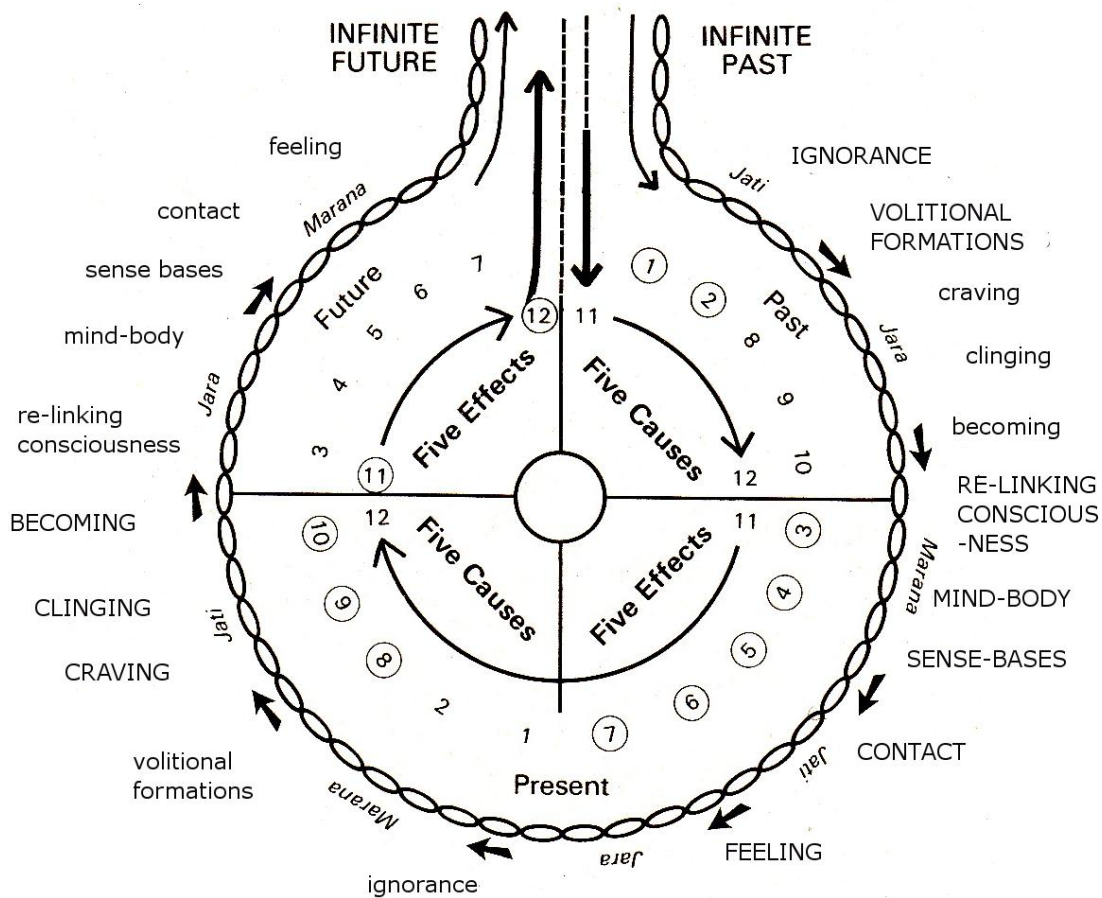


The 'Epiontic' Dependently Originating Process of Cyclic Existence According to Early Buddhist Metaphysics

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Abstract

Some modern Western interpreters of Buddhist teachings and philosophy claim that the original teachings of the Pali Canon were staunchly anti-metaphysical. In this article I examine the early Buddhist worldview and demonstrate that this assertion is deeply mistaken. Whilst the early teachings of the Buddha clearly rejected dogmatic metaphysical positions which the Buddha characterised as being 'extreme', he also implicitly, yet clearly, taught a subtle metaphysical view of the process of reality which is consistent with the modern quantum 'epiontic' (epistemological perception creates ontology) perspective of 'quantum Darwinism.' Central to this viewpoint is 1) a non-materialism which indicates that the ultimate process of reality is of the nature of mind; 2) the assertion that the ultimate nature of reality lies between the extremes of 'existence' and 'non-existence', 'eternalism' and 'nihilism'; 3) the assertion that the epiontic mechanism operates as '*kamma*', or '*karma*', a central mechanism for the functioning of conditioned *samsaric* (cycle of dissatisfactory lives) reality. On the basis of these fundamental insights the doctrines of 'rebirth' and 'dependent origination' are shown to be crucial metaphysical components of the overall early Buddhist worldview as taught by the Buddha. These doctrines are also shown to be consistent with modern quantum theory. On the basis of this investigation recent claims that the 3-lifetimes model of dependent origination is mistaken are shown to be desperately misleading.

Keywords: Pali Canon, metaphysics, early Buddhist metaphysics, *paticcasamuppada*, dependent arising, quantum epiontic paradigm, quantum Darwinism, *kamma*, *karma*, rebirth, extreme views, the middle way, consciousness, four noble truths, noble eightfold path, *nirodha*, cessation, enlightenment, transcendental dependent arising, morphogenetic fields, 3-lifetime model, cyclic existence.

Vision arose, insight arose, discernment arose, knowledge arose, illumination arose within me with regard to things never heard before.

- *Dhammacakkappavattana Sutta: Setting the Wheel of Dhamma in Motion*¹

In this paper I will present an analysis and exposition of one of the early Pali Canon teachings of Buddhism, dependent origination (*paticcasamuppada*, also translated as dependent co-arising'), within the context of the recent quantum 'epiontic' paradigm, a paradigm which indicates that the psycho-physical world comes into existence through the operation of a minimalist amplificatory perceptual function which is internal to the quantum field. It is this amplificatory function which is able to activate and bring to fruition the potentialities which reside within the quantum realm of reality. When we investigate this modern discovery in the context of early Buddhist 'metaphysics', which suggests that it is the operation of the intentionality within Mind and minds, driven by a deep craving which is internal to the process of existence, that produces *samsara*, the cycle of dissatisfactory existence which extends over many lifetimes, the mutual illumination is striking.

One motivation for this undertaking is to undermine the common yet mistaken notion that the teachings of early Buddhism are staunchly anti-metaphysical. The doctrines of the Pali Canon are generally thought to be those which were taught by the Buddha himself, although

these teachings were not written down for several centuries after the Buddha's *parinirvana* or final passing into the deathless realm of the unconditioned. And because on some of the occasions that the Buddha gave teachings to various groups of people he apparently refused to engage in metaphysical discourse, and indeed in some of these occasions the Buddha clearly did clearly deprecate many metaphysical views, it is mistakenly thought by some (Steven Batchelor² and Robert Ellis³ are notable examples) that these occasions indicate a blanket condemnation of any metaphysical viewpoint on the part of the Buddha. Such a crude conclusion, however, ignores the fact that many of the core teachings, 'dependent origination' in particular, are obviously indicative of a subtle, yet powerfully acute, metaphysical perspective upon the functioning of the process of reality.

In fact, as we shall see, in the context of the most recent insights into the operation of quantum reality we may elucidate, and even deepen, the Buddha's metaphysical position into a more embracing metaphysical perspective which we could call *quantum epiontic dependent origination* (for the rest of this paper I shall simply use the term 'dependent origination'). For those unfamiliar with the term 'epiontic' it will enough for the moment to take this term as indicating that at the quantum level 'epistemology' (the means of knowledge) and 'ontology' (what 'exists') are intertwined. The instigator of the quantum 'epiontic' paradigm Wojciech Zurek, a quantum perspective that he also called 'quantum Darwinism', summed up his insight as follows:

...quantum states, by their very nature share an epistemological and ontological role – are simultaneously a description of the state, and the 'dream stuff is made of.' One might say that they are *epiontic*. These two aspects may seem contradictory, but at least in the quantum setting, there is a union of these two functions.⁴

This means that perception, originating at and operating through the quantum 'dream-stuff' level, must be central to the generation of what appears to 'exist'; furthermore this 'epiontic', or quantum-perceptual, process must be responsible for the evolution of sentient beings. According to the important and influential twentieth century physicist John Wheeler, once sentient beings come into existence they actually become the motive force of the process of the universe:

Directly opposite to the concept of universe as machine built on law is the vision of *a world self-synthesized*. On this view, the notes struck out on a piano by the observer participants of all times and all places, bits though they are in and by themselves, constitute the great wide world of space and time and things.⁵

According to Wheeler then it is the perceptions of all sentient beings which actually create, 'epiontically', the fabric of space and time. It is this remarkable and striking metaphysical vision that we shall find echoed in the metaphysical perspective of early Buddhism.

There is another recent debate within Buddhism itself, a debate which will be unfamiliar to anyone not acquainted with recent 'controversies' within the Western Buddhist community, which is addressed, and hopefully resolved, by this elucidatory investigation. The general presentation of the extended version of dependent co-origination includes twelve links, each of which provides the condition for the following link with the final link linking back to the first, thus supplying a cyclic account of the generation of the psychophysical world. The detail will be covered shortly. The most generally presented treatment of these links spreads them out over three lifetimes in a manner which gives an account of the way in which sentient beings are driven, because of a fundamental 'ignorance' and 'craving', to endlessly take rebirth in the conditioned and 'dissatisfactory' realm of *samsara*. However, recent

Western practitioners and writers on the subject such as Leigh Brasington have suggested that this account contains 'serious logical flaws' which render the account to be untenable.⁶

It is intriguing and surely relevant to contemplate the fact that the three lifetimes model which is being disparaged is regularly presented as central by modern exponents of the Buddhist doctrine who are generally considered by Buddhist practitioners to have attained a high degree of enlightenment (Mahasi Sayadaw for example⁷) and is accepted as canonical by most significant Buddhist scholars (Maurice Walshe for instance in his introduction to his translation of the Buddha's teachings *Thus I have Heard*⁸). Some recent Western exponents of a more Westernized form of Buddhism such as Leigh Brasington, however, consider they have greater insight. We shall see in this paper' however' that, although the point Brasington makes that the process of dependent origination should not be thought to *only* apply across lifetimes or from one to the next, is appropriate, the assertion that it does not apply across lifetimes is mistaken.

At the outset of his book on quantum physics *Veiled Reality* quantum physicist and philosopher Bernard d'Espagnat writes that:

This whole book centers on the conviction that whoever tries to form an idea of the world – and of man's position within the world – has to take the findings of quantum physics most seriously into account.⁹

Quite clearly, then, d'Espagnat considers that quantum physics is relevant, in fact essential, to any kind of metaphysical account of reality and, as we shall see, early Buddhism does contain a deep and subtle metaphysical account of the process of reality, a metaphysical account which actually accords with the findings of quantum physics. Indeed, any account of reality which did not accord with quantum theory could surely *not* be given credence. As Henry Stapp says with reference to some modern philosophers who ignore the evidence of quantum theory:

Philosophers of mind appear to have arrived, today, at less-than-satisfactory solutions to the mind-brain and free will problems, and the difficulties seem, at least *prima facie*, very closely connected with their acceptance of a known-to-be-false understanding of the nature of the physical world, and of the causal role of our conscious thoughts within it.¹⁰

The 'known-to-be-false' viewpoint is that of the pre-quantum 'classical' understanding of the physical world which rules out mind and free-will. Stapp describes one of his central conclusions from a lifetime of pondering the mystery of the quantum revelation as follows:

According to the orthodox interpretation, these interventions are probing actions *instigated by human agents who are able to 'freely' choose which one, from among the various probing actions they will perform. ...* The concept of intentional actions by agents is of central importance. Each such action is intended to produce an experiential feedback.¹¹

Within the Buddhist perspective it is karma (Pali: *kamma*), or 'action' which is the central mechanism which drives the process of the wheel of existence within the realm of the dualistic world; actions and subsequent effects make up the process of dualistic experience on all levels of reality. Remarkably this view finds a deep resonance at the level of the microscopic foundations of the process of reality within the discoveries of quantum physics. According to Stapp it is the fundamental mechanism of actions and results, or, employing Stapp's own characterisation, actions and feedbacks, operating through the quantum level,

that drives the process of reality. This process and mechanism of actions and feedback is referred to in Pali Buddhist terminology as *kamma-vipaka* (Sanskrit: *karma-vipaka*), actions and effects; and this mechanism turns out to be the fundamental quantum process of reality.

According to Stapp the evidence of quantum theory, a theory which places *actions* at the center of the ontological structure of reality:

...upsets the whole apple cart. It produced a seismic shift in our ideas about both the nature of reality, and the nature of our relationship to the reality that envelops and sustains us. The aspects of nature represented by the theory are converted from elements of *being* to elements of *doing*. The effect of this change is profound: it replaces the world of *material substances* by a world populated by *actions*, and by *potentialities* for the occurrence of the various possible observed feedbacks from these actions.¹²

In other words even the material world becomes a construct within experience which is generated through a quantum-karmic action-feedback mechanism. This quantum perspective is shared by John Wheeler:

The universe is a self excited circuit. As it expands, cools and develops, it gives rise to observer-participancy. Observer-participancy in turn gives what we call tangible reality to the universe ... Of all the strange features of the universe, none are stranger than these: time is transcended, laws are mutable, and observer participancy matters.¹³

Thus we see that that the new quantum perspective places the participatory intentional actions of sentient beings center stage in the generation and process of reality.

It is exactly this viewpoint (without the precise 'quantum' background of course) which is central to the early Buddhist teachings. Wheeler tells us that the universe is a 'self-excited circuit', a notion which he illustrated with his graphical image of the 'self-perceiving' universe (figure 1) and it is the Buddhist graphic of the 'Wheel of Life' (figure 2), which illustrates and expounds the links of dependent origination, that actually gives the details of exactly how the self-excited circuit of existence operates within the realm of sentient life.

The notion of a 'self-excited' feedback loop, driven by intentional action (*kamma*, Sanskrit: *karma*), is central to early Buddhist metaphysics. In his exposition of the nature of 'kamma' Thanissaro Bhikkhu¹⁴ tells us that:

Buddhists ... saw that karma acts in multiple feedback loops, with the present moment being shaped both by past and by present actions; present actions shape not only the future but also the present. Furthermore, present actions need not be determined by past actions. In other words, there is free will, although its range is somewhat dictated by the past.¹⁵

And in his introduction to the *Ahara Sutta* (Nutriment Sutta) Thanissaro Bhikkhu summarizes dependent origination, indicating that it fits into both a 3-lifetime and 1-lifetime model, versions of dependent origination which Brasington considers as being logically deficient, and also a momentary model, i.e. all links operate within a single moment:

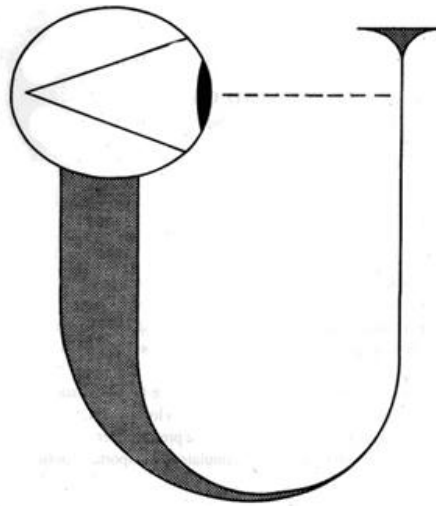


Figure 1 – Wheeler's 'self-perceiving universe' image.

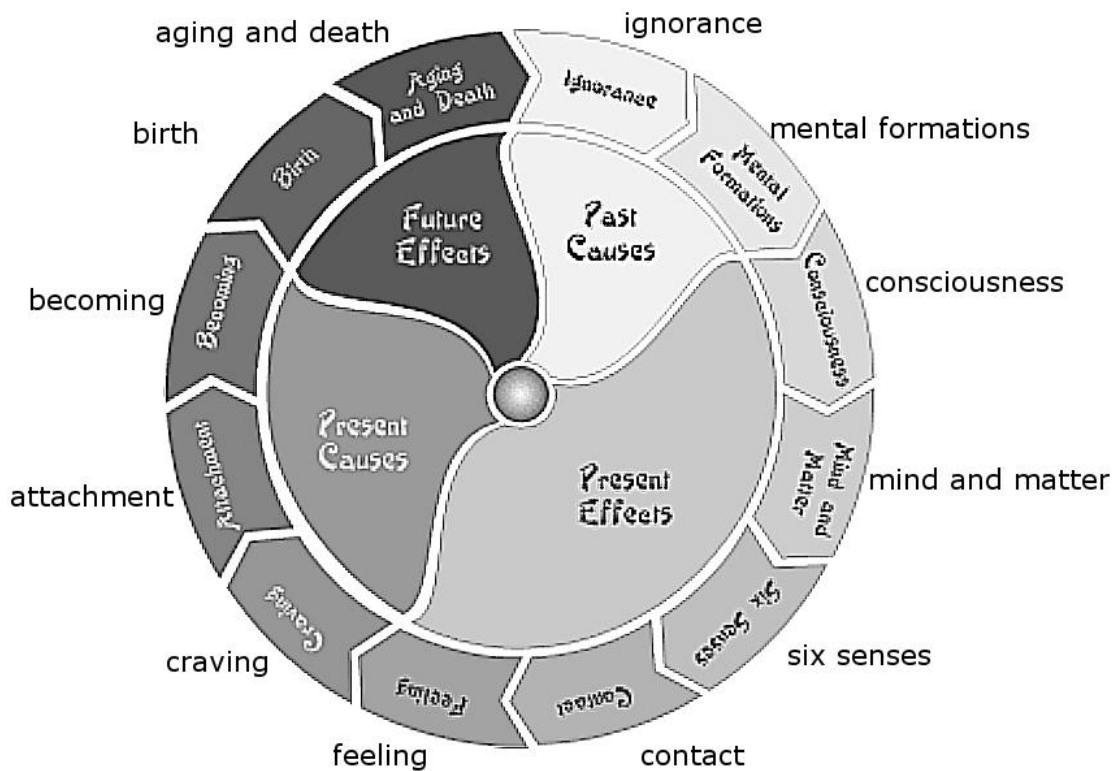


Figure 2 – Buddhist 'Wheel of Life' showing the links of dependent origination (taken from Mahasi Sayadaw's Discourse on Dependent Origination).

The Commentary to this discourse tries to fit this teaching into the three-lifetime interpretation of dependent co-arising, emphasizing the role of the four nutriments in the mechanics of death and rebirth, but there is no need to limit the teaching to this interpretation. The teachings both in this discourse and in the following one show the complex interactions and feedback loops among the different factors of dependent co-arising, both between lifetimes and within a single lifetime — even a single moment. Craving is what takes material form, contact, intention, and consciousness — all of which precede it in the chain of dependent co-arising — and turns them into food for further becoming: continued becoming in this lifetime, and future becoming in the next.¹⁶

The four 'nutriments' which provide the "maintenance of beings who have come into being or for the support of those in search of a place to be born"¹⁷ (i.e. a rebirth consciousness seeking a womb) are 1) physical food, 2) sense contact 3) volitional intentionality and actions (*kamma*) and 4) consciousness. Physical food obviously sustains the body which in turn sustains the mind, the mind and body provides the basis for sense contacts which then, driven by a thirst for more sense contact leads to intentions and volitional actions, which in turn generate consciousness in general and rebirth consciousness in particular. Thus the teaching of the four nutriments is in a way a cut down version of dependent origination, a version that emphasizes the fact that the process is driven by a universal hunger, thirst or craving (*tanha*). As Nyanaponika Thera tells us:

It is hunger that stands behind the entire process of nutrition, wielding its whip relentlessly. The body, from birth to death, craves ceaselessly for material food; and the mind hungers as eagerly for its own kind of nourishment, forever new sense-impressions and for an ever expanding universe of ideas.¹⁸

It was this aspect of the Buddhist worldview, the notion that the entire process of reality and the universe is driven at a fundamental level by a universal craving for existence that the Western philosopher Arthur Schopenhauer found compatible with his own conclusion that embodied sentient existence was the result of the operation of a universal 'Will' to exist.

As a further indication of the importance of feedback-loop nature of dependent origination, in his introduction to the *Madhupindika Sutta* (the 'Honey Ball' Sutta) Thanissaro Bhikkhu writes that:

Because the Buddhist analysis of causality is generally non-linear, with plenty of room for feedback loops, the maps vary in some of their details.¹⁹

The ways in which the Buddha described the various feedback mechanisms which drive the functioning of reality varied according to the context and level of the discourse. But, as we shall see, the early Buddhist metaphysical vision was one of a universal feedback loop, driven by sentient intentionality, acting on all levels of reality. Before we turn attention to the details, however, it is essential to refute the mistaken notion that the early Buddhist worldview, as presented by the Pali Canon, was completely and absolutely, metaphysically perhaps one might say, anti-metaphysical.

The Suttas which are generally taken as indicting the Buddha's complete dismissal of metaphysics are the *Kalama Sutta*, in which the Buddha gives pragmatic advice to the residents of a "town of the Kalamas"²⁰, the *Avyakata Samyuttas*, the various discourses that recount the Buddha's 'silence' on various metaphysical issues, the *Cula-Malunkiyovada Sutta*, which contains the, famous in Buddhist circles, arrow parable, and the *Lokayatika*

Sutta ('The Cosmologist'), in which the Buddha does give reasons for avoiding certain metaphysical positions and, furthermore, also *does indicate the correct subtle metaphysical viewpoint of the middle way beyond extremes which is enshrined in the doctrine of dependent origination, a viewpoint which prefigures quantum theory.*

In the *Kalama Sutta* the town's people ask the Buddha about the various priests and contemplatives who pass through their town expounding differing views as the ultimate nature of reality and the spiritual doctrines which should be followed. Each proponent of a doctrine "expound and glorify their own doctrines, but as for the doctrines of others, they deprecate them, revile them, show contempt for them and disparage them."²¹ The Buddha replies by saying that the wise thing to do is not to go by dogmatic doctrines but to pursue modes of behaviour which are conducive to the elimination of suffering and the promotion of welfare and happiness:

Now, Kalamas, don't go by reports, by legends, by traditions, by scripture, by logical conjecture, by inference, by analogies, by agreement through pondering views, by probability, or by the thought, 'This contemplative is our teacher.' When you know for yourselves that, 'These qualities are skillful; these qualities are blameless; these qualities are praised by the wise; these qualities, when adopted & carried out, lead to welfare & to happiness' - then you should enter & remain in them.²²

Now, as Bhikkhu Bodhi points out, this teaching, like many of the Buddha's discourses, needs to be understood in its context. Bhikkhu Bodhi points out that the *Kalama's* are not followers of the Buddha and they are asking about contradictory metaphysical and spiritual teachings of other teachers around at that time. The Buddha, intent on giving advice which would lead to a significant spiritual practice which would lead to a lessening of suffering simply gave a teaching on testing out various doctrines according to their impact upon the "welfare and happiness" of the individual and community, and it is notable in this *Sutta* that the Buddha does not even expound his own doctrines of the four noble truths, the eightfold path or dependent origination. Bhikkhu Bodhi says about this:

after advising the Kalamas not to rely upon established tradition, abstract reasoning, and charismatic gurus, the Buddha proposes to them a teaching that is immediately verifiable and capable of laying a firm foundation for a life of moral discipline and mental purification. He shows that whether or not there be another life after death, a life of moral restraint and of love and compassion for all beings brings its own intrinsic rewards here and now, a happiness and sense of inward security far superior to the fragile pleasures that can be won by violating moral principles and indulging the mind's desires. For those who are not concerned to look further, who are not prepared to adopt any convictions about a future life and worlds beyond the present one, such a teaching will ensure their present welfare and their safe passage to a pleasant rebirth - provided they do not fall into the wrong view of denying an afterlife and kammic causation.²³

So, whilst it is true that the Buddha avoids explaining his clearly metaphysical doctrines of dependent origination, kammic causation and rebirth, it is nevertheless clear that he gives advice on a practice of life which is in accord with these doctrines.

However, the fact that he does not think it advisable or necessary on this occasion to go into metaphysical detail with the Kalamas, people who are not asking to become his followers

and hear his teachings in detail, does not mean that the Buddha taught that metaphysics was innately bad, or that he had no metaphysical viewpoint. Is it likely that a completely enlightened being (assuming that one accepts that he was a fully enlightened being) did not know about the metaphysical structure of reality? The notion is absurd. Furthermore the Buddha's admonishment 'not to rely upon established tradition, abstract reasoning, and charismatic gurus' and so on does indicate an abandonment of all doctrine and reasoning, it indicates the necessity to experientially test out the doctrine in pragmatic practice. The notion that the Buddha was suggesting that they should follow the experience in any direction they fancied without recourse to any theory or doctrines whatsoever is absurd, he was clearly saying that they should adopt doctrines which experience shows to be beneficial. Furthermore this admonishment to adopt a pragmatic stance also does not indicate the necessity of rejecting all metaphysics, it suggests that metaphysics should be pragmatically useful, not a matter of dogmatic adherence. Buddhist practice requires a kind of engaged and experiential metaphysics.

In the case of the Buddha's doctrine of the *avaykata*, which are the undetermined, or unanswered, questions, we are in the situation where the Buddha clearly did consider that certain metaphysical questions should not be worried over, a position which does not mean that he did not know the answer of course. There are two main texts in the Pali scriptures, Suttas 63 and 72 of the Majjhima Nikaya, which each have the same list of ten propositions or 'views' (*ditthi*), in the following list the term '*Tathagata*' refers to a 'perfectly enlightened being' like the Buddha:

1. The world is eternal.
2. The world is not eternal.
3. The world is (spatially) infinite.
4. The world is not (spatially) infinite.
5. The soul (*jiva*) is identical with the body.
6. The soul is not identical with the body.
7. The Tathagata exists after death.
8. The Tathagata does not exist after death.
9. The Tathagata both exists and does not exist after death.
10. The Tathagata neither exists nor does not exist after death.

In the *Cula-Malunkyovada Sutta* the monk Malunkyaputta challenged him to answer these questions, but the Buddha refused to give any teaching about these issues, although Malunkyaputta tried to press for an answer. It is significant that these questions are posed in an assertive manner which was given the appellation of 'inherent existence' and 'inherent non-existence' by later Buddhist philosophers. It appears that the Buddha was clearly distancing himself from assertions which indicate a commitment in any way to absolute 'existence' or absolute 'non-existence' (or eternity and non-eternity or identity and non-identity). However, as we shall see, rejecting such 'fixed' and 'dogmatic' metaphysical positions is not the same as the rejection of any and all metaphysical positions.

In his exposition of the doctrine of dependent origination Ajahn Payutto makes the point that it was extreme dogmatic metaphysical views which the Buddha rejected abundantly clear:

To understand the principle of Dependent Origination is said to be Right View (*samma-ditthi*). This Right View is a very balanced kind of view, one which does not tend to extremes. Thus the principle of Dependent Origination is a law which teaches the truth in a median and unbiased way, known as the Middle Teaching. The

'median-ness' of this truth is more clearly understood when it is compared with other teachings ... the principle of Dependent Origination differs from these extreme views...²⁴

Ajahn Payutto then proceeds to give examples from the Suttas such as the following:

A Brahmin approached the Buddha and asked, "Venerable Gotama, do all things exist?"

The Buddha replied, "The view that all things exist is one extreme materialistic view."

Question: Then all things do not exist?

Answer: The view that all things do not exist is the second materialistic view.

Question: Are all things, then, one?

Answer: The view that all things are one is the third materialistic view.

Question: Are all things, then, a plurality?

Answer: The view that all things are a plurality is the fourth materialistic view.

"Brahmin! The Tathagata proclaims a teaching that is balanced, avoiding these extremes ... [S.II.77]²⁵

The rejection of oneness and plurality later became enshrined in the Mahayana 'neither one nor many' demonstration of emptiness. Here we should note not only the rejection of extreme views, but also the implied rejection of materialism. For, indeed the doctrine declared by the Buddha is, as we shall see, clearly inconsistent with the metaphysical position of materialism.

It is generally accepted that the Buddha's fundamental concern was soteriological, teaching a method of liberation from suffering, not metaphysical; he wanted his disciples to achieve enlightenment, not that they should understand metaphysical concepts. To know the answers to these questions is not necessary for liberation. Ajahn Payutto put this point as follows:

...we must bear in mind the Buddha's objective in teaching Dependent Origination. In his teachings, the Buddha aimed to present only that which could be used to address the problems of life on a practical basis. He did not encourage trying to understand reality through conjecture, debate, or analysis of metaphysical problems, which he saw as impossible.²⁶

But, although it may be true that understanding the metaphysical makeup of the process of reality is not necessary for achieving the goal of liberation, the notion that the Buddha considered the 'analysis of metaphysical problems' was 'impossible' is clearly incorrect from the perspective of Ajahn Payutto's own understanding of the Buddha's teachings, for on the very next page he writes:

The view of the principle of Dependent Origination as a world-evolution theory, although harmonious with the teachings of the Buddha, is nevertheless somewhat superficial. It lacks a profound, detailed, moment-by-moment analysis of physical and mental components. ... In order to delve deeper into the truth, it is necessary to examine the unfolding of natural events in more detail, on a personal basis, clearly seeing the truth of this process as it actually occurs in our lives, even in very brief instances. With such a clear awareness, the three benefits mentioned above will be

more likely to occur. Incidentally, this more immediate interpretation does not preclude the interpretation of the process as evolution on a long-term basis.²⁷

But, whilst it is true that achieving any degree of 'enlightenment' must obviously involve a person examines "the unfolding of natural events in more detail, on a personal basis", this does not mean that 'Dependent Origination as a world-evolution theory' which Ajahn Payutto tells us is "harmonious with the teachings of the Buddha" is "superficial". It is clearly the case, as we shall see, that the personal investigation of the process of reality makes deeper and clearer sense within an overall metaphysical understanding to the process of reality and its evolution.

It is true, of course that the Buddha was clear that being obsessed with metaphysical questions will not lead to enlightenment. To make his point the Buddha told the parable of the man pierced by a poisoned arrow. If he insists, before receiving medical treatment, on knowing who shot the arrow, and of what clan he is, what kind of bow he was using, what the bow string and the shaft of the arrow were made of, from what kind of bird the feathers on the arrow came, and so on, he will die before his thirst for knowledge is satisfied. Likewise, if we distract ourselves from the path to enlightenment by trying to settle these disputed cosmological and metaphysical issues we may well fail to escape the clutches of birth, ageing, death, grief, sorrow, suffering, lamentation and despair and so on.

However, such a view does not mean that the Buddha did not know the answers, or that such questions do not have answers, although the answers may be, as with quantum physics, so bizarre, counter-intuitive and difficult to comprehend that at the time the Buddha may have been very wise not to try and explain them. But the fact that the Buddha considered that explaining the subtle metaphysical nature of reality in detail was not necessary, perhaps even detrimental, to achieving the goal certainly does not mean that he did not know, or that he thought that there was no answer to the nature of the metaphysical depth of reality. Thus in the *Simsapa Sutta* (The Simsapa Leaves) we read that the Buddha picked up a handful of leaves and asked "What do you think, monks: Which are more numerous, the few simsapa leaves in my hand or those overhead in the simsapa forest?" The Sutta continues:

"The leaves in the hand of the Blessed One are few in number, lord. Those overhead in the simsapa forest are more numerous." In the same way, monks, those things that I have known with direct knowledge but have not taught are far more numerous [than what I have taught]. And why haven't I taught them? Because they are not connected with the goal, do not relate to the rudiments of the holy life, and do not lead to disenchantment, to dispassion, to cessation, to calm, to direct knowledge, to self-awakening, to Unbinding. That is why I have not taught them.²⁸

In the *Vacchagotta Sutta* Vacchagotta asks the Buddha:

"Now then, Master Gotama, is the cosmos eternal?"

"That has not been declared by me, Vaccha: 'The cosmos is eternal.'"

"Well then, Master Gotama, is the cosmos not eternal?"

"Vaccha, that too has not been declared by me: 'The cosmos is not eternal.'"

"Then is the cosmos finite?"... "Is the cosmos infinite?"...

"Is the body the same as the soul?"...

"Is the body one thing, and the soul another?"...

"Does the Tathagata exist after death?"... "Does the Tathagata not exist after death?"...

"Does the Tathagata both exist and not exist after death?"...

"Does the Tathagata neither exist nor not exist after death?"

"Vaccha, that too has not been declared by me: 'The Tathagata neither exists nor does not exist after death.'"²⁹

The Buddha's lack of answer to the issue of the existence or non-existence of the Tathagata, or fully enlightened being, after death is extremely intriguing in the light of the recent discoveries of quantum physics. If we are to believe the Buddha when he indicates that none of the possibilities offered apply to the situation then the existential configuration of the Tathagata after death is:

Not existent

Not non-existent

Not (both existent and non-existent)

Not (neither existent nor non-existent)

This is a quite remarkable state of affairs which surely no one would consider to be anything other than paradoxical obfuscation and unnecessary inscrutability; until, that is, one knows that this is exactly the configuration of the quantum realm, which is why the quantum physicist Robert Oppenheimer said regarding the existential condition of an electron (a quantum 'particle') that:

If we ask, for instance, whether the position of the electron remains the same, we must say 'no;'; if we ask whether the electron's position changes with time, we must say 'no;'; if we ask whether the electron is at rest, we must say 'no;'; if we ask whether it is in motion, we must say 'no.' The Buddha has given such answers when interrogated as to the conditions of man's self after his death; but they are not familiar answers for the tradition of seventeenth and eighteenth-century science.³⁰

This strange existential configuration of 'hovering' between existence and non-existence and combinations of these two is fundamental to the nature of quantum 'reality', which is the 'reality' underlying all phenomena. For instance, quantum physicist Giancarlo Ghirardi describes a quantum state of 'superposition' of paths a particle might take in a quantum experiment which involves two possible paths **O** or **E**:

Therefore, "to be in a superposition $|\mathbf{O}\rangle + |\mathbf{E}\rangle$ " is logically incompatible with any of the following "to be on path **O** or **E**," "to be on both **O** and **E**," and "to be elsewhere than **O** and **E**."³¹

In other words the quantum 'particle' is not fully on any of the paths but hovers in a ghostly state of potential existence and non-existence spread over both of them. And physicist Jeffrey Alan Barrett in his book *The Quantum Mechanics of Minds and Worlds* cites this paradoxical quantum configuration of quantum 'existence':

...a neutral K meson is typically not a K^0 meson, not a $-K^0$ meson, not both and not neither.³²

This is an extraordinary discovery: the existential configuration or lack of existential determinacy that the Buddha indicated as being the indeterminate state of enlightened beings after death corresponds exactly to the ultimate quantum realm of reality!

In the *Lokayatika Sutta* the Buddha discusses the nature of the cosmos with a 'cosmologist' (*lokayata*). In his notes to his translation Thanissaro Bhikkhu tells us that the Indian cosmological schools of thought based their principles upon the nature of the physical world, generally leaning towards hedonism as the best approach to life. In modern times, he tells us:

...they would correspond to those who base their philosophies on principles drawn from the physical sciences, such as evolutionary biology or quantum mechanics.³³

However, ironically, we shall find that it is actually the Buddha who reaches conclusions which anticipates modern quantum mechanics! The discussion of the *Lokayatika Sutta* is as follows³⁴:

"Now, then, Master Gotama, does everything exist?"

"'Everything exists' is the senior form of cosmology, brahman."

"Then, Master Gotama, does everything not exist?"

"'Everything does not exist is the second form of cosmology, brahman."

The Buddha then continues to his expound his subtle metaphysics of the 'middle between extremes':

Avoiding these two extremes, the Tathagata teaches the Dhamma via the middle...

In other words the Buddha asserts that the metaphysical nature of reality is that it exactly 'hovers' between existence and non-existence. How remarkable, then, that in a recent work the science writer Michio Kaku tells us that:

The reason why molecules are stable and the universe does not disintegrate is that electrons can be in many places at the same time.electrons can exist in parallel states hovering between existence and non-existence.³⁵

The ability of a quantum particle to be in two places at the same time, whilst still maintaining an identity as a single entity, is a feature of quantum behaviour that is absolutely crucial for the functioning of reality. It is a primary feature of the quantum world that from a pre-quantum 'classical' perspective should be completely impossible.

It will now be useful to take a brief detour into the later Mahayana teaching concerning the middle between extremes in the light of Dr. Robert Ellis's views concerning what he considers to be the monumental confusion of Buddhist philosophers. The following is the very first paragraph in the introduction by the contemporary Buddhist scholar José Ignacio Cabezón to the translation, which he carried out with Geshe Lobsang Dargyay, of the 'great' fifteenth century Sakya Tibetan Buddhist scholar Gorampa Sönam Sengé's philosophical polemical work concerning the ultimate nature of reality, or 'emptiness', *Distinguishing the Views*, which Cabezón has given the title *Freedom from Extremes*:

The Indian and Tibetan Buddhist sources tell us that the purpose of life is to attain enlightenment for the sake of others. But ignorance - the *misunderstanding* of reality - stands in the way of achieving that goal of enlightenment. One of the more urgent aims of Buddhist practice, then, is to overcome ignorance by cultivating an understanding of reality, the ultimate truth, the final nature of the self and the world. The Mahayana sutras use a variety of terms to designate this profound truth: *the sphere of dharma* (Skt. *dharmadhatu*; Tib. *cbos kyi dbyings*), *phenomena in themselves* (*dharmata*; *chos nyid*), *reality* or *thusness* (*tathata*; *de bzhin nyid*), and of course *emptiness* (*sunyata*; *stong pa nyid*). The Madhyamaka (*dbu ma*), or "Middle Way," is the name of the Buddhist philosophical tradition whose chief concern is the view or theory (*lta ba*) of that reality known as emptiness. The Middle Way is so called because it is said to be a middle ground between two false extremes - the extremes of eternalism and nihilism. Some of the greatest minds in the history of

Indian Buddhism have devoted a good deal of philosophical writing to delineating this Middle Way.³⁶

According to Dr. Ellis, the troubled author of *The Trouble with Buddhism*, all of these “greatest minds in the history of Indian Buddhism” have been desperately, nay, “scandalously” even, “confused” about the “Middle Way”, hardly comprehending the first thing about it.

Ellis has a remarkably extreme view concerning the capacities of the Buddhist philosophers that Cabezón consider to be “some of the greatest minds in the history of Indian Buddhism” as well as current Buddhist practitioners, even supposedly advanced ones such as the Dalai Lama. To get an idea of the depth to which Buddhism, according to Ellis, has become or perhaps always was, desperately confused about “its own insights,” it is worth considering some of the unrestrained comments that he makes during the course of his book and elsewhere on his website. The very first paragraph of chapter one of his book is as follows:

Expositions of Buddhism often start with the Four Noble Truths as the most basic teaching of Buddhism. That is one reason why I feel a need to address them from the beginning. Yet I cannot take the Four Noble Truths as they are normally presented and build on those, for even here, at the very starting point of Buddhism, there are confusions to clear up. These confusions suggest to me that the Buddhist betrayal of its own insights is no recent phenomenon, but started very early on in its history or was perhaps even there in confusions from the beginning.³⁷

So immediately we are given the impression that the Buddha himself may have been confused about his own insight, although this is not fully stated and in email correspondence Ellis has said it is in fact impossible to know what the Buddha said. Generally, however, we take the early Pali Suttas to be a reasonable reflection of the Buddha’s life and teachings. And Ellis certainly thinks that quite early on there may have been a “betrayal”. This attribution of “betrayal” is made on a few occasions. For instance in the beginning of his discussion of how we can justify beliefs Ellis says:

...it is important to clarify this. To do so will also be part of my case that Buddhism has often betrayed its own core insights, for the assumptions that it has made about how we know are at the base of this betrayal.³⁸

And, according to Ellis it is through the ‘Middle Way’ that we can come to have justified beliefs, although never acquire final knowledge; the ‘Middle Way’ justification process is incremental and the incrementalism never ends, absolute knowledge about anything is forever beyond reach.

Ellis’ version of the ‘Middle Way’ then seems to have little to do with the manner in which it is actually employed within Buddhist philosophy. The middle way of *practice*, as opposed to the metaphysical middle way between extremes of existence and non-existence, propounded by the Buddha is admittedly an incremental process, but it is an incremental process which finishes at the point of direct experiential metaphysical certainty. But Ellis believes that Buddhism has an inbuilt propensity to “betray” itself at every opportunity:

The Buddhist tradition has preserved its teachings of the Middle Way through many centuries, and for that it deserves much credit. However, the teachings of the Middle Way as presented by most Buddhists today are full of confusions. In my experience they are often reluctant to acknowledge or address these confusions, because of their

misplaced respect for tradition in itself as a source of wisdom, which leads them rather to defend traditional accounts of the Middle Way than really examine them.³⁹

What is the core issue of this “scandalous” betrayal? It is, according to Ellis, the belief in the possibility of metaphysics, the notion that knowledge about ultimate reality can be gained, then enshrined within a tradition such as Buddhism and then passed on by that tradition to future practitioners who through their own investigations determine that the Buddhist tradition has something highly significant to offer concerning metaphysical, and direct experiential, knowledge of ‘ultimate’ ‘Reality’. This view, says Ellis, is entirely misconceived and mistaken. In the above opening from Cabezón’s *Freedom From Extremes* we read:

The Mahayana sutras use a variety of terms to designate this profound truth: *the sphere of dharma* (Skt. *dharmadhatu*; Tib. *chos kyi dbyings*), *phenomena in themselves* (*dharmata*; *chos nyid*), *reality* or *thusness* (*tathata*; *de bzhin nyid*), and of course *emptiness* (*sunyata*; *stong pa nyid*). The Madhyamaka (*dbu ma*), or “Middle Way,” is the name of the Buddhist philosophical tradition whose chief concern is the view or theory (*lta ba*) of that reality known as emptiness.

For Ellis this notion that Buddhism can have anything to say metaphysically about “profound truth” is all part of its abject betrayal of its own insights. This is because, again according to Ellis, the real Buddhist Middle Way, or, rather the real ‘Middle Way’ discovered by him, shows us that metaphysics is impossible. According to Ellis the core teaching of the Buddha, as contained in the Pali Suttas, requires the abandonment and repudiation of any metaphysical enquiry or conclusion whatsoever.

However, the elucidation presented above quite clearly indicates that the metaphysical ‘middle way’ reached by the Buddha as presented in the Pali Canon, as opposed to the Buddha’s practical ‘middle way’ of avoiding the extremes of asceticism and indulgence, corresponds exactly, although less extensively developed, with the later Mahayana subtle metaphysics of ‘emptiness’ (*shunyata*) which indicates that the ultimate nature is in some sense metaphysically located between the extremes of existence and non-existence, eternalism and nihilism and so on. The 2nd century Madhyamika philosopher-practitioner Bhavaviveka expressed the metaphysical nature of ultimate reality as:

Its character is neither existent, nor non-existent,
Nor both existent and non-existent, nor neither.
[Buddhists] should know true reality
That is free from these four possibilities.⁴⁰

And the great Nagarjuna, writing about the same time:

Everything is real and not real,
Both real and not real,
Neither real nor not real.
This is the Lord Buddha’s teaching.⁴¹

And, as we have seen these descriptions of the metaphysical nature of ultimate reality correspond with remarkable precision to the discoveries of modern quantum theory.

In the *Phena Sutta* the Buddha clearly indicated the insubstantial nature of what appears to be the ‘material’ world, which is indicated by the term *rupa*, which is translated as ‘form’:

Form is like a glob of foam; feeling, a bubble; perception, a mirage; [mental formations], a banana tree; consciousness, a magic trick However you observe

them, appropriately examine them, they're empty, void to whoever sees them appropriately. Beginning with the body as taught by the One with profound discernment: when abandoned by three things — life, warmth, & consciousness — form is rejected, cast aside. When bereft of these it lies thrown away, senseless, a meal for others. That's the way it goes: it's a magic trick, an idiot's babbling. ... No substance here is found.⁴²

In this Sutta the Buddha clearly tells his followers that what appears to be a substantial 'material' world is entirely insubstantial. This, of course, is the central teaching of no-self (*anatta*) and impermanence (*anicca*) applied to what appears to be the 'material world'.

The following excerpt is taken from a quite recent book on quantum theory, *Quantum Reality: Theory and Philosophy*, it tells us that within quantum field theory, at the lowest level accessible to physics, there is no substance, the quantum field is actually 'empty' of substance:

Now, from a philosophical point of view, this is rather big stuff. Our whole manner of speech ... rather naturally makes us think that there is some stuff or *substance* on which properties can, in a sense, be glued. It encourages us to imagine taking a particle and removing its properties one by one until we are left with a featureless 'thing' devoid of properties, made from the essential material that had the properties in the first place. Philosophers have been debating the correctness of such arguments for a long time. Now, it seems, experimental science has come along and shown that, at least at the quantum level, the objects we study have no substance to them independent of their properties.⁴³

So at the lowest level of 'reality' material substance just simply disappears and all that is left is an energetic field of potentiality which can create the appearance of a 'material' reality inhabited by sentient beings, which it also produces.

As the appearance of the material world is inhabited by sentient beings, which are, of course, organic animate structures endowed with consciousness, consciousness itself must be in some way an aspect of the insubstantial quantum field which underlies the manifestations of reality. So at the base of reality there is no 'material' substantiality, but the energetic field must have some form of fundamental awareness. In fact some physicists are now considering that the world of manifestation must be 'created' by the activity of some kind of inner 'epiontic' awareness acting upon the potentialities within the fundamental quantum field. As we have already seen physicist John Wheeler wrote that quantum theory requires that we conceive of the universe as "*a world self-synthesized.*"⁴⁴ This means that the universe 'creates' itself from out of a mind-like insubstantial quantum field of potentiality by internal acts of 'epiontic' perception and eventually produces sentient beings, or Wheeler's 'observer-participators' who become the agents of the universe's self-creation. As Thanissaro Bhikkhu points out:

As the Buddha said, the mind is more variegated than the animal kingdom. Think of the many species of fish in the sea, birds in the sky, animals on the land and under the ground, whether extant or extinct: All of these species are products of minds, and the mind can take on a wider variety of forms than even that.⁴⁵

This means that awareness, consciousness and perception are more fundamental than the 'material' world which ultimately does not exist in the way that it appears. As we shall see even the apparently 'material' bodies of sentient beings are fashioned from epiontic quantum

'dream-stuff' through the agency of quantum 'morphogenetic fields' which are kammically formed.

This insight has been central to Buddhist philosophy for at least a couple of thousand years:

All environments are formed by *karma*, that is actions and the potencies they establish. The wind, sun, earth, trees, what is enjoyed, used and suffered - all are produced from actions. Potencies on the mind of each person in combination of those of similar beings create the very substance of their world system.⁴⁶

So it looks as if the fundamental quantum field is an insubstantial karmic field of potentiality within which actions and perceptions leave traces for future activation. Quantum physicist Professor Henry Stapp says that quantum physics requires that we recognize that "the concept of intentional actions by agents is of central importance. Each such action is intended to produce an experiential feedback."⁴⁷

This viewpoint is at least implicitly contained within the Pali Suttas; thus we read in the *Dhammapada*:

Phenomena are preceded by the heart, ruled by the heart, made of the heart.⁴⁸

This is the translation by Thanissaro Bhikkhu; Acharya Buddharakkhita translates:

Mind precedes all mental states. Mind is their chief, they are all mind-wrought.⁴⁹

The relevant Pali term is 'manopubbangama' which is usually translated as 'directed by mind', 'mano' generally is translated as 'mind'. The term 'heart' is often translated from 'citta' which also can be translated as 'mind', although it is often more appropriate to use the phrase 'heart-mind'. So we could easily translate this opening passage of the *Dhammapada* as:

Phenomena are preceded by the mind, ruled by the mind, made of the mind.⁵⁰

And this provides us with a quantum 'epiontic' version in which, whilst the minds of individuals will determine the mental states of those individuals, the collective mind of sentient beings would determine the actual nature of the environmental 'material' reality.

In his essay '*The mind-body relationship in Pali Buddhism: A philosophical investigation*' Peter Harvey writes concerning the notion of 'citta-originated' (mind-originated) 'matter' (*rupa*) that:

The discussion still leaves the meaning of 'citta-originated' (*citta-samutthana*) *rupa* states to be determined. Dhs. 667 holds that the two intimations are always 'citta-originated', and that certain other *rupa* dhammas, including the four primary elements may be, when they are 'born of citta', 'citta-caused' (*citta-ja*, *citta-hetuka*). Does this imply that *citta* can actually create certain kinds of matter, or what? The *Patthana* (Vol. 1, pp. 22-23) holds that there are four ways in which a *rupa* dhamma may 'originate': by *citta*, by *karma*, and by natural physical processes related to nutriment' and temperature. Nevertheless, *citta* cannot 'originate' matter on its own: *citta*-originated *rupa* arises dependent on the primary elements, and skilful or unskilful mental processes (*ibid*). This is because any 'derived' *rupa* depends on the primary elements, and these always arise dependent on each other. Thus the position of the Theravadin *Abhidhamma* seems to be that *citta* can produce or create certain kinds of matter, but not literally 'out of nothing', for 'citta-originated' matter is also dependent on other forms of matter.⁵¹

We now know, however, that Newtonian-Cartesian type 'matter' 'does not exist', as Stapp puts it, so it makes complete sense to fully accept the tendency within the Pali Canon to lean towards the ontological primacy of Mind and treat *rupa*, form or 'matter' as gross and solidified *citta*. So the early Pali Suttas can be easily harmonized within an 'epiontic' quantum theory that indicates that the entire process of reality is a vast *kammic* (*karmic*) feedback loop which operates according to the mechanism which the Buddha called 'dependent arising' or 'dependent origination' which operates within a mind-like quantum field of 'epiontic' potentiality.

After the Buddha, in the *Lokayatika Sutta*, intimates that the nature of reality is metaphysically a matter of mind-like (!) potentiality hovering between existence and non-existence he immediately describes his insight into dependent origination:

From ignorance as a requisite condition come fabrications. From fabrications as a requisite condition comes consciousness. From consciousness as a requisite condition comes name-&-form. From name-&-form as a requisite condition come the six sense media. From the six sense media as a requisite condition comes contact. From contact as a requisite condition comes feeling. From feeling as a requisite condition comes craving. From craving as a requisite condition comes clinging/sustenance. From clinging/sustenance as a requisite condition comes becoming. From becoming as a requisite condition comes birth. From birth as a requisite condition, then aging & death, sorrow, lamentation, pain, distress, & despair come into play. Such is the origination of this entire mass of stress & suffering.⁵²

Furthermore the *Lokayatika Sutta* also tells us that the chain of dependent origination can be reversed in order to achieve liberation from the dissatisfactory nature of cyclic existence (*samsara*). These two directions of the links of dependent origination are themselves linked to the second (forward direction: *anuloma-paticcasamuppada*) and fourth (reverse direction: *paticcasamuppada-nirodha-vara*) of the four noble truths so it is necessary to place the discussion within the context of the four noble truths.

The fact that all the essential teachings of the Buddhist path are encompassed and contained within the Four Noble Truths was stated by the Venerable Sariputta when he said:

Friends, just as the footprints of all legged animals are encompassed by the footprint of the elephant, and the elephant's footprint is reckoned the foremost among them in terms of size; in the same way, all skilful qualities are gathered under the four noble truths. Under which four? Under the noble truth of stress, under the noble truth of the origination of stress, under the noble truth of the cessation of stress, and under the noble truth of the path of practice leading to the cessation of stress.⁵³

One of the Buddha's central insights clearly elucidated in these early teachings is that there are two modes that human beings can adopt within the world of their psychophysical embodiment. The first, almost universal, mode is that of *samsara*, a continuous and 'binding' cycle of painful and dissatisfactory rebirths in cyclic existence (although there is no fixed, unchanging 'self' which takes rebirth but, rather, a mental continuum). This cyclic process is generated by a constant quest for an illusory ultimate and lasting satisfactory experience which cannot be attained because of the way in which it is sought, and where it is sought – within *samsara*, the realm of conditions and conditionality.

The second mode is that of the person who adopts the Buddhist spiritual path towards *Nibbana*, which is the 'unbinding from' and, eventually, the 'extinguishing' of the pointless and pain-producing quest. The 'extinguishing' comes about because of a clear, direct and immediate perception and experiential 'realization'; this is the crucial insight that the way in which the quest for ultimate satisfaction within the conditioned realm of *samsara* is carried out undermines its fulfillment, *precisely* because of the nature of reality. Thus direct insight into the nature and functioning of reality is essential.

We first meet the Four Noble Truths and the Noble Eightfold Path in the first teaching that the Buddha gave after his enlightenment, the *Dhammacakkappavattana Sutta: Setting the Wheel of Dhamma in Motion*⁵⁴. This Sutta begins by indicating that "one who has gone forth", a seeker of enlightenment, should avoid the extreme of sensual indulgence and the extreme of self-mortification and then the Buddha expounds "the middle way realized by the Tathagata [the term 'Tathagata' is generally translated as 'one gone to thusness' where 'thusness' indicates the ultimate nature – sometimes considered as nonduality, Peter Harvey brilliantly translates as 'the One Attuned to Reality'⁵⁵] - producing vision, producing knowledge" which "leads to calm, to direct knowledge, to self-awakening, to Unbinding." The Sutta then continues by outlining that the Noble Eightfold Path, which is made up of "right view, right resolve, right speech, right action, right livelihood, right effort, right mindfulness, right concentration" and then outlines the Four Noble Truths, which Thanissaro Bhikkhu list as: noble truth of 'stress', noble truth of the origination of stress, noble truth of the cessation of 'stress' and, finally, the noble truth of the "way of practice", or path, leading to the cessation of 'stress'. 'Stress' is a translation of the Pali term *dukkha*, other translations are 'suffering', sometimes 'misery', and 'dissatisfactoriness' (the dissatisfactory nature of existence). Harvey translates '*dukkha*' as 'pain'. The actual path, or "way of practice" which leads to the cessation of *dukkha*, is the Noble Eightfold Path. So the interpenetration between The Noble Truths and the Noble Eightfold Path is established right at the outset of the Buddha's teachings, the Noble Eightfold Path *is* the fourth Noble Truth.

At this point it is necessary to outline the Four Noble Truths in little more detail. The first, and very significant, point to note is the reason for the term 'Noble' as applied to these 'truths'. The Pali term which is translated as 'Noble Truth' is '*ariya sacca*'; this term, however, is more correctly translated, as Peter Harvey does in his excellent *Dhammacakkappavattana Sutta: The Discourse on Setting in Motion of the Wheel (of Vision) of the Basic Pattern: the Four True Realities for the Spiritually Ennobled Ones*, as the title suggests, as a 'true reality for a spiritually ennobled one'. In other words a 'Noble Truth' is not actually a 'truth' for an ordinary person precisely because they are not spiritually developed enough to directly see the 'truths' lying at the heart of the essential nature of the functioning of reality. Only *arahants* (Sanskrit: *arhat*), practitioners who have attained a level of awakening, directly see *ariya* ('noble') 'truths' *as* 'truths' about the way reality really is, and functions. This does not mean, of course, that unenlightened beings cannot have insight and deepen their insight into these truths about reality which are directly and immediately seen by awakened beings. Indeed this deepening of insight into the core truths concerning the functioning of reality is the Buddhist spiritual path, which is the Noble Eightfold Path, or, in its other guise, the *reverse* links of the chain of dependent origination (the reverse of the more generally known twelve links which underpin *samsara*). The reverse operation (*paticcasamuppada-nirodha-vara*) of the links leads to liberation.

The following is an overview, with amplifications, of the descriptions of the 'Four Truths of the Noble Ones' from the *Dhammacakkappavattana Sutta* (fragments in square brackets [] are taken from Harvey's version):

1. Noble truth [or true reality] of stress, pain, dissatisfactoriness: The following are listed as indications of suffering and dissatisfactoriness: birth, aging, death, sorrow, lamentation, pain, distress, despair, association with the unloved [union with what is disliked], separation from the loved [separation from what is liked], not getting what is wanted. To those who would claim that along the road between birth and death there may be many pleasures to be had the Buddha would respond that such temporary pleasures cannot be considered to be ultimately satisfactory because their ending will be necessarily painful.

At the end of the list the Buddha sums up the situation by saying "in short, the five clinging - aggregates are stressful", or in the Harvey version "the five bundles of grasping fuel are painful". These are the five *kkhandhas* (Sanskrit: *skandhas*), usually translated as 'aggregates'; they are the Buddha's classification of the fundamental constituents of psychophysical existence: 'form or materiality' (*rupa*), 'feeling' (*vedana*) – which can be classified as being either pleasant, unpleasant, or neutral, the next aggregate is 'discrimination' or 'perception' (*sanna*), then 'kammic formations' (*sankhara*) – these are habitual tendencies that are built up through constant repetition of perceptions and actions, and finally 'consciousness' (*vinnana*). These aspects of the psycho-physical process supply the basis for the 'sense spheres' or 'sense gates' (*ayatana*) through which experience flows into a mental continuum. Harvey's translation of the aggregates as "grasping fuel" indicates that they supply the 'fuel' for the 'grasping' (*upadana*) at and for existence or becoming (*bhava*), furthermore the grasping itself becomes fuel for future cycles. The process is a self-reinforcing, self-resonating feedback loop which underlies what quantum physicist John Wheeler called the 'self-synthesizing universe'.

The overall cosmic picture implied within this vision of the process of reality is that the entire process and structure of sentient existence within the containing universe is driven by a deep cosmic impersonal energetic force which 'wills' towards, to use the terminology of the Western philosopher Arthur Schopenhauer who was appreciative of the Buddhist worldview, or 'grasps' or 'craves' an experiential presence in the conditioned world. In this view all sentient beings become representatives and agents of a universal craving for existence. Narada Mahathera in his excellent *Buddhism in a Nutshell*⁵⁶ says, for instance, that "beings are merely the visible manifestation of this invisible kammic force." Within the context of quantum theory this would be an 'epiontic' function operating within the quantum field of potentiality. The unfortunate consequence of this situation for all sentient beings is that they are trapped within a continuous kammic cycle of suffering; the only fortunate consequence for human beings is the possibility of liberation from that kammic cycle of suffering through the practice of the Buddhist path.

2. Noble truth of the origination of stress [this, for the spiritually ennobled ones, is the pain-originating true reality]: craving that makes for further becoming [renewed existence] - accompanied by passion & delight, relishing now here & now there - i.e. craving for sensual pleasure, craving for becoming, craving for non-becoming.

3. Noble truth of the cessation of stress etc. [this, for the spiritually ennobled ones, is the pain-ceasing true reality]: the remainderless fading & cessation, renunciation, relinquishment, release, & letting go of that very craving.

4. Noble truth of the way of practice leading to the cessation of stress etc. [this, for the spiritually ennobled ones, is the way leading to the cessation of pain]: the Noble Eightfold Path - right view, right resolve, right speech, right action, right livelihood, right effort, right mindfulness, right concentration.

The Buddha states concerning the four noble truths that:

- The noble truth of stress is to be **comprehended**. This clearly means that an intellectual appreciation of the reality and nature of the situation is required in order to begin work on the path.
- The noble truth of the origination of stress is to be **abandoned**. Obviously to remove the effect the cause must be eliminated. Note that it would not actually be possible to abandon the 'noble truth' of the origination of stress, otherwise it would not be a 'truth'; it is the origination of stress itself that has to be abandoned.
- The noble truth of the cessation of stress has to be **directly experienced**. This means that an intellectual understanding is not sufficient, although it is necessary; a direct transformational experiential 'realization' is required.
- The noble truth of the path to cessation of stress has to be **developed**. The path is to be practiced in all aspects of life.

Once the Buddha had done this to perfection only then could he "claim to have directly awakened to the right self-awakening unexcelled in the cosmos..."

It is worth noting that in the original teachings the liberation which takes place does seem to entail a kind of 'extinction' or 'cessation' (*nirodha*) of the individualized consciousness of the practitioner. Ajahn Pasanno and Ajahn Amaro, in their essential book *The Island: An Anthology of the Buddha's Teachings on Nibbana* say concerning this:

...when the dualistic, discriminative process is checked then the 'thing-ness,' the solid externality of the world and the 'me-ness' of the mind are seen as essentially insubstantial. There is no footing for the apparent independent existence of mental or material objects or an independent subject.⁵⁷

Furthermore they quote Buddhadasa Bhikkhu as indicating a sphere of 'reality' lying 'beyond' the extremes of material and immaterial, existence and non-existence, a perspective which anticipates later Mahayana developments. Buddhadasa Bhikkhu writes that:

Voidness is neither a material nor an immaterial element, but is a third kind of element that lies beyond the ken of ordinary people. The Buddha called it "quenching element" or "cessation element," (*nirodha-dhatu*).⁵⁸

It is important to note here that the 'cessation-element' was said by the Buddha to be "beyond the ken of ordinary people". This is significant in the context of the earlier discussion of why the Buddha did not expound the metaphysical nature of the ground of reality. At the time there were no concepts to indicate the nature of an insubstantial realm which 'hovered' between existence and non-existence, hence the Buddha simply dismissed 'extreme' metaphysical views. Today we have discovered the quantum realm, but even quantum physicists still regularly claim that this realm is 'beyond their ken'. Thus physicist and television science presenter Jim Al-Khalili has declared that:

For me the biggest mystery of all lies at the heart of reality: how to explain the weird behaviour of the subatomic world. We have a very powerful theory that explains the atomic world-quantum mechanics. But the problem is no one understands what it means.⁵⁹

The Buddha knew what this meant two thousand five hundred years ago!

The notion of the 'nirodha-dhatu', which corresponds to the sphere of the 'unborn', 'unconditioned', 'unfabricated', as it is called in the *Udana*, clearly anticipates later Mahayana concepts of the 'dharmadhatu', the nondual sphere of phenomena, and the Tathagatagarbha (womb of the ones gone to thusness), or Buddha-matrix and Buddha-nature teachings. Another Pali word that Ajahn Pasanno and Ajahn Amaro use to describe the state of Nibbana is *Atammayata*, which literally means 'not made of that'. This word was considered by Ajahn Buddhadasa to be "The ultimate Buddhist concept."⁶⁰ One of the reasons for this evaluation of the concept of *Atammayata* – the notion of not being made of or concocted by any conditioned entity – is that, whilst it indicates what the state *is not* and does not make any positive assertion about what the state *is*, the concept is not entirely negative:

The mind with *Atammayata* is not clinging and grasping. The mind with *Atammayata* is not concocted by and does not rest in any state of mind, all of which are impermanent, undependable, oppressive, uncontrollable, and unownable, that is, void of selfhood.⁶¹

Such a mind is, of course, still a mind of some sort, even if it "does not rest in any state of mind." So we might say that the mind with *Atammayata* – resting in no fixed mental state - which partakes of the *nirodha-dhatu* corresponds to the third Noble Truth: cessation (*nirodha*).

In order to start working our way towards *nirodha-dhatu*, the sphere in which the stress of samsaric existence is 'quenched', we must start working on the Noble Eightfold Path, which is a means of activating the reverse links of dependent origination, the first element of which is 'Right View' (*sammaditthi*). A few pages back I indicated that the Noble Eightfold Path *is* the fourth Noble Truth, we also find, when we consult the *Sammaditthi Sutta: The Discourse on Right View*⁶², that, amongst other things such as understanding wholesome and unwholesome actions, an understanding of the Four Noble Truths is itself an essential basis for having a right view:

When a noble disciple has thus understood suffering, the origin of suffering, the cessation of suffering, and the way leading to the cessation of suffering ... In that way too a noble disciple is one of right view... and has arrived at this true Dhamma.⁶³

So just as the Noble Eightfold Path stands as the last of the Four Noble Truths, so the Four Noble Truths are contained in the first step of the Noble Eightfold Path: Right View. But now in the Right View Sutta the second and fourth Noble Truths are unpacked so to speak. These two aspects are elucidated in parallel and in reverse order – starting with aging and death. Here is the section on aging and death:

When, friends, a noble disciple understands aging and death, the origin of aging and death, the cessation of aging and death, and the way leading to the cessation of aging and death, in that way he is one of right view... and has arrived at this true Dhamma. And what is aging and death, what is the origin of aging and death, what is the

cessation of aging and death, what is the way leading to the cessation of aging and death? The aging of beings in the various orders of beings, their old age, brokenness of teeth, grittyness of hair, wrinkling of skin, decline of life, weakness of faculties - this is called aging. The passing of beings out of the various orders of beings, their passing away, dissolution, disappearance, dying, completion of time, dissolution of the aggregates, laying down of the body this is called death. So this aging and this death are what is called aging and death. With the arising of birth there is the arising of aging and death. With the cessation of birth there is the cessation of aging and death. The way leading to the cessation of aging and death is just this Noble Eightfold Path; that is, right view... right concentration.

Here we see again that the formula of the Four Noble Truths is used within the description of each of the twelve links of the conditioned becoming of existence. In this way the various doctrines can be seen to interpenetrate and mutually support each other. Thus, whilst the Four Noble Truths in one sense stand as the introduction to and lead in to the twelve links and Eightfold Path, which is essentially the path to activate the reversal of the twelve links, the discussion of these two aspects in the Right View Sutta constantly support and strengthen the scope of the Noble Truths.

The Right View Sutta goes through the links in reverse order, but for the purposes of this exposition I will just quickly run through the Twelve Links of Dependent Origination for those who are not familiar with them. This exposition is based upon the *Sammaditthi Sutta: The Discourse on Right View*⁶⁴ and the *Paticca-samuppada-vibhamga Sutta: Analysis of Dependent Co-arising*⁶⁵ with additional information from Maurice Walshe's *Thus I have Heard* and the excellent *Buddhism for Dummies* by Jonathan Landaw and Stephen Bodian. The most natural, and generally accepted, way of understanding the operation of these links is as spanning three lifetimes, 1-2 relate to a previous life, 2-10 the present life (number 2 actually crosses between the previous and current life because it is a subtle consciousness that carries the kammic formations from one to the other), links 11-12 refer to the next life. Once we have looked at the links outlined according to this model we shall address the objections raised by Leigh Brasington. The twelve links are:

1. **Ignorance** (*avijja*): Ignorance is basically about the way that reality functions and what it amounts to. For instance the second noble truth is the origin of suffering which is indicated as being 'craving', but craving itself is actually a crucial element of the twelvefold chain of interdependent origination. This means that the twelvefold chain itself is part and parcel of the second noble truth, because it is a detailed and graphic depiction of the arising of *dukkha*, which is the first noble truth. Also it is clear that part of the reason for the arising of *dukkha*, or suffering, is ignorance of *anatta* (absence of fixed and inherent personal self and lack of substantiality in phenomena) and its co-component *anicca* (the impermanence of all phenomena). Thus basically the ignorance indicated concerns the fundamental and essential nature of reality and its functioning. On the Wheel of Life image (see figs 1 & 4) this is illustrated by a hobbling blind man (top and slightly to the right of image – the rest of the twelve links go clockwise around the 'wheel').

2. **Kammic Formations** (*sankhara*): Because of ignorance intentional actions which have kammic consequences, leaving traces upon the mind stream of the sentient being performing the acts, of body, speech and mind, are performed with 'grasping' intentionality. The image on the wheel of life is of a potter fashioning a pot. The idea is that kammic actions fashion future potentialities.

3. **Consciousness** (*vinnana*) The kammic actions condition the nature of the consciousness which is projected into a future life. The image is of a monkey scampering down a tree, this represents the rebirth consciousness, with kammic traces, leaving one life in preparation for the next. This consciousness, which is a subtle consciousness carrying kammic (karmic) traces, will determine the nature of the next link.

4. **Name and Form / Mentality and Materiality** (*nama-rupa*): The image is that of two travelers in a boat, one of the travelers is form (*rupa*), which is the body; the other is 'name' or 'mentality'. Thus the body and mind, the psychophysical embodiment that one has in any lifetime depends on previous lifetimes.

5. **Six sense media / bases / gates** (*sal-ayatana*) Represented by an empty house with six windows; the six gates (ear, eye, nose, tongue, touch, and mental sense) are the bases for experience, although there is no one inside (*anatta*).

6. **Contact** (*phassa*): This link is represented by a man and woman embracing and kissing and ..., but in actuality this link is the coming together of senses and sense objects which then leads to the next link.

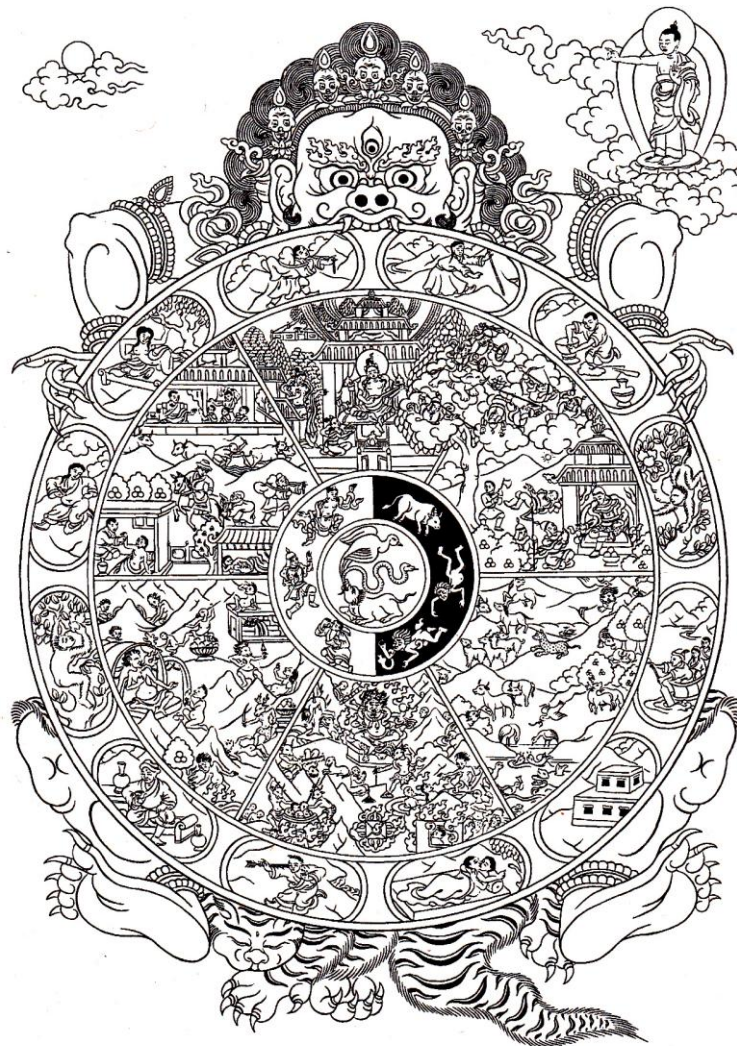


Figure 4 – Wheel of Life

7. **Feeling** (*vedana*). Represented by a man with an arrow in his eye; feelings may be pleasant, unpleasant or neutral.

8. **Craving** (*tanha*) Represented by someone drinking alcohol. Pleasant experiences produce a craving for more of them. Unpleasant experiences produce cravings to be rid of them.

9. **Clinging / grasping** (*upadana*): Represented by a monkey snatching a fruit; this is a deep, instinctual grasping at existence which is conditioned by endless lifetimes of habitual grasping. This grasping becomes instinctually desperate at the time of death and conditions the leap into a future life. Unenlightened beings, of course, are unconscious of the mechanisms although they generally experience panic at some level at losing existence.

10. **Becoming** (*bhava*): Represented by a pregnant woman; here is the beginning of the next lifetime.

11. **Birth** (*jati*): A woman giving birth.

12. **Aging and Death** (*jara-maranam*): Represented by someone carrying a corpse. From the moment we are born we are on the way to dying again!

This sequential description of the *samsaric* cycle of suffering (*dukkha*) is actually the detailed account of the generation of the first noble truth or reality of *dukkha*. The twelvefold cycle of links is clearly driven at its core by 'craving' (*tanha*) and 'grasping' (*upadana*); which are the two crucial factors of embodiment which are etched deeply and unconsciously into psycho-physicality.

A crucial feature of dependent origination is the 'epiontic' and 'quantum Darwinian' nature of the process. The originator of the 'quantum Darwinism' perspective, Wojciech Zurek, has written that:

Observers of quantum phenomena can no longer be just passive spectators. Quantum laws make it impossible to gain information without changing the state of the measured object. The dividing line between what is and what is known to be has been blurred forever.⁶⁶

This tells us the division between perception and what appears to come into existence as an 'external' and apparently 'material' reality cannot be held as being a fundamental feature of reality. At the quantum level, which is the level of potential existence ('hovering' between 'existence' and non-existence), there is actually no fully formed 'existence' as we generally understand this term. In fact there is infinitude of 'alternative' possibilities which are described by a mathematical entity called a 'quantum wavefunction'. Furthermore, which of the alternatives become what we generally think of as 'real' existence is determined 'epiontically' (the epistemic act of 'knowing' determines ontology, or what comes to be) by consciousness. As Zurek says:

Given almost any initial condition, the universe described by [the quantum wavefunction] evolves into a state containing many alternatives that are never seen to coexist in our world. Moreover, while the ultimate evidence for the choice of one alternative resides in our elusive "consciousness," there is every indication that the choice occurs much before consciousness ever gets involved and that, once made, the choice is irrevocable.⁶⁷

Here Zurek points to the potential 'existence' at the quantum level of the multitude of possibilities which 'the ultimate evidence' indicates are in some way 'chosen' by

consciousness. However, the manner in which this choice, and here we are talking about the appearance of the material world, takes place is not a matter of individual but appears to be determined at a much deeper level of awareness which operates 'much before' individual consciousness 'gets involved.' It seems, rather, that the appearance of the material world is determined by a deep level of inter-subjective or collective awareness acting through the quantum realm. Physicist Mikhail Mensky (Mikhail B. Menski⁶⁸) says that:

...the consciousness as a whole splits between the alternatives but the individual consciousness subjectively chooses (selects) one alternative.⁶⁹

This mechanism is facilitated at a deep level of consciousness which is not usually available for conscious observation from the point of view of more self-aware levels of consciousness. Mensky indicates that the level of consciousness involved:

...the most primitive, or the most deep, level of consciousness, differing perceiving from not perceiving.⁷⁰

Such deep levels of consciousness contain shared structures of possible experience. These aspects of the structures of consciousness are comparable with those that the analytic psychologist C.G. Jung called archetypes. Although Jung's archetypes are primarily concerned with deep emotional determinations of aspects of reality, his work led him to suggest, like the physicist David Bohm who suggested a deep unified mind-like quantum level of reality he called the 'implicate order' which contains traces of previous sentient activities awaiting future activation, that there is a deep level of connection between the physical world and the realm of the subjective.⁷¹ This view of the deep inner and hidden connection between the manifest realms of the objective world and the subjective experiential world was also shared by physicist Wolfgang Pauli who corresponded for a time with Jung on the subject.

Zurek describes the appearance of the materiality of the 'classical' realm which emerges for the quantum pool of potentiality:

... the appearance of the classical reality can be viewed as the result of the emergence of the preferred states from within the quantum substrate through the Darwinian paradigm, once the survival of the fittest quantum states and selective proliferation of the information about them throughout the universe are properly taken into account.⁷²

Thus we see that the entire multitudinous universe of experience, including the appearance of the apparently 'material' world emerges 'epiontically' through repeated activation and perception. Once the process gets underway then it amplifies into more stable levels of apparent 'solidity'. Zurek describes this:

The main idea of quantum Darwinism is that we almost never do any direct measurement on anything ... the environment acts as a witness, or as a communication channel. ... It is like a big advertising billboard, which floats multiple copies of the information about our universe all over the place.⁷³

And the more often the advertising campaign is 'bought into' so to speak the more powerful and persuasive it becomes. Thus the entire multitudinous and tumultuous universe of sentient experience, including the collective appearance of the 'material' world, resonates out of and in turn amplifies the traces within the quantum level and the entire process is driven by an quantum 'epiontic' perceptual 'grasping' (*upadana* – 9th link of dependent origination) which echoes up through the mechanism of quantum Darwinism to the consciousnesses of sentient

beings who are in turn evolved out of the quantum realm by what appears to be the 'classical' level Darwinian evolutionary process.

This emerging quantum epiontic picture of the process of reality as being an emergent experiential realm from a more fundamental field of potentiality was anticipated by the Buddhist *Yogacara* (4th century, *Yoga*=meditation, *cara*=practice) account according to which a subjective and an objective aspect of experience arise together from the ground consciousness (*alayavijnana*) on the basis of previous moments of similar experiences, perceptions and actions:

A seed or predisposition is activated and simultaneously produces both an object and a cognizing subject, much as in a dream.⁷⁴

The result of each moment of perceptive experience, each intention, and each action is a strengthening of the latency within the ground consciousness for that event to occur again, and, when there is an activating resonance within the ground-consciousness, an interdependent subjective-objective dualistic experiential field arises into conscious awareness. According to the *Yogacara* perspective this resonant process is amplificatory, and each momentary perception reinforces, to a miniscule degree, the probability of the same perception occurring at a future moment, and upon the basis of this mechanism a coherent perceptual world emerges (figure 5). This describes the mechanism which underpins John Wheeler's "vision of a world self-synthesized."⁷⁵

According to the *Yogacara* perspective it is the amplificatory mechanism of the universal kammic cause and effect process within the fundamental epiontic dream-stuff of reality that creates the appearances of the dualistic world. In this characterisation of the quantum process the appearance of the 'classical' world of experience and materiality is generated through a continuous web of rapidly repeated perceptions on the part of countless numbers of sentient beings over vast timescales.

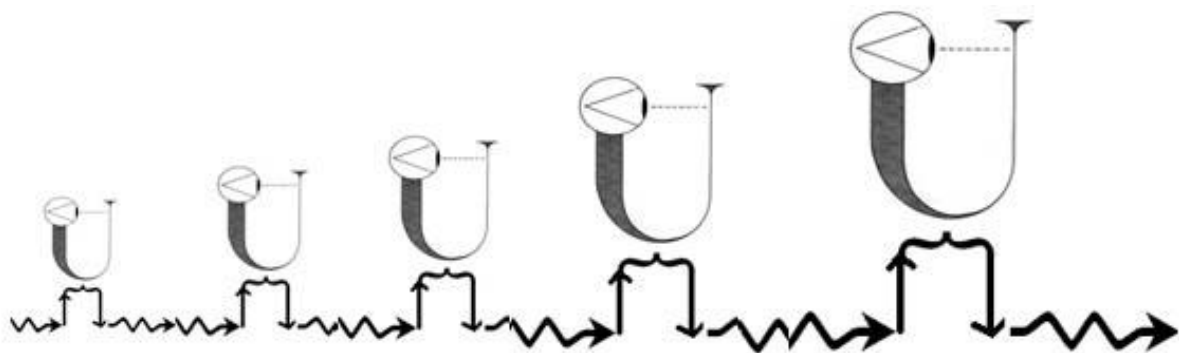


Figure 5 – quantum epiontic amplificatory 'self'-perception

The Buddhist philosopher William Waldron describes this fundamental aspect of the *Yogacara* account of the functioning of reality as being driven by 'self-grasping' which is the deep instinctual habit within all sentient beings to crave individuated experience. Waldron describes this as a linguistically recursive process; however the linguistic levels operative within the *Yogacara* account of the process of reality operate deep within the psycho-

physical structure of embodiment, directly structuring and determining the potentialities for manifestation of future experience at deep psychophysical levels:

...this linguistic recursivity, which colours so much of our perceptual experience, including our innate forms of self-grasping, now operates unconsciously ... and ... these processes are karmically productive at a collective level as well as individual level – that is they create a common ‘world’.⁷⁶

This constitutes an unconscious ‘inter-subjective feedback system’ and therefore:

...it is the unconscious habits of body speech and mind to which we are habituated that give rise, in the long term and in the aggregate, to the habitats we inhabit, the ‘common receptacle world’ we experience all around us.⁷⁷

Although this formulation attributes the creation of the ‘common receptacle world’ to the unconscious habits that ‘we’ have become habituated to (over countless lifetimes) it is important to understand that this is an inter-subjective process that begins at a deep non-individuated quantum level of the universal process of manifestation into the dualistic experiential world. The universal process of the unfolding of the potentialities within the ground of reality arises because the function of ‘epiontic’ cognition, which unfolds the potentialities, is itself an innate function of the ‘epiontic’ stuff of reality. Thus sentient beings are necessary agents of the universal process of manifestation of experiential realms of duality and they therefore become entrapped within the *samsaric* cyclic process of reality (figure 6).

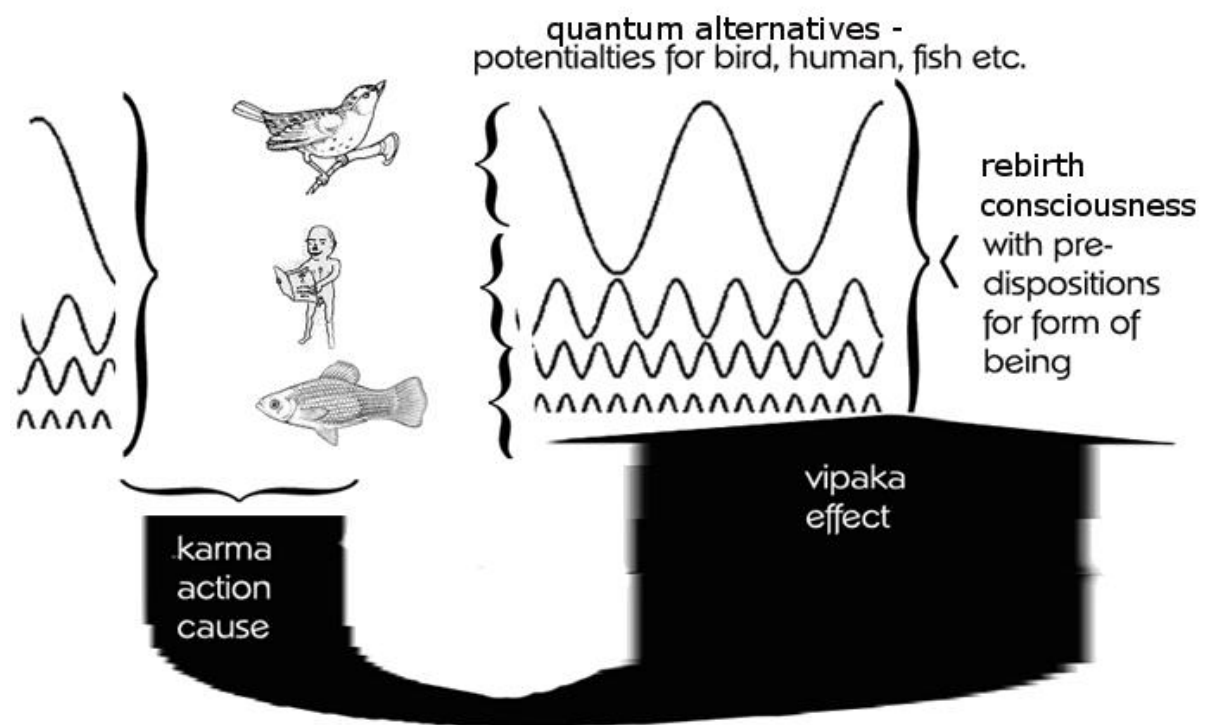


Figure 6

This, ultimately illusory, process of Universal 'Self'-perception creates the multitudes of intentional cycles of embodiment as described by the twelve links of dependent origination, which is a central Buddhist teaching (figures 2 & 4). In its quest for its own illusory 'Self'-nature the Universal process generates an endless profusion of illusory 'selves'. These are the sentient beings acting as the Universe's agents of Self-perception through their imagined process of 'self' perceptions. Unfortunately for all sentient beings, dualistic embodiment is a matter of suffering (*dukkha*).

The 'epiontic' process of the 'grasping' for existence embodied within the links of dependent origination as explained by Buddhist doctrine operate at all levels of the process of reality. This process is facilitated by what Rupert Sheldrake refers to as quantum 'virtual' morphogenetic fields within 'implicate' quantum levels. Sheldrake describes the process of embryonic development as follows:

The development of multicellular organisms takes place through a series of stages controlled by a succession of morphogenetic fields. At first the embryonic tissues develop under the control of primary embryonic fields. Then ... different regions come under the influence of secondary fields, in animals those of limbs, eyes, ears etc. ... Generally speaking, the morphogenesis brought about by the primary fields is not spectacular, because it establishes the characteristic differences between cells in different regions that enable them to act as the morphogenetic germs of the organ fields. Then in the tissues developing under their influence, germs of subsidiary fields, fields which control the morphogenesis of structures within the organ as a whole...⁷⁸

Furthermore:

...morphogenetic fields are not precisely defined but are *probability structures* that depend on the statistical distribution of previous similar forms. The probability distributions of electronic orbitals described by solutions of the Schrödinger [quantum] equation are examples of such probability structures, and are similar in kind to the probability structures of the morphogenetic fields of morphogenetic units at higher levels.⁷⁹

Morphogenetic fields, then, are exactly the kind of quantum probability fields which would be created or built up by the kind of processes involved in the quantum epiontic perspective. The close connection between the 'formative causation' hypothesis and the quantum epiontic perspective resides in the fact that it is the quantum process of repeated perception or activation at the quantum level that builds up the probability structures within quantum wavefunctions; it is this internal quantum process, therefore, that creates morphogenetic fields. In other words morphogenetic fields can be considered to be 'classical' level virtual expressions of deep operations of the 'epiontic' quantum level of awareness-consciousness. Such fields can clearly be identified with the Buddhist notions of kammic (karmic) 'formations' and rebirth consciousness.

Within the early Buddhist worldview five significant levels of the overall kammic operation of cause and effect were identified, the first being the overall definition embracing the other four. In the early worldview the term 'kamma' was generally restricted to the ethical/moral dimension, in later schools such as the Cittamatra (pronounced Chittamatra) or 'Mind-Only' it was considered as the general principle of cause an effect, or 'karma' and so embraced all levels, thus in the later worldview 'karma' became more or less identical to *Dhammaniyama*:

Dhammaniyama: the natural law of cause and effect;

Utuniyama: the natural law pertaining to physical objects (physical laws);

Bijaniyama: the natural law pertaining to living things and heredity (biological laws);

Cittaniyama: the natural law governing the workings of the mind (psychological or psychic laws);

Kammaniyama: the law of kamma, which is of particular importance in determining human well-being and is directly related to behavior from an ethical perspective.

The manifestation of the dualistic realm of experience takes place through a hierarchy of quantum epiontic levels, beginning with the merest spontaneous movement of the ground consciousness towards the activity of perception. This movement of universal intentionality, which is a naturally innate function of universal 'empty' awareness-consciousness, has the effect of activating, and thereby strengthening the latencies of the potentialities within the ground of reality. Once the process has begun the quantum process of manifestation cascades through increasingly more complex levels of manifestation. Sheldrake himself says that his hypo-thesis of 'formative causation', which has a great deal of commonality with dependent origination, does not explain the genesis of the cascade of this manifestation of the evolutionary process; it only describes the mechanisms involved once the process gets going:

The action of the morphogenetic field of a morphogenetic unit on the morphogenetic fields of its parts, which are morphogenetic units at lower levels, can be thought of in terms of the influence of this higher level probability structure on lower level probability structures; the higher-level field modifies the probability structures of the lower-level fields.⁸⁰

The necessary conclusion from the quantum epiontic perspective, however, is that the quantum realm contains within it an innate perceptual 'epiontic' tendency to unravel quantum potentialities into the dualistic experiential world through the process described by *quantum epiontic dependent origination* which *operates at all levels of reality*.

This fundamental epiontic aspect of the process of reality underlies the grasping (*upadana* – 9th link of dependent origination) for becoming into existence (*bhava* – 10th link) which eventually leads to the quantum morphogenetic fields which are the kammic formations (*sankhara* 2nd link) underlying rebirth consciousness (*vinnana* 3rd link). As Nyanaponika Thera eloquently describes the situation:

The desire for conscious awareness has the same character as that for sense impressions: the craving to be alive, to feel alive in the constant encounter with the world of objects present to consciousness (or present within consciousness - as the idealists prefer to say). But there is still more meaning than that to be derived from the description of consciousness as a nutriment if we consider that it is explained primarily as rebirth consciousness. This rebirth consciousness, which is a single moment's occurrence, feeds (or conditions) the mind-body process (*naama-ruupa*) of the present existence; and it is the arising of such moments of rebirth consciousness at the beginning of each successive life that continues the interminable chain of future births, deaths and sufferings, Growth or proliferation is a characteristic feature of all consciousness. Each rebirth consciousness, though its direct link is with the life immediately preceding it, has behind it the inexhaustible store-house of the begin-

ningless past, a vast granary of potential seeds of life. Fed from the dark unfathomable recesses of the past...⁸¹

Thus Nyanaponika Thera describes the continuous process of re-embodiments of a stream of psychophysical energy, re-linking into the 'material' world through the movement of a rebirth consciousness form lifetime to lifetime.

Leigh Brasington, however, does not agree with this view of the process of dependent origination. In his article *Dependent Origination: The 3 Lives Model – Not!*⁸² Brasington claims that there are serious 'logical' problems with the 3-lives model, and he bases this claim on his consideration of the reverse direction of the links which are the path which leads to liberation. The idea is that by 'going against the stream' of the forward operation of dependent origination which binds sentient beings into *samsara* it is possible to reverse the process and eventually extinguish (*nirodha*) the process, thus achieving the peace of liberation. The Buddha described the sequence as follows (this is taken from Brasington's presentation):

Now from the remainderless fading & cessation of that very ignorance comes the cessation of concoctions (kammic formations).

From the cessation of concoctions comes the cessation of consciousness,

From the cessation of consciousness comes the cessation of mind & body.

From the cessation of mind & body comes the cessation of the six sense bases.

From the cessation of the six sense bases comes the cessation of contact.

From the cessation of contact comes cessation of vedana (feeling).

From the cessation of vedana comes the cessation of craving.

From the cessation of craving comes the cessation of clinging.

From the cessation of clinging comes the cessation of becoming

From the cessation of becoming comes the cessation of birth.

From the cessation of birth, then aging & death, sorrow, lamentation, pain, distress, & despair all cease.

Such is the cessation of this entire mass of Dukkha.

The primary reason that Brasington offers for asserting the illogicality of the 3-Lives model is that if one were to lay the above 'cessation chain' on top of the 3-Lives origination sequence (without giving thought to any of the subtleties involved) then, according to Brasington, it follows that:

With the ceasing of Ignorance in your previous life, there is a ceasing of [concoctions-kammic formations] in your previous life. Therefore since the [concoctions-kammic formations] ceased, your consciousness and mind & body have ceased in this life. Oh wait, if you are reading this, then I guess your consciousness and mind & body have not ceased in this life! So in order to get free of dukkha in your next life, you need to go back to your previous life...⁸³

This argument, however, requires such a naïve, simplistic and disingenuous understanding (or perhaps even misunderstanding) of the process of dependent origination that one can only wonder whether it is itself driven by some form of 'craving' of its own, perhaps a craving to establish a thoroughly modern and Westernized version of Buddhism which rejects all the foundational traditional roots.

The following passage from Mahasi Sayadaw's *Discourse on Dependent Origination* indicates Brasington's error:

According to the scriptures, mental formations arise because of ignorance, but between them there are the two links of craving and attachment. Ignorance leads to craving, which develops into attachment. Craving and attachment stem from the desire for pleasure and are explicitly mentioned in the middle part of the doctrine of Dependent Origination. When the past is fully described, ignorance, craving, attachment, kamma, and mental formations are all included.⁸⁴

In other words, although in the canonical presentation the links which are mentioned as operative in life 1 are ignorance and the resulting kammic, or 'mental', formations, *this does not mean that the other links are absent*. And this applies for all the three lives involved in the 3-Lifetimes model; the fact that ignorance is not mentioned in the second (current) lifetime does not mean that it is absent from the chain. The extended version of the links of dependent origination implied by Mahasi Sayadaw's observation would be something like the following, in which the *implied* links are indicated (indented):

Life 0→Life 1

Ignorance

*The whole chain is dependent on ignorance so ignorance pervades every link. Treating this description as a purely linear sequence is a simplification of a complex dynamic process. At this point in the 3 lifetimes model we are in the midst of the ignorance operating in **Life 1**. But in point of fact it is the kammic intentionality formations of **L0** which give rise to quantum morphogenetic fields that underlies the energy of the rebirth stream of subtle consciousness across lifetimes. This means that in the previous lifetime (**L0**) the following has given rise to the current life:*

Kammic Intentionality Formations (L0) → Rebirth Consciousness (L0→L1)

*Now the energy of the rebirth consciousness activates the development of name and form or the psychophysical growth of the embryo (again involving quantum morphogenetic fields). Now the cascade of links, driven by ignorance and the craving which is implicit in all the links, develops through to the stage of becoming which gives rise to the kammic intentionality formations (again involving quantum morphogenetic fields) (**L1→L2**) generated in **Life 1** which will generate (quantum morphogenetic fields) and carry across to **Life 2**.*

Name and Form

Six sense bases

Contact

Feeling

Craving

Clinging

*The next crucial point is that the process of becoming which is implicit in **Life 1** clearly must involve the establishment of kammic intentionality morphogenetic fields. This, although implicit, is also obvious!*

Becoming → Kammic Intentionality Formations (L1→L2)

Kammic Intentionality Formations (L1→L2) → Rebirth Consciousness (L0→L1)**Life 2****Ignorance** (from **Life 1** but also operating in **Life 2**)**Kammic Intentionality Formations** (from **Life 1** but also operating in **Life 2**)**Rebirth Consciousness (L0→L1)****Name and Form****Six sense bases****Contact****Feeling****Craving****Clinging****Becoming** → **Kammic Intentionality Formations (L2→L3)****Life 3****Rebirth Consciousness (L2→L3)****Birth****Name and Form****Six sense bases** → etc.

*All the links are implicitly operating in **Life 3**. However, in **Life 3** the emphasis is shifted to the fact that the unpleasant features of the aging process and death are a natural consequence of the cyclic process. All the other links, of course, are also operative in **Life 3**. How could it be any other way?!*

Aging and Death.....

This, far from perfect, presentation should indicate how in fact all the links interpenetrate and all the links are present in all the lifetimes. In fact, as Brasington indicates, the links can be thought of as operating momentarily. On the basis of the quantum epiontic perspective this must be the case. But this does not mean that the 3-lifetimes model is incorrect. The operation of the links in the 3-lifetimes mode arises dependently upon the operation of the universal epiontic process of dependent origination on all levels of reality.

It is therefore clearly unacceptable to reject the 3-lifetimes model on the basis of a dogmatic, unsubtle and dubious understanding of dependent origination in the face of the several occasions the Buddha clearly indicated the movement of rebirth consciousness from one life into a mother womb of the next life. The following is from the *Maha-nidana Sutta*, which is an exposition of the links:

From consciousness as a requisite condition comes name-and-form.' Thus it has been said. And this is the way to understand how from consciousness as a requisite condition comes name-and-form. If consciousness were not to descend into the mother's womb, would name-and-form take shape in the womb?⁸⁵

This clearly indicates that the links of dependent origination function across lifetimes.

In his brilliant exposition of the fundamental teachings of the Buddha, *The Only Way to Deliverance*, R. L. Soni writes that:

Personality can be symbolized by a wave on water. Although born of the residual momentum transmitted by the preceding wave, it is still a new phenomenon, so far as its material content are concerned. As such, while the person is a *kammic* continuity from the past, he is a new entity so far as the physical elements are concerned. However, none of the psychic elements are transmitted only the resultant force passes over to produce a new life. It is no wonder, therefore, that the Buddha, in the *Majjhima-Nikaya* 38, admonished a monk holding the view that *Vinnana* continues as is and not as a mere "relinking factor." A look at Diagram II shows each wave with its start, its flow and its ebb. This, in relation to the person, symbolizes rebirth existence, and death. Rebirth follows death, so long as there is some residual force as a seed to manifest anew. Usually there is no lack of such seeds to carry forward the process of existence.⁸⁶

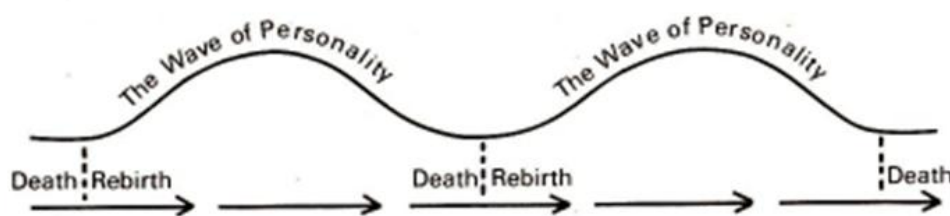


Figure 7 - SONI'S DIAGRAM II

Such a view is entirely consistent with the quantum epiontic perspective; in fact it follows inevitably because all intentionality, both unconscious and conscious, leaves amplificatory traces operating within the epiontic quantum level. The physicist David Bohm referred to a quantum 'implicate order' which held traces of intentional-volitional actions which would of necessity activate a future manifested 'explicate order'. Within this continuous pulsating rhythm of what Bohm referred to as the 'holomovement' there is a continuous 'implicating' and 'explicating' of energy. In an interview for Omni magazine Bohm explained:

I propose something like this: Imagine an infinite sea of energy filling empty space, with waves moving around in there, occasionally coming together and producing an intense pulse. Let's say one particular pulse comes together and expands, creating our universe of space-time and matter. But there could well be other such pulses. To us, that pulse looks like a big bang; In a greater context, it's a little ripple. Everything emerges by unfoldment from the holomovement, then enfolds back into the implicate order. I call the enfolding process "implicating," and the unfolding "explicating." The implicate and explicate together are a flowing, undivided wholeness. Every part of the universe is related to every other part but in different degrees.⁸⁷

Thus in Bohm's vision the universe itself, as well as sentient beings, is also subject to birth, decay and rebirth, thus indicating that the Buddhist principle of dependent-origination operates not only across the lifetimes of a continuous, yet self-less, flows of psychic energy which take up a new psycho-physical embodiment on the basis of previous kammic (karmic) volitional activities, but also entire world-systems which are driven by the collective karma of

the contained sentient beings. As the *Ornament of Stainless Light Tantra* (moving beyond the Pali context for a moment) indicates:

When a world undergoes destruction, there follows a time of emptiness....During this time of emptiness the subtle particles of these five elements exist as isolated fragments and are not in any conventional sense objects of the sensory powers of the eye and so forth. They are known as empty particles and remain isolated in empty space. When the potential of the collective karma is ripened, the subtle air particles come together to form air whose nature is light and moving.⁸⁸

Such a view of a continuous 'implicating' and 'explicating' of flowing energy, which occupies apparently stable configurations for shorter or longer time scales, organized by quantum 'morphogenetic fields' conforms to the fundamental physical principles of the conservation of energy and information.

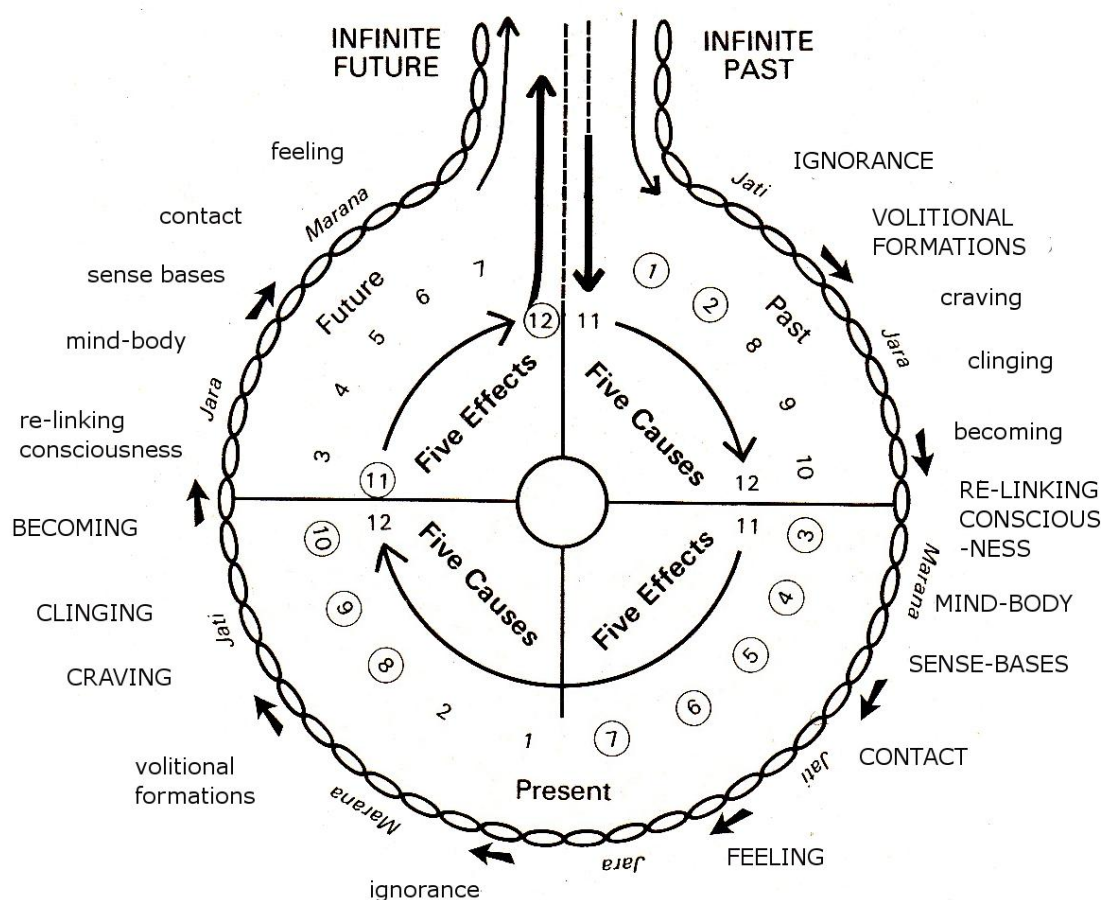


Figure 8 – SONI'S DIAGRAM VII

Figure 8 shows Soni's diagram VII of how the links of dependent origination interpenetrate so that, although for didactic reasons the 12 links are often spread across 3-lifetimes in order to relate them to the fact of rebirth, this does not mean that the links not mentioned in any one lifetime are not operative. The correct understanding of dependent origination requires a deep

and subtle metaphysical understanding of the epiontic process of reality which does take place on all levels. In the diagram I have added labels around the side to make it easier to comprehend; links in capitals are those mentioned in the standard 3-lifetimes formula, those in lower case are the links that Soni considers must be implicitly operative although not explicitly mentioned. Soni writes in this context that:

The encircled Arabic numerals in Diagram VII represent the links ...with respect to the past, present, and future. The non-encircled numerals represent the links, which, though not enumerated, are potentially present. Thus, in the present, the very presence of *tanha* (link number eight) means the operation of *avijja* and the mental dispositions flowing from it (links number one and two). Similarly in the past, the presence of links one and two meant the operation of *tanha*, *upadana*, and *bhava* (links eight, nine, and ten). In this way, rebirth was enabled in the present. As regards the future, the process must repeat itself. With rebirth indicated, links three, four, five, six, and seven arise. Links eleven and twelve, namely *jati* and *jara-marana*, exist in the future, the past, and as well in the present. As such, the conclusion is obvious: five causes in the past gave rise to five effects in the present; and, five causes in the present give rise to five effects in the future. A look at Diagram VII will clarify this point. Of course, past means repeated rebirths retrospectively going into the infinite past, and future means repeated rebirths going forth into the infinite future. Each existence is a process of *jati-jara-marana*. This ever recurring phenomenon of rebirth-decay-death evidently implies suffering.⁸⁹

The next diagram that Soni offers us illustrates the manner in which all the links operate in every lifetime but are explicitly spread over three lifetimes. This is shown, with additional labels for easy comprehension, in figure 9 which is Soni's diagram VIII. Soni writes concerning this diagram:

Each life, in the past, present, and future, is an entity complete in itself, according to the operation of the Causal Chain. This is illustrated in diagram VIII. In each existence the resultant-complex (*uppatti-bhava* or U.B.) is used as a base for the cultivation of a fresh causal complex (*kamma-bhava* or K.B.) for results in the future. It is clearly shown that each life begins with link eleven, *jati* or rebirth, and ends with link twelve, *jati-marana* or decay-death. It will also be noted that the "past" ends with "death" and the "present" begins with "rebirth"; the "present" also ends with "death" and the "future" begins with "rebirth." Moreover, the diagram significantly puts links one and two (*avijja* and *sankhara*) at the junction of *uppatti-bhava* and *kamma-bhava* in each existence; otherwise, *tanha* will fail to be actualized without the presence of these two. If *tanha* is not activated, further processing in the Causal Chain will cease. *Tanha*, certainly, is a link of special import. It not only maintains the integrity and continuity of the Chain of Existence in the infinite past but also is responsible for sustaining *Patikkasamuppada* in the present in order to make it continue in the future indefinitely.⁹⁰

Here Soni indicates the 'weak point' in the chain which binds us to *samsara*, the link between 'feeling' (*vedana* – pleasant, unpleasant or neutral) and 'craving' (*tanha*). In large measure the Buddha's path is designed to unlink this link. Soni's brilliant exposition should now have made it abundantly clear that the teaching of dependent origination is far more precise, complex, and all embracing than the rather hasty outline given by Brasington. And, remarkably, this all-embracing metaphysical analysis of the deep epiontic functioning of

reality on all levels conforms with the findings of modern quantum theory and the quantum 'formative causation' theory of evolution and morphogenises proposed by Rupert Sheldrake.

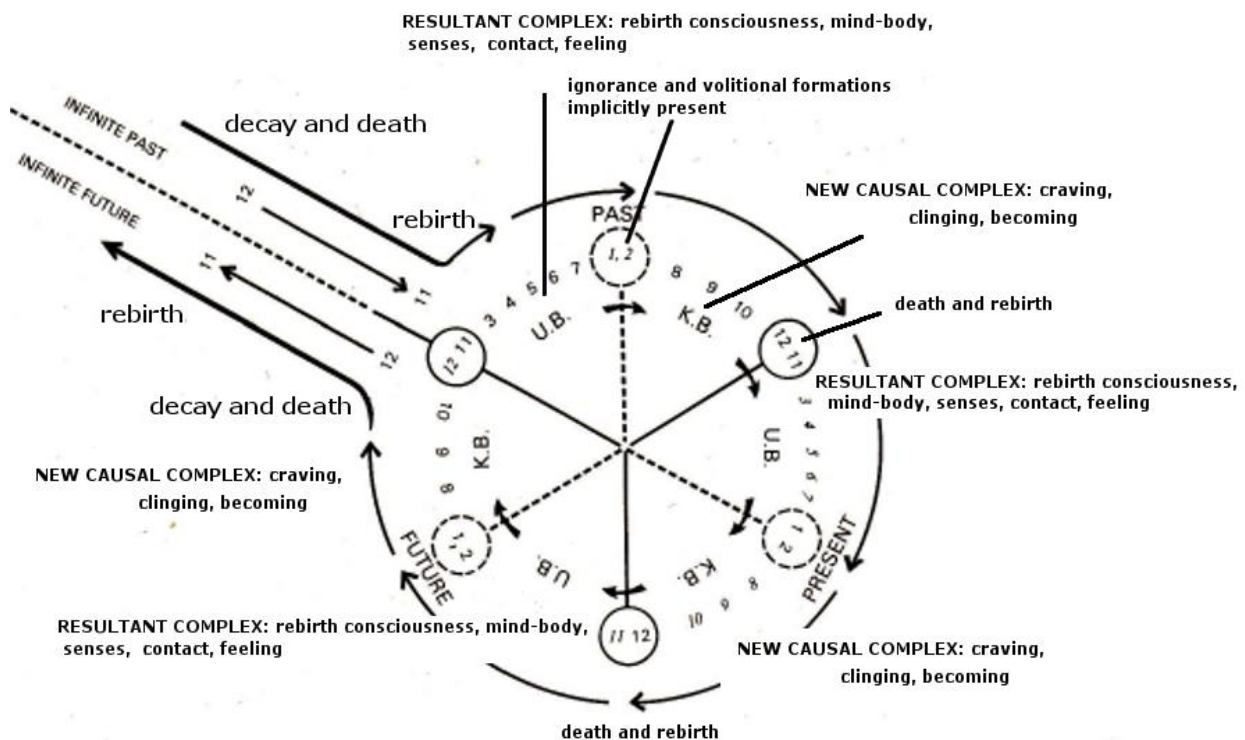


Figure 9 – SONI'S DIAGRAM VIII

The discussion so far indicates that the 3-lifetimes model emerges naturally from the fact that the entire process of reality is epiontically driven at all levels. Thus the momentary level is therefore fundamental. The momentary view is indicated by the much admired and inspirational Ajahn Chah in his talk 'The Key to Liberation' (but this does not mean he rejected the 3-lifetimes version):

So the Buddha taught us to contemplate these wavering conditions of the mind. Whenever the mind moves, it becomes unstable and impermanent (anicca), and unsatisfactory (dukkha) and cannot be taken as a self (anatta). These are the three universal characteristics of all conditioned phenomena. The Buddha taught us to observe and contemplate these movements of the mind. It's likewise with the teaching of dependent origination (paticcasamuppada): deluded understanding (avijja) is the cause and condition for the arising of volitional kammic formations (sankhara); which is the cause and condition for the arising of consciousness (vinanna), which is the cause and condition for the arising of mentality and materiality (nama-rupa), and so on The Buddha separated each link of the chain to make it easier to study. This is an accurate description of reality, but when this process actually occurs in real life the scholars aren't able to keep up with what's happening. It's like falling from the top of a tree to come crashing down to the ground below. We have no idea how many branches we've passed on the way down. Similarly, when the mind is suddenly hit by a mental impression, if it delights in it,

then it flies off into a good mood. It considers it good without being aware of the chain of conditions that led there. The process takes place in accordance with what is outlined in the theory, but simultaneously it goes beyond the limits of that theory. There's nothing that announces, "This is delusion. This is volitional kammic formations, and that is consciousness." The process doesn't give the scholars a chance to read out the list as it's happening. Although the Buddha analyzed and explained the sequence of mind moments in minute detail, to me it's more like falling out of a tree. As we come crashing down there's no opportunity to estimate how many feet and inches we've fallen. What we do know is that we've hit the ground with a thud and it hurts!⁹¹

As Ajhan Chah points out the Buddha presented the links in various forms to illustrate points and to make the process comprehensible. Furthermore this description is a crucially important observation which tells us why a purely intellectual understanding is not sufficient for reversing the psychophysical cycle of functioning which underlies the 'natural' mode of samsara, which is a mode of functioning which digs us further into samsara. It is the instinctual mode of operation; it was, if you like, programmed into us by evolution. Later Buddhist scholars said that the unconscious and instinctual modes of functioning described by the 'mundane' *paticcasamuppada* (dependent-origination) have been programmed into sentient beings over 'beginningless time.' The cover of Mahasi Sayadaw's discourse displays the links in spiral fashion (figure 10), indicating that the longer the process continues the deeper we dig ourselves into *samsara*.

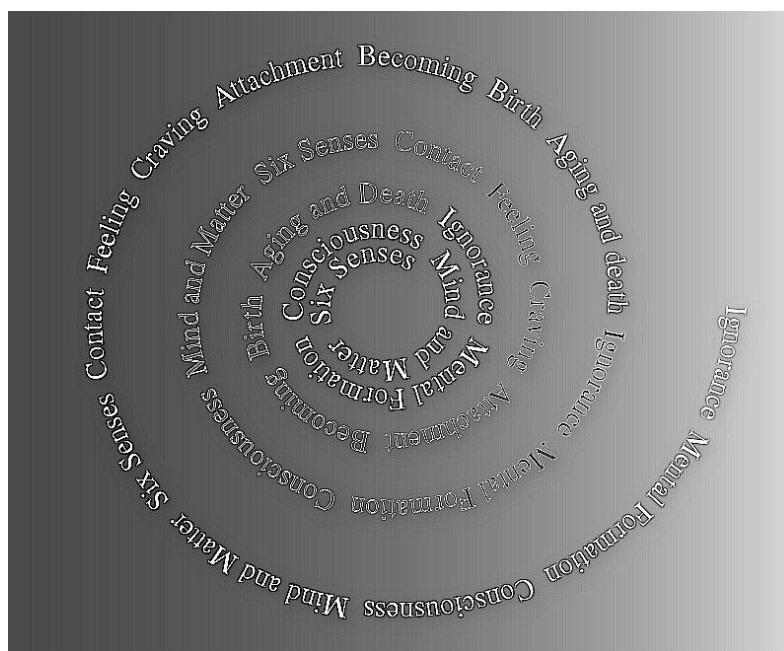


Figure 10

In the Buddha's second discourse, the *Anatta-lakkhana Sutta: The Discourse on the Not-self Characteristic*, the Buddha delivered some further bad news. First he indicated the lack of any solid, fixed core in any aspect of reality, although he focuses on the lack of any permanent personal 'self'. Thus with regard to 'form' or materiality he tells his followers:

Bhikkhus, form is not-self. Were form self, then this form would not lead to affliction, and one could have it of form "Let my form be thus, let my form be not

thus.” And since form is not-self, so it leads to affliction, and none can have it of form: “Let my form be thus, let my form be not thus.”

In other words if one were really in control of one's body, for instance, it would be possible to control it, directly improve one's appearance without cosmetics, reverse the aging process and so on. But, of course, most of what goes on with both internal and external phenomena is completely beyond one's control. The Buddha repeats this formula for the other aggregates: feelings, perceptions, formations and consciousness, thus showing that there is no fixed, enduring 'self' to be found in any phenomena. This is the teaching of no-self (*anatta*).

In the same Sutta the Buddha also introduces the teaching of impermanence (*anicca*) in order to drive home the not-self teaching:

“Bhikkhus, how do you conceive it: is form permanent or impermanent?” -
 "Impermanent, venerable Sir." "Now is what is impermanent painful or pleasant?" -
 "Painful, venerable Sir." - "Now is what is impermanent, what is painful since
 subject to change, fit to be regarded thus: 'This is mine, this is I, this is my self?'"
 "No, venerable sir."

So here we find the intimate interconnection between the 'three marks of existence' or 'three essential facts of existence': *dukkha* (stress/suffering), *anicca* (impermanence) and *anatta* (lack of fixed 'self'). Impermanent phenomena, when taken to be permanent and constituting a 'self' can only lead to dissatisfaction because they cannot fit expectations. Impermanent phenomena cannot constitute a 'self', either for themselves or for living beings, precisely because they are impermanent. Thinking and treating impermanent phenomena as being capable of permanent 'selfhood' can only generate *dukkha*.

So we are led to the understanding that the entire grasping process of the twelve links is a pointless exercise anyway because there is simply nothing to provide lasting satisfaction which could possibly be grasped by the grasping process. All phenomena are impermanent and lack any fixed or solid core of reality. As we have seen, in the *Phena Sutta* the Buddha does not hold back on his evaluation of the phenomena of conditioned reality: “Form is like a glob of foam; ... That's the way it goes: it's a magic trick, an idiot's babbling. ...”⁹²

Such considerations should lead a practitioner to disenchantment with grasping at the impermanent phenomena of conditioned reality:

Bhikkhus, when a noble follower who has heard (the truth) sees thus, he finds estrangement in form, he finds estrangement in feeling, he finds estrangement in perception, he finds estrangement in determinations, he finds estrangement in consciousness. When he finds estrangement, passion fades out. With the fading of passion, he is liberated. When liberated, there is knowledge that he is liberated. He understands: 'Birth is exhausted, the holy life has been lived out, what can be done is done, of this there is no more beyond.'⁹³

Once the actual process and nature of the samsaric functioning of reality, which is comprehended by the first two noble truths as schematically illustrated in figure 11, is fully comprehended then disenchantment with the limited returns for the efforts involved, so to speak, naturally arises. The process of the generation of samsaric reality through the operation of ignorance and the subsequent 'grasping' for a solid 'reality' where there is none generates a thoroughly illusory, and yet to unenlightened beings dramatically convincing, cycle of suffering through the operation of the twelve links.

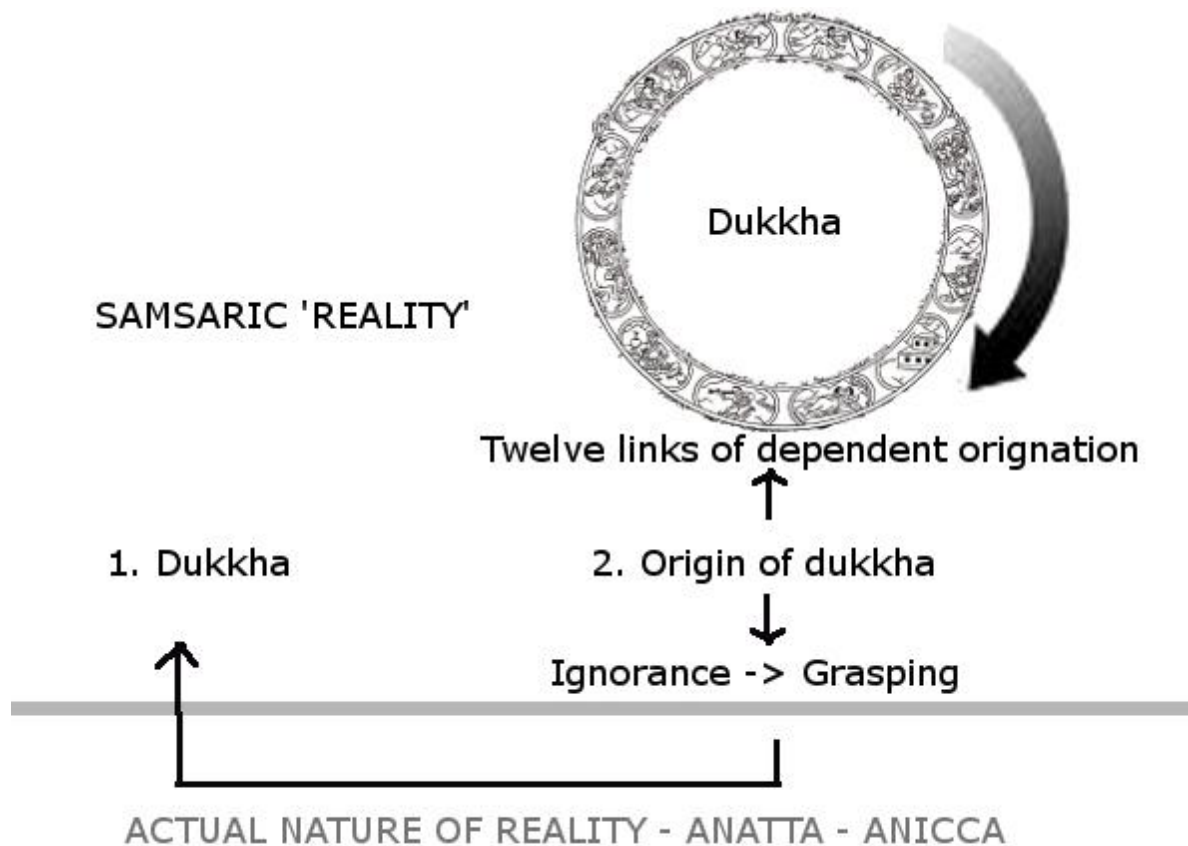


Figure 11 - Schematic diagram of the generation of the dukkha of samsara through the operation of ignorance and grasping producing the twelve links of dependent origination.

However, the Buddha clearly indicates that there is another experiential sphere of reality. In the *Udana* the Buddha expressed the realm of the unconditioned ground from within which the illusion of 'fabricated' conditioned world arises, in inspirational language:

There is that dimension where there is neither earth, nor water, nor fire, nor wind; neither dimension of the infinitude of space, nor dimension of the infinitude of consciousness, nor dimension of nothingness, nor dimension of neither perception nor non-perception; neither this world, nor the next world, nor sun, nor moon. And there, I say, there is neither coming, nor going, nor staying; neither passing away nor arising: unestablished, unevolving, without support. This, just this, is the end of stress.⁹⁴

And:

There is, monks, an unborn, an unbecome, an unmade, unfabricated. If there were not that unborn, unbecome, unmade, unfabricated, there would not be the case that emancipation from the born, be-come, made, fabricated would be discerned. But precisely because there is an unborn, unbecome, unmade, unfabricated, emancipation from the born, become, made, fabricated is discerned.⁹⁵

This is the 'unfabricated' realm of nirodha-dhatu.

Reversing and undoing the unconscious and instinctive operation of the 'mundane' links of dependent origination is not an easy task; Dizgar Kongtrul Rinpoche says about this:

Primarily, we feel, we act on our instincts. When we truly contemplate this situation, we have to acknowledge that these are not all natural instincts, because some of them lead us against our fundamental innate desire to be happy. Not only do they lead us against it, but also they actually bring us suffering. Obviously there are some flaws in these instincts! If they were natural, primordially pure instincts, they would not have any flaws. These instincts are shaped and conditioned by the ignorant confusion of believing that there is a self and that that self is extremely important. To cling, cherish, and protect the self is a state of mind that has been with us for so long it feels completely natural—you might say instinctual. But if these were genuine, natural instincts, we could never get rid of them. If that were the case, nobody would be able to get enlightened. Precisely because there are so many individuals who have already become enlightened, we can say that self-clinging is not a truly natural, primordial instinct.⁹⁶

There must be, then, a way of training ourselves to function according to enlightened 'primordially pure instincts.' In the final few pages we shall look at the process of employing the reverse 'transcendental' dependent arising links (*lokuttara-paticcasamuppada*) which operate to produce a Nibbanic mode of operation in order to rectify the situation; and we shall find a symmetrical, yet reversed, structure in the third and fourth 'truths' to that of the first and second.

The *Upanisa Sutta* also describes a reverse, 'transcendental' set of links of dependent arising (*lokuttara-paticcasamuppada*) which is used to unbind the practitioner from the samsaric mode of being. These links are described as: Faith (*saddha*) → Joy (*pamojja*) → Rapture (*piti*) → Tranquillity (*passaddhi*) → Happiness (*sukha*) → Concentration (*samadhi*) → Knowledge and vision of things as they are (*yathabhuta-nanadassana*) → Disenchantment (*nibbida*) → Dispassion (*vimutti*) → Knowledge of destruction of defilements (*asavakkhaye nana*). It is through the application of the 'transcendental' cycle of links that the mundane *samsaric* operation of the cyclic links can be counteracted. The 'defilements', sometimes referred to as 'cankers', are those aspects of mind which maintain the ignorance and craving of the mundane, forward direction operation of the links.

A clear exposition of this 'transcendental' reverse version of *paticcasamuppada* is provided by Bhikkhu Bodhi in his article *Transcendental Dependent Arising: A Translation and Exposition of the Upanisa Sutta*⁹⁷; the *Upanisa Sutta* is contained in the *Nidanasamyutta* (SN 12.23). In his article Bhikkhu Bodhi praises this approach because of its structural continuity in the sense that it tells us that a similar psychophysical mechanism which has got us trapped into *samsara* can get it out of it:

By linking the two series into a single sequence, the sutta reveals the entire course of [a person's] faring in the world as well as his treading of the path to its transcendence. It shows, moreover, that these two dimensions of human experience, the mundane and the transcendental, the dimensions of world involvement and world disengagement, are both governed by a single structural principle, that of dependent arising.⁹⁸

The order in which the two sequences, the 'mundane' and the 'transcendental' links of dependnet arising is as follows:

Mundane Order

Ignorance (avijja)
 Kamma formations (sankhara)
 Consciousness (vinanna)
 Mentality-materiality (namarupa)
 Sixfold sense base (salayatana)
 Contact (phassa)
 Feeling (vedana)
 Craving (tanha)
 Clinging (upadana)
 Existence (bhava)
 Birth (jati)
 Suffering (dukkha)

Transcendental Order

Faith (saddha)
 Joy (pamojja)
 Rapture (piti)
 Tranquillity (passaddhi)
 Happiness (sukha)
 Concentration (samadhi)
 Knowledge and vision of things as they are (yathabhutañānadassana)
 Disenchantment (nibbida)
 Dispassion (viraga)
 Emancipation (vimutti)
 Knowledge of destruction of the cankers (asavakkhaye ñana)

In this laying out of the two sequences we see the links which function to create samsara followed by those which can be used to reverse the process. As Bhikkhu Bodhi says:

By making this connection it brings into prominence the comprehensive character of the principle of conditionality - its ability to support and explain both the process of compulsive involvement which is the origin of suffering and the process of disengagement which leads to deliverance from suffering. Thereby it reveals dependent arising to be the key to the unity and coherence of the Buddha's teaching. When the Buddha declares, "I teach only suffering and the cessation of suffering"⁹⁹ the bond which unites these two terminals of the doctrine as complementary sides of a single, internally consistent system is simply the law of dependent arising.¹⁰⁰

Furthermore, Bhikkhu Bodhi emphasizes the interrelated, interpenetrating unity of the Buddha's vision based on the principle of dependent arising:

Dependent arising (patticasamuppada) is the central principle of the Buddha's teaching, constituting both the objective content of its liberating insight and the germinative source for its vast network of doctrines and disciplines. As the frame behind the four noble truths, the key to the perspective of the middle way, and the conduit to the realization of selflessness, it is the unifying theme running through the teaching's multifarious expressions, binding them together as diversified formulations of a single coherent vision. The earliest suttas equate dependent arising with the unique discovery of the Buddha's enlightenment, so profound and difficult to grasp that he at first hesitated to announce it to the world. A simple exposition of the

principle sparks off the liberating wisdom in the minds of his foremost disciples, while skill in explaining its workings is made a qualification of an adroit expounder of the Dhamma. So crucial is this principle to the body of the Buddha's doctrine that an insight into dependent arising is held to be sufficient to yield an understanding of the entire teaching. In the words of the Buddha: "He who sees dependent arising sees the Dhamma; he who sees the Dhamma sees dependent arising."¹⁰¹

It seems, then, that it is the metaphysical principle of dependent arising which underpins the network of interrelatedness of all the doctrines of the Buddha, and also the possibility of liberation and enlightenment.

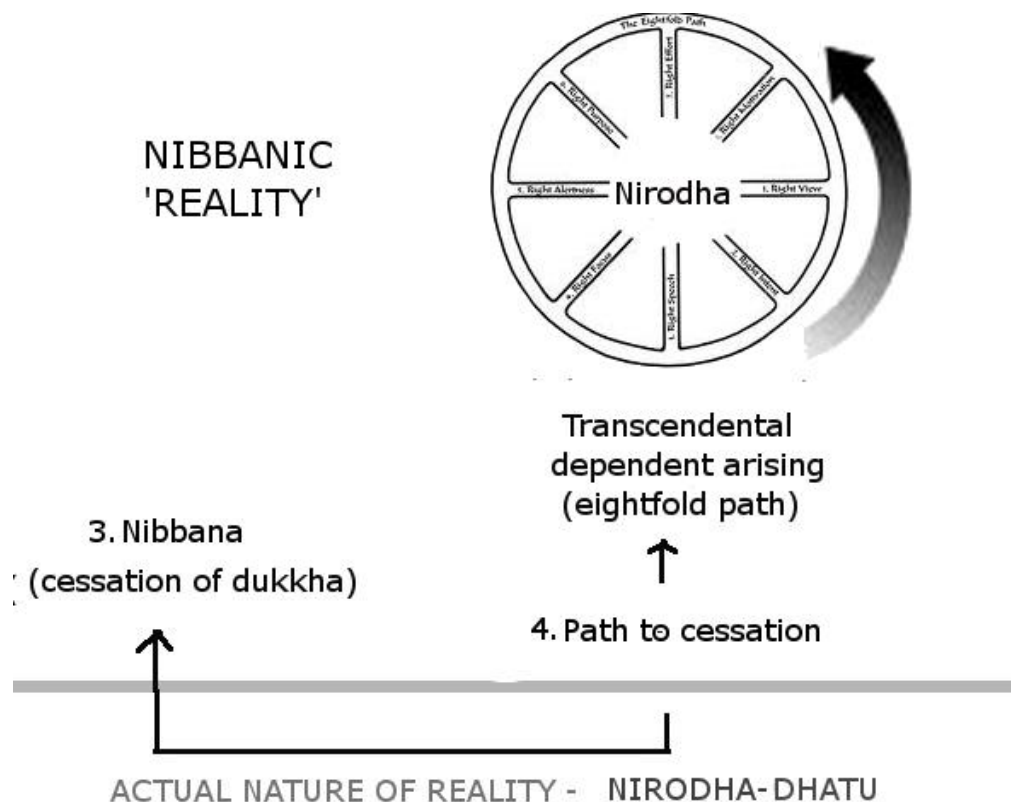


Figure 12 - Schematic diagram of the cessation of dukkha and samsara through the operation of the transcendent twelve links of dependent origination which are the basis for the eightfold path..

Figure 12 is the schematic functional-structural depiction of the interrelationships between the third and fourth noble truth and the transcendent dependent arising scheme, and it corresponds, and is the antidote through reversal, to the functional-structural situation of the first and second truths depicted in figure 11 (figure 14 at the end of this paper combines the two). In figure 11 the twelve links of the mundane operation of dependent arising, which leads to the dukkha of samsara, instinctually, unconsciously, continuously and rapidly turn clockwise thus generating the first noble 'reality' – the dukkha which is the primary mark of samsara. Figure 12 shows the conscious turning of the wheel of dharma in the reverse direction as the fourth noble truth generating an enlightening path towards the cessation of dukkha and the establishment of Nibbana, the third noble truth.

The actual dharma wheel used in the figure is the one that represents the eightfold path; but this is by no means incongruous with our discussion concerning the transcendental dependent arising because the eightfold path is the transcendent dependent arising expressed in a different form. Turning the wheel of dharma in the form of the eightfold path necessarily turns the transcendent links of the reverse dependent arising of Nibbana. How could it be any other way? Figure 13 shows Soni's diagram of the reverse turning of the wheel (although his actual diagram shows the links going clockwise) through the application of the eightfold path, beginning with Samma-ditthi or Right/Correct View. As shown in the diagram the various activities fall into three divisions: *Panna* (Wisdom, which includes view and intention), *Sila* (Morality – speech, conduct and livelihood) and *Samadhi* (Concentration – effort, mindfulness and concentration).

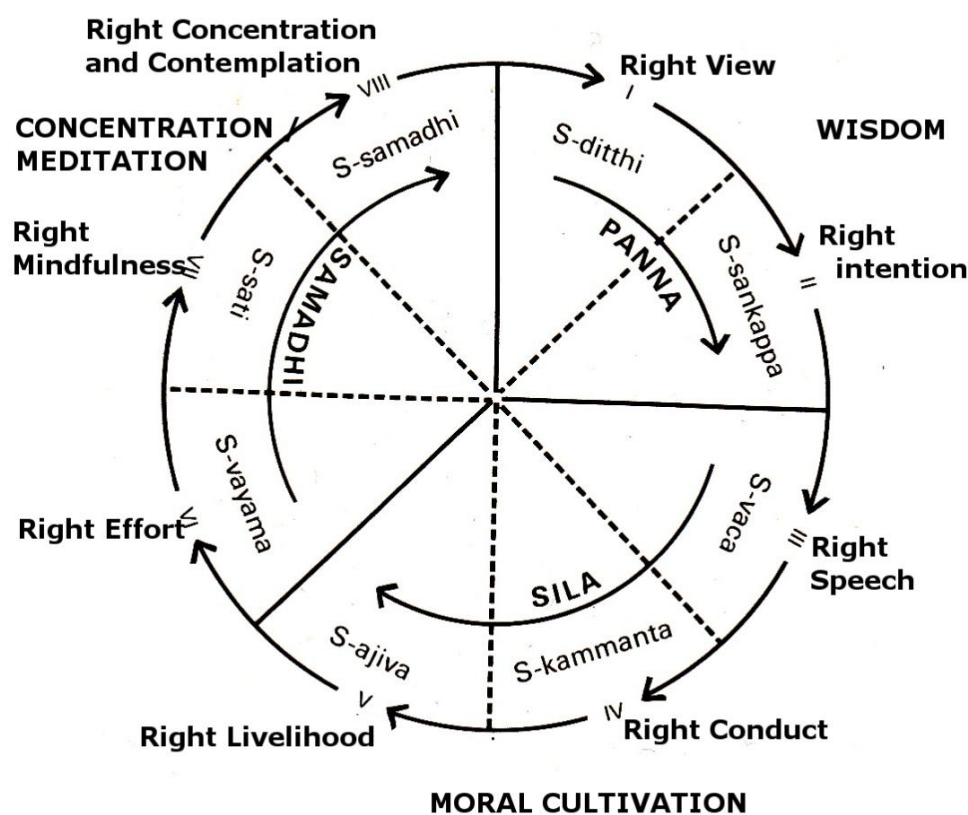


Figure 13

An important issue concerning the transition from the mundane links of dependent arising to the transcendental links of the progression towards liberation is the transition from the last link of the mundane dependent arising chain, suffering, and the first of the 'transcendent' chain, faith. How does suffering lead to faith? Bhikkhu Bodhi has this to say:

Since it is suffering that impels us to seek the way to liberation, suffering is called the supporting condition for faith. By itself, however, the confrontation with suffering even at the level of mature reflection is not sufficient to generate faith. For

faith to arise two conditions are required: the first is the awareness of suffering, which makes us recognize the need for a liberative path; the second is the encounter with a teaching that proclaims a liberative path, Thence the Buddha says that faith has for its nutriment hearing the exposition of the true Dhamma. Saddha, the faith that comes into being as a result of hearing the exposition of the true Dhamma, is essentially an attitude of trust and commitment directed to ultimate emancipation. In order for such faith to arise and become a driving force of spiritual development, it must meet with an objective ground capable of eliciting its forward leap into the unknown and of prompting its inner urge towards liberation. From the Buddhist perspective this objective ground is provided by the three objects of refuge - the Buddha, the Dhamma, and the Sangha, that is, the enlightened Teacher, his teaching, and his community of noble disciples. The faith to be placed in them must not be blind and uncritical. Though initially requiring consent born out of trust, it also must be based on critical scrutiny - the Teacher tested to determine his trustworthiness, his doctrine examined to decide on its cogency, and his disciples interrogated to ascertain their reliability. As a result of such examination, conducted either through personal confrontation whenever possible or through scrutiny of the scriptural records, faith becomes settled in the Buddha as the Perfectly Enlightened One, the unerring guide on the path to deliverance; in the Dhamma as his teaching and the path leading to deliverance; and in the Sangha as the community of the Buddha's disciples who have verified his teaching through their own direct experience, and hence may be relied upon for guidance in our own pursuit of the goal.¹⁰²

The crucial issue here is that we are not talking about *blind* faith. In the midst and recognition of the suffering nature of existence to grasp at any thing which might look temporarily viable is asking for trouble, asking for more suffering. What is required is “critical scrutiny” in order to determine the “cogency” and “reliability” of the path that one is considering upon.

There seems to be a type of thinking amongst some Buddhists today that wants to claim that gaining detailed knowledge of the Buddhist scriptures and Buddhist philosophy is not necessary, even a waste of time. Such thinking, however, is completely mistaken. In fact if it were true it would be hard to comprehend why there is such a vast corpus of Buddhist teachings and philosophy. But this viewpoint seems to derive from a misunderstanding of the teaching of not being *attached* to ‘views’. This teaching seems to sometimes be interpreted as meaning that all views are worthless. But *not being attached to views* is not the same as *not knowing anything about the Buddhist metaphysical views* which underlay the practice. The Mahayana teacher Traleg Kyabgon, speaking about Buddhism in general, has this to say:

We have to think about views and viewpoints quite carefully. Buddhism states that our normal views inhibit us and chain us to the limited condition of samsara, whereas the correct view can lead us to our ultimate spiritual destination. We should not conclude from this – although modern Western Buddhists often do – that meditation is all about getting rid of views or that all views will hinder us from attaining our spiritual goal. This assumption is based on the legitimate premise that Buddhist teachings emphatically identify the need to develop a non-conceptual wisdom mind in order to attain liberation and enlightenment. However, many people mistakenly think that this implies that we do not need to believe in anything and that all forms of conceptuality must be dispensed with right from the beginning. It is only

incorrect views that we need to overcome. The correct and noble view is to be cultivated with great diligence.¹⁰³

At the very end of their book *The Island* Ajahn Pasanno and Ajahn Amaro say something similar in much fewer words by quoting Yogi Berra, who actually was not a Yogi but an American baseball player who looked Yogi-like whilst sitting cross-legged waiting for his turn:

If you don't know where you are going, you will wind up somewhere else.

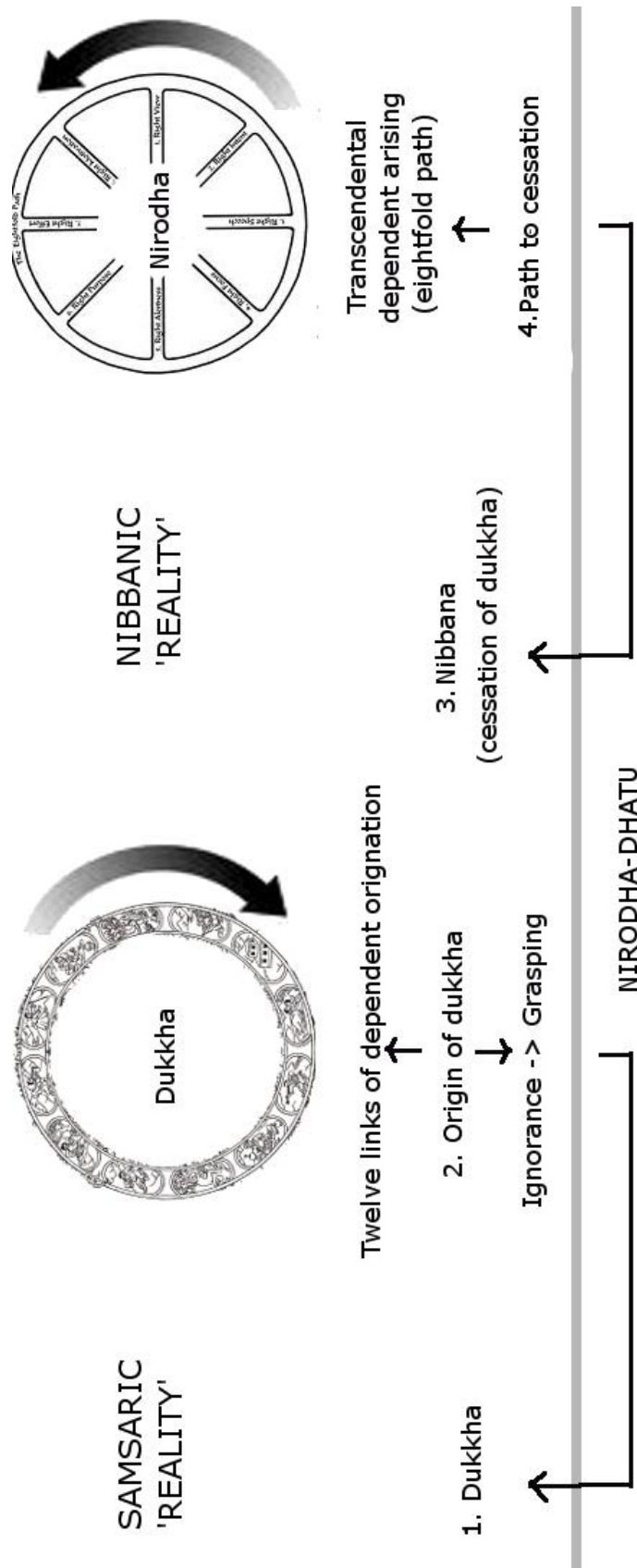


Figure 14 – The twofold nature of reality: the four noble truths and the functioning of the two forms of dependent arising – mundane and transcendental.

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