Chapter 16

## Peculiarities And Personalities

## The Eclipse as Omen

"there will be signs in the sun and in the moon and in the stars"
-The words of Jesus (Luke 21:25)
Are eclipses omens? An omen is a portent, or a signal, of a coming event. Usually, omens are considered in a negative context. The darkening of the sun or moon during an eclipse has been considered an ill omen for millennia across all cultures around the world. It is such a universal phenomenon that it could be described almost as instinctive. Sometimes, meanings are different for solar and lunar eclipses. Solar eclipses can be so rare as to take entire generations by surprise.

Since solar eclipses began to be predictable, around 1700, scientists have informed us they are not omens. This is apparently because scientists uncovered elements of the cosmic mechanism for the eclipses, or more succinctly, the clockwork motions of these celestial bodies.

It is typical of Western thought that insight into the mechanism of a phenomenon is considered proof that the phenomenon is not supernatural. This type of logic's faults lie both in the conception of time and in the reluctance to acknowledge authorship of said phenomenon.

Scientists discover natural mechanisms. Does this grant natural mechanics the same soullessness as the mechanisms we humans create? Is that logical? Is the extraordinary mechanism of the human body the same as an automobile? Even if one was to accept such an absurdity, doesn't the presence of the automobile demand consideration of its creator's intent?

If there is an author/creator living outside the time domain, then mechanisms that author created could contain the artist's signature. The mechanisms in place (sun and moon) to illuminate and warm the earth could very well contain portents, messages or omens. It would be similar to a book author leaving "clues" within a text.

As far back as the 11th Century, there were "experts" (Medieval religious authorities) warning people against believing eclipses were omens. Clearly this was a response to a history of public anxiety in response to eclipses. There's clearly a desire from authority to maintain order that resurfaces time and again in such warnings; a desire to repel unpredictable expressions of human superstition.

Lunar eclipses are the most experienced eclipse. Astronomers have predicted them for 2500 years. It was well-known among learned people from an early age that the phenomenon was caused by the moon entering the earth's shadow. Solar eclipses eluded most predictions until the development of a fully measured globe and careful astronomical computation, which arrived around the time of Newton and Halley in the late $17^{\text {th }}$ Century.

The first duty of the first eclipse mappers was to tell the "common people" that eclipses were not omens. The very first accurately predicted solar eclipse, which darkened London on July 131715 was accompanied by this hope from its famous predictor, Sir Edmund Halley:
"They (the people) will see that there is nothing in it more than Natural, and no more than the necessary result of the Motions of the Sun and Moon."-Halley 1715

There was clearly an interest in easing the fears of the common people. Similar reassurances were issued from the pulpits and Universities of England, Germany and France well into the $19^{\text {th }}$ Century. Perhaps this was a response to previous chaos at such events. Perhaps it was about the triumph of logic and rational thought. Either way, an attitude of the new scientific priest class was established. "Established Authority"insisted that it is foolish (meaning wrong, or even dangerous) to publicly entertain the idea that an eclipse might be omens.

The tone of this "decision" bears consideration. It seems more than just a leader crying "no need to panic", for the general safety of a milling crowd. It seems, then and now, as a statement of theology. It is a pronouncement that the authority has determined there is no "meaning" in this peculiar visible phenomenon. This determination accompanied a turning point in the history of humanity, the rise of the technological era.

This raises the question: because one understands some of the physical properties of a phenomenon, does that make any meaning besides physical mechanics disappear? If one understands the motions, muscles and hormones that bring about a hug between two people, do we know why the hug occurred? Do we understand why hugs exist? Is it possible that different people might have differing views of hugs that are simultaneously true?

Solar eclipses present to the human eye a physical, cosmic and potentially symbolic story. It stirs deep emotion in the viewers. The witnesses wonder without authoritative prompting, what could it mean?

Science rushes to tell us the meaning of the eclipse story is partly its mechanics and partly their scientific brilliance in presenting these mechanics. Science tends to say there is no greater meaning. Don't look for an author. Keep focused on the wheels, the figures, the numbers, the tables and illustrations. Or better yet just let the professionals do it for you. According to science, eclipses are periodic meaningless turning of astronomical wheels. We know their story. It's all we have been taught for generations.

Before any solar eclipse occurs over a populated areas these days, "experts" rush to remind us that while, once upon a time, primitive people were superstitious about such things, these days we "know" better that they are simply meaningless natural phenomenon.

## What do the Media Say?

Here's a very small sample from the internet, from the days before the Aug 212017 USA eclipse:

Today, we know that the Sun is a star and that eclipses aren't omens. A total solar eclipse happens when the Sun, Earth, and Moon line up. Aug 172017 - Boulder Daily Camera

In ancient history, eclipses were seen as ill omens, before people understood exactly what caused this. Now we know it's just simple celestial geometry -National Space Center. UK Jul 262017

They (primitives) thought that it was an omen of disaster and devastation. Those of us who aren't superstitious put no stock in those old beliefs. --Zanesville Times Recorder Aug 192017

In the modern age, scientists can predict when and where these cosmic events will occur, and skywatchers can appreciate their beauty rather than fear that the events might bring devastating consequences. Even though most people today have access to science-based information about eclipses, misinformation, myths and superstitions continue to surround these celestial events. Space.com Aug 2017

As long as eclipses have occurred, humans have interpreted them as a sign of something. Yet, even during what were perceived to be highly superstitious times, ancient astronomers could already believe there must be something more to the phenomenon. Time Aug 162017

And, the winner is! :
Given that nature has manufactured untold numbers of these planets, it's a safe bet that someday we'll find one with a moon that's just the right size to block its sun. Maybe we'll even find members of another intelligent species who have also watched, in astonishment, as their local star vanished at mid-morning.... A solar eclipse still exerts a pull on the dark side of the human imagination, but it weakens with every century. --Ross Andersen/ Atlantic Magazine Aug 102017

Mr. Andersen states that "nature" manufactured this Universe. He claims it's a safe bet you'll find a planet just like ours-one with a same-sized sun and moon, no less! Apparently, there's even smart creatures there too. Does that seem true? Is such conjecture somehow more sophisticated than believing God actively creates a phenomenon for the purpose of human consideration?

The sum of the public modern narrative is this: dumb people used to believe superstitious things, but now smart people can safely assert every natural phenomenon to be completely meaningless. OK, we hear you. But to me, the certainty of the argument has a smell of deep uncertainty about it.
"Thou dost protest too much, methinks", as Shakespeare said through the Queen in Hamlet. Earlier in the play he had Hamlet says these famous lines:
"There are more things in Heaven and Earth, Horatio, than are dreamt of in your philosophy " Hamlet Act One Scene 5 William Shakespeare Who was wiser? Shakespeare or Atlantic magazine?

The peculiarity of the solar eclipse phenomenon is different from all other cosmic peculiarities and coincidences by orders of magnitudes. An eclipse is an improbably tiny tip of a shadow brought by a perfect alignment in the perspective of observant beings of two wildly different sized and distanced objects-which returning at predictable intervals-leaving a distinct path across the face of earth.

I'm saying God writes upon the Earth. Perhaps that's heresy to certain court magicians. But is it an omen? They look like omens sometimes. Other times it seems more like a song. Sometimes it's humorous, sometimes a lament. Proof? There's no proof in this pudding. You can say "so what" to anything. But after a bit of research, I fail to see much good that has come to human dignity from submission to the law of coincidence.

## Want An Argument For Omen Eclipses?

Here's 10 examples of solar eclipses that could easily be construed as omens. Full descriptions are found at the world or US eclipse sections:

Trail of Tears Total Nov 30 1834: Path follows route of displaced Cherokees while they are on it. Titanic Hybrid Apr 171912 Path across Atlantic, England and Europe 60 hours after Titanic sinks. World War One Total Aug 211914 Path divides Europe in the first days of the Great War. JFK Death Premonition Nov 221919 Path in Texas/Cuba 44 years to day before JFK killed. Jerusalem Ring of Fire Aug 211933 Across Jerusalem and Babylon as Nazis rise to power. Atom Bomb Eclipse Total Jul 91945 Path goes from USA to USSR one week before first A Bomb Test. Korea Divided Total May 91948 Korea divided by path along $38^{\text {th }}$ Parallel two years before war. Sharud Iran Cross Totals 1952 and 1954 two eclipses over Iran at time of coup and Shah's installation. Vietnam Cross 1955 Total and Ring of Fire Vietnam has two eclipses the year the Vietnam War starts. Mount Saint Helens Feb 261979 last US total eclipse for 38 years over volcano year before she erupts.

This is a short sample of potentially "ominous" eclipses. Omens are subjective, of course. You can't prove meaning. Is the supernatural awe humans have always felt towards this phenomenon justified?

## Some Cultural Responses

Cultures around the world felt that the Sun and the Moon become dark during eclipses because something was happening to them. In most cases, even after the idea of the moon entering earth's shadow became known, the common people assumed that some form of dark entity was attempting to eat or blot out the Sun or Moon. Most cultures attached ominous meaning to the eclipses.

Bible: Solar eclipses are not specifically mentioned in the Bible, though there are several supernatural events involving the sun and several prophecies concerning the darkening of the sun around the time of Judgment Day. The potential for signs in the sun and moon is mentioned near the beginning of Genesis (1:14) and by Jesus in the New Testament (Luke 21:25). There is no Hebrew word for "eclipse". The Jewish Talmud apparently says that a solar eclipse is a bad omen for the entire world, which runs according to the solar calendar, and a lunar eclipse is considered a bad sign for the Jewish nation, with its lunar year (according to Chabad.org)

Quran: Solar Eclipses are not specifically mentioned in the Koran either, though Mohammad addresses them in later sayings as "signs of Allah" and a call to prayer.

Hinduism: Hinduism addresses solar eclipses in the Vedas, attributing them to a a demon called Svarbhanu, who attacks the sun.

Buddhism: Tibetan Buddhists believe that during eclipses, the effects of one's good or bad deeds are multiplied. Other Buddhists feel, as many cultures do, that it is an important time for prayer.

Native Americans: Native beliefs are, of course, varied. Many, like the Navajo, avoid the eclipse and pray. Aztec and Mayan civilizations predicted lunar eclipses and put great meaning on all eclipses.

Babylonians, Greeks and Romans: All three pillars of western civilization considered eclipses omens, often with bad implications for the king or nation. All three cultures recorded dates of local eclipses.

Egyptian: Ancient Egyptians had a myth of a snake, Apep, that attacks the boat of the Sun god which is now believed to refer to solar eclipses.

China: Chinese traditions of astronomical observations can be dated to 2650 BC and they had sophisticated observatory buildings by 2300 BC. Systematic Chinese records of eclipses begin around 720 BC., around the same time as the Babylonians. In ancient China, solar and lunar eclipses were often omens that foretell the future of the Emperor. Ancient Chinese believed that solar eclipses occur when a celestial dragon devours the Sun. This belief is the source of the term "draconic" to describe the eclipse month and year. They also believed that the same dragon attacks the Moon during lunar eclipses. It was a tradition in ancient China to bang drums and pots and make loud noise during eclipses to frighten that dragon away. Chinese Emperor Zhong Kang of China supposedly beheaded two astronomers, Hsi and Ho, who failed to predict an eclipse in 2300 BC.

## Personalities -Eclipse Scientists:

Thales, the Milesian (c. 624 - c. 548) sometimes called the "Father of Science" , Thales is the first person credited with predicting a solar eclipse. This prediction is mentioned by Herodotus (624-547 BCE), concerning the total eclipse of 28 May 584 BCE, which put an end to a conflict between the Lydians and the Medes.

Herodotus wrote:" ... day was all of sudden changed into night. This event had been foretold by Thales, the Milesian, who forewarned the lonians of it, fixing for it the very year in which it took place. The Medes and the Lydians, when they observed the change, ceased fighting, and were alike anxious to have terms of peace agreed on".

It's remained unclear for centuries how such a prediction could have been made, as it is generally understood that the scientific knowledge necessary for such a prediction was not available at the time. While that is true for solar eclipses, Babylonian astronomers were already well aware of the Saros 18 -year 11 day repetition for lunar eclipses. By an extraordinary geographical happenstance, an exact Saros period of 18 years and 11 days separated the eclipse May 28584 Thales predicted from a prior eclipse in the "neighborhood" on 602 BC May 18. They were both members of Saros 57, which simply managed to include some of the same general geography in both appearances. This is a difficult feat for solar eclipses, which tend to move farther around the globe, but it is not altogether unknown. The same thing happened in Midland Texas between ring of fires on May 101994 and May 202012 with Saros 128. The 602 BC eclipse was centered on Persia and Babylon, and likely made quite a stir. The 584 BC eclipse had its center more towards the Mediterranean, including Greece.

If the date of the Babylonian eclipse and the astronomical knowledge of Saros Cycles had been imparted to Thales and Grecian astronomers, a lucky educated guess (which would be difficult to repeat) could have easily been the cause of the first successful solar eclipse prediction.

## Edmond Halley (1656 to 1742)

Halley was a British Scientist, astronomer, and friend of Sir Isaac Newton. He is the man whom Halley's comet is named for. He produced what is considered the first accurate predictive eclipse map, for a May 31715 (Saros 114) total eclipse over England.

It is certainly quite peculiar and fortuitous that such an eclipse would occur over the hometown (London) of the great master of eclipse prediction just as he was perfecting the art of eclipse prediction. He predicted the eclipse correctly with only minor errors.

## Theodor von Oppolzer (26 October 1841-26 December 1886)

Oppolzer was an Austrian astronomer and mathematician of Bohemian origin. He was born in Prague. Clearly a genius, one of his famed feats was memorizing the values of 14,000 logarithms. In 1868 he led an expedition to observe a solar eclipse (1868 Aug 18 Total -Saros 133).

The year after his death (1887), Oppolzer's work the Canon der Finsternisse,( "Canon of Eclipses") was published. An authoritative compilation of the 8,000 solar and 5,200 lunar eclipses from 1200 BC until 2161 AD, it was understood as one of the greatest computational feats of its day.
He also published a two-volume manual on the determination of the orbital elements of comets and planets. Both of his works served as standard astronomy references for many years. (Wikipedia) His book is credited as important source material for much of modern research, including the work of Van Den Bergh and Espenak. It is only available through rare book sellers.

Oppolzer's work provided an important lesson about eclipses. There's both a way to predict them in the future and to chart their past paths. The math is very precise, but not super easy. I don't know how to do it, and I am grateful to eclipse scientists for taking care of it for us.

George van den Bergh (born Apr 251890 / died Oct 3 1966) There is little information about George Van Den Bergh besides a brief Wikipedia page. His greatest claim to fame is naming the Saros personalities by giving them numbers. This feat greatly facilitated the ability to organize and understand eclipse cycles. Van Den Bergh also discovered (and re-discovered) many eclipse cycles. Van Den Bergh was a Dutch law professor and is called an "amateur astronomer". It's unclear why he was considered an "amateur". Perhaps because he was a lawyer by trade. He did write an accessible book about the cosmos, The Universe in Space and Time, (1937) which was published in the UK and the USA. I bought a used copy. His style is inviting, easy to understand and contains a great chapter on eclipses, a subject he clearly loved. He was probably the greatest eclipse expert of the $20^{\text {th }}$ Century. There is something peculiar about the sheer unknown-ness of George Van den Bergh.

This is interesting, however: Van den Bergh was the son of Samuel van den Bergh, one of the founders of Unilever, which in 2020 was the fourth largest consumer goods company in the world. George did not go into the family business, but instead pursued an academic career and became a lawyer in Amsterdam. From 1925-33, he was also a member of the Netherlands House of Representatives.

He was arrested and detained by the Nazis in 1941. I can find no specifics. He survived the war. In 1936, he had given a speech to the Congress concerning the problem posed by anti-democratic groups
in democratic countries. The text of the speech is available with some searching online. Such a public stance was perhaps a reason he was targeted by the Nazis.

During the 1950s he studied the longer eclipse cycles. This work was published in 1951 as Regelmaat en wisseling bij zonsverduisteringen, met een aanhangsel over maansverduisteringen and translated into English in 1955 as Periodicity and Variation of Solar (and Lunar) Eclipses.
It's as unavailable as any book I've ever looked for. No pdf's online. No quotes. What did he say in it? Apparently, there is a crater on the Moon named after him.

He is credited by NASA's chief eclipse scientist, Fred Espenak, with numbering the Saros and other achievements. He named the Hepton, Octon and others. It's unclear why his work has largely disappeared. Perhaps because he was an amateur. Perhaps because he said this:
"How inconceivably greater (than was then surmised) is the Creation to him who believes in a Creator! And he who cannot believe in a Creator, should not he, too, bow his head before this wonderful and mysterious Universe?"

George van Den Bergh- The Universe in Space and Time- Final words of Chapter 11 (1937)

## Fred Espenak (b. Aug 11953 USA) and Jean Meuss (b. 1928 Belgium)

We must give credit to the two men probably most responsible for making sure that the world has maintained easy access to accurate records of the eclipse phenomenon. The Two Volume Five Millennium Canon of Solar Eclipses ( 2000 BC to 3000 AD) is an indispensable resource for those wishing to track historical implications of eclipses and their cycles. It has the benefits of all the technology of the USA's space agency, NASA, and is extremely easy to comprehend. Fred Espenak has been working with NASA on eclipses since 1978 and is known as Mr. Eclipse. Jean Meuss was his partner in writing the Canon. Espenak was born into the eclipse Metonic. There was an eclipse over Russia on Aug 1 2008, on his $55^{\text {th }}$ birthday.

## Part Two of Personalities: The Mystery of the Numbers Man

What was the challenge Norman Bloom, the "Numbers Man", came up with that elicited the response of two of America's greatest minds?

## The cast of characters:

Norman Bloom: Eccentric, mentally ill homeless ice cream truck driver obsessed with numbers. Martin Gardner: Renowned popular mathematician and magician.
Carl Sagan: Popular astronomer and television personality. Easily the most famous popular scientist of the late $20^{\text {th }}$ Century.
Larry King: Radio and TV Talk show host. King (Born Larry Zieger) was the guy who let Norman Bloom talk to the public. Bloom was a regular caller to Larry King. It was King who first called Bloom "the Numbers Man." During his career, King did more than 60,000 interviews. CNN's Larry King Live became "the longest-running television show hosted by the same person, on the same network and in the same time slot" as recognized by the Guinness Book of World Records.

These four unusual characters appear in a mysterious true-life interaction over the legacy of a " $\$ 1,000$ challenge" to refute Norman Bloom's "proof" that God exists.

The Mystery: What was the proof? What did Bloom really say in his publication, THE NEW WORLD, that caused Gardner and Sagan to both reference him in print in the 1970's?

Last year, I read Martin Gardner's Amazing Numbers of Dr. Matrix, a collection of columns from Scientific American which appeared in the 1960's and 70's.
This is what Dr. Matrix said in Chapter 2: Los Angeles:
Dr. Matrix continued. "It is in the physical world, however, that we find the most remarkable patterns. A numerologist knows it is not a coincidence that the sun's disk viewed from the earth, is almost identical in size to the moon's disk* or that the sun's period of rotation is almost exactly the same as the moon's period of revolution (sidereal month) around the earth. (About 27 days)

Here, in the Magic Numbers of Dr. Matrix, Gardner provides one of the only examples in print of a scientist (though speaking through an alias) marveling at the reality of the sun/moon alignment. It appears to have been written as a column originally in 1960 or 1961 and then updated later. It's perhaps the only creative reference to the sun/moon alignment from a popular $20^{\text {th }}$ century personality.

I felt vindicated! At least someone in history is in the "Sun's the same Size as the Moon in the Sky" Club. Then I saw the footnote. It got even better. The footnote referred to Norman Bloom. He seems to be the first guy in the USA to go around talking "cosmic clocks moon sun 19 year "mystery stuff. I guess the cliché would be to call him an American Original. Even better, call him the Numbers Man.

What was the footnote? Why does it matter? First let's find out about Norman Bloom.

Norman Bloom (exact birth and death date unknown--died late 1989 or early 1990

Information from NPR (who talked to Bloom's family)/ and summarized in Kooks Magazine-Feb 1990
Norman Bloom was a New Jersey native who was Jewish by descent. His birthday and death day are unclear. For a while in the early 1950's, he was a family man adored by his children. He was also a near genius level musician. He made some poor investments in the 1950's, was divorced by his wife and gradually became eccentric and preoccupied. In 1962 he decided to go public.
"In 1962 (Bloom) rented Carnegie Recital Hall for a concert which was supposed to vindicate and validate what had become his preoccupation: The Bible. The music was impressive, but almost no one showed up and Bloom was shattered. "From the NPR 1990 broadcast upon Bloom's death.

After the disaster of his concert, he began an all-consuming obsession with numbers. In the summertime, Bloom drove an ice cream truck in New Jersey neighborhoods. People considered him a kindly character who was loved by the kids. The ice cream job paid for his true profession: numbers work. The work that has survived consists of tiny type, disorganized number associations and equations crammed on legal-sized or $11 \times 17$ paper. Part typewritten, part hand-written scrawls filled with numerical associations, Biblical prophecy, sports scores, historical numbers, stock market figures, prophetic warnings, thoughts, and Hebrew letters. He lived at the Library much of the time. Many of the staffers liked him and considered him a gentle soul.

Eventually Bloom began to believe himself to be the Messiah. He made frequent calls to Larry King's call-in show for years spouting his doctrines. King eulogized him on-air upon his death. Bloom would travel to various universities and publicly challenge scientists and public figure. These included Carl Sagan. Here's how Sagan described him in his important essay, God and Norman Bloom:
"Norman Bloom is a contemporary American who, not incidentally, believes himself to be the Second Coming of Jesus Christ. Mr. Bloom has been a fixture at some scientific meetings, where he harangues the hurrying, preoccupied crowds moving from session to session...Bloom has issued a fascinating pamphlet that states: 'The complete faculty of Princeton University has agreed that it cannot refute, nor show in basic error the proof brought to it, in the book, THE NEW WORLD, dated Sep 1974. This faculty acknowledges as of June 11975 that it accepts as a proven truth THE IRREFUTABLE PROOF THAT AN ETERNAL MIND AND HAND HAS SHAPED AND CONTROLLED THE HISTORY OF THE WORLD THROUGH THOUSANDS OF YEARS. '"...Despite his offer of a thousand dollar prize for the first individual to refute his proof, no response was elicited.

## Carl Sagan-God and Norman Bloom-

The American Scholar Magazine Autumn of 1977
Sagan dates Bloom's THE NEW WORLD at 1974. As you'll see, Gardner dates it at 1970.

## How to Find what Norman Bloom Said? There are Apparently Only Two Bloom Source Materials in the World: Stanford University and Kooks Magazine

Stanford Collections Dept: I obtained about 20 pages of Bloom material from Stanford Special Collections. Bloom had dated it 8-8-1976 on the first page. It was found in the papers of Martin Gardner, Box 69 file 6. It starts strong with much talk of "proof" but never gets around to it. Instead, the pamphlet almost immediately turns to approximately 15 pages of tiny type devoted to an astonishingly incomprehensible theory of baseball scores.

Sample:
"IT IS OBVIOUS THAT AFTER HAVING ESTABLISHED THE RECORD OF 888 GAMES WON during the 11 years without a pennant, THAT HE HAS THE POWER TO INSURE THAT THE YANKEES WILL WIN THAT PENNANT IN THE BICENTENNIAL anniversary year of 888+888...
"In 1776 Redcoats Beat American Yankees-CAPTURE NEW YORK!
In 1976 Reds beat American League NY YANKEES-winning in NEW YORK!
Bloom states that the reason for his new fixation on Baseball was" the huge amount of amassed data". His intention was to show patterns in the numbers. It goes on to spend several pages more on the number 1776. Maybe it will all make sense someday.

Though the work says THE NEW WORLD on the cover page, it simply can't be the original THE NEW WORLD because it's clearly not the same writings either Gardner or Sagan mention. It doesn't appear to contain much astronomical content at all, just a bunch of head spinning words and numbers.

Upon seeing this and later (1987) Bloom material, it becomes obvious that Bloom "published" everything he did under the heading THE NEW WORLD and simply added numerical ideas as he went. The original THE NEW WORLD book, composed of ten pages, was apparently written in 1970. It was clearly astronomical in nature and at least coherent enough for comprehension. Several years passed between these writings. Clearly Bloom's mental state was deteriorating. Could it be that he wasn't totally crazy when he composed the first THE NEW WORLD?

What was the proof in that original THE NEW WORLD that Bloom was so certain of? Why would minds like Carl Sagan's and Martin Gardner's even acknowledge Bloom? And for that matter...Where is the original THE NEW WORLD?

It turns out that Bloom's 1970 work THE NEW WORLD is not exactly available for free download. In fact, even more than George van Den Bergh's vanished study of eclipse cycles, it has been essentially lost to time. My efforts to locate any original pamphlet in true form have turned up fruitless, though he certainly would have distributed hundreds of them, as was his habit. It appears he used the logo THE NEW WORLD on pretty much everything, and in every new writing, he would always mention he had some proof, but then you search the material...and the proof isn't there... it seems he felt he had already stated it, which perhaps he had. Or more likely he felt he was restating the same proof in new ways with things like baseball scores and bicentennial trivia.

The Other Source: Kooks Magazine 1987 Bloom material was graciously provided to me by Donna Kosey, former editor of Kooks Magazine, who did an article on Bloom in Kooks 1990 Feb 3 issue. Family members who were interviewed for the NPR piece that aired after his death apparently threw away the dozens of boxes filled with papers stuffed into Bloom's storage unit.

Bloom's later work is genuinely incomprehensible. This later material I've seen is not something two serious academics would likely consider. It's a harrowing trip to numberland madness. Here it is, if you dare, but you probably don't want to stick around in there for long.

(above) Norman Bloom circa late 1987-courtesy of Donna Kosey Kooks Magazine
There is mention of the proof in there (lower middle left), near a mention of the " $\$ 1,000$ challenge", but where's the proof? He doesn't get around to it here, though you can see a mention of the 19-year Metonic in reference to 1929 to 1948 in Israel history. You can also see THE NEW WORLD logo in the middle of the page. In existing Bloom documents, there is precious little astronomy at all. No proof, just new numbers from new fascinations. Like any true artist, he had already moved on.

Was the astronomical "proof" in Bloom's 1970 THE NEW WORLD perhaps kind of crazy sounding? Sure. But probably not as crazy as these final writings.

What Norman Bloom wrote in the original THE NEW WORLD in the early 1970's was interesting enough that two of America's greatest minds thought it worthy of public commentary. What challenge did the "Numbers Man" come up with that stirred both Martin Gardner and Carl Sagan to respond in print? The first clue comes from Gardner.

## Martin Gardner (Oct 211914 to May 22 2010)

Martin Gardner was an American popular mathematics and science writer with interests also encompassing scientific skepticism, "micromagic", philosophy, religion, and literature - especially the writings of Lewis Carroll, L. Frank Baum, and G. K. Chesterton. He was a leading authority on Lewis Carroll. The Annotated Alice, which incorporated the text of Carroll's two Alice books, was his most successful work and sold over a million copies.

He had a lifelong interest in magic and illusion. In 1999, MAGIC magazine named him as one of the "100 Most Influential Magicians of the Twentieth Century". He was considered the preeminent American puzzler, and published more than 100 books.

Gardner was best known for creating and sustaining interest in recreational mathematics - and by extension, mathematics in general - throughout the latter half of the 20th century, principally through his "Mathematical Games" columns. These appeared for twenty-five years in Scientific American, and his subsequent books collecting them. (sourced from Wikipedia)

One of Gardner's best loved characters was the mysterious Dr. Matrix, a master of illusion and math, who was usually off on secretive adventures with his mysterious daughter and assistant, Iva. Invariably, each adventure would have lots of room for tough math puzzles and mind-blowing numerical peculiarities. It was Dr. Matrix, in Gardner's columns from Scientific American, who showed the world that the name of HAL, the demonic computer in the film 2001, was obtained by shifting each letter backward from IBM. He was also the first to chronicle many of the non-ecliptic synchronicities between the lives and deaths of John F. Kennedy and Abraham Lincoln.

Again, here is Dr, Matrix speaking, from the chapter entitled Los Angeles:

A numerologist knows it is not a coincidence that the sun's disk viewed from the earth, is almost identical in size to the moon's disk* --The Amazing Numbers of Dr. Matrix (Martin Gardner)

Note the asterisk. Just a little footnote in another out-of-print book:

[^0]It is interesting that Gardner addresses the sun/moon arrangement in the guise of his pseudonym, Dr. Matrix. Gardner was a lifelong magician and scholar of magic. This is perhaps a clue in this drama. Later in life, Gardner, though far from being a Christian, admitted belief in an active God and the power of prayer in his extraordinary intellectual memoir, The Whys of a Philosophical Scrivener.

After puzzling Gardner, the great puzzler, Bloom takes on a true heavy hitter: none other than the most famous scientist in the world, Carl Sagan. Sagan next takes an interest in Norman Bloom, and what he says (and doesn't say) about Bloom's THE NEW WORLD is fascinating, to say the least. On many levels it illuminates the tension between modern scientific and ancient cosmic truth.

## The Norman Bloom Mystery deepens. Here comes Carl Sagan:

## Carl Sagan (Nov 91934 to Dec 20 1996)

Carl Sagan was undoubtedly the most famous popular scientist of his time, and one of the most wellknown scientists of all time. The author of several best-selling books (Dragons of Eden, among others), he also created and starred in the most watched astronomy show of all time, the 1980's PBS series, Cosmos, which aired in more than 60 countries to over 500 million people. I was certainly a fan.

Oddly enough, Sagan broaches the subject of Norman Bloom in an essay entitled God and Norman Bloom. It appeared in The American Scholar in Autumn 1977 and is available for reading online. The American Scholar is the Quarterly Magazine of the Phi Beta Kappa Organization. It has been around for 90 years and addresses lots of different intellectual topics. It isn't a peer reviewed science site. It's more like a place for smart people to share essays.

In God and Norman Bloom, Sagan addresses Bloom's THE NEW WORLD which is dated 1974. The NEW WORLD Sagan received in 1974 was possibly different from the one Garner got in 1970, as it appears Norman Bloom was constantly changing THE NEW WORLD.

In his American Scholar essay, Sagan says Bloom's "central" argument for proof of God is based on the close alignment of the luni-solar Metonic cycle of 19 solar years. Oddly, Sagan will not call it the "Metonic Cycle" or even call it a cycle at all. As we'll read in a minute, Sagan instead argues that the alignment of lunar and solar calendars at 19 years is not all that special of a phenomenon.

Sagan's is clearly geared to a general Phi Betta Kappa crowd. His witty, friendly style invites a natural trust that what he says is the truth, the whole truth, and nothing but the truth. A little careful reading, however, reveals curious omissions in his argument against the conclusions of the earnest, though potentially insane, Norman Bloom.

Before we read about that, it's important to figure out: what is Bloom's central point in The New World? Martin Gardner in The Magic Numbers of Dr. Matrix stated that the "cornerstone" of Bloom's argument is this: the sun and the moon appear the same size in the sky.

Sagan mentions this "cornerstone" when discussing Bloom's work only in two passing moments. First he says:

The supposed proofs (in Bloom's THE NEW WORLD) are many and diverse, all involving numerical coincidences that Mr. Bloom believes could not be owing to chance. Both style and content of the arguments are reminiscent of the Talmudic textual commentary and cabalistic lore of the Jewish Middle Ages. For example, the angular size of the moon or the sun as seen from earth is half a degree. This is just $1 / 720^{\text {th }}$ of the circle ( 360 degrees) of the sky. But $720=6!6 \times 5 \times 4 \times 3 \times 2 \times 1=720$, therefore, God exists...the approach is familiar and it infiltrates the entire history of religion.

The second mention occurs later: "in a solar eclipse the moon, which appears from earth just as large as the sun, must pass in front of it"

## Carl Sagan-God and Norman Bloom/The American Scholar (Autumn 1977)

Sagan seems to downplay the arrangement, to say the least. The words go to impressive lengths to avoid showing wonder towards the sun/moon alignment. This blasé view of created symmetry and synchronicity has been the template for scientists and educators for hundreds of years (maybe even longer!). For some reason, many scientists can't seem to bear to say (take a deep breath) that the sun appears the same size as the moon in the sky!

Sagan does not say Bloom mentions the sun/moon alignment as any cosmic proof at all, instead focusing on Bloom's apparent fixation that the angular diameter of the sun and moon is $1 / 720^{\text {th }}$ of a 360-degree sky. (That is something new I learned from the essay, and thus learned from Norman Bloom, I suppose.) But back to reality. The sun being the same size as the moon in the sky is an infinitely more interesting truth than the 720 equation, being as the sun/moon alignment demands an aesthetic (thus simultaneously mathematical and Artistic) consideration. The sun/moon alignment is not a numerical coincidence, nor can it be a result of any currently understood gravitational resonance. The alignment is based on perspective. Not only that, but scientists also assert that the current alignment has not always been this way. The moon was closer in the distant past and moves farther away at the rate of 1 and $1 / 2$ inches a year.

Again, let's isolate Sagan's language. I think it's important. He states:
"For example, the angular size of the moon or the sun as seen from the earth is half a degree (and later) ...the moon, which appears from earth just as large as the sun"

I guess it's better than not mentioning it at all. But you can't help but read such underwhelming hohum language and not leave with the feeling that "oh, Carl Sagan said half a degree and $1 / 17$ hundred $20^{\text {th }}$ or something about something".

And, as we know, saying that something is "just as large" is not exactly saying its "the same size". But how this verbiage differs is difficult to express. Of course, Sagan knew the sun and moon appear the exact same size, to the point where sunlight can flicker through the valleys of the moon during an eclipse. But he doesn't feel he needs to make a big deal about it, even though most of his readers are probably completely unaware of the fact and might find it enlightening.

I believe the sun/moon perception alignment is so astronomically improbable that many "educated" people would rather avoid it. Perhaps the sun/moon alignment is a can of spiritual worms. Astronomers may gulp at the sun/moon reality. Out of perhaps an innate sense of awe, they hesitate to call such a reality "coincidence". Sagan's response is typical of the astronomical community's largely dismissive consideration of the sheer magnitude and creative implications of this cosmic arrangement.

That's all fine. Downplaying something is no crime.

Much more problematic is Sagan's response to Bloom's argument for the peculiarity of the Metonic Cycle, that alignment of solar and lunar calendars every 19 years that means we have the same phase of the moon on the same calendar date every 19 years. The Metonic Cycle has been known to astronomers for 2500 years. It was named for Meton of Athens, after all from, well... way back.

Sagan will not even call it the Metonic Cycle. He can't utter the words. He won't even say it's a "cycle". But he does say it is Bloom's "central argument":
"Bloom's central argument-and the one that much of the rest is based upon-is the claimed astronomical coincidence that 235 new moons is, with spectacular accuracy, just as long as nineteen years. Whence...(Quoting Bloom): 'Look Mankind, I say to you all, in essence you are living in a clock. The clock keeps perfect time, to an accuracy of one second/day! How could such a clock in the heavens come to be without there being some being, who, with perception and understanding, who, with a plan and with the power, could form that clock?'"
(Sagan then replies) "Fair question. To pursue it, we must realize that there are several different kinds of years and several different kinds of months in use in astronomy":( ibid)

This is where Sagan's natural scientific skepticism and great knowledge run the risk of appearing deliberately confusing. Faced with describing a simple alignment of 19 years and 235 months, he decides to go off for nearly two pages with facts and figures of all three kinds of solar years, the Sidereal, Tropical and Anomalistic, which all differ one from another by less than $1 / 10^{\text {th }}$ of a day. Then, if your head isn't already spinning after learning that the sidereal year is 365.2564 days and the tropical is 365.242199 days and the anomalistic is 365.2596 days, he brings in all four kinds of months (Synodic, sidereal, anomalistic and draconic), announcing them down to the fifth decimal!

Soon, instead of reading an essay, we are wading in a mess of numbers worthy of Bloom himself, all because Sagan is apparently trying to prove that Bloom is grasping at digital straws.

After piles and piles of numbers and words, Sagan finally agrees in print that yes (of course) there are actually 235.00621 synodic months (the lunar month we actually observe) in exactly 19 solar sidereal years (the solar year we actually observe).

After admitting the Metonic Cycle is indeed real, but still refusing to mention it by name, Sagan does an odd thing. He asserts that this same phenomenon of luni-solar calendar connection could easily be found elsewhere. To prove this audacious claim, he gives the only other possible example that could even be close, the conjunction of eleven solar years with 136.05623 lunar months.
"Thus," (Sagan writes, with more than a touch of irony,) " there is (also) a connection between 11 years and 136 new moons. Moreover, Sir Arthur Eddington believed that all physics could be derived from the number 136. With the foregoing information and just a little intellectual fortitude, it should be possible as well to reconstruct all of Bosnian History" ( ibid.)

Ha Ha. All the Phi Beta Kappas perhaps laugh on cue. Aren't we educated elites so clever? Here is the final word, the final put-down of all those silly people and all their unauthorized associations, their sad attempts to find sacred meaning in visible cosmic patterns. Sagan uses the 136 moon/ 11 solar year conjunction as his essay's last concrete refutation of Bloom's claims of a divine cosmic clock centered on the 19-year Metonic. It's the scientific feather in the cap. The frosting on the agnostic cake.

He then spends several pages making the familiar argument that anyone can find patterns anywhere but smart people know better- blah blah blah. Case closed, right? The triumph of science over madness. Umm...well, wait a second. First and foremost, are the two alignments Sagan just compared in print actually that similar?

The first numerical alignment (the "central" argument of Bloom, according to Sagan), is the Metonic Cycle, a conjunction of 235.006 lunar months and exactly 19 solar years. The second alignment (the one Sagan says is essentially the same) is 136.056 lunar months and 11 years.

Are these the same level of precision? Of course not. Look at the numbers behind the decimal points. In percentage of each lunar month, the difference is almost of a magnitude of ten.

The 19 year cycle has 235 lunar months followed by two zeros behind its decimal point. That amounts to just a two hour difference over 19 entire years in the alignment of the two calendars of sun and moon as perceived from earth. It takes 250 years for the alignment to be one day off!

In the second alignment, the one Sagan quotes as certain proof the 19 -year cycle isn't all that special, behind the 136 lunar months is .056 , meaning the 11 year calendar is off by $5.6 \%$ of one lunar month. That's at least 1.65 days (nearly 40 hours) off from alignment just every 11 years.

In mathematical and astronomical terms, these two alignments are not even close to the same degree of precision and would never be compared as such in any peer-oriented paper. The only reason Sagan could get away with such a sloppy comparison is that the audience for the American Scholar is likely a non-mathematical audience, already sympathetic with his intentions.

The 19-year Metonic is quite precise. If he knows another place they align so precisely, he doesn't mention it in this essay.

Why would a famous astronomer like Sagan need to make a sloppy argument with weak math? The 11-year solar/lunar calendar alignment is "ballpark" close, but nearly two days off every 11 years is not really much of an alignment at all. No cultures make calendars out of it, simply because the phase of the moon will not be the same every 11 years, making the "alignment" essentially useless.

In the essay, Sagan makes sport of Bloom's assertion that the 19 year cycle is connected to The Bible's Psalm 19 ("the heavens declare the Glory of God"). He then goes on to mention the Saros Cycle
without mentioning that it also contains three precise alignments with lunar, draconic and anomalistic months every 19 eclipse years. Sagan only mentions that the first two align and ignores the anomalistic month alignment. He ends the paragraph about the Saros describing the phenomenon this way:
> "Coincidence? Similar numerical coincidences are, in fact, common throughout the solar system. The ratio of spin period to orbital period on Mercury is 3 to 2 . Venus manages to turn the same face to the earth at closest approach on each of its revolutions around the sun...given enough time...such resonances will arise inevitably."

## Carl Sagan (ibid.)

I don't know about you, but neither of the resonances Sagan lists resonates with me. The ratio of spin to orbit is 3 to 2 on Mercury? What does that have to do with us? Is it as impressive as the alignments of sun and moon, based on both human perspective and cosmic reality? Do the same principles that make Mercury and Venus spin make the Metonic and Saros work? If so, he does not explain.

The Metonic and Saros alignments are magnitudes more improbable than the examples he gives. Not to mention, on top of that, the sun's the same size as the moon in the sky.

The 19-year Metonic alignment has been part of astronomical teaching and religious timekeeping since the Babylonians. It was named for Meton of Athens 500 years before Christ. What was the harm in calling it by name, or admitting that it's pretty darn amazing and unique? Why make the disingenuous argument that such precise alignments are everywhere when they aren't?

But that's actually the least of it.
Sagan goes further into the perilous pit of omission. He neglects to reference the biggest "coincidence" of all: the alignment of the Draconic/Eclipse Calendar with the lunar and the solar calendar at that same 19-year spot. Every 6940 days, three calendars align, not just two. And this allows not only for the same phase of the moon every 19 years but also for eclipses on repetitive calendar dates every 19 years for up to a century.

| Solar Year 365.24 days | x | 19 years | $=6,939.60$ days |  |
| :--- | :--- | :--- | :--- | :--- |
| Lunar | 29.53 days | x | 235 lunar months | $=6,939.68$ days |
| Draconic 27.212 days | $x$ | 255 draconic months | $=6,939.06$ days. |  |

There is no gravitational/ orbital reason three different orbital realities make calendars out of the same two objects (sun and moon). It just does, every 6940 days. Not mentioning it seems like a big omission, even absurd. They do not do it again until the 391-year mark.

Bloom's argument for the 1,000-dollar prize was surely based on two cosmic points. 1) The sun is the same size as the moon in the sky (as his argument was reported by Gardner) and 2) the Metonic alignment, as reported by Sagan.
Gardner said the "cornerstone" of Bloom's argument was the sun and moon alignment.
Sagan said "central" to Bloom's argument was the 19-year Calendar alignment.

Maybe Sagan didn't actually know the Draconic Calendar aligns with the solar and lunar calendars at 19 years. You'd think he would know such a thing, being an astronomer and all. But it's actually possible he didn't know. I think there are many astronomers out there right now who don't know. Sagan had a lot on his plate in 1977. I still find him likable. He does mention the draconic (eclipse) month in the essay and gives its length (27.22122 days), so he at least knew about that.

Still, in this influential essay written to influential people, the most prominent astronomer of modern times dismisses the idea of giving dignity to the Metonic arrangement, even by name. He brushes off two thirds of it as just another "numerical coincidence" and ignores completely the most improbable third piece. Then, when bringing up the Saros, he only mentions two thirds of its improbable alignment as well. We aren't talking about the coincidence that La Quinta always seems to be next to Denny's. We are talking about what is arguably the greatest cosmic synchronicity known to humankind besides the existence of intelligent life itself.

Maybe he was hurrying. Maybe his priority was keeping the essay light, having just a little fun at Norman's expense. To Sagan's credit, at least he acknowledged Bloom. Maybe Sagan was so deep in other important science that he didn't think too hard about the specifics of cosmic arguments levied by an unbalanced ice cream truck driver crying in the wilderness:
"Look Mankind, I say to you all, in essence you are living in a clock. The clock keeps perfect time..." -Norman Bloom

I don't know what to make of it. I get the feeling that there is more to all of this, some kind of deep spiritual blindness constructed by a priest class that is waiting to be lifted. I have to move on.

In the end, Sagan is rather sweet (albeit a little patronizing) when talking about Bloom. He calls him a "kind of genius". But something is still amiss about this type of "science" Sagan exhibits. Its blind spot is so great as to make it feel untrue. It is a blind spot increasingly familiar to modern man, and that blind spot seems planted squarely over the face of God.

## Peculiarities in the Bloom Saga?

It seems there is a triad in this story, like a musical chord. We have interesting archetypes who might very well have met in a Middle Eastern palace court 3000 years ago. They return entwined in a real-life story with the nature of truth at its very core.

One riddle is that three of the four characters are Jewish: Norman Bloom, Carl Sagan and Larry King.

Norman Bloom is the crazy oracle archetype. A Hebrew messenger in the path of bewildering cosmic signals, a conduit of universal information bound to be ignored and ridiculed. Bloom tries to deliver a message but ends up shattered upon the rocks of social disinterest, his own mind, and his pride. Bloom clearly tapped into a mysterious numerical reality -a kind of projection or underlying pattern.

But...as Bob Dylan said:
"some things are too hot to touch.
The human mind can only stand so much"- Things Have Changed- Bob Dylan

Martin Gardner's archetype is the classic Gentile astrologer/wise man of the Babylonian or Egyptian courts and schools. Familiar with ancient mysteries of math and magic, he knows there are secrets of universal order, but also knows why certain shrouds are left in place. Gardner probably knew how close Bloom had gotten to one part of the secret. If he didn't think so, he wouldn't have so playfully presented that secret in print. He repeats Bloom's greatest claim two times on one page. Once, giving credit to Bloom himself, and once, having his own fictional alter-ego say essentially the same thing.

Carl Sagan found himself as a kind of Official Authorized Priest of the Temple of Science and Technology. Sagan was a kindly and sympathetic observer of Creation. Possibly our most beloved agnostic, he still acknowledged Bloom. As temple priest, he knew there are certain avenues of the mind that are not to be wandered if the sanity of society is to be maintained. Certain truths can only be approached by the initiated. Certain equations are not to be admitted to the masses.

Larry King: For whatever reason, King did not screen out Bloom's calls. There must have been some reason he let him speak. I can't find any taped samples of their interactions online, but I have seen a video one time of King eulogizing Bloom upon his lonely passing. The video is not easy to find anymore. King looked sincerely sad when announcing his death.

Bloom and Gardner and King are all basically nouns. Sagan is a Polish word for "maker of pots and pans". These three souls, for one brief moment in history, put on a largely unnoticed play of intellectual, imperial, scientific and human reality. The reality of Sun and Moon and Earth and Mind are tossed between them in print like cosmic hot potatoes.

## Riddles of the Age-The Computer Network

They will say, "Where is this 'coming' he promised? Ever since our ancestors died, everything goes on as it has since the beginning of creation."
2 Peter 3:4

Here's a question. What's so different about now? Haven't unhinged doomsayers been babbling their apocalyptic fantasies for thousands of years? Why is this the end of an Age? How can I be so certain it would be marked by peculiar eclipses? Really, the God of the Universe signing His name across the planet? What's the hurry in repentance?

What's the answer? Pretty simple, really. Three words. International computer network. The computer age has brought the imminent onset of true spiritual tyranny, where free thought and free will are contained and subdued automatically by physical and spiritual interface with the anti-spirit of that machine.

I put out a big, dense book in 2001 called "What the Fire Said". I made 35 copies and distributed them to various American personalities and friends, just like some crazy person might ( hint: I'm not any crazier than the next guy). Here is a quote from that all but forgotten tome:
"The Force that desires the destruction of free will forever comes to power inside the international computer network." (What The Fire Said 2001)
You can judge for yourself if there is truth in the singular prediction I made.

How big is the Internet?

In a list of 80 cultural moments that shaped the world, chosen by a panel of 25 eminent scientists, academics, writers and world leaders, the invention of the World Wide Web was ranked number one, the entry stating, "The fastest growing communications medium of all time, the Internet has changed the shape of modern life forever. We can connect with each other instantly, all over the world." From Wikipedia (British Council May 2016)

First the positive: The network has "positive" attributes. Ok? There. I said it. It's not ALL bad, of course. Positive traits include communication, ideas, commerce, entertainment, and funny cat videos.

The network had to come into existence, of course.
The network's appearance is implied in the Bible in three places: the Hebrew Book of Daniel, and the New Testament books of Matthew and Revelation. Very quickly and without much explanation, I will quote these three sections. Of course, my reasoning is contestable, as I expect anything and everything I say or quote to be contested in this world of endless criticism.

The fourth beast is a fourth kingdom that will appear on earth. It will be different from all the other kingdoms and will devour the whole earth, trampling it down and crushing it. Daniel 7:23

And this gospel of the kingdom will be preached in the whole world as a testimony to all nations, and then the end will come. Matthew 24:14 (the words of Jesus stating that there will be a means for communicating across the whole world)

And of course:
He was granted power to give breath to the image of the beast, that the image of the beast should even speak and cause as many as would not worship the image of the beast to be killed. He causes all, both small and great, rich and poor, free and slave, to receive a mark on their right hand or on their foreheads, and that no one may buy or sell except one who has the mark or the name of the beast, or the number of his name. This calls for wisdom: let the one who has understanding calculate the number of the beast, for it is the number of a man, and his number is 666. Revelation 13: 15-18

To come literally true, these Biblical passages necessarily require a worldwide network. Of course, such a network did not and could not have existed until the last thirty years.

I am not trying to concoct complicated and obscure riddles. I am just giving a simple application of famous prophecies to a likely meaning. The ubiquitous and desolating power described in these passages has not previously appeared in history, though it has been approached in diabolical archetype by various imperial efforts. Now is the only time such a worldwide force could exist. The recent example of the enforcement of certain worldwide measures to the farthest ends of the globe should confirm that reality. The installation of thousands of satellites is bringing wireless internet to every portion of the planet. We live very close to becoming at the mercy of a worldwide machine. Of course, believing that prophetic descriptions of our modern times are written in two-thousand-year-old documents requires a faith in God's intentions. I believe these riddles are intentionally preserved remnants of truth left to instruct and comfort us in deceptive times. Not everyone has such
faith, I understand. Perhaps you will at least entertain my arguments that our peculiar time is indeed peculiar. Then perhaps later you can decide for yourself whether it has indeed been foretold. I primarily intend to make this assertion with eclipses. But first I will assert the peculiarity of our times with an exploration of modern riddles.

With all that in mind, I present some riddles of the age.

- Internet. Enter net. A trap. A command or suggestion: come into the trap. Nets are commonly used to catch fish. A fish is a common symbol for Christians.
- World Wide Web. Webs are also traps. The spider's web is the other name of the internet. Spiders often eat their prey alive. Feel like "Getting on the web"?
- Apple. The most famous logo in the world is a fruit with a bite taken out of it. This is clear symbolism of the first rebellion in the Bible, when Eve and Adam ate the forbidden fruit from the Tree of The Knowledge of Good and Evil.

When the woman saw that the fruit of the tree was good for food and pleasing to the eye, and also desirable for gaining wisdom, she took some and ate it. She also gave some to her husband, who was with her, and he ate it. Genesis 3:6


The Apple One Computer sold for $\mathbf{\$ 6 6 6 . 6 6}$. Steve Jobs and Steve Wozniak put the first personal computer in history, the Apple One, on sale in April 111976 in Palo Alto, California.
It went up for sale in the Bicentennial year of the USA. The introductory price was $\$ 666.66$ cents. Wozniak said he came up with that initial price because he liked repeating digits.
$\mathbf{w w w}=\mathbf{6 6 6}$. The Hebrew letter Waw or Vav is the correspondent to our common letter w. In earlier times it was likely pronounced with " $w$ " sounding. Today modern Hebrew pronounces it with a " $v$ " sound. Hebrew letters are also numbers. Waw is the sixth letter of the Hebrew alphabet and bears the numerical value of six. Quite literally, www=666.


The meaning of the letter is "hook" and it bears a vague resemblance to a hook or shepherd's crook.

Meta means "dead" in Hebrew. Meta means "is dead" in Hebrew. This is the new name of the facebook company and their signature "Metaverse".

The Computer and Internet were funded by War. The first computers and linked computer systems were created and funded by military departments. Tim Berners-Lee claims to have invented the World Wide Web, but communication between computer systems had already been going on since the 1960's at the US Defense Department and Intelligence agencies. We were just brought into the network by the web.

The computer network is an architect of deception. Maximum expression of historical deception is likely found in the modern "deepfake", automatically created and distributed(and convincing) falsity.

Screens are Simulated Fire. Once we sat around fires and told each other stories. It's hard to take your eyes off a fire! Now we stare into electric fires and it tells us the story. This is the unspoken primary explanation for the overwhelming addictive power of visual technologies, including cinema, television, computer terminals and smart phones. The metaphor of fire and light and story is relevant not only for this riddle but also to the significance of eclipses.

The screen gets closer and closer. From the movie screen to the television to computer to the phone, the screen gets closer to us and moves further upon our bodies. The stated goal of proponents of digital technology is to breach the final barrier; to bring technology inside the human body.

Internet addiction/Phone Addiction is the most common pathology in the world. The National Institute of Health says nearly $40 \%$ of Americans are internet addicts, many of them porn addicts. It's probably more than that. The average person touches their phone 2600 times a day.

The Internet behaves in an opposite manner of God. Firstly, by mimicking omniscience. God knows all and sees all. The Internet imitates His omniscience. The Internet does not forget or forgive. God forgives. The Internet catalogues our behavior and then never forgives. Indeed, it is always threatening to expose faults.

The Internet is a Worldwide Temptation machine. Lead us not into temptation? The internet tempts all. The internet is also a worldwide defamation machine.

It seeks entry into the human body. Brain computer interfaces are almost on the market as of this writing. Recent responses to "events" showed the urge for state control over the body.

The Internet swallows creativity and culture. The last 20 years have seen the placement of nearly all forms of art into the mercy of the network. Musical albums, newspapers, poetry, romance, books, painting and other art.

It transforms civilization. In 30 years it has transformed nearly every aspect of human life.

Religious faith plummets in inverse relation to rising Internet usage. In the early 1990's, more than 90\% of Americans identified as Christian. By $200778 \%$ of Americans identified themselves as Christians. Fourteen years later in 2021, that number was down to $63 \%$. What is the common cultural denominator? The rise of the internet and cell phone.

It calls itself IT. Information Technology's acronym defines itself as a non-human other, in contrast to the "I and Thou" reality of mutual recognition. In Madeline Le Engle's classic, Wrinkle in Time, the Dark enemy of humanity is called It.

Spirit does not live in the Network. The greatest clue as to its nature.

AI. The manifestation of information as personality. Ai is touted as our destroyer. If this is so, why was it made? Ai was also the name of a Canaanite city, an enemy of early Hebrews (Joshua Chapter 7 to 9). Ai in Hebrew means literally "heap of ruins".

The Father of the Modern Computer was a man named Zuse. Konrad Zuse created the first digital programmable computer in May 1941, funded by the War Department of Nazi Germany. Zuse, of course, is very close to "Zeus", supreme God of the Greeks. I mean, how many people do you know with the name Zuse? IBM bought his patents in 1946, just after the war. Zuse suggested the universe was a computer simulation in a 1967 book and was an avowed atheist.

Gates as a noun is at once a common entryway, a computer term and a Biblical Concept. Gates are places where one enters private spaces. Gates were the entry point of walled cities and fortresses. Logic "gates" are the essential commands of binary Boolean algebra, the method of computer logic. These gates refer mainly to the three basic commands of binary language - "and, or, not".

The "gates of hell" is a common phrase even today and was famously used by Jesus: on this rock I will build my church, and the gates of hell shall not prevail against it.
Matthew 16:18

Windows 7 revealed on Wuhan Eclipse Day July 222009 Windows 7 was the most popular computer program in the history of the world to that point, with 630 million licenses by 2012. It was released for manufacturing on July 22 2009, the day of a tremendous solar eclipse, the longest of the $21^{\text {st }}$ Century, with duration of 6 minutes and 39 seconds. It crossed from India to the Pacific and featured total eclipse in Wuhan China, where ten years later the pandemic began. Bill Gates' first health partnership with China began in 2009 just as he undertook co-operation with them. He toured China in 2010.

Solar eclipse 7 weeks after Microsoft moves to Bellevue/Seattle. The last total solar eclipse in America for 38 years occurred in the American Northwest Feb 26 1979, seven weeks after Gates moved his company from Albuquerque to Bellevue, Washington, where he had been raised. Bellevue ( $99.64 \%$ coverage). $100 \%$ totality at Mount Saint Helens the year before she erupts.

Mount Saint Helen's and Microsoft. As Microsoft prepared the language MS DOS in Bellevue April and May 1980, Saint Helens awakened 80 miles to the south erupting on May 181980 in the most destructive eruption in the modern history of North America. Saint Helens erupted laterally to the north. The longitude of the crater of Mount Saint Helens is 122.2 degrees. The longitude of Bellevue is 122.2 degrees. Mount Saint Helens erupted in the direction of Microsoft as they developed the most important language in the history of the world, which was leased to IBM and Apple the following year.

Saint Helen was the mother of Constantine, the Roman Emperor who made Christianity the official religion of the Empire. She is credited with being a faithful follower of Jesus and with finding the "true Cross" in Jerusalem on a pilgrimage in 324 AD. She founded the Church of the Nativity and the Church of the Ascension there. She is often depicted carrying a cross. Mount Saint Helens is one of only two active volcanoes in North America named for a saint.

Eclipses are an expression of riddle, story and synchronicity. Solar eclipses bear a message of the truth of the implicate order. They are much like music in that regard. This work intends to present them sympathetically with that in mind.

## The Idea of Anniversary in Calendars

Anniversary celebrations are common in all cultures who have calendars. The first anniversary celebrations were likely Solstice and Equinox celebrations.

Death days are more often noted accurately than birth days. Four Examples: Julius Caesar. No exact birthday (just month of July noted) Died March 1546 BC Christopher Columbus. no exact birthday, Died May 201506. Prophet Mohammad ...no exact birthday, Died June 8632 AD.

The reason for obscure birth dates is obvious. Often people are born in obscurity. After they achieve renown, their passing is felt sharply and the date of death is noted. In the modern era of public record keeping, both birth and death days became more commonly known.

In cosmic timekeeping, three calendars are constantly aligning. Each moment is always in relation with a moment 19 years before and 19 years after, where the sun and moon are the same relative to earth. It's quite odd. These pulses of 19 are accompanied by other cycles, with other pulses. The Saros connects three alignments every 19 eclipse years, the Hepton has 7 eclipses 7 eclipse seasons apart occupying 19 years and 325 days. There are cycles at 300 years minus 44 days. There are Octons and persistent lunar year triads of eclipses. The 391-year cycle is a near perfect re-alignment.

In short, there are many calendars colliding. Moments resonate! Carl Sagan agreed there was certainly resonance and it was in that agreement of resonance where he most accepted the possibility that cosmic arrangement might offer proof of God. From God and Norman Bloom:
"None of these numerical coincidences prove the existence of God-or, if they do, the argument is subtle, because the effects are due to resonances."
Carl Sagan-God and Norman Bloom 1977

Sagan's fault in God and Norman Bloom was not his opinion that resonances are coincidental. That's a valid opinion. The problem came in his neglect in not acknowledging the actual triad of resonances involved in the Metonic and Saros Cycles. Instead he wrote as if in both, only two calendars were resonating.

Anniversaries: Do anniversaries resonate? Perhaps. There is an actual realignment of cosmic bodies on certain dates. This is especially true over the course of about a hundred years as the lunar, solar and eclipse calendars align on exact or nearly exact dates. Those same alignments then reappear about five hundred years later.

The problem is that it is nearly impossible to diagram or "sum up" such a phenomenon. There are many different calendar relations. It is very much like an extraordinary symphony with hundreds of instruments. The best I have been able to do is try and listen to it and repeat what part I can hear.

But the possibility of cosmic realignment, or "resonance" as Sagan puts it, on actual anniversary dates turns out to be certainly real in time. To what extent I don't know. I can only offer peculiarities of certain anniversaries and personalities. As mentioned in the Metonic section, exact day anniversaries can be deceptive on a spinning planet. As Van den Bergh said: "A day is 48 hours". Sometimes I mention anniversaries including the day before or day after. Sometimes I stick to the singular exact anniversary.

Other times in history are more general. Times of war and conquest, migration, enlightenment or enslavement. Sometimes these may be marked by peculiar eclipses or swarms. I do not propose that any of constitutes "proof". I do propose we all have the right to point out "peculiarities".

## Eleven Personalities/Eclipse Associations

1) Pope John Paul II (born May 18 1920, died April 2 2005, buried April 8 2005)

Pope John Paul II is the only person I've found who was both born and buried on actual exact days there were solar eclipses. He was born Karl Wotjyla in Poland on the day of a strong (. 97 magnitude) partial solar eclipse, though it was not visible in Poland. This was Saros 146's last eclipse as a partial before becoming the lead-off eclipse of the modern Hepton Two Cycle. This was 60 years to the day before the eruption of Mount Saint Helens. Thus the eruption occurred on the Pope's $60^{\text {th }}$ birthday. Saint Helen was the mother of the Roman Church (mother of Constantine). Pope John Paul II was buried in Vatican City on April 8 2005, the same day a total solar eclipse occurred over the Pacific, ending at the isthmus of the Americas (Saros 129). It was not visible in Vatican City. Apr 8 returns in American eclipse of 2024.
An interesting numerica fact : John Paul II lived exactly 31,000 days.

## 2) Martin Luther King (Jan 151929 to April 4 1968)

King was born into a solar eclipse Metonic and died 8 days before a total lunar eclipse over the USA. There are seven MLK birthday eclipses on January 14/15 between 1926 and 2029. King's birthday Metonic arrives three years before his birth and departs on what would have been his $100^{\text {th }}$ Birthday.

## King Birthday Metonic Eclipses:

## Jan 141926 Africa to Southeast Asia Total (Saros 130)

Jan 141945 Africa to Tasmania Ring of Fire ( Saros 140) Eve of MLK's $16^{\text {th }}$ Birthday Jan 14/15 1964 Antarctica partial (Saros 150) First eclipse on planet earth after JFK's assassination happens on MLK's $35^{\text {th }}$ birthday. Eclipse warbles between Jan 14 and 15 due to south pole location. Jan 15/16 1972 Antarctica Ring of Fire (Saros 121) Again moving between his birthday and the 16th on the eight year lurch on what would have been his $43^{\text {rd }}$ birthday.
Jan 151991 Tasmania/New Zealand Ring of Fire (Saros 131) The Birthday Metonic firmly arrives on the $15^{\text {th }}$, what would have been King's 62nd birthday.
Jan $15 \mathbf{2 0 1 0}$ Africa/India/China Ring of Fire (Saros 141) King would have been 81 for this tremendous 11 minute ring of fire 177 days after the Wuhan Total of Jul 222009.
Jan 142029 USA Partial (Saros 151) Strong partial covers North America on the eve of MLK's 100th Birthday. 45 \% coverage in hometown of Atlanta. 50\% coverage at murder site of Memphis.

There were 103 years of MLK Birthday Metonic Eclipses. Note the numeric links between the Saros numbers: the first three are 130, 140 and 150 . The last four are 121, 131, 141 and 151.

## King's Death: Lunar Eclipse in the USA April $12^{\text {th }}$ and 13th, 1968

On Passover April 12/13 1968, eight days after King's murder, a Blood Moon total lunar eclipse covered the USA Good Friday night into Saturday morning, part of a Blood Moon Lunar Tetrad on Jewish High Holy Days. Easter arrived the next day on April $14^{\text {th }}$, the $103^{\text {rd }}$ anniversary of the murder of Lincoln, the $56^{\text {th }}$ anniversary of Titanic sinking, and the $36^{\text {th }}$ anniversary of the splitting of the atom. April 121968 was 23 years after death of Franklin Roosevelt.

Between 1951 and 1968, there were eight total lunar eclipses in the USA. One happened 8 days after King's murder. Another happened 38 days after JFK's assassination.

## Notes about MLK Death Day of April 4

Being about 11 days apart (one Metonic week or the difference between a lunar and solar year), King's Death Day of Apr 4 is perpetually linked with Abraham Lincoln's Death Day Apr 14/15 in the larger Eclipse Metonic. Because they are one lunar year apart, the two eclipse dates follow each other linked in perpetuity, usually separated by a single eclipse. For instance, Lincoln's death day appears in a solar eclipse Apr 14 1809. King's Death Day appears in a solar eclipse on Apr 4 1810, one lunar year later. King's death day of 4-4 is also linked with Robert Kennedy's death day of 6-6 in the same Metonic, separated by exactly 3 eclipse years (1033 days). Kennedy was shot 63 days after King in 1968, and the two men were friends.

April $4^{\text {th }}$ is one day after the traditional dating of the Crucifixion of Jesus on April 3 ${ }^{\text {rd }}$ 33AD. April $4^{\text {th }}$ would be the day that Jesus slept in the tomb 1935 years before.

1968, the year King and RFK were killed, is also 2000 eclipse years ( $2000 \times 346.62$ days) after the Jewish Temple was destroyed by the Romans in 70 AD. The Temple was attacked on the day after Passover, or our equivalent of April 13, 70 AD. Therefore, the 70 AD attack on Jerusalem and the April 1968 Passover lunar eclipse which followed the killing of King are exactly 2,000 eclipse years apart.

## More on MLK: Atlanta and Memphis In Modern Eclipses.

King's hometown of Atlanta is dead center in deepest eclipse line on the May 301984 USA eclipse.

Memphis, where King was killed, is highlighted by the 2017 and 2014 USA cross over Little Egypt, the area around the conjunction of the states of Illinois, Tennessee, Missouri and Kentucky.

Memphis, Tennessee was named after Memphis, the capitol of Ancient Egypt, the first empire to have an institutional system of mass slavery. Memphis Tennessee even has a giant pyramid, opened 11-91991. Note numeric relation of 11-9 to Egyptian New Year of 9-11.

Memphis lies at the southern end of what is called Little Egypt, along the Mississippi in the USA. Memphis, Tennessee has 93\% coverage in 2017 eclipse and 98\% coverage in 2024. The ancient site of Memphis Egypt (near Cairo) has 96 \% coverage in 2027 eclipse and 75 \% in 2034.

## 3) Bush Family in Eclipses

The Bush family, from Prescott (1895 to 1972) to George W. (born 1946), is probably the closest thing the USA has to a true political dynasty.

1925 Jan 24 NYC/ Roaring Twenties Total Eclipse (Saros 120) eclipse six months after George Bush Sr. was born on Jun 12 1924. 98.3\% totality in his birthplace of Boston, Massachusetts. Curiosity: John F. Kennedy and George Bush Sr. were born 6 miles and 7 years apart in 1917 and 1924. Their fathers, Joseph Kennedy and Prescott Bush were also born 7 years apart, in 1888 and 1895.
NYC eclipse saw totality in New Haven, CT (at 9:11 am), where George W. Bush will be born in 1946. Totality over New York City 919 months and 19 days before 9-11 attacks.

1932 Aug 31 ${ }^{\text {st }}$ New England Total (Saros 124) Totality 100\% over Kennebunkport, Maine—spiritual home of the Bush Family. 99.8\% in Boston.

1963 July 20 Japan to USA—Only Maine Total (Saros 145) A few months before Kennedy Assassination. Totality only in state of Maine. 97\% in Kennebunkport. 94\% in Boston.

1970 March 7 USA Eastern Seaboard (Saros 139) 94\% in Kennebunkport. 96\% in Boston.
1984 May 30 Washington DC (Saros 137) Ring of Fire darkens Washington DC (95\%) while Bush is Vice-President.

1994 May 10 USA Ring of Fire (Saros 128) Ring of Fire crosses Texas the year George W. Bush is elected Governor. 87\% coverage in Midland, his boyhood home. Path crosses USA to exit in Maine, with annularity directly over Kennebunkport.

2012 May 20 USA Hanoi Vietnam to Midland Texas (Saros 128) First complete USA solar eclipse in 18 years begins at sunrise over Hanoi Vietnam and ends at sunset over Bush Home in Midland Texas.

2023 October 14 USA Ring of Fire (Saros 134) Ring of Fire Path again goes directly over Midland Texas on its way to exit nation at Corpus Christi (Body of Christ). The only three rings of fire eclipses (1994, 2012 and 2023) over the heartland of USA in the last century all go directly over Midland or very close.

2024 April 8 USA Total Eclipse (Saros 139) Eclipse crosses Texas. Totality in Austin (where George W. was Governor), Dallas (George W.'s current home), and at his Ranch in Crawford. 96 \% coverage in Kennebunkport Maine.
4) Donald J. Trump Trump was born the day of a total lunar eclipse which was not visible from the USA on June 14 1946. Interesting: Bill Clinton (Aug 19 1946) and George W Bush (July 6 1946) were also born in the summer of 1946. Thus, three US presidents were born within 66 days of each other, each in different summer months.

The strange case of three 60's Icon relations in 1920's Eclipses—Dylan, the Beatles and MLK


## 1925 to 1927

The map at left shows three eclipses. At Top is Dylan eclipse USA to Britain ( Jan 24 1925), just below it is the Beatles Liverpool to USA ( Jun 29 1927) Bottom right is three years before MLK's birth (Jan 14 1926)

## Dylan and the Beatles

Most musical historians make the case that the two greatest examples of creative musical expression in the era of modern cultural maximum expression (1945 to 1975) were Bob Dylan and The Beatles. Dylan is widely considered the greatest songwriter of all time. The Beatles are usually considered the greatest and most worldwide popular musical act of all time. Both are clearly unique phenomenon. They also deeply influenced each other and were friends.

## 5) Bob Dylan's Eclipse

1925 Jan 24 NYC/ Roaring Twenties Total Eclipse (Saros 120) Solar Eclipse begins at sunrise with totality in Duluth, Minnesota (where Dylan was born) and Hibbing, Minnesota, where he was raised. Eclipse brings totality to Woodstock, New York, (where Dylan lived for many years and the site of huge 1969 concert he did not attend). Eclipse then travels to New York City, the city where he chose the name Bob Dylan, where he became famous, recorded his first albums, and lived for many years.

Jan 241925 is 36 years to the day before Dylan travels from Minnesota by bus to New York City on Jan 24 1961. He played two songs that night and would become famous within the year.

After the eclipse path leaves New York City. It travels Atlantic and ends just after crossing the United Kingdom, thus linking the Dylan Eclipse with the 20th century's other greatest example of maximum musical expression, The Beatles, who have their own eclipse $21 / 2$ years later. All the Beatles became
friends with Dylan and their separate musical expressions fed each other. Between them, they may have been part of the maximum expression of popular art in human history. Dylan's eclipse had $86 \%$ coverage in Liverpool.

## 6) The Beatles

The Beatles were the most popular worldwide musical phenomenon in the history of planet earth. They were a maximum expression of popular music and art.
The 16/36 pattern: Dylan's hometowns were marked in an eclipse at sunrise 16 years before his birth and 36 years before he first achieved fame.
16/36: The Beatles hometown of Liverpool, England was marked in an eclipse at sunrise 16 years before the last Beatle was born there and 36 years before their peak popularity began.

## 1927 June 29 Liverpool to America Total Eclipse (Saros 145)

One of the only total solar eclipses to cross Liverpool in centuries broke through heavy cloud banks to give an immortal show to thousands of Brits, many of whom had gathered on the beaches at sunrise. Within the same 16 -year time frame as the span between the Dylan eclipse and Dylan's birth, all members of the Beatles are born in the eclipse path in Liverpool.
An eyewitness report:
"The sense of exaltation produced by such stupendous beauty was so great that when the first pencil of light from the reappearing sun robbed the corona from our eyes, one seemed to fall back to earth through an untold distance, back to the common reality of ourselves, our fellow beings, and the wet sand on which we stood, Totality was ended. "
S. Seeley—The Total Eclipse of June 29, 1927, Liverpool England— writing for The Royal Astronomical Society of Canada

Within the same time frame of 36 years from total eclipse to arrival, both Dylan and the Beatles arrived in the place that will make them famous. (NYC for Dylan and London/ America for the Beatles)

Within 40 years from eclipses both Dylan and the Beatles will achieve their greatest level of commercial popularity. Dylan in 1965 (40 years from 1925 NYC/Hibbing eclipse) with "Like a Rolling Stone". Beatles in June 1967 (40 years from 1927 Liverpool eclipse) with Sergeant Pepper's Lonely Hearts Club Band.

The Dylan eclipse traveled from America to Britain, with sunrise over Dylan's home of Hibbing. The Beatles Eclipse traveled from Britain to America. It began in Britain at sunrise over Liverpool before traveling across the northern latitudes to ending in America's Aleutian Islands of Alaska.

The two eclipses essentially circled the globe: America to Britain to America. This is the same pattern as the music itself. The rock, country and blues music of America traveled to England, inspired the Beatles and then returned to America. Music is a force for truth made from and for the Holy Spirit.

In the 1920's the British Empire covered nearly a quarter of the Earth's surface. Soon it would be the American Empire that would dominate. See USA eclipses.

## 7) Charles Darwin (Feb. 121809 to April 19 1882)

Darwin was born on the very same day as Abraham Lincoln on Feb 12 1809. He had three birthday eclipses during his life.

He died on April 19, 1882, seven years and one day before Adolf Hitler was born on Apr 20, 1889.
Darwin's death day first appears as an eclipse on April 19 1939, in the hours before Hitler's $50^{\text {th }}$ birthday, the last solar eclipse before World War Two. It was a ring of fire connecting North America with extreme Northern Europe. 25\% coverage where Darwin died 57 years before in Kent, England.

## 8) Adolf Hitler (April 201889 to April 30 1945)

One of the only total eclipses over Berlin in the last thousand years happened on Aug 19 1887, 87 weeks before Hitler was born. It traveled from sunrise at Berlin through Poland and included totality in Moscow. (see world eclipses)

Hitler's death (4-30) and birthdays (4-20) are perpetually linked on the Metonic one lunar year apart from each other. They appear firmly in modernity for the first time with an Apr 302022 partial and April 202023 hybrid eclipse.

Hitler had an eclipse on the eve of his 50 th birthday, Apr 191939 (7pm Berlin time $30 \%$ coverage 5 hours before his $50^{\text {th }}$ birthday), 135 days before WWII.

Hitler may have seen two eclipses: The Titanic Eclipse of April 171912 covered much of Northern Germany in annularity, including Berlin with 95\% coverage. The World War One Eclipse of Aug 21 1914, in the first weeks of the war, had $80 \%$ in Berlin and $70 \%$ at Hitler birthplace in Austria.

The last solar eclipse of the $20^{\text {th }}$ Century and the last complete eclipse of the second millennium was an August 111999 Total Eclipse across Europe and the Mideast. Totality in Branau am Inn, Austriawhere he was born and in Munich, where he first achieved notoriety and power.

There is an unexplained oddity whereby Hitler's birthday of 4-20 became a catch phrase among marijuana smokers as a time to smoke pot.

## 8) Billy Graham (Nov 71918 to Feb 21 2018)

Billy Graham lived his life balanced neatly in between the two greatest modern USA cross-country eclipses. Billy Graham was born 152 days after the great cross country USA eclipse of June 81918 on Nov 7 1918. ( $82 \%$ coverage in his hometown of Charlotte, North Carolina). Graham died 184 days after the next USA cross country eclipse, which happened 99 years later on Aug 21 2017. (99 \% coverage where he died in Montreat, NC). These two eclipses were the only true west coast to east coast total eclipses since the nation's founding.

Billy Graham preached the Gospel of Jesus Christ in person to more than 200 million people during his lifetime, the most in human history.

## 9) 2023 Dwight Eisenhower vs. Adolf Hitler Cosmic rematch

Eisenhower (Oct 141890 to March 28 1969). There was a partial solar eclipse on Mar 28 1968, exactly one year before Eisenhower's death on Mar 28 1969. Ike's birthday appears in a USA Ring of Fire Oct 14 2023, the first time Oct 14 appears in an eclipse since 1651. Hitler's birthday appear in a hybrid on Apr 20 2023, the first time an April 20 eclipses appears since an April 19/20 solar eclipse in 1651.

Oct 142023 is Ike's $133^{\text {rd }}$ birthday
Apr 202023 is Hitler's $134^{\text {th }}$.

Eisenhower was commander of the Allied army that invaded Europe on June 6, 1944 and fought Hitler's army. The Allied Army entered Germany in early 1945.

## 10) Christopher Columbus (born 1451 died May 20 1506)

Columbus used knowledge of an upcoming lunar eclipse on June 301503 to trick the natives of what became Jamaica into thinking Columbus and his crew were deities.
Columbus death day of May 20 (1506), and his arrival in America day Oct 12 (1492) were embedded throughout the last half of the 20th Century Eclipse Metonic.

The date of his first colonial crime (the kidnapping of natives two days after arriving in 1492) is Oct 14, which is the date of the 2023 American Ring of Fire 531 years later.

## 11) Prophet Mohammad

Quoted From:
Hadith No: 153
Narrated/Authority of Al-Mughira bin Shuba

The sun eclipsed in the life-time of Allah's Apostle (Mohammad ) on the day when (his son) Ibrahim died. So the people said that the sun had eclipsed because of the death of Ibrahim. Allah's Apostle said, "The sun and the moon do not eclipse because of the death or life (i.e. birth) of someone. When you see the eclipse, pray and invoke Allah."

Other Hadiths record the Prophet also saying of eclipses on that occasion " they are but two of the signs of Allah".

With those recorded statements, Mohammad becomes one of two founders of a major religion to specifically address eclipses.

Jesus talks of "signs in the sun and moon" (Luke 21:25) that will accompany his return, clearly a reference to eclipses.

## Study in The Birthday/Deathday Metonic—US Presidents

## This is basically a prelude to the JFK/ Lincoln Section

About one in 35 people are likely living in a solar eclipse Metonic that lands usually on their birthday. About one in 35 people are going to die on a day of a metonic.
Eclipses wiggle around a little, so as many as one in 6 people can have at least one eclipse on either their birth or death day during their lifetime.

Having solar eclipses on both one's birthday and death day during your lifetime is not exactly "common". That being said, it does happen to some and I will make an attempt to roughly determine the level of its peculiarity.

Does everybody have interesting solar eclipses on their birthday during their lifetimes? The answer is clearly no. Is it what you would call rare? Not really.

There are only about 35 dates rolling around on the Metonic at any one time. These can bend one date in either direction now and then. Depending on how long you live, it seems there might be as much as a one in 6 chance of having your birthday appear on any solar eclipse during your lifetime. I do not have any family or close friends whose birthdays appear on a solar eclipse during their lifetime.

Are you born in the Solar Eclipse Metonic (meaning is there an eclipse anywhere on earth?
Current Metonic (remember these dates can bend and sometimes don't show up for many decades):
January 5, 15, 26
February 6, 17, 27
March 9, 20, 30
April 8, 20, 30
May 10, 21
June 1,11, 21
July 1, 12, 22
August 2,12,21
September 1, 12, 22
October 2, 14, 25
November 3, 14, 25
December 4, 14, 26

These are the latest dates generally, but they wobble a bit due to times zones and orbital reality. If you are more than one day removed from any of these dates, "generally" you will have not had a complete eclipse on your birthday during your lifetime. Partials can vary by two days sometimes.

Now add the death day. How likely is a solar eclipse to show up on both a person's birthday and death day during their lifetime? Example: If I am born on March 21908 and die on July 14 1975, did any solar eclipse ever appear on either of those days anywhere on earth while I was alive? The answer is
no. The Solar Metonic in early March was around the 8th, the 18th and the 29th during the 20th Century. Now it has moved on. The Metonic in July is around the $11^{\text {th }}$ and 22 nd.

I will not have a solar eclipse on my real birthday. The next time my birthday appears in the solar eclipse Metonic is more than a century away.

The chance of having at least one eclipse appear on both one's birthday and death day during a lifetime at all appears to may be between one in 15 . It is within that framework that we can begin to look at patterns that are more peculiar. We look at Lincoln and JFK.

It turns out that birthday/deathday eclipses (and other interesting eclipses) are peculiarly abundant (and extremely peculiar) in the lives and times of our two most famous American Presidential martyrs, Abraham Lincoln and John F. Kennedy. These eclipse patterns seem to bear a unique witness, worthy of consideration, that compliments already chronicled synchronicities in the lives and deaths of the two presidents.

The full Kennedy/Lincoln Study follows this chapter.

## Metonic Calendar Review

Now, let's briefly review Metonic reality by using the Kennedy death day eclipses. The following are actual solar eclipses on or around JFK's death day during the $20^{\text {th }}$ Century.

1) Nov 221900 Kennedy Death day Metonic starts the 20th Century
2) Nov 221919 JFK Assassination Premonition Eclipse (Texas and Cuba)
3) Nov 21/22 1938 Total Antarctica
4) Nov 23 1946--Partial
5) Nov 22/23 1965 (Ring of Fire Southeast Asia) (Nov 22 in USA)
6) Nov 22 1984—Total in New Guinea over PT 109

Notice the first three eclipses are separated by two exact 19-year periods. That is the classic definition of Metonic. They occur on basically the same date. From 1938 to 1946 you find a two-day jump announcing what I call the 8 -year lurch. From that point the 19 -year Metonic again resumes, though it begins pushing towards the 23 rd on the solar calendar.

By 2030 that same Metonic will have moved to November 25th, and it will be impossible to have a solar eclipse on Nov. 22nd for several centuries.

The difference in dates is affected by orbital reality, geographic time zones, the international date line and leap years. As you begin to appreciate the subtle certainties of the Metonic progression, you realize that these are not imaginary milestones, but indeed specific moments in cosmic time being cyclically marked.

Here's another example:

August 21 1914--eclipse across the battlefields of Europe at outset of WWI -Then 19 years...
August 21 1933-- eclipse across Jerusalem as Nazis rose to power in Germany then 19 year period (eclipse Aug 20 1952),
then 19 year (eclipse Aug 20 1971),
then 8 year lurch (eclipse Aug 22 1979)
then 19 years (eclipse Aug 21/ 22 1998),
then 19 years brings us to: August 212017 --cross country eclipse of the USA

That's 103 years, a particularly long Metonic hold on a date.
The most possible is 122 years, a rare feat. Much of it is perspective and perception due to time zones.

These dates progress over the decades and centuries. August 21st becomes Aug 24th by the mid-21st century. After 300 to 500 years or so it will again return to having eclipses on August 21st.

There are approximately 3 dates per month in any given century where an eclipse might happen. For instance, at this writing, we just had a Dec 42021 eclipse which was preceded by an eclipse the year before on Dec 142020 and a December 26th eclipse in 2019. Those were lunar years apart-354.3 days. These lunar year triads are common but not necessarily constant.

There are cycles of time expressed in eclipses. But it is not science as we have been taught. It is close to song or art, but it's clearly a cosmic clockwork. They are dates that repeat or dance for awhile and then slowly change over time.

## Birth and Death Day eclipse. Is it Common? Let's take a Look.

Let us consider the birth and death days of all 39 Deceased Presidents of the USA. Let's also check the birthdays of the 6 living Presidents. Then, just for fun and scientific sampling, we'll look at 39 deceased public personalities and check for the presence of birthday/deathday eclipses in their lives.

Here are the results:

Of the 39 Deceased Presidents of the United States:
28 had no birthday or death day solar eclipses of any kind during their lifetime.
6 had one solar eclipse (including partials) during their lifetime on either their birthday or deathday.
4 had complete solar eclipses on both birthday and death days during their lifetime.
One (Hoover) had a partial and a complete

Of the six living presidents, only one has a birthday within the eclipse Metonic—Jimmy Carter with an October $1^{\text {st }}$ birthday.

Here are the four deceased Presidents with who had both Birth and Death days expressed in complete solar eclipses during their lifetime.

Thomas Jefferson—Born April 131745 ---Died July 41826
William Henry Harrison—Born Feb 9 1773—Died April 41841
Abraham Lincoln---Born Feb. 12 1809--Died April 14/15 1865
John F. Kennedy—Born May 29 1917--Died November 221963
3 of them-Harrison, Lincoln and Kennedy-died in office.
3 of them-Jefferson, Lincoln and Kennedy- are considered among the greatest Americans of all time.

## Thomas Jefferson Eclipses (b. April 13 1745, d. July 4 1826)

solar eclipses occurred on April 13, 1763, April 131801 (partial) and July 4th 1796.
Thomas Jefferson died on July 4 1826, the $50^{\text {th }}$ anniversary of the Declaration of Independence (which he had written). He died on the exact same day as John Adams, a fellow "Founding Father" - who Jefferson had defeated in the election of 1800.

Their deaths occurred thirty years after a July 41796 total eclipse (over open ocean-no land- in the Pacific) on the $20^{\text {th }}$ anniversary of American Independence. That was both the first and last eclipse on July 4th for hundreds of years in either direction. As a curiosity, James Monroe, another founding Father, also died on July 4th five years later in 1831.

There were two complete solar eclipses during Jefferson's life on his birth and death days, an eclipse on his 18th birthday in 1763 and 30 years before his death, on July 4 1796. He almost certainly saw neither of them.
The eclipses that happened the day Jefferson turned 18 is shown on left.
The one that happened one lunar year later is on the right

( maps courtesy of NASA) Above left : Jefferson's $18^{\text {th }}$ Birthday Ring of Fire Africa, Arabia, Persia, India and on the right a Ring of Fire over Europe.
Above right: Jefferson is still 18 for another 11 days. Spain, Portugal, France, Britain, Germany. And right over Paris in the Springtime! Those would be some great eclipses to have on your $18^{\text {th }}$ birthday, whether you saw them or not.

He would see plenty of eclipses over the course of the Revolution. See USA eclipse section. His birthday Metonic of April 13 becomes Lincoln's death day Metonic of April $14^{\text {th }}$. They literally pass the Metonic baton between Apr 131801 and Apr 141809 on an eight-year lurch. Lincoln is two months old and Jefferson is 64 in April 1809.

William Henry Harrison, Born Feb 9 1773—Died April 41841
solar eclipses on Feb 91785 and April 41810

Harrison is said to have been the recipient of the most famous curse in the history of the USA, a curse passed by Shawnee Chief Tecumseh, who was killed by Harrison's Army in battle in 1813.
Harrison is the man who ran on" the Tippecanoe and Tyler Too." slogan for President. The battle of Tippecanoe was where the US Army defeated a confederation of Native Tribes in 1812.
Harrison died 31 days into office, the result of pneumonia contracted during his inaugural parade.
First eclipse occurs when Harrison turns 12 years old in Feb 1785, a South America to Africa Ring of Fire. The next eclipse is when he is 37 on April 4 , what will be his death day 31 years later. He likely saw neither. He dies April 4 1841. 4-4 is also the date of the assassination of Martin Luther King 127 years later.

Herbert Hoover has two eclipses but one is a partial.

## Before we get to Kennedy and Lincoln; Here's all the Presidents:

Presidential Births and Deaths in The Solar Eclipse Metonic.
1.George Washington—Born 2-22-1732...Died 12-14-1799 (no eclipses)
2. John Adams---Born 10-30-1735...Died July 41826 (eclipse 7-4-1796)
3. Thomas Jefferson-Born 4-13-174/ Died July 4th 1826- (two on April 13' one eclipse Jul 4 1796)
4. James Madison -3-16-1752 to 6-28-1836 (no eclipses)
5. Monroe-4-28-1758 to 7-4-1831 (eclipse 7-4-1796)
6. J. Quincy Adams 7-11-1767 to 2-23-1848 (no eclipses)
7. Andrew Jackson 3-15-1767 to 6-8-1845 (no eclipses)
8. Martin van Buren 12-5-1782 to 7-24-1862 (no eclipses)
9. W.H. Harrison born 2-9-1773 to died 4-4-1841 (eclipses on Feb 91785 and April $4^{\text {th }} 1810$ )
10. John Tyler—born 3-29-1790 to 1-18-1862 (no eclipses)
11. James Polk-11-2-1795 to 6-15-1849 (no eclipses)
12. Zachary Taylor 11-24-1784 to 7-9-1850 (no eclipses)
13. Millard Fillmore-1-7-1800 to 11-8-1874 (no eclipses)
14. Franklin Pierce-11-23-1804 to 10-8-1869 (eclipse on 10-8 1866)
15. James Buchanan-4-23-1791 to 6-1-1868 (no eclipses)
16. Abraham Lincoln -2-12-1809 to 4-14/15-1865 (3 birthday eclipses on Feb 12 1812/ Feb 12 1831/ Feb 121850 and one post death on Feb 11 1869—one day before what would have been his 60th birthday. Four death day eclipses: April 14, 1809/ April 14 1828/April 15 1847/ one year post death April 15 1866-Lincoln was shot on 14th and pronounced dead 9 hours later on the $15^{\text {th }}$.
17. Andrew Johnson 12-29-1808 to 7-31-1875 (no eclipses)
18. US Grant 4-27-1822 to 7-23-1885 (no eclipses)
19. Rutherford B. Hayes 10-4-1822 to 1-17-1893 (no eclipses)
20. James Garfield-11-19-1831 to 9-19-1881 (no eclipses-Garfield was assassinated. He narrowly misses eclipse Metonic on both dates. There is a numerical peculiarity of 1 s and 9 's in birth and death days ( 11-19 and 9-19). Death year of 1881 is the last year before 1961 that is the same upside down.
21. Chester Arthur -10-5-1829 to 11-18-1886 (no eclipses)
22. Grover Cleveland-3-18-1837 to 6-24-1890 (no eclipses)
23.Benjamin Harrison 8-20-1833 to 3-13-1901 (Aug 201895 partial)
24. Grover Cleveland-see above
25. William McKinley -1-29-1843 to 9-14-1901 (no eclipses)
26. Teddy Roosevelt-10-27-1858 to 1-6-1919 (no eclipses)
27. William H. Taft---9-15-1857 to 3-8-1930 (no eclipses)
28. Woodrow Wilson 12-28-1856 to Feb 31924 (eclipse on Feb 3 1916—Wilson's $60^{\text {th }}$ Birthday)
29. Warren Harding 11-2-1865 to 8-2-1923 (no eclipses)
30. Calvin Coolidge ---7-4-1872 to 1-5-1933 (no eclipses)
31. Herbert Hoover-- 8-10-1874 to 10-20-1964 (partial eclipse on 10-20-1892 and Annular eclipse on 8-10-1915)
32. Franklin Roosevelt -1-30-1882 to 4-12-1945 (no eclipses)
33. Harry Truman-5-8-1884 to 12-26-1972 (no eclipses- narrowly avoided Metonic in both dates) 34. Dwight Eisenhower-10-14-1890 to 3-28-1969 --Partial eclipse 3-28-1968, exactly one year before his death.
35. John F. Kennedy Born May 29, 1917---Died November 22, 1963
two exact birthday eclipses on May 29, 1919/ May 29 1938) - exact death day Nov. 22nd 1919 and 1965-7 more eclipses on Metonic during 20 ${ }^{\text {th }}$ Century. Eleven in all
36. Lyndon Johnson-8-27-1908 to 1-22-1973 (no eclipses) ...Johnson's death day has interesting numeric similarity to JFK death date. Johnson died on 1-22-1973 Kennedy on 11-22-1963. it's a difference of exactly 10 years and 10 months.
37. Richard Nixon 1-9-1913 to 4-22-1994 (no eclipses)
38. Gerald Ford 7-14-1913 to 12-26-2006 (no eclipses. Died 34 years to the day after Truman)
39. Jimmy Carter 10-1-1924 (Carter was born in Metonic. Was 16 years old for 10-1-1940 eclipse.
40. Ronald Reagan 2-6-1911 to June 52004 (no eclipses)
41. George HW Bush 6-12-1924 to 11-30-2018 (no eclipses)
42. Bill Clinton born 8-19-1946 (not on Metonic)
43. George W. Bush 7-6-1946 (not on metonic... 44 days before Clinton)
44. Barrack Obama 8-4-1961 (not on Metonic)
45. Donald Trump 6-14-1946 (not on solar Metonic but was born on a lunar eclipse visible from Asia)
46. Joe Biden 11-20-1942 (not on Metonic. Biden was born on Robert Kennedy's 17th birthday

Again: Of 46 US presidents - 39 are Deceased. Of them, 28 had no birthday or death day solar eclipses of any kind during their lifetime. 6 had one solar eclipse (including partials) during their lifetime on either their birthday or deathday. Herbert Hoover had one partial and one complete. Four had complete solar eclipses on both birthday and death days during their lifetime.

Of the six living presidents, one has a birthday within eclipse Metonic—Jimmy Carter.
About 70\% of deceased presidents had no eclipses with their birth/death day during their lifetime. $18 \%$ had one. 10\% had at least two—Jefferson, WH Harrison, Lincoln and Kennedy. Only Kennedy and Lincoln had solar eclipses occur in the USA on either birthday or death day. Lincoln had an eclipse on his $22^{\text {nd }}$ birthday (2-12-1831). It went very near Washington DC, where he would die 34 years later. Kennedy had an eclipse 44 years before his death day (Nov 22 1919) when he was two years old (plus $1 / 2$ lunar year). It began over the state of Texas, where he would be killed.

## Continuing Synchronicity Eclipse Experiment

Now, let's continue this experiment. I chose a list of 39 random deceased celebrities and public figures from the past. I chose them off the top of my head and wrote their names down on a piece of paper without first looking at their birth/death days for best "scientific" effect.

What would the percentages be of ecliptic presence in their lives?
39 Total Public figures. 22 had no eclipses (56\%) 15 had 1 eclipse (38\%) 2 had 2 eclipses (5\%) 0 had more than two complete eclipses.

As you will see, the two with two eclipses were Huey "The Kingfish" Long and Ray Charles...Long was a populist American politician who was assassinated on September 10, 1935. Ray Charles, of course, was one of the great entertainers in the history of popular music.

Here is the List of famous non-president people and their relation to Metonic:

1. Ben Franklin 1-17-1706 to 4-17-1790 (no eclipses)
2. Albert Einstein 3-14-1879 to 4-18-1955 (one eclipse)
3. Princess Diana 7-1-1961 to 3-31-1997 (no eclipses)
4. Marilyn Monroe 6-1-1926 to 4-4-1962 (no eclipses; died exactly six years before MLK)
5. Elvis Presley 1-8-1935 to 8-16-1977 (no eclipses)
6. John Lennon 10-9-1940 to 12-8-1980 (no eclipses)
7. Huey Long---8-30-1893 to 9-10-1935(3 eclipses---total on 8-30-1905, partial on August 30 1925..total on September 10 1923)
8. Charles Lindbergh 2-4-1902 to 8-26-1974 (one eclipse 2-4-1943)
9. Walt Whitman 5-31-1819 to 3-26-1882 (one eclipse)
10. J. Edgar Hoover 1-1-1895 to 5-2-1975 (no eclipses)
11. Mahatma Ghandi 10-2-1869 to 1-30-1948 (no eclipses. His birthday is in current Metonic)
12. Mao Tse Tung---12-26-1893 to 9-9-1976 (one eclipse)
13. Josef Stalin -12-18-1878 to 3-5-1973 (one eclipse-partial in 1924)
14. Queen Victoria-5-24-1819 to 1-22-1901 (one eclipse)
15. Nelson Mandela -7-18-1918 to 12-5-2013 (no eclipses)
16. Roy Rogers-11-5-1911 to 7-6-1981 (no eclipses)
17. Judy Garland - 6-10-1922 to 6-22-1967 (one eclipse)
18. Robert E. Lee 1-9-1807 to 10-12-1870 (no eclipses)
19. Martin Luther -11-10-1483 to 2-18-1546 (no eclipses)
20. Charles Darwin-2-12-1809 to April 19th 1882—Shared birthday eclipses with Abe Lincoln)
21. Harry Truman (Mount Saint Helens hermit) birth unknown. Died May 18, 1980 -one eclipse 1920)
22. Mozart ---1-27-1756 to 12-5-1791 (no eclipses)
23. Mother Theresa-8-26-1910 to 9-5-1997 (no eclipses)
24. Babe Ruth - 2-6-1895 to 8-16-1948 (no eclipses)
25. Thomas Edison 2-11-1847 to 10-18-1931 (no eclipses)
26. Ray Charles 9-23-1930 to 6-10-2004 (eclipses 9-23-1987 and 6-10-1964)
27. Pablo Picasso-10-25-1881 to 4-8-1973 (one eclipses)
28. George Harrison - 2-25-1943 to 11-29-2001 (one eclipse)
29. CS Lewis 11-29-1898 to 11-22-1963 (one eclipse -shared death day with JFK and Aldous Huxley)
30.Helen Keller ---6-27-1880 top 6-1-1868 (no eclipses)
30. Malcolm X-5-19-1925 to 2-21-1965 (one eclipse)
32.Walt Disney--- 12-5-1901 to 12-15-1966 ( no eclipses)
33.Buddy Holly -9-7-1936 to 2-3-1959 (no eclipses)
31. Winston Churchill 11-13-1874 to 1-24-1965 (one eclipse 1-24-1925)
35.Shah Reza Pahlavi-10-26-1919 to 7-27-1980 (no eclipses)
32. Augusto Pinochet--- 11-25-1916 to 12-10-2006 ( no eclipses)
33. Salvador Allende-6-26-1908 to 9-11-1973 (one eclipse four years before his death on 9-11-

1969-he was born 2 days before an eclipse on 6-28-1908)
38. Lucille Ball-8-6-1911 to 4-26-1989 (no eclipses)
39. Jimi Hendrix 11-27-1942 to 9-18-1970 (no eclipses)

Once again, 39 Total Public figures.
22 no eclipses (56\%)
15 with 1 eclipse (38\%)
And 2 with two eclipses (5\%)
The two with two eclipses were Huey "The Kingfish" Long and Ray Charles...

Total of 78 deceased Presidents and Public Figures. 6 of them had eclipses on birth and death days. 7\% of them. 4 were Presidents. Another was a famous politician/Governor-one was an entertainer. Half of that figure (3) were assassinated-Lincoln, Kennedy and Huey Long.
The other three were Jefferson, William Henry Harrison and Ray Charles.

Only Kennedy and Lincoln have closely linked Metonic eclipses (repeating through history) with birth and death days. Only John F. Kennedy has a matching eclipse pair (Metonic side by side) with his birth and death days in permanently locked opposite nodes 177 days apart. Lincoln's death and birthday are linked exactly three eclipse years apart.
We have established the basic peculiarity.
Perhaps now we're ready to dive into the reality of the Lincoln/Kennedy Eclipses.


[^0]:    *(Gardner speaking)" this is dramatically evident during a total eclipse of the sun when the moon's disk precisely occludes the sun's disk. Put another way, the tip of the moon's shadow just brushes the earth's surface. The improbability of this coincidence is a cornerstone in a proof of the existence of God as outlined in a ten-page pamphlet by Norman Bloom, published in 1970 in Guttenberg, New Jersey. That pamphlet is entitled, The New World: The First Proof in History that the Earth, Moon and Sun are controlled by a Thinking, Acting Mind and Hand That Has The Power of Life and Death over every Living Thing on Earth. Mr. Bloom reports that he has defended his argument at such centers of higher learning as Harvard, MIT, and Barry Farber's WOR Radio Show. He offers \$ 1,000 to anyone who can find a flaw in his proof. (Gardner ibid.)

    There you have it. Gardner says the sun/moon coincidence is "the cornerstone" of Bloom's argument. Gardner clearly possessed this 1970 work at some point, but it did not end up in his papers at Stanford. The papers at Stanford are mostly about baseball and are dated 8-8-1976.

