

**RESEARCH PAPER****Review of "Fractal Time: The Secret of 2012 and A New World Age" by Gregg Braden****Gabriel Kabanda**

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Email: gabrielkabanda@gmail.com, profgkabanda@hotmail.comReceived: 2nd April 2017, Revised: 11th April 2018, Accepted: 14th April 2018**ABSTRACT**

The review below presents a synopsis of the content, style and merit of the book on "Fractal Time: The Secret of 2012 and a New World Age" by Gregg Braden (Braden, G., 2009). Our spiritual relationship with God and the universe all appear to be directly influenced by the planetary changes that are being documented now by the best science of today, and supported by various patterns of war and peace. Braden was totally convinced that the Time Code works. Braden posits that time based patterns can be discerned and plotted using his Time Code whether they are grand scale effects emanating from the Big Bang or a more personal scale charting repetitive patterns of setbacks, opportunities and triumphs in one's own life. Gregg Braden himself admits that his book is not scientific. The Maya calculated the end of time and inscribed it as a permanent record for future generations about 2000 years ago. The shift of world ages has been experienced by only five generations in the last 26,000 years, and we will be the sixth. Braden believes that we are living the end of time defined by a 5,125 year cycle of time where the present world age began in 3114B.C. The earth and our solar system complete a cycle every 5,125 years through the heavens.

Key words: Fractal Time, New World Age, Gregg Braden

ANALYTICAL EXPOSITION

The review below presents a synopsis of the content, style and merit of the book on "Fractal Time: The Secret of 2012 and a New World Age" by Gregg Braden (Braden, 2009). The book dwells on the subject of time-cycles in a very fascinating manner. Braden believes that we are living the end of time defined by a 5,125 year cycle of time where the present world age began in 3114B.C. and was destined to end in A.D. 2012. The ancient traditions called this the great cycle. The end of time was confirmed by the epic poems of India's Mahabharata, the oral traditions of indigenous Americans and the biblical story of Revelation, those who have come before us knew that was coming (Braden, 2009). The earth and our solar system complete a cycle every 5,125 years through the heavens. At least four such cycles were marked by the changes in global magnetic fields and climate, diminishing resources, and rising sea levels that come with the end of time. The shifts of world ages have been experienced by only five generations in the last 26,000 years, and we will be the sixth.

The Maya calculated the end of time and inscribed it as a permanent record for future generations about 2000 years ago (Braden, 2009). The last day of the present world age is written as a five-part code using the format of the ancient Long Count calendar, which reads from left to right. The leftmost is the baktun which represents 144,000 days. Moving right, the katun corresponds to 7,200 days; the tun, 360 days; the uinal, 20 days; and the kin, 1 day. With this code in mind, the Mayan calendar placed the end date of our age at 13.0.0.0 (13 baktun cycles, and 0 cycles for the rest of the units). When the date is translated to our familiar system of time, the message is decoded to conclude with the winter solstice that was scheduled to take place on December 21 in the year 2012 (Braden, 2009).

Time Code 1 demarcates the completion of a 5,125-year-long cycle of time, which the ancient Maya calculated would end with the winter solstice on December 21, 2012. It is believed that this was witnessed by one world age that lived in the year 3114 B.C., approximately 1,800 years before the time of Moses and the biblical Exodus. Our spiritual relationship with God and the universe all

appear to be directly influenced by the planetary changes that are being documented now by the best science of today, and supported by various patterns of war and peace (Braden, 2009).

Time Code 2 represents the repeating nature of cycles where the close of one world age is the beginning of the next. To get to the beginning of what's new, the cycle must pass through the end of what exists. This is like the seasons of the year and phases of the moon. The Mayan ancestors recognized the nature of time's cycles long before science described the journey through the heavens, and their timekeepers preserved what they knew and incorporated their knowledge into stories about the universe and life. These were nonscientific descriptions of creation and destruction, birth and death, beginnings and endings (Braden, 2009). It appears though that ancient predictions for our time in history describe an age filled with an epic "darkness". The physical explanation is that our solar system is moving through the shortest part of an orbit that looks like a flattened circle, an ellipsis whose far end carries us to the most distant point from the core of our home galaxy, the Milky Way. It is believed by both ancient traditions and modern science that our location in this cyclic orbit determines how we experience the powerful sources of energy, such as the "massive magnetic fields," which radiate from our galaxy's core (Braden, 2009). The Earth's position (orbit, tilt, and wobble) is confirmed by the ever-changing cycles that influence everything from temperature and climate to polar ice and the planet's magnetic fields.

The experience of separateness is credited with our sense of being lost, as was experienced by the traditions of the Hopi and the ancient Vedas. "Archaeological discoveries of an advanced civilization located in the Indus River valley between what is now India and Pakistan seem to support the Hopi myths, as well as those of the 100,000-line epic of the Hindu Mahabharata" (Braden, 2009). The ancient civilizations, such as the Hopi, Hindu, and Mayan cultures, generally agree when it comes to the cyclic nature of the universe, but differ in specifics. They agree that at least three worlds have existed and were destroyed, before the one we are living today. However, what distinguishes the calendar of the Maya apart from the oral traditions, such as the Hopi, is that their timeline for the shift ends on a specific date, and their system of calendars accurately identifies the alignment that marks the shift, a rare astronomical configuration that has been confirmed by modern computers. Just in the way the equator of the earth divides the Northern and Southern hemispheres, so does the equator-like line that we cross in the Milky Way separates the "top" of the galaxy's disk from the "bottom." As the planets of our solar system line up with one another and our sun, our crossing of the galaxy's equator also aligns us with the mysterious source of energy that lies at the heart of the Milky Way. This alignment and the conditions that it creates signal the completion of the great cycle, as indicated by the Mayan calendar (Braden, 2009). According to Braden (Braden, 2009), can only understand how cycles relate to life by crossing the fuzzy line that has traditionally separated science from the spiritual traditions of our ancestors.

Braden took note of Time Code 3, which stipulates that new discoveries show that we can think of time as an essence that follows the same rhythms and cycles that govern everything from particles to galaxies.

This is acutely different from Time Code 4, where can think of the things that happen in time as places within cycles-points that can be measured, calculated, and predicted. With Time Codes 3 and 4 in mind, we have the reasons and the tools to think of time in a powerful new way (Braden, 2009). Time Code 5 states that if we know where we are in a cycle, then we know what to expect when it repeats. Time Code 6 provides for the Time Code Calculator, which shows us when we can expect the conditions of the past to repeat, not the events themselves. Based on repeating cycles of time, the Time Code Calculator clearly identifies the two dates when the conditions for such an attack would be present following the seed event in 1941 (Braden, 2009). Braden questioned whether the past really holds a blueprint for the future, as he could not understand the mysterious end date of the Mayan cycles. The seven chapters in the book provide a powerful and practical way of thinking about the relationship between humankind and time, history, and the future. However, the book is not a science publication. Fractal Time is the result of more than 20 years of research by the author (Braden, 2009).

CRITICAL CONTEXT

Chapter one of the book is on the Time Code Program. A woman's menstrual rhythm, for example, is governed by a 28-day cycle that is also linked to the cyclic phases of the moon. For each day our bodies follow the rhythms of a 24-hour period (the circadian cycle of light and dark), which regulates such things as when we sleep, when we are alert, and when we're hungry (Braden, 2009). Although the reality of the firefly code may not have materialized, the idea that time itself could be part of nature's code did (Braden, 2009). Braden presented the key to the success of the Elliott Wave Principle, one of the most successful market-prediction tool in the history of the New York Stock Exchange, which has two basic assumptions: (Braden, 2009)

1. The market will always advance and decline in precise intervals-the "waves" of the Elliott Wave theory.
2. If you know where the advance begins, you can calculate when and how often the declines will occur.

The key is that time repeats in cyclic patterns and that each repetition is similar to the last (fractal), with a greater intensity. The Time Code program can be used in three different ways to reveal the cycles of specific events (Braden, 2009). These are:

- Mode 1, which tells us when we can expect the conditions for something that has happened in the past to occur again. For the events of September 11, 2001, the author used Mode 1.
- Mode 2, which tells us which date in the past holds the conditions we can expect for the future
- Mode 3, which tells us when we can expect the conditions of a personal experience, either positive or negative, to repeat in our lives.

According to Emane (2016), Time code 1 says that we are living the completion of a 58,185-year-long cycle of time- a world age that the ancient Maya calculated would end the winter of the solstice on December 21, 2012. We are living the end of time, not the end of the world as a lot people predicted, but the end of a world age. Emane (2016) asserts that Time code 2 states that our ancestors recorded their experience of the last end of time showing beyond a reasonable doubt that the close of one world age is the beginning of the next, and not the end of the world. Somewhat, it might be unbelievable that cycles exist and can repeat in our lives or whatsoever (Emane, 2016).

Braden was totally convinced that the Time Code works (Braden, 2009) as evidenced by the following:

1. Based upon a documented seed date, when the conditions of "surprise" and "attack" were set into motion, the Time Code formula successfully identified the next two times when America could expect those conditions to repeat themselves.
2. On both of the predicted dates, a plan to surprise and attack America actually existed.
3. On one date, the plan was actually carried out.

Chapter Two of the book is on Our Journey Through Time (Braden, 2009).The Hindu religion believes that the Cosmos itself undergoes an immense, indeed an infinite, number of deaths and rebirths. In line with Time Code 7, the ancient traditions divide Earth's 25,625 year orbit through the 12 constellations of the zodiac, the precession of the equinoxes, into five world ages lasting 5,125 years each (Braden, 2009). For every 5,125 years, the natural changes in Earth's position in space create an astronomical alignment that signals the end of one cycle around the galaxy and the beginning of the next. The ancients called the periods of time between such alignments worlds or world ages. It is not not the planet itself that ends, but our location in an orbit that changes. Just as the end of the night is a necessary part of our 24-hour day and makes the day that follows possible, the end of one age is a necessary part of our 5,125-year cycle that gives birth to the next (Braden, 2009). Time Code 8 states that position of the earth within our galaxy creates powerful changes that signal the end of one world age and the beginning of the next. The knowledge of these cyclic changes is known as the doctrine of World Ages (Braden, 2009). Vedic scholars agreed that there are four yugas contained within each cycle, where each cycle has a specific quality that it brings to the age when it appears. Each of these qualities describes a form of self-realization that relates to Earth's position in the heavens. It, therefore, follows that the closer we are to our galaxy's core, the

greater our degree of enlightenment. We must make greater efforts to find our personal enlightenment at the most distant portions of our orbit (Braden, 2009).

Chapter Three of the book is on The End of Time. Albert Einstein (1879-1955), the physicist, was quoted saying "By examining these core [Mayan] traditions, we can reconstruct and revive the original 2012 revelation" (Braden, 2009). Over the centuries that followed the last shift of world ages, the themes of what happened then, and humankind's response to it, have been incorporated into myriad religious and spiritual practices. As diverse as they appear, the common thread that joins them together offers a clear message for us today. The dominant theme of a Kali cycle is one of discord, contention, and quarrel. Examples of these traits" include (Braden, 2009).

- The appearance of rulers who are unreasonable and levy taxes unfairly
- The time when people become addicted to intoxicating drinks
- The period when famine and death are common

Braden alludes to the fact that the visions of a world-age transition, and what follows it, extend far beyond the ancient and indigenous worldviews into the era of recorded history. For more than 400 years such visions of the future have fallen into the realm of prophecy, and the word itself has been nearly synonymous with the names of great seers such as Edgar Cayce and Nostradamus (Braden, 2009). It is argued that the prophecies of Nostradamus, Edgar Cayce, the Aztecs, the Hopi, the Maya, and others have sent the reverberations of an unmistakable message throughout time. Although separated by hundreds of years of history and thousands of miles of distance, all point to now (Braden, 2009). Time Code 10 states that the present world age began on August 11, 3114 B.C, and its end is signaled by the rare alignment of our solar system with the core of the Milky Way galaxy on December 21, 2012, an event that last occurred approximately 26,000 years ago (Braden, 2009).

Emane (Emane, 2016) found the Braden's books to be strange in a sense that as in the case of *The Divine Matrix*, you always discover things that you did not know or could not explain before reading the book. How is it that there are some cycles in our lives or other people's lives or in our environment? How could things that occurred in the past come to pass again? Braden declared that a curse on American presidents might have existed, that is the fact that every 20 years a US president dies (Emane, 2016). The author stated that historians worked on the issue and started to suspect that the assassination of President Lincoln in 1863 was the beginning of a cycle that started a little more than 20 years earlier when another US president died. William Henry Harrison had become sick and died of pneumonia. With his death it looked as if the seed (cycle) had been engrained from that very moment, to pattern such tragic events. In the years after those events, the suspicions of those historians proved to be truthfully real (Emane, 2016). The predictions for the 2012 time period range from an era of chaos and destruction to a thousand years of peace and cooperation (<https://trans4mind.com/counterpoint/index-new-age/braden2.shtml>). The most interesting part of the book is the all too brief history and explanation of this, Mandelbrot's Fractal Geometry, and the Fibonacci Sequence and how they illustrate an underlying universal pattern in creation. (<http://www.circlesoflight.com/blog/fractal-time-gregg-braden/>).

Time is a cycle that proceeds based on a fractal, cosmic, and galactic pattern. (Time Codes 1, 2, 7, and 10) (Emane, 2016). The Mayan and astrology time tables mysteriously coincide with the year 2012. It is noted that the birth of Jesus Christ occurred in the Age of Pisces (2,160 years ago), whilst the Age of Aquarius has been characterized as an age of wholism and the drawing of humanity together. The world moves within a bigger and grander pattern of global, cosmic and galactic magnitude (Time Codes 8, 16, 17, and 19) (Emane, 2016). It is argued that the orientation of the Earth's magnetic poles is said to cause climate changes at a global scale, and likewise affect human emotions. With modern-day technology, scientists are able to substantiate the findings of these ancient peoples (Emane, 2016).

Since time moves in repetitive cycles and patterns, the conditions to which events occur can be predicted. Therefore, repetitions are a good thing. (Time Codes 3, 4, 5, 6, 9, 11, 13, and 15) (Emane, 2016). It is noted that cognizance should be exercised about repetitions and nested cycles in time, as well as the greater intensity of the conditions when they are repeated.

Another unfortunate reference is his misread of the brilliant work of Benjamin Lee Whorf whose insights into the structure of Hopi language and world view, had Braden explored them in depth, would have surely altered the tone and conclusions of this book. According to Braden, "the Hopi simply don't think of time, space, distance, and reality in the way we do. They see everything as happening 'now.'" According to Emame (Emame, J.D.E, 2016, p.12), the Time Code Calculator is a tool to predict the appearance of conditions for an event to occur (Time Codes 14 and 18). Accordingly, the Time Code Calculator (TCC) enables the calculation of when the next occurrence of the events in people's lives, those that were accompanied by great joy or pain, or any emotional experience that has left an imprint. The TCC can also calculate when the repetition of the conditions of events will occur, which had a big impact at a local, national, or global level, based on a first seed event in the cycle. The outcomes of our lives and our world depend on the actions and decisions we choose. (Time Codes 12, 20, and 21) (Emame, 2016).

Gregg Braden observed certain cyclic temporal patterns in some past events and some natural phenomena, which he theorized a fractal time concept based on these observations and developed equations and software to calculate years in which cyclic patterns of specific types of events can occur in future (Makuei, 2017). What was questionable was whether or not he has he given tabulated data on predicted and actual times of occurrence of some events. If the answer is yes, then his theory works well and the method can be applied for some future events also. As to whether such predictions come true is another. It was observed that there had been other astronomical calendars by other civilisations as well like the Egyptian, Arab, Hindu Vedic, and Chinese etc. from which also such calculations are possible, where each may give a different answer (Makuei, 2017). Why the author chose the Mayan system was not fully justified, neither did he compare the different methods. Such illustrations were not provided in the book.

Makuei, (2017) contests the archaeological evidence of sleeping dolls in Indus Valley excavations that they do not in any way relate to the Mahabharata story as the author claims for two strong reasons: Mahabharata happened long before Indus Valley civilization and they do not necessarily depict war-fleeing as they are individual dolls. Not only Mayas, but other astronomers also knew astronomical configurations that marked time lines. According to Makuei (2017), the whole theory disintegrates when the author (Braden, 2009). states-

"To be absolutely clear, this is not an event that happens suddenly in a single day. In other words, our crossing of the imaginary line that divides our galaxy does not suggest that we'll all go to bed on December 20, 2012, in one world and wake up the next morning to a radically different world on the 21st. Rather, the winter solstice appears to be the astronomical marker that the Maya chose to designate the centre of the transition zone. That zone begins well before and ends well after 2012. "

The author (Braden, 2009) cites the attack on Pearl Harbour by Japan in 1941 as the previous cycle event. An attack on USA is the similarity recognized by the author to consider that 9/11 was a repeat of 1941. However, 1941 was part of World War II in which USA had remained neutral till then. The attack by Japan drew the country into the War. It is argued that on the other hand, actions by USA against terrorism, especially against Afghan Taliban through repeated bombing angered Taliban, which resulted in their taking revenge. Thus the two conditions differ (Makuei, 2017). Most of the Mayan scholars are of the view that Mayan calendar did not forecast any such doom (Makuei, 2017). The very idea that Long Count Mayan calendar ends in 2012 was rejected as misrepresentation of its history and culture. These observations relate to (MacDonald, 2007), (Stuart, 2012) and (Webster, 2007). Especially, David Stuart categorically established that the cosmic theory (based on which 21 December 2012 catastrophe was predicted) is complete nonsense. In (Makuei, 2017), Stuart posits that, "the Maya calendar was inseparable from the ancient world that created it: a lost worldview of kings, gods, and ancestors. By wrenching this special vision of time and cosmology away from that particular cultural and historical milieu, we do nothing more than manipulate the past for our purposes and messages. Their genuine accomplishments- in astronomy, mathematics, architecture, art and writing- are more impressive than the silly predictions attributed to them."

INTEGRATIVE CONCLUSION

Braden posits that time based patterns can be discerned and plotted using his Time Code whether they are grand scale effects emanating from the Big Bang or a more personal scale charting repetitive patterns of setbacks, opportunities and triumphs in one's own life (<http://www.circlesoflight.com/blog/fractal-time-gregg-braden>). Referred to as catastrophism in modern parlance, theories as to why this pathology persists range from the curses of biblical Revelation to suppressed racial memory of past planetary or societal disaster. Gregg Braden himself admits that his book is not scientific. According to Makuei (2017), all he has done is to mystify some observations of early civilisations and seek support of modern science for some non-sense correlations of past events with current ones and predict big changes in starting 2012. Nothing really happened on 21 December 2012.

Makuei (2017) asserts that believing in that planetary magnetic field affects human life is like believing in astrology. He argued that the Magnetic field of the moon is so weak and far away that its effect on human mind is exaggerated. One can compare the frequency of bizarre behaviour on full moon and other days. Very strong solar magnetic storms occurred only in 1958 and were likely to occur in 2012 as per the author citing scientific findings. There were strong solar magnetic storms in March 1989, July 2000 and October-November 2003. However, Braden conveniently ignores them to justify his 2012 theory (Makuei, 2017). A solar magnetic storm of very high magnitude was predicted for 2012 as part of Maya world age events. However, although a high magnitude solar magnetic storm occurred on 23 July 2012, it escaped the earth (Sanders, 2014). It can be inferred that this prediction missed the target (Makuei, 2017). The way Braden tries to connect list of repeated conditions of global and personal events, looks like "heads I win, tail you lose" type of argument. It is well-known that the recent global financial crisis was not due to oil crisis, but sub-prime mortgage of housing loans in USA. If the predicted event happened on another date, Braden conveniently says it was foreseen and some events or steps taken delayed it. If it happened on the predicted date, it is very good. All the examples have this limitation (Makuei, 2017).

Braden believed in his prophecies and vehemently states, contrary to the view of Makuei (2017) and other researchers, that:

"From the 8,000-year-old Hindu Vedas and the ancient Mayan calendar to the indigenous prophecies of Asia and the Americas, the timekeepers of the world seem to agree with Noonan. They have predicted, anticipated, welcomed, and feared the events of our time. As frightening as some of the stories and prophecies are, however, it's important to note that there is nothing in any of them that tells us unconditionally that the world itself ends, or leaves any doubt that we will survive what lies before us. What they do say is that the cycle that has spawned the world as we know it is over and the next begins." (Braden, 2009).

The Maya calculated the end of time and inscribed it as a permanent record for future generations about 2000 years ago (Braden, 2009). The essay or review presented a synopsis of the content, style and merit of the book on "Fractal Time: The Secret of 2012 and a New World Age" by Gregg Braden (Braden, 2009). The shift of world ages have been experienced by only five generations in the last 26,000 years, and we will be the sixth. Braden believes that we are living the end of time defined by a 5,125 year cycle of time where the present world age began in 3114B.C. The earth and our solar system complete a cycle every 5,125 years through the heavens.

REFERENCES

1. Braden G. (2009): Fractal Time Calculator. Greggbraden.com, 2009. Web. <<http://www.greggbraden.com/fractal-time-calculator/>>. ISBN 978-1-4019-2064-7.
2. Emame J.D.E. (2016): Fractal Time by Gregg Braden. A Book Discussion and Overview, Munich, GRIN Verlag, <https://www.grin.com/document/437224>.
3. <http://www.circlesoflight.com/blog/fractal-time-gregg-braden/>
4. <https://trans4mind.com/counterpoint/index-new-age/braden2.shtml>
5. MacDonald J.G. (2007): Does Maya calendar predict 2012 apocalypse? http://usatoday30.usatoday.com/tech/science/2007-03-27-maya-2012_n.htm
6. Macdonell A.A. (1900): A History of Sanskrit Literature. D Appleton & Co, New York. NASA. (2012, December 22). Beyond 2012: Why the World Didn't End. <http://www.nasa.gov/topics/earth/features/2012.html>

7. Makuei G. (2017): A Critical Review of Fractal Time Concept of Greg Braden. Journal of Contemporary Scientific Research (ISSN (Online) 2209-0142) Volume 1, Issue 4, October 2017 Issue | www.jcsronline.com.
8. Sanders R. (2014): Fierce solar magnetic storm barely missed Earth in 2012. <http://newscenter.berkeley.edu/2014/03/18/fierce-solar-magnetic-storm-barely-missed-earth-in-2012/>
9. Sridharan R. (2004): Shri Rudrekadasini (3rd ed.). R Sridharanm Chennai.
10. Stuart D. (2012): The Order of Days: The Maya World and the Truth about 2012 (2nd ed.). Three Rivers Press.van Stone, M. (Undated). 2012 FAQ (Frequently Asked Questions).
11. Webster D. (2007): The Uses and Abuses of the Ancient Maya. The Emergence of the Modern World Conference, Otzenhausen, Germany. Pennsylvania State University.
12. Wikidot (2014): Vedic Time System. <http://veda.wikidot.com/vedic-time-system>.
13. Wilson H.H. (1870): The Vishnu Purana: A System of Hindu Mythology and Tradition. Trubner.
14. Brown M. (2008, February 2): I do not Pseudoscience. Retrieved January 14, 2015, from Mike Brown's Planets: <http://www.mikebrownplanets.com/2008/02/i-do-not-pseudoscience.html>
15. <http://bhagavadgunadarpana.blogspot.in/2013/06/kali-yuga-nama-sankeerthanam-andvishnu.html>
16. Sarvam Srikrishnarpanam (2013, June 3): Part 12: Kali Yuga - Nama Sankeerthanam and Vishnu Sahasranamam.

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