The Mind and Mental Faculties

Part 1 of 2
Louangrath, Paul T.I.★

About the author

★Louangrath, P.I. is an Assistant Professor in Business Administration at Bangkok University, Bangkok, Thailand. For correspondence, he could be reached by email at: <u>Lecturepedia@gmail.com</u>

ABSTRACT

This paper explains mental faculties under Buddhist theory of the mind. Buddhism classified mental faculties according to their positive, negative and neutral effect. We used the negative mental faculties or *mentis malus* to help diagnose stress and depression. *Mentis malus* consists of 5 types mental malevolence and together has 14 components. Individually and severally, these 14 components of the dark side of the mind contribute to a state of unhappiness. The level of unhappiness or mental problem that people experience depends on the level and numbers of *mentis malus* surfacing in their consciousness. There are two parts to this paper. In this part 1 installment, we outlined the working of the mind through 50 distinct mental faculties that give rise to human emotions. In Part 2, we will provide an analysis of 14 mental faculties or types of emotion that give rise to stress. By having pinpointed the cause of stress, we offer non-invasive and non-chemical dependent tool for stress management and preventative measures against depression.

Keywords: cetasika, consciousness, depression, emotion, mental faculties, mind, stress

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1.0 INTRODUCTION

The purpose of this paper is to explain mental faculties. We define mental faculties as the ability of the mind to accomplish a certain mental tasks. These tasks are formation of emotions. Emotions are mental states. These mental tasks are defined and categorized into 52 components. These 52 components of mental faculties function contemporaneously with the mind. The mind represents consciousness. The emotions of the mental faculties depend on consciousness for its existence, and expression. We identified 14 mental faculties or mental states which contribute to stress and depression. Effective stress management depends on the recognition and avoidance of these 14 mental states.

Mental faculties are categorized into two main groups: general and occasional. The general emotional state may be experienced by everyone. Occasional emotional state may be experienced by an individual only in specific occasion upon certain stimuli. The general unwholesome mental states consist of 4 elements: *Moha (Delusion or ignorance); Ahirika (Shamelessness); Anottappa (Moral fearlessness);* and *Uddhacca (Restlessness)*. The remaining ten occasional unwholesome emotions include are divided into three subgroups: (i) greed category which include *Lobha (Greed); Diţthi (Wrong view);* and *Māna (Conceit);* (ii) hate category which include *Dosa (Hatred); Issā*

(Envy); Macchariya (Stinginess); and Kukkucca (Worry, remorse); and (iii) hinderance category which include Thīna (Sloth, laziness); Middha (Torpor, tiredness); and Vicikicchā (Skeptical doubt). The scope of this paper is to explain all 52 types of human emotions, and focus on the 14 types of emotion that cause stress and depression.

Table 1. Unwholesome or unhealthy mental states

Table 1. On wholesome of unificating mental states							
General unhealthy mental states	Specific unhealthy mental states						
There are 4 general unhealthy mental states:	There are 10 specific unhealthy mental states:						
-Delusion, ignorance or confidence (<i>Moha</i>)	(i) Greed category:						
-Shamelessness (<i>Ahirika</i>)	-Greed (Lobha)						
-Moral fearlessness (<i>Anottappa</i>)	-Wrong view (<i>Ditthi</i>)						
-Restlessness (<i>Uddgacca</i>)	-Conceit (Māna)						
	 (ii) Hate category: -Hatred (<i>Dosa</i>) -Envy (<i>Issā</i>) -Stinginess (<i>Macchariya</i>) -Worry, remorse (<i>Kukkucca</i>) (iii) Hinderance category: -Slothfulness, laziness (<i>Thīna</i>) -Torpor, tiredness (<i>Middha</i>) -Skepticism, doubt (<i>Vicikicchā</i>) 						

Both the mind and mental faculties are abstract. Their existence has no material or organic representation. Neither the mind nor mental faculties has an organ. We may point to the brain as the organ that processes information or external stimuli. The physical organ called brain is a separate entity which mind and consciousness depends; however, the outward and observable existence of the mind is a distinct and separate entity from the physical organ. Personality, for instance, is one aspect of the outward manifestation of the mind, but it cannot be said that it is a brain because a brain is an organ, but personality is a pattern of behavior and thoughts. We use the bodily organs to process external stimuli to formulate meaning, make judgment or evaluation. The mind is consciousness or a state of awareness where external stimuli are processed through the six senses: hearing, seeing, smelling, tasting, touching, and cognition (*mentis*).

Although the scope of this paper is to explore mental faculties, it is not possible to disregard the discussion of the mind because the existence of mental faculties depends on the mind. Therefore, by introducing the subject matter, we explain the role of the mind before embarking on exploring mental faculties.

This paper employs English as the language of the text. However, certain terms are in *Pali*, a language that the Tipitaka was originally written (Stargardt, 2000). Tipitaka is the teaching of Buddha contained in 45 volumes of texts. The Tipitaka talks about the mind and its function. *Pali* is the Middle Indo-Aryan language native to the Indian subcontinent. Original *Pali* terms are used to refer to the original terms or vocabularies used to describe the nature, function and characteristics of the mind and mental faculties. The English translation of these terms could not do justice to the accuracy of the term without losing its original meaning; thus, Latin is used to supplement the English translation of the *Pali* terms. The definitions of some of these terms appear in the appendix. Some modern Thai language text is used to supplement the explanation in the footnote.

1.1 The mind

Mental faculties are functional aspects of the mind. Therefore, it is of prime importance that we first introduce the mind. The mind is defined as a state of consciousness. The mind does not have a form, it is an abstract. As a state of consciousness, the mind indicates a state of awakening, awareness, and cognition. This state depends on a living being. A non-living object of an unanimated object does not have a mind; a mind exists only in a living being.

The mind is the mental faculties that are non-physical (Clark, 2014). The non-physical description of the mind as the working of the physical organ, brain, is considered an older view. Modernly, the mind is viewed as "physical" to include the brain organ and its activities and functions (Smart, 2011). Some studies of artificial intelligence uses the working of the mind to model mental phenomena of the human mind (Klopf, 1975). The dichotomy of physical and non physical classification of the mind is artificial and erroneous. The "mind" refers to the working or function of the brain organ upon the receipt, processing, and interpreting stimuli through the organ senses: ear, eyes, nose, tongue, body and mental contact. It is a phenomenon that is abstract. Its work and function may be observed, but the "mind" itself is not. Whatever physical forms that writers tried to use to attach meaning to as the mind are nothing more than evidence of the existence of the mind. The "physical" manifestation of the mind is the evidence of the function of the mind, and, therefore, is its existence. As for the mind itself, there is no organ. Even though modern science may claim that the brain represents all thinking process or mental work of a living being, this narrow view of the mind is inadequate for deeper discussion of understanding of the mind since science could only explain how the brain works through indirect evidence, such as electroencephalograph measuring electrical impulses emitted by the brain organ and infer that the brain is working and, therefore, that is the evidence of the mind. No machine has the capability of pinpointing what "thought" is processed by the mind. Since no such machine exists, empirical evidence seeking to prove the existence of the mind through physical evidence is futile. The physical brain organ has 86 billion neurons and each is linked to 10,000 other neurons (Wishaw and Ian, 2010; Sherwood, 2011). This knowledge does not prove or define what is the mind? The evidence only shows the composition or constituents of the brain organ.

The lack of modern research to understand the mind and its function also tell us that the western concept of mind is in adequate. There had been attempts to argue that only intellectual function, such as reasoning constitutes the mind (Başarm 2010). For some writers, the mind is equivalent to "thought" (Israel and North, 2010).

As an abstract, the mind should be seen and studied independently of the physical body or organ, such as the brain (Kim 1995). Independent, not in a sense that there is a physical body and the mind is an independent abstract, such as the soul or spirit that comes and goes from the physical body (Delgado, 1969), but as an independent condition of knowing or cognition. This approach to the mind transcends the realm of academic inquiry to the world of superstition.

Western philosophy of dualism taught that the mind is independent properties that emerge from the brain, but cannot be reduced to the brain itself; at the same time, it is not a distinct substance (Hart, 1996). This attempt to explain the mind is a good dance around the fire without explaining "what is the fire?"

The discussion of the mind makes neuroscience look, more or less, like a fake science because it uses scientific instrument to measure or prove an abstraction. Abstract is concept; as such it is non-material. Scientific measurements are nothing more than evidence of the working of the brain organ. Even for the function of the brain itself, these measurements are nothing more than the evidence of traces of the function or an organ, but not the organ itself. Only inferences could be made; it is only by the acceptance of the general supposition of the inference, that the scientific community accepts these measurements as scientific evidence; but evidence of what? The mind as we have explained is an abstract, not form. A tree with a height of 3 meters is a form that could be measured by a meter stick. However, the life of a tree may not be measured directly. We may say that a tree have existed for ten years and conclude that the life of a tree is ten years old. The length

of time of ten years is no more different than an electroencephalograph measuring the electrical impulses of the brain and concludes that the graph represents the measurement of the mind. This scientific failure in empiricism is evident in western literature.

From the older western trace of the study of the mind, Plato himself understood the dualism of form as material object and mental images as abstract. However, through the course of history, advances of western science had lost its way in understanding the dichotomy of form and abstract. Spinoza, for instance, for the lack of understanding of the mind had attributed the mind to "nature" and "God" (Spinoza, 1670). Modern writers are more logical to admit that the understanding of the mind cannot be limited to physical science (Putnam, 1967; Davidson, 1980). There are some reductive physicalists who still insist that mental state could be explained by scientific accounts of physiological processes and states (Churchland, 1986; Churchland, 1981; Smart, 1956). This insistence is evidence to show that lack of understanding of the dichotomy between form and abstract. Science can measure form or the physical world; however, it cannot measure abstract. Nevertheless, scientific research in neuroscience continues to prove precisely that which, by its nature, is not capable of being proven directly through instruments (Farah *et al.*, 2009; Koch, 2009). Some writers already admit that the western understanding of the mind is incomplete (Denett, 1998; Searle, 2001).

In this paper, we assert that the mind is a stream of consciousness composed of discrete moment-to-moment connection (Karunamuni and Weerasekera 2017; Karunamuni, 2015). This discrete moment is created by the state of awareness of cognition where consciousness is created in one of the four building blocks: form (ruppa), emotion (vedhana), memory (sanya), and synthesis (sangkhaRA). If the Mind is "M" and other building blocks are designated as F, E, M and S respectively. The stream of consciousness consists of all possible combinations in all possible order of (MF; ME, MM and MS) discretely, meaning distinct pair, and independently, meaning no one pair depends on the other and no two pairs may occur simultaneously. As each pair clings or bonds occur, a spark of consciousness is created. With this creation, awareness is made. This awareness can never precede the occurrence, but only after bonding, remaining, and extinction of the pair. The awareness is made when the new bonded pair is made. This recognition occurs at (M*+1), and never at M* because the occurrence of the pairing is too fast and the remaining of the binding is too short. The bonding, remaining, and extinguishing of the pairing of this stream of consciousness defines the mind. The mind, in essence, is the stream of consciousness. What is consciousness? We answer this question in section 1.3, infra.

1.2 The four building blocks as a foundation of the mind

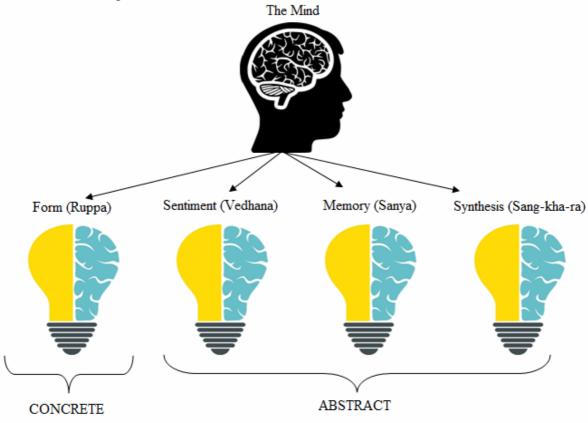
Consciousness is the state of awareness and knowing. Awareness means knowing of the external stimuli and knowing means ability to receive, process, and evaluate the stimuli through the six receptors. These six receptors are: ears for hearing, eyes for seeing, tongue for tasting, body for touch, and cognition.

The mind possesses certain characteristics that we can observe. *Firstly*, the mind is neither enduring nor permanent; it arises and is extinguished. *Secondly*, the mind occurs within a boundary of its building blocks; these building blocks include (i) form or body, (ii) emotion, (iii) memory, and (iv) synthesis.

The form or body of which the mind clings is the physical or material form which could be touched and felt. The remaining three building blocks (emotion, memory, and synthesis) are abstract. Thus, the mind may also be looked upon as a state of consciousness that is comprised of form and abstract. *Thirdly*, the mind arises, remains in its building block and is extinguished in the same place where it arises. For instance, if the consciousness recognized a material object, it is said that the mind arises at the form building block. Within a fleeting moment, for the mind cannot remain in one state for so long, it would appear in one of the three building blocks. Let us call each appearance or arising as a *spark* is flickered off at the form, a new one appears in another building block, say, memory. At that point the mind recalls an event or series of events from the person's

past and inures itself with the emotion of that past event. That inurement of emotion is the function of the mind through the contemporaneous function of the mental faculties. This spark too will not last long, and sooner will it be extinguished. Upon its extinction, a new spark will appear in one of the four building blocks. This process repeats itself over and over throughout the state of a person's consciousness. This is called the working of the mind where the mind arises, remains, and extinguishes in the same place. This arising, remaining and extinction is a spark of thought. Each blink of the spark represents the on-and-off of the spark in one of the four building blocks. Thus, at any moment we can track the location of the mind as to where it stands. By the law of its nature, the mind cannot wander off to any locations other than these four places: (i) form or body, (ii) emotion, (iii) memory, and (iv) synthesis.

Fig 1. The four building blocks of the Mind



Note: The four locations called building block of the mind are (i) form or body, (ii) emotion, (iii) memory, and (iv) synthesis. The mind can be at one place at one time. We realize where the mind had been only after it had left that location.

1.3 Consciousness defines the state of mind

1.3.1 Consciousness in Western literature

Consciousness is defined as the state of awareness of the external object or in internal within oneself (van Gulick, 2004). One text in modern psychology defined consciousness as an "executive control system of the mind." (Farthing, 1992). Defining consciousness is not easy, but there is a common understanding among writers and philosophers of what is consciousness (Searle, 2005). Western understanding of consciousness is evident by the use of the term "awareness" to describe it. In modern time, writers from cognitive science, psychology, and anthropology continue trying to define consciousness (Trnka and Lorenciva, 2016). In modern medicine, attempts had been made to study consciousness through measuring various state and responses by the mind through alertness, comprehension, disorientation, delirium and movement in response to painful stimuli (Guzeldere,

1997). Some western attempts to study consciousness have practical applications when it is used to assess consciousness in comatose or anesthetized patients (Fins *et al.*, 2007).

John Locke defined consciousness as "the perception of what passes in a man's own mind." (Locke, 1690). Diderot and d'Alembert's *Encyclopédie* defined consciousness as "the opinion or internal feeling that we ourselves have from what we do." (Diderot and d'Alembert, 2014).

In the English language, the word "consciousness" is derived from the Latin *conscius* (con- "together" and scio "to know"). It has been interpreted to mean "knowing together or common knowledge" (Lewis, 1990). However, we will later point out that this interpretation is wrong, despite the original coining of the Lain was correct.

Thomas Hobbes wrote: "Where two, or more men, know of one and the same fact, they are said to be Conscious of it one to another." (Hobbes, 1904). This attempt to illustrate consciousness in Hobbes' *Leviathan* is also a failure because it illustrates consciousness as co-dependence of knowing the object by two persons. Consciousness does not depend on the existence of another person nor anyone in the world. The inner mind of the person alone defines consciousness. From the western literature the reference of consciousness to the "self" was best exemplified by the Archbishop Ussher who wrote in 1613 of "being so conscious unto myself of my great weakness." (Ussher, 1613).

From historical record, there are also some misunderstandings in attempts to link consciousness with the concept of "conscience." Consciousness is not the same as moral conscience. The Early Latin writing of Cicero, for instance, took a literal meaning of the original Latin: *Conscientia* which means to know together (Cassin, 2014). Thus, in its earlier application, it was said that *conscientia* connotes the witness has the knowledge of someone else's action (Molenaar, 1969). Descartes also made an attempt in applying *conscientia* in a different light. Descartes took *conscientia* to mean conscience, i.e. awareness of right and wrong (Hennig, 2007). In "Search after Truth" (*Regulæ ad directionem ingenii ut et inquisitio veritatis per lumen naturale*, Amsterdam 1701), Descartes wrote that "conscience or internal testimony" (*conscientiâ*, *vel interno testimonio*) defines *conscientia* (Adam and Tannery, 1908; Heinämaa *et al.*, 2007). Conscience is knowing the difference between right and wrong. However, this knowledge is not consciousness. Consciousness is "knowing" in a continuous fashion or in an appearance of continuity as the mind leaves one building block and clings to another. From historical records of the western literature, we found attempts to define consciousness were unsatisfactory. We now turn to the dictionary definition of consciousness.

The Cambridge Dictionary defines consciousness as "the state of understanding and realizing something." A similar attempt at the definition was made by the Oxford dictionary which defines consciousness as:

The Routledge Encyclopedia of Philosophy defines consciousness as:

"Consciousness—Philosophers have used the term 'consciousness' for four main opics: knowledge in general, intentionality, introspection (and the knowledge it specifically generates) and phenomenal experience... Something within one's mind is 'introspectively conscious' just in case one introspects it (or is poised to do so). Introspection is often thought to deliver one's primary knowledge of one's mental life. An experience or other mental entity is 'phenomenally conscious' just in case there is 'something it is like' for one to have it. The clearest examples are: perceptual experience, such as tastings and seeings; bodily-sensational experiences, such as those of pains, tickles and itches; imaginative experiences, such as those of one's own actions

[&]quot;The state of being aware of and responsive to one's surroundings."

[&]quot;A person's awareness or perception of something." and

[&]quot;The fact of awareness by the mind of itself and the world."

or perceptions; and streams of thought, as in the experience of thinking 'in words' or 'in images'. Introspection and phenomenality seem independent, or dissociable, although this is controversial." (Craig, 1998).

According to Macmillan Dictionary of Psychology:

"Consciousness—The having of perceptions, thoughts, and feelings; awareness. The term is impossible to define except in terms that are unintelligible without a grasp of what consciousness means. Many fall into the trap of equating consciousness with self-consciousness—to be conscious it is only necessary to be aware of the external world. Consciousness is a fascinating but elusive phenomenon: it is impossible to specify what it is, what it does, or why it has evolved. Nothing worth reading has been written on it." (Sutherland, 1989).

In Western literature, there is no coherent definition of consciousness (Sytsma and Machery, 2010). In some cases, this attempted definition breaks down to equate consciousness to nothing more than an intuition (Antony, 2001). Consciousness is abstract, not a material object (Ryle, 1949). Attempts to define it had been circular and unsatisfactory (Sutherland, 1989). In this paper, we define the mind and consciousness according to Buddha's teaching. The understanding of the function of the mind and the concept of consciousness were explained in the fifth century B.C. by Bhudda Gautama.

1.3.2 Consciousness in Buddhist literature

Consciousness is defined as the state of the mind to maintain the ability to recognize mental contact via six receptors and to process the stimuli according to the 14 steps of the mental process in the mind in order to give meaning to each stimulus. As a state of consciousness, the mind is the state of both awakening and awareness. As a state of awakening, the mind is conscious and, thus, can process data from external sources through the six receptors. These stimuli will be turned into information through the working of the mind. The mind works in 14 functions: (i) arising, (ii) maintain the existence of that arising, (iii) leaning toward one of the six senses according to the type of stimulus received, (iv) acknowledge the hearing of the sound and decide whether it is good or bad, (v) acknowledge the sight of the form and decide whether it is good or bad, (vi) acknowledge the smelling of the scent and decide whether it is good or bad, (vii) acknowledge the taste by the tongue and decide whether it is good or bad, (viii) acknowledge the touch of the sensation and decide whether it is good or bad, (ix) receive the emotion from the selected emotion from the five senses, (x) evaluate the emotion, (xi) make decision for the selection of the appropriate emotion for the stimulus, (xii) inurement of the selected emotion, (xiv) receive the emotion from the last step [xiii], and (vix) move from the moment by means of extinction of the spark. From step (i) to (xiv), it is called one moment of the mind; the duration of which is less than a millisecond. Since it is not

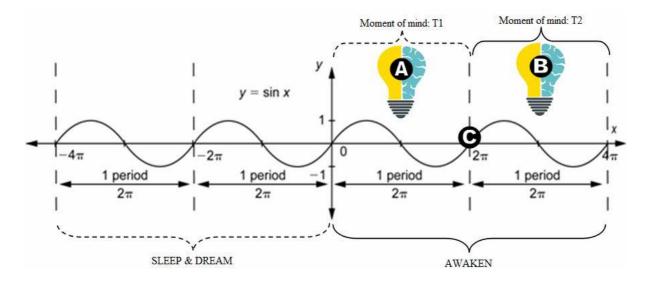
^{1 1.} ปฏิสนธิกิจ ทำหน้าที่เกิด; 2. ภวังคกิจ รักษาดำรงภพชาติ; 3. อาวัชชนกิจ กิจที่รำพึงถึงอารมณ์ทั้ง 6; 4. ทัสสนกิจ ทำกิจเห็น เป็นกุศลวิบากหรืออกุศลวิบาก; 5. สวนกิจ ทำกิจได้ยิน เป็นกุศลวิบากหรืออกุศลวิบาก; 6. ฆายนกิจ ทำกิจได้กลิ่น เป็นกุศลวิบากหรืออกุศลวิบาก; 7. สายนกิจ ทำกิจลิ้มรส เป็นกุศลวิบากหรืออกุศล วิบาก; 8. ผุสสนกิจ ทำกิจกระทบสัมผัส เป็นกุศลวิบากหรืออกุศลวิบาก; 9. สัมปฏิจฉันนกิจ ทำกิจรับอารมณ์ ต่อจากปัญจวิญญาณ; 10. สันตีรณกิจ ทำกิจพิจารณาอารมณ์ต่อจากสัมปฏิจฉันนะ; 11. โวฏฐัพพนกิจ ทำกิจ ตัดสินอารมณ์; 12. ชวนกิจ ทำกิจเสพอารมณ์; 13. ตฑาลัมพนกิจ รับอารมณ์ต่อจากชวนะ; & 14. จุติกิจ เคลื่อนจากภพ กือมรณะ.

capable of measurement by any instrument due to its speed and lack of physical form, the working of the mind, as also true for the mind itself, is abstract.

What we have described thus far is the working of the mind in a state of awakening. Does the mind continue to work during the state of unconsciousness or non-awaken state, such as during sleep? The existence of the mind depends on the living being or the state of being alive; it is only with the extinguishment of life or upon death would the mind cease to exist. During the non-awaken state, for example during sleep, the mind still functions and the evidence of the working of the mind is seen through dream. Dream is an experience of witnessing the occurrence of events or series of events in the mind during sleep capable of being made to be understood by the subject; dream is an evidence of the working of the mind during a state of non-awakening. As long as the person is alive, the mind continues to exist. In each moment of its existence, the mind continues to perform its functions in a 14-steps process. Each cycle of the 14-steps constitutes a moment of the mind or a single event understood by the mind.

The *moment* of the mind is defined as the episode that a person experienced by the working of the mind from step (i) to (xiv). The duration of this moment from its arising at (i) and ending in (xiv) is fleeting as a flicker of the spark of the thought itself; we may illustrate this rising and extinguishing by sinoid curve. Buddha analogized this duration to the length of time it takes to blink the eyes. In that millisecond the mind has accomplished one task in one building block and starts the spark at another building block. This flicking of the spark happens so fast that, the on and off of each sparks together would appear to be a continuous stream of light; thus, we observe that the state of consciousness is a "continuity" of a state of awareness. However, in reality the mind sparks are more discrete than continuous. The continuity is only an appearance due to the lack of the power of observation we possess. We see the mind's function only after the task has been accomplished, and never during its active engagement. The space between one flickering of a particular building block and the next is so infinitesimally small that it me be equated to a limit of zero. This limit was illustrated by an analogy where the Buddha attempted to define the space between the ending of one and rising of another building block as the ratio of a piece of dirt caught in the finger nail divided by the mass of the earth; hence, modernly, we may equate this illustration as the limit of zero. As a near zero value, the gap of one ending and another rising of the clinging of the mind, projects an appearance of continuity. Since the ability of our observation is lacking to see the disconnectedness of each spark, the moment in mind becomes a continuous form which we call time continuity. Here, we see the true definition of consciousness where the awareness, rising from observing of an event in the mind after its diminishing and rising of another, appearing to be a continuity of awareness; thus, consentia.

Fig. 2: Illustrating the moment of the Mind by wave length and frequency



Note: (A) represents the first thought, (B) represents the second thought, and (C) represents the gap of connecting point between (A) and (B); this space is infinitesimally small that it escape a common observation; thus, the transition from (A) to (B) becomes so fast that it gives an appearance of a continuity.

1.4 Types and levels of consciousness

From the Buddha's perspective, consciousness is the cognition of the mind's event observable from a current locus after the diminishing of an event in a prior locus. The mind cannot know simultaneously of an occurrence of an event; it knows only after the event is observed, registered, and a proper interpretation is made according to the 14 steps of the working of the mind. The mind is able to recognize two types of event or stimulus: form and abstract. Under this framework, consciousness is divided into two types: (i) *ruppa-yanna* or form dependent consciousness, and (ii) *aruppa-yanna* or consciousness that does not depend on form, i.e. it depends on abstract.

The *form dependent consciousness* is classified into 4 levels, namely primary (*pathom-yanna* or primary state of consciousness), secondary (*tuti-yanna* or secondary state of consciousness), tertiary (*tati-yanna* or tertiary state of consciousness) and quartro (*jatu-yanna* or fourth state of consciousness).

There are four types of consciousness that does not depend on form. These abstract consciousness include awareness of (i) space is boundless (akasananja-ayatana yanna), (ii) consciousness is infinite (vinya-nanja-ayatana yanna), (iii) state of nothingness (akin-janya-ayatana yanna), and (iv) a state of neither perception nor non-perception or neutralism (neva-sanya-nasanya-ayatana yanna).

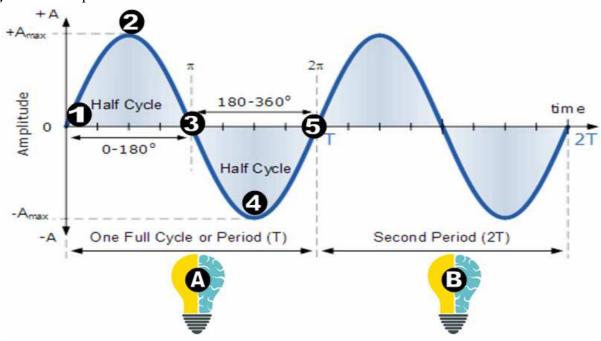


Fig. 3: Form dependent consciousness

See:

² อรูปฌาน 4 ฌานมีอรูปธรรมเป็นอารมณ์ ฌานที่เป็นอรูปาวจร ได้แก่:1. อากาสานัญจายตนะ (space is boundless); 2. วิญญาณัญจายตนะ (conscious of consciousness is infinite); 3. อากิญจัญญายตนะ (conscious of the sphere of nothingness); 4. เนวสัญญานาสัญญายตนะ (อัปปนาสมาธิ) (state of neither perception nor non-perception)

 $http://84000.org/tipitaka/dic/d_seek.php?text=\%CD\%D2\%A1\%D4\%AD\%A8\%D1\%AD\%AD\%D2\%C2\%B5\%B9\&detail=on$

Note: The primary consciousness is composed of (1) awareness (vitaka), (2) pondering (vijara), (3) joy (piti), (4) happiness (sukkha), and (5) unity of mind (Ekaggata).

1.4.1 Form dependent consciousness has four levels

The *primary consciousness* is composed of awareness (*vitaka*), pondering (*vijara*), joy (*piti*), happiness (*sukkha*), and unity of mind (*Ekaggata*) (Fig. 3). The first contact the mind makes with the outside world is by receiving the stimulus through one of its six receptor organs: ears, eyes, nose, tongue, body, and cognition. The mind processes each type of contact one-by-one and gives its meaning. At this first stage of consciousness, the mind uses all five levels to process the incoming stimulus (data) in order to give information (understanding). This level of consciousness is present in all living persons in a waking state. Since it requires no skill or training but allowing the mind to process the stimulus after the initial contact, it is classified as a primary or basic form of consciousness.

The secondary level of consciousness is composed of joy (piti), happiness (sukkha), and unity of mind (Ekaggata). This second level of consciousness is considered a more developed because the ability for the mind to know or attain cognition does not depend of awareness and pondering. By mental contact with the object, the mind immediately recognizes the object and could maintain the state of consciousness, ready to know, requires only three elements to sustain consciousness: joy (piti), happiness (sukkha), and unity of mind (Ekaggata). The removal of the first two elements (awareness and pondering) had been removed as unnecessary in order to reach joy, happiness and unity of mind. In order to use only joy and happiness to achieve unity of mind, the mind must be trained to remove the first two procedures for the mind's data processing. When the mind can process stimulus and reach cognition without the need of awareness and pondering the object or stimulus, it is said that the mind is skillful at some level. This level is a second level of consciousness.

The third level of consciousness requires only two components: happiness (*sukkha*), and unity of mind (*Ekaggata*). At this state of consciousness, the mind knows only joy and mental unity; it requires only joy and mental unity to given meaning the object upon the mental contact with form or material. Unity of the mind is reached with only one requisite: happiness. A state of happiness (*sukkah*), once reached, may allow the mind to attain a state of unity. A person who is happy may be said to be in a state of bliss; the mind of such a person is stable or unshaken. This stability of the mind is called unity or singularity.

The fourth level of consciousness is composed of equanimity or peace of mind (*ubek-kha*) and mental unity or the mind having a singularity in emotion. This fourth level of consciousness is the highest level of consciousness that depends on tangible form or material to exist. The tangibility that gives meaning to the mind through the six receptors may be recognized at the first level where consciousness consists of five components. As the mind is developed, these components are dropped until one (mental unity) is left and a new one (*ubek-kha*) is added. Reaching the fourth level of consciousness requires training. This training comes in a form of meditation.

1.4.2 Form independent or abstract consciousness has four levels

If the mind is further trained, after the fourth level of form dependent consciousness, the mind enters into formless consciousness or consciousness that does not depend on form in order to reach unity. The first formless type of consciousness is called *akasa-nanja-ayatana*³ or using the air or open space as the basis for cognition. For example, in an awaken state, a person can stare into open space and give meaning to an object or thinking while staring at open space. The second formless

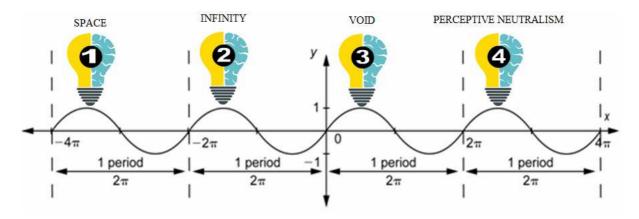
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³ อากาสานัญจายตนะ (ฌานอันกำหนดอากาศคือช่องว่างหาที่สุดมิได้เป็นอารมณ์ หรือภพของผู้เข้าถึงฌานนี้ - sphere of infinity of space).

type of consciousness is called *vinya-nanja-ayatana*⁴ or the recognition that consciousness is infinite. The third level of formless consciousness is *akinja-ayatana*⁵ or the recognition of a state of nothingness. Lastly, the fourth level of formless consciousness is called *neva-sanya-na-sanya-ayatana*⁶ or the mind recognizes a state of neither perceive nor non-perceive of the outside world. The mind has been trained to sever all six senses receptors from receiving external stimulus in order to experience the 4 types of abstract consciousness.

Note that the form independent, formless or abstract consciousness is not the same as subconsciousness. Subconsciousness or consciousness in a non-waking state still depends on form stimulus through the six receptors to make meaningful interpretation of the mental contact of the stimulus. For instance, dream during sleep is a form dependent consciousness that is synthesis through *ruppa* (form), *sanya* (memory), *vedhana* (emotion) and *sangkhara* (synthesis), such as the working of the mind during its waking state at the primary level of consciousness. The waking and non-waking state of the mind does not change the manner in which the mind works in the context of consciousness. Consciousness depends on life; so long as the being is alive, consciousness is present. Therefore, during sleep, consciousness is still present. Since sleeping is not death, the mind continues to work according to its nature. What is the nature of the mind? The consciousness, both during the waking and non-waking states, arises and extinguishes like a spark of light that goes on and off in one of four building blocks and then on-and-off again in another building block. This process keeps repeating infinitely throughout the life of the person. The iteration of the mind rising and extinguish in one of the building block in one's life defines an observable infinity. Infinity may be defined and observed in this way.

Fig. 4. Abstract consciousness or consciousness not dependent on form



1.2 Mental faculties

Mental faculty (cetasika) refers to the nature of mental faculties that arises with the working of the mind; it is that which occurs in the mind. Mental faculties are emotions which are equivalent to mental faculties that serve as the components of the mind; it is classified as the capacity and the property of the mind. It occurs simultaneously with the function of the mind being an evidence of

⁴ วิญญาณัญจายตนะ (ฌานอันกำหนดวิญญาณหาที่สุดมิได้เป็นอารมณ์ หรือภพของผู้เข้าถึงฌานนี้ - sphere of infinity of consciousness)

⁵ อากิญจัญญายตนะ (ฌานอันกำหนดภาวะที่ไม่มีอะไรๆ เป็นอารมณ์ หรือภพของผู้เข้าถึงฌานนี้ - sphere of nothingness)

⁶ เนวสัญญานาสัญญายตนะ (อัปปนาสมาชิ) (ฌานอันเข้าถึงภาวะมีสัญญาก็ไม่ใช่ ไม่มีสัญญาก็ไม่ใช่ หรือภพของผู้ เข้าถึงฌานนี้ - sphere of neither perception nor non-perception)

the emotion of the mind. Mental faculties are categorized into 3 cantos. First, emotional mental faculty refers to the instability of abstract components of the mind. Second, memory mental faculty refers to the ability to recall past events. Third, the remaining 50 components of mental faculties are categorized as synthesis mental faculty which includes all abstract components and the function of the mind.

Mental faculties refer to the type of nature that serves as a group of components for the make-up of the mind; it allows the synthesis of mental experiences, such as feelings, emotions, judgment, etc. Components of mental faculties which comprise the mind have four characteristics: (i) occur at the same time as the mind, (ii) distinguish at the same time as the mind; (iii) having the same sentiment as the mind; and (iv) depends on the same condition as the mind.

The mind and mental faculties depend on one another. Suppose that the mind is water and mental faculty is a red dye, by combining the water and the red dye, a reddish solution is produced. As the water and the red dye could not be separated after they had been mixed, like so that the mind and mental faculty could not be separated from one another. The four characteristics of mental faculty are (i) mental faculty depends on the mind to exist, (ii) the function of mental faculty is to coexist with the mind, (iii) the output of mental faculty is the sentiment of the mind; and (iv) the cause for the arising or occurrence of mental faculty is the occurrence or function of the mind.

The synthesis of mental faculties that occurs at the same time with the mind allows the mind to have different feelings, sentiment or emotion, such as knowing the effect of pleasure, of consciousness of form or abstract, or even the diminishment of all function of the mind by means of reaching *nirvana*, i.e. a state of absolute emptiness.

The mental faculties or *cetasika* consists of 52 components which may be divided into three main types, namely (i) anyasamana cetasika which may be used to comprise the working of the mind; it is known as the middle-ground type of mental faculty. Anyasamana cetasika is further divided into two categories *suppachitasatarana* with 7 kinds and *pakinaka cetasika* with 6 elements; (ii) *akusala cetasika* (impurity) consisting of 14 elements which include *lobha* (greed of 3 kinds), *dhosa* (anger of 4 kinds), *moha* (ignorance of 4 kinds), dhituka (defeatism 2 kinds), and *vijikija* (doubts 2 kinds); and (iii) *sobhana cetasika* (purity). There are 4 categories of pure mental faculties; these include *sadharana* (general 13 kinds), *viratti* (righteousness 3 kinds), *appamanya* (infiniteness 2 kinds), and *panya* (knowing or intelligence or wisdom 1 kind).

Table 2. Components of 52 types of mental faculties

Neutral Effect Unhealthy Effect			Healthy Effect						
Universa	Occasiona	Universa	Occasional			Universa	Occasional		
1	1	1				1			
-	-	-	Gree	Hat	Othe	-	Abstinenc	Infinit	Wisdo
			d	e	r		e	y	m
1*	8	14	18	21	25	28	47	50	52
2	9	15	19	22	26	29	48	51	
3	10	16	20	23	27	30	49		
4	11	17		24		31			
5	12					32			
6	13					34			
7						35, 36			
						37, 38			
						30, 40			
						41, 42			
						43, 44			
						45, 46			

^{*}See Appendix 1 for the names of all elements of emotions or mental faculties.

2.0 ANYASAMANA CETASIKA: THE MIDDLE PATH OF MENTAL FACULTIES

Anyasamana cetasika refers to the middle path of the mental faculties. The term itself allows us to infer that the mental faculties may be seen as having composed of two extremities, namely purity and impurity; in the middle lies anyasamana cetasika or the middle mental faculties having neother good nor bad effect. The middle mental faculties may be combined with the working of the mind which consists of the good, bad, and neutral. There are 13 elements of the middle mental faculties which further is divided into two subgroups. These two subgroups are (i) suppachitasatarana with 7 kinds and (ii) pakinaka cetasika with 6 kinds.

Table 3. The middle path of mental faculties

Middle Path Mental Faculties with Neutral Effect on the Health of the Mind					
Universal or General Occurrence	Occasional or Specific Occurrence				
1. Contact	8. Initial thought				
2. Feeling	9. Sustained thought				
3. Perception	10. Determination				
4. Intention	11. Energy				
5. Unity of mind	12. Rapture				
6. Life faculty	13. Wish				
7. Attention					

2.1 Suppachitasatarana or the general mental faculties (mentis publicus)

Suppachitasatarana cetasika refers to the general mental faculties that could be experienced by all members of the public. This serves as a component for the general functioning of the mind. When this group of mental faculties becomes part of the mind, all 7 elements of these known public mental faculties enter the mind simultaneously. These 7 elements cannot be separated; thus, it is called public mental faculties. If each element or some elements could be separated from the group, then each person may select to experience one or some elements of this type of mental faculties; thus, the group of 7 faculties would cease to be public. However, since these 7 elements cannot be separated from one another nor can each one of these 7 components work independently of one another, they are called public or generalized mental faculties. These 7 components include: (i) Ekaggata (unity), (ii) sivita-insariya (vitality), (iii) manasikara (mental), (iv) vedhana (feelings), (v) sanya (memory), (vi) chetana (intent), and (vii) bhassa (contact).

Ekaggata refers to the "unity of the mind." The mind or thinking process works in a step-bystep process. The external stimuli enter through the 6 senses: hearing, sight, taste, smell, touch, or mental component or cognition. In the western culture, only five senses are recognized; however, in the Buddhist teaching, there is the sixth dimension called cognita or the mental decider or *chitta* or chaiya. As the person receives the stimuli, the mind searches for the correct type of emotion or interpretation through assigning meaning called a type of emotion. Once the correction interpretation and meaning is assigned, the mind reaches a state of satisfaction or bliss. That moment of bliss which the mind successfully solved a query, is called *Ekaggata* or mental unity, a single moment of recognition that the problem (stimulus) received from the external environment, received through one of the six receptors, had successfully been interpreted and assignment of meaning, called understanding had been completed. This state of the mind having understood the message is called a unity or mentis concordia. By its nature and function, the mind is a problem solver. Each stimulus received by the mind is seen as a query that needs to be solved by giving proper meaning to the stimulus. This, the stimulus received is seen as raw data; the processing of the mind by giving meaning or interpretation turns the data into information. This, the person is informed, i.e. know. Once a meaning is assigned, the mind reaches a state of Concordia. Whether the assigned meaning is correct or not is a subjective judgment made by the mind. Sometimes, the assignment meaning or the interpretation is incorrect when compared to objective standard, i.e.

giving wrong answer to an exam question nevertheless the mind had accomplished its task. *Mentis Concordia* is not about correct or incorrect interpretation, but as a completion of the task by the mind. If the mind is presented with a query and is unable to reach *mentis concordia*, it will repeat the attempt to find the answer. If after repeated attempts it could not find the answer and still continues attempting, stress or mental strain starts to appear. This is one way that stress or mental strain is formed.

This ability to attain *mentis concordia* is universal ability. All human are capable of attaining such mental state. It is a prime condition for mental functioning or thinking process. For the western basis of the five senses of receiving stimuli from the external environment, attaining the state of *mentis concordia* is almost self-explanatory because it is rudimentary. However, for the eastern concept of the sixth receptor claiming that the *mind* itself is another receptor capable of receiving, sensing, interpreting, and achieving state of *mentis concordia* may seem redundant because the experience of *mentis concordia* itself is a state of mind. This argument is not a minor point and needs to be explained.

We may use the word "mind" in two different contexts. Let us spell the word "Mind" with capital "M" to refer to the general working or function of the mental engine that encompasses of experience in receiving, interpreting and reaching the state of *mentis concordia*. Let us use the work "mind" with small "m" to refer to the mental state of consciousness to receive sensual stimuli from the external environment (mental contact). This *mind* serves as if it is an organ of senses, but a true organ is organic; the *mind organ* is inorganic and it is dependent upon the existence of the living being. It is a state of consciousness combined with the ability to process the stimulus data and turn into information. Like the ears that process sound, eyes that process form, nose that smells, tongue that tastes, body that feels touch, the *mind* is a state of consciousness that processes data from the external environment in both form and abstract by means of mental contact. When the physical organ of senses depends on the function of the physical life of the living being, the mind inorganic depends on the vitality of that living physical form. It depend on the form to exists, just as the mental faculties depends on the Mind to exist, the *mind inorganic* depends on the living body with the five organ senses to exist. The life of a living being has aspects of what we call living. On the one hand, the physical being comprising of the five organ senses, we may called this physical form of living as vita corporeus. On the other hand, the mind receptor or the sixth component of receptor is non-organic and could be called *vita perceptus* or mental contact.

With this explanation of the *mind inorganic* as a sixth receptor to achieve *mentis concordia*, we are forced to make a bold assertion that "life" consists of both physical and non-physical. The physical life or *consciousness* is easily understood through its physical form equipped with its five organs of senses: ear, eyes, nose, tongue, and body. The non-physical is the sixth dimension of senses which we described above as the *mind inorganic* which is capable of processing external stimuli and reaching a state of *mentis concordia*. These two aspects of life's consciousness might allow us to assert that *consciousness* of a living being consists of *form* and *abstract*. The "form" is one which may be found through the five physical senses. The "abstract" is one which may be found in the *mind inorganic*. Both form and abstract function together to process external stimuli and help the Mind to reach a state of *mentis concordia*.

Sivita-insariya is the "vitality" of a living being or faculties of a living organism or human being in an abstract form or non-material. Vitality may include the Mind, mental faculties, age, being alive, continuity during the life span of a living being, the characteristic of being a living person, all that which we called living or being alive. Vitality is abstract because its existence depends on the living being to manifest its properties and characteristics. As a sign of life, it depends on the living. A dead animal represents non-living; it is nothing more than a corpse of a once living being. A living animal, on the other hand, manifests signs of its state of being, i.e. the thinking, movement and experience its environment, both internal and external. This sign of life, which we called vitality, is public. Everyone may experience it as part of being alive. There is no

need for special training to experience living or of being alive. Signs of being alive is not a privilege, but may be experienced by all living beings.

Manasikara or "mental effort" is the third kind of public mental faculties (mentis publicus). Mental effort is the ability to think or the use of one's ability to think. This ability is classified as public because everyone possesses this ability. It is considered one of the 7 pillars in mentis publicus because everyone is capable of thinking and engaging in a thinking process or mental process without special training. For a human being, this ability comes as a natural ability. When a person thinks about something, a mental effort is manifested.

Vedhana or "emotion" is the fourth kind of public or general mental faculties. All members of the public is capable of experiencing and expressing emotion. There are three types of emotion, namely (i) like, (ii) dislike, and (iii) neutral. These three types of emotions may be generated by time components where the past, presence, and future stimuli may evoke one or two or three types of emotion in a person. The memory of pain, for instance, is the working of time component of the past with the non-pleasure or dislike emotion of the presence that a person feels. The positive feeling of looking forward to some rewarding or honorific event in the future is a result of combining the positive emotion or "like" with the time component (future). This ability of the Mind is classified as general or public (mentis publicus) because everyone may experience it without special training. It is a natural ability of all human beings.

Sanya or "memory" is the fifth kind of public mental faculties. Everyone possesses memory and can recall that memory of recorded past events without any difficulty. This type of mental faculties or ability is classified as *mentis publicus* or public or general knowledge of the mental faculties because it is natural and does not require special ability to experience it.

Chetana or "volition or intention" is the sixth kind of public mental faculties. All conduct or action starts with volition or intention. Intention is the willing of the mind to undertake a certain action where a specific outcome had been the aim of such mental volition. So long as the Mind functions, it may form intention. An act in accordance with the intent is a volitional act. A volitional act is an act that is dictated by the will of the person. So long as the person can form a will, the person is capable of exerting intent. Since intent is a characteristic of the Mind which may be formed and expressed without special ability or training, as all members of the public may do so; it is, thus, classified as mentis publicus or a general and public class of mental faculties.

Bhassa or "contact" is the seventh kind of public mental faculties. It is considered part of a general mental ability of the general public because it could be experienced by everyone without special training. The contact refers to the receiving of outside stimulus through the five physical senses (life form) and the sixth sense by the mind (life abstract or vita perceptus). There are two types of contact, physical contact and mental contact. The physical contact is the contact that may be recognized by the six sensing receptors. The sound makes contact with the ears in a form of hearing. The form makes contact with the eyes through sight. The scent makes contact with the nose by smelling. The taste makes contact with the tongue by tasting. The touch makes contact with the body by physical touch. These five types of contact are together called physical contact. Lastly, the sixth type of contact is the mental contact by means of cognition. The seventh kind of public mental faculties (bhassa) is the mental contact. This mental contact, recognized by cognition, may be experienced by everyone without special skills or training; thus, it is classified as mentis publicus or mental state of the general public.

In summation, the public or generalized mental faculties (Suppachitasatarana cetasika) are defined as the mental abilities that may be experienced by all members of the public; thus is known as general mental faculties. In order to experience these mental faculties, there is no need for special training. This public mental faculties or mentis publicus forms the basis of human understanding among members of human species. One can assume that all members of the human species possess these seven kinds of mental abilities and, as the basis of their mental faculties and the functioning of the human mind, they provide members of human society the easy of effective communication. They serve as common bases to allow us to experience "group thinking" since all members possess

the same abilities, as a common source of the mental code for communication, this *mentis publicus* is considered an achievement for the human species.

2.2 Pakinaka or specific mental faculties (mentis certus)

A second class of mental faculties called *pakinnaka* or specific mental faculties (*mentis certus*); its occurrence does not concur with the arising of the output of the Mind every time. For instance, when the mind thinks of a certain thought, it is necessary that such a thought is accompanied by a specific type of emotion: like, dislike, and neutral. There are six kinds of *mentis certus*. They may enter the Mind and formulate the expression of the mind, but they do not all enter at the same time. These six kinds of *mentis certus* enter the mind individually and separately at different moments. These six kinds of non-public or *mentis certus* include: (i) *vitaka* (awareness), (ii) *vijara* (consideration), (iii) *adhimaka* (following or convincing), (iv) *chandha* (willingness or satisfaction), (v) *viriya* (efforts), and (vi) *piti* (joy).

The first kind of specific or *mentis certus* is called *vitaka* or awareness. Awareness is defined as the mental focus of something. The condition under which awareness exists is one characterized by the awakening of the mental state, i.e. awaken means conscious, and there is an object on which the mental state focuses its attention upon the target object. Consciousness is a condition under which the Mind receives, processes, and reaches cognition. This focus is called awareness. There are two requisites for this state of mental faculties: (i) awakening of the mind or the mind is not asleep, and (ii) a mental focus on a particular object or focal point. This does not happen automatically. A certain object may exist and the mental state may be awakened; however, unless there is a focus or the volitional willing of the mind to force the mind to focus on the object, that awareness does not occur. For this reason, this mental ability or faculties is non-public; it happens only in the person who satisfies both conditions: awaken and wielding the mind to an object of focus. By whatever cause or reason, this ability may not exist in everyone as a matter of fact; it is an outcome of a volitional act. Its occurrence is not general, but occasional. Not all persons experience it at any given moment, only a particular person can experience it upon a stimulus; thus, it is called occasional.

The second kind of *mentis certus* is called *vijara* or consideration or pondering. The precondition for mental consideration is awareness. In order to consider or ponder something, that *something* or object must first become a focal point of the attention of the observer, i.e. the observer must have the awareness of the object. Since awareness of the precondition for consideration, and that awareness is specific or *mentis certus*, then consideration or pondering too, by default is *mentis certus*. It is a mental ability which does not occur automatically, but requires a mental effort as a precondition. This exertion of mental effort may require training or volition on the part of the observer. Therefore, consideration or ponder is not a general mental ability.

The third kind of *mentis certus* is called *adhimaka* which means following or convincing. In order for the Mind to become convinced of any data or stimulus present to it, the mind must be aware of the stimulus, ponder upon the stimulus and enters a third phase of mental efforts in coming to a conclusion of being convinced or found interest in the stimulus. When a person pays attention to a stimulus, say a lecture in a study hall, the Mind works in the same manner. First, the person is aware of the lecture being presented. The person makes the mental note of the object and ponders upon the information presented. Before coming to any conclusion or become convinced by the speaker or of the subject matter, the student must attentively follow the subject matter. This third kind of *mentis certus* requires even more mental efforts than the prior two (awareness and consideration), this premeditation by wielding the mind to follow the presentation or stimulus allows the observer to engage in a mental exercise. This mental exercise is a mental work engaged through a volitional and voluntary act of the observers; therefore, this type of mental faculties does not exist in all persons for any given stimulus. It happens only in a person who has the awareness of the object, ponders upon that object, and follows through it.

The fourth kind of non-generalized or specific mental faculties is called *chandha* or willingness or satisfaction. It is classified as mentis certus or specific and non-general mental state because it requires active engagement by the observer or subject in the object. The person would have to go through all prior three kinds of mental elements: awareness, consideration, and following, in order to come to willingness or satisfaction. If we look at this fourth kind of mental faculties in a stage-by-stage format of the working of the Mind, we see that the three prior mental faculties laid the foundation for this fourth one. The mental willingness or the conclusion of satisfaction would not be possible without "awareness, consideration, and following" as prerequisites. Therefore, since all three prior mental faculties are classified as mentis certus, this fourth stage of mental work must by condition be likewise specific and occasional. We may return to the example of a student listening to the lecture. At the last stage, he had manifested awareness, pondering the content of the lecture, and following through the presentation, at this point the student makes a decision of whether he is satisfied with the presentation of the subject matter. This mental experience is specific to the student or the observer, not enjoyed nor engaged by the public, it is specific to one who is engaging in the activity. The activity is the presentation of the stimulus where the observe becomes aware of the stimulus, considers the stimulus attentively, follows through with the presence of the stimulus, and makes a conclusion about the stimulus. This activity or mental exercise is specific to a particular observer and does not happen simultaneously nor is it a happenstance. The activity in these four stages of mental exercise does not happen by chance; they are the outcome of a volitional act or series of mental acts.

The fifth kind of specific mental faculties or *mentis certus* is called *viriya* or efforts. Effort is defined as attempt and attempt is a volitional act. Such an act is an outcome of intent. An intent must first be formed. That formation then the intent is expressed through a volitional act, inwardly or outwardly, this volitional act culminates to a continuation of an action. This is how efforts are manifested. The mental effort that serves as part of non-general or *mentis certus* in the rubric of mental faculties sees the continuation of the working of the Mind.

Lastly, the sixth specific mental faculties is called *piti* or joy. As the mental efforts is being exerted in a continuity from the fifth *mentis certus*, assume that the stimulus is something positive or that it may be called "stimulating" as it had attracted an continuous efforts of the mind to follow it, the observer enters a stage of joy. This joy may come from an understanding of the subject matter presented from the external environment. For the student in our example, the joy may occur when the student understands the subject matter or can find meaningful application of the newly acquired knowledge. What if the student finds the subject matter not interesting or that it is not stimulating, the outcome of the mental faculties may be the opposite. Instead of joy, the student may find it not enjoyable. It does not matter what the mental outcome of the student may be, this fifth kind of non-public mental faculties is one possibility; the person processing the stimulus does not have to "enjoy" the stimulus; joy is one possible outcome. There might be other mental outcome from the process.

We commonly attribute "joy" to a sentiment or feeling of happiness. Although such a common attribution is not entirely wrong, it is not a precise conclusion of what we experience in the Mind. Similar to *mentis concordia* (*Ekaggata* under *mentis publicus*) that we presented earlier, joy in the sense of mental faculties context is momentary, as if analogous to a spark of light that arises then sooner vanishes; the length of existence of joy may be as short as a blink of an eye. We need to rely upon the power of the Mind to recognize its arising and extinction. This is different from the common definition of happiness where people attribute the state of lasting joy, thus, the term "enjoyment" enters our vocabulary to express such a sentiment or feeling. That type of enduring sensation of enjoyment is more superficial and does not explain the working of the mind. The primal cause of that enduring sentiment commences with the spark of joy whose existence is more fleeting than enduring that gives rise to the recognition of its transient existence and the observer captures and replays it over and over again to extend its effect by relying on memory (*sanya*)---hence, a fleeting moment of joy turns into a lasting enjoyment. The rewind and replay happens in

such a high speed that it appears to the untrained Mind as if it is continuity from moment-tomoment feeling or recognition of a feeling or emotion. This superficial observation gives an appearance of continuous state of joy; an experience commonly called happiness.

3.0 AKUSALA CETASIKA (MENTIS MALUS)

The discussion we presented thus far is confined to the public (*mentis publicus*) and non-public mental faculties (*mentis certus*) which consist of only positive or neutral aspects of the mental faculties. In this section, we explore what is classified as non-beneficial or *mentis malus* (*akuslala cetasika*). *Mentis malus* is comprised of 5 types of mental malevolence and together has 14 components. Individually and severally, these 14 components of the dark side of the Mind contribute to what the public called unhappiness. The level of unhappiness or mental problem that people experience in their lives depends on the degree and number of these *mentis malus* surfacing in their mental faculties.

The Mind is a machine. By definition, a machine takes in the input of the same kind and produces an output of the same type. For the Mind, the input comes through the six senses: hearing, seeing, smelling, tasting, feeling of bodily touch, and mind-receptor or mental contact. The input are then sound for the hearing organ, form for the sight organ, taste for the tongue, smell for the nose, heat and pressure for the bodily touch, and emotional stimulus for the mind-receptor. The mind is a multi-functional machine capable of processing six different kinds of stimulus and produces six different kinds of output. Each input and output among the six senses has its own receptor; thus, the Mind is more of a factory housing six different machines that receive specific input and produces specific output discretely. These outputs work together with the mental faculties (mentis facultas).

The output is packaged into the four building blocks of the Mind. These building blocks consist of (i) form (ruppa), (ii) memory (sanya), (iii) emotion (vedhana), and (iv) synthesis (sangkhan). The mental faculties discussed in this paper are found in the synthesis building block of the Mind. In this synthesis block, there are 52 elements of what is called mental faculties or emotions which work with and depends on the Mind to exist. In the packaging process of the mental packaging of the output of the Mind, it is in the synthesis that we find the cause of what may attribute to unhappiness and other causes of mental problem. In this section, we explain the five kinds of mental faculties that attribute to mentis malus.

3.1 Lobha or greed as the cause of *mentis malus*

Greed is defined as an intense desire to acquire. A desire to acquire something does not qualify as greed. The desire for the acquisition must be intense in order for it to qualify as greed. There are three elements of greed: (i) greed as an intense desire to acquire or *lobha*, (ii) holding a wrong view or *dhitti*, and (iii) arrogance or *maana*.

It is true that we cannot obtain all that we desire. Thus, intense desire to acquire things that would not materialize will ultimately lead to disappointment. This feeling of disappointment is a negative mental outlook and if such a feeling is allowed to continued, it will develop into something even more negative. Recall that the mind by its nature cannot stay in one place for too long. The mind arises in one building block and must distinguish and arise in one of the other three building blocks. Under normal condition, as this process continues, a healthy mind is assured. However, when the desire to attain something becomes intense, the mind is forced to focus on that particular desire a longer period of time or as soon as the spark of the mind is extinguished, it is recalled to arise again in that same building block; as this obsessive re-enactment of the mind to be in the same building block and finally comes a moment of truth that what had been desired would not come to fruition, the mind moves from its bingeing state to a new synthesis, a feeling of dejection and disappointment. This negative feeling coupled with the recollection of the desire and its attendant non-fruition recreates more disappointment. As the process continues, all the mental sparks and

distinguishing happen in one place: synthesis producing disappointment. This is one cause of mental stress.

Mental stress is defined as tension putting the mind out of balance. Balance of the mind is characterized by the proper function of the mind where it arises and extinguishes constantly and consistently among the four building blocks of the mind. When the mind remains in one building block too long or returns to the same building block too often through the repetition and interaction between memory (*sanya*) and synthesis (*sangkhara*), mental stress or tension occurs. If left untreated, stress may develop into depression. If depression is left untreated, it may lead to depression and ultimately self-destructive action, such as self-inflicted pain and ultimately suicide.

If stress may come from greed and greed is the intense desire to acquire then the cause for stress or depression may be easily identified. If the cause is identified then intervention may be made. In this case, the intervention must start with the re-orientation of the mental outlook. Since the intense desire (*lobha*) is part of the synthesis component of the four building blocks of the mind, the person experiencing stress or depression as the result of greed must be released from that building block of the mind. The mind must be freed from its forced subjugation in the synthesis building block and be allowed to roam freely among the four building blocks according to its nature.

Recall that the four building blocks of the mind are: form, memory, emotion, and synthesis. Greed belongs to synthesis because greed is the intense desire to acquire something that the person does not now have in possession. When this intense desire is created in the synthesis building block, as the mind obeys its law of nature by arising and extinguishing, the person (subject) clings to the second building block called memory and recalls the desire to acquire, the desire was not fulfill and the person becomes disappointed. Not giving up the desire, the person forces the mind to cling to the memory of the desire and engages in the desire under the synthesis building block; thus, the mind is forced to go back and forth between synthesis and memory with disappointment and a feeling of dejection as the consistent outcome. Mental sickness such as stress and depression are the consequences of this artificial and unproductive control of the mind.

The other possible outcome of greed is that the person actually acquires the things that were intensely desired. Would the occurrence of stress or depression foreseeable in such a person? Yes, because greed is defined as intense desire to attain something and that even after the attainment of the object, the person will continue to desire more and with the same or more intensity. That is the nature of greed; greed is an insatiable desire to acquire. There could be no true satisfaction even when the object of desire had been obtained, a new desire will form and the level of intensity rises as before. The only solution is to cut the cycle of desire, attainment and continuing to desire to attain more, by recognizing that this insatiable desire to attain is greed. By accepting the fact that greed leads to disappointment and continuing greed leads to repeated disappointment; in order to cut the cycle, the person must dissolve greed by turning the attention to other elements or group of mental faculties or emotions.

The second component in this category of negative mental outlook possesses the wrong view point or opinion (*dhitti*). In the scientific community, people whose possess the wrong view are said to have committed Type I error. Type I error occurs when the investigator insist on believing in something that is wrong in spite of the contrary evidence. A person possessing the wrong opinion may produce negative mental outlook because such view is contrary to fact. When faced with reality that is contrary to such a view, the person is forced to accept what is correct, but his insistence to cling to the wrong view will lead him to go on the offensive to insist of being correct, and, at the same time, retreats on the defensive by trying to rationalize that his view is correct despite mounting evidence showing the contrary. This internal conflict will produce a feeling of dejection and self-hate. The holding of the wrong view is thus classified as a negative mental outlook.

The third component of *lobha* is arrogance (*maana*). Arrogance is defined as the feeling of self-aggrandizement at the expense of others. It is a form of selfishness; however, in simple

selfishness, the person exploits others for self-interests. Arrogance, on the other hand, is more destructive in that it comes at the expense of others. It is considered unhealthy mental faculties because for the self, arrogance leads to over-confidence; over-confidence leads to recklessness, and ultimately self-endangerment or the estrangement of others. The consequence may be that the arrogant person is faced with ostracism and rejection by his peers and community.

Both the holding the wrong views and being arrogant have their origin in the mind. Among the four building blocks of the mind, the thoughts that gave rise to this kind of mental outlook reside in synthesis. Since the wrong view is contrary to fact, the person holding the wrong view merely synthesizes the opinion and insisting on calling it truthful or correct. As for arrogance, this too comes from the synthesis building block of the mind. The idea that the person is superior to others is an outcome of a mental creation which may not reflect reality. Like greed when the desire is unfulfilled, disappointment is its fruit, arrogance when faced with social rejection or ostracism, disappointment is also laid in wait for an arrogant. When disappointment is the reward of such mental outlook, it should be avoided. To harbor arrogance is to sow the seed of disappointment.

3.2 Dhosa or hatred as the cause of mentis malus

Hate is defined as a strong feeling of dislike. As a mental state or mental faculties, hate is a negative sentiment. To say that hate is not definable or irreducible is to engage in self denial (Spencer, 2017). Every human sentiment or mental state had been identified; there are 52 of such emotions called *cetasika*.

Sigmund Freud defined hate as an ego that wishes to destroy the source of its unhappiness; he asserted hate is linked to the question of self-preservation. This view is incorrect and is selfdestructive. Freud misunderstood the function and effect of hate. The function of hate is to construct a fictional mental state as part of the person's desire to obtain something but is stopped short of achieving that desire. Hate is a response mechanism in coping with disappointment. The person feeling hate is the subject; the target of which is negative sentiment is aimed becomes the object. The object may or may not be the cause or obstruction of the subject's desire; it is a sub-element of greed (*cupiditas*), but the sentiment of the subject is to aim and channel the negative energy towards the object. This is not "self-preservation" as described by Freud, but it is self destructive in that the subject synthesizes and magnifies an enemy that is unreal and non-existent (res non existo). Even in a case where the object may be real, or that obstruction had indeed existed, the sentiment of hate nevertheless is a de facto response, not a continuing attempt for self-preservation nor a fight to preserve self interests. Hate is an unhealthy means of self-therapy to heal one's wounded desire. The effect of hate is the creation of a mental state which could neither be found nor supported by objective reality; thus, it is unhealthy for the Mind. As a mental state, hate is a state of mind functioning in a state of less than optimum. The only consolation is that hate, like other mental state, is a transient state. It is not permanent. It is not correct when someone asserts that hate may not be subsided with the passage of time (Smith, 2016). Since this paper demonstrates that the working of the Mind is discrete, the feeling of hate is the lie and relive of a state of Mind which arises and diminishes. The lingering of this sentiment is not a continuation, but the reliving of an e vent which had passed. It is recalled anew through the power of memory---one of the building blocks of consciousness. By that recollection, the sentiment o hate is relived. Through that reliving does the person reaps the harvest of mental discontent.

Freud is not alone in incorrectly glorifying hate. In some western literature, it has been written that "As compared to magical destruction, aggressive ideas and behaviour take on a positive value, and hate becomes a sign of civilization." (Winnicott, 1973). What defines civilization is "righteousness," not a state of mental psychosis whose root is founded in the deep desire to satisfy the self, but in the process, as the sentiment of hate endures through the repetition of recollection of such a sentiment, hate becomes the source of self destruction for the subject. There are four elements of hate: hatred (*dhosa*), envy (*issa*), stinginess (*macchariya*), and worry, remorse (*kukkucca*).

3.3 Moha or ignorance as the cause of mentis malus

A common interpretation of *moha* is "delusion." This interpretation is not meaningful and inaccurate. *Moha* is classified in the greed category. As defined above, greed is the unquenchable desire to acquire something; however, the term "delusion" would not accurately reflect this category of *mentis malus*. Delusion is an idiosyncratic belief that is strongly being held despite contradicting evidence. A more accurate interpretation of *moha* is ignorance (*ignoratio*). In the Buddhist context, ignorance is the antithetical of knowledge or *panya*. Panya is defined as wisdom, knowledge or intelligence. Knowledge or intelligence in Buddhism refers to the knowledge of the four noble truth: (i) suffering (*dhukka*), origin or cause of suffering (*samudhaya*), the end of suffering (*nirodha*), and how suffering could be ended (*marga*). Ignorance, as an antithetical to "knowledge" of the noble truth, refers to not knowing suffering, not knowing the cause of suffering, not knowing that suffering could be ended, and that there is a means or ways for ending suffering.

In a common language, ignorance is defined as the lack of knowledge or lack of understanding. In keeping with the original teaching of knowing and ignorance, then ignorance refers to the mental state that in life there is suffering, its cause, it could be ended and there is a way to end suffering. There are 8 ways to end suffering through righteousness: (i) right view, (ii) right intention, (iii) right speech, (iv) right conduct, (v) right livelihood, (vi) right effort, (vii) right consciousness, and (viii) right concentration or focus. A person believing that life is full of joy may be delusional.

People who experience negative emotion and ultimately become stressful are commonly ignorant of the suffering. Not able to recognize that the current state of the mind causes suffering, the person endures the negative mental state that leads to stress. The untreated stress leads to depression. The solution to stress could be recognized the fact that stress is an outcome of ignorance. Stress itself has is cause of suffering. By recognizing this fact is the first step towards exfoliating away the mantle of ignorance. Accepting and practicing the eightfold path will lead to the end of stress and depression because the eightfold path to reorient the mind towards civility, humility, and sensibility. This approach to treatment of mental stress may be far more superior to the conventional practice seen in modern medicine where anti-depressive drugs are used.

3.4 Dhitthi or wrong view as the cause of mentis malus

 7 1. สัมมาทิฐิ (ความเห็นที่ถูกต้อง) หมายถึง ความรู้ในอริยสัง 4

2. สัมมาสังกัปปะ (ความคิดที่ถูกต้อง) หมายถึง ความคิดในการออกจากกาม ความไม่พยาบาท และการไม่ เบียดเบียบ

- 3. สัมมาวาจา (วาจาที่ถูกต้อง) หมายถึง การเว้นจากการพูดเท็จ หยาบคาย ส่อเสียด และเพ้อเจ้อ
- 4. สัมมากัมมันตะ (การปฏิบัติที่ถูกต้อง) หมายถึง เจตนาละเว้นจากการฆ่า โจรกรรม และการประพฤติผิดในกาม
- 5. สัมมาอาชีวะ (การหาเลี้ยงชีพที่ถูกต้อง) หมายถึง การเว้นจากมิจฉาชีพ
- 6. สัมมาวายามะ (ความเพียรที่ถูกต้อง) หมายถึง สัมมัปปฐาน 4 คือ ความพยายามป้องกันอกุศลที่ยังไม่เกิด ละ อกุศลที่เกิดขึ้นแล้ว ทำกุศลที่ยังไม่เกิด และคำรงรักษากุศลที่เกิดขึ้นแล้ว
- 7. สัมมาสติ (การมีสติที่ถูกต้อง) หมายถึง สติปัฏฐาน 4
- 8. สัมมาสมาธิ (การมีสมาธิที่ถูกต้อง) หมายถึง ฌาน 4

เมื่อเทียบกับหลักไตรสิกขา องค์มรรคข้อ 1-2 เป็นปัญญา ข้อ 3-4-5 เป็นศิล และข้อ 6-7-8 เป็นสมาชิ http://www.84000.org/tipitaka/dic/d item.php?i=293

Holding the wrong view is a form of mental state which may leads to unwholesome or unhealthy mental condition or state of mind. In general, a wrong view is defined as clinging to any idea or concept in an absolute term. In Buddhism, extreme views are to be avoided; thus, fanaticism is another form of wrong view. Taking the middle path in all views of the world is the correct view. The existence of anything in the world may not be absolute. Absolute existence (attita) is not possible since all things must ultimate decay and finally distinguish (anij-jang). This transient existence makes the existence of all things impermanent and without permanent self or identity (anat-ta). At the end of the spectrum is to claim that nothing exists (nitthita). This absolute view of the world is also erroneous and unwholesome. The middle path of seeing the world consists of three components: things exists, remains, and then is extinguished; such is the nature of all things. This is called the middle path (majima).

As a mental state, to hold an absolute or extreme view is to sow the seed for disappointment because the world, the realty of the world, is not so. The correct view is one that obeys rationalism and prudence. Rationalism is defined as "any view appealing to reason as a source of knowledge or justification" (Lacey, 1996). By reason, we mean non-extremism. Here, we find the confluence of Buddhism and Western thought because rationalism exerts immense influence upon Western thinking (Lavaert and Schröder, 2016). If guided by rationalism then there should be no extreme view because extremism is irrational and illogical. Fanaticism is an example of wrong view. Fanaticism is self-confirming that the view held by the believer is correct (Postman, 1976). When it is shown that such view is incorrect, fanatics generally take extreme actions to show that their extreme view is correct. Ultimately, fanatics are proved to be wrong and are ostracized from the community of the civilized people.

The correct view is a more prudent view. Prudence requires the avoidance of extreme views. Nothing in the world is absolute. As a mental state and outlook, one should not hold absolute view of any subject. To do so would result in disappointment when it is shown otherwise. For this reason, the wrong view (*Ditthi*) is considered unwholesome. If one can avoid holding a wrong view, one can gain one notch in attaining healthy mind.

3.5 Vijikija or doubt as the cause of mentis malus

Doubt is an occasional unwholesome mental state. Occasional means that this type of mental state does not always remain in the Mind of the person. It occurs as a result of reacting to a stimulus. Doubt is a statement or belief or non-belief. It is classified as unwholesome because doubt obstructs the path to knowledge.

In Western philosophy, there is a branch of study called skepticism whose ideology is based on either (1) the denial of possibility of all knowledge or (2) the suspension of judgment due to the inadequacy of evidence (Popkin, 2003). This denial of knowledge leads to the conclusion that either nothing exists or if something exists, we could not truly know of its existence (Jones, 1952). Some skeptics may go as far as asserting that the meaning of objects may be constantly changing; therefore, true knowledge is not possible (Popkin, 1967). Thus, one of well known Greek skeptic, Socrates, was reputed to have said he knew nothing or that nothing was worth knowing (Hazlett, 2014). This branch Western philosophy stands at a stark contrast to Buddhist teaching which embraces knowledge. Humans can understand the world they live in, and they can make themselves to be understood.

For Buddhism, true knowledge exists. The four noble truth may be subjected to empirical examination and could stand the test of time because it is self evident and also could be proven. For instance, everything that exists in the world arises as its first coming forth. Thereafter, it remains in existence, and then is extinguished. This birth, remains in existence, and death represents the cycle of existence of all things, living and non-living. It is further argued that if an object's existence is impermanent then it may be the cause of human suffering as we cling to it (object of desire) as it ultimately will diminish. Thus the logic of the four noble truth follows: where there is suffering, there is a cause, where there is a cause, there is a cessation, and there is a method of how to end

that suffering. Knowledge is capable of being ascertained. Doubt is seen as one of fifty-two possible mental states. Unlike Western philosophy of skepticism, Buddhist philosophy treats skepticism as an unwholesome state of mind. Instead of a branch of knowledge, skepticism is seen as an obstruction to knowledge.

4.0 SOBHANA CETASIKA (WHOLE & HEALTH EMOTIONS)

Recall that Buddhist teaching categorizes mental faculties into 52 elements. These 52 elements are further divided into four sub-categories: (i) general, (ii) occasional, (iii) unwholesome or unhealthy, and (iv) wholesome or beautiful, mental faculties. This section explains the last group of mental faculties (wholesome) which is comprised of (a) public or universal, (b) righteousness, (c) limitless and (d) wisdom.

4.1 Sadharana (public or universal) as the cause of mentis bonus

There are 19 distinct mental faculties that are classified as universal cause for healthy mental state (mentis bonus). Where there are only 14 elements of mental faculties which are responsible for unhealthy mind (mentis malus), the 19 elements of mentis bonus is provides hope for treatment of mental distress. Firstly, there are more "good" than there are "bad" mental states. By replacing each unhealthy mental state with a healthy one, mental distress may be treated. This treatment is be accomplished with "mind management" instead of external intervention, such as antidepressant chemicals, such as: sertraline (Zoloft), fluoxetine (Prozac, Sarafem), citalopram (Celexa), escitalopram (Lexapro), paroxetine (Paxil, Pexeva, Brisdelle), or fluvoxamine (Luvox) whose side effect may include nausea; increased appetite and weight gain; loss of sexual desire and other sexual problems, such as erectile dysfunction and decreased orgasm fatigue and drowsiness; insomnia; dry mouth; blurred vision; constipation; dizziness; agitation; and irritability. Secondly, mental stress or depression treatment may simply be reduced to no more than "mind management." This mind management approach to treatment of mental distress include the recognition of the 4 basic building block of the mind and replace the 14 unhealthy mental states with the 25 healthy ones. The 19 mental states are universal or general that could be recognized and experience by all persons without special training. They are listed below with their corresponding English equivalence.

Williamess
Moral shame
Moral fear
Non-greed
Non-hatred
Equanimity
Tranquility (of mental factors)
Tranquility (of consciousness)
Lightness (of mental factors)
Lightness (of consciousness)
Pliancy (of mental factors)
Pliancy (of consciousness)
Adaptability (of mental factors)
Adaptability (of consciousness)
Proficiency (of mental factors)
Proficiency (of consciousness)
Rectitude (of mental factors)
Rectitude (of consciousness)

Confidence

Mindfulness

1. Saddhā

2. Sati

In addition to the 19 universal mental states, there are other occasional or specific healthy mental states which include (i) abstinence, (ii) infinity, and (wisdom). There are three kinds of abstinence, namely right speech (samma vaja), right action (samma kammanta), and right livelihood (samma ajiva). There are two type of infinite mental state, namely compassion (karuna), and sympathetic joy (mudita). As for wisdom, there is only one type and has no sub-elements.

There are 14 mental states or emotion that a person should recognize and avoid. These 14 elements of *mentis malus* are:

1. Moha Delusion 2. Ahirika Shamelessness 3. Anottappa Moral fearlessness 4. Uddhacca Restlessness 5. Lobha Greed 6. Ditthi Wrong view 7. Māna Conceit 8. Dosa Hatred 9. Issā Envy 10. Macchariva Stinginess 11. Kukkucca Worry, remorse 12. Thīna Sloth, laziness 13. Middha Torpor, tiredness 14 Vicikicchā Skeptical doubt

Since the mind function in such fast speed that it is nearly impossible to anticipate each mental state before it occur, but only through recognition after it had already disintegrated. A thought may arise, we are able to recognize it only after it has been extinguished and new thought arises in its place. Thus, the in order to avoid a particular type of thought of mental state is through (i) recognition, and (ii) avoidance. The recognition is the recognition after it had extinguished. The avoidance is the avoidance of not to recall it through memory (sanya).

4.2 Viratti (abstinence) as the cause of *mentis bonus*

Abstinence means refraining from doing. Since we are talking about the mental state, the refraining is about refraining from doing something so that we could maintain a benevolent mental state. "Abstinence" is about refraining from doing bad conduct or refraining from entertaining bad thoughts (14 elements of unhealthy mental states) in order to attain and preserve a benevolent mental state. Abstinence mental faculty or emotion consists of three elements: right speech ($Samm\bar{a}$ $v\bar{a}c\bar{a}$), right action ($Samm\bar{a}$ kammanta), and right livelihood ($Samm\bar{a}$ $\bar{a}j\bar{v}a$).

Right speech consists of refraining from telling lies, use of profanity, innuendo, and raving. Right action consists of refraining from killing, stealing, committing adultery. Right livelihood means to earn an honest living, and refraining from wrongful livelihood. These three types of refraining conducts constitute abstinence. Each type of refraining seems to refer to conduct, rather than a state of mind. However, all refraining in this group of *bonus mentis* has their root in the mind, i.e. intent. Since they are intentional acts, by refraining from their commission, the mind is put at state of abstinence of doing unwholesome action or thought. People who refrain from engaging in wrong speech, wrong action and wrong livelihood are said to harbor good mental state. Since all action begins its course in the mind, by refraining from such actions, the mind is not polluted. This state of mind or emotion is considered to be benevolent.

4.3 Appamanya (limitless) as the cause of *mentis bonus*

There is a group of mental states which could not be counted. These are compassion (Karuṇā) and sympathetic joy (Muditā). We cannot quantify compassion. Although there might be a level or

degree of compassion, such an attempt to quantify what is truly limitless is an artificial construct. Similarly, the joy of sympathizing with another human being is also not quantifiable. When we express for having witness others being happy, this mental state connotes the purity of the heart and mind because our emotion is not clouded by envy or jealousy. Compassion and sincerity could not be measured with quantifiable scale.

What does it cost to have compassion for another living being? Compassion does not an input and output process. Compassion is the desire to alleviate other's suffering (Jimenez, 2011). This attempt to alleviate the suffering of other may come in a form of warmth and care (Nanda and Santosh, 2015). In the western literature, the expression of compassion is said to be hierarchical, paternalistic and controlling in responses (Gilbert, 2001). One western source claims that compassion is a variation of love or sadness (Shaver et al., 1987). It is recognized as an emotional state (Bowlby, 1983; Haidt, 2003; Keltner et al., 2006). It links the person expressing compassion with the one who is suffering (Goetz et al., 2010; Ekma, 2003). One source claims that the rationale is that people emulate the emotion of other people around them (Hatfield and Cacioppo, 1993). This view is not genuine since compassion is an expression of sincere understanding of other people's suffering. The purpose of expression compassion is to lessen the suffering of the other person who is suffering by showing the understanding of such sufferance. It is not a mere expression of fake emotion resulted from emulation. Hence, the more a person knows about human conditions and their sufferance, the more readily that person is to express compassion for his fellow beings (Cassell, 2009). Compassion may have the effect of inducing the feeling of kindness and forgiveness; thus, the presence of compassion generally reduces the chance for violence (Goertz et al., 2010).

4.4 Panya (wisdom) as the cause of mentis bonus

Finally, wisdom is a benevolent mental state. The term "Paññindriya" or Wisdom is a mental faculty or state of mind requires a comparative analysis on how western writers see wisdom as oppose to how is wisdom being viewed under Buddhism.

Wisdom is unbiased knowledge (Grossmann, 2017). An example is wisdom is virtue and ethics (Staudinger and Glück; 2011; Walsh, 2015). Western writing differentiates wisdom from emotion (Grossmann *et al.*, 2018). However, in Buddhist philosophy, wisdom is one form of emotional state. Wisdom is a subject of study in modern psychology (Sternberg, 1985). "[T]here is an overlap of the implicit theory of wisdom with intelligence, perceptiveness, spirituality and shrewdness, it is evident that wisdom is an expertise in dealing with difficult questions of life and adaptation to the complex requirements." (Brown and Greene, 2006). Some sources assert that there is a psychological process that underlies wisdom (Bluck and Glück, 2005). This view is consistent with the Buddhist teaching since in Buddhism wisdom is an emotional state. Nevertheless, among western literature, psychological definition of wisdom varies (Staudinger and Glück, 2011). Despite the variation and uncertainty of the concept of wisdom, there is a consensus among western writers that "wisdom" is a reflection and judgment about critical life matters (Baltes and Staudinger, 2000). Wisdom is the state of being wise. Wisdom is not the same as IQ (Grossmann *et al.*, 2010); it is a different kind of intelligence (Staudinger *et al.*, 1997). A wise reflection upon other people's life problem is one way of looking at wisdom (Grossman and Kross, 2017).

Can wisdom be measured? It has been argued that wisdom could be measured either as a form stable personality or how the person judge or evaluate problems in different context (Grosmannm 2017). However, the use of questionnaire to assess wisdom has been criticized as having biased response (Brienza et al., 2017; Taylor et al., 2011). This claim itself, if well-founded, is inconsistent with the pretext of wisdom. By its very nature, wisdom is an objective knowledge, absent of bias (Glück et al., 2013). To assert that there is response bias in a survey to test or assess wisdom is argumentative and self-defeating. Regardless of the argument and counter-argument in the measurement of wisdom, research had shown that the outcome of measuring wisdom is context

dependent (Grossmann, 2017). For example, this contextual difference may come from culture (Grossmann *et al.*, 2012), and age (Harter, 2004; Orwoll and Perlmutter 1990).

Wisdom is knowledge of what is good and bad in life. In Buddhist teaching, wisdom may be obtained through three sources: (i) listening to someone know is wise (suta-maya-panya); (ii) thinking (*jinta-maya-panya*); and (iii) learning or doing (*pavana-maya-panya*) (Tipitaka, vol. 11). In order to accomplish any one of the three sources of wisdom, the person must learn to be an objective observer. To maintain objectivity, one must use three rule of observation: (a) that is not mine (*netang-mama*), (b) that is not me (*neso-hamassami*), and (c) that is not about me (*na-meso atta*). As an observer, the person must not identify himself/herself with the object of observation. To distance oneself from the event, one achieves the first element of objectivity. Secondly, the observer must not claim possessory interests or taking any form of advocacy in the event or object of observation. By not claiming possessory interest in the event, the event could be observed objectively. Thirdly, the observer must not internalize the event nor identify with the event.

The analytical approach to wisdom consists of 4 steps: (i) recognition of the event, such as human suffering (dukkha), (ii) causation of the event (samudha-ya), (iii) the diminishing of the event (nirodha), and (iv) method of obtain diminishment of the event (nidhoda pattipata) by the 8 fold paths (maggha) (Tipitaka, vol. 19). The 8 fold paths to righteousness are: (i) right view, (ii) right intention, (iii) right speech, (iv) right conduct, (v) right livelihood, (vi) right effort, (vii) right consciousness, and (viii) right concentration or focus.

5.0 ANALYSIS AND DISCUSSION

In this first part of a two parts series, we outline the mental faculties responsible for mental stress. We note that mental state is part of the functioning of the min. The mind functions by clinging to four building blocks, namely for, emotion, memory and synthesis. The state of happiness or distress lies in the synthesis block of the mind. This synthesis consists of what is called "mental faculties" which consists of 52 different types of emotions. There are 14 types of emotions that may contribute to mental distress. In contrast, there are 25 healthy mental states which a person could use to counter unwholesome or unhealthy mental states. In the second paper, we will use the 14 elements of unwholesome mental states as indicators to measure mental distress.

5.1 Joy and happiness

Happiness may be defined as pleasant emotional states, such as joy, amusement, satisfaction, gratification, euphoria, and triumph (Algoe and Haidt, 2009). In a broader sense, happiness is to live life in a satisfying way (Deci, 2006). This satisfaction may come from many sources, such as encountering unexpected positive event, (Cosmides and Tooby, 2000), or seeing love ones (Lewis, 2016). The source of happiness may be both internal and external in origin (Seligman (2004). Happiness is not the ultimate goal; it must be balanced with the meaning of life (Baumeister *et al.*, 2013; Abe, 2016). Some culture advocates a balanced life, and not advocate to maximize happiness (Joshanloo and Weijers, 2014; Hornsey *et al.*, 2018).

The importance of happiness may be seen through historical evidence of modern politics. For instance, Thomas Jefferson claimed that the pursuit of happiness is a universal right of people (Schelesinger, 1964). Happiness has been used as an indicator to measure how well the government is doing its job for the country (Tolumitsu, 2017). Subjective Happiness Scale was used to measure happiness (Lyubomirsky and Lepper, 1999). Satisfaction with Life Scale (Diener *et al.*, 1985). World happiness report uses the Cantril Scale ranging from 0 to 10 (Levin and Currie, 2014). These empirical attempts to measure happiness showed that happiness appears to be stable over time (Baumeister *et al.*, 2013; Costa *et al.*, 1987).

Happiness or joy is a mental state that is created in the mind by its function. It is not a state of nature where happiness or joy is continuous and lasting; rather, the mind experiences a state of joy by not encountering the 14 distressful state of mind. When the mind finds mental unity (*mentis Concordia*), it repeats the replay of that state by moving between synthesis building block, memory

building blocks, and emotion or sentiment building block. These are abstract building blocks of the mind; thus, happiness is an abstract concept. How happiness is achieve, the mind has to work in moving around three out of four building blocks. By discovering how the mind works through its building blocks, there is no secret in finding a joyful mental state which we commonly called happiness.

Thus, what we have seen in the western literature about attempts to measure happiness had been so far failed attempts. How long does happiness remains when it arises, and at what kevel does happiness manifest itself? These types of question may be meaningful only if they are put into context of the 4 basic building blocks of the mind. In this part 1 of two parts paper, we assert that happiness is a mental state recognizable only as an after fact (*de facto*), not instantaneous since the person's ability to recognize an event created by the mind is much slower that the occurrence of the event. Any measurement of happiness, therefore, is a measurement of the recollection of the event, not the event itself. Since happiness is a mental state whose existence or occurrence is discrete, any longitudinal study of attempts to monitor the state of happiness over time is a failed study. Since happiness is a state of mind that exists and disintegrate so quickly, the observe must be a good observer. In the second part of this paper, we anticipate quantitative modeling of the functioning of the mind and how could such proposed model be used for treating mental stress and depression.

5.2 Mental stress and depression

Stress is defined as mental strain. Stress may lead to depression and other health problems (Sapolsky, 2004). One mechanism to cope with stress is positive adaptation (Gibbon, 2012). Four types of stress had been identified (Selye, 1974): good stress, bad stress, hyper-stress and hypostress. One coping mechanism is to balance the hyper and hypo-stress (Selye, 1983). Good stress (eustress) may lead to good feeling or euphoria (Selye, 1975). When an external shock is experienced by a person as a source of euphoria, this may be seen as positive stress (Fevre *et al.*, 2006). Whether the factor contributed to stress depends on the subjective interpretation of the person (Hargrove *et al.*, 2013). Major life event may lead to stress (Teo and Fam, 2018). The chronic occurrence of these life changing events may lead to health problems (Cohen *et al.*, 1998).

Positive life changing event may help predict mental stress (Jeronimus *et al.*, 2014; Jeronimus *et al.*, 2013). A person's perception of stressor modulates mental stress (Alwin *et al.*, 2014). There had been attempts to measure stress level produced by various life changing events (Holmes and Rahe, 1967).

From the Buddhist teaching, stress is internal in nature. This intrinsic cause of mental comes from 14 factors; these factors had been identified in this paper as: *delusion; shamelessness; moral fearlessness; restlessness; greed; wrong view; conceit; hatred; envy; stinginess; worry, remorse; sloth, laziness; torpor, tiredness; and skeptical doubt.* The key to avoid stress or mental distress is to recognize these 14 factors in our emotion or mental state and refrain from entertaining or allowing such mental states to fester in the mind. Instead, the person should entertain or experience the 25 types of healthy mental; states that may lead to a state of joy (Index 2).

7.0 CONCLUSION

Although this paper is not a religious study, since the mind and mental states had been studied by Buddha in 4th century B.C. and much of the discussion in this paper is based on Buddha's teaching on the mind and emotion, we relied heavily on Buddhist concept. The purpose of this paper is to explain mental or emotional states in order to identify particular types of emotional states that are responsible for mental distress and depression. According to Buddha's treatise on the mind, there are 52 distinct mental or emotional states. We identified 14 types of mental states that are classified as unwholesome mental faculties. We assert that by identifying and find the means to dissolve these 14 mental states through the use of meditation focusing on other remaining 38 mental faculties, stress and depression could be effectively treated without the use of chemicals, such as anti-depressant drugs. This paper is the first installment of a two installment series. In this part 1, we

identified 14 elements of unwholesome mental states that are responsible for stress and depression. In part 2, we will construct a survey to measure these 14 mental states and identify which elements of the remaining 38 mental states could be harnessed and used to eliminate or lessen the effect of these 14 unwholesome emotions.

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APENDIX 1

Mental faculties: 52 elements

Neutral Effect Un			healthy Effect			Healthy Effect			
Universa	Occasiona	Universa	Occasional			Universa	Occasional		
1	1	1				1			
-	-	-	Gree	Hat	Othe	-	Abstinenc	Infinit	Wisdo
			d	e	r		e	y	m
1*	8	14	18	21	25	28	47	50	52
2	9	15	19	22	26	29	48	51	
3	10	16	20	23	27	30	49		
4	11	17		24		31			
5	12					32			
6	13					34			
7						35, 36			
						37, 38			
						30, 40			
						41, 42			
						43, 44			
						45, 46			

I. Mental state with neutral effects

A. Universal or general occurrence of mental states with neutral effects

Contact (Phassa)
 Feeling (Vedana)
 Perception (Sanya)
 Intention (Chetana)
 One-pointedness (mental unity) (Ekaggata)
 Life faculty (Jivitindriya)
 Attention (Manasikara)

B. Occasional or specific occurrence of mental states with neutral effects

8. Initial thought (Vitakka)
9. Sustained thought (Vichara)
10. Determination (Adhimakkha)
11. Energy (Viriya)
12. Rapture (Piti)

12. Rapture (Piti)
13. Wish (Chanda)

II. Mental state with negative effects

A. Universal or general occurrence of mental states with negative effects

14. Delusion(Moha)15. Shamelessness(Ahirika)16. Moral fearlessness(Anottappa)17. Restlessness(Uddhacca)

B. Occasional or specific occurrence of mental states with negative effects

18. Greed (Lobha)
19. Wrong view (Ditthi)
20. Conceit (Hoha)

21. Hatred (Dosa) 22. Envy (Issa)

23. Stinginess (Macchariya)
24. Worry, remorse (Kukkucca)
25. Sloth, laziness (Thina)
26. Torpor, tiredness (Middha)
27. Skepticism, doubt (Vicikicca)

III. Mental state with positive effects

A. Universal or general occurrence of mental states with positive effects

28. Confidence(Saddha)29. Mindfulness(Sati)30. Moral shame(Hiri)31. Moral fear(Ottapa)32. Non-greed(Alobha)33. Non-hatred(Ashosa)

34. Equanimity (Tatramajjattata) 35. Tranquility of mental factor (Kayapassaddhi) (Chittapassaddhii) 36. Tranquility of consciousness 37. Lightness of mental factor (Kayalahuta) 38. Lightness of consciousness (Chittalahuta) 39. Pliancy of mental factor (Kayamuddhuta) 40. Pliancy of consciousness (Chittamuddhuta) 41. Adaptability of mental factors (Kayakammanyata) 42. Adaptability of consciousness (Chittakammayata) 43. Proficiency of mental faculty (Kayapakanyata) 44. Proficiency of consciousness (Chittapaganyata) 45. Proficiency of mental factor (Kayyujukata) 46. Rectitude of consciousness (Chittujukata)

B. Occasional or specific occurrence of mental states with positive effects

(i) Abstinence

47. Right speech (samma vaca)
48. Right action (Samma kamanta)
49. Right livelihood (Samma ajiva)

(ii) Infinite

50. Compassion (Compassion)
51. Sympathetic joy (Mudhita)

(iii) Wisdom

52. Wisdom (Panya)