A Strategic Perspective on Buddhist Meditation

Charles Pyle

Perceiving in terms of signs, beings take a stand on signs.

Not fully comprehending signs, they come into the bonds of death.

But fully comprehending signs, one doesn't construe a signifier.

Yet nothing exists for him by which one would say,

'To him no thought occurs.'

The Question

I would like to begin by framing a question that goes to the heart of Buddhist meditation, then I will develop an explanation that answers the question.

The first principle of Buddhism is that human beings are chronically plagued by suffering (dukkha), though we normally ignore it. The second principle is that this suffering is not intrinsic to human nature, but that it a function of adventitious causes extrinsic to human nature. The Buddha taught that the root cause of dukkha is a multifarious complex of misunderstandings of the nature of things, which is collectively called avijja, commonly translated into English as 'ignorance.' Since this ignorance is extrinsic, it is possible to bring this chronic suffering to an end by eradicating the ignorance that causes it. Therefore, since the cessation of dukkha would be of great benefit to human beings, the Buddha taught people how to eradicate ignorance. He taught the correct worldview, which consists of several interrelated principles of natural law such as tilakkhaṇa and paṭiccasamuppāda. And he taught a system of practice, itself a function of natural law, a path that leads to the alleviation of dukkha. The culmination of this path of liberation is a type of meditation, vipassana ('clear seeing' or 'seeing deeply') which enables one to see the true nature of things, the truth, and thereby eradicate ignorance, and thus bring about liberation from dukkha.

There are many different principles and practices in the Buddhist worldview and the Buddhist path of liberation, and they are all interrelated, but for purpose of this discussion I would like to focus on *vipassana* meditation. I believe that anyone who has studied and practiced *vipassana* becomes aware of and has struggled with a fundamental question, a puzzle, a paradox, in the logic of *vipassana*. And, whereas such a paradox would be intolerable in the logic of a conventional endeavor, I suggest that this paradox is not only tolerable in *vipassana*, but is integral to its functionality in that its purpose is to see beyond conventional logic, to see the ultimate truth (*paramattha sacca*) that is beyond all logic, beyond grammar, beyond words and all other signs. It is an endeavor to see the signless, and from that point of view the paradox is seen as merely an apparent paradox.

Perhaps the simplest way to see the paradox is to consider the central image of Buddhism: a representation of the Buddha sitting in the position prescribed for mediation. The implication is that if we want to follow the path of liberation from suffering prescribed by the Buddha, this is what we should do. And what is he doing? He is doing something very abnormal: Nothing. He is not reading, not studying, not talking, not

¹ From Samiddhi Sutta, translated by Thanissaro 2010

building, not going, not even moving. Here is the puzzle: How can one progress along the path of liberation by doing nothing? How can one do something by doing nothing?

Of course, while this image conveys important implications, it does not say anything about what is going on in the mind, and that is of the utmost importance in Buddhism, for Buddhism holds that mind is preeminent. The Buddha gave detailed instructions on vipassana meditation in the $Satipatth\bar{a}na$ Sutta and the closely related $\bar{A}n\bar{a}p\bar{a}nasati$ Sutta. One can also benefit from the teachings of contemporary Buddhists of great accomplishment. For example, the Venerable Achaan Chaa described it in simple terms thus:

You must examine yourself. Know who you are. Know your body and mind by simply watching...The practice is not to try to achieve anything. Just be mindful of what is. Our whole meditation is looking directly at the mind.²

Try to keep your mind in the present. Whatever there is that arises in the mind, just watch it. Let go of it. Don't even wish to be rid of thoughts. Then the mind will reach its natural state.³

What he says here is that we should not do active analysis, or think, or even wish. There is a role in Buddhism for reading, studying, logical and critical analysis (yonisomanasikāra), but not in vipassana mediation. We should just watch, and the mind will reach its natural state, the state of liberation. My focus here is on the point that it is not that I do something to cause liberation, but that if I watch, silently, passively, liberation happens to me. Here is the puzzle: How can mere watching result in the eradication of ignorance and liberation from suffering? On this question, Achaan Chaa gives us a clue: because that is the natural state of mind. Liberation is the natural state of the mind, and ignorance is not the natural state of the mind. So in sum the effect of meditation is not a function of what I do, but a function of natural forces.

It is also made clear in the above mentioned *suttas* that *vipassana* is essentially a passive silent watching of what goes on in the body and mind without goal, without intent, without interference, even without judgment, in a totally disinvested state of mind as regards one's likes or dislikes. As Venerable Anālayo puts it, 'like a spectator at a play':

A close examination of the instructions in the *Satipaṭṭḥāna Sutta* reveals that the meditator is never instructed to interfere actively with what happens in the mind. If a mental hindrance arises, for example, the task of *satipaṭṭḥāna* contemplation is to know that the hindrance is present, to know what has led to its arising, and to know what will lead to its disappearance. ⁴

Uninvolved and detached receptivity [is] one of the crucial characteristics of *sati*...the purpose of *sati* is solely to make things conscious...*Sati* silently observes, like a spectator at a play, without in any way interfering. Some refer to this non-reactive feature of *sati* as "choiceless" awareness. "Choiceless" in the sense that with such awareness one remains impartially aware, without reacting with likes or dislikes.⁵

Sati as such is mere awareness of phenomena, without letting the mind stray into thoughts and associations... By letting go of all dependencies and cravings during

3 Kornfield p. 40.

² Kornfield p. 48

⁴ Anālayo p. 57

⁵ Anālayo p. 58

this advanced level of practice, a deepening realization of the empty nature of all phenomena dawns on the meditator. ⁶

Again we see the apparent paradox that in *vipassana* meditation the meditator does not seek the goal of realization, and yet by engaging in the passive activity of *vipassana* meditation the realization of truth 'dawns on the meditator,' and thus his goal is attained. The meditator does not to do anything that is causally efficacious, and yet ignorance goes away and truth emerges.

Finally, the same implication follows from the Buddha's description of his own enlightenment by the use of passive grammar:

Vision arose, insight arose, discernment arose, knowledge arose, illumination arose within me with regard to things never heard before: 'This is the noble truth of stress.'

So here is the question. How does passive, silent, detached watching of the mind lead to the eradication of ignorance and the emergence of truth? Above we saw the suggestion that it is a function of the nature of mind. If so, what exactly causes the emergence of realization? What dynamic is at work here?

Buddhism is Science

In order to answer this question, we must begin by correcting an error that European scholars imposed upon the Buddhist universe of discourse many years ago by calling it 'religion.' When Europeans first came into contact with Buddhism, they tried to make sense of it in their universe of discourse, which had been fundamentally split by the struggle between religion and science. To these foreign scholars Buddhism did not appear to be a science, but it did have many of the features of religion, so they categorized it as a religion. As the European discourse gained power and prestige, mainly through the success of its science in the material dimension, European societies became powerful and its discourse spread throughout the world. Consequently, Buddhism came to be thought of as a religion by all authorities: governments, academia, Google.

What is most unfortunate, even though the conflict between religion and science did not exist in the Buddhist universe of discourse, Buddhism came to regard itself as a religion. Thereby Buddhism accepted the awkward strategic positioning imposed upon it by a foreign universe of discourse as being unscientific, when in fact, upon objective consideration, it is obvious that Buddhism is scientific. However, many Buddhists do realize, perhaps unconsciously, this framing of Buddhism as religion is inappropriate with incorrect implications, and so they try to avoid this problem by speaking of Buddhism as a philosophy, or a spiritual journey, or inner science, or mind science. My impression is that in recent years more and more Buddhists are realizing that Buddhism is science, and are taking the position that Buddhism should be framed as science, not religion.

Let me cite three examples of prominent Buddhists who have done so. First, the Dalai Lama has been deeply interested in the relation between science and Buddhism since his childhood. He has stated innumerable times along the lines of the following quote that Buddhism is fundamentally grounded in empiricism, and thus a scientific endeavor.

-

⁶ Anālayo p. 115-16

⁷ Dhammacakkappavattana Sutta, translated by Thanissaro Bhikkhu. 2010

From either of the two perspectives, the [Theravada] or the Mahayana, we find that analysis and examination through reasoning, the basic Buddhist attitude is very important. Once you find a fact through investigation, then you accept it. Even if that fact appears contradictory to Buddha's own words, it doesn't matter. Because of this, I feel the basic Buddhist attitude is quite similar to the scientists' attitude...either way there is a strong emphasis upon your own analysis and investigation and not simply a dogmatic adherence out of faith in the Buddha.⁸

A second example is Venerable Buddhadāsa. In explaining ānāpānasati meditation he asserted that:

...we have studied and explained the sixteen step method in full, because it will reveal the secrets of nature thorugh its scientific approach. This is a science that leads to a natural understanding of kāya, vedanā, citta, and Dhamma, in the best and most complete way possible, through the perspective and approach of natural science. This method is a scientific approach...

And in another place he stated that 'To come to know the true nature of things is the true objective of every Buddhist.' And, succinctly, 'Dhamma is nature.' 11

A third example is Phra Prayudh Payutto, who amassed a mountain of evidence that Buddhism is science in his monumental work, Buddhadhamma: Natural Laws and Values for Life. He does not explicitly assert Buddhism is science, but he makes the all arguments that would be needed to establish that as a fact. First, he asserts that 'Buddhism only accepts empirical knowledge' and he cites the Buddha's teachings throughout the book that support this assertion. Second, he asserts that the basic Buddhist principles tilakkhaṇa and paticcasamuppāda are natural law. 13 And in regard to many other aspects of Buddhism throughout the book he argues that every aspect of Buddhism is based on natural law and the principle of cause and effect.

According to the principles of Buddhadhamma, there is nothing higher than nature, or nothing besides nature...Furthermore, the whole of the natural process continues along according to causal factors: it does not proceed in an aimless manner and it is not subject to supernatural influences apart from causal factors. ¹⁴

To establish that Phra Prayudh Payutto has in effect argued that Buddhism is science, consider how the U. S. National Academy of Science defines science as distinct from religion:

Scientists seek to relate one natural phenomenon to another and to recognize the causes and effects of phenomena¹⁵....In science, explanations are limited to those based on observations and experiments that can be substantiated by other

⁸ Hayward, 32-3

⁹ Buddhadāsa 1997. 123-4

¹⁰ Kornfield, p. 125

¹¹ Buddhadāsa 1997 p 36

¹² Payutto 284

¹³ Payutto 61 and 94

¹⁴ Payutto 95-6

¹⁵ Steering Committee on Science and Creationism viii

scientists. Explanations that cannot be based on empirical evidence are not a part of science. 16

Here are the key points. First, the U. S. National Academy of Science says that science deals with natural phenomena, whereas, by implication, religion deals with unnatural phenomena, supernatural, mystical, etc. Second, science seeks to make sense of natural phenomena by recognizing causes and effects, as distinct from religion which allows phenomena that are not subject to the natural laws of cause and effect, such as miracles, which, by definition, are interruptions of the laws of nature. Third, all principles of science, including theories, hypotheses, laws, axioms, etc., are subject to empirical verification, as distinct from religion which rests on fundamental principles and practices that are explicitly held not to be capable of empirical verification and must instead be taken as true by faith, such as the existence of God, the laws and commandments of God, etc. So as you can see, Phra Prayudh Payutto has provided extensive arguments in support of each of the three characteristics that distinguish Buddhism as science rather than religion.

As a fourth and final example of a Buddhist that regards Buddhism as science, I would like to cite the fact that the Buddha, Gautama, described the fundamentals of Buddhism, the four noble truths and the noble eightfold path, not as a path that he created, but as a path that he discovered, in fact, an ancient path that he re-discovered.

It is just as if a man, traveling along a wilderness track, were to see an ancient path, an ancient road, traveled by people of former times... In the same way I saw an ancient path, an ancient road, traveled by the Rightly Self-awakened Ones of former times. And what is that ancient path, that ancient road, traveled by the Rightly Self-awakened Ones of former times? Just this noble eightfold path: right view, right aspiration, right speech, right action, right livelihood, right effort, right mindfulness, right concentration. That is the ancient path, the ancient road, traveled by the Rightly Self-awakened Ones of former times. I followed that path.¹⁷

The implication is that the Buddhist path of liberation, and the other fundamentals of Buddhism, have always been there, prior to and independent of their discovery by this Buddha, Gautama, just as gravity has always been there, prior to and independent of its discovery by Newton. From this it follows that the Buddha was describing natural phenomena, just as much as Newton was. And it follows that Buddhism is just as legitimately science as physics is.

Though one could continue this argument at great length, I believe I have cited sufficient evidence to justify in the current context the premise that Buddhism is science, and thus rectify this historical error that has been foisted upon the Buddhist universe of discourse. 18 However, since the positioning of Buddhism as science, or rather the repositioning of Buddhism as science, has radical and far reaching implications, I feel it is important to solidify this position by briefly exploring some of it potentially confusing fundamental features before we move beyond.

The first feature of Buddhism as science I would like to consider is that a moral code (sila) is a fundamental element of Buddhism. For this reason, one might object to the characterization of Buddhism as science, based on the notion that science does not

¹⁷ SN 12.65, translated by Thanissaro 2011

¹⁶ Steering Committee on Science and Creationism 25

¹⁸ I have developed a similar argument in Pyle 2009, and Wallace 2003 is excellent.

prescribe morals. To begin with, while it is true that in some abstract, philosophical sense scientists may consider their work to be beyond the realm of morals, in fact science does prescribe morals. It is very common for governments and individuals, including hardcore scientists, to develop positions on moral issues based on what they believe to be scientific grounds. On the other hand, the moral code of Buddhism is not simply an ethics, but is an integral component of its scientific methodology. Just as the sterility of a biological laboratory is a necessary condition for the scientific study of microorganisms, so too is the Buddhist moral code a necessary condition for the study of mind. As Phra Prayudh Payutto put it:

This code is not a divine command demanding that followers do this or that in accordance with a divine purpose, a purpose based on ungrounded faith and loyalty that does not require an understanding of interconnected causes and effects. The Buddhist moral code has been determined based on reasons and natural law...as its foundation in order for true wisdom to occur.¹⁹

The second feature of Buddhism as science I would like to consider can be approached in terms of the role of hermeneutics in Buddhism as a science, as distinct from its role in Christianity as a religion. In religious systems of thought, such as Christianity, because those systems are based on texts of supernatural origin that reveal truths that are hidden behind a limit of knowledge that human beings are not capable of going beyond, the practitioners can only try to understand those truths through the texts that reveal them. And, since those texts are exposed to various types of corruptions, and because language is inherently liable to multiple, and often conflicting, meanings, religious texts are always subject to multiple conflicting interpretations. And yet it is crucial that these inconsistent interpretations be resolved in order to determine how one should act in conformity with those highly important revealed truths. It is in this Christian context that hermeneutics developed as a branch of scholarship that attempts to develop objective, mechanical, one might say, scientific, principles by which one can extract the intended meaning from texts. Hermeneutics is of the utmost importance in religion.

However, in science hermeneutics, while not entirely pointless, is of relatively little importance. Of course one must learn to understand the discourse of one's discipline, and that is done largely through the study of texts. But even in the beginning stages, the study of texts is always accompanied by a corresponding practice of experimentation and direct observation of the phenomena being studied. In science one studies the texts, but direct observation of the phenomena is preeminent. It has always been the fundamental principle of Buddhism that realization of the true nature of things is the point, whereas the original teacher and his teaching, now present only in texts, merely point to the truth.

I believe that the famous simile of the blind men and the elephant (Ud 6.4) can be instructive here. Although it is not the stated point of the story, it does imply that direct knowledge not only obviates the interpretation of second-hand representations, i.e., texts, but direct knowledge is a necessary precondition for the correct interpretation of texts. In the story a number of blind men were each allowed to examine a different part of an elephant. One examined the ear, one the leg, and so on. Then, when they were asked to explain what an elephant is like, they each gave correspondingly different answers, such as 'It is like a winnowing basket," and "It is like a post," and so on. The reports of the blind men, who are presupposed not to know what an elephant is, can be taken as signs,

¹⁹ Pavutto 245

which by their nature also only convey a partial and distorted representation of that which they represent. Further it is also presupposed in the story that the teller of the story and the addressees of the story do know what an elephant is. Therefore, it is implicit in the story that you have to know what an elephant is in order to be able to sort out and interpret the signs, the texts, that represent the elephant.

Thus Buddhist practitioners are, like all other scientists, obliged to pursue the study of texts, to engage in critical examination (*yonisomanasikāra*) of both the texts and actual phenomena, and, preeminently, to seek direct understanding of the nature of things by of direct observation. Physicists might use a telescope, Buddhists use meditation.

The third feature of Buddhism as science I would like to consider is that Buddhism includes mind, where the conventional sciences do not. In Buddhism mind is considered to be a sixth sense, in addition to the five commonly recognized - sight, sound, smell, taste, and touch. Correspondingly, whereas conventional sciences make the assumption that everything is a function of material causality, Buddhism holds that, on the contrary, mind is predominant. It is not that Buddhism excludes or discounts material phenomena *apriori*. It is not that Buddhism is lacking in knowledge of material phenomena. This is not an oversight or an incidental issue. It a central point of difference between Buddhism and conventional science. It is an empirical finding that is boldly asserted in the first line of the Dhammapada:

Mind precedes its objects. They are mind-governed and mind-made. To speak or act with a defiled mind is to draw pain after oneself, like a wheel behind the feet of the animal drawing it.²⁰

It is important to note that in the conventional scientific discourse it is very common to presuppose that mind is merely an epiphenomenal artifact of material causality by using 'mind' and 'brain' interchangeably, or even as a conjoint term 'mind/brain'. But it is also important to note that the exclusion of mind from the scientific discourse, and the presupposition that everything is a function of material causality, is simply a premise inherited from the European scientific and cultural tradition. It is not asserted to be an empirically substantiated premise. The question of whether the Buddhist position on mind makes sense or not should, by the standards of scientific inquiry, be decided on empirical grounds.

There is much that should be said about this issue. I cannot go into it in depth here, but I would like to cite a very practical and relatively obvious reason the Buddha gave for focusing on mind:

Bhikkhus, there are two kinds of diseases: Physical diseases and psychological disorders. Some people in this world can claim that they have been without physical disease for a whole year. And you can find some people who can claim that they have been without physical disease for two years...three years...four years...five years...ten years...twenty years...thirty years...forty years...fifty years...a hundred years. But it is hard to find anyone who can claim that he has been free of mental disturbances, even for a single moment, except for those who have destroyed all mental intoxicants ($\bar{a}sava$).

The fourth feature of Buddhism as science I would like to consider is faith. While, as I argued above, Buddhism is grounded in empiricism, faith $(saddh\bar{a})$ does still play an

²⁰ http://eawc.evansville.edu/anthology/dhammapada.htm

²¹ A II.142-143. Payutto p. 269

essential role in Buddhism, just as it does in the conventional sciences. It is by the power of faith, and maybe also hope, that one is motivated to invest the time and effort necessary to test a hypothesis. In Buddhism, as in other sciences, after you have verified or falsified the hypothesis, the need for faith falls away. Phra Prayudh Payutto has a detailed and heavily referenced discussion of faith.²²

Once a person has insight—that is, clear knowledge and vision—there is no need for confidence, it is not necessary to have faith in other people...an arahant has the highest insight and, therefore, has a quality called " $asaddh\bar{a}$," meaning a person without $saddh\bar{a}$.

The fifth feature of Buddhism as science I would like to consider is epistemology. Buddhism holds that it is possible to gain some degree of understanding of things by means of logical inference, but the ultimate goal is to attain direct personal knowledge of the nature of things, of the natural characteristics of things as mentioned above, such as the law of dependent origination, the three characteristics, the causes of suffering, the cessation of the causes of suffering, etc.

The epistemological position of conventional science is very different, and somewhat confusing. On the level of the philosophy of conventional science it is commonly held that there is no truth, or if there is, it is unknowable. Indeed, it is held that is not possible to know anything with certainty. The idea is that science approaches truth by developing theories and from those theories they derive implications that are falsifiable, and then they develop test situations in which one can prove the implications false or fail to prove them false. In this view, the closest way one can relate with reality is by asymptotically approaching it, though never getting there. And any system of ideas that is not falsifiable is not science.²⁴

While this view of science has wide acceptance, it is a philosophical view of science, and as with all philosophical views, it is fraught with conditions, exceptions, and other complexities, which we will not venture into here. Suffice it to say that in the real world real people invest their lives and fortunes in the exploration and development of scientific ideas in the hope that they are correct, and thus they will work, not because they are falsifiable.

In any case, Buddhism holds a radically different view of knowledge and of truth and falsity. And the epistemological issue from the Buddhist point of view is not so much a matter of gaining new knowledge, but of becoming free of false knowledge, delusions, that prevent us from seeing and knowing what is perfectly obvious. Conventional scientists talk about ripping the veils from mother nature, so that we can discover nature's secrets. Buddhism is concerned with us getting rid our own veils, so that we can see the nature of all things clearly.

In concluding this discussion of Buddhism as science, I think it is possible to succinctly state the basic principle of Buddhism thus: We normally live in conflict with the laws of nature, and this causes suffering. We can learn to understand and conform to the laws of nature, which results in the disappearance of suffering, and brings happiness.

Buddhism is related to the Sciences of Semiotics and Linguistics

Given that Buddhism is science, and given the radical differences from conventional science, the next question is this: is it possible, and if so, how can Buddhism

²³ Payutto p. 221-222

.

²² Payutto p. 211-222

²⁴ Popper, 1959.

and conventional science find common ground on which to begin to develop an integrated and mutually beneficial discourse? There have been many conferences and publications attempting to develop a meaningful interaction, such as the Dalai Lama's series of Mind and Life Institute conferences, Wallace's *Buddhism & Science: Breaking New Ground*, etc. In so far as I am aware of such efforts, there has been very little progress, if any. The reasons for this as I see it are basically twofold. First, all of the scientists in these joint efforts, whether psychologists, neurobiologists, or physicists, presuppose that Buddhism is not really science and they presuppose that speaking of 'mind' is just an informal way of talking about brain phenomena. Or, in other words, they presuppose the validity of their position on what should be the fundamental question, namely, whether material causality is able to explain all phenomena. To put it the other way around, the scientists assume the falsity of the fundamental premise of Buddhism, that mind is one of the sense modes, and that it is the preeminent sense mode, and therefore such discussions do not really take place on a common ground.

I want to suggest that perhaps the only branch of science, as it is currently conceived, that does share common ground with Buddhism is the science of semiotics, which is the study of signs, and particularly the sub-branch of semiotics that studies the systems of signs that comprise human language, linguistics. These are both very complex areas of study, and consist of multiple theoretical divisions, so let me be more specific. I am suggesting that Buddhism is compatible with the system of semiotics that evolved out of C. S. Peirce's theories of logic and his theory of signs, and the school of linguistics that grew out of Peirce's groundwork through the work of linguistic pioneers such as Nikolai Trubetzkoy, Roman Jakobson, Edward Sapir, and Jacques Lacan, particularly in regard to the theory of markedness and language universals. The common ground is the phenomena of the sign, and the essential feature of the sign shared by Buddhism and Semiotics was stated in a characteristically succinct way by the Zen patriarch Huang Po:

Anything possessing any signs is illusory. It is by perceiving that all signs are no signs that you perceive the Tathāgata.²⁵

Obviously it would not be possible to even provide a general introduction to semiotics and linguistics here, so what I propose to do here is to offer a very brief explanation and a couple of examples of some important points on which Buddhism and semiotics clearly share common ground. Then I will return to elaborate the point made by Huang Po. In conclusion, I will offer a brief explanation of how the question posed in the first section can be answered from this point of view.

Let me begin with a sketch of C. S. Peirce's systems of logic and semiotics. He begins with the assertion that there are three universal categories of phenomena, which he calls Firstness, Secondness, and Thirdness. He describes the categories in various ways, none of which are exactly like the descriptions of the three characteristics of Buddhism (*tilakkhaṇa*), but nevertheless, once you understand his categories and their implications, it becomes clear that they align with and seem to be exactly the same. That is an important point of similarity, which I will state, but cannot justify here.

It is important to begin with this foundation because Peirce's logic and his theory of signs grow out of the three categories. The most important tripartite categorization of signs that follows from his categories, and certainly the most well known is the distinction between iconic signs, indexical signs, and symbolic signs. A sign is something that refers to something else. An iconic sign refers to its referent by virtue of a relation of

.

²⁵ Blofeld p.71

firstness, or similarity. An indexical sign refers to its referent by virtue of a relation of secondness, or concrete force. And a symbolic sign, which is the type of sign characteristic of human language, refers to its referent by virtue of a stipulation or habit.

An example of an iconic sign is the reflection of the moon in the water, represented in Figure 1, one of the most commonly used examples of a sign in the Buddhist discourse. Note that Figure 1 is not a representation of how the reflection of the moon in the water would actually look physically, like a photograph, because the moon would be above its reflection. It is a representation in terms of Peirce's diagrammatic logic of the sign relationship between the moon and the iconic image of the moon reflected in the water. The point of this mode of representing the sign relationship is that there are two levels of phenomena. The first level is the image of the moon as you might see it if you look at the moon directly, and the second level is the image of the moon as you might see it reflected in the water. The first level is conceptually prior to the second. Or in other words, the second, the iconic sign of the moon, is derived from and is dependent upon the first. Thus if the first were to go away, the second would go away. If the first appears, then the second can appear. So note first that Peirce's diagrammatic logic of the sign is represents the logic of dependent origination (*paticcasamuppāda*).

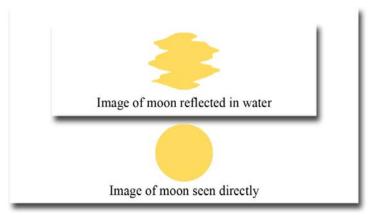


Figure 1. Moon in the Water

Secondly, there is a relation of relative truth and falsity between the first and the second, and this is so in multiple ways. In this particular case, for example, if you were situated in such a way that you could not see the moon itself, and if the water were perfectly calm, you might take the reflection of the moon in the water as the moon itself. In other words, the reflection of the moon in the water says, in effect, the moon is here, when it is not so. Or in another scenario if the water were disturbed, as in this image, so that it doesn't look much like the moon, and if you didn't see the moon itself, you might think someone was on a boat on the water flashing a light. The logic of both of these scenarios can be represented if you suppose the second layer in this diagram were to be expanded to cover the first layer. That would represent what would be seen by someone who naively took the reflection of the moon in the water at face value as something in itself. So this diagram represents the fundamentally deceptive logic of signs. Technically, this is a representation of the logic of duplicity, the essential logic of falsity, and it is the logic of all signs. This is why one of the three doors to liberation is the signless.

Further, even when we see the image of the moon directly, as represented in the first level of this diagram, what we see is not actually the moon itself, but is also an iconic image of the moon. It is a reflection of the light of the sun from the surface of the moon. It is conceptually prior to the image we see reflected in the water, but it too is derivative,

and that fact is also represented here, though in a somewhat surreptitious way. The page on which this diagram is represented can be taken as the implicitly presupposed first level of representation, the level of unrepresented truth, or in this case as the level of the moon as it is in reality, which is not represented but can be supposed to be being covered up by the first represented level. Thus the page itself represents what Peirce called the first sheet of assertions, which is absolute truth, and the two represented levels represent levels of relative truth, each of which is an iconic representation of the moon. Thus the two levels that are represented arise in layers of lesser degrees of truth, relatively speaking, from the prior unrepresented level of absolute truth. In this we have a representation of the distinction between relative truth (or conventional truth) and absolute truth, *sammutisacca* and *paramattha-sacca*.

The second type of signs is indexical signs. These are signs that refer to their referent by means of some relation of material force, contact, or related implication. For example, the footprint of a deer in the mud represents a deer. The footprint is similar to the shape of the deer's foot because the deer's foot forced the mud to take that shape by pressing into the mud. Such a footprint says, 'some animal was here, and it was a deer,' and in some cases, where there were unique characteristics in the footprint, it might even say, 'that particular deer was here.' Another indexical sign is the movement of a flag that can be taken as an indication of the direction of the wind, because the wind forces it to move in just that way. On the human level a basic type of index is pointing, which references its object by protruding a finger in the direction of the object. Of course, this type of sign is subject to misunderstanding too, as anyone knows who has tried to direct a dog to the food you have laid out for him by pointing. Invariably the dog will come to your extended finger, and not go to the food. This exemplifies the classic Buddhist aphorism, 'Do not take the finger for the moon.'

The third type of sign is symbolic signs. These are signs that refer to their referent by means of a stipulation or habit or convention. These types of signs are mainly, though not exclusively, found in human language and culture. For example, the word 'moon' doesn't have any relation of similarity or physical contiguity to the moon. It refers to the moon merely by the conventions of the English language. So outside of the realm of English it does not mean 'moon'. This bring us to the realm of language.

Language

Language consists of signs that are a mixture of all three of the sign types distinguished above. For example, "I went to work and went to school" describes two acts using symbolic signs, but it also implicitly conveys the order of the two events iconically by means of the order of the words. That is, by default one assumes this means that the first event is first and the second event is second. The pronoun "I" is an index, and thus cannot be interpreted in the abstract. It can only be interpreted in a physical context, normally as referring to the person who speaks the sentence. This simple example demonstrates that the analysis of language in terms of sign functions is extremely complex, so I will just consider a couple of relatively obvious features of language.

First, it is very important to realize that human language is essentially unnatural. One way to see this is by considering that every language is a foreign language, and that it is foreign in two ways. First, each language is foreign in relation to every other language, as for example Thai is foreign to English. And second language is also foreign in relation to each child born in that language community. A child will naturally develop physical characteristics that are similar to those of its parents, but if a child is removed from its parents at a young age, it will grow up speaking the language of its caretakers whatever that might be. Children must go through a rather lengthy and sometimes painful process

of learning the language of their community. Thus no language is a truly native language. Or to put it the other way around, every language is unnatural. Thus as a child learns a language, he is investing himself into an unnatural world view, he is developing an unnatural sense of self, one that is not a function of the laws of nature, and thus a self and a world that is characterized by *dukkha*.

That language is unnatural can also be seen by considering the three types of signs. Iconic and indexical signs function by means of a natural relation between the sign and referent. In order for a sign to be symbolic it must not be related to its referent by a natural relation, for if it were, it would not be a symbolic sign, but an icon or index. Thus by definition every symbolic sign must be an unnatural sign.

This characteristic of language has been commonly ignored by most linguists and philosophers, but the British philosopher H. P. Grice noticed this is a characteristic of human language, referring to it as nonnatural meaning.

This question about the distinction between natural and nonnatural meaning is, I think, what people are getting at when they display an interest in a distinction between "natural" and "conventional" signs..²⁶

Furthermore, if you observe the way children learn to communicate, you can see that there are two distinct phases. Roman Jakobson noted in his most influential work on the development of child language that children speak a different type of language until about the age of two, at which point they begin to actually learn the language of the adults surrounding them. Before this point children do not use the negative word, in English, 'no.' They are able to express negativity, as for example by spitting out food, but that is different from saying 'no.' And they also do not use the first person pronoun, or generally any pronouns. They refer to themselves the same way as their parents do. For example, at this early stage of development, if the parents call the child "Bobby," the child would say, "Bobby hungry" instead of "I hungry." And during this first phase children are capable of pronouncing any sound or combination of sounds that is physically possible.

But all of a sudden around the age of two, children are struck by a more or less comprehensive inability to pronounce the wild variety of sounds they could before. Some children are struck totally dumb for weeks or even, rarely, a year. At this point they also begin to use the negative word to an excessive degree, responding almost compulsively negatively. And at this point they begin to use the first person pronoun to refer to themselves.

In Buddhist terms I think it is reasonable to suppose that at this point the child undergoes a comprehensive eradication of his prior sense of himself, being struck by a kind of total ignorance, by which he becomes a clean slate, the foundation upon which he can progressively rebuild himself in the unnatural logic and conceptuality of his language. Thus he will find himself, as we all do, suffering under a very thick and complexly woven fabric of ignorance and false conceptuality. I believe this is exactly what Phra Prayudh Payutto is discussing here:

Their pattern of behavior has been received, handed down to them through their education and training, their culture, religious beliefs, and the preferences of their society.²⁸

-

²⁶ Grice p. 379

²⁷ Jakobson 1968

²⁸ Payutto p. 128

He says, 'the above points are called *āsava*. I think it makes sense to extend this slightly and say that *āsava* are a function of language. These are the deep and persistent unconscious influences that induce us to misperceive and misunderstand reality. If this is true, then we can say that the fabric of language is the fabric of ignorance, and that the dynamic of language is the dynamic of ignorance.

By way of elaborating this relationship, I would like to point out that ignorance (avijja) is commonly misunderstood to be a simple gap in knowledge. However, the type of ignorance Buddhism is concerned with is an activity of semiotic displacement, an instantaneous event that uses a sign to cover up what was there before. Ignorance is the unconscious substitution of what you expect to hear, or what you want to hear, for what you actually hear. Ignorance produces a kind of hallucinatory state of mind in which you perceive things that are not there, or don't perceive things that are there, or incorrectly evaluate things, etc. Let me illustrate that this is an ordinary and integral function of language with a couple of examples. Please also bear in mind, that, while I have chosen very simple and superficial examples to illustrate this point, the exact same dynamic is at work in every element of language.

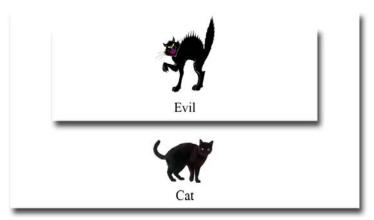


Figure 2 A Black Cat

Consider the diagram in Figure 2. I don't know how widespread this belief is, but in America those who are superstitious in believing believe that if a black cat walks across your path, that is bad luck, and more generally that black cats are evil. I have seen a person throwing stones at a black cat to chase it away so he wouldn't be contaminated by evil. Such a person sees what is simply a black cat, but they instantly displace that simple perception with the idea of it as the embodiment of evil. They are only aware of the second level of representation in this figure, displacing and covering over the prior naïve perception.

A similar type of hallucination, but on a completely different level of language, consider Figure 3. I am trying to represent the type of hallucinatory mishearing that normally takes place as a function of language on the boundary of foreignness between languages, in this case Thai and English. The first level represents the sounds of a pair of words in Thai that differ only in the first sound element, or phoneme. The word for 'duck' begins with an unaspirated [p] and the word for 'spicy' begins with an aspirated [ph]. These two words can be distinguished by a Thai speaker by the difference in their initial sound. However, English prohibits an unaspirated [p] from occurring at the beginning of a word, so when an English speaker, who is not familiar with Thai, hears a Thai

pronounce the word for 'duck', he unconsciously substitutes an aspirated [ph], and cannot hear any difference between the two words. He 'hears' [ph] instead of [p].

Furthermore, this hallucination in hearing is matched by a corresponding incapacity in pronunciation. An English speaker will not be able to pronounce the word for 'duck' correctly either. He will compulsively pronounce it incorrectly, as he hears it, with an aspirated initial.

Similarly, the other way around, consider Figure 4. If an English speaker says the words represented here on the first level, a naïve Thai speaker will mishear the final sounds as represented on the second level, and will be entirely unaware of having done so. This is so because [sh] and [l] sounds are prohibited in the Thai language from occurring at the end of a word. And also here the automatic mishearing of what is prohibited, is matched by the automatic, compulsive mispronunciation of the words in the same way they are misheard.

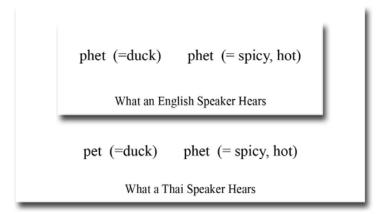


Figure 3 An English Speaker's Hallucination

If we take these as examples of the general phenomena of ignorance, which I believe is correct, one of the most interesting implications that becomes obvious is that ignorance is not just the active distortion of perception, but it is also at the same time and in exactly the same way, and imposition of a compulsion on performance. There is no biological reason for these inhibitions of pronunciation; they are entirely a function of the systemic ignorance imposed upon us by our language.



Figure 4 A Thai Speaker's Hallucination

In concluding this attempt to convey a sense of how deeply semiotics and linguistics is related to Buddhism, I would like to point out that the entities that are at work in these last two examples are not actual sounds, but are abstract categories of sound, defined within a matrix of intersecting oppositions, such as consonant vs. vowel, dental vs. labial, aspirated vs. unaspirated, etc. The Buddha said that the world is supported by the opposition between existence and non-existence. And the implication here is that the world arises by adding layers of oppositions upon that foundational opposition. So the elements that are the function of ignorance in the above examples are of the same ontological order as all the other elements of ignorance. That is to say, in sum, that the self is exactly the same type of object as a phoneme. So it is not only on the level of signless liberation that linguistics is relevant, but also on the level of not-self, because obviously the self is also a function of language.

How Does Meditation Work

Now that we can picture the logic of duplicity and the dynamic of ignorance in terms of Peirce's diagrammatic logic, we can see that ignorance is not just a matter of conceptual or logical phenomena, but it is a matter of force, inhibition, compulsion. Second, we can see that, while the general realm on which Buddhism is focused is the realm of mind, it is more particularly the play of truth and falsity in the realm of mind that is at issue. The atomic element, so to speak, is the duality, or the duplicity, which is the atomic structure of falsity. Because duplicity is intrinsically asymmetric, the elaboration of this realm is also intrinsically asymmetric. It is built up layer upon layer, and woven into complex networks of falsity. And globally speaking this realm is governed by a kind of gravitational force, such that falsity arises conditionally, layer by layer, from truth, and is constantly compelled by its nature to collapse downward toward truth. This is the nature of ignorance, and it is also the nature of language.

For example, one basic principle that follows from this is that truth is one and falsity is many. There can be only one center, but there are many radii, and many points on a circle. This principle also is presupposed in language. Hence, any concept that implies singleness, implies truth, and any concept that implies manyness implies falsity. Thus in English we say 'he is straight', meaning he is honest, but 'he is crooked' means he is a liar. 'He is two-faced' means he is a liar.

Consider speed and slowness. There is a scale of faster and slower. There is no limit to how fast you can go, and people have all sorts of contests to see who can go the fastest. But no one has a contest to see who can go the slowest. Indeed, there is a limit to slowness. When you stop and sit on the ground, the dimension of speed collapses. Hence 'fast talker' means someone who lies. It is common practice for salesmen to try to keep your mind moving and get you to make a decision without giving you time to stop and think. Because when you slow down, or stop, falsity tends to come apart, and truth tends to emerge.

It is similar with sound, that is, sound of language. You can talk louder or softer, faster or slower, but if you are silent, all the polarities that apply to sound collapse. There is an inherent association between silence and truth. That is why the Buddha was called Shakyamuni meaning "the silent Shakya."

Consider the relation between up and down. It is clear that down is first and things grow or are built up. Of course, whatever goes up, must come down. The force of gravity, together with the inherent impermanent nature of constructed things, means that whatever is built up will eventually come down. Not only that, but there is an asymmetry in up and down. There is no limit to how far up you can go, but if you go clear down to the ground you can't go any further down. Hence, in English 'he has his feet on the ground' implies

that he is aware of truth, whereas 'he has his head in the clouds' implies he is caught up in a world of falsity.

Finally, the Buddhist distinction between relative truth and ultimate truth (*sammuti-sacca* and *paramattha-sacca*) is similar. There are multiple levels of relative truth, but at the limit of absolute truth all of the dimensions of relative truth collapse and become inapplicable.

Thus, just as physical things tend to fall, falsity also tends to fall, disintegrate, collapse, revealing the underlying truth. That is how the motionlessness, the silence, the aloneness, the equanimous awareness of Buddhist meditation can enable one to see truth. The force that is in play here is the force of truth. The truth speaks in silence. Contrarily, the more talk and social intercourse, the thicker the falsity, the more obscured is truth.

Bibliography

Anālayo, Bhikkhu. 2003. Satipaṭṭhāna: The Direct Path to Realzation. Cambridge, Windhorse Publications Ltd.

Blofeld, John. Trans. 1958. The Zen Teaching of Huang Po: On the Transmission of Mind. New York: Grove Press.

Bodhi, Bhikkhu. 1993. Anuruddha, A Comprehensive Manual of Abhidhamma: The Abhidammattha Sangaha of Acariya. Ed. Bhikku Bodhi. Trans. Mahāthera Nārada and Bhikku Bodhi. Kandy: Buddhist Publication Society.

Bodhi, Bhikkhu. 2000. The Connected Discourses of the Buddha, 2 vols., Boston, Wisdom Publications.

Buddhadāsa Bhikkhu. 1997. Mindfulness with Breathing: A Manual for Serious Beginners. Boston: Wisdom Publications.

Buddhadāsa, Bhikkhu. 1971. Toward the Truth. Ed. Donald K. Swearer. Philadelphia: Westminster Press

Conze, Edward. 1958. Buddhist Wisdom Books containing The Diamond Sutra and The Heart Sutra. Trans. Edward Conze. New York: Harper & Row.

Gould, Stephen J. 2002. Rocks of Ages: Science and Religion in the Fullness of Life. New York: Ballantine Books.

Grice, H. P. 1957. "Meaning." The Philosophical Review, Vol. 66, No. 3. (Jul., 1957), pp. 377-388.

Hayward, Jeremy W. Varela, Francisco J. Gentle Bridges: Conversations with the Dalai Lama on the Sciences of Mind. Boston: Shambhala, 1992.

Jakobson, Roman. 1968. Child Language, Aphasia, and Phonological Universals. The Hague: Mouton.

Kalupahana, David J. 1976. Causality: The Central Philosophy of Buddhism. Honolulu: The University Press of Hawaii.

. 1999. "Language", in Encyclopedia of Buddhism, Sri Lanka, vol. 6, p 282-4.

Kornfield, Jack. 1977. Living Buddhist Masters. Boulder: Prajna Press.

Lopez, Donald S., Jr. 1988. Editor. Buddhist Hermeneutics. Honolulu: University of Hawaii Press.

Nagarjuna, Garfield, Jay L. The Fundamental Wisdom of the Middle Way: Nagarjuna's Mulamadhyamakakarika. Trans. Jay L. Garfield. New York: Oxford University Press, 1993.

Payutto, P. A. 1995. Buddhadhamma: Natural Laws and Values for Life. Trans. Grant A. Olson. Albany: State University of New York Press.

—. Toward Sustainable Science: A Buddhist look a trends in scientific development. Trans. Bruce Evans. Somerville: Wisdom Publications, 1993.

Popper, Karl. 1959. The Logic of Scientific Discovery. New York: Basic Books

Pyle, Charles. 2009. Festschrift in Linguistics, Applied Linguistics, Language and Literature in Honor of Prof. Dr. Udom Warotamasikkhadit, Fellow of the Royal Institute of Thailand on his 75th Birthday. June 2009. Bangkok. P. 41-57.

Steering Committee on Science and Creationism. Science and Creationism: A View from the National Academy of Sciences, Second Edition. PDF from http://www.nap.edu/catalog/6024.html. Washington, DC: National Academy of Sciences, 1999.

Thanissaro Bhikkhu. 2010. "Samiddhi Sutta: About Samiddhi" (SN 1.20), translated from the Pali. Access to Insight,

http://www.accesstoinsight.org/tipitaka/sn/sn01/sn01.020.than.html

Thanissaro Bhikkhu. 2010b. "Dhammacakkappavattana Sutta: Setting the Wheel of Dhamma in Motion" (SN 56.11), translated from the Pali. Access to Insight, www.accesstoinsight.org/tipitaka/sn/sn56/sn56.011.than.html

Thanissaro Bhikkhu. 2010c. "Tittha Sutta: Various Sectarians" (Ud 6.4), translated from the Pali. Access to Insight,

http://www.accesstoinsight.org/tipitaka/kn/ud/ud.6.04.than.html

Thanissaro Bhikkhu. 2011. "Nagara Sutta: The City" (SN 12.65), translated from the Pali. Access to Insight, http://www.accesstoinsight.org/tipitaka/sn/sn12/sn12.065.than.html .

The Dalai Lama, Beerzin, Alexander. The Gelug/Kagyu Tradition of Mahamudra. Ithaca: Snow Lion Publications, 1997.

The Dalai Lama, Herbert Benson, Robert A. F. Thurman, Daniel Goleman, Howard Gardner, et alii, 1991. Mind Science: An East-West Dialogue. Somerville: Wisdom Publications.

Wallace, B. Allen. 2003. "Introduction: Buddhism and Science---Breaking Down the Barriers." p. 1- 29. Buddhism & Science: Breaking New Ground. New York: Columbia Press. 2003