

Philosophical Discussion

**The Psychological Experience of Time Described in the
Tibetan Book of the Dead:**

Mathematical Definitions and Practical Examples

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(Editor's Note: This is a comprehensive, well written, albeit somewhat difficult to understand, theory of the afterlife first proposed in the *Tibetan Book of The Dead*. Nevertheless, it might not be the viewpoint of certain readers of the Journal. Since the Journal does not have any official religious viewpoint on life after death, it is being presented here. Each reader can take out of it what he/she can or desires.)

Abstract: This article describes a psychic theory of life and death proposed by Tibetan researchers. Long ago, the Tibetans used a systematic, pragmatic approach to study the psychic event of death and rebirth. Although it is not considered a scientific approach, it produced a detailed description of these psychic phenomena. This article proposes to explain the Tibetan research with an expansion of the experience of time. Guidance to this expanded experience of time is through mathematics, through certainty, not skepticism, after comprehending the expanded dimensions of time mathematically. An intelligible and mathematical description is presented of the time dimensions in three psychic states, Nirmanakaya, Sambhogakaya, and Dharmakaya. Then, expanding the psychic awareness by following the method of the enlightened Buddha, the reader will also gain the experience of the Nirmanakaya state and its use of two dimensions of time.

Origin of the Mental Construct of Three Time Dimensions

Long ago, the Tibetans used a systematic, pragmatic approach to study the psychic event of death and rebirth. Although it is not considered a scientific approach, it produced a detailed description of these psychic phenomena. The description was published as the *Tibetan Book of the Dead*. It was composed long ago by Padmasambhava. The Dalai Lama recently commissioned a translation, which describes three states of Being. The ancient Tibetans used the mental construct of three time dimensions in the three states of Being. This publication was based on experiments and experiences with death and dying over an era of hundreds of years. Questions about death and dying have haunted people for thousands of years. Specialist Tibetans answered these questions in great detail. Examining the answers is a proper application of the heuristics of science and mathematics.

Three States of Being

There are three separate states of Being labeled Nirmanakaya, Sambhogakaya, and Dharmakaya.

These states "are related to our natural states and to the ...qualities of full enlightenment."

(Padmasambhava, 2006, p. xix). A person or entity in each of these states has a worldview. This article mainly discusses the time dimensions of the

worldviews. More definitions are provided in the Definitions endnotes. The curious reader can absorb the concepts faster by jumping ahead to the section "Examples of the application of the second dimension of time." See Definition endnotes for particular meanings as used in this article.

Skepticism could obscure the comprehension of the three states of Being and the concepts of time used in these states.

Certainty of the Times of the Three States Removes Skepticism

One method to bar skepticism of the three states is given by Klein in "Certainty, a Refutation of Skepticism." It dissolves the skeptical hindrances of the following reservations.

1. How does the author know about these states?
2. How does the reader know that the author knows these states?
3. How does the reader know the evidence provided by the author proves he knows these states? (Klein (1981) p. 9-199)

Three mental preparations are necessary to accept and to use the three time dimensions. Replacing skepticism with open-minded certainty is one preparation. Accepting the limitations of the mind is another, which is described below. Another is pre-perception.

Pre-perception of the Times of the Three States

These are states, which must be experienced to be accurately comprehended. To start the assimilation of the three states, one must have some method of grasping the initial intellectual pre-perception described by William James.

"The IDEA is to come to the help [in comprehending the new idea] and make it more distinct. It may come with effort...and is ... our attention's strain. Let us show how universally present in our acts of attention is this anticipatory thinking of the thing to which we attend ... 'pre-perception' is the designation for this imagining of an experience before it occurs." (James, 1992, p. 223).

This pre-perception is the second preparation, which aids in bootstrapping the whole new idea into the reader's ken. Other preparations will be exposed below. The pre-perceptions will allow the reader to absorb and use the three times and the three states whenever encountered. The following sections aid the reader's pre-perception. Here is the intellectual pre-perception of the Nirmanakaya state. The Nirmanakaya state can be experienced during the bardo interval between rebirth and death.

Nirmanakaya

At a time between the death Reality and rebirth, the dead entity begins a bardo interval in the embryo, "assumes a grosser physical existence culminating in actual rebirth into our normal waking experience..." which has the [potential of experiencing the] Nirmanakaya; translated as "the Buddha Body of Emanation." (Padmasambhava, 2006, p. xx). This Nirmanakaya interval is the state of being in the NOW of any individual enlightened person. For a trained person, the Nirmanakaya state could be what we currently call enlightened waking consciousness. Although enlightened, it cannot perceive Reality (Dharmakaya below) because of the limitations of a human body and brain. It is thus limited in comprehension of Reality. Reality and this limitation will be addressed below.

The Nirmanakaya state is influenced by karmic wind, physical and spiritual laws. It is a state of becoming which exercises willpower, desire, and habitual tendencies. Becoming is described as a person changing physical, emotional and mental states as the location of the NOW changes with respect to an origin in the frame of reference such as moving through space, X1, X2, X3 as times t4, and t5 pass.

The Nirmanakaya is part of the observing mental function, which perceives the body, feelings, mind and mental constructs. It witnesses the functions of the mind, for example, consciousness of the sense organs, perception, intellectual manipulation, the arising of subconscious urges, intuition, and instincts. It is the essence of the NOW. It is without personality and often called the primordial Being, Isness, or Suchness. It is the witness that cannot be witnessed as described in the Upanishads. There are Buddhist states of Being called the Jhanas and the Supermundane states that allow the reader to experience the Now as the Nirmanakaya. These methods are translated by Bhikku Nanamoli and Bhikku Bodhi, in *The Middle Length Discourses of the Buddha: Majjhima Nikaya*. Examples are the second Jhana is Being without verbal thought, nor intellection, nor identifying sense data. The third Jhana has no emotion. The fourth Jhana is Being without pleasure or pain. There are Supermandane States called Base of Infinite Space, Base of Infinite Consciousness when the state of the NOW is conscious of being and nothing else, Base of Void, and Base of Neither Perception nor Non-perception. (Nanamoli and Bodhi, 1995, pp. 899-902)

When a person is in the state without taints, he/she experiences the Nirmanakaya. It is the state of the NOW which is conscious of being. The person who is in the Nirmanakaya interacts with other entities such as people. Other persons can perceive and interact with the physical manifestation of the person in the Nirmanakaya state. There is no particular evidence available for people to know that a person is in the Nirmanakaya state. Zen Masters or others who have experienced the Nirmanakaya may be able to detect the state in another person. For this purpose, Zen Masters have developed ways to test a person in order to gain evidence of the Nirmanakaya.

The objective of this article is to explain the view of time used in the three separate states of Being labeled Nirmanakaya, Sambhogakaya, and Dharmakaya. The language of mathematics is best suited to describe time.

Description of Time Dimensions Requires the Language of Mathematics

Jeffreys and Jeffreys explained the use of mathematical models in *Methods of Mathematical Physics* (Jeffreys and Jeffreys, 1950, p.1). To understand the relation of mathematics to physics, we start with the notion of numbers. Numbers include all real, irrational, negative, positive, integers, and ratios. We accept arithmetic and algebraic formulas as correct under specific conditions so that the results are correct when any numbers are substituted for the symbols in the formulas.

The use of mathematics in science is that of a language, in which we can state relationships too complicated to be described, except at inordinate length, in ordinary language. The rules satisfied by the symbols are the grammar of the language. The language has two conditions. It must be possible to say what we want to say; it must have sufficient generality. It must be self-consistent so that starting from the rules, it must be impossible to

deduce anything that is declared false by the rules. However, the proposition that a given system of axioms for mathematics is consistent cannot be proved by methods using only the rules of the system. The language has symbols for the things we need to discuss and for the processes that we carry out. So the fundamental notion of measurement corresponds closely to that of addition. Rules govern the use of germane measurement units and the concept of dimensions. The rules of algebra are modified for use with measurement units, dimensions, and other issues relevant to science. The other arithmetic and algebraic processes and rules correspond to other physical processes and concepts. However, the proposition that a given system of axioms for physics is consistent cannot be proved by methods using only the rules of the system.

The science of physics has been built up from many assumptions and axioms over a long history. The laws of physics are based on successive approximations. Since the physical laws are formulated as models that can be comprehended by humans, who are limited in ability to experience the physical world and to invent mental constructs, there will never be exact formulations. For a given law, each important physicist adds more experiments and theories so the description of the law becomes successively more like the underlying truth.

Vector Algebra as a Heuristic for Comprehending the Times of the Three States

Refer to any algebra book on Cartesian frame of Reference with Three length Dimensions.

Here is a brief review of vector algebra. A frame of reference is usually thought of as a box with rectangular sides containing a subject of interest, such as a moving arrow. Each of the three lengths of the box has a label, X_1 , X_2 , X_3 usually x , y , z . A vector is a quantity with the added property of a direction in the frame of reference. A unit vector has a scalar length of one unit. The vector multiplication of one vector by another vector results in a new vector product pointing in the direction that is at 90° to both the original vectors being multiplied. (Jeffreys and Jeffreys, 1950, p.57) There are many other books teaching vector algebra. The symbol \bar{X} represents the operator for vector multiplication. In the following notation, the bar above a symbol means the symbol is vector

A measured scalar X_1 is a length in the direction of unit vector, \bar{i} . Similarly, a length, X_2 is measured in the direction of unit vector, \bar{j} . And X_3 in the direction of unit vector, \bar{k} . A scalar duration of time, t_4 , in the direction of unit vector, \bar{i} . And a scalar duration of time, t_5 , in the direction of unit vector, \bar{j} . The reader thinks of the paper with two lengths, one from the bottom towards the top of the page $X_1 \bar{i}$ and another sideways from the left to the right hand edges $X_2 \bar{j}$. Also the height above the paper is $X_3 \bar{k}$ in the direction of unit vector \bar{k} at 90° to both \bar{i} and \bar{j} .

Imagine the product of two vectors:

$$\bar{i} \bar{X} \bar{j} = \bar{k} \quad \text{equation (1)}$$

Time (t_4)

The "reference time" t_4 is defined as events changing with respect to an origin, NOW, of a frame of reference. NOW is defined at the endnotes.

Time, t_4 is the change of location of NOW even when X_1, X_2, X_3 , are not considered. In the mental construct, changes in t_5 and t_6 may be constant or disregarded for the purpose of aiding the imagination. The reference time is non-zero; it must change. In mathematics, the "scalar time" t_4 is defined also as a quantity. It describes a NOW that has a duration more than zero. If scalar time t_4 had a quantity of zero then the NOW would not exist. This is a trivial case, which will not be considered. The scalar time t_4 quantity changes in a direction with respect to the origin of the frame of reference. So it is a vector, \bar{t}_4 . Define the unit vector in the reference time t_4 direction as \bar{t}_4 .

The direction of the vector \bar{t}_4 is defined by the vector product of two space unit vectors,

$$\bar{j} \times \bar{k} = \bar{t}_4 \quad \text{equation (2)}$$

The direction of t_4 is a right angle to both \bar{j} and \bar{k} .

Similar definitions are stated of t_5 and t_6 below

It can be proved that vector algebra is an accurate and sufficient mathematical framework for describing physical phenomena in times t_4, t_5 , and t_6 .

Time (t_5)

The "reference time" t_5 is defined as events changing with respect to an origin, NOW, of a frame of reference. It is the change of location of NOW even when X, Y, Z , and t_4 do not change. In the mental construct, changes in t_4 and t_6 may be constant or disregarded for the purpose of aiding the imagination. The change in reference time, t_5 is non-zero; it must change. The "scalar time" t_5 is defined as a quantity. It describes a NOW that has a duration more than zero. If scalar time t_5 had a quantity of zero then the NOW would not exist. This is a trivial case, which will not be considered.

The scalar time t_5 quantity changes in a direction with respect to the origin of the frame of reference. So it is a vector, \bar{t}_5 .

Define the unit vector in the reference time t_5 direction as \bar{t}_5

Most of the properties of \bar{t}_5 are the same as \bar{t}_4 . Except the direction of the unit vector is defined as

$$\bar{k} \times \bar{t}_4 = \bar{t}_5 \quad \text{equation (3)}$$

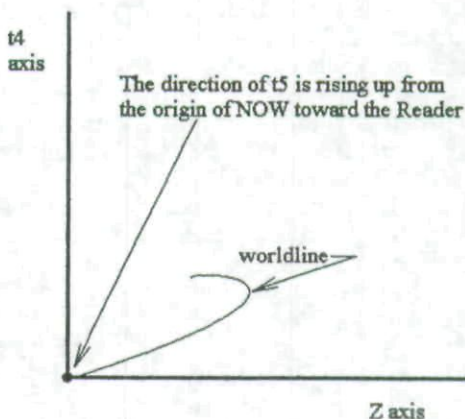
At a right angle to both \bar{k} and \bar{t}_4

A person in the Nirmanakaya state easily uses the heuristic of the t_5 view.

Most people can use the second time dimension, t_5 , but are not conscious of using it unless taught to use t_5 . It is not unusual to view an event changing at location X_1, X_2, X_3 , and t_4 from a frame of reference, X_1, X_2, X_3, t_4 , which also includes t_5 . But people do not realize they are doing this. This view will be taught below with examples. See Figure 1: The View of a Four Dimensional Worldline From a Five Dimensional Reality.

The worldline is the four dimensional description in X_1, X_2, X_3, t_4 , of an event. The worldline is viewed from t_5 in a frame of reference with X, Y, Z, t_4, t_5 . The worldline cannot be shown properly on a 2 dimensional paper. However, it is rising above the origin; it is not in the plane of the paper. Because the reader looks at the paper from some inches away, the worldline appears to be projected on the flat paper. The reader is encouraged to try this mental experiment of turning the point of view 90° . Examples for

Figure 1 The View of a Four Dimensional worldline form a Five Dimensional Reality. The black dot is the origin, the location of the Reader's NOW or orientation of perception.



practicing the mental experiment are given below.

The living body, brain and mind is limited to the Nirmanakaya up to the time of death. When the person's body dies, the Nirmanakaya is free of the body and brain.

Time (t_6)

The Nirmanakaya entity turns its view 90° and takes on the view of the Sambhogakaya. The "reference time" t_6 is defined as events changing with respect to an origin, NOW, of a frame of reference. It is the change of location of NOW even when X , Y , Z , t_4 , and t_5 do not change. In the mental construct, changes in t_4 and t_5 may be constant or disregarded for the purpose of aiding the imagination. The change in reference time, t_6 is non-zero; it must change. The "scalar time" t_6 is defined also as a quantity. It describes a NOW that has a duration more than zero. If scalar time t_6 had a quantity of zero then the NOW would not exist. The scalar time t_6 quantity changes in a direction with respect to the origin of the frame of reference. So it is a vector, \vec{t}_6 .

Define the unit vector in the reference time t_6 direction as \vec{t}_6 .

Most of the properties of the unit or direction vector, \vec{t}_6 are the same as \vec{t}_6 and \vec{t}_5 . Except the direction of the unit vector is defined as

$$\vec{t}_4 \times \vec{t}_5 = \vec{t}_6 \text{ equation (4)}$$

At a right angle to both \vec{t}_4 and \vec{t}_5

The members of the class of objects viewed in the t_6 are probable worldlines in the future. However at a given quantum of time QT , there is only a single event where all worldlines converge into the NOW. To get an idea of the wide range of probable worldlines, consider what is probable. All the probable future events differentiate one worldline from another, for example, enquiring as a state of Being (See definition of NOW in endnotes), eating, dreaming while sleeping, contacting the external world through the senses, understanding, perceiving, acts of Will, choosing. Choosing is the distillation of a worldline by an act of free will what to inquire, what to eat, and so on. Choosing narrows down to one worldline what is actually experienced.

It perceives the set of changes in t_5 more clearly than when limited to

the view of Nirmanakaya.

It perceives the changes in life usually associated with t4 from the view of t5. And it perceives the probabilities in t5 from the view of t6.

The dimension, t6 contains the many probability states of an event, which is in the future.

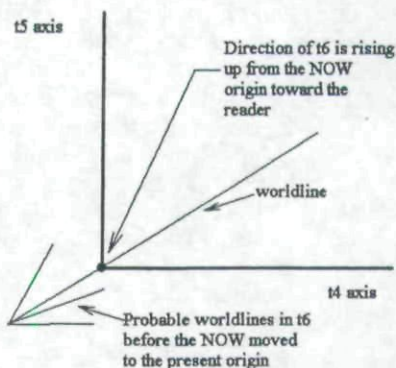
The probabilities, "p", of all possible events, of which there are n possible, at a future time t61 in the measured in the t6 dimension, add up to 1.0, Mathematically,

$$\sum pn = 1.0$$

When the NOW arrives at a given time, t61, only a single possible event is observed. The observed event has a probability of 1.0 in t6, stated as, $p=1.0$.

See Figure 2: The Five Dimensional Set of Probable Worldlines from the View of a Six Dimensional Reality

Figure 2 The Five Dimensional Set of Probable Worldlines from the View of a Six Dimensional Reality
The black dot at the origin represents the location of the NOW, the location of the Reader in a six dimensional reality. The dot moves continuously in three time dimensions.



When a person leaves the body and brain behind at death, he or she experiences the Dharmakaya state of Being.

Sambhogakaya

Some people remain in the Dharmakaya (Reality) bardo interval after death. Others continue as follows. Immediately after death, a person becomes an entity in the state of [pure essence] Reality. "From within this... natural state, [the entity] begins a bardo interval of "perceptual experience; the phenomenal forms are comparatively subtle and non-substantive...this mode ...is the Buddha body of Perfect Resource (Sambhogakaya)." (Padm asambhava, 2006, p. xx)

Sambhogakaya is the bardo interval of being in the NOW after the Reality of death (Dharmakaya) and before the Nirmanakaya state leading to rebirth. At death, if the dead entity has cultivated the Nirmanakaya state, and has developed the correct habitual tendencies, it is freed from the limitations of the human brain and body. It exists in Sambhogakaya. The view held by the entity has its origin in the Sambhogakaya state. It views the entire past life in six dimensions, X, Y, Z, t4, t5, t6. It views all probable future worldlines of existence in the t6 view.

This focus of *The Tibetan Book of the Dead* is preparation for death and acquiring habitual tendencies during life, which will be expressed in the Sambhogakaya state (Padmasambhava, 2006, pp. 5-196). The Sambhogakaya state is the essence of a living person; the pure energy of an enlightened mind but without a physical body.

The dead entity in the Sambhogakaya state is influenced by karmic wind, habitual tendencies of perception, habitual feeling reactions, delusional entities, spiritual laws, and some fading memories. Memories are rapidly fading as the cerebral base disintegrates. It is not affected by physical laws, or man-made laws. There is no thinking, cognition, gender, perception, sense data or language. However, there are length and space perceptions, and perception of three dimensions of time, t_4 , and t_5 , t_6 that is the subject of this article. An entity in the Sambhogakaya state easily uses the heuristic of the t_5 view and the t_6 dimension. The direction of the t_6 unit vector is given above,

$$\bar{t}_4 \times \bar{t}_5 = \bar{t}_6 \text{ equation (4)}$$

The dead entity is in a state of becoming lasting approximately 49 days, if it does not remain in the Dharmakaya. This is described extensively in the *Tibetan Book of the Dead* (Padmasambhava, 2006, pp. 197-316).

A simplified definition of becoming is changing the location of the NOW, which is the origin of a frame of reference. The NOW moves through lengths X_1 , X_2 , X_3 , and times t_4 , t_5 , and t_6 . A general definition is the evolution into another human body, through rebirth. The Karmic wind is the force of cause and effect that acts on all entities alive or dead. The entity has Willpower and desire in the Sambhogakaya state. Willpower is the effort made by the entity to change its location or other state such as being born in one of several planes of existence. Habitual tendencies are mainly emotional reactions or efforts started by Will. Desire is a habitual tendency cultivated during the living state. The possibilities of Willpower and desire to change the plane of rebirth is addressed as the solution to the central problem of evolved enlightened rebirth in the *Tibetan book of the Dead*.

The *Tibetan Book of the Dead* discusses the transition after life through death in the Sambhogakaya state and subsequent rebirth into life again. The cause and effect relationships and the choices of the dead entity during this life and during the Sambhogakaya state results in the dead entity selecting its next parents and the plane of existence for its next stage of existence. If the dead entity chooses a human or animal rebirth, it selects its parents. The entity enters the embryo in preparation for rebirth. The Sambhogakaya state ceases during gestation.

The Tibetan Buddhist concept is that the best approximation of Sambhogakaya that the living mind can invent is a worldview called herein, "Reader's Nirmanakaya." This is the one objective reality possible to be known by a living person. It tends to change from year to year as a given person matures.

Let us define a particular worldview called herein, "Buddha's Sambhogakaya," experienced by a person named Buddha. Let us propose that this worldview is the most accurate worldview held by one transcendent individual even though he was living. The worldview Buddha's Sambhogakaya is an approximation of Dharmakaya. The worldview evolved over time, t_4 as Buddha matured.

As the reader knows from experience, people will argue and refuse to accept a new idea such as Buddha's Sambhogakaya for an amazing number of reasons. However, arguing does not change the nature of reality, Dharmakaya or Sambhogakaya. In fact, arguing may have helped the Buddha to improve the approximation, Sambhogakaya. Even if no one but Buddha holds this worldview of Sambhogakaya, it remains the best approximation to Dharmakaya, It will never be the true Dharmakaya; unknowable to the human body and brain.

Dharmakaya

"Death is the point at which both the physical and mental fields dissolve into inner radiance and where both consciousness and energy exist at their most subtle non-dual levels... This mode is the Buddha Body of Reality (Dharmakaya)." The Dharmakaya is the ultimate Reality, All That Is. It can only be comprehended after death, if then, due to the limitations of the body, brain, and the limited ability to conceive of mental constructs. If it is possible to understand or experience the Dharmakaya at all, it would be after the passing at death when the physical and mental fields dissolve into an ineffable, indescribable state of subtle Isness which can be named "inner radiance" or "void." The Dharmakaya state does not perceive these three time dimensions or the three length dimensions. It has no mental constructs, no identification of length, or time, t_4 , t_5 , or t_6 . It is the primordial "Buddha Nature" the essence of the enlightened mind merged with All That Is. It is not obscured by mental constructs or personality. It is not affected by the physical laws and spiritual laws. It has no physical body but it has an existence. It is a spiritual entity blended with other non-physical entities. It is not in a state of becoming; it is uncreated. Thus it is operating in Truth so to speak, a correct assessment of Reality without the delusions and ignorance created by a person in the Nirmanakaya, limited by the body, brain and mind.

The Limitations on the Mind

Before examples of the time, t_5 mental construct can be introduced below, the reader must admit the limitations on the mind. See Spigelman, *On Despair of Intelligibility*. First consider the problem of intelligibility in physics, much simpler concepts than death and time. "The reaction of most physicists to the paradoxes and enigmas of quantum theory ... has been to despair of ever being able to make the theory intelligible" (Spigelman, 1987, p.13)

Nobel laureate, P.W. Bridgman stated, "Our conviction that nature is understandable and subject to law arises from the narrowness of our horizon... If we sufficiently extend our range, we shall find that nature is intrinsically neither understandable nor subject to law." (Bridgman, 1950) Nobel laureate, R.P. Feynman wrote, "I think it is safe to say that no one understands quantum mechanics." (Feynman, 1965).

Responses to the Despair of Intelligibility

"There are three responses to the despair of intelligibility.

◆ The first is the rejection of the effort to explain, to comprehend... This attitude has its roots in religion and in practical people who are not inter-

ested in the 'why' of the world but only in the 'how'...

♦The second has been a quest for new modes of understanding in mysticism."

Unfortunately, the "Western secular thought " does not accept this second creative response. This rejection by the [dogmatic, fixated thinking of the] closed mind blocks a greater set of solutions of the problems in the [psychical researcher's] search for truth.

♦The third response is a belief in [a subjective reality in addition to] an objective reality. Recognizing that observation, measurement, prediction and control without comprehending [both the subjective and objective reality] is only technology...This requires a 'new simple idea'." In other words, we need an idea that we can comprehend with our limited minds such as belief in a subjective reality which depends on the observer.' (Spigelman, 1987, p.13).

Let the reader accept an axiom: The nature of the physical universe exists. People are not capable of knowing the entire physical universe due to the limitations of the mind, to limitations on tools such a telescopes, to limitations on observation of the universe, to limitations on the unknown parts of the universe that cannot be known. This absolute environment is designated by Dharmakaya.

An Obstruction to Gaining the Nirmanakaya Worldview is the Assumption That the Mental Concept is Equivalent to a Transcendent Experience

In spite of the Hope for the First Response to the Despair of intelligibility, above, the mind by itself cannot totally comprehend the reasons why and how the world works. Spiritual experience is also necessary.

Part of the barrier to understanding the truth of the physical universe is arrogance of believing that the mind can comprehend the details of the truth by reason and thinking. The achievable understanding of truth may be limited to a certain level of understanding, a new simple idea, and no more. The Nirmanakaya is an experience, not a mental construct that can be discovered by logic or reading. To achieve the Nirmanakaya worldview, the heuristic tool is psychic transcendent experience; introspection under the supervision of a person who lives in the Nirmanakaya state and is capable of teaching the methods of achieving it.

Consider the barrier thrown up by minds closed to new models, closed to new experiences of the Nirmanakaya state. Add this to the limitations of the mind, brain and body. Then the search for truth of Nirmanakaya, or even arcane physics, is more limited.

Creating an amendment to the theory of dimensions is the intent of this article. By accepting the proposition of three dimensions of time, the reader can accept this physical description of the world. Simultaneously, the reader also accepts the pre-perception of the way to experience the Nirmanakaya.

Guidance to the Nirmanakaya Worldview

The nature of the void or emptiness cannot be described in any language or mathematics. The Buddha gave explicit instructions about how an individual can experience the void (Nanamoli and Bodhi, 1995, pp.965-970) So the method can be described but not the state, which is experienced. A

clue; an approximation of the Nirmanakaya is the following label, "Emptiness and inner radiance are inseparable." Can the reader conclude that achieving new concepts in physics is quite different from the experience of Nirmanakaya, which is not a concept?

Examples of the Application of the Second Dimension of Time

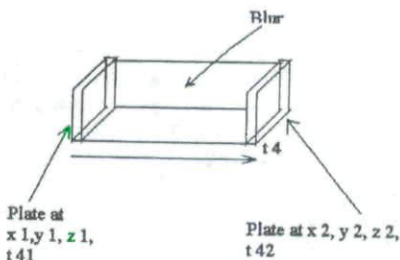
This introduction leads to the realization of the everyday use of the second dimension of time.

The following examples describe the reader's observing an event in a frame of reference, X, Y, Z, t_4 from the view of the frame of reference, X, Y, Z, t_4 , t_5

The Example of the Blur of a Moving Plate

An example of perceiving a long quantum of time, t_4 from the view of reality including t_5 , is the blur of a moving thing. The blur represents the locations of the thing, which are within the quantum of time, t_4 . If the reader could hold in mind an hour movement of a plate, an hour's history of the plate could be perceived at one t_5 . This means that the perceiver would be using both t_4 and t_5 to make a perception of sense data. See Figure 3 Blur is the Worldline; the Four Dimensional Representation of a Plate

Figure 3 The plate has 3 dimensions of length and one extension of time that is perceived by the Perceiver as a blur. If the Perceiver could register one visual appearance for an hour, then the blur would register as an hour long extension of the plate.



Observed from the View of X, Y, Z, t_4 , t_5 toward X, Y, Z, t_4 [At end-note]

The Example Given by William James

"Chapter XVII The Sense of Time... The feeling of past time is a present feeling..."

[Notice it is described as a feeling, not a thought.]

Our consciousness of time...our inner states succeed each other... between the mind's own changes being successive and knowing their own succession lies as broad a chasm as between the object and subject of any case of cognition in the world. A succession of feelings is not a feeling of succession. And since to our successive feelings, a feeling of their succession is added, that must be treated as an additional fact requiring its own special elucidation, which this talk about the feelings knowing their time-relations as a matter of course leaves all untouched.

If we represent the actual time-stream of our thinking by an horizontal line, the thought of the stream [the thought of the stream is the second dimension of time, t_5] or of any segment of its length, past, present, or to come, might be figured in a perpendicular raised upon the horizontal at a certain point. The length of this perpendicular stands for a certain object or content, which in the case is the time thought of at the actual moment of the stream upon which the perpendicular is raised. There is thus a sort of perspective projection of past objects upon present consciousness, similar to that of wide landscapes upon a camera-screen.

And since our maximum distinct perception of duration hardly covers more than a dozen seconds, we must suppose that this amount of duration is pictured fairly steadily in each passing instant of consciousness by virtue of some fairly constant feature in the brain-process must be the cause of our perceiving the fact of time at all. Its content is in a constant flux, events dawning into its forward end as fast as they fade out of its rearward one and each of them changing its time-coefficient from 'not yet' to 'not quite yet' to 'just gone' or 'gone.' The specious present stands permanent like the rainbow on the waterfall unchanged by the events that stream through it.

Each event retains the power of being reproduced... the reproduction of an event after it has once completely dropped out of the rearward end is an entirely different psychic fact from its direct perception in the specious present. That is the analysis of what happens in reproductive memory, the recall of dated things. "(James, 1992, pp. 270-271).

The Example of Corporate Stock Price

Consider that there is a chart with stock price for a corporation measured along the Z axis and the time of the price noted on the t4 axis. At any moment, t_4n , a dot would appear on the chart, which would represent the price at time t_4n . Now turn the chart 90° and a series of dots looking like a line would be perceived on the chart. All the prices of the stock, occurring in t_4 , would be perceived in a short quantum, Δt_5 . See any Stock price vs. time Chart or refer to Figure 2 and the financial news.

Conclusions

While investigating psychic phenomena of a person in the three states described, we have abstracted three different times. The Tibetan Buddhist masters inherently recognized three different dimensions of time in addition to three different states of Being. We can use these dimensions to calculate a more accurate worldview. Heisenberg's scrutiny could be leveled at the findings of the *Tibetan book of the Dead*. The entire fabric presented herein is intelligible and infallible as required by Heisenberg and Spigelman.

Recommendations

The researcher is encouraged to enlarge his or her psychical research by incorporating the second dimension of time into his/her worldview. The Nobel prize-winning physicist, Heisenberg, in *The Physicist's Conception of Nature* commented that the researcher must examine the means of investigation, the tools for observations, the assumptions about what can be inferred from the observations, and the theories that are presented based on

the components of the investigation. The entire fabric must be intelligible and infallible (Heisenberg, (1958)). This scrutiny could be leveled at the findings of the *Tibetan book of the Dead*.

Endnotes

Dimension

Dimensions abstracted from the observations are mental constructs. There are three dimensions of length and three dimensions of time. These may be simply mental constructs. We conceptualize a length of a thing, which is a separate property from all other physical descriptions of the thing. This separation is purely a mental tool. A length without a thickness or a depth has zero thickness and zero depth. Therefore it does not exist physically. It exists only in the reader's mind.

Conceptual time dimensions are invented times, t4, t5, and t6, which are mental constructs, for the purpose of deducing conclusions to which we can append the remainder of psychological reality. Although we can imagine dimensions that can be divorced from all the physical measurements of a thing, dimensions exist only to help our imagination. All things have non-zero lengths and are changing through all times. All physical times have a duration, defined as a change of state in a thing that is observable.

Now

The NOW is the center of the world external to the body and mind of the reader; the origin of the frame of reference. Events pass by the NOW origin. This is similar to Heidegger's "Dasein" in *Being and Time* (Heidegger, 1962, pp. 26-27). The NOW of the reader includes a mental construct of three dimensions of length (X, Y, Z). It may include one to three dimensions of time (t4-t5-t6)

Times and length are represented in brain memory. This has been proven in experiments by Libet in *Mind Time: The Temporal Factor in Consciousness*, (Libet, 2004, pp. 15-170) and Triesman in "The Perception of Time" in *The Arguments of Time*, (Triesman, 1999)

The attitude of the NOW is questioning, scrutinizing, giving a hard look. The Now is dominated by the questioning, which has three parts.

1. What is to be found out by asking? The intention is to find out the meaning of Being, a psychological entity that can be detected in the physical world

2. What is interrogated? The psychological entities of a living thing themselves, within the reader's own mind, are questioned as regards their Being.

3. What is asked about? The word, Being, is what is asked about; the Being of psychological entities.

Then the reader defines Being in the Nirmanakaya state to differentiate it from the ultimate Reality, the Dharmakaya state. Being in the Nirmanakaya is the process of the reader talking about, or mentally constructing, or contacting the psychological world. It is what he/she is, the NOW. With this attitude, a small part of underlying Nirmanakaya and the world is perceived by the entity.

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Paying for Surgery

A man awakened from major heart surgery and found himself in the care of nuns at a Catholic hospital. As he was recovering, the mother superior questioned how he was going to pay for his surgery. She asked if he had health insurance. He said no. She asked if he had money in the bank. He said no. She asked if he had a relative who could help with the bill. He said that the only relative he had was a spinster sister who was a nun. The mother superior became agitated and loudly proclaimed, "Nuns are not spinsters, nuns are married to God!" At this point, the patient said, "Then send the bill to my brother-in-law."

— Submitted by Boyce Batey

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