

Novel Way to Engineer and Manage the world for Happiness using Buddhist Philosophical Ideas

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Abstract

Throughout the history, people have tried to understand the world to reduce suffering and increase human happiness. Scientists and many others try to put their best effort to increase the way of satisfying the human senses, as they believed that it is the way to end suffering and gain ultimate happiness. Technical developments and management techniques allowed increasing the level of satisfaction of our physical needs and satisfying senses. However it is questionable whether only focusing on satisfying the physical senses would give real happiness. In this research we try to combine the engineering and management together with philosophical ideas especially with Buddhist perspective in order to increase the real happiness. Key aspect here would be to investigate the fact that trying only increase the fulfilling sense requirement would lead to real happiness or is there other aspects to consider improving the happiness.

Keywords: world, senses, happiness, management, engineering, philosophy, Buddhism

1. INTRODUCTION

The world can be considered as the earth with all its countries, living beings and things, and the whole universe at large. There is a significant difference between the world at large for happiness as people including scientists see, and the reality as explained by the philosophers. Engineers and scientists and majority of people used to believe human happiness can be increased only by increasing the material gain in order to satisfy our senses. However, philosophical approaches are sometimes little bit different than this approach as material gain cannot give only satisfaction or happiness, but also kind of unsatisfactory feelings as well. For example, consider Apple co-founder Steve Jobs final sayings[1], did not leave behind a deathbed warning about how the "non-stop pursuit of wealth will only turn a person into a twisted being, just like me. At this moment, lying on the sick bed and recalling my whole life, I realize that all the recognition and wealth that I took so much pride in, have paled and become meaningless in the face of impending death. Now I know, when we have accumulated sufficient wealth to last our lifetime, we should pursue other matters that are unrelated to wealth ... ". This is a clear indication that even you get all sorts of material gains in terms of money, respect, knowledge, innovation ability etc., still something lacking with respect to ultimate happiness.

There is a significant difference between the world at large as people including scientists see, and the reality as explained by the Buddha. Scientists observe the world using the six senses and other instruments which they have developed to increase the range and capacity of each sense, such as telescopes, microscopes etcetera in contrast, Buddha has developed his wisdom through mind development techniques without using any external instrument and then explained about the world. Importance of investigating both the scientific aspects and the Buddhist teachings about the world is, to use that knowledge to improve our life styles in order to overcome suffering in both worldly and spiritually. With the technological advancements today, it is not that difficult to access the knowledge scientists have developed so far. However, it is a continuous ongoing process as new discoveries and theories emerge. This would lead to a great limitation in scientific findings. In the case of Buddha's teachings there are no continuous changes or revisions as such, because Buddha has revealed whatever is necessary for the human beings to know in order to overcome suffering. However, there is a difficulty of elucidating or expounding what Buddha has mentioned just by studying the ancient scripts, and modern analysis by various others, as this is something to be experienced by following the path shown by Buddha to understand (to be percipient) fully. These are the two main limitations in this research.

When talking about the world for happiness, there are many different ways of understanding it. Scientists use various methods to explore it in different fields such as biology, medicine, engineering, geography, chemistry, physics, mathematics, and astronomy etcetera. Philosophers and religious leaders talk about what is this world, who am I, where one come from, what would happen after death, how to gain ultimate happiness. Almost all of them tried to gain happiness from the external world by satisfying the senses or by reborn in a place where you get all sort of pleasures or

no more suffering. In contrast Buddha mentioned one cannot get ultimate happiness from the external world by satisfying the senses, but it can be done by understanding the true nature of the world and giving up the attachment and not to be re-born again in any of the realms of world. As it would be endless huge area to investigate, our scope is narrowed down to investigate, how one can gain ultimate happiness from the world, based on Theravāda Buddhism, compared with other views and methods.

2. VIEWS ABOUT THE WORLD AND HAPPINESS

People tried to understand the world to reduce the suffering and increase the human happiness. Aristotle, who was a student of Plato, is one of the greatest thinkers in the history of western science and philosophy, making contributions to logic, metaphysics, mathematics, physics, biology, botany, ethics, politics, agriculture, medicine, dance and theatre. According to Aristotle, happiness is the central purpose of human life and a goal in itself. Aristotle was convinced that a genuinely happy life required the fulfillment of a broad range of conditions, including physical as well as mental well-being, and he talked about cultivation of virtue as well.

Aristotle defines happiness[2] as; the function of man is to live a certain kind of life, and this activity implies a rational principle, and the function of a good man is the good and noble performance of these, and if any action is well performed it is performed in accord with the appropriate excellence: if this is the case, then happiness turns out to be an activity of the soul in accordance with virtue.

According to Aristotle, happiness cannot be achieved until the end of one's life but it is a goal and not a temporary state. However, according to Buddha, one can achieve ultimate happiness of Nibbāna within this life, as Buddha and many Arahants did.

To be happy at work, to be happy at play, to be happy in our homes and amidst our family is something that all of us desire. But how do we find this happiness? Peter G. James Sinclair[3], who wrote many books and memos about happiness, says here are five truths that I trust will clearly define it for you: "Happiness doesn't come from what we have, Happiness comes from what we use, Happiness doesn't come from what we see, Happiness comes from what we choose, Happiness must rise from within". He tries to say that happiness does not belong to outside world, but it is something to be done within. This is somewhat matching with the Buddha's teaching that to end the world of suffering, you have to search it within.

According to the Pascal[4], the famous philosopher and mathematician, the essays contained in Human Happiness are a curiously optimistic look at whether "humans can ever find satisfaction and real joy in life – or whether a belief in God is a wise gamble at best." He is critically analyzing that whether the blind belief would suffice to gain the real happiness of life. His way of investigating is agreeing with Buddha as he has advised not to blindly believe anything, but investigate wisely as in Kālāma Sutta[5]. However the conclusions are not agreeing with Buddha's teachings as he has the self-belief.

When considering only about human happiness, ignoring the fact that animals also living beings, "each year, over sixty billion land animals are raised in the global "livestock industry", only to end up as food on our plates.[6]"

Most of these animals have probably lived a life not worth living, chronically in discomfort and pain, and despair. Brutal cruelty exists not only in the food industry, but also throughout the cosmetics industry and the fur industry. Exploitation of animals permeates our entire society, not only in the three industries cited, but also in zoos, circuses and bullfighting arenas[7].

Is it reasonable to talk about only human happiness as many modern scientists or some of the religions suggests? This is against Buddha's teachings, as any living being in the 31 realms of existence can be born as human being as well.

Worldly level people believe that sensual pleasures can give the real happiness, but Buddha has clearly rejected this as in Potaliya Sutta[8], by comparing it to a skeleton as one of seven similies: "Even so, householder, an ariyan disciple reflects thus: Pleasures of the senses have been likened to a skeleton by the Lord, of much pain, of much tribulation, wherein is more peril."

Similar examples were taken in Alagaddūpama Sutta[9];

Sensual pleasures are said by the Lord to be of little satisfaction, of much pain, of much tribulation, wherein is more peril. Sensual pleasures are likened by the Lord to a skeleton ... to a lump of meat ... to a torch of dry grass ... to a pit of glowing embers ... to a dream ... to something borrowed ... to the fruits of a tree ... to a slaughterhouse, to an impaling stake ... to a snake's head, of much pain, of much tribulation, wherein is more peril.

In the Mahādukkhakkhandha Sutta[10], Buddha explains:

And what, monks, is the satisfaction in pleasures of the senses? These five, monks, are the strands of sense-pleasures. What five? Material shapes cognisable by the eye, agreeable, pleasant, liked, enticing, connected with sensual pleasures, alluring. Sounds cognisable by the ear,... Smells cognisable by the nose, ... Tastes cognisable by the

tongue,... Touches cognisable by the body,... These, monks, are the five strands of sense-pleasures.

Similarly he has explained the danger, and how to escape from sensual pleasures, so one could end the suffering due to attachment for them.

Buddha further explains the gratification, the danger, and the escape of sensual pleasures in Māgandiya Sutta[11],

Suppose someone who formerly revelled in material shapes cognisable by the eye - agreeable, pleasant, liked, enticing, connected with sensual pleasure, alluring - after a time, having known the coming to be and passing away of material shapes and the satisfaction and the peril of them and the escape (from them) as it really is, getting rid of craving for material shapes, suppressing the fever for material shapes, should dwell devoid of thirst, his mind inwardly calmed. What have you, Magandiya, to say of him?" "Nothing, good Gotama... So Buddha has not seen only the pleasure as worldly people see, but also the danger and the escape for those who seek end of suffering by understand the reality of world.

There were various beliefs about the world in ancient times, such as the notion that the world is flat, world is a creation by a "God", or "Brahma" or some other supernormal power. However, modern scientists do not want to waste time on such concepts. Modern scientists such as Neil Bohr, Heisenberg, and Albert Einstein tried to explain what the world is, its composition using ideas about matter and waves, and then the Quantum Theory.

The assumption that the waves of Quantum Theory were in no way real waves (as Schrodinger believed) which has led to a terrible confusion in the sciences. By following Born's discovery that the square of Schrodinger's wave equations could be used to determine the probability of where the 'particle' could be found, Bohr (and Heisenberg, Born, and now many others) have maintained the confusion of the particle wave duality of matter. Bohr's Copenhagen Doctrine - that Particles and Waves are both Incomplete descriptions of the world (which cannot be described) and complement one another[12].

However Einstein, Schrodinger, de Broglie, and many others believed that reality was not driven by chance, but was logically connected and that the laws of Nature could be sensibly understood. According to Schrödinger, he is opposing not in a few special statements of quantum mechanics held at that time, but as it were the whole of it. He is opposing its basic views that have been shaped 25 years ago, when Max Born put forward his probability interpretation, which was accepted by almost everybody during that time . This indicates that Schrodinger did not agree with others and his own findings prevailed during that time[13].

Thus, the last and the most successful creation of theoretical physics, namely quantum mechanics (QM), differs fundamentally from both Newton's mechanics, and Maxwell's e-m field. For the quantities which figure in QM's laws make no claim to describe physical reality itself, but only probabilities of the occurrence of a "physical reality that we have in view" .

Albert Einstein says,

I still believe in the possibility of a model of reality -- That is to say, of a theory which represents things themselves and not merely the probability of their occurrence. On the other hand, it seems to me certain that we must give up the idea of complete localization of the particle in a theoretical model. This seems to me, the permanent upshot of Heisenberg's principle of uncertainty.

So Einstein interested in finding some way to explain the things existing, but not observations about them.

According to Haselhurst findings so far by modern scientists it can be divided into three parts;

- i) We must know the truth to act wisely, and truth comes from physical reality.
- ii) Our present and past societies are not founded on truth and they have acted unwisely (overpopulation, destruction of nature, pollution, climate change, religious and economic wars, and etcetera).
- iii) We now know the correct language to describe physical reality (all matter interactions are wave interactions in space), and this knowledge is critical for our future survival, being the very source of truth and wisdom[14].

However, the point is that first, (i) he has ignored the mental aspect of it which is crucial for finding the truth. Secondly, (ii), he has correctly identified the weaknesses but ignored the fact that how millions of people developed their wisdom and ended in all sorts of sufferings. Thirdly (iii), ignoring the fact that the findings of science have been changed throughout the history and are expect to be changed in the future as well with more new findings. So relying on one such finding which is still not understood correctly would be a mistake about the truth and wisdom. Throughout this thesis we are going to explore the Buddhist perspective about the world and how it helped to completely overcome the unsatisfactoriness or suffering for those who have followed it until the final stage.

Among the scientists, Schrödinger is the closest to Buddhist perspective by his saying,

"What we observe as material bodies and forces are nothing but shapes and variations in the structure of space. The world is given to me only once, not one existing and one perceived. Subject and object are only one."

This is exactly matching with the idea in Kaccānagotta Sutta[15] where Buddha has clearly rejected that something is there (Atti) or not there (Natti), but preached the middle.

Now he, who with right insight sees the uprising of the world as it really is, does not hold with the non-existence of the world. But he, who with right insight sees the passing away of the world as it really is, does not hold with the existence of the world. Thus far, Kaccayana, he has right view. Everything exists: — this is one extreme. Nothing exists: — this is the other extreme. Not approaching either extreme the Tathāgata teaches you a doctrine by the middle.

Schrödinger's "Given to me only once" implied that it was not there before (Ahutvā Sambhutam) and not existing afterwards (Hutvā Nabhavissati) However, he does not explain the cause-effect theory or the Dependent Origination (Paṭiccasamuppāda), which may describe why/how it is perceived, and perhaps, that is why he was unable to convince others. For example, Albert Einstein rejected it by saying "I like to think that the moon is there even if I am not looking at it." [16]

"Bohr thought that the atom is real. Atoms are neither heuristic nor logical constructions. It makes much sense to characterize Bohr in modern terms as an entity realist who opposes theory of realism" [17] . "Impossibility of any sharp separation between the behavior of atomic objects and the interaction with the measuring instruments which serve to define the very conditions under which the phenomena appear" .

The outcomes of whatever experiment always yield a definite value, so the entanglement of object and the measurement instrument described by the quantum formalism only lasts until the interaction between object and instrument stops .

So the questions to be asked are: When does it stop? Is it possible to stop? How, and what will be the situation? Is it necessary to stop? Buddha has answered all those questions. For him, the external object is what you sense through your own senses (instruments), and he gave the detailed explanation of how to see the reality of those senses and whatever observed by them.

As a parallel to the lesson of atomic theory regarding the limited applicability of such customary idealizations, we must in fact turn to, quite some other branches of science, such as psychology, or even to that kind of epistemological problems with which already thinkers like Buddha and Lao Tse have been confronted with, when trying to harmonize our position as spectators and actors in the great drama of existence.

This is a kind of indication that Niel Bohr knew that they have not found the ultimate reality so far, and worthwhile of investigating the teachings of the great thinkers such as Buddha. Buddha discouraged people in searching about external universe as it does not help one to overcome sufferings. However, once venerable Ānanda asked him three times to describe about them, as in the Cūḷanikā Sutta [18] he has answered:

As far as moon and sun move in their course and light up all quarters with their radiance, so far extends the thousandfold world-system. Therein are a thousand moons, a thousand suns, a thousand Sinerus, lords of mountains: a thousand Rose-Apple Lands, a thousand Western Ox-wainsa thousand Northern Kurus, a thousand Eastern Videhas; four thousand mighty Oceans, four thousand Mighty Ruler, a thousand Four Great Rulers, a thousand heavens of the Thirty-Three, a thousand Yama worlds, a thousand heavens of the Devas of Delight, a thousand heavens of the Devas that delight in creation, the same of those Devas that delight in others' creations, and a thousand Brahma worlds. This, Ānanda, is called "The system of the thousand lesser worlds." A system a thousandfold the size of this is called "The Twice-a-thousand Middling Thousandfold World-system." A system a thousandfold the size of this is called "The Thrice-a-thousand Mighty Thousandfold World-system." Now, Ānanda, if he wished it, the Tathagata could make his voice heard throughout this last-named world-system, or even further, if he chose.

Hence, even Buddha knew about external world, he did not encourage people to search about it as it would not help one to gain ultimate happiness.

Dualism postulates two alternatives or two ends. Many of the philosophers, scientists such as Albert Einstein, Plato, Heisenberg etc. fall into this type of thinking, through which they believe two ends namely subject(observer) and object. A few of them like Schrödinger opposed the seeing of things as one which can be considered as monism. This is only one alternative to dualism, as there can be another option of more than two, hence non-dualism might be pluralism as well as monism. Both these views are rejected by the Nyanaponika Thero in his Abhidhamma Studies, and Prof. Takakusu also has been in agreement with him. Zen Buddhism also rejected it by saying "If all things go back to the One, where does the One go back to?" But, if Buddhism rejects not only dualism, but also monism and pluralism as well, where then does it stand? It looks as if the truly Non-Dual is not covered by any of these terms. [19]

Buddhist method of examining and analyzing based on our own experience by using the five physical senses and the mind, where Buddha has asked to see the world within this fathom long body (Rōhitassa sutta).

However, as ordinary people, we perceive and discriminate many, but our consciousness feels itself to be unitary and opposes itself as a "Subject" to the "Objective" world of perceptions. Hence again it falls into duality. Here, the multiplicity is reduced to the duality of 'I' and 'Not-I'. 'things' are nothing but continually changing pictures arbitrarily picked out by perception, and so do duality, multiplicity and unity alike become meaningless terms, since the very concept of number disappears when there are no fixed, or fixable, items to be counted. It is not even a number of

single items; is infinite; as standards of enumeration are based on perception and therefore arbitrary. Objectivity is only a particular mode of subjectivity.

The origin of dualistic thinking, as well as its ceasing, is clearly explained in the Madhupiṇḍika Sutta[20] by Buddha and then elaborated by Kaccana Thero. Based on contact of sense-organ, sense-object and sense-consciousness there arise feeling, perception, reasoning and diversification. In other words, our way of thinking is conditioned by the very process of our perception of the world.

If this is so, then as long as we are attached to our sense-perceptions of the world we cannot expect to get away from dualistic thinking. We must get back then through perception, which is 'distinguishing a thing by its marks', to feeling, and behind that to the bare sense-consciousness - bare seeing, hearing, and etcetera. There is a moment here of bare consciousness without emotional reaction. If we can get back to that, we are safe!

This is the exact discourse given to "Bāhiya Dāruciriya", - Seeing is seeing only etcetera" who instantly understood it and became fully enlightenment (Bāhiya Sutta) [21] and to the Mālunḅyaputta (Mālunḅyaputta Sutta)[22] , whom later became arahant by contemplating it.

According to Descartes[23] objects have two qualities called primary and secondary. Primary qualities are the length, height, breadth, change, location, duration, and number, and can be understood by way of Mathematics. Objects also have what are called secondary qualities, such as color, sound, taste, smell, heat, and cold. He believed that these qualities do not exist objectively in physical objects themselves, but are rather qualities of our perception of the world around us. He concluded that objective, primary qualities could be known decisively, but not secondary qualities. His theory suggests while elementary particles, atoms, molecules, electromagnetic fields, and waves are believed to exist independently of any observer, the visual images we perceive of the world around us do not exist out there. Ever since the time of Galileo and Descartes, generations of physicists and biologists have followed this distinction and have made extraordinary progress in measuring and understanding objective, physical, quantifiable realities. However, less progress in philosophical understanding of mental realities including thoughts, mental images, emotions, desires, dreams, and consciousness itself.

According to William James[24] (1842-1910) , the American pioneer of psychology, scientists had devised methods for investigating the external world that could be subjected to mathematical analysis. In this way, questions that had long been raised over by philosophers were finally solved by the empirical methods of science. The more science progressed, the fewer problems remained in the hands of philosophers. However, when will it stop? Will there be an end to the progress of science? The Austrian neurologist Sigmund Freud (1856-1939) became well known for his theories of the unconscious mind. As there is no instrument to measure the mind, on the basis of patients' verbal reports of their subjective experiences while awake and while dreaming, Freud sought to fathom the hidden mechanisms of the mind. As science placed the highest priority on experiential knowledge, the only things they considered to be real were the things scientists could measure: namely, physical entities and processes and anything else were deemed "supernatural" or at least irrelevant to scientific inquiry. Most of the mind researchers are not professionally trained.

According to Wallace Experimental physicists are professionally trained to observe physical processes, and biologists are professionally trained to observe biological processes. Cognitive scientists have taken on the challenge of understanding mental processes, but unlike all other natural scientists, they receive no professional training in observing the realities that comprise their field of inquiry.

Prof K. N. Jayatilleke[25] states;

The doctrines of Buddhism can be better understood if we can see in them the impact of the different theories and practices enunciated in the vedic and non-vedic traditions. One of the basic principles of Buddhism has been that of accepting whatever it thinks is sound, good and true from whatever source it comes, and of rejecting what it believed to be unsound, evil and false. "...seven Materialist schools of thought was possibly exaggerated but the number probably reflects the impact of Materialist thinking at this time on the thought of Buddhism. This impact must have been very strong for when the Buddha comes to classify the thinkers of his day, he gives equal prominence to the Materialists as against the Externalists.

He says:

There are these two theories—the theory of personal immortality and the annihilationist (Materialist) theory. Those recluses and Brahmins who hold to, seek refuge in and cling to the theory of personal immortality are utterly opposed to the annihilationist theory and those recluses and Brahmins who hold to, seek refuge in, and cling to the annihilationist theory are utterly opposed to the theory of personal immortality .

According to early suttas (loka sutta) [26] the world is called Loka because it is subject to disintegration (Lujjati loko). Thus this disintegration is also a feature of impermanency, a sign of change, and therefore, it means the absence of anything that is permanent, that the world is devoid of any permanent substances. However, people in worldly level

do not realize this impermanent nature, and hence take them as Sukha which they believe can give happiness.

With the developments of modern science, such as advanced biotechnology , nanotechnology and artificial intelligence , they can bring unmatched opportunities for increasing global happiness. Biotechnology can be used to improve human health and welfare as well as for enhancing our emotional capacities . Nanotechnology can help us solve environmental problems, cure diseases and reduce poverty. Through in vitro meat, even the pain-driven “livestock industry” can be replaced . Therefore one can argue that modern science can be used to increase the human happiness with the material world. However, in addition to great promise, those technologies unfortunately bring great risks and the worst of these risks threaten the very existence of mankind . Some well-known experts on the subject estimate that the risk of outright human extinction is significant, perhaps even as high as 25%-50% . A catastrophe of such a magnitude would not only kill all living humans; it would also ensure that countless generations of future humans are never born. That would amount to an astronomical loss of future lives . So it is clear that development of new technologies can be used to increase the apparent happiness by improving the material world to consume, however, the question remaining is whether it can give ultimate happiness with no suffering at all?

Buddha also accepted that material world can give us certain happiness. However, there is in-built suffering coming because of that which one might have believed to gain only happiness. Therefore, one has to understand not only that they can give happiness, but also unhappiness or suffering as well. So the material world outside does not give the ultimate happiness. However the path shown by Buddha would lead one to ultimate happiness called Nibbāna, where no suffering involved. That is by following the Noble Eight Fold Path starting with right view which would help one to give up the craving to material world, until up to a stage that not to be re-born again in any of the 31 realms of existence.

3. DELUSION BY SENSES AND THE TRUTH

3.1 Truth about the World Experienced by the Eye

Just consider the external objects we get to know using our eyes. Initially, we tend to think that whatever we see actually exists externally. However, consider the situation such as seeing a rainbow, a mirage, or a situation where a dog or a bird is looking at a mirror. We get deluded very easily if we just believe our eyes only without investigating the reality. We believe that whatever colours we see exist externally. The function of the eye is to compose forms depicting color and shape. Shape also can be considered as how the color is being spread. Let us say for example that there is a coloured sticker on an external window. Anything that comes in front of the window, say a white car, will be seen in color through the window. The sticker determines what we see. Similarly, if we look through coloured spectacles, we see everything in that color. If a child, from birth, sees the outside world through a coloured glass window, he would think that everything outside is of the colour of that glass. He would not see what really exists out there until such time he walks out of the house one day. Similarly, fish in a tank with different coloured glasses on each side will think that all objects on that side would be in the color of the glass of that particular side. In each of these instances, the external objects were not changed, but it was the ability of the eye to form a particular image. This clearly shows that what we see (color) does not belong to the external world, but depends entirely on the ability of our eye. In other words, the color generated by the eye is not what really exists outside!

Consider the situation of an image generated by the eye of a color blind person, or an eye of an animal where it can generate only black and white images. Do they see the colors that exist outside or do they see what is generated by their own eyes? The same scenario applies to the human eye. What we see does not exist outside, but the generated images depend on the capability of our own eyes together with whatever instruments we use (colored glasses, telescope etc.). If you see this reality, would you crave for outside colors, like a child seeing a rainbow, who does not know the reality? If we don't see the eye as it is with insight, we will continue to see forms that exist externally, and crave for them.



Figure 1: What we see by the eye is like a reflection on water

So whatever we see using our eyes can be compared to an image (or reflection) falling on water (**Figure 1**) when one looks into a pond. It is not possible to interact with this image by touching or smelling it and it appears when we look into the water and disappears when we move away. If we reach out to touch it, we will feel the water but not the image. Similarly, there is no way to get to know about it by tasting it as well. In other words, there is no way one could experience this image by another sensor. Another example to illustrate this delusion would be the time when we see a painting. We see people, buildings and flowers in the picture with real looking surroundings, though it is just a series of paint brush strokes on the wall. If we attempt to feel a flower for instance, we will touch the wall but never the flower. Whatever we believe is in the picture is only a creation (imagination) in our own mind. Those similes explain whatever gets to know using our eye faculty is a creation of our mind, but due to the delusion believed to as outside object.



Figure 2: Heap of sand as we see

Another example would be a heap of sand (**Figure 2**) we observe with our eyes. Due to the Density of Whole (Ghanasañña) we think that what exists outside is a heap of sand. However, in reality it is only a pile of sand particles grouped together which looks like a heap. Our belief is that the 'heap' of sand exists and remains there even when we are not looking at it. That's the perception of the world. The teachings guide us to examine this with insight through a vision beyond how worldly beings perceive. Venerable Mankadawala Sudassana Thero, proposes a simple experiment, "Let us assume that we ask thousands of people to remove sand from the heap, the rule is that one person can only remove one particle. We see that when all particles have been removed, the heap is gone too! Where is it now? No one has removed the heap! Now, let us assume that everyone brings back the particle they removed and places it as before. We see the heap again. Furthermore, we also note that when we touch we only touch the sand particles, but not a heap. "The shape of the pile of sand or 'Heap' is a formation of the eye which appears when the eye consciousness arises and ceases when we look away, without leaving any trace. The notion of 'Heap' forms within the mind and hence belongs to the mind and not to the external space or sand particles.

Similar to sand particles which are piled up in space, the four great elements are grouped in different ways in space and when sighted we see a shape and colour, for example various shapes such as round or rectangular, colours like red or blue as formed by the eye. We cannot touch these 'forms' or feel them to experience any sensations, for example as pleasant or unpleasant or as cold or hot, since they do not exist externally. When we touch, we feel the element of solidness as a form of touch, which is unrelated to the visual form. Note here that the eye consciousness that arises when the eye meets the object (visual stimuli) is different to body consciousness resulting from touch (i.e. tactile stimuli). This implies the truth of 'Form' (*Rūpa*) which we believe is existing outside, with reference to an image (or reflection) falling on water when one looks into a pond. We cannot interact with this image by any other sensor such as touching or smelling. It appears when we look into the water and disappears when we move away. If we reach out to touch it, we will feel the water but not the image.

Therefore, whatever we see with the eye has the following qualities:

1. Generated by the eye, depending on its capability.
2. Arises only at the moment of seeing and disappears soon after.
3. Can be compared to an image in the water, where it cannot be experienced by any other sensor other than the eye itself.
4. The same thing cannot be experienced again even by the eye, as each time it generates a new image.
5. What we have experienced by the eye is different from what exists outside.

If we do not see the eye as it is with insight, we will continue to see forms as existing externally, which is not the reality.

3.2 Truth about the World Experienced by the Ear

Similar to the eye, when we behold a visual object such as a man or a woman or any other thing, as the external object belongs to the world, we get deluded with ear as well. When there is a sound that ear consciousness gets to know about, the mind attaches a physical object pertaining to that sound. For example, sounds such as the sound of vehicles, voice of singers, animals, birds etcetera. When perceiving sound, we have the habit of identifying them with visual images. For example, when we hear the sound of a vehicle we quickly connect it to an image of a car or a truck in our mind. Consider a situation where you meet a foreigner who talks to you in a strange language. You will not have any feeling either like or dislike even though he may be accusing or praising you. However, if you know the language and understand what he says, you will immediately react and either like or dislike him, and may even express your feelings. Does this person or the ideas about him belong to the sound we hear by the ear, or something added by the mind? If we observe carefully, it would be very clear that it is not the sound, but a creation of our own mind that prompted us to react. However, because of our deluded mind we cannot see this reality. Therefore, there is a tendency of attaching whatever ideas that arise in our mind to the external object which we mistakenly believe are from where the sound originated. The mind can only recall or memorize impressions of our own mental constructions with the help of sound signals, and not what is out there as we mistakenly believe.



Figure 3: What you hear is the world existing externally?

Imagine a situation we create for a baby to hear different sounds (Figure 3). What will be the world it is imagining about? Does it really exist outside? Another example would be an instance where we hear the sound of an ambulance. Due to certain causes and conditions sound signals will reach the ear and a sound will be generated, and this sound will arise and pass away. But what about all the mental images that we have formed in our mind along with the sound like - white van with a red cross, a light flashing on top of the van, medical equipment inside, patient, nurse and driver inside the van etcetera. So many physical things have been created in our mind which does not really belong to the sound. Not only that but we also used to believe that all of them do exist outside, due to the delusion.

Therefore, whatever we hear with the ear has the following qualities:

1. Generated by the ear, depending on its capability.
2. Arises only at the moment of hearing and disappears soon after.
3. Can be compared to a foreign language which we do not understand, where it cannot be experienced by any other sensor other than the ear itself.
4. The same thing cannot be experienced again even by the ear, as each time it generates a new sound impression.
5. What we have experienced by the ear is always a new sound which arises and passes away and is not something that is already existing outside

3.3 Truth about the World Experienced by the Nose



Figure 4: Dog might think and visualize something to be existing outside just by smelling.

The same scenario applies to the nose as depicted in the Figure 4 where a dog smells something and its mind might tell it about so many external objects existing outside. Although in reality through nose consciousness we can only experience a smell, but due to delusion the mind attaches so many other external objects to that smell. For example if we smell something that is being cooked or baked - the mind adds on so much more to it! Example: cake is made of eggs, flour, sugar, my mother makes good cakes, and I ate cake yesterday which was so tasty etcetera. Numerous external objects are attached to this smell which in reality lasts only for one thought moment and fades away instantly and then a new smell arises. Because we don't see the smell only as a smell with its inherent arising and passing away nature, we then form either a like or dislike towards that smell thus creating unwholesome states of mind.

Another example would be the situation where we are travelling in a car with an infant and pass a "Durian" fruit seller. Both the baby and we experience the same smell. For the baby it was just a smell with nothing physical attached to it. But for us, coupled together with our past experiences we picture a green fruit with a thorn covered husk on the outside, pale yellow flesh inside. Some people regard durian as having a pleasantly sweet fragrance whilst others find the aroma disgusting. It is only with penetrative insight that one can understand that the smell sensation is independent of the physical object.

Therefore, whatever we smell with the nose has the following qualities:

1. Generated by the nose, depending on its capability.
2. Arises only at the moment of smelling and disappears soon after.
3. Can be compared to the smell of a durian fruit, where it cannot be experienced by any other senses other than the nose itself.
4. The same thing cannot be experienced again even by the nose, as each time it generates a new odour impression.
5. What we have experienced by the nose is always a new smell which arises and passes away and is not something that is already existing outside

3.4 Truth about the World Experienced by the Tongue

A child might reject the medicine (**Figure 5**) even before tasting it **Error! Reference source not found.** Just by the sight it concludes about the taste, which may be the total opposite when tasted. A person who is having a meal thinks that the taste he enjoys is in the food on his plate, where in fact it is the taste of the morsel of food that has become a pulp mixed with saliva while chewing. For some reason if he has to put it out, he will throw it away with disgust. It is only vomit. The one who realizes that what he enjoys when eating is nothing pleasant to look at as the piece of meat or fish on the plate, will no longer crave for food.



Figure 5: Child might reject medicine even before really tasting it

If we take an example, consider the experience of many monks who had been served with very salty food. One monk having oral cancer was able to eat this food without any problem (since his tongue was no longer sensitive for tastes because of the chemotherapy that he was undergoing) whereas the other monks could not eat the food which was too salty. If the taste was in the food everyone should have been able to eat and enjoy the food the same way. Although it was only a taste that was felt whilst eating which arose and passed away at that very moment, see how we attach descriptions to this taste - like crystals, white in colour, packed in a polythene bag etcetera. All these descriptions are things we create in our mind and attach it to the taste due to our delusion and really has nothing to do with the taste.

Therefore, whatever we taste with the tongue has the following qualities:

1. Generated by the tongue, depending on its capability.
2. Arises only at the moment of tasting and disappears soon after.
3. Can be compared to the taste of medicine, where it cannot be experienced by any other sensor other than the tongue itself.
4. The same thing cannot be experienced again even by the tongue, as each time it generates a new taste impression.

What we have experienced by the tongue is always a new taste which arises and passes away and is not something that already exists outside.

3.5 Truth about the World Experienced by the Body

When you feel a pain while eyes closed, and then imagine about the physical body part (eg: leg) is not the idea of a leg a creation of the mind? What was felt was only a feeling (*vedanā*), but we add on a physical body part to that pain and think “Oh! My leg is paining” and associate it with either a pleasant sensation or an unpleasant sensation. Not seeing the reality that it is only a series of sensations arising and passing away, we either get attached to the sensation and crave for it more and more or reject it with resentment.



Figure 6: Do you feel what exist outside just by the touch?

Can we really get to know about what really exists just by the touch? Consider the situation as in the **Error! Reference source not found.** where a blind person trying to know what is in the picture (**Figure 6**). Imagine the two situations shown in the above figures and think about what a blind person would be able to know about the picture. The blind person is not able to form any visualization in his mind about the picture. He would only feel the hardness of the painting. But when a person with good vision sees the picture, numerous objects get projected in his mind, which in reality is non-existent.

To understand how we form defilements and how fermentations come into play, consider your foot being hit by a rock, you will bear the pain and deal with it not worrying about the rock. However, if it was a person who trampled your leg, you will react with anger instantly, finding fault with that person. If we see beyond form and refrain from grasping as person there will not be any difference in our reaction in both instances noted above.

Another simple example can be seen when one takes a shower. You will feel the water touching the body and it is only consecutive feelings which arise and pass away. But we attach so many external physical things to these feelings like the water coming from the overhead tank which is black in colour, kept on the roof, etcetera. None of these physical things have any connection to the bodily sensation. When we feel a cool breeze, here again it is only the touch sensation that we feel but we attach physical factors like a metal fan, hanging from the ceiling, white colour, bought from this shop etcetera. None of these characteristics belong to the sensation that we felt but it is our delusion to think so. It is noteworthy to understand that this bodily sensation cannot be experienced by any other sense faculty other than the body itself.

Therefore, whatever we feel with the body has the following qualities:

1. Generated by the body, depending on its capability.
2. Arises only at the moment of touching and disappears soon after.
3. Can be compared to the cool breeze coming from a fan, where it cannot be experienced by any other sensor other than the body itself.
4. The same thing cannot be experienced again even by the body, as each time it generates a new tactile impression.
5. What we have experienced by the body is always a new sensation which arises and passes away and is not something that already exists outside.

3.6 Truth about the World Experienced by the Mind

When a thought crosses our mind, let us say for example a thought about ancient pagoda known as Ruwanweli Seya. This thought would arise and pass away instantaneously followed by millions of other thoughts but we build up so many stories in our head and attach external objects to the thoughts which are no longer there. Flowers being offered, lamps being lit, people worshipping etcetera come to our mind. The mind can think about anything we have experienced before by other senses or something not experienced yet (**Figure 7**), however does it exist externally? Do

these things really belong to the thoughts that we had? Due to our ignorance we do not realize that these thoughts last only for one thought moment and fade away. Instead we attach physical objects to these thoughts.

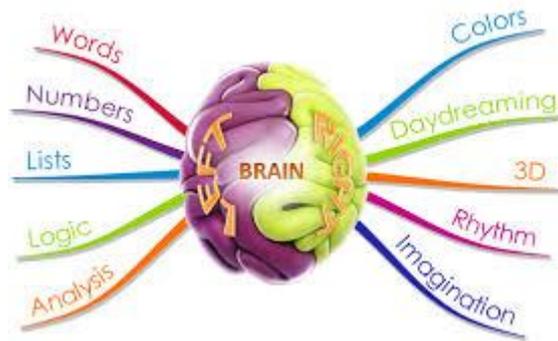


Figure 7: Mind can think about various things

Therefore, whatever we think with the mind has the following qualities:

1. Generated by the mind, depending on its capability.
2. Arises only at the moment of thinking and disappears soon after.
3. Can be compared to a dream, where it cannot be experienced by any other sensor other than the mind itself.
4. The same thing cannot be experienced again even by the mind, as each time it generates a new thought.
5. What we have experienced by the mind is different from what exists outside.

3.7 Way Forward

It is high time to rethink about the way people to gain happiness by satisfying the senses and use technical developments, engineering and management advancements towards that as all six human senses are deluding us. If we try to combine the engineering and management together with philosophical ideas in order to increase the real happiness, it would be beneficial not only for human beings but also all living beings and the environment where we live.

4. Discussion

No scientist has claimed so far about the full enlightenment, or in other words ending all sorts of suffering. Buddha and his disciples claimed that they have done so within this life, and also it is possible to follow that path by anyone with genuine interest. In this research, it has been identified that the main mistake done by the scientists is to believe and depend on their six senses. They come up with various theories based on the assumption that what you perceive about the world through the senses is correct and give ultimate happiness by satisfying them. As the capability of our senses are limited, their effort is to develop more and more sophisticated instruments in order to increase the capabilities of our senses to satisfy them believing that would be the way to overcome suffering. However, Buddha clearly rejected this approach as one would never be able to end suffering by trying to satisfy the senses, but it would increase more and more craving consequently giving more suffering. Instead one should try to understand what senses are and truth behind them to overcome delusions about them which would cause end of craving consequently leading for ultimate happiness.

Findings in this research show that the world referred to by the Buddha is the very same as the world referred to by people. However the delusion about how to gain happiness in worldly level will not lead for ultimate happiness as shown by the Buddha. He has accepted that there is a kind of happiness in this world by satisfying the senses, but one has to understand not only happiness but also unsatisfactoriness involved, and also how to get rid of it, in order to experience the ultimate happiness. He has clearly mentioned that one has to overcome worldly attachments by removing the delusion and to develop mind so that not to be re-born in any of the worldly realms in order to experience the ultimate happiness of Nibbāna.

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