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# **The Theory of a Natural Eternal Consciousness**

## **The Psychological Basis for a Natural Afterlife**

by  
Bryon K. Ehlmann

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The natural eternal consciousness (NEC) (in a nutshell):

*You believe you are having an  
experience, and for all eternity  
you never know otherwise.—p. 63*

Postprint version, dated 07/22/2020: A few very minor revisions have been made to the originally published article.

**Note:** I have written another more recent article about the NEC theory: *Death's New Reality: Challenging Orthodoxy and Dealing With Our End-of-Life Illusion of Immortality*. This article discusses the challenges in getting people to understand, accept, deal with, and appreciate the NEC theory and theory's significance and potential impact on philosophy and religion. I offer my views on how the NEC and natural afterlife may be seen as compatible (or not) with the afterlife teachings of some of the major world religions. A preprint version of the article is available at ResearchGate.net (by clicking on its title) and at academia.edu.

## The Theory of a Natural Eternal Consciousness: The Psychological Basis for a Natural Afterlife

Bryon K. Ehlmann

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Focusing solely on the near-death cognizance of the dying, rather than the material perspective of the living, reveals a new understanding of death. Its significance to psychology, philosophy, and religion is huge for what emerges is a long overlooked phenomenon: a nonsupernatural, relativistic, and timelessly eternal consciousness, which can be a *natural afterlife*. Ironically, the validity of the *theory of a natural eternal consciousness* (NEC) assumes the loss of all materially based consciousness with death — more specifically, the permanent loss of time perception. The theory claims, and the article deduces from empirical knowledge, that by imperceptibly entering the timelessness before death, one's last conscious moment, whatever the type, becomes by default — psychologically, *from one's perspective* — a forever present moment. To help explain and validate the theory, the article presents thought experiments and a formal model of all of life's moments and all transitions between periods of time perception and those of timelessness. An open-minded reading should reveal that the NEC does not threaten faith in a god or a heaven.

Keywords: natural eternal consciousness, natural afterlife, NEC theory

Given this article's title, most readers will likely immediately question first, how any "eternal" consciousness and afterlife can be "natural," versus supernatural, and second, how such phenomena, if real, could ever be validated. The article explains how a proper frame of reference is key to justifying how the terms *eternal* and *natural* are appropriate in describing these phenomena. This frame of reference is that of the psychological perspective of a dying person, not that of the material perspective of the living. The *theory of a natural eternal consciousness* (NEC), or *NEC theory* for short, exemplifies a theory in which truth is relative to one's frame of reference,

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the prime example of such being Einstein's theory of relativity. It is also a theory that surprisingly claims that a vestige of our mind can timelessly exist (in a psychological frame of reference) when there is no longer a body (in the material frame of reference).

To support this extraordinary claim, the article employs thought experiments to help the reader envision an illusion that occurs with death and makes the out-of-body, eternal "existence" a reality to the dying person. The article also employs tools that are common to systems and computer science to analyze and formally model all time-perceiving and timeless states of mind and all transitions between them as well as all conscious moments that are experienced by a person within a lifetime. From this *lifetime-in-eternity model*, the NEC, including the *natural afterlife*, is formally defined and its reality is "proven" by logical deduction based on "empirical truths," i.e., well-established psychological principles and everyday human experience. The deduction is given in the form of a proof — like that required for a logical, mathematical, or computational theorem — though, admittedly, such theorems are proven based on absolute truths.

To further support the NEC theory, the article makes the case that the theory can be tested. This is possible because the NEC begins before death and merely lingers beyond, the NEC being psychological and death being imperceptible.

The psychological principles relevant to the theory are discussed in the next section. Subsequent sections state and explain the theory, formally define the NEC based on the lifetime-in-eternity model, validate the theory by "proof" and by establishing its testability, indicate the vast variation in the NEC experience, and conclude by summarizing the article's claims, contributions, and implications. The implications, while significant for religion and philosophy, are discussed minimally in this article, though the theory's religious neutrality is emphasized.

### Relevant Psychological Principles

Two opposing hypotheses can be deduced from psychology for what we will experience upon death. The first is based on the definitions of *mind* and *consciousness* like those given in many introductory psychology textbooks. The second delves just a bit deeper and is based on human experience and established cognitive principles in time and in conscious perception.

Hypothesis 1. Quoting from a psychology textbook by Zimbardo, Johnson, and McCann (2014, p. 325): "The *mind* is the product of the brain," *consciousness* is "the brain process that creates our mental representation of the world and our current thoughts" and "as a process ... is dynamic and continual rather than static." Therefore, when the brain dies, the mind as its product and consciousness as a *brain process* must totally cease to exist and we will "experience" a kind of nothingness like that before life.

Hypothesis 2. For decades evidence has been mounting that we perceive time as a sequence of events, each evolving one discrete, present conscious moment at a time (Elliott and Giersch, 2016). Outside of these moments, e.g., dreamless sleep, we perceive nothing. Before death a still functioning brain produces one last present moment of a perceived event within some experience, perhaps a dream, and then is incapable of ever producing another moment that would cognitively supplant the last one from our consciousness. Therefore, we never perceive and thus are never aware that our last experience is over. So a remnant of consciousness, an experience paused in a moment at a point in time, will become imperceptibly timeless, i.e., *static*, and deceptively eternal *relative to our perspective*. (Here *experience* is not in quotes as it is indeed experienced before death.)

Hypothesis 1, despite lacking empirical verification, has been accepted as orthodoxy by many. It can only be verified *after* death, which is impossible. In contrast, hypothesis 2 has hitherto been overlooked, likely because of the orthodoxies of hypothesis 1 and religion and the difficulty for the living to view death strictly from a nonmaterial frame of reference, i.e., that which is perceived by the dying. Moreover, hypothesis 2 can be verified *before* death and is verified to some degree with many human encounters with timelessness — e.g., dreamless sleep — each being perceptively like death. Especially relevant are those encounters after which we awaken *instantly* startled when our first conscious moment is inconsistent with our last — e.g., when waking up after having an intense dream. One needs only to ask: “Suppose I had never woken up?”

This article thoroughly analyzes hypothesis 2 and promotes it to a theory. The question posed above is one of many thought experiments that are presented to aid analysis and to help the reader envision the NEC.

### *Time Perception*

To delve deeper into hypothesis 2 and better grasp how an eternal consciousness can be natural, one must first understand how we subjectively perceive time. This must include the fact that we continually transition back and forth between perceiving time and not perceiving time and that when we are not perceiving time, we are simply not perceiving any events and thus no next moment until we once again transition back to perceiving time, if indeed we ever do. Events that may contribute to one’s perception of time, or sense of time, include the tick of a clock, a spoken syllable, the flap of a butterfly wing, the blink of an eye, any detectable movement of an object, and the slightest progression in one’s train of thought.

Time perception became one of the major subfields of psychology as it emerged in the late 1800s (Block and Hancock, 2017). Survey articles in the field, like Block and Hancock’s, and internet searches by the present author revealed much relevant literature on the subjective perception of time, i.e., *psychological*

time, within periods of real time, but none on transitions to and from periods of time imperceptibility — i.e., periods of *psychological timelessness* (Stroud, 1955) — as, for example, encountered during dreamless sleep. Perhaps the lack of attention to these transitions should not be surprising given that so many definitions of the field resemble that given in a psychology textbook study guide:

**Time perception** is a field of study within psychology and neuroscience that refers to one's subjective experience of time, which is measured by one's own perception of the duration of the indefinite and continuous unfolding of events. (Cram101 Textbook Reviews, 2017, p. 206)

The lack of attention to these transitions *should* be surprising, though, for in reality we constantly alternate between psychological time and psychological timelessness. Moreover, we spend roughly a quarter to a third of real time in the latter. Actually, our minds spend almost all of real time in the latter — i.e., in a timeless state wherein time is imperceptible — if we consider the period before our life, i.e., the *before-life*, as well as that after our life, i.e., the *after-life* (with a hyphen).

Not to think this last statement, as well as the idea of a natural eternal consciousness, absurd, one must first be informed that the before-life and after-life are, when not explicitly or otherwise stated in this article, presumed devoid of any supernatural consciousness. Then, one must understand the cognitive homogeneity of the transitions into timeless states of mind and that of the timelessness of the timeless states no matter the transition type — e.g., awake to dreamless sleep, dreaming to dreamless sleep, awake to passed out, and yes, even dying to dead. Also, one must understand the psychological and thus the relativistic nature of these transitions and of the timelessness — i.e., relatively speaking, “It’s all in the mind!” The present article is intended to further such understandings.

To this end, Figure 1 introduces some notation, similar to that used in the lifetime-in-eternity model. Figure 1(a) shows the scenario upon which the time-perception field of psychology seems to focus. A duration of real time between some time  $t_a$  and some later time  $t_b$  is subjectively perceived by an individual in terms of some sequence of perceived events  $e_1$  through  $e_j$ . Of interest are what factors influence psychological time and to what extent.



Figure 1: Two scenarios relevant to time perception. In the mind a period of real time between time  $t_a$  and time  $t_b$  is in (a) subjectively perceived as a sequence of perceived events  $e_1 e_2 \dots e_j$  and in (b) imperceptible, resulting in *Timelessness*, because no events are perceived, including the two state transitioning events ( $\wedge$ s).

Figure 1(b) shows the scenario relevant to this article. A duration of real time begins at some time  $t_a$  when an imperceptible event occurs (denoted by  $\wedge$ ; e.g., fall asleep) that transitions the mind from a time-perceiving state to a timeless state. The last event that was perceived, which may have been interrupted at some moment, is some event  $e_k$ . After this event no more events are perceived, thus resulting in psychological *Timelessness*, until at some time  $t_b$  when another imperceptible event occurs (denoted by another  $\wedge$ ; e.g., wake up) that ends the timeless period. This event transitions the mind back into a time-perceiving state wherein some initial event  $e_{k+1}$  (e.g., an alarm beep) is immediately perceived, which signals a new conscious awareness.

Note in (b) that when the imperceptible event at  $t_a$  is death, the after-life begins, the event at  $t_b$  does not occur, and events  $e_{k+1}$   $e_{k+2}$  ... are not perceived. Also, note that when the event at  $t_b$  is birth (or near birth), the before-life ends, the events ...  $e_k$  are not perceived, and the event at  $t_a$  does not occur.

### *Conscious Perception*

To see the NEC as natural, one must have an understanding not only of time perception but also of conscious perception. When in a time-perceiving state of mind, we consciously perceive events, which define our sense of time and of movement, not continuously but in discrete conscious moments (Herzog, Kammer, and Scharnowski, 2016; Stroud, 1955; von Baer, 1862). We perceive, and can thus be cognizant of, only one of these moments at a time, the *present* moment, which remains the present one until replaced by the next moment. The present moment includes our sense of the flow of time, of self, and of life by incorporating selective memories of *past* conscious moments and the anticipation of *future* ones — especially the next one, which we naturally assume will be consistent with the last. Yet we never really know in the present moment whether or not the next one will occur.

### **Statement and Explanation: The Basis and Essence of the NEC**

On the basis of our time and conscious perception, the imperceptible event of our death, and many reports of near-death experiences (NDEs), a previous article by Ehlmann (2016) posited the *theory of a natural afterlife*, stating it as follows:

The natural afterlife of an NDE-enabled creature is the NDE from which it never awakes — essentially, a never-ending experience (NEE) relative to the creature's perception. (p. 932)

The theory defines the natural afterlife, implying its existence by its association with the NDE — a phenomenon evidenced by numerous accounts recorded across cultures and throughout history as far back as the oral tradition (Holden,

Greyson, and James, 2009b; Moody, 2001). The theory assumes, as does the NEC theory, that the NDE is indeed a *near*-death experience not an *after*-death experience as some postulate (e.g., Long, 2008; van Lommel, 2010). It occurs in an altered state of consciousness, as do dreams, and is thus dreamlike to some extent. In fact, Ehlmann (2016) suggests that intense dreams could also provide the basis for the natural afterlife.

The NEC theory broadens the theory of a natural afterlife and substantiates it by positing a more general phenomenon, one that encompasses the natural afterlife and provides the psychological basis for its existence as well as that of a myriad of other timeless NEEs. In so doing, the more general NEC theory essentially provides the replacement for the more specialized one. The NEC theory is stated as follows:

The natural eternal consciousness (NEC) of a creature with human-like time and conscious perception is, relative to the creature's perception, its final conscious moment. The NEC may be perceived as a natural afterlife.

The theory postulates that any type of final conscious moment results in an NEC and can be a natural afterlife depending on the kind of NEE it embodies and how it is perceived.

To begin to accept this theory as more than a hypothesis, one must grasp not only its psychological basis but also the essence of the NEC. Toward this end, analogies and thought experiments are presented. Then, some properties, which are attributed to the NEC, are discussed as well as some aspects of the theory.

### *Analogies and Thought Experiments*

First, employing the most general analogy, your NEC is like your before-life except for two significant differences. In the NEC, like in your before-life, billions of years pass by without your knowledge "in no time at all," relatively and thus literally. But, unlike in your before-life, in the NEC you enter this state of timelessness after some final conscious moment, never knowing it was your last but wherein you are expecting another. Also, unlike your before-life, no event, like birth, ever occurs that would eventually terminate the timelessness, thus making the NEC timelessly eternal.

Next, the NEC is like each of the five scenarios described below, each providing a thought experiment that allows one to better imagine the NEC.

*Scenario 1.* You are totally engrossed in watching a movie. Then, without knowing, you unexpectedly, without any perceived drowsiness, fall asleep. For you the movie has been imperceptibly paused, while in reality (that for others) it continues on. Until you wake up, you still believe you are watching that movie. When you wake up, you are shocked that you fell asleep and that the movie has continued on.



But now suppose you never wake up. In your NEC, you would still believe — i.e., nothing would ever happen to change your awareness — that you are “watching that movie.”

*Scenario 2.* (Pick a phrase in the [ ]s, always before or always after the /.) You are having a [pleasant dream / nightmare]. You are [lying on the beach, engaged in a playful conversation with someone you truly love (but who may now be deceased) / being chased down a dark alley by a large, menacing looking man with a knife]. You awake [with a smile / terrified in a cold sweat but now extremely relieved it was only a dream].

Again, suppose you never wake up. In your NEC, you would still believe — i.e., nothing would ever happen to change your awareness — that you are either “lying on the beach, engaged in a playful conversation with someone you truly love” or “being chased down a dark alley by a large, menacing looking man with a knife.” You never know a dream has ended until experiencing an awake moment, but if you never do, what will ever happen to make you think the dream is over?

*Scenario 3 (a real, personal one).* Recently, I was angry at myself for buying a house on the beach as I saw the waves creep closer and closer to my back patio and realized my home would soon be flooded. I was at this house and very upset when I woke up. Then, I realized to my relief that I did not own that house, it had only been a dream. But where was I? It took me a while to get my bearings — i.e., to look around, access my memory, and figure out in which of my previous homes I was living. But what if I had never woken up?

*Scenario 4.* You are lying on an operating table with a mask over your nose and mouth. Someone has told you to count backwards from 100. You are counting out loud “93” then “92” but unknowingly never get to “91.” Instead, the next thing you know you are surprised to find yourself in a recovery room, perhaps with a loved one beside you.

But again, suppose you never wake up. In your NEC, you would still believe — i.e., nothing would ever happen to change your awareness — that you are at “92” counting backwards in that operating room. Analyzing the similarities of the general anesthesia experience with the NEC in more detail can be helpful in understanding the NEC, but this comparison, as with previous ones, offers insight only when analyzed from the perspective of what is in the mind of the experiencer, here the anesthetized person.

Continue to imagine you are this person and note that general anesthesia and the NEC share the following aspects, given in italics:

1. *Your last perceived moment includes an anticipation of more such moments to come.* When saying “92,” you anticipate as part of that moment saying “91”

in the next moment in the same room to the same people — even despite knowing that your experience here will soon end in an unconscious state.

2. *Your mind never gets the message that there will be no next moment similar to the last* (e.g., with anesthesia, that “you’ve passed out”). *So you continue to believe that a next moment will follow from the last* (e.g., that you will still be in that operating room with those people counting backwards from what will be “91”).
3. *You never lose your sense of self.* When you wake up, you never ask “Who am I?” (which is also true with dreaming and dreamless sleep). As James (1890/1977, pp. 31-33) eloquently explains (though here merely summarized), “it is *myself, I, or me*” that makes life’s “*stream ... of consciousness*” seem continuous to the mind despite many “*interruptions,*” i.e., “*time-gaps.*” About the general anesthesia type of time-gap, Hameroff (2017a) states “It’s still incredible that they’re awake, they go to sleep, and come back the same person.”
4. *You lose your sense of time.* Hameroff (2017b) states that patients under full general anesthesia experience no passage of time. *Even if you could experience nothingness, which you cannot, there would be no events and thus no time to do so.*
5. *You will not dream.* Hameroff (2017a) states that patients do not dream under full general anesthesia. Dreams are, however, possible when going into or out of full anesthesia, bringing scenarios like 2 and 3 into play.
6. *Your memory is taken offline. You are not “remembering” your last conscious moment, and you are not dreaming, so memory fragments need not be accessed* (Lewis, 2013). *Not only would accessing your memory take time but timelessness makes it purposeless.*
7. *Your last perceived moment does not seem timeless, which it is, but simply seems to remain the present.* It will seemingly remain the present forever if the anesthesia never wears off, there is no NDE, and you never wake up.

Evidence suggests that although dreams cannot occur during full general anesthesia, NDEs can (Greyson, Kelly, and Kelly, 2009; Hameroff, 2017a). This possibility as well as the many reports of NDEs from those not under general anesthesia lead to the final thought experiment.

*Scenario 5.* You are having what you will call your NDE should you recover. In this very profound, all too real experience, you are overcome by marvelous feelings of wonder, love, and contentment. You truly believe that you have arrived and are experiencing heaven, and you are excitedly anticipating the next moment and an eternity of joyful experiences.

If you never wake up, this is your NEC. You perceive nothing more, yet nothing less. Everything else that happens thereafter is totally irrelevant to you. Very relevant and *relative only to you*, however, is that the moment described above

goes on forever. Your NDE consciousness, your sense of self, and, if one exists, your soul have entered a timeless dimension. You are finally, fully, and forever “living in the moment,” the final moment of your NDE. You believe you are in heaven, and for all eternity you never know otherwise.

The above scenario and commentary depict a heavenly NEC and appear almost verbatim in Ehlmann (2016) to describe the natural afterlife. Indeed, this NEC is a natural afterlife. It and all of the NECs depicted by the thought experiments above reveal a phenomenon that is relativistic, timeless, and eternal. These and other NEC properties are discussed below as well as some aspects of the NEC theory that may not be obvious.

#### *Elaboration on NEC Properties and Theory Aspects*

*Relativistic, timeless, and eternal.* The relativistic aspect of the NEC cannot be overemphasized. Its properties must be seen from the proper frame of reference. Einstein’s special theory of relativity asserts that time is relative to an observer’s frame of reference, whether stationary or in motion. The NEC theory asserts that time is also relative to an observer’s frame of reference, whether living or dead. In life one perceives time as a marching parade of events that eventually must permanently end, whereas in death one perceives time as only a forever moment, though without perceiving it as timeless.

Humans have focused solely on the possibility of a time-perceiving, eternal consciousness that is perceived as such by everyone, the living and the dead. Therefore hidden from view has been a relativistic consciousness that is timeless, but *only to the living*, and eternal, but *only to the dead*. Lose sight of this relativity and you lose sight of the NEC.

The eventless, thus timeless, and eternal essence of the NEC also cannot be emphasized enough. Death is an event that is only perceived by others. At death, one is unknowingly eternally left in a timeless state — i.e.,  $\Delta t = 0$  (delta  $t$ , meaning change in time, equals zero). The loss of memory is irrelevant because memory is only necessary when time elapses, i.e., when  $\Delta t > 0$ . Nothing needs to be remembered over time, nothing needs to be sustained. Zero energy is needed.

Relativistic, imperceptibly timeless, and deceptively eternal are elusive concepts that must all be juggled at once to grasp the NEC. The interplay among these properties is addressed below in the context of the model and the “proof.”

*Logically consistent and optimal as a heaven.* Because  $\Delta t = 0$  for the NEC and one is just “living” in a moment, no decisions can or need be made, so free will, which could introduce imperfection or even evil, is not an issue. Also, in contrast to a time-perceiving, eternal ( $\Delta t = \infty$ ) consciousness in a *seemingly* perfect afterlife, one can never *become* bored.

Moreover, given an extremely intense and pleasurable final moment, both sensually and emotionally, the NEC provides an optimal (and thus *truly* perfect)

heaven (Ehlmann, 2016). Once optimal happiness is attained, more events are superfluous.

*Applicable to other creatures.* The NEC theory applies to any “creature with human-like time and conscious perception.” Extensive discussion of such applicability is unwarranted here. Noteworthy, however, is that McNally, Ruxton, Cooper, and Jackson (2013) indicate that the question is not whether many vertebrates perceive time as a sequence of events but at what rate they process and resolve these events, which they must do in discrete units given binary neural firing. Also, research shows that REM sleep, conducive to dreaming, occurs in higher-level mammals (Bekoff, 2012; Louie and Wilson, 2001) and that rats show a surge in electrical brain activity just before death, which is believed to be indicative of an NDE (Borjigin et al., 2013).

*Natural but nonexclusive.* The NEC theory uniquely labels the eternal consciousness it defines as natural because, unlike those of the other afterlife varieties that have been envisioned, its definition and explanation are within the scope of present scientific understanding. As a result, the theory provides religious naturalism (Crosby, 2002; Stone, 2008) with a naturally evolved and produced immortal consciousness and potential afterlife.

The theory, however, merely defines the NEC, implicitly claiming it as the default after-life. It does not deny the existence of a supernatural eternal consciousness or afterlife no matter how apparently illogical or (at least for now seemingly) unscientific. Such an eternal consciousness could be an after-death type of NDE or some other afterlife that immediately or later overrides the NEC — e.g., a reincarnation or a resurrection of body and soul.

### **Formal Definition of the NEC Based on the Lifetime-in-Eternity Model**

The lifetime-in-eternity model facilitates a precise and formal definition of the NEC and natural afterlife and also the deduction of the NEC theory as is given in the next section. The model accounts for every conscious moment of a lifetime and all periods of psychological timelessness within time eternal. This abstract model provides a representation of the last moment of the last event of the last conscious experience followed by the final period of timelessness, which is like all others within a lifetime except that it never ends.

Figure 2 is a state diagram that provides the model at the highest level of abstraction. It represents a life sandwiched between the before-life and the after-life. The model shows the major states of mind, both awake and not awake, and the events that cause the transitions between them. The states are represented by ovals and the events by arrows, both descriptively named. State names begin with a capital letter, event names with a lowercase letter. In the state After-life with NEC, brackets denote that the NEC *could* be perceived as a Natural Afterlife. A state can be internal to another state. A time-perceiving state has an event arrow that loops from and back into the state. The named event actually occurs one or more times within, i.e.,

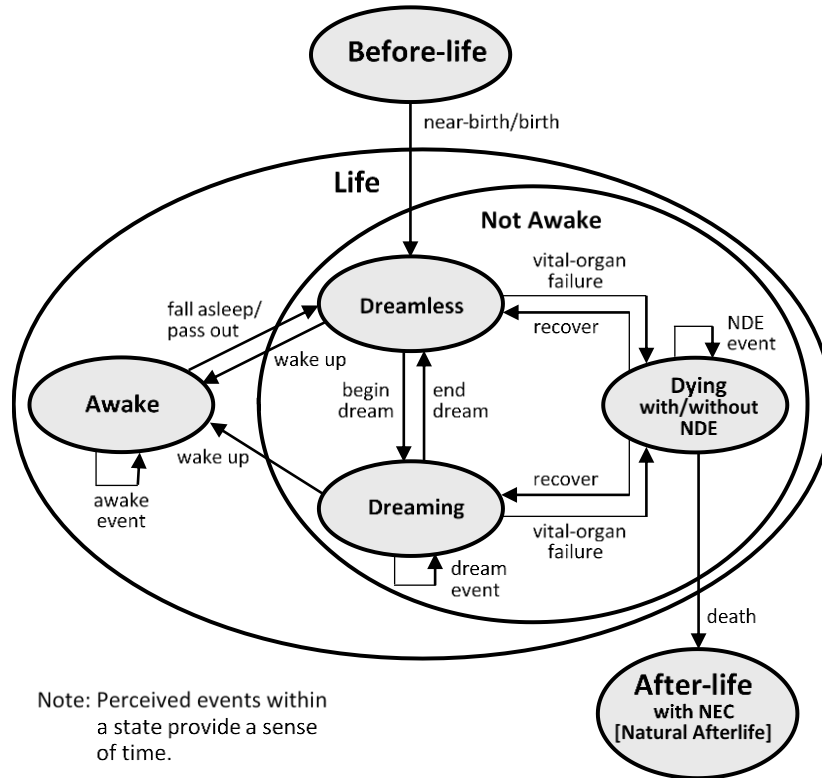


Figure 2: A state diagram providing the lifetime-in-eternity model at the highest level of abstraction. States of mind are denoted by ovals and state transitioning events by arrows.

internal to, the state. Time is perceived to flow within such states as these perceived events occur. Timeless states have no such looping arrows. The looping arrow on the Dying state is applicable only when Dying with NDE.

“Dying” and as well as the term “vital-organ failure,” the transitioning event into the Dying state, lack precise definition. The “vital-organ failure” event is assumed to be a point at which failure within some organ causes deterioration of brain cells and related brain functioning such that a person is now dying and “near to death.” The event causes a person to pass out if still awake and is such that the brain can no longer sustain a dream, though an NDE is still possible.

The statement below describes the NEC in a nutshell and can be used to stress its relativity in regard to its timeless and eternal properties and to further explain Figure 2.

You believe you are having an experience, and for all eternity you never know otherwise.

In the NEC, the believing that “you are having an experience,” with sense of self and all that the experience encompasses, exists only in your mind. It originates within the state Awake, Dreaming, or Dying with NDE depending on the type of experience. Its type and content is relative only to you. It is timeless, relative only to others, because with loss of consciousness you do not know that your experience has been “paused” in a present moment, whereas those living do. It is “for all eternity,” i.e., eternal, because with death the “you never know otherwise” extends beyond the originating state into the After-life with NEC state, transitioning via imperceptible events through one or more timeless states. For example, if you never wake up after a dream and have no NDE, an “end dream” event would transition you into the Dreamless state, “vital-organ failure” into the Dying without NDE state, and “death” into the After-life with NEC state. It is eternal, however, only to you, because those living know that your experience ended with death. Therefore, to you and only to you, your NDE is imperceptibly timeless and deceptively eternal, making it relativistic.

Figure 3 reveals the states and events internal to the Awake state. Three sub-states and six types of “begin-end” events reflect that when we are awake, our minds transition, seamlessly and imperceptibly, among reality, imagination, and rarely, hallucination. Therefore, in the Awake state we perceive time in terms of real events, imaginary events, and hallucinatory events, any of which can provide the final conscious moment for the NEC. Imagining can include daydreaming, recalling a past experience, or just being deep in thought, oblivious to real events.

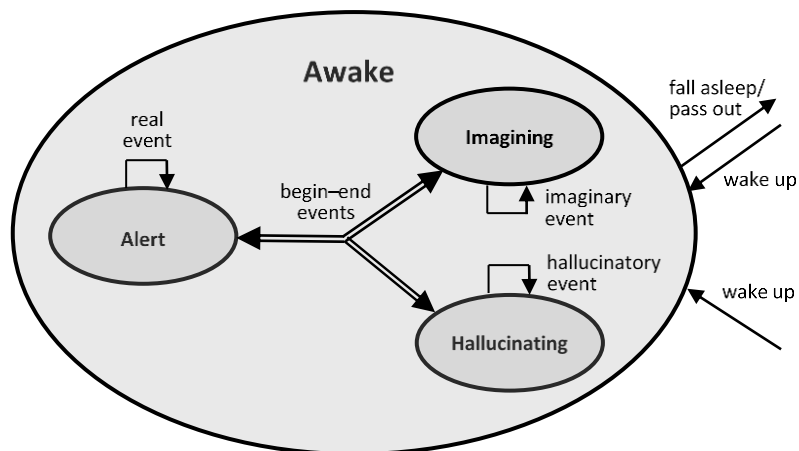


Figure 3: The states and transitions internal to the Awake state of Figure 2. Three sub-states are shown corresponding to three types of awake consciousness. Each state has two “begin-end” event pairs, each indicating transitions from (begin) and into (end) one of the other two states. For simplicity, all these events are shown as three two line arrows with a common starting point.

Figure 4 reveals the internals of the Dying state that are relevant to the NDE and to the discussion of the testability of the NEC theory. Three substates are identified. Without NDE is that wherein a person is not having an NDE. With NDE is that wherein a person is having an NDE. The Severely Failing Brain state reflects the fact that dying is a gradual process that can be viewed as ending only when no sign of brain activity can be detected. This state is entered when the deterioration of brain function is such that the brain cannot support an NDE. The event named “below  $minBF_{nde}$ ,” meaning below minimum Brain Functionality ( $minBF$ ) for an NDE, is this point in time.

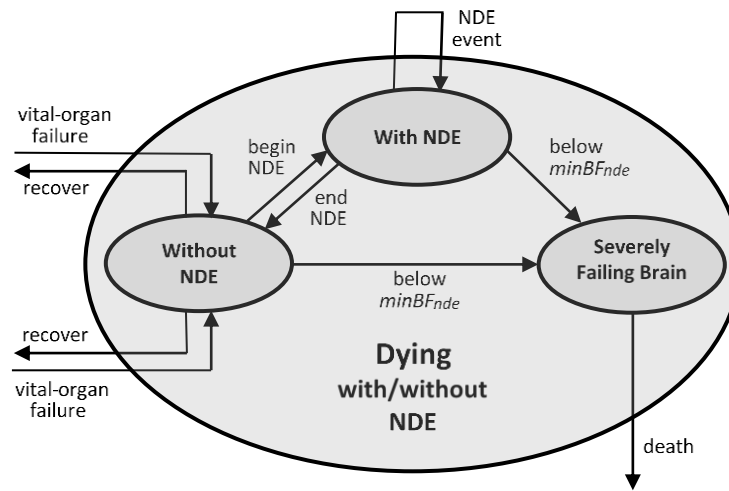


Figure 4: The states and transitions internal to the Dying state of Figure 2. The substates are shown that are relevant to the NDE and to the testability of the NEC theory.  $minBF_{nde}$  is the minimum brain functionality needed for an NDE.

The lifetime-in-eternity model shown so far describes a lifetime at the *event* level. Table 1 defines a formal notation, *NEC notation*, which extends the model by taking this description down to the level of a *moment* — i.e., breaking down life’s events into life’s moments. The NEC notation permits every conscious moment of a life and all periods of timelessness before, within, and after a life to be represented, though to do so would typically require billions of characters. The notation is defined using a technique normally used to define the syntax of formal languages. Its purpose is foremost to formally define the NEC and natural afterlife by putting them into the context of life and time eternal. Another is to stress that one’s final conscious moment as a perceived present is just like all of the other such moments in life that immediately precede periods of timelessness.





In the NEC notation, a lifetime in eternity is represented by symbols, variables, and 12 equations. In Table 1, Equation 1 defines an *Eternity*. Equations 2 to 11 define a *Life*, where 3 to 11 can be seen as defining the notion of the “moment train” as devised by Stroud (1955) — i.e., a sequence of discrete conscious moments.<sup>1</sup> Equation 12, the focus of attention going forward, formally defines the *NEC* and *Natural Afterlife* in the context of *Life* and *Eternity*. The equation is given below and hereafter referred to as the  $NEC_{FD}$  (NEC Formal Definition).

$$NEC [= \textit{Natural Afterlife}] = (m_r | m_i | m_h | m_d | m_{nde}) \sim \textit{Timelessness} \sim \textit{After-life}$$

The  $NEC_{FD}$  states that the *NEC* possibly (denoted by [ ]s) is (denoted by =) a *Natural Afterlife* and is that which follows. First is the final conscious moment in *Life*, i.e., a lifetime. This moment is represented by the variable  $m_r$ ,  $m_i$ ,  $m_h$ ,  $m_d$ , or (|)  $m_{nde}$ . Each type of moment ( $m$ ) — real ( $r$ ), imaginary ( $i$ ), hallucinatory ( $h$ ), dream ( $d$ ), or NDE ( $nde$ ) — encapsulates the sense of self and all sensory perceptions present within the respective type of experience at its end. It also includes present thoughts, beliefs, and emotions as well as others that linger from past moments (preceding  $ms$ ) that make up the current and previous events of the experience. One such belief is, to some extent, that of a future — i.e., future moments and events consistent with past ones and the now forever present one. Thus, in the mind of the dying person, the  $m$  in the  $NEC_{FD}$  essentially represents the experience itself at a point in time.

What follows and transforms the experience into the *NEC* is imperceptible eternal timelessness. First is the timelessness within one or more timeless states leading up to and including the Severely Failing Brain substate (Figures 2 and 4). It is denoted by *Timelessness* in the  $NEC_{FD}$ , where the first  $\sim$  denotes the initial transitioning event, e.g., “end dream.” Second is the timelessness of the After-life state. It is denoted by *After-life*, where the preceding  $\sim$  denotes the event “death.”

*Cognitively*, the timelessness in the *NEC* with its preceding conscious moment as the present throughout is the same as that which occurs often in life. In Table 1, Example (b), perceiving  $m_{nde}$  as the present in the *NEC*, denoted as  $m_{nde} \sim Tln \sim \textit{After-life}$  where *Tln* abbreviates *Timelessness*, is the same as perceiving  $m_d$  as the present within  $m_d \sim Tln$ , which is underlined in the table and denotes, in order, a last dream moment, an “end dream” event, and the timelessness that here precedes waking up.

### Validation

Can the *NEC* theory be validated? More specifically, can it be deduced based on presumed scientific knowledge, i.e., empirical “truths”? Relevant to claiming it a scientific theory, can it be verified or falsified by testing? Is it consistent with

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<sup>1</sup> In the *NEC* notation, subscripts identify the type of event, not its position in a sequence as in Figure 1.

and explanatory of other phenomena? First, to show it can be logically deduced, it is “proved” as would be a theorem.

*Proof*

The NEC can be inferred from three natural phenomena. One is the perception of time as dependent on, i.e., relative to, a perceived, ordered sequence of events — real or otherwise. Call this Event Relative Time. The second phenomenon is a consciousness, i.e., perception and awareness, that occurs *only* in discrete conscious moments, one present moment at a time, wherein past moments play a major role in shaping the totality of the present moment and a future moment is anticipated but not guaranteed. Call this Present Moment Consciousness. The third phenomenon is the inability to perceive the transition from a time-perceiving state into a timeless state. Call this Imperceptible Loss of Time. If each phenomenon is treated as a proposition, the NEC theory can now be logically stated as the conjunction ( $\wedge$ ) of these propositions as follows:

$$( \text{Event Relative Time} \wedge \text{Present Moment Consciousness} \wedge \\ \text{Imperceptible Loss of Time} ) \rightarrow \text{NEC} [ \wedge \text{Natural Afterlife} ]$$

To prove this statement true, one must show that all three propositions and the implication ( $\rightarrow$ ) are true, i.e., empirically true. The [ ]s again denote the possibility of a Natural Afterlife, which is addressed in more detail below.

The propositions Event Relative Time and Present Moment Consciousness are generally accepted as true and have so far been assumed to be true in this article. Indeed, their truth is well established by science and philosophy. To elaborate on this point, the next three paragraphs digress a bit from the proof.

Einstein posited that time itself “has no independent existence apart from the order of events by which we measure it” (Barnett, 1964, pp. 19, 47), though only the *perception* of time is relevant to deducing the NEC theory. Philosophy describes this perception as “changes or events *in* time” and our perceptions of “their temporal relations” (Le Poidevin, 2015). The previously given definition of time perception as a field of study indicates that “within psychology and neuroscience” the “experience of time” is related to “the indefinite and continuous unfolding of events.”

The dependency of time perception on events implies that when we cannot perceive events within a state of mind, e.g., dreamless sleep, we simply encounter timelessness. We do not experience nothingness as that would take time. We only lose our sense of time but do not lose one very important thing: our sense of self. To be clear, in a timeless state of mind, our sense of self is lost (or more precisely, inactive) *to the living* (i.e., in their reality), but *in our mind*, i.e., psychologically, we never lose it. It was present in the last event perceived before entering the

timeless state; nothing happens in the timeless state to tell us we have lost it; so, it becomes timeless until another event is perceived.

Regarding Present Moment Consciousness, as early as the third century B.C., the Abhidharma Buddhist school posited perception as occurring only in discrete conscious moments, which it called *dharmas* (Ronkin, 2014). According to Herzog et al. (2016), this viewpoint was first reflected in Western science when von Baer (1862) “coined the term ‘moment’ as the border between the past and the future.” Reflecting current science, Herzog et al. state the following:

We experience the world as a seamless stream of percepts. However, intriguing illusions and recent experiments suggest that the world is not continuously translated into conscious perception. Instead, perception seems to operate in a discrete manner, just like movies appear continuous although they consist of discrete images. (Herzog et al., 2016, Abstract)

Research (e.g., Elliott and Giersch, 2016; Herzog et al., 2016) indicates this “seamless stream of percepts” is processed unconsciously and rendered into a new discrete conscious moment — also referred to as a “psychological moment,” “time slice,” or “snapshot” — roughly every 50 milliseconds. Each such discrete, unchanging moment must include many conscious elements so as to produce experiences in the mind that “just like movies appear continuous.” Imagine a science fiction selfie. It would capture not only a visual of you and your surroundings but *all* of your sensual perceptions, even odors, as well as your sense of self, point of view, occurrent beliefs, emotions, etc. It is capturing a present conscious moment, an experience frozen in time. Such a moment is one’s consciousness at a point in time. *One is aware of only what one perceives in these moments.*

Now, to prove the implication ( $\rightarrow$ ) true, assume for now that Imperceptible Loss of Time is true. Given Event Relative Time, at some point in dying one perceives a final awake, dream, or NDE event (possibly interrupted) and transitions forever into timelessness (modelled in Figures 2 and 4 as a sequence of timeless states ending with After-life and denoted in the  $NEC_{FD}$  by *Timelessness* and *After-life*). Assuming Imperceptible Loss of Time, within this timelessness one is not made aware by any transitioning event into any timeless state and so remains unaware that the final perceived event was final — not by the first transitioning event (the first  $\sim$  in the  $NEC_{FD}$ ) nor by any later one including “death” (the last  $\sim$  in the  $NEC_{FD}$ ). Hence, given present-moment-consciousness, nothing — i.e., no subsequent present moment of an event — ever changes one’s unawareness that one’s final present conscious moment (denoted by  $m_r$ ,  $m_i$ ,  $m_h$ ,  $m_d$ , or  $m_{nde}$  in the  $NEC_{FD}$ ) of one’s final perceived event was indeed final. Hence, *relative to one’s perception*, one’s final static conscious moment, embodying an experience, is not only imperceptibly timeless but when followed only by timelessness, is deceptively eternal and is thus an NEC. Therefore, assuming no startling interactions among the three empirically true propositions, i.e., the causal phenomena, the implication ( $\rightarrow$ ) is true.

Only Imperceptible Loss of Time, as restated below as a lemma, remains to be proven:

Lemma: The transition from a time-perceiving state into a timeless state of mind is imperceptible.

This lemma is true because clearly no perceived event in the ensuing timeless state signals the transition (since the states are timeless) and, as now argued, all events transitioning into timeless states (Figures 2 and 4) are imperceptible on the basis of human experience and what is impossible given present scientific knowledge. To begin with, human experience confirms that one never perceives

1. falling asleep, i.e., the “fall asleep” event;
2. passing out from fainting, drugs, trauma, or medical condition, i.e., the “pass out” event;
3. ending a dream, i.e., the “end dream” event; and
4. ending an NDE, i.e., the “end NDE” event.

Regarding 1 and 2, though one may be groggy or with head trauma “see stars,” one only realizes the event occurred upon waking up — as in “I must have passed out” but never “I’ve passed out.” Regarding 4, though many recall the final moments of their NDE upon recovery (even being told something like “you must return now”), they do not report any kind of perceived moment signaling its end (Holden, Greyson, and James, 2009a; Long with Perry, 2010; Moody, 2001).

The remaining two events that may initiate or transition one through the timelessness leading up to death are “vital-organ failure” and “below  $minBF_{nde}$ .” These purely physiological events are imperceptible almost by their definitions. The first signifies deterioration in brain function to such a level that dream events are impossible (even more so, awake events), and the second signifies further deterioration such that NDE events are impossible. How, therefore, are events like these to be perceived in an unawake state when such brain deterioration levels are reached (i.e., when there can be no  $m_r$ ,  $m_i$ , or  $m_h$ ; no  $m_d$  in the case of “vital-organ failure”; and no  $m_{nde}$  in the case of “below  $minBF_{nde}$ ”)? Also, no evidence exists that these two events have ever been perceived by anyone who has recovered from the ensuing timeless states.

The argument just given applies even more so for the event “death” except that the “no evidence exists” claim is clearly baseless, but the inability to perceive the moment of death — i.e., the proposition of an *imperceptible death* — seems especially true given that brain function has deteriorated even more below the minimum at which NDE moments are possible. In fact, death *is* imperceptible when “death” is defined as *brain death*, which is the “complete loss of brain function” (Martin, 2017). With zero or near zero function, the brain would have to produce a scientifically unexplainable, thus supernatural, kind of consciousness

at or just before death providing a perceptible event ( $e_{death}$ ) and moment ( $m_{death}$ ) that would somehow signal death.

One last event must be analyzed for which a “no evidence exists” claim *seems* baseless: the “end NDE” preceding death. Inconsistent with human experience and scientifically unexplainable is how this event — unlike the “end NDE” preceding a near-death recovery, the “end NDE” ending the rare NDE unrelated to near death, and the everyday “end dream” event — would cognitively signal a transition into timelessness. Could it, however, signal the loss of self and the nothingness of death? If so, how? Consistent and explainable is simply that an NDE imperceptibly either ends naturally before the “below  $minBF_{nde}$ ” event or “freezes” at this event because the next NDE moment, i.e., “frame,” can simply no longer be produced or “displayed.”

Hence, by thorough analysis and reasoning, Imperceptible Loss of Time is true. Therefore, the NEC theory is “proved,” i.e., deduced from empirical truths. ■

To those with a firm belief in “nothingness” after death: indeed, *after* our last conscious moment, from a material perspective we lose all awareness (perceive nothing new), then lose all memory and capacity for any nonsupernatural awareness ever again, but from a psychological perspective — i.e., *the perspective of only what our minds perceive* — we perceive at some point in time  $t$  the last conscious moment of some experience, never perceiving it as our last. Then, for all time  $> t$ , we are unaware, i.e., *never perceive*, that the experience is over. Therefore, as deduced above, from our mind’s perspective the experience *at time  $t$*  is, as stated before, imperceptibly timeless and deceptively eternal. It is an illusion, but to the dying person, it is real.

### *Testability*

Unlike all other claims of an eternal consciousness or afterlife, the NEC theory can be verified or falsified by testing, because the NEC exists *before* death and does so psychologically. Moreover, the nearer to death that it is verified by testing, the more certain it is subjectively eternal because as brain function decreases to zero, the probability of any materially supported conscious moment that would change awareness — perhaps cognitively signaling the end of an experience, the onset of timelessness, or even a before-life kind of nothingness — decreases to zero.

The NEC theory is actually empirically supported every time one awakens *instantly* surprised when one’s first conscious moment is inconsistent with the last, as in waking up after a dream. Here, as in all awakenings, one’s last experience — awake, dream, or NDE — has been curtailed with its last moment still present in the mind. Important to note is that this last moment is often overwhelmed by initial awake events and readily forgotten, particularly when last experiences are mundane, as in falling asleep in one’s bed as intended. Nevertheless, the

permanency of the last present moment in the mind, cognitively (versus materially) and deceptively, through periods of timelessness, including those ending in death, can be scientifically verifiable (or falsifiable) by future neurological and/or psychological studies. Especially relevant would be further studies involving NDE experiencers (NDErs) and other near-death survivors ( $S_{ndS}$ ).

Such studies are possible because of the near certainty that a person never dies during an NDE. Instead, as indicated in Figure 4 and by the  $NEC_{FD}$ , a span of time follows the last conscious NDE moment and precedes “death.” This span is timeless to the dying person and occurs within the “Severely Failing Brain” state, which ends only after *all* brain activity has ceased. Detailed monitoring of electrical brain activity in dying rats (Borjigin et al., 2013) and people (Chawla et al., 2017) have supported the existence of this state as the time between the end of a sudden spike in such activity, believed indicative of an NDE, and death. Such monitoring and its correlation with some measure(s) of brain functionality ( $BF$ ) will only improve and become more commonplace with continuing breakthroughs in neuroscience and technology.

Offered below is a description of one possible research study that could further verify the NEC theory or could falsify it.

1. Brain activity and function for many dying patients would be closely monitored.
2. Monitoring and interviews with  $S_{ndS}$  would reveal: the NDEr survivors ( $S_{ndeS}$ ); for each  $S_{nd}$  the minimum recorded  $BF$ , i.e.,  $minBF_{nd}$ ; the signature brain activity identifying the time period of an NDE; and for all NDEs the minimum  $BF$  seen just before NDE activity ceases — i.e., the  $minBF_{nde}$ , which corresponds to the “below  $minBF_{nde}$ ” event and the  $BF$  needed for an NDE moment ( $m_{nde}$ ).
3. Neurological studies would also reveal the minimum  $BF$  needed for the other types of conscious moments ( $m_r$ ,  $m_i$ ,  $m_h$ ; and  $m_d$ ). All of these  $BF$ s should be found greater than  $minBF_{nde}$ , meaning that the onset of timelessness or even a premonition of death cannot be perceived with normal consciousness in the Severely Failing Brain state, which is consistent with the NEC theory.
4. *The following finding would support the Imperceptible Loss of Time proposition and therefore the NEC theory: no  $S_{ndS}$  report an event that signaled timelessness or the nothingness of death — including  $S_{ndeS}$  with  $minBF_{ndS}$  above and perhaps some below  $minBF_{nde}$  — providing evidence for the imperceptibility of the “end NDE” and the “below  $minBF_{nde}$ ” events, respectively.*
5. Instead, some  $S_{ndS}$  report they had perceived such an event. *This finding would falsify the Imperceptible Loss of Time proposition and thus the NEC theory, at least for some. If such an event always occurs at some  $BF < minBF_{nde}$  (though seemingly inconsistent with number 3), the theory would be falsified for all.*

Note that any perceived “nothingness of death” by a  $S_{nd}$  would be *near* nothingness as it would include self and would be just a premonition — premature, wrong, and thus highly unlikely. Also, memory loss in the Severely Failing Brain state is certainly imperceptible and so, though it may prevent later recall of an NDE after awakening, it cannot psychologically undo the present NDE conscious moment and coexisting belief that the NDE has not ended. Figure 5 shows that *remembering* a final present moment (e.g.,  $m_{nde}$ ) experienced just before *Timelessness* is not an issue unless one wakes up and it is supplanted by a new present moment (e.g.,  $m_r$ ).

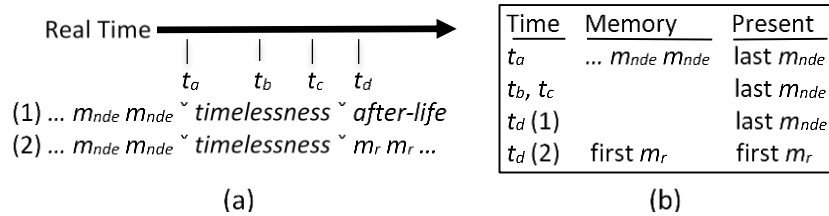


Figure 5: (a) depicts two scenarios for NDEr  $P$ : (1)  $P$  dies and is dead at time  $t_d$  and (2)  $P$  instead recovers and perceives real moment  $m_r$  at  $t_d$ . For both (1) and (2), assume  $P$  enters the Severely Failing Brain state at  $t_a$  and at  $t_b$  loses all memory. (b) shows a table listing for times  $t_a, t_b, t_c, t_d$  for (1), and  $t_d$  for (2) the moments in  $P$ 's short-term “Memory” and the moment that  $P$  perceives as the “Present.”

*Explanatory Power*

The NEC theory explains the natural afterlife by placing it in the framework of a more general theory based on the psychology of time and conscious perception. Thus, the theory of a natural afterlife is now a corollary of the NEC theory, which states that the natural afterlife results when the NEC content is perceived as an afterlife, which is often the case with an NDE.

The theory of a natural afterlife explains at least one purpose for both dreaming and NDEs plus yet another for NDEs. Both experiences provide the means for staging a nonreal yet realistic, spiritual production within an altered conscious state of mind that provides the final moment of an experience that may be perceived by the dying person as an afterlife — amazingly, a logically consistent one at that. The NDE’s other purpose related to the natural afterlife is to provide this moment very near to death in an extremely intense, “even more real than real” manner (Brumfield 2013; Noyes, Fenwick, and Holden, 2009; Thonnard et al., 2013). How better to imprint the moment into the mind so that it will be a truly forever “unforgettable” present?

Indeed, some scientists (e.g., Mobbs and Watt, 2011) believe that our brains, as they shut down, have a natural propensity for producing NDEs. The scientific explanations for this propensity — essentially brain physiology — have been

reported by many articles in popular scientific publications (e.g., Choi, 2011; Hill, 2012; Shermer, 2013). Also, a more recent article reported that an end-of-life electrical surge of unknown cause, perhaps indicative of an NDE, was commonly detected in the brains of a sample of critically ill patients who died (Chawla et al., 2017). Thus, the NDE and perhaps some dreams facilitate the natural afterlife, and coming full-circle, may explain the purpose (if not the mere natural consequence) of the more general NEC.

### **Vast Variation in the NEC Experience**

For centuries humans have considered just two main possibilities for what awaits us at death: nothingness, like that of our before-life, or some type of supernatural afterlife. The NEC provides possibilities *close to* both as well as a continuum in a variety of timeless, never-ending experiences in between — from heavenly to humdrum to hellish. Whether an NEC is an “afterlife” is subjective, depending to some extent on its content and intensity and to a large extent on “the eye of the beholder.” This section discusses some possible variations in NEC experience, beginning with near nothingness and ending with an optimal heaven. Variations in the NEC experience can be seen when one simply considers the kinds of experiences that often occur in life before one transitions into timelessness and imagines what one’s final moment could be like.

First, consider the ordinary, dull, and emotionless moment that one often experiences just before falling asleep each night. As we lie in bed, this moment embodies our sense of self in all its facets and an awareness of our surroundings, but we may see nothing, hear nothing, smell nothing, taste nothing, and may physically feel nothing. We may, however, see darkness behind our eyelids if we focus on it, differentiating it from self. This moment is not nothingness as we are aware of three things: our self, our surroundings, and the darkness. Alternatively, our mind is focused on some trivial dispassionate thought so that we do not take notice of the darkness and thus do not perceive it. In either case, if and when we awake, we do not dwell on our final awake moment because (1) it was not extraordinary (unless our first awake moment presents something unexpectedly different from that embodied in our last moment, e.g., we wake up in a different room) and (2) the new present moment gets our immediate attention. If, however, we never wake up and never have a new present moment, this awake and final moment is our NEC, which can be seen as near nothingness. This NEC is what people can now view as simply “dying in your sleep.”

Obviously many variations are possible for one’s awake and final moment before falling asleep, each providing a different NEC. First, “dying *peacefully* in your sleep” would be almost like near nothingness but, quite significantly, one’s final moment (and thus NEC) would include the feeling of peace and contentment. Second, one can literally or figuratively “cry oneself to sleep,” or third, fall asleep happy and



content in someone's loving arms. If one never wakes up from these experiences, one's final moment is the NEC, complete with the associated emotions. Fourth, as in a previous thought experiment, one's final moment could involve a scene from a movie. Fifth, the final moment could involve being at a party. If we fall asleep at a party and wake up some hours later, we immediately wonder "Where have all the people gone?" If you never wake up, they will still be there in the NEC.

Consider other awake experiences, first, a drug hallucination. Who knows what a final hallucinatory moment will encompass? Second, consider the moment just before one passes out from some traumatic experience, like an accident. Will this perhaps terrifying moment become the NEC? Or will it, as often occurs after waking up from such an experience, have been graciously replaced via amnesia and a "rewind" (↔) to some prior present moment? Third, consider the final moment of a visionary kind of an end-of-life dream and vision (ELDV). Vivid and meaningful ELDVs have been recorded throughout history, and a recent research study found them to be common. This study — the results of which were published by Kerr et al. (2014) and reported on by Hoffman (2016) — also found that comforting perceptions of meeting deceased loved ones within ELDVs were more prevalent as participants approached death.

Any of the final awake moments described above could later be overridden by the dream kind of ELDV. The content and intensity of a dream are usually totally beyond one's control, and the experience and final dream moment they provide can be very realistic, sensual, and emotional. Although the sensory perceptions and events within dreams are not real in a material sense, the very intense emotions they can invoke are real (McNamara, 2014; van der Linden, 2011), causing people to wake up from dreams still feeling the emotions they experienced, e.g., fear. These emotions and the whole dream experience that is interrupted by death "live on" in the NEC, and emotions are what may be foremost in the mind and the most momentous.

Any of the final moments described above, as well as the one just before passing out during the administration of general anesthesia, could later be overridden by an NDE. Everything stated above about a dream and its final moment is true for an NDE. The NDE, however, can be even more realistic and intense than a dream, so much so that studies have shown that many NDErs claim their NDE was not a dream (Long, 2008). Studies have also shown that NDEs often have a more lasting impact on NDErs than do dreams (Noyes, Fenwick, and Holden, 2009). It should be comforting to know that studies have also shown that the heightened emotions that are most often invoked within NDEs are love, joy, and a feeling of peace (Kellehear, 2009; Zingrone and Alvarado, 2009). Also comforting to know is that no matter how tragic and sudden a death, the incredible processing speed of the brain, 30 times faster than the fastest supercomputer by one estimate (Hsu, 2015), could allow an NDE to be produced in nanoseconds (i.e., billionths of a second).

Any of the final moments described above may provide the NEC experience, but when is this experience, i.e., the NEC, a natural afterlife? The more restrictive, yet simple answer is that the NEC is a natural afterlife when the beholder, the dying person, perceives it as an afterlife. That is, the NEC experience is such that it conforms to one's view of what an afterlife could be like. The less restrictive answer is that the NEC is a natural afterlife when its extraordinariness and intensity, emotionality, and/or sensuality are such that the beholder is completely captivated in it. Implicit in both answers is the prerequisite that nothing in the experience makes the beholder doubt that it will continue on forever, like an expectation of death at any moment, or doubt that it is real. Though some may quibble with ever calling the NEC a life because it has no events, remember that the dying person does not know this, so it is a life to that person, which in the end is what really matters.

Although the natural afterlife could result from an ELDV, it is the NDE that often delivers what many NDErs view as an afterlife, either heavenly or hellish. Many therefore view the NDE as an after-death experience. Of course, what one "views as an afterlife" may be greatly influenced by religion. Masumian (2009) summarizes the afterlife teachings of most of the predominant world religions and states that close examination of these teachings "reveals striking parallels between religious and near-death experience (NDE) accounts of [the] afterlife" (p. 159). Masumian goes on to state that "Scientific investigation of NDEs is now beginning to offer tangible evidence for postmortem survival of some as yet unknown entity in humans" (p. 182) and later calls this unknown entity a "postmortem consciousness" (p. 183).

### Conclusion

The NEC provides this "postmortem consciousness," the holy grail for many NDE researchers. These researchers, however, especially those who view NDEs as *after-death* experiences, have probably only been seeking an event filled postmortem consciousness that would be recognized as such by everyone if only living humans could peer beyond death. They have probably not considered a relativistic and timeless eternal consciousness and afterlife that only materially exists *before* death but is perceived by and only by the dying person as eternal and possibly postmortem, yet is not perceived as timeless.

The major contribution of this article is that it describes such a consciousness and afterlife and shows that neither is supernatural. They are natural in that they are supported by human experience and widely accepted principles in psychology within the fields of time perception and conscious perception. The NEC theory has been shown to be deducible, empirically based and testable, and possibly explanatory of a purpose for dreams and NDEs.

Another contribution of this article is that it shows that there is no before-life kind of nothingness after death — what emerges is instead, by default, a conscious

moment, minimally including self within some context. Simply put, your NEC is you believing you are experiencing all that is within this moment and never knowing otherwise. If one still protests “But you can’t *believe* you’re experiencing anything because you’re dead,” one must answer two questions: “When did you stop believing?” and “Cognitively, precisely what made you do so?” with a big emphasis on “you,” the dying person.

Another way to view the NEC is as a scrap of leftover consciousness that is not biodegradable. One’s last conscious moment is such because, unlike all the other gazillion moments in life, its presence in the mind never gets supplanted by another and remembrance never fades as forgetting takes time. Therefore human-like consciousness once embodied within time is never obliterated but only made psychologically timeless when its physical embodiment is no more.

Is the content of this disembodied consciousness beyond one’s control? Seemingly largely so, especially given the possibility of an ELDV or NDE. Is it to be determined only by chance? Whether one’s after-life, an NEC by default, is naturally deterministic or nondeterministic or controlled by a god remains a mystery and a matter of faith. The NEC phenomenon therefore changes little except to make a nonsupernatural kind of heaven (and hell) now a real possibility. To opine philosophically in closing, what seems prudent given the NEC is at least to form a self that one is happy to live with *forever* and to lead a life that allows one to be content and peaceful in one’s last wakeful moment. Anything beyond that involves unselfish love and trust.

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