofeedback process that helps resolve our psychosomatic illnesses. Next, and more important, we must maintain our wordless awareness as this will activate the parasympathetic nervous system. The extremity of the parasympathetic nervous system releases the hormone acetylcholine that triggers a number of actions from the endocrine system. For example, the release of insulin from the pancreas is in balance, which helps regulate the amount of glucose in the blood by enabling the cells to absorb glucose and by storing any excess glucose in the tissues for future use. The hypothalamus also activates the brainstem which releases acetylcholine, serotonin (like the pineal gland), melatonin (like the hypothalamus) and especially dopamine. The release of dopamine gives us an intrinsic feeling of pleasure and motivation not related to any external stimuli. The Buddha mentioned a feeling of elation, rapture and motivation in all the four stages of samādhi that he experienced leading to enlightenment.

When we practice meditation correctly, the hypothalamus releases acetylcholine and melatonin depending on the technique and practical actions that we use. These biochemicals that are produced in the brain affect our inner organs. When the parasympathetic system is activated, our cardiovascular system is regulated, our heart rate is steady, our blood pressure normalizes, our blood glucose level is balanced, and our digestive system operates optimally. This results in a healthy and balanced body.

Serotonin is an important neurotransmitter produced in the pineal gland. It helps improve our health and stamina, maintain our sleep/wake homeostasis, alleviate depression, provide a sense of satiety, regulate mental stresses and anxieties, and reduce headaches."

Master TTT explains the effect of 'incorrect' meditation on the sympathetic nervous system:

"If we have been practicing meditation for a long while but often find ourselves ill-tempered and do not experience benevolence, compassion, empathetic joy and equanimity, we should be aware that we are practicing incorrectly and are activating the sympathetic nervous system. The sympathetic nervous system secretes the biochemical norepinephrine that adversely affects the heart, the vascular system and other inner organs such as the stomach, liver, and kidneys. This is due to the link between the sympathetic nervous system and the endocrine system that directly affects the inner organs. For example, the inner medulla of the adrenal glands will produce more epinephrine and norepinephrine while their outer cortex produces cortisol, and the pancreas will produce glucagon. These biochemicals, when produced in excessive quantity, adversely affect our inner organs. They are released when we feel emotions such as sadness, despair, anxiety, and fear that come from the mind being attached to objects. Another reason that leads to their release is the incorrect practice of meditation. Techniques such as concentration, auto-suggestion and excessive effort lead to mental and psychosomatic illnesses." Thus, as Master TTT explains, the mind affects the brain and body in either a beneficial way or in a detrimental way, depending on the type and quality of our meditation practice.

"The mind creates illnesses in the body through the release of biochemicals by the sympathetic nervous system and the endocrine system. This mind is the false mind that is dominated by the ego, with its focus on "me" and "mine". On the other hand, the wordless awareness mind is not influenced by emotions and the ego. In it, there is only a flow of wordless awareness. Zen Buddhism gives it a pseudoentity and calls it "the boss" or the "true self". When this flow of wordless awareness is present, the hypothalamus activates the parasympathetic nervous system which secretes acetylcholine. This, in turn, leads to the release of a number of beneficial biochemicals, such as serotonin and melatonin from the pineal gland, and acetylcholine, serotonin, melatonin and dopamine from the brainstem."

Thus, he concludes:

"The biofeedback process is a closed loop. When our intellect is awakened to spirituality, we start to practice meditation correctly and this activates the parasympathetic nervous system and the endocrine system. These systems release biochemicals that regulate bodily functions and result in a healthy body. The mind perceives the wellbeing of the body and experiences peace and harmony. This, in turn, provides the feedback that motivates further practice."

"People living in the world are often very busy with their work or business or struggling to make ends meet. Their mind is often agitated, their pre-frontal cortex is in overdrive and they often experience stresses, irritations, frustrations, anxiety, and sorrow. In their case, the impact on the body is similar to when one follows an incorrect meditation practice. The sympathetic system is over-activated and harmful biochemicals are secreted in excessive quantity. This results in stress and illnesses such as cancer. Modern life is more stressful than life in the older days and the sympathetic system gets over activated as it is repeatedly bombarded by strong emotions. As a result, more people are now affected by psychosomatic illnesses than in the older days when life was more leisurely and the sympathetic nervous system and the parasympathetic nervous systems were more in harmony. The sympathetic nervous system does not cause harm by itself. The sympathetic nervous system and the parasympathetic nervous system complement each other, and when they are in balance, the individual experiences good health."

SUMMARY

In comparing wordless awareness with mindfulness, we find that mindfulness is concerned with the worldly mind in that it employs concentration on one object as a method of quieting the mind that leads to greater insight into changing and unsubstantial worldly phenomena. Awareness starts with verbal and progresses to non-verbal or wordless awareness that allows practitioners to connect with the Holy Mind that consists of Wordless Awareness, allowing practitioners to prevent the sensory input from reaching the worldly mind (consciousness and thinking), thus experiencing the purification of the mind (releasing defilements) and realizing their Buddha nature. It then permits ultimate cognitive (wordless) awareness that awakens the practitioner to the Buddha mind (some call it enlightenment).

When considering the sources of knowing: consciousness and thinking are in the worldly mind and wordless awareness is in the Holy mind. Again we find that mindfulness is concerned with consciousness and thinking requiring the practitioner to use alertness of the consciousness to focus on a single object. Some mindfulness practices also include thinking about objects or phenomena to arrive at worldly insight. Wordless awareness obtains knowing from the innate (non-worldly) senses of ultimate seeing, ultimate hearing and ultimate touch as well as the ultimate cognition. These ultimate senses exist beyond our worldly physical sense organs and connect to ultimate spontaneous knowing that arises when the practitioner reaches the highest levels of Samadhi awareness.

Of the six methods of meditation discussed in this paper, two of them employ concentration on one object, i.e. mindfulness and the beginning level of vipassanā. They also utilize the worldly mind to be conscious of and think about the worldly phenomena. Five of the methods use wordless awareness, beginning with verbal awareness and progressing to wordless awareness (advanced level of vipassanā plus annupassanā, samātha, samādhi and pañña). Wordless awareness allows the practitioner to experience the Holy mind and to rise to the highest levels of spiritual realization.

In terms of the effect these meditation practices have on the brain and the body, mindfulness and vipassanā with alertness and concentration affects the sympathetic nervous system to release biochemicals that cause the body to be more active and ready for 'fight or flight'. This is functional where high alertness is appropriate in our competitive and dangerous world, however in terms of the long term effect on the body it produces 'wear and tear' that ultimately leads to reduced health, both mental and physical. The meditation practices that use wordless awareness activate the parasympathetic nervous system that releases biochemicals in the bodily organs that relaxes them and brings them into balance, resulting in improved mental and physical health. It is beneficial to have optimal functioning and balance between both the sympathetic and parasympathetic systems in order to experience optimal mental and physical health.

Thus, in conclusion, it is important to understand the similarities and differences in the wordless awareness and mindfulness meditational practices. Thus we can make an informed decision as to which approach best suits our needs as we proceed along our spiritual journey and produces the outcome we desire...it is our choice.

SUGGESTED READINGS AND SOURCES:

Zen Master Thích Thông Triệt's writings and lessons prepared by Bikkhuni Zen Master Thích Nữ Triệt Như on meditation, including:

Biofeedback process in meditation

Cognition in meditation

Four meditation practices

The brain and meditation

Three aspects of knowing

The meaning of pañña wisdom

In addition, Master TTT has prepared a glossary of terms used in his written materials to help the reader.

These and other topics are covered in a series about meditation in English and will become available on an English language website: <u>www.sunyatameditation.org</u>

Zen Master Thích Thông Triệt has published many books and articles in Vietnamese and he also published his first English language book in 2010 entitled: Zen In The Light of Science. This book describes the same materials covered in this paper as well as scientific studies on the neurology of the brain as it is affected by meditation. As other books and papers are translated into English they also will become available on the English language website.