

The Calendar According to Scripture

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Abstract (Summary): In this day and age matters are summarized so that the faithful will not waste time with false teachings which surround us. It is helpful also for the faithful who have come down similar paths to parts of the truth to quickly identify their fellow brothers and sisters. If you do not already agree with these points, then read onward and open your eyes. I am being up front with the faithful here and giving the bottom line for the controverted elements of the calendar. Therefore this summary is not exhaustive: (1) The seven day week is independent of the sun and moon, and is a continuous cycle from Creation. The Sabbath falls onto the night of the sixth day of the week, and the seventh day, being observed from evening of the 6th day to evening of the 7th day. In the evening of the 6th day, every soul is to rest from all work. The seventh day is most holy. (2) The new moon is marked by the first visible sliver of light seen with the naked eye. We prefer the witnesses to be in Israel, but allow local observations under some circumstances. (3) The year is determined when the sun goes forth from the west (west is called the 'end' of the heavens, to be explained), and begins anew when the sun returns to its circuit point after 365 or 366 days. (4) The lunar year is usually 12 months, and is to be extended to 13 for no reason except that which is necessary to prevent the first day of Passover from aligning with the old solar year. (5) The barley doctrine will be refuted in an Appendix. Even though it usually aligns with correct results, it is not a Scriptural method of finding the year. (6) The post equinox method used by the late Babylonian calendar is thoroughly refuted. (7) Modern equinox calculations are rejected in favor of ancient observational sighting. All the particulars are confirmed using biblical chronology.

Books by Daniel Gregg

The Good News of Messiah (NT Translation)

The Scroll of Biblical Chronology and Ancient Near Eastern History, Vol. I

The Scroll of Biblical Chronology and Ancient Near Eastern History, Vol. II

The Resurrection Day of Messiah

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Introduction

The Controversy: I should not need to say that what the Scriptural Calendar is has occasioned great controversy. What ought to be the simplest and most granted of matters has been made into the most contentious. The reason for this is that the calendar ultimately validates the truth concerning the identity and mission of Adōnai Yēshua to be a ransom for scattered Israel, to regather the tribes, to make forgiveness of sin, and to restore the kingdom. So the devil is desiring to see the matter confused. Satan does not want the calendar to contribute to the truth about Mēssiah Yēshua. So he promotes the foolish and uninformed to confuse the matter on one end, and he hires deceivers on the other, whose chief qualification is how clever they can be in promoting lies that are logically inconsistent with the truth. Above all, he does not want a revival to happen among the faithful in Mēssiah to return to a full knowledge of his Law. He wants the sheep to be scattered, separated, and without guidance, so that he can prey on them one by one to destroy them if possible.

If one were to survey the multitude of competing calendar claims to the title of “Biblical Calendar” one would come up with an astonishing number of contradicting claims. Logically, only one answer to a particular is right, and all the others are false teaching. This means without a check or test to confirm which is right, the probability is that whatever anyone may uncritically accept will be false. Unproven tradition cannot be relied upon. The traditions compete with each other. Matters must be logically sorted out and scientifically checked under the guidance of the Spirit, seeking answers through prayer. Real prayer brings objective answers. Real diligence discovers them. Piety without diligence only a pretense.

Testing Matters: So it is necessary to prove which one is right. Providentially, Scripture provides the method of proof in its chronology, wherein the calendar may be applied to fix key dates. Only one calendar can do this harmoniously, and that is the true Biblical Calendar. False calendar promoters almost never give any examples of biblical dates determined in their calendar system. The reason is simple. The test cases quickly expose a faulty system, either by way of the wrong year, the wrong weekday, or something else that is historically wrong. If they try to give examples of biblical dates, then they end up contradicting plain and obvious Scriptures. Therefore they refrain from this and simply state their calendar system with no applications to historical chronology. In other words, they accept a world view rejecting the proper role of biblical chronology in the establishment of historical truth, and then they teach their erring system.

I say this so that you will know the truth, and how to test and confirm the truth, and how to expose the false. A false system is a network of circular lies devilishly engineered to reinforce each other. False matters are proved by arranging the proofs with all manner of deceptions so that false assumptions used in the proof go unrecognized and unchallenged. The deceiver builds a mental cage for his victims, using circular reasonings and logical fallacies. And it is easy for the ignorant and unstable

to get trapped in such a linguistic cage. Once the victim is in the cage then all too often the victim is too proud of their own sense of rightness to humble themselves and actually test what they believe to see if it will stand up to objective truth, which isn't based on subjective feelings.

Testing the calendar against historical dates is essential to being sure that one has not fallen into a trap. Constructing an objective Biblical Chronology founded on historical truth is a necessary first step in proving which calendar is correct. All false teachers skip this step, and many of them reject the idea that there is an objective accurate chronology of Scripture because deep down they know they don't know it, and they are afraid of it, because its revelation will reveal that they are liars.

One Calendar in Scripture: The biblical calendar was legislated in the first five books as a matter of Law, and since it was a matter of law, no biblical writer deviated from its requirements. There was, and is, and will be, ever one biblical calendar. There were no changes in the calendar along the way, except added holy days marked in the calendar. The calendar itself did not change. It has existed since the time of creation. One calendar explains everything in Scripture. Every date in Scripture is explained in terms of one calendar.²

Every false calendar system will be unable to explain the date of Messiah's birth, or the time of his death and resurrection³. We may also test matters using the year of the Exodus after working out biblical chronology independently. When you the reader see the fruitfulness of this, then there are many other biblical dates that can be likewise checked against history, which only serves to confirm the calendar with severe redundancy.

A necessary knowledge. Knowledge of the calendar is necessary to keep Messiah's laws, to know when his feast days are, the Sabbatical and Jubilee years, to understand historical events in Scripture, and very importantly to be able to understand prophetic events that have not yet happened, which are in terms of the one calendar of Scripture.

But first we must say what the correct calendar system is, and cite the texts that support it. The testing I will save for points after I have explained the mechanics to show that we have rightly interpreted the texts. One can indeed go a long way in testing what I say about the calendar against the applied chronology. Even the most sincerely doubting Thomas should be convinced.

At the Beginning

Lights for signs: We read in Genesis 1:14 that Yahweh created lights, "for signs, and for appointed times, and for days and years." The sun is called the, "greater light," and clearly it is the light that determines the 'year' and the 'day'. Although months are not mentioned in the text as months, the 'lesser light', called the moon,

² This includes the dates given relating to the Great Flood, and the days of creation week. It also includes the time periods given in the book of Revelation. Space will not permit me to explain all in this paper.

³ This includes the lunar sabbath calendar, pure conjunction based calendars, the so called Enoch calendar, the proleptic Rabbinic calendar, and the Karaite calendar, with certain exceptions where it shares common teaching with the biblical calendar.

clearly determines the 'month.' And the month is covered in the meaning of the words "and for appointed times." The new moon day was an appointed time, as are the feast days in the first and seventh month, and other traditional days. The light of the moon supplies the sign that determines which of the days are appointed times. The other light, the greater light, also has a role in setting the appointed times, sometimes translated "seasons." Thus the moon's light does not exclusively determine appointed times. It does so in partnership with the sun's light. The moon's light is a sign to tell us when the appointed time of the new moon day is. It is a sign to tell us which of the 29 or 30 days of the month we are on. And it is also a sign to tell us when a lunar year begins. A lunar year is a type of year determined by months, being about the same length as a solar year. The sun's light signals the start and end of days. The course of the sun's light in the heavens also signals the start and end of the year, which is the primary definition of the year, being 365 or 366 days. The lunar year is so called from being a time period of similar length to the sun's year. The sun's role for appointed times is to tell us which of the months is first in the year.

The point is that both heavenly lights are used in tandem to determine appointed times, days, and years. Every day is a day of a year determined by the sun's light. Every month is part of a lunar year determined by the moon's light. Every day is a numbered day of a month, and a numbered day of a year. Every season, or appointed time, is determined by both noting recurrence of sunlight and moonlight. Therefore, it says both lights are signs for appointed times, days, and years. This is confirmed by Scripture's subsequent use of the lights for exactly these purposes.

There is no mention of the weekly cycle in Genesis 1:14. The sun's light takes a role in determining the start and end of days used for the week days, but it takes no role in informing us which day of the week we are on. The Sabbath is an appointed time kept in remembrance of creation week. It is not certain days of the month, or certain days of the year, because it is determined by a perpetual seven day cycle, which began before the sun's light and the moon's light were assigned the role of counting days for months and years.

The use of the word 'lights' is no accident. The word of Yahweh is quite exact in defining the important points of the calendar. Firstly he creates 'lights' for 'signs'. He does not call them 'heavenly bodies' or 'astronomical objects' or 'planets'. He does not even call them 'sun' and 'moon'. Those names are first used in Genesis 15:12 and 37:9 respectively. This is because it is the 'light' that is supposed to be the 'sign'. And of course a sign is to occur to signal the beginning of a day, a month, or a year. When the (sun) light appears we know the day begins. When the (moon) light first appears we know the new month has begun, and when the greater light (the sun) completes a cycle, we know that a year has passed. Let us now discuss the month in particular.

The Month

Hodesh חֹדֶשׁ. Later on the Scripture uses the word 'new' (or 'new made' = 're-

newed’) to describe the beginning of the month. See Numbers 29:6, 1 Samuel 20:5; 1 Chronicles 23:31. The (moon) light sign then is the new light. For the moon waxes and wanes and disappears. Then it reappears with new light as a thin sliver in the western sky, and it grows waxing until full moon, and wanes again. This happens every 29 or 30 days. The same word *hodesh*, meaning renewal of the moon refers to both the time it takes to renew itself and also the point in time at which it becomes renewed. It is derived from the Hebrew verb $\Psi\text{TT}\bar{\text{T}}$ *hadash* which means to make to be new, renew. Pertaining to the time it takes to renew itself, which is 29 or 30 days, *hodesh* means a month in English. Pertaining to a point in time, *hodesh* means the new moon. More literally, *hodesh* means the renewing of the moon, either the time it takes or the point it is renewed.⁴

If the Hebrew word *hodesh* is not indicated to mean another time of the month then it is understood to mean the point in time when the new moon is first seen. Sometimes the context indicates it is the new moon day, the day of the new moon feast, or if put with a number or event that is clearly on another day of the month, then it means that part of the month (renewing time period). For example, in Exodus 19:1 it says, “In the third *hodesh* after the sons of Israel went out of the land of Egypt, on this day, they had entered the wilderness of Sinai.” In this case, it means the new moon day, because the day is mentioned. But where not, it means the time the new moon is first seen.

Invisible moons don’t count: So a new moon is when the light reappears, and this is when the month begins. It cannot be when the moon is not seen during its dark period because there is no new visible light at this time. The dark moon is called the conjunction, and those who do not pay attention to Yahweh’s Word are bound to get it wrong if they start their months at the conjunction instead of when the new light sign occurs. Calling a conjunction a “new moon” is a modern definition that originated with astronomers who ignored the Scripture definitions, so the definition is not Scriptural. However, English (like Hebrew) also calls the thin sliver the ‘new moon’, but because English people are not used to starting months at the ‘new moon’ they often call the first few days of the thin sliver the ‘new moon,’ in a loose sense like a new baby is called a newborn as long as it is very little. That is, they do this without realizing that one of these days is the very first day of the month. Sometimes in cases of doubt two days are treated as the new moon day in so far as a feast may be held on the first day and the second day of a month, or the 30th of an old month, and the 1st of the new month.⁵

Older Tradition agrees with Scripture: According to Jewish tradition, the light of the new moon was observed before AD 359, and sometime between then and the 12th century the Rabbinic Calendar evolved to its present state in which new moons often are said to occur on the same day as the conjunction. Various rules

4 Hodesh appears to be derived directly from a participle form of *hadash*, thus renewing, or making to be new.

5 Some have argued against the visible new moon giving the sign for the month on the basis that David stated, “Tomorrow is the new moon” (1 Sam. 20:5). How would he know when it was except on the basis of seeing it, they say, and they reason that it would be the new moon day when it was seen and could not be said to be ‘tomorrow.’ They then say the conjunction must have been calculated in advance, and that this is how he knew, so that ‘tomorrow’ would make sense to them. But their whole reasoning is done in ignorance of Scripture, first as to the definition of a day, which we will come to, and second as to the sense of ‘tomorrow’ which never means the evening.

were added, some which keep the first day of the month the same as the conjunction day, and others which arbitrarily postpone the first day of the month past the new moon day, such that the Rabbinic month may begin: 1) at the conjunction, 2) on another dark moon day between conjunction and the first sliver, or 3) sometimes it coincides with the day of the first sliver. Despite this, the earlier traditional history of the Jews places the new moon at the first sliver. By earlier, I mean at all times before the middle of the 4th century AD.

Witnesses had to see the moon: The Mishnah contains instructions for examining eyewitnesses, but not examining any mathematicians who tried to calculate the conjunction day. The Talmud, Mishnah, and Philo, and various other sources all say the new moon was observed with the first renewed light during the time of Moses and the Prophets, and during the time that Messiah Yeshua observed and kept the feasts of Israel. So the recent Rabbinic calendar contradicts the former Jewish tradition and the Scripture. It is based on the doctrines and precepts of men instead of the word of Yahweh.

Various interpreters have tried to gloss over the discrepancies between the Rabbinic Calendar and the former Jewish tradition by reinterpreting key calendar texts to make it appear their system agrees with Scripture. These are the loudest. But most interpreters acknowledge the Rabbinic calendar currently in use is not the calendar received by Jewish tradition prior to the 4th century AD. The religious justification of the Rabbinic calendar therefore usually takes the form of an argument justifying the changes while acknowledging the fact that new moons were visually determined before the changes. This, however, involves one in a moral hazard. Visual observation was clearly approved by the Almighty throughout the historical periods covered in Scripture. It is on the safe side to observe it this way. But the innovation of the Rabbinic calendar is based on a transfer of authority to unify Israel to the Rabbis after the Scripturally appointed authorities, the Levitical priests, lost their positions. This expropriation of priestly authority by the Rabbis is certainly questionable in the light of the fact that they also use the same authority to reject Messiah Yeshua, and to deprive those holding faithful to Messiah of liberty. But while the Temple stood many priests confirmed their faithfulness to Messiah Yeshua. I would argue that it is necessary to return to the Scripture approved method to unify Israel under Messiah Yeshua, because the dates of his birth, and his death and resurrection are in terms of the visual method. As for the other methods, no one is able to come up with a believable explanation of historical times and seasons stated in Scripture using them. The calendar should remain a witness to Messiah Yeshua by observing it as he did.

To summarize matters, when the moon first appears with new light after a period of non-visibility, which occurs at the end of 29 or 30 days from the previous month, then this new light is the signal for the first day of the month. Since the new moon is seen at night, the new moon feast is held on the following day. That day is numbered as the first day of the month. This explanation is related to the definition

of the day, so the detail of it will be given in the next section.

There were no computers or calculators when the world was created, and no telescopes or binoculars. Therefore, the lights, necessarily, had to be seen by eye. It is the eye that sees the light. For thousands of years, the eye was the only observational tool used in the seeing of heavenly lights. For most⁶ of biblical history the eye was the only instrument available to see the lights that were signs for the appointed time of the month, for days, and for years.

The Purpose of Witnesses: The purpose of the witnesses was to find out when the new moon reappeared. If it is cloudy where all potential observers are, or it is clear and no one looks, is a moon that could be seen the new moon? To answer this question, consider if the moon were not seen on the 30th day of the old month. Does this mean the next day is not the new moon day because witnesses did not see it? No it does not. Astronomical calculation shows that the moon is always new on or before the 30th day of the old month. Therefore, a calculation is used to settle the matter, when witnesses are not properly situated. It is a very simple calculation of counting days of the old month. Therefore, a calculation was performed when witnesses were lacking. For this reason, we know that calculating what the witnesses could see if they would look, and the sky was not obscured, is an allowed procedure.

If the new moon were not seen due to inclement weather, and the old month was made 30 days, and then if on the 29th day of the new month the moon was not seen due to inclement weather, then how long should that month be, 29 or 30 days? It should be 29 days, because it is more likely that a 29 day month will follow a 30 day month than another 30 day month. This also is a calculation that was used in ancient times to compensate for cloudy skies.

If during a clear hot summer, with clear skies, witnesses fail to see the moon on the 29th day four times in a row, making four 30 day months, and it is cloudy on the 29th day of the fourth month, how long should the fifth month be? Answer 29 days, because there are never more than four 30 day months in a row.

So we have two conditions when cloudy weather and calculation says the new moon should appear on the 29th day, and one condition upon which it is new before the 31st day of the old month. One could even use a new moon cycle from 19 years back to solve a problem when witnesses did not see a moon because either they did not look, or the weather prevented it.

The problem with calculations, of course, especially in ancient times, was the longer one went by them, the more likely the actual new moon would differ from it. So such calculations had to be regularly calibrated by actual sightings. But they did amazingly well back then. The Babylonians were able to determine the new moon day with 90% success.

It should be noted that there is no biblical legislation determining a new moon other than that the light is the “sign” for the new month. If the sign occurs, but no one looks, is the moon new? Of course it is. Not reading a sign does not mean the sign is not there. People driving in their hometown fail to look at signs all the time, yet they seem to know what the rules are without having to see all of them.

⁶This is to say, if someone invented an optical aid in ancient times, it was soon lost again to history.

So we are able to presently calculate when eye witnesses would certainly see the moon under clear skies. Does this mean we should disregard the calculations when the weather is bad, or when witnesses are unable to look for other reasons, or are not interested in looking? I should point out that in several cases of inclement weather, the decision of when a new moon should be that could not be seen, was based in part on information from the previous month's observation! And in the four 30 day month example given, the decision was based on information gained from negative clear sky observations on the 29th days of those months. So we see that what witnesses previously saw was converted to a calculation later on.

So I suggest that astronomical software designed to calculate what a witness could see if the weather was not bad is allowed in principle. And in fact, the software is based on a statistical compilation of previous new moons seen by witnesses. So it is not different in principle from the examples given above. It is just the same principle to a greater degree exercised.

Now tis true that sometimes conditions are near border line values, and it is not certain what witnesses will see. In such cases witnesses will be required to settle the issue.

But if people should differ on whether the moon was seen or could be seen and make different decisions, then it is not a matter for judgment or any kind of penalties. Such a matter is between one's conscience and the Almighty. And if in the future Temple authorities are a day off, by all means observe it, and also the day you think is correct, at least insofar as private observance is possible. And if they erred, depending on the reason, the judgment falls on the Levitical priests according to Scripture. But no one should be calling another a transgressor for not realizing which day is the new moon.

Let us now pass on to the 'day'.

The Day

³Then the Almighty says, "Let it be light." And it is light. ⁴Then the Almighty sees the light, that it is good. Then the Almighty begins⁷ to cause a division between the light and between the darkness. ⁵Then the Almighty calls the light, "day." (And the darkness he has called "night.") Then it is setting. Then it is daybreak. One day.

The Literal Day: Now the beginning and the end of the literal day are marked by dawn and dusk.⁸ While this may seem pedantic the only reason we know the difference between dawn and dusk is that the sun is coming up at dawn and going down at dusk. The light is the first definition of 'day' in the Scripture, ***"Then the Almighty calls the light 'day'."*** (Genesis 1:5) This is contrasted with 'night' so that

⁷ Sometimes the imperfect requires us to indicate some way that the action keeps going if the English terms used try to fight against the incompleated action idea. So I may also put, "is causing a division" (and keeps on causing it). The word "division" might be better explained as "cycle."

⁸ Though I speak of twilight, dawn, sunrise and sunset, the first day of creation only had evening twilight at the end of the day, and no sunrise or sunset, and likely no morning dawn. 'Let there be light' just simply resulted in full light with no mixture. The light source of the first three days was replaced by the sun on the fourth day. All literal days from the 4th day onward began with first dawn and ended with last dusk.

'day' denotes the duration of light, which is about twelve hours. This literal day is about twelve hours because it changes its length in hours over the course of a year. It is easy to overlook the 'light' definition of day, but it is the very first definition given in Scripture.

The dividing of day and night: *"Then the Almighty begins to cause a division between the light and between the darkness."* This Hiphil imperfect is really a present tense in the consecutive form, hence "causes" or "is causing." What happened here is the Almighty started the process that would cause the day and night to separate into distinct periods of time. Doubtless this means that the celestial sphere was put into daily motion as the cause.⁹ The first dividing is to occur at the evening at the end of the day. So he is causing the cycle of day and night.

Many readers, however, mistakenly assume that this division was a separating of light from a mixture of light and darkness, this is to say an increase of light from darkness to twilight to full day. But this isn't the case. A cause goes before an effect. The creation of light comes first, and then he sees it, that it is good. So if light were being formed by separating it from darkness, then the cause is put out of order with the effect. The waw consecutives should go in strict order unless proved otherwise. He causes a division such that the darkness will return in the evening. This interpretation keeps the waw consecutives in order. And we will see that it is critical to understanding the next statement, which refers to the following night and not the primordial darkness. Umberto Cassuto interprets the matter the same way:

It was not the Creator's intention that there should be perpetual light and no darkness at all, but that the light and the darkness should operate consecutively for given periods and in unchanging order. Consequently, God divided the one from the other, that is, He separated their respective spheres of activity.¹⁰

The Literal Night: (*"And the darkness he has called 'night.'"*) Genesis switches from the regular imperfect form here to the perfect form expressed by the word 'has.' The effect is to take the statement out of the narrative time line built by the consecutive imperfects. The nights referred to are the nights following the days. The darkness referred to is the divided darkness that followed the days. Explaining why this is so takes extensive knowledge of Hebrew, which is explained in the footnote.¹¹

⁹The creation narrative is from the point of view of a stationary earth, because objective perception is relative to the frame of reference. But it is equally true that viewed from a stationary sun, the earth is revolving in the course of a year, and rotating in the course of a day. If one were on the surface of the sun, the earth moon system would appear to rotate about once a month.

¹⁰Rabbi Umberto Cassuto (1883-1951), *Commentary on Genesis*. "Cassuto's The Documentary Hypothesis and the Composition of the Pentateuch (Hebrew, Torat HaTeudot, 1941; English translation, 1961) was one of the first mainstream works to offer a detailed critique of Wellhausen, rejecting both the central idea of the documentary model - that the Pentateuch had its origins in originally separate documents which had been combined by an editor into the final text - and Wellhausen's dating, which saw the four sources being composed between 950 and 550 BC with the final redaction around 450 BC" (The Online Encyclopedia, 2021).

¹¹I will try to summarize it here using an English example. The narrative tense in English is the past tense, and the way one drops a statement into the narrative that one wishes to keep off the timeline is to switch to the present tense for the one statement. For example, "John arrived at breakfast. John ate his cereal and drank his orange juice. (John hates eggs). John finished by eating his toast. Then he left the table." All the verbs here are in the past tense except one. The present tense switch in "John hates eggs" is the signal that takes this statement off the timeline or sequence of events and makes it a timeless statement of truth. For the same effect, Hebrew uses the imperfect for the narrative, which really is a present tense. And for the timeless statement dropped into the narrative, it switches to the perfect, which is really a completed tense (or point of view). So the conventions in

The Calendar Day: Beyond a literal day, from dawn to dusk, a day is extended by a night to a 24 hour period. The usual case is that days are extended forward to include the night after them. But the case of Sabbaths forms an exception: The seventh day is put with the night before it to form the weekly Sabbath. The daytime for annual Sabbaths is put with the nights before them to form the festival Sabbaths. The dawn to dusk seventh day is put with the night before to make up the Sabbath. But, the night after the sixth day was ordinarily regarded as the extension of the sixth day, and the workers daily sabbath, like the five days before it, and this night was merged with holy rest on the seventh day (dawn to dusk) to form the weekly Sabbath, hence (dusk to dusk), or more broadly from sunset at the end of the daylight portion of the sixth day up to night following the seventh day.

The reason I interject with the explanation of the Sabbath above, and more will be explained later, is that many have incorrectly concluded that the Sabbath is also from dawn to dawn, or that it is only 12 hours such that work is allowed on Friday night. The corrected explanation of matters does not require overturning the time for beginning and ending the Sabbath that has been handed down to us. The real answer to why the calendar day was changed by Judaism to sunset, and the change adopted by Christianity also, is not that they wanted to corrupt the timing of the Sabbath, as alleged by detractors who have discovered the alteration, but because the resurrection of Messiah was on the Sabbath, and on the third calendar day, and both parties wished to get rid of it, the Christians claiming to keep Messiah, but not his Law, and the Jews claiming to keep the Law, but not Messiah. Since the two are inseparably linked, their kind of logic will end up with neither the Torah nor Messiah in the end.

Excepting Sabbaths, the normal definition of a calendar day is marked from dawn to dawn, according to the words, *“Then it is setting. Then it is daybreak. One day (Gen. 1:5).”* That is, the night between setting and the next daybreak is made an extension of the day to form a full calendar day until the cycle begins again at daybreak. At that point the previous calendar day is complete and may be counted. Therefore, one day is from the creation of light to the next dawn. This is the default definition of a calendar day. The text first defines a literal day, calling it ‘light,’ and then it appends a night between *erev*¹² and *boqer*, calling it ‘one day.’

Rabbi Cassuto¹³ explains:

[Then it is setting. Then it is daybreak. One day] When day-time had passed, the period allotted to darkness returned (and there was evening), and when night-time came to an end, the light held sway a second time (and there was morning), and this completed the first calendar day (one day), which had begun *with the creation of light.*

Hebrew are opposite what they are in Hebrew.

¹² It may be further remarked that *erev* in Hebrew always refers to a setting or diminishing of the light, that is growing dark. Complete darkness, therefore, cannot be *erev*. Also the Hebrew word *boqer* means daybreak, and not morning in a broader English sense leading up to midday, nor in a sense of going back to midnight. For these reasons evening and morning in Hebrew denote the boundaries of a night, and not a night and a day. The primordial darkness before the creation of light cannot be said to have an evening in Hebrew or be so. *Erev* first requires a light so that it can grow dark. Therefore, the first *erev* came at the end of the first day.

¹³ *The JPS Torah Commentary*, Jacob Milgrom, also explains the same way. But these Rabbis are the few who have taken up the scientific study of Hebrew. The majority live in cultural ghettos of their own making and do nothing but repeat the traditions handed down to them in the Talmud.

answer to the usages found. The inconsistencies have not gone unnoticed. The theory is rightly criticized or rejected by many top level modern Hebrew grammars and linguists.

This shroud of darkness sadly continues to this day in elementary Hebrew courses, often leaving students perplexed. In this theory, the *waw* is supposed to ‘convert’ the meaning of an imperfect verb to a perfect, and a perfect verb to future tense. But the theory was rejected as long ago as in Young’s Literal Translation as one may discover by reading the introduction. It is easy to explain the use of the Hebrew tenses without this theory. The Hebrew perfect may in fact be used in three tenses, ‘he had called,’ ‘he has called’ and ‘he will have called.’ The imperfect may also be used in three times also, ‘they *did*¹⁵ say’, ‘they say’ or ‘they are saying’, and ‘they will say.’

One will look in vain for any example of this theory carried out in Modern Hebrew all the way back to the Hebrew used in the Mishnah and Talmud. The *vav* conversive is also absent in all the Rabbinical writings. The *vav* conversive theory cannot explain the use of the perfect for the future in the many passages that have no *waw* prefixed to the perfect. For example, “To your seed I [will] have given this land” (Gen. 15.18). There is no *waw* here to convert the perfect to a future (that is to the sense of the Hebrew imperfect). It is still a perfect, but the context makes it clear to refer to the future, and so we preserve the perfect by giving a future perfect translation.

When this theory is combined with post Temple Judaism’s tradition of reckoning a day, it is tempting to invoke it over Gen. 1:5 to make it appear that the evening referred to is in the pluperfect, “There had been evening.” This way the evening may be said to be the primordial darkness before the first day. But this theory crashes as soon as you begin to apply it to all the *waw* imperfects, viz.:

And God had said, “there will be light.” And there had been light. And God had seen the light that it [was] good. And God had caused a division between the light and between the darkness. And God had called the light ‘day.’ And the darkness he had called ‘night.’ And there had been evening. And there had been morning. One day.

When all the imperfects are so treated and put in sequence, then the distinction in the Hebrew between the imperfects and the perfect statement (underlined) is lost. This shows that *waw* conversive theory is not the answer. Also all sense of timing is lost and up to the reader to sort out without help from the text, leaving him to assume all the resultant perfects are in sequence because they are simply in the past of the narrator, and give no relation of statements among themselves. So the theory actually does not get the result required of it to redefine the day. Just compare the above with the translation at the beginning of this section. Another aspect of Hebrew not explained by the *waw* conversive theory is the difference between *wa* attached to imperfect verbs and *wə* attached to the perfect and nouns. The *wa* has a consecutive meaning, “then (next)” that moves action along, but *wə* with the perfect is like *wə* with nouns. It is conjunctive, and should be translated

¹⁵ The use for the simple past tense is the English equivalent. What is really happening is that the Hebrew imperfect is fundamentally a present tense. Hebrew past narrative is told in the present tense in Hebrew. And Sometimes in English whole stories are narrated in the present tense, such as *The Hunger Games*. So the use of the present for the past should not be entirely alien to English. It gives Hebrew a more vivid flowing experience than the English simple past.

“and.” Finally, the theory dashes any chance of an explanation for the sometimes pluperfect use of the imperfect, which is easily explained by *wə* and *wa* together: *uwa* + imperfect. For example, Gen. 2:19, “And then the Almighty *had* formed” וַיִּצְרֶה. This causes the meaning to shift from then consecutive to then remote, as in “back then,” and gives a pluperfect sense. The had is for the benefit of the English reader. Truly, “*The princes of Yehudah have been like those who remove a boundary marker. I will pour out my rage like water upon them*” (Hos. 5:10). This sometimes pluperfect variation of the *wa* is recognized by Hebrew experts based on context. I have simply extended Michaelis’ theory here to explain it.¹⁶

Days for offerings: When speaking of the continual offering, Daniel states, “unto setting-daybreak 2000 and 300. And the holy place will have been righted” (Daniel 8:14). The text reads עַד (until, unto) for a reason. This is because the day for the daily offering was from dawn to dawn. The first lamb of the day was put on the altar at daybreak, and it was to burn until the next daybreak, all night. The number 2300 does not refer to a number of days. It refers to a number of offerings. The second lamb of the day was put on the altar in the afternoon, and it also burned until the next daybreak. Both offerings burned “unto setting daybreak,” which is all night, because it says in Lev. 6:9, “*This is the law of the ascending offering. It is the ascending offering upon the grill, upon the altar all night until the daybreak, and the fire of the altar shall be kept burning in it.*” It should be known then that evening and morning are the limits of a night, and do not mean a night and a day.

Likewise, the sacrifice of a peace offering may be eaten for a day and a night (Leviticus 7:15), and the Passover (Exodus 12:10), and the festival offering (Deuteronomy 16:4). The first-fruits offering, since it has a burnt offering, is also for a day and a night (cf. Leviticus 6:9-10; Leviticus 23:12-13).

We may confirm the sacrificial definition of the day from dawn to dawn by Messiah’s resurrection, “the third day.” He was in the grave three days and three nights (Matthew 12:40). Day is put before night. He was put in the grave on the 14th day, which must count as the first day, and then that night counts as the first night. That day and night are the 14th day. The third day is the 16th day, a day and a night. He rises in the night following the daytime of the 16th day, which is still the third day. But if night is put first, then one will find that a third night requires a fourth day.

Some clever person, some wily fox is going to say that the day Messiah was put in the grave does not count. They will say that the counting was exclusive of the starting point, despite the fact all counting in Scripture includes the starting point. But the third day in Scripture is never counted exclusively. But it says, “I cast out demons and perform cures today and tomorrow, and the third day I am going to be perfecting myself” (Luke 13:32). It is today, tomorrow, the third day. And also

16 J.D. Michaelis made a proposal in 1745 as to the origin of wayyiqtol. He suggested *wa* was a short form of *haway*, ‘it was.’ My proposal is that *waw* conjunctive was prefixed to the *wa* to show when this was the case, and that due to the writing of Hebrew without vowels the only way we can figure it out now is from the context which writers of the biblical text were careful to provide. It must be understood that only in the cases where the verb must be pluperfect within the narrative should this explanation be used. It is a double *waw* that distinguishes these cases, viz. wayyiqtol from uwayyiqtol. Scholars across the board agree that the explanation has been lost. All I claim for my proposal is that it shows promise of an explicit marker where the contexts already show a pluperfect sense.

today, yesterday, the third day, if one counts backwards. The starting point, today, is always included. Do they really point out how they are counting? Most often they do not, because they do not want you to know they are making an assumption. And realizing an assumption is made is the first step to disproving it.

Definition of a day proved: Messiah said on multiple occasions that he would rise “after three days” (Mark 8:31, 9:31, 10:34, GNM),¹⁷ and also in “three days and three nights,” (Matthew 12:40), and also “on the third day” (numerous texts). The only sort of day after three days that is on the third day is a third calendar day from dawn to dawn. This is because the calendar day has the night after the day part, yet on the same calendar day. What do they reply to this? They always claim that “after three days” is a Hebrew idiom for “on the third day.” Josh McDowell states:

The phrases, “after three days” and “on the third day,” are ...simply idiomatic, interchangeable terms, clearly a common mode of Jewish expression.¹⁸

McDowell tries to prove this from the Talmud, but as I show in *The Resurrection Day of Messiah Yeshua*, this attempt from the Talmud, and all additional attempts to prove this from Scripture are deceptions. A word study of the Hebrew word for “after” (אַחֲרַיִ) will show that it always means after the termination of the period indicated. A Similar word study of the Greek word for after (μετα) used in the Evangelists shows that it means “after” the period mentioned terminates also.¹⁹ The Hebrew usage of “after” in the Genesis genealogies (Gen. 5:4 etc.) requires the balance of years to be after the year of causing a birth, e.g. the 800 years for Adam to be after the 130 years in order to sum up to 930 years. Also, when it says a Judge rules for so many years, and then another arises “after him” that the period mentioned before is complete. If this were not the case, then the long numbers given in the text would not give the correct sums. And this is the case everywhere else in Hebrew with the word “after.”

Therefore, it is most assuredly a special pleading to argue otherwise. And furthermore, it is a special pleading to posit that appeal to unknown Hebrew idiom is the solution to the contradiction faced by Friday to Sunday advocates from the “after” texts when there is a clear and logical path to solution if they simply drop their Friday to Sunday theory in the first place for a sensible chronology that meets all the requirements without any special pleading concerning the meaning of words. So we have seen that the dawn to dawn definition of a day is needed for sacrificial offerings, and for Messiah’s suffering and time in the grave.

17 There are even more occasions than cited here, because the scribes changed some of the readings to say “on the third day.” They knew they could not make these texts agree with their Friday to Sunday theory.

18 *The Resurrection Factor*, Josh McDowell, 1981.

19 Also, an examination of the Latin “post tres dies” (in some contemporary Latin texts outside the NT), will show that in some rare circumstances that the first day is complete at the starting point, that it is deemed after 1 day right after the event, but that a full 24 hours must pass before it is said to be after 2 days, and a full 48 hours before it is said to be after three days. This reckoning also does not fit Friday to Sunday which is less than 40 hours. Also, sometimes in Greek μετα means “through the midst,” but only with a verb of motion in which the action may be drawn out during the period mentioned. Messiah was not rising during three days, so this nuance does not apply.

Observations on the timing of Sabbaths

Jewish Scholar Umberto Cassuto remarks in his commentary on Genesis:

It will thus be seen that throughout the Bible there obtains only one system of *computing time*: the day is considered to begin in the morning; but in regard to the festivals and appointed times, the Torah ordains that they shall be observed also on the night of the *preceding day*. This point is explicitly emphasized whenever a certain precept has to be observed particularly at *night*, like the eating of unleavened bread on the night of Passover and fasting on the evening of the Day of Atonement. In the case of the Sabbath and the other festival days, however, there was no need to *stress* that work was prohibited on the night preceding, since agricultural tasks (and it is specifically these that the Torah has in mind) are performed only by day. There is no discrepancy, therefore, in our verse at all.

Prelude: “The sabbath” is from the ending of light of the 6th day through the ending of light of the 7th day. The “day of the sabbath” is just the 7th day. But there is also a night of the sabbath. This is the night between the 6th and 7th days. The 7th day alone is never called the sabbath, as if it were the whole of the sabbath. It is called sabbath or a sabbath without the word “the.” When the sabbath is referred to without qualification, it comprehends the whole time including the night before the seventh day. These distinctions are in the Hebrew text and are not evident in most English translations which confuse the differences.

“The” sabbath is a combination of the workers daily rest at the end of the sixth day, that is the night after it, and the daytime rest declared holy on the seventh day. The ordinary night rest at the end of the sixth day is specially treated because it is necessary to properly keep the seventh day holy. Therefore, the night before the seventh day is also regarded as holy. Properly speaking, “the sabbath” is a cessation from work in the night of the sixth calendar day continued through the seventh literal day till dark.

Yom HaShabbat: Properly this translates “day of the sabbath,” which is to say the day part of the sabbath. Never in Scripture do we see an adjective construction *HaYom HaShabbat, “the Sabbath day.” Most translations fail to observe the distinction, leaving the reader with the impression that either “The sabbath” is only 12 hours, or with the impression that “the seventh day” is 24 hours. Neither is true. The seventh day is dawn to dusk in Genesis 2, but “The Sabbath” without the word “day” is for a night and a day.

Calendar day. A calendar day is dawn to dawn. A literal day is dawn to dusk. Never does Scripture define day as dusk to dusk. It implicitly defines “the Sabbath” from dusk to dusk, but never calls it “a day” when doing this. One can always be sure when the word “day” is used that it refers to either a literal day, or if necessary to extend it in context, it is extended to the end of night following the day. Sabbaths are not calendar days, but the sabbaths are always a cessation from work during parts of two calendar days, a night and a day, the night being included before the day to ensure proper sanctification of the day.

Clarification: I use the adjective “calendar” in the expression “calendar day” to mean a 24 hour cycle. The Scripture, however, does not clarify matters in this fashion. It uses the context or order of events to do so. For example, “And the flesh

of the sacrifice for thanksgiving, his peace offering, on the day of its being brought near shall be eaten. He shall not allow any from of it to remain onward daybreak” (Lev. 7:15). From this it is inferred that the night after the day belongs to the day the offering shall be eaten.

Deconstruction of texts: False teachers have become experts in the art of deconstructing the contextual meaning of biblical texts. This is possible because Scripture more thoroughly relies on context and other Scriptures to make its meaning plain. Usually, the plain meaning was known by the original audience without much help from the context, but being removed from the original culture requires us to use the provisions of written Scripture to restore the cultural context assumed by ancient readers. Scripture does not employ a method of making scientifically thorough and precise statements put into a little package of one sentence. It rather relies on default assumptions derived from the culture, which often can only be recognized or restored by the scientific study of contextual implications from afar. These facts make it easy for either false or ignorant teachers to deconstruct the proper sense of texts to support their own ideas, or more often to remove them from being a threat to their own teachings.

Not a science text: Scripture is not a science text, but it is full of science. Scripture is not an itemized doctrinal list of how to observe or what to believe. But it is full of instructions on both. The Almighty is the ultimate author of the narrative that surrounds the stories and speeches of individuals in Scripture, noting which speak for the Almighty, and which do not. The Scripture is a divinely engineered parable meant to woo those with hearing ears, and bound to frustrate those without ears to hear. The spiritually unwilling, and those who do not discipline their own emotions and inclinations into conformity to the truth will be led astray when they deconstruct texts in their minds. But those who bring their hearts to conformity with the truth will understand the texts as they were meant to be. Sadly, the willing are also led astray by just plain ignorance, a legacy of our fathers and sometimes our lack of diligence. The Almighty, in his own times, will rescue his people who have fallen into ignorance. For a time he allows his people to suffer ignorance to make sin's cost plain that we may turn from it, but he is forgiving also. And in a time he cleans out the corruption and restores knowledge. And he who is a watchman, who knows the truth, is obligated to make it known to Israel.

Jewish Tradition: After the destruction of the second Temple, tradition has added a dusk to dusk definition of the calendar day. It has imposed this calendar day on the sabbath, and on creation days. The original dawn to dawn calendar day was virtually forgotten. Though the sabbath is a night and a day, this night and day does not define a biblical calendar day. It is parts of two days. But it is called the sabbath because the cessation of the sixth day is combined with the cessation of the seventh. To the best of my understanding, the nearest approach Scripture comes to acknowledging the sunset to sunset definition of a day is in Revelation 11:9 and 11:11, where it says “three days and a half,” if the half day is half of the Jewish calendar day, which is a night at the end of the third day. Scripturally, however, this half day would be contained in the third calendar day. The point of Revelation

11:11 is to make it crystal clear they lay dead for three days and three nights, that is the night after the third literal day may not be omitted.²⁰ Revelation abounds with statements and phrases that acknowledge the drift of both Judaism and Christianity away from the originally known truths, and it seeks to correct them.

Yom Kippurim: Many who think that “the Sabbath” is limited to a dawn to dusk seventh day dismiss Lev. 23:32 as having any application to the duration of “the Sabbath.” They claim that the day of atonement is an exception for the timing of sabbaths. But we shall see that the only thing exceptional lies only in the fact that what is implied in the other cases is explicitly stated in this case, and also what is explicitly stated is necessary as to including what is unnatural, whereas resting at night was natural and taken for granted, and no emphasis needed to be placed on that. The only reason the limits of Yom Kippurim are given is that the instruction also pertains to “afflicting your souls,” which was done by fasting. Eating comes by nature and so also resting when it is too dark to work, especially in ages when there were no electric lights. So the matter is made explicit on account of the necessity to afflict the soul by dawn on the tenth day:

²⁷Then Yāhweh spoke to Mosheh saying, “Yet, on the tenth day of this seventh month is the day of the atonements.²¹ It is an assembly calling. Holy it will be for ye. And you will have afflicted you souls, and you will have brought near a fire offering to Yāhweh.²⁸ And any work you shall not do in the bone²² of this day, because it is the day of atonements, to declare to be wiping away²³ over you at the face of Yāhweh your Almighty.²⁹ Because every soul which will not be made afflicted in the bone of this day, even will have been cut off from its people.³⁰ And every soul which may do any work in the bone of this day, even I will have destroyed that soul from the midst of its people.³¹ Any work you shall not do. *It shall be a statute of old*²⁴ to your generations in all your dwellings.³² A *ṣabbath* of restmostness it is for ye. And ye will have afflicted your souls in the ninth of the month in the setting, from setting unto growing dark you shall *ṣabbath* your *ṣabbath*.

First observe that the commandments pertain to the tenth day of the month, and that it is speaking of the literal day. This is made clear by the command to have a holy convocation during the day and the references to “the bone of this day.” It is made doubly clear that the tenth day is a literal day by verse 32 where the sabbath backs up over the ninth day for its beginning. This pattern is not exceptional. At first it was said that the seventh day was declared holy, and in it the Almighty declared his work to be finished. But in fact, he saw all his work in the sixth day as it grew dark, and that is when the actual rest began. Later, “the Sabbath” is introduced

20 The time period is so stated as to mimic the duration of Messiah in the grave. It may be noted that Revelation is not necessarily endorsing the Jewish calendar day. The three days may be taken as literal days, dawn to dusk, and the half day appended thereto is a night which may be regarded as the extension of the third literal day to a biblical calendar day, dawn to dawn.

21 Literally, “wiping away,” in reference to wiping away ritual impurity and sin impurities.

22 or “substance of this day.” This is a Hebrew idiom meaning “this same day.”

23 A declarative Piel. Same word as atonement. In respect to ritual impurity, the wiping away effects a physical cleansing. In respect to personal sin it is the Almighty who effects the spiritual cleansing of Israel, and the ritual is an declaration of the sin removal. The same is true when forgiveness happens. Forgiveness is prior to cleansing, and is effected by the Almighty. The sacrifice or ritual is only an official declaration of forgiveness in that the offering demonstrates the cost of sin to all witnesses. The offering is a ransom cost to show the costs imposed on the Almighty and the sinner by sin. It is never a compensatory satisfaction of the cost of sin. It is only a demonstration of the cost involved for the Almighty to grant forgiveness instead of what we had deserved.

24 Olam. Literally pertaining to the obscurity of time.

to encompass the complete rest period exactly the same as it is applied here to the day of atonements. The ninth day is counted just the way a creation day would be counted: “*Then there is setting. Then there is daybreak. The ninth day.” So “in the ninth day” or “on the ninth day at setting” without the possibility of mistaken interpretation refers to the going down of the sun in the middle of the ninth dawn to dawn day. If the 9th day were counted as post Temple Judaism implicitly teaches Genesis days, then one would have to fast 48 hours to be safe, because in such a case the tradition would fix setting for the ninth day with sunset beginning night before the day.²⁵

So there is nothing exceptional about the day of atonement in terms of its timing. The commandments are at first stated for the literal tenth day, but the sabbath period backs up over the night of the previous day. The purpose of this is the same as with the seventh day. If one did not begin to afflict the soul in the night for the previous day, then one would not be afflicted at daybreak on the tenth day. This is because fasting is considered the acceptable means of causing the physical affliction.²⁶ The affliction does not begin right away. A parallel idea is true for the seventh day. The rest on it cannot be with respect to six days of creation if one fails to rest on the night of the sixth day and still needs to recover from the work of the sixth day. For this reason “the Sabbath” begins the same way as the day of atonement.

Workers who work from sunup to sundown in the fields in ancient times were dead tired in the night of the sixth day. One cannot achieve the refreshing rest on the seventh day by working the night before it. Therefore, the Sabbath includes the night before as set apart so that one can truly rest on the seventh day. Just the same way as one must begin fasting at sunset on the 9th day to achieve affliction of the soul on the 10th day, so also one must rest at sunset on the 6th day to achieve the purpose of rest on the 7th day, to keep a day holy to Yahweh.

Example of the Creator: The reasoning given in the commandment is this, “because [in]²⁷ six days Yahweh had made the heavens and the earth, the sea, and all which is in them. Then he is resting on the seventh day. Therefore Yahweh has declared blessed the day of the sabbath, and he declares it to be holy” (Exodus 20:11). It says “Then he is resting” נִשְׁבַּח, *wayyanah* which is a Hebrew waw consecutive with the imperfect. The imperfect, called the prefix tense, is natively a present tense in Hebrew. Whereas English tells a narrative in the past tense, and

²⁵ This is if we use the definition of the day as given in the mistranslations of Genesis 1 where the evening is made to be the first part of each day. One would have to begin one's fast with evening beginning the 9th day. Based on Lev. 23:32 alone one might think to end the fast when evening arrives after the literal 9th day, but no, since the 10th day is mentioned in the previous texts, one would have to continue to fast to the end of the literal 10th day also, for a total of 48 hours. To eliminate this natural interpretation (using their own version of the Genesis calendar day), the Rabbis depart from their Genesis definition of a day with evening at the beginning of their calendar day, and use a definition with evening only at the end of the day. This may be seen in the Gemara (Rosh Hashanah 9a:5; Rosh Hashanah 9a:6). They define the 10th day to begin only with night, which they say is not the evening in the meaning of the text, but in doing so they contradict their own Genesis definition of a day, wherein a calendar day must begin with evening defined only as night. They correctly require fasting during evening twilight regarded as part of the 9th calendar day. Their shifting definition relieves the absurdity of a 48 hour fast, but it is also against their standard they established in Genesis. Once the Rabbis explanations of Genesis are accepted, their arbitrary interpretive authority is required to rescue the resulting contradictions.

²⁶ See Acts 27:9.

²⁷ “In” is frequently left out of Hebrew sentences where it is the only reasonable sense.

unusually sometimes a writer will narrate in the present tense, Hebrew customarily narrates with a present tense.²⁸ The Hebrew imperfect contains the idea of a progressive also, overlapping the use of a participle when it wishes to emphasize the progressive idea. This allows imperfects to be time-stacked. For example. Then he is eating. Then he is drinking. We have a sequence here, but the imperfect allows the eating action to continue while the drinking iteratively happens. Or we may say the drinking is a progressive snapshot that can extend backwards to take place with the eating iteratively happening. This is just another way of saying the events may happen at the same time. All that the waw consecutive implies is that some drinking happened after some eating.

The reason I say this is that “Then he is resting” does not mean that he began resting

at dawn on the seventh day. It just means resting was in progress, and that the point where he would have begun work again on the other days, instead, he is resting the whole day. When the sabbath was reintroduced to Israel in Exodus 16, they are to let the food rest *הָנִיחוּ* *hanniyfu* all night until “daybreak.” This verb is an alternative form of the same verb in Exodus 20:11. This implies they should not expend any work on it during the night. The baking and boiling should be done before sunset on the sixth day. This parallels Genesis 1:31, “Then the Almighty is seeing” or “sees” “all which he had made. And behold it is very good. Then there is setting. Then there is daybreak. This also implies that no work was expended after sunset on the sixth day. Therefore, the ceasing (sabbathing) began at the end of the day portion of the sixth day, because if any were done, then it could not be included in the Almighty seeing everything. Moreover, the refrain, “it is good” appears six times in the narrative, and the seventh time it says, “it is very good.” That is all he saw is very good. Seven is the number of completion. A related root means to be full or satisfied. The point is that he did not just see everything up to a point. He saw everything at the point of completion.

Therefore, following the example of the Creator, “The Sabbath” began in the 6th day at evening and continues to the next evening.

Genesis Symmetry: When the word ‘day’ is used without a context indicator then it is probably not an extended day, it is a dawn to dusk day. When the context distinguishes the literal day from the calendar days, by including nights with the calendar days, then the days without the explicit nights are certainly literal days. So in Genesis 1:5, the “light” called “day” is one literal day, dawn to dusk. And in Genesis 2:2, “the seventh day” is referring to a literal day, because there is no setting and daybreak giving the limits of an added night. It doesn’t say, Then there is setting. Then there is daybreak. The seventh day. That phrase is left off.²⁹

The Creation account begins with a literal day, wherein the light is called ‘day.’

²⁸ The participle is also built on the Hebrew imperfect stem, typically a long /o/ after the first root letter, and a long /e/ between the second and third. Or we may say the imperfect is a participle augmented with person.

²⁹ Some use this fact to suggest another interpretation, that the Sabbath never ended, thus “one eternal day,” or a perpetual sabbath, and as a result it is disconnected from its physical importance. This idea is gnostic and is refuted by Exodus 31:17, where it says, “Then he is getting refreshed.” It should also be noted that if every day is holy, then no day is set apart. If every day is a breather day, then no day can be a work day.

This day is then extended by the night between the limits: “Then it is setting. Then it is daybreak,” and called “one day.” Days two through six are also defined in this extended fashion at the end of each night. The refrain, “Then there is setting. Then there is daybreak” is appended to each of the six days after the creating work is done during the day part of each day. Then the Almighty rests on the seventh day, but the day is not extended like the six. So the passage is symmetrical. The six calendar days are bracketed by mentioning the first day first as a literal day, and then the seventh day as a literal day.

Two literal days: The first day is first defined as a literal day, then it is extended by a night, so that it is included in two definitions, a literal and a calendar day version. Days two to six receive only calendar day definitions. That is, these definitions are the only mentioned. Day seven occurs in the literal day definition. Since the text does not say, “Then there is setting. Then there is daybreak. The seventh day.” It is evident that the seventh day mentioned in the text is dawn to dusk. Furthermore, only the last day of the dawn to dawn days is used with the definite article, “the”: “Then there is setting. Then there is daybreak. The sixth day.” Probably the reason for the article is to heighten the completion of the sixth day at the end of night, at daybreak. So the first week begins with a literal day and ends with a literal day. Later in scripture the symmetry is completed by defining “the Sabbath” as a night and a day, so two definitions at the beginning of the week, and two at the end of the week.

Ordinary rest vs. special rest: At the end of each of the days of creation there was a nightly rest. This nightly rest was the ordinary rest, that is rest from the day’s work at night. Nothing was created during the nights. So work ceased then as is the usual pattern. However, it is rest during the seventh day, dawn to dusk, that is extraordinary. This rest relieves the cumulative stress of the weeks work. As it has been written, “And he was refreshed” (Exodus 33:17)³⁰. Now, I would observe that without the ordinary rest at the end of the day part of the sixth day, the holy rest of the Sabbath cannot take place. Because if one worked through the night, then one would need to rest during the seventh day from the work of the sixth day. It would thus be an ordinary rest delayed. And it would be impossible to sanctify the seventh day. One would not be refreshed from the cumulative work of the previous week if one worked through the night. I would therefore observe from the divine example that refraining from work during the ordinary rest is necessary to benefit from the special rest on the seventh day.

Sacred or Ordinary? I have just stated that the rest for the sixth day is ordinary rest. But it is also special in the sense that unlike the nightly rest for days one through five, it is a necessary preparation to keep the seventh day holy. So the sixth day rest becomes a legal imperative for properly resting on the seventh day. It is not just a fence around the seventh day. A fence is just a warning zone so to speak. For example, the rabbis said one should finish eating offerings at midnight even though Scripture put the deadline at daybreak. The Rabbis were concerned

³⁰ Which some will take exception to because the Almighty does not need rest. But the Almighty Son descended to lower himself to a position of needing physical rest just as he lowered himself to a man so he could wrestle with Jacob and even get beat by Jacob. The texts say what they say. Judaism or those Christians who deny the divine nature of Messiah cannot change them.

that someone might just go over the line and become guilty, so they placed a fence well back from the actual limit. But, if the work limit were dawn on the seventh day (supposing a prohibition on work during the night was only a fence), and one worked up to it, then one could hardly get a refreshing rest from that work. It is well known that the rhythm of the sleep cycle would require a full night of sleep the next night to fully recover from skipping a nightly rest! So resting the night before the seventh day cannot be merely a fence. It is, in fact, a logical requirement.

We can deduce other logical requirements for a proper keeping of the seventh day holy that lay outside of it, that would require preparation before the seventh day. One who believed in false gods would have to first repent and become loyal to the Almighty in order to observe the seventh day for him. One would have to confess that he is the only Creator. So we see that the seventh day has a preparatory context involving more than just resting the night before it. I conclude then that refraining from work in the night before the seventh day is a holy obligation. It does not sanctify the seventh day, but it certainly prepares for it. It may be regarded as a holy preparation though.³¹

Scriptural implications: Scripture appears to be cognizant of this observation as there are various hints and statements implying a rest in the night before the seventh day. The first of these is that Genesis 1:31 states, “Then the Almighty sees all which he had made, and behold it is very good. Then it is setting. Then it is daybreak. The sixth day.” It is evident through the use of the word “all” that he made nothing more during the night. Somewhat confusing is the mistranslation (or misunderstanding) of Genesis 2:1-2 so as to imply that he finished his work on the seventh day, which is now corrected to read, “Then are finished the heavens and the earth, and all their host. Then the Almighty declared his work finished on the seventh day which he had done.” This is to say, at the point were he was accustomed to begin creating in the day, instead he declared his work finished³², formally recognizing a state that ensued after the ‘he saw’ statement in 1:31. So then it is evident now without contradiction that the Almighty stopped his work before the night of the sixth day. At sunset on the sixth day, the Almighty ceased from all his work. On the seventh day, at dawn, he declared his work finished. Then he is resting on the seventh day instead of working.

The official declaration is logically dependent on the point of actual finishing and so implies that “the Sabbath” (meaning cessation) from work began with the evening of the sixth day. Also, humanly speaking, the rest of each night is necessary

31 This is to be contrasted with “the preparation day” during which common work may be done, and this ends at sundown.

32 This translation is a case of ‘declarative Piel,’ literally causative intensive, “made to be finished.” This nuance appears in other places in the Torah, e.g. to “declare” someone clean or unclean (cf. Lev. 13:6-14:48, 13:8; 20:25). It also appears in the Hiphil of certain verbs. The sense is necessary because the previous use of the verb is passive “are finished” and so refer to the state of matters at dawn on the seventh day (stative Piel). This state was entered into just before the statement in 1:31 that the Almighty saw all that he had made. This idiom was so misunderstood that the Greek translators and even the Samaritan text and Syriac misunderstood it and sought to correct it by emending the text to read “the sixth day.” More recent translations have sought other ways to solve the conundrum, including pluperfect, “had finished,” and translation “by the seventh day.” Leupold translates, “And on the seventh day God declared His work on which He was engaged, finished.” See also H. Ross Coe, “The Sabbath in Genesis 2:2-3, Andrews University Seminary Studies, Vol. 41, No. 1, 5-12. Copyright Andrews University Press, 2003.

in order to be refreshed the next day. Therefore, to omit the rest of the sixth night would mean one could not be refreshed on the Sabbath even if one rested then.

In Exodus 16:23-24a it says, *“Then he says to them, it is what Yāhweh has said—a restmost rest of holiness for Yāhweh is tomorrow. That which you should bake, bake. And that which you should boil, boil, and all the remaining, let rest for yourselves, to be guarded until the daybreak. Then they let it rest until the daybreak.”* The hint here is that they let the food rest (הִנְיָחוּ) in the night, and by implication they were not supposed to work in the night either.

In Nehemiah 13:19 it says, *“Then it is as that the gates of Yerushalayim had been shaded at the face of the Sabbath, that I had said, ‘And let be shut the doors.’* Here we see that with the beginning of twilight before the seventh day, Nehemiah shuts down commerce. Since it was customary to shut gates when night arrived, Nehemiah’s special order refers to shutting the gates early, as soon as the gates are shaded, when the sun disappears, that is there are no longer any sharp shadows.

What is more, some merchants camped outside the city at night when they found that they could not enter during twilight. Nehemiah threatened to arrest them. The text then says, *“From that time they had not come on the Sabbath.”* In as much as they arrived in the twilight after the gates were shut, and lodged at night outside the city, they *“had come on the Sabbath”* (בָּאוּ בַשַּׁבָּת). The night before the seventh day is included in the *“Sabbath.”* Nehemiah is careful not to refer to the night before the seventh day as *“the day of the Sabbath.”* He just refers to it as *“the Sabbath.”*

Sabbath vs. Sabbath Day: Scripture never uses the word *“day”* in connection with the night before the Sabbath. Neither does it use the word *“seventh”* in connection with the night before the seventh day. Yet, we have just seen that the night is included so as to join the rest in the night before with the holy rest during the day under one term, *“the Sabbath.”*

Matthew 28:1 also preserves the subtle distinction, *“But the latter of the Sabbaths, at the dawning for the first [day] of the Sabbaths...”* It was at the point where the Sabbath was just turning into the Sabbath day. So the resurrection of Messiah was on the Sabbath, but it was before the seventh day began.

Dawn days used to explain Sabbaths: Scripture assumes the underlying definition of a day from dawn to dawn to ensure that it makes unambiguous statements about holy days. This definition is the one used to explain the sunset epoch for Sabbaths and festivals. Yom Kippur is timed from the setting of the 9th day to the setting of the 10th day, using the dawn to dawn definition of a day to define the sunset to sunset limits of the Day of Atonement. However, if the 9th day is incorrectly assumed to begin at sunset, then the whole of Yom Kippur could be mistakenly placed on the night before 9th day of the month, ending at sunset at the end of the 9th day. But elsewhere it is said that the day is the 10th day of the month. This is the case because it is the night before the 10th day that goes with it to make the sabbath. Sunset on the 9th day falls at the beginning of the night between the 9th and 10th days. And sunset on the 10th day falls at the start of the night between the 10th and 11th days. In any dawn to dawn day, there is only one place sunset can be, and this is in the middle of it at the start of its night portion.

A difficulty: It appears that it says “the seventh day is the Sabbath” (Exodus 16:26) as if the seventh day were all of the Sabbath. The definite article “the” would imply this. If the seventh day is 12 hours, then “the Sabbath” would only be 12 hours. If the seventh day is 24 hours, then “the Sabbath” would mean 24 hours. The difficulty is solved through the Hebrew which omits the definite article. It says, “And on the seventh day is a Sabbath.” And also the night before it is a Sabbath, and both go together to make “the Sabbath.” The same solution applies in Exodus 20:10 and other texts.

וּבַיּוֹם הַשְּׁבִיעִי שַׁבָּת
sabbath is seventh the day the on and

And the seven days of unleavened bread are timed from the setting of the 14th day to the setting of the 21st day. Hence one seventh part of this week is between two sunsets. The 14th calendar day is between dawn on the 14th and the following dawn on the 15th. Therefore, unleavened bread begins at sunset following the day part of the 14th day, and not the evening before. The setting of the 21st day is not a sunset to begin it, but it is a sunset in the middle of it, after the day portion.

Without the fundamental calendar day defined from dawn to dawn, all such statements concerning the feasts would be ambiguous or confusing. This is because there are two sunsets associated with every day defined from sunset to sunset. But when we understand the underlying days are from dawn to dawn, there is only one sunset associated with each day. If the mistaken definition of the Genesis day were imposed on Passover week, then one would begin the feast 24 hours early and end it 24 hours early.

New moon before new moon day: If we apply the normal dawn day to the month, we will see that the sign for the month occurs when the new moon is sighted in the night before its first day. The month begins with the new moon, but the first calendar day of the month is between two dawns following the night of the sighting. The new moon feast is properly held between these two dawns. The new moon is sighted on the 29th or 30th day of an old month, as the night of its sighting is included in the previous day. The night will belong to the new month, but that calendar day will belong to the old month.³³ On the morrow is the new moon day, and the offerings that go with it and the daily offering burn for a day and a night. Likewise, the *olah* offering for the Sabbath is for a day and a night.

This situation is not unlike when the spring equinox falls on a given day of the first month. The days of the month before it belong to the old year, but the days from the equinox onward belong to the new year. A month is necessarily split into being parts of two years just as a day is split into being parts of two months when the new moon is seen.³⁴

³³ If it is the day of Yom Teruah, Tishri 1, then the night the moon is seen and the next literal day combine into the Sabbath rest for the feast. The new moon feast, and offerings for it, however, are for the day and the following night. So also it is with the second Passover offering. The annual Sabbath ended at sunset on the 15th day, but feasting could legitimately last until daybreak beginning the 16th day. The Rabbis, however, set up a fence on the dawn limit and made midnight the limit.

³⁴ This is separate from a definition of a lunar year. The solar year is split by a month. When dealing with lunar years, the definition begins it with the new moon.

Calendar cults: Sound chronology and calendar teaching is the mathematics of biblical truth. It is for this reason that the serpent promotes crazy people and crazy ideas to corrupt the calendar at all costs. Just to give some perspective, the Rabbis are generally wrong about, (1) the timing of new moons, (2) the timing of the year, (3) the timing of the sabbath year, (4) the timing of the jubilee year, (5) the explanation of Daniel 9, (6) the history of the Persian empire, (7) the time Israel spent in Egypt, (8) the Abraham to Terah connection, (9) the definition of a calendar day in Genesis, (10) the night the Exodus took place, (11) the night of keeping watch, (12) merit and demerit, and (13) the Messiah. I could multiply this forever with examples from their commentaries. The Church is generally wrong on the same list of items because it rejects the Torah, except perhaps #5, #7 and #13. But then I could add a host of errors not shared with the Rabbis, such as their own holidays, and come up with a much longer list.

Since the two main players are corrupt, it should come as no surprise that a host of other calendar cults have cropped up on the fringes, such as lunar sabbath teachers or Qumran calendar promoters. In some sense the Church and the Rabbis have made it easier for these other cults to prosper via tradition and false translation. In another sense, they are responsible for their own kamikaze attacks on the truth. We do not need these other groups sniping away at the edges of the sheep fold. So I will address a few of them so as to reduce, if possible, their vexations.

Lunar sabbath: these teachers count sabbaths from the new moon. That is, their sabbaths are not an unbroken observance of the seventh day counted from the creation sabbath. They place sabbaths on the 1st, 8th, 15th, 22nd, and 29th days of a month. Lunar sabbath teachers generally deconstruct every text that can possibly be used against them. That is they have a complete set of re-interpretations, no matter how crazy or unparsimonious, that “rescues” them from any refutation. But their rules never allow them to prove anything except by their own assumptions and then deconstructing all opposition. So arguing with a lunar Sabbath teacher or adherent is like arguing with the wind. It is always shifting. They deepen their darkness by rejecting any statement that disagrees or can logically be shown to disagree with their belief system. Therefore the refutations given here are mainly to aid those who have not already rejected all truth.

David and the Holy Bread: On the eve of the new moon, David met with Jonathan, and then hid for three days. On the third day, he fled to Nob, arriving there on the 4th day of the month. I know it was the 4th day on the basis of biblical chronology. But it does not matter. It could not have taken long for David to arrive at Nob seeking something to eat. When he arrived there he received the bread, “being turned away from at the face of Yahweh to set hot bread on the day of its being taken” (1 Sam. 21:7). The bread was changed out on the Sabbath. So the fourth day of that month was a Sabbath. The nearest lunar sabbaths are days 1 and 8 of the month. So by counter example, the lunar sabbath is refuted.

The Bread of Life: Messiah died on the 14th day of the month. The day after it was an annual sabbath, which the lunar teachers agree with, but he was in the grave three days and three nights, and the resurrection was on “the latter of the

Sabbaths,” just before “the dawning for the first day of the Sabbaths.” That is, Messiah rose from the dead on the weekly Sabbath. And the Sabbath day he appeared to his disciples was necessarily the 17th day of the month. But the nearest lunar sabbath was the 15th day of the month. So by a second counter example, the lunar sabbath is refuted.

Not the 7th day: The lunar doctrine profanes the 7th day through false teaching, attracting Christians in name only, who convinced of some error of Christianity, never understood the good news, and perhaps a few who are just ignorant, yet who will receive forgiveness. The error of the lunar teachers, however, is worse than being a victim of traditional errors in Judaism or Christianity, because they do not even have tradition as an excuse, and have fallen into worse error. I will now further lay bare their heresy by explaining it in relation to the seventh day and priestly rotations.

There are four lunar weeks in each month, and for this reason they are not all an even seven days. The interval between lunar sabbaths must be longer at the beginning of every month by one or two days. A week of 8 or 9 days is required to span the end of each month. So, then if the 29th of a 29 day month were a lunar sabbath, and the 8th day of the new month also, then the lunar sabbath on the 8th day of the month is the 7th day of what? That week was 8 days, and not seven. Now some observe the 1st, 7th, 14th, 21st, and 28th days as lunar sabbaths. In the same way, the span will be 8 or 9 days till the next lunar sabbath depending on the length of the month, 29 or 30 days. So again, the 7th day of nothing.

Priestly rotations: The priests rotated every seven days changing divisions at noon every sabbath. Scripture commands that all priests have equal access to their share of gifts and offerings. “Portion equal to portion they will eat” (Deut. 18:8). To ensure this outcome requires the 24 divisions to rotate in strict order for one week each, none serving longer or less than the others. If a feast overlapped the work of a regular division, then all the divisions divided the extra work equally including the one on duty. Thus, on a feast, the regular division would get its regular amount of work and rewards for it. The extra work would be divided 24 ways, one share of it going to the regular division along with its rewards. One division would get overtime work, but this would be made equal because eventually all divisions would find themselves in this situation upon their regular service.

Since there are 24 divisions, and 4 weeks in a lunar sabbath month, invariably the division placed in the first week of a month would perpetually be serving in the first week of the month every six months. Since this week averages 1.5 days longer than the other weeks, it raises the income of 6 divisions 21% above that of the others. Even worse, all the first weeks have a new moon day, which has extra rewards, and the new moon days would not distribute over time to all divisions.³⁵

Shavuot: Forty nine days are to contain seven regular Sabbaths (cf. Lev. 23:15-16). This, of course, is impossible with the lunar sabbath.

The Qumran Calendar. This calendar sets the first day of the first month on a Wednesday after the spring equinox without regard to the moon. The first month

³⁵ Solomon's 12 officers also provisioned the kingdom for one month each. These twelve months also ran in strict rotation, a lunar year, with no intercalary month.

is always 30 days, and so also the second. The third month is 31 days, so that a quarter is 91 days. Three more quarters of 91 days complete the year at 364 days. The 15th day of the first month always lands on a Wednesday. At Qumran, a cycle of this calendar was overlaid with a series of no-moon days and the rotation of priestly divisions. They calculated these no-moon days by the Egyptian method, by noting the disappearance of the old moon, and then marking the next day as the first day of the lunar month. Using both the no-moon days marked we can find the synchronization point for one cycle of their calendar in 42 BC. We can then check it by seeing if the priestly rotations synchronize with the rotational starting point recorded in Seder Olam. It does. The Qumran rotations match the Seder Olam source.

The same calendar is found in the book of pseudo-Enoch and the book of Jubilees, and is the calendar of the Damascus Document community. This Jewish group was commonly known as Essenes. But they kept the same Sabbath as other Jews, and also the same priestly rotations. Qumran scholars, however, have noticed that the Essenes engaged in divination, which suggests a possible explanation for pseudo-Enoch. Pseudo-Enoch was not just a human production, but evidence shows revelations were obtained by its author using familiar spirits. The familiar spirits revealed truths that were supposed to be kept hidden. But they also mixed up these revelations with false teachings meant to get the Essene cult started. This cult formed the third branch of second Temple Judaism.

Since the truths revealed have compelling elements, Yeshua confirmed which can be taken as true, and also instructed the Evangelists on this. He did so by clarifying the nature of demons, the unmarried nature of the sons of God, the existence of the abyss, where the sons of God who rebelled were confined. The Messiah is thus not using pseudo-Enoch as the source of truth, but he is correcting by confirmation and omission what the familiar spirits tried to corrupt. Yehudah (Jude) does use a quotation from Pseudo-Enoch, but the sentiments contained there come from the book of Deuteronomy, and the erstwhile morality of users of the book, much like the Mormons can be said to have a high sexual purity even though they use a book delivered by a familiar spirit. Jude is quoting for ironic or sarcastic effect. Jude's gnostic opponents were morally licentious, and indeed gnostic Christianity adopted the book of pseudo-Enoch into their canon. So the quotation amounts to using their own source against them, viz. "Even the seventh from Adam Enoch prophesied to these [gnostics]..." (Jude 1:14).³⁶ Jude uses pseudo-Enoch in the same way therefore that Paul uses the Greek Poet Epimenides, who was a false prophet and idolater, i.e. for sarcastic and ironic effect. Any other incidental allusions to pseudo-Enoch in Scripture may be assigned to the extensive cultural impact that pseudo-Enoch had on turns of phrases and idioms used in second Temple Judaism. The Scripture uses

³⁶ The author of pseudo-Enoch referred to himself as the seventh from Adam. Some think that because the biblical Enoch was the seventh generation from Adam that Jude must be speaking of him. But only the author of pseudo-Enoch makes a big deal of the point. It is clear from the quotation itself, and many theological errors in the book of Watchers whom Jude means. We may suppose also that Jude was being cryptic and therefore careful. It appears that he had enemies ready to denounce him, because he cryptically refers to Israel as the body of Moses. See GNM, Jude 1:9. Yehudah's point was that his gnostic enemies had fallen into the very errors that the books they adopted as canonical condemn.

the prophecies of Balaam the same way. Balaam was a false prophet and a user of familiar spirits. His renown was international. From them he divined genuine truth. But when he prophesied over Israel the Spirit of the Almighty came upon him and compelled him to speak only the truth and this is what was written.

Teachings of demons: There are several modern variants of the Essene calendar promoted by false teachers. Scholars are not sure how the Qumran calendar was intercalated. And neither are adherents of the modernized cult. For this reason they dispute it and contradict themselves. In at least one of the variants every Wednesday is a sabbath, and the seventh day sabbath is ignored.³⁷ The ancient Essenes, however, observed the Sabbath on the same day as other Jews as we can be sure from Josephus. None of these teachers can be certain of the facts, and it is certain that the hapless followers preyed upon by them are bullied into conformity by powers of persuasion, and suggestions of condemnation for getting things just slightly wrong, rather than truth seasoned with forgiveness. Have nothing to do with them. They are agents of lawlessness, and their revelations are teachings of demons.

The Year

Opponents of what I am going to say here sometimes spend a good deal of time trying to win the argument by demonizing the use of the sun, and particularly the spring equinox. But Scripture uses the sun metaphor, “For a sun and shield is Yahweh Almighty, favor and glory Yahweh will grant. He keeps back no good thing for those walking with wholeheartedness” (Psa. 34:11). The sunrise to begin the day can be just as demonized as anything else by using argument based on associating things that do not belong together. The logical error is called equivocation. The sun and its movements have no more to do with idolatry than the incidental similarities between gems and the stones used in idols. Everything good has been made the object of worship by pagans. Therefore, everything good may be ransomed from pagans and given their proper places. But it is the business of religious liars feigning piety and purity of worship to draw men away from the truth. So we now consider the year, which is determined by the motions of the sun.

The ‘year’ is no less straightforward than the day or the month, but its ancient reckoning is not well understood by modern people used to tables, books, almanacs, printed calendars, and computers to tell them when a year has passed. The year is harder to grasp simply because it takes a longer time to observe a year. One does not have to wait long to see a sunrise. One has to plan their observation more carefully to observe a new moon. But to observe a year requires a lot more time, and a lot more attention to small movements of the sun. You will see what I mean in a bit. The concept is easy if one puts themselves in the shoes of an ancient person with no more tools than their eyes, the ability and strength to set up markers, and a lot of time.

Annual movements of the sun: The sun rises in the east and sets in the west. Well no, most of the time it does not rise in the exact east or set in the exact west.

³⁷ <https://www.enochcalendar.com/> (Nick VanderLaan). VanderLaan condemns at least three other variant Enoch calendar teachers: Leeland Jones, Derek Limbaugh / Zadok Way, and the Ken Johnson Dead Sea Scroll Calendar.

In fact one will note that the sun sets in a new location almost each and every day of the year if they measure or mark the setting points from a fixed observation point. If one looks west and watches the sun, then one will notice that as the days grow longer it keeps setting farther and farther north on the horizon until it reaches its farthest point north. At this point it appears to set in the same place for several days, and then it begins to set more and more to the south. The sun keeps setting toward the south as the days get shorter and shorter until it reaches a south-most point. Again it appears to set in the same place for several days. After this it begins to move north again as the days get longer and longer. When it again reaches the point where one first started observing it going north then at that point it will become clear that it will simply repeat all the motions one saw before. This complete cycle or repetition of motions is called the 'year'.

The year is like the month. The moon repeats a series of motions waxing and waning, and then disappearing, and then reappearing, and then waxing again. The new moon is seen above the sun at sunset, and the full moon is seen opposite the sun. The old moon is seen just before sunrise while it itself is moving toward the sun. The old moon shows a thin sliver of light just like the new moon. Only it is oriented to the observer slightly differently. One knows a whole month has passed when the cycle begins to repeat. As pointed out above the 'light' of the moon is the sign, and it is the 'new' light that gives a sign before the first day of the month, and marks the beginning of the month.

Length of a sun cycle: The cycles of the moon repeat every 29 or 30 days, and the word used for the beginning of a repeat cycle is 'new' הַחֹדֶשׁ הַנֶּחָדָשׁ. The cycles of the sun also repeat. The sun always returns to the same exact point on the horizon after one counts 365 or 366 days. It does not matter which point one picks on the horizon. Any point will do so long as one waits until the sun returns to that point traveling in the same direction when one first picked the point. One can indeed pick an arbitrary point for the moon also, such as the full moon, or the first quarter, or the third, and then count off 29 or 30 days for it to return to the same state. One would have great difficulty however in picking points other than the first light of the thin sliver simply because it is not possible to tell precisely when those other points occur by a simple observational method. In any case the Scripture has clarified the matter by indicating the 'new' light is the sign to begin the month.

Year measuring points: The Scripture also tells us at what point to begin and end the year. Various nations have picked every point to measure the year. The most popular are the south-most setting/rising points, the north-most setting/rising points, and the midpoints between the south-most and north-most points. This smorgasbord of choices is not unlike that for the moon. Nations have timed their months from full moon to full moon, last seen old moon, new sliver, and conjunction to conjunction. The scripture settles the matter with two words, 'light' and 'new'.³⁸ For the sun, the scripture also settles the matter:

³⁸ Generally, the whole ancient near east used the new light of the moon to begin a month, from Sumerian times on down, Ugarit, Canaan, Uruk, Ur III, Isin, Amorite Babylon, Assyria, Babylon, Persia, and Greece. Ancient Egypt is the main exception, and later Rome.

Then it is at the end of days. Then Qayin brings from the fruit of the ground a tribute offering to Yahweh. And Hevel also had brought one (Gen. 4:3).

At the end of two years of days (Gen. 41:1).

Until a complete year of days from his sale (Lev. 25:29).

And it was at the time of the return of the year, at the time kings go out [to war] (1 Chronicles 20:1).

And it was at the circuit of the year that the army of Aram had gone up against him (2 Chronicles 24:23).

And at the turn of the year Nebuchadnezzar the king had sent for him and brought him to Babylon (2 Chronicles 36:10)

And it was at the turn of the year that Ben Hadad called Aram to attention. Then he went up to Aphaek to battle with Yisrael (1 Kings 21:26; cf. 1 Kings 20:22)

And it was at the great circuit of the days. And Hannah had conceived, then she bore a son (1 Samuel 1:20).

You shall keep the Feast of Unleavened Bread... at the appointed time in the month of Aviv... You shall do the Feast of Shavuot, the first fruits of the wheat harvest, and the Feast of In-gathering . In the circuit of the year, three times in the year shall see every male of you the face of the Lōrd Yāhweh. (Exodus 34:18-23).

In the going forth of the year, when you are gathering your labors from the field, three times in the year, every male of you shall see the face of the Adōn Yāhweh (Exodus 23:16b-17).

And thou hast kept this statute at its appointed season from days to days (Exodus 13:10, Young's Literal Translation).

Return of the year: Now we must pay exact attention to the time of the, “return of the year,” which is an exact translation of the Hebrew: לַעֲתַת הַשּׁוֹבַת הַשָּׁנָה (1 Chronicles 20:1). It is in the spring time. If anyone wishes to argue whether it was spring or not, then 2 Chronicles 36:10, above, settles the matter beyond any legitimate objection. The King of Babylon took Jerusalem in the month of Adar,³⁹ and

³⁹ The Babylonian Chronicle gives the date.

he exiled the King, “at the return of the year.” This is also proved by the fact that Jehoiakim died in midwinter. The exiled king reigned three months, which end up in the spring. Also kings go out to war in the spring because that is when it was most convenient and profitable to do so.

Therefore, the Scripture says that the year begins and ends in the spring. That is, the cycle of the year repeats anew every spring. Further, the Scripture confirms that the year is measured by ‘days’. 1 Samuel 1:20 says that Hannah gave birth at the, “great circuit of the days.” Where we expect the word ‘year’ we find the word ‘days’. Likewise, 1 Samuel 1:3 literally says, “from days to days,” to define a ‘year’. Similarly, Exodus 13:10 says, “days to days,” by which it means a cycle of a year. The reason that, “days to days,” is interchangeable with the words, “year to year,” is that a ‘year’ is defined as a number of days, which as noted above is the time needed to complete one cycle. This is 365 or 366 days. The ‘turn of the year’ is the day following the 365th or 366th day. It is just the same with the moon. The ‘new moon day’ is the day following the 29th or 30th day of the previous month.

Year measured in days: Since the Scripture speaks of the ‘year’ in terms of ‘days’ it is clear that ‘days’ must be used to measure the year. The commandment to observe the anniversary of the Exodus speaks of the ‘year’ in terms of, “from days to days.” (Exodus 13:10) The year will ‘return’ to the same point after 365 or 366 days. This ‘return’ is in the spring. When the ‘return’ occurs is 365 or 366 days after the previous ‘return of the year’. Pay close attention to the definition of a year as being so many ‘days’. These definitions clear the matter up, as does the word ‘new’ in connection with the moon. Therefore those who begin a year according to the sun at any other point than the spring, or who calculate its length in any other way besides counting the days, are ignoring the Word of Yahweh.

Rosh Ha-shanah explained: Now in another place the beginning of the year is referred to as at another time. Ezekiel 40:1 speaks of the, “beginning of the year” ראש השנה and the Jews are in the habit of calling the first day of the seventh month Rosh Hashanah. But the Ezekiel text uses the phrase speaking, “on the tenth day of the month.” What is the explanation of this? The phrase Rosh Hashanah means, “head of the year.” The phrase probably means something like, “top of the year,” (top is also in the Hebrew dictionary for this word) not in the sense of the precise beginning moment, but in the sense of the beginning segment. In English usage one might say, “at the beginning of the game,” and mean not when the clock starts, but the first few plays. Or the phrase Rosh Hashanah might mean at the, “high point of the year,” (this sense is also in the Hebrew dictionary) and indeed the 7th month is the high point, and the 10th day is the highest and most important point of the whole year.

It certainly does not mean the beginning day of the year, as it speaks of the 10th day and not the first day of the month. Though, some have supposed that it speaks of a year of Jubilee, and that the day of atonement is the first day of a year of Jubilee. But this assumption falls apart when we discover that this particular year was not a year of Jubilee. Please consult the *Scroll of Biblical Chronology*, either volume

I or II. Now, I have some time ago noted that *Rosh Hashanah* does not speak of a particular day at all. It is more than likely that it speaks of the beginning month of the Jewish civil and agricultural year. So rather than a beginning day, it refers to the beginning month. And that it was on the 10th day is no longer a problem. It could be any day of that month and be the “head of the year” in terms a beginning month of the civil year.

There are thus two types of ‘year’ in the Scripture. The second type is clearly dependent on the reckoning of the first type. Many cultures have two or more types of ‘year’. The other types are called a ‘year’ because they are about the same length as the year determined by the sun. For example the Greeks measured a year from a fall new moon, but the Olympiad from the summer solstice.

If one studies biblical chronology, they will find that a civil year begins with the first day of the seventh month. The civil year is the year for the reigns of kings and the agricultural cycles, and some eras. The civil year is the year for Sabbatical years and Jubilee years. The civil year is dependent on the sun’s cycles and the moon cycles. For one cannot know when the seventh month is unless the first month is correctly lined up with the sun’s cycle at the beginning of the solar year. The Scripture clearly says, concerning the Passover month, “*This month shall be for you the beginning of months. It shall be the first month of the year for you*” (Exodus 12:2).

Now as we have seen, the year with which we are concerned to determine the first month begins in the spring at the ‘return of the year’ and it is measured by so many ‘days’. The definition of the year is so closely tied to a timing of ‘days’ that the phrase, “from days to days,” is used to mean, “from year to year.” (Exodus 13:10, 1 Samuel 1:3) This is to say that 365 or 366 days is interchangeable with the definition of a ‘year’. A year equals 365 or 366 days just as a month equals 29 or 30 days.

The ends of the heavens: Now what remains is to pick the obvious point on the horizon in the spring to use as a reference point for the cycle of the sun. And as we are bound to determine a ‘year’ by using the measurement of ‘days’, we must pick a point of reference from which to count the days of one full cycle back to that point.

Scripture does not leave us in the dark as to which point the year begins at:

The heavens are recounting the glory of God...for the sun he has set a tent in them. And like a bridegroom it goes out of its constellation. It rejoices like a mighty man to run its course. From the end of the heavens is his going out, and its circuit is over their ends. And nothing is hidden from its heat (Psalm 19).

And I will have brought against Elam the four winds, from the four ends of the heavens (Jer. 49:36).

At the four winds are the gates,⁴⁰ east, west, north, and south (1 Chron. 9:24).

He had measured the wind of the east with the measuring rod, 500 rods with the measuring rod, around (Ezek. 42:16)

40 Or gatekeepers. Cf. Dan. 8:8, 11:4, “to the four winds of the heavens.” See also Ezek. 37:9.

...the wind of the west (Exodus 10:19)

Then they encamped in Gilgal at the east end of Jericho (Joshua 4:19).

Westward, which is at the end of the valley of Rephaim (Joshua 15:8).

He has made the Bear and Orion, and the Pleiades, and the constellations of the south (Job. 9:9).

The word for “ends” *qestot* in Hebrew is קְצוֹת. This word is associated with the four cardinal points in Scripture, east, west, north and south, also called “the four winds” (רוּחוֹת). There are four q’tsot, extremities or limits of heaven. Two of these points, east and west concern the sun. The tent that the sun runs its course in is the mazzaroth מְזָרוֹת, or constellations. It runs through a series of constellations called “chambers,” also houses. The sun sets out at the end of heaven (east) from its constellation in the spring, and makes it circuit back around to the east and west point again.

The circuit is both a coming round and the point marking the completion of the circuit. So we are given the east west points for the starting and ending of a year. Now what remains is to pick the obvious point on the horizon in the spring to use as a reference point for the cycle of the sun. This point, as noted, is east and west. And as we are bound to determine a ‘year’ by using the measurement of ‘days’, we must pick a point of reference from which to count the days of one full cycle back to that point. Without saying in formal terms what the point should be, the Scripture gives enough information through the hints and terminology to pick the point from the available options. Probably the reason there is no formal scientific treatise on the beginning of the year in Scripture is that it was a settled matter and taken for granted that the year began at the spring equinox in ancient times.

Since the year is to begin in the spring at the west end of heaven and come back round to the east and west ends, the only option is that point almost⁴¹ exactly half way between the south-most point and the north-most point of setting. This point is exactly west. If the sunrise point, the observer point, and the setting point are all connected in a line, then the line formed will be straight on the day the sun rises in the east and sets in the west. This is the only choice among the choices provided by ancient cultures using a purely observational method.⁴²

Remember that mathematics and methods using sophisticated instruments

⁴¹ If one were to bisect the winter solstice and summer solstice angle then one would get a precise east to west line only at the equator. In all other locations it is necessary to bisect the sunrise to observer to sunset angle on the same day, and then to find the perpendicular line to this, which is east-west. In the northern latitude of Jerusalem there is about a 1/2 degree deviation between the mid solstice direction and due west. The cardinal points were surveyed so as to give true west.

⁴² Refraction raises the apparent altitude of the sun by about ½ degree. This makes the sun appear at the west point of the horizon sooner than if the earth had no atmosphere. The difference between the observed equinox and one calculated without refraction is usually that the observed equinox is 1 day earlier. Refraction was baked in the cake so to speak from the beginning. Only modern calculations of the equinox factor it out. The ancient observational method with refraction is confirmed by the birth on Messiah on Tishri 1, 2 BC, which was on Sept. 1.

were not developed until well after the Scripture was written. And even if some instruments were used in the most ancient times, the practical observational method would have been the first employed, and would have endured long after attempts to change it were made.

Which is better, east or west? What makes the western-most setting point (in the exact west) the compelling point of reference to measure the year? First, when the sun is seen going down, it can be tracked more easily than when the sun is rising. When it is rising it is hidden from view and one cannot see precisely where it is going to come up. Second, the consumption of the annual festive offering of Passover on the 15th of Nisan to commemorate the Exodus is marked as the sun goes down (Deuteronomy 16:6) and eaten with unleavened bread, “from days to days.” (Exodus 13:10) Third, the sun stays in the same place for about three days at the south-most point and the north-most point. This fact makes it very difficult to determine which of those days might begin or end a year. But on the western horizon at the midpoint the sun moves a whole diameter each day. This makes it relatively easy to pick the day when the sun crosses the west point.

Surveying to find west: To find the west-most point is a matter of simple geometry. On any day the observer can mark the location of sunrise and sunset. The angle formed by sunrise, the observer at the vertex, and the sunset is then divided in two. This bisection line is the north-south line.⁴³ Then simple geometry is used to find the perpendicular east-west line to the north-south line. A stone or pile of rocks is set up at the end of the west line overlooking the horizon. The observer therefore stands at his fixed point and waits for the sun to set over his rock marker. The day on which it does so is the beginning of the year.

If the observer is sure about his last observation of the year, then he may count 365 days to make his next observation. The sun may set west after the 365th day (day 366). Or the sun may set west after the 366th day (day 367). This is exactly parallel to watching for the new moon. The new moon may be seen at the end of the 29th day, or it may be seen at the end of the 30th day.

Observing the tequfah⁴⁴ day: When the sun sets at the west marker moving more northward each day, then the year has begun. And to double check the observation, the observer notes that he has counted 365 or 366 days in the old year, so as to make a complete year. If he is sure about his observation, then for the next year he may simply check the location of sunset on the 366th day to see if it sets west. If it does then the old year is 365 days, and that day is the 1st day of the new year.

⁴³ Bisection can be done by marking off equidistant cords of the angle to be divided, and then by swinging equidistant arcs from the marked points so that they intersect. The dividing line is drawn through the vertex of the angle and the intersection point. The ancients, no doubt knew that their measuring lines had some stretch in them. Care had to be taken to exert equal amounts of force on the lines.

⁴⁴ The Latin term *aequinoctium* from which comes the English *equinox* is not as descriptively accurate as the Hebrew term. It means “equal night,” i.e. the night is equal to the day. But no definition of the equinox actually occurs on a day when the day length is equal to the night length. This isn’t even true at the equator because refraction always makes the visible sun show itself longer than it does not. The true equal day and night happens quite a few days before the sun crosses east and west at the spring equinox, and quite a few days after at the fall equinox. And if one moves to Australia, then everything is upside down. The Hebrew term means “circuit” which is the return point of the year correlating to the west “end” of heaven.

If it does not, then the year is postponed one day to the 366th day, and the new year begins on the 367th day. Using these simple methods, ancient Israel was able to determine the beginning of the year with enough precision to satisfy agricultural timings and religious observances.

The intercalation rule: The rule then is that the year must begin on the same day the festive offering of Passover is eaten or before that day. This ensures that there are only three pilgrim feasts in each year as commanded by the Scripture, *“Three times in the year you shall keep a feast to me.”*⁴⁵ (Exodus 23:14) Any other method is bound to break the command by placing four feasts in one year and two in the next. And any other method of measuring the length of a year is bound to disregard the Scriptural teaching that a year is defined by so many ‘days’.

Equivalent Rabbinic rule: The Rabbis give the rule that the 16th of Nisan (at sunset beginning it) should occur after the beginning of the year. This is exactly the same as the rule I have stated. The 15th of Nisan (at sunset ending it) should occur on or after the beginning of the year. Note that I am talking about the same sunset as the Rabbis. They say sunset starting the 16th. I say sunset ending the 15th. They do not allow the year to begin on the 16th. That is the same as my method of allowing the year to begin on the 15th. The only difference between these ways of stating the matter is that referring to sunset on the 15th is connected with the festive offering of Passover eaten with unleavened bread (cf. Exodus 13:10; Deuteronomy 16:6). Note then that the matter is confirmed both by the historical tradition of the Jews and by the Scripture and by the practical measures of other ancient cultures fixing the year in the spring.

Two Passover offerings: The offering for the 15th day of the month is eaten as the sun goes down on the 15th day. This second offering marks the anniversary of the Exodus and the going out of Egypt “by night” (Deut. 16:1). It is this second offering that is the synchronization point for the year, and it is eaten up to daybreak during the night of the exodus, the night that the sons of Israel should keep the watches of the night, because Yahweh kept watch over them to bring them out of Egypt. At daybreak the watchers may return to their tents. And for six more days unleavened bread is eaten (Deut. 16:7-8).

The offering made on the 14th day, and eaten that night, is the first seder, and this marks the anniversary of the plague of the firstborn in Egypt. It was at the end of this night that they left their homes in Egypt, because none was allowed to go out of their house until daybreak. They therefore began to leave on the 15th day at daybreak, and completed the Exodus the following night. At night the Exodus was completed, and at daybreak on the 16th, six days remained in the feast.

Catholic approximation of the rule: I may also cite the practice of the Church concerning Easter. Although Easter is a perversion of the Passover, the Church’s

⁴⁵ The passover offering on the 14th day between noonset and sunset is eaten after sunset, and so properly on the first day of unleavened bread which is reckoned as an annual Sabbath. The second passover offering to commemorate the Exodus is eaten on the day part of the 15th nearing sunset, i.e. it is eaten on the same Sabbath. It is also true that one may continue to eat the offering up and until the first hint of dawn, but no longer. By this time the year has begun and the precept to eat the Passover in the new year is kept. Therefore the rule is that the year must begin before the moment of sunset on the 15th of Nisan, and the location for determining this is taken as the Temple in Jerusalem.

calculation methods preserve a likeness of the ancient rule for determining the beginning of the year. Firstly, the Church calculates the new moons, not by the Roman civil calendar, but by approximating sighted new moon times.⁴⁶ Then it figures the beginning of the year using calculation of the spring equinox (when the sun sets west). Then it says that Easter will occur on the first Sunday after the first full moon that falls after the spring equinox. This is essentially the same as the Scriptural method, except it has been made fuzzy by the method, and is not suitable for precision in critical cases. It says that the year must begin before the middle of the month. We may roughly state the Scriptural rule this way. If the year does not begin by the middle of the month, then an extra month should be added to the year.

Guard the new moon of the Aviv: Cf. Deut. 16:1. This is done by counting off the days of the old year as described below. A decision has to be made sometimes to add a 13th month to the year. For the month of the Aviv is by definition the month Israel came out of Egypt, the month of Passover, and by all means the anniversary of the Exodus “at night” should not fall into the old year, so as to satisfy the precept for three feasts in one year. If the month is too soon for the year, then it is not the month of the Aviv. And if intercalation is mistakenly called for, skipping a qualifying new moon, then the late month is not the Aviv either. So Israel is commanded to Guard this new moon to watch for it in its season. The month name does not give the method of making the determination, but rather only describes the character of the season, as do the great majority of other month names so far discovered from the ancient near east. As such the Hebrew is equivalent to “Guard the new moon of the Spring.” The Spring gives the character of the season, i.e. new growth springing up, but spring itself is determined by astronomical means.⁴⁷

Rosh Hashanah 21a:8:

§ **Rav Huna bar Avin sent this instruction to Rava: When you see that,** according to your calculations, **the season of Tevet**, i.e., winter, will **extend to the sixteenth of Nisan**, and the spring equinox will occur after the sixteenth of Nisan, **add an extra month to that year**, making it a leap year. **And do not worry** about finding an additional reason to justify making it a leap year, **as it is written: “Observe the month of spring”** (Deuteronomy 16:1). That is to say, **see to it that the spring of the season**, i.e., the spring equinox, **is in the new part of Nisan**, i.e., the first half, before Passover.

Sanhedrin 13b:2:

The baraita teaches: The tanna referred to as **Aherim says:** The year is intercalated even on account of **a minority of the month**, and **how much is a minority of the month? Fourteen days.** The

⁴⁶I am aware that this is an oversimplification of the matter. The Easter computus has often been based on eclectic ecclesiastical definitions of new moon, full moon, and the use of astronomically inaccurate cycles, the choice of which was motivated by speculation on the date of the crucifixion and the ability of the cycle to match it. The underlying assumptions of each system are rarely explained or made clear. At the time of Roger Bacon, the ecclesiastical lunar calendar was badly out of phase with the moon, and so also the putative equinox. In 2021, the paschal new moon was March 15, which must be taken as the new moon day since a day is defined between midnight and midnight by the Gregorian Calendar. The moon was seen on March 14th in the evening, so it is as correct as to the new moon day.

⁴⁷As far back as Targum Onkelos and Jonathan, the phrase “by night” was confused with the night of the first seder.

Gemara asks: **What do Aherim hold? If they hold that the day of the equinox concludes** the season, **and** also that **we require all of the Festival** to take place in the new season, **this condition is fulfilled** even if the season is lacking fifteen days. **Rav Shmuel bar Rav Yitzhak says: Aherim are standing in**, i.e., discussing, **the season of Nisan. As it is written: “Observe the month of spring** and keep the Pesah” (Deuteronomy 16:1), from which it is inferred: **Preserve** the day of **the equinox of the spring**, to ensure **that** it will be **in the month of Nisan**, meaning that the equinox must occur during the first part of the month of Nisan, by the fourteenth, the day the Paschal offering is sacrificed.⁴⁸

The decision month: The first month is therefore determined in this manner. Observers watch for the moon at the end of the 12th month, and see it after the 29th or 30th day of that month. This new moon is the decision month, i.e. it will be decided if it is the first month or a thirteenth month for the old year. The observers have been counting days at the same time, starting from the beginning of the old year. They have noted that usually every four years the year is 366 days long. So they know whether the year will be 365 days or 366 days. They then note the day count on the new moon day of the decision month, and if they find that the final day of the year is counted on the 14th of the month or before, then that month will be the first month. If they find that the final day of the year falls after the 14th of the month, then they will know that a 13th month (II Adar) should be added to the year.

These methods of determining the day, the month, and the year, are strictly observational. Counting 29 or 30 days, or 365 or 366 days allows one to predict in advance when the signs may occur. Observers can indeed not count days, however, they will have to observe every day to see if the sign occurs if they don't count days. It is really helpful to know in advance when the new year will begin by counting 365 or 366 days, as this means one will know if the month following the 12th month is the 1st month or the 13th month before it is almost half way over.

As the Scripture defines the year as so many 'days', which are 365, we may see a confirmation of the fact in the age at which Hanoch (Enoch) was taken to be with Yahweh. He lived 365 years on earth. It appears that by choosing this number of years, Yahweh is confirming the length of a normal year. The rule then would be that a normal year is 365 days unless it is proved it should be 366 by observation. The age of Enoch correlates the year to the number of days in the year. Seeing that no one died at age 365 before the flood, it is a 100% probability that Enoch's 365 years was meant to confirm the length of the year.

Feast of the circuit of days? In 1065 BC David sent a message to Nabal. “For on a *Yom Tov* we have come” (1 Sam 25:8). *Yom Tov* is a Hebrew idiom for a feast day. I believe this was a pair new moon feast days for the first month of that year, and David sent his message at daybreak on the first day of the new moon. Nabal gave an evil reply and went off to feast that day and evening. He slept off his wine and awoke in the morning. Then Abigail told him what had happened the day before. Her message was delivered on the second new moon day, which was also the spring equinox. He had a stroke and was immobilized. “Then it was according to ten of the days, then Yahweh struck Nabal. Then he died” (1 Sam. 25:38). So he died on

⁴⁸ The debate is between two opinions, whether the 14th day of the month could fall in the old year or not. Clearly according to Huna it may. Huna's interpretation is more accurate because Deut. 16:1 is connected with the second Passover offering made on the 15th. In both opinions, astronomical means is the only means.

the 10th day of the year.⁴⁹ If they had a separate tequfah feast, then this year it was combined with the new moon days. But it was customary for a sheep shearing feast to be held on the tequfah date, because we read in 2 Sam. 13:23, “Then it is at two years of days. Then they were sheep shearing for Absalom in Baal Hatsor... so Absalom called for all the sons of the king.”

Precise West: The year begins with the sun in the precise west, because Scripture says “*At the great circuit of the days*” (1 Sam. 1:20), “*From the end of the heavens is its going out, and its circuit is at their ends.*” (Psalm 19:6). *The four ends of the heavens* are *the four winds*, as it says, *And I will have brought against Elam the four winds, from the four ends of the heavens* (Jer. 49:36). And the four winds are from four cardinal directions, as it says, *At the four winds are ... east, west, north, and south* (1 Chron. 9:24). The four ends of the heavens, the four winds of the heavens, and the four directions of the heavens, east, west, north, and south are terms for the same directions, so Psalm 19:6, when we decode it according to Hebrew idiom, is saying, “*From the western point of the heavens is the sun’s going out, and its circuit is at the east and the west.*”

Competing Equinox Definitions: There were several unbiblical equinox methods in ancient times. Among them, the one that concerns us most, is the mid-solstice equinox, which located the solstices south and north of west and then found the midpoint location to determine the first day of the year. This point is not due west in the land of Israel. In fact it only agrees with west if you survey it at the equator. In Israel it is about 0.5 degrees north of due west, which is one sun diameter. Using it would put the beginning of the year one day late most of the time. The correct method is confirmed by Messiah’s birth in 2 BC because that year the biblical tequfah was satisfied, but the mid-solstice method was not.

It was, in fact, the 2 BC date that led me to research the different ancient methods of finding the spring equinox, when I discovered that Luke’s data pointed only to 2 BC. The only thing that did not fit was the modern definition of the spring equinox. I soon discovered that ancient people’s used quite a number of different methods of finding the first day of the year in the spring. In the course of the research, I discovered that the method used by Israel is the observational method just described. So as to make sure the 2 BC date was independent of any equinox method before using it to confirm the proper method, I tested out every other nearby year with Luke’s data, and found that there is sufficient data to arrive at 2 BC and only 2 BC even without knowing which equinox method is correct.

Intercalation Restated

¹ *Then Yāhweh spoke to Mosheh and to Aharon in the land of Egypt, saying,*
² *“This new moon for ye is the head of new moons. It is the headmost for ye for the*

⁴⁹ Since the old year was 366 days, it may be that the first new moon day was the tequfah day, if they had failed to observe the leap year closely enough. In which case Nabal had his stroke on the 2nd day of the year and the 2nd day of the month, and died on the 10th day of the month and the 10th day of the year. In any case, the idiom is peculiar, “according to ten of the days.” A mere note of elapsed time would read differently, but this appears to be referring to the days of the year.

new moons of the year” (Exodus 12:1-2).

Since a particular day is not specified, the forms of **שִׁחַרְחִי** specify the new moon. They specify the time the new moons. One could just substitute the word “renewing” for “new moon” in the above text. It is understood that renewing pertains to the moon, and that unless the context shows otherwise, the renewing means the point in time that the new moon is first seen. Moses and Aaron were shown a specific new moon, “This new moon” it says.⁵⁰

They were shown the moon, that is two witnesses. The Almighty does not say this new moon was the first day of the year. He does say it was the headmost “for the new moons of the year.” This is important, because if he had said it was the first day of the year, then a lunar year would be in view. But he says “for the new moons of the year,” and it is clear a solar year is in view. We shall see what makes the first month the headmost month is the criteria that not more than 14 days of the month are in the old solar year. That is, better than half the days must be in the new year, 15 or 16 depending on if the month is 29 or 30 days.

Some of the days may be in the old year, up to 14. How did they know this? This is where applied chronology enters the picture. The biblical chronology shows that 1632 BC was the year of the Exodus.⁵¹ And in this year, due to other synchronisms, we know that this new moon was seen on March 27th in the evening, on the 358th day of the old year. The new moon day was the 359th day. And that year was 365 days long, so the first seven days of the month were in the old year.

How do we know that the limit of days that can be in the old year is 14? Because it says in the next chapter:

This day you are going out in the month of The Green-Ear...Seven days you shall eat unleavened bread...and it will have been as a sign for you upon your hand... And you will have kept this statute at its appointed time from days unto days (Exodus 13:10)

This is to say they shall keep it once in the days of each year (**מִיָּמִים יְמִימָה**, Exodus 13:10, *from days unto days*). If they keep the feast of unleavened bread on a day before the new year begins, then they will have kept it twice in a year. Scripture says that they shall keep three pilgrim feasts in a year, and not two or four. For this reason, the Almighty told them which new moon was the first. They would then find that the last day of Adar (the 12th month) that year fell on the 348th day of the year (March 17, 1631 BC). They would find that 17 days from the next month would be required to complete the old year to 365 days. And since Passover was to be on the 15th day of the first month, a 13th month would have to go with the old year. Otherwise, Passover would fall in the old year. So that year was 13 months long, and the first day of the new year coincided with the 18th day of the 13th month.

⁵⁰ See Rashi's commentary. But Rashi does not explain why it means the time new moon sighting and not some other arbitrary day between the sighting and the 10th day of the month. But I have supplied the reasoning. With no other indication at all, this is what it means.

⁵¹ See *The Scroll of Biblical Chronology*, Vol's I and II.

So by simply telling them when the headmost month was in Exodus 12, and then in the same month, on the 15th day he tells them they should keep it “from days unto days,” therefore, not again until the days of the new year. A solid intercalation rule is established on the basis of just these two texts. After 12 months, if the old year has not come to an end earlier than the 15th day of the next month, then an extra month must be added before keeping Passover.

At the end of 40 years, Moses briefly refers to the intercalation rule:

Watch for the new moon of The Green Ear. And you will have done the Passover for Yāhweh your Almighty, because in the month of The Green Ear Yāhweh your Almighty brought you out from Egypt by night (Deut. 16:1).

Besides looking for first visibility of the new moon, how then does one know if it will be the moon of The Green Ear? If the old year is expected to be 365 days, then if a new moon is seen on the 351st day or greater, then it is the new moon of The Green Ear, and becomes the headmost month for the new year. If the year is expected to be 366 days, then if a new moon is seen on the 352nd day or greater, then it is the new moon of the Green Ear. But if a new moon is seen with too many days left in the old year to go, then it is not the new moon of The Green Ear.

This interpretation is justified by “Observe the day of the Sabbath, to keep it holy” (Deut. 5:12). This means not to watch for a certain number of people ceasing from work at dawn on a given day to determine if it is the Sabbath. But it does mean to count from days to days, the days of the week, to figure when the Sabbath day is. So likewise is the proper explanation of Deut. 16:1 just given:

שָׁמֹר אֶת־יוֹם הַשַּׁבָּת computed by counting days

שָׁמֹר אֶת־חֹדֶשׁ הָאָבִיב also by computed by counting days

Since the Hebrew structure is the same, right down to the definite article, it is clear that the computation is by counting days of the week to determine the day of the Sabbath, and by counting days of the year to determine the new moon of the Aviv, and not by making an etymological argument out of the word Sabbath or Aviv due to the presence of the definite article, “the.”

Summary

The first definition of a day is dawn to dusk. The second definition of day includes the following night. This makes a calendar day from dawn to dawn. This is the ordinary definition of a day in the days of the week, and the days of the month and the days of the year. Sabbaths, and Feast days called Sabbaths determine the Sabbaths from the night previous to a day. The month begins with the first sighting of a visible new moon. The new moon day begins on the morrow, which is a new moon

feast, and the first day of the month.

The year begins when sun first sets west or north of west. The first day this occurs is the first day of the year. I use the topmost point of the sun to make this calculation, and so long as this top point, when it sets has already reached due west, then this is the first day of the year⁵². Since the first day of Passover is an annual Sabbath, and it is the memorial of the Exodus, the new year must begin sometime on that day, or before it. The day of this celebration, as the sun is setting, must be in the new year. The celebratory feast must be finished by daybreak going into the 16th day of the month.

If it is calculated that the beginning of the year will be after the 15th day of an assumed first month, then it must become a 13th month. This pattern fits the rest of the calendar. A month is 29 or 30 days. The months of the year are either 12 or 13. And the days of a year are either 365 or 366.

Test Case No. 1: Messiah's birth

Messiah was born at a significant appointed time on Yǎhweh's calendar, the Feast of Trumpets, which is on the first day of the seventh month. As I said at the beginning, erring calendar systems cannot stand up to historical testing. It was already mentioned that Revelation 12:1-2 confirms the visible sighting of the new moon by not placing it in conjunction with the sun on the day of Messiah's birth. The moon is below the feet of the constellation while the sun is in the constellation of Virgo. The moon would be a visible new moon. This is the sign for the month. The day of Messiah's birth was the first day of the seventh month in 2 BC, which happened on Sept. 1, 2 BC.⁵³

The year is computed by following Luke's notations. In the 15th year of Tiberius, Messiah was immersed by Yohanan. This was the summer of AD 29 just before the beginning of the 16th year of Tiberius. At this point in time, Luke notes that Messiah is almost 30 years old, which is to say he will turn 30 on the coming Tishri 1 at the end of summer in AD 29. This brings us back to the fall of 2 BC for his birth.⁵⁴

The annual Sabbath of Yom Teruah (The Feast of Trumpets) was sunset on Aug. 31, 2 BC to sunset on Sept 1, 2 BC. The new moon feast, and any sacrifices associ-

⁵² The Scripture is not so specific as to specify which part of the sun must align with west before it sets. But it may be argued that so long as any part of the sun is still appearing it is quite bright, and the last flashes of slight are from the top limb of the sun.

⁵³ The date is in the proleptic Julian calendar, and not the Gregorian calendar. The proleptic Rabbinic Calendar dates the Revelation sign to Tishri 3, and for that year, the Rabbinic Nisan 1 comes to Thursday, March 6, 2 BC. The Rabbinic Calendar dramatically fails its own theory for this date because the Rabbinic Nisan 15 would occur before the spring equinox. This is due to the fact that the length of the year in the Rabbinic mathematical formula for the fixed calendar is too long, and the farther one goes back the earlier the putative equinox is incorrectly calculated. So it meets its own rule mathematically, but contradicts the actual equinox in 2 BC. The Rabbinic calendar not only cannot reproduce the Revelation sign on Tishri 1, but it also places Passover in the old year before the spring of 2 BC.

⁵⁴ Why not the beginning of the 15th year of Tiberius in AD 28? Because Tishri 1 was Sept 9 that year, and Tiberius 15th year began on Sept. 18th. So neither Yeshua nor Yohanan, who was five moons older than Yeshua would have their 30th birthdays in the 15th year of Tiberius. Yohanan did not come preaching earlier in AD 28, so it is not possible that Messiah was immersed by him in that year. It would all be before Luke's stated year for the 15th year of Tiberius. Since Luke's Greek means Yeshua was "almost 30," in AD 29, his birth year was the date of the Revelation 12 alignment in 2 BC, and not any year earlier.

ated with it on that day was from dawn on Sept. 1 to dawn on Sept. 2. The visible new moon appeared just after sunset on Aug. 31, 2 BC, at which time Miryam was in labor. She gave birth early the next morning.

This year in 2 BC, the new moon for the 1st month appeared on March 7, 2 BC just after sunset on the 351st day of the old year. The 365th day arrived on March 21st that year, and March 22nd was the first day of unleavened bread and the spring equinox. So that year this month was the first, and not the 13th of the old year.

The elements of the calendar used in confirming this date are (1) fixing the first month using the rule of intercalation: so long as the 15th day of the month following a 12 month year occurs on or after the spring equinox, then it is the first month of the new year. (1) Fixing the first and 7th months using the first visibility of the new moon. It may be noted that using any definition of the new moon earlier than first visibility would have resulted in the 15th day the month falling before the first day of the new year resulting in a miss for the Revelation sign in 2 BC for the month of Tishri. For the 7th month, Revelation 12 indicates first visibility by the position of the moon. (3) Defining the beginning day of the year observationally with respect to the west instead of using a modern geometric definition of the spring equinox is also confirmed. Using the latter method would result in adding a 13th month to the old year in the spring of 2 BC. Also rejected is the mid solstice method of determining the first day of the year. Rather, Scripture requires due west. In Jerusalem the mid solstice point is about 0.5 degrees north of due west, and using that point would cause a miss for the Revelation sign in 2 BC.

Babylonian post equinox method refuted: Also, the correctness of the rule of the equinox is also confirmed over against the practice of the late Babylonian calendar to place the first day of the first month always on or after the spring equinox.⁵⁵ The Revelation sign aligns on the evening of August 31st, 2 BC, which places 1 Nisan before the spring equinox. Likewise, the year of Messiah's death, 1 Nisan is before the spring equinox, and also in the year of the Exodus, 1632 BC, 1 Aviv is before the spring equinox. In John 5:1, the unnamed feast was Purim in AD 32. It came on the weekly Sabbath that year. This year also requires 1 Nisan before the spring equinox to match the synchronism.

Equinox method confirmed: In 598 BC, the Babylonians used the post equinox method, and so dated the fall of Jerusalem to the 2nd day of Adar (March 16th, 597 BC). Things work out best if the Jewish month of Adar were 30 days. So I suppose that they did not see the new moon after 29 days due to cloudy weather.⁵⁶ They were also unable to receive reports due to the siege. So the city fell to the Babylonians on 1 Aviv (the Babylonian Adar 2). According to 2 Kings 24:8, Jehoiachin reigned three months. But according to 2 Chron. 36:9 he reigned three months and ten days. What is the explanation of the difference? Under biblical rules three months

⁵⁵ It should be noted that the earlier phase of the Babylonian calendar followed a form of the Biblical rule, and often calculated the first day of the first month before the Spring equinox, even in Nebuchadnezzar's reign. The Babylonians later regularized their intercalation rule so that 1 Nisan would always begin in the new year. This method was promoted by Herb Solinsky.

⁵⁶ It may be that the siege was at its fiercest point on the evening of the 29th when the new moon was supposed to be seen, and that the Babylonians had lit many fires against the wall. So they did not see the moon. The siege went on the 30th day, and then the decision to surrender was made on the 1st day of the Judean Nisan.

and ten days may be stated inclusively as four months. It cannot be presumed that three months means three 30 day periods without regard to the moon, because the Hebrew idiom for such is “a month of days” יָרַח־יָמִים (cf. 2 Ki. 15:13; Deut. 21:13). Therefore, the “three months” refers to the previous three months, month 12, 11, and 10. It is more than likely that the 10th month was a part month. But careless interpreters treat it as a full month. The 10 days, then of the other account they back fill into the 9th month, resulting in the conclusion that either the writer of Kings or the writer of Chronicles has erred. In my Biblical chronology, I demonstrate that nothing is ever rounded off. Inclusive counting picks up the extra part and states it as a whole. Therefore, if a time period is really 10 days and three whole months, then it can be restated as four months, but not three.

What is more, the Chronicles writer puts it as three months and ten days, and not ten days and three months. This hints that the days come after the three months. So what answer relieves both accounts of any error? It is a matter of point of view. The writer of Kings counts Jehoiachin’s reign over when he surrendered to the Babylonians on 1 Aviv. Therefore, he does not count that day, or any day after it.

But the writer of Chronicles is more charitable, since he writes from the Judean perspective, and he lets Jehoiachin remain king until he is taken away to Babylon, even though his house is under arrest. We are informed in 2 Chron. 36:10 that he was taken away, “At the return of the year king Nebuchadnezzar had sent him.” So then, what do we find out when we check the number of days in the month of Aviv that year up to the return of the year? We find exactly 10 days. The city fell on day 356 of the old year, and the year was 365 days long. So 10 days.

The return of the year was on March 26, 597 BC, according to when the sun first set just north of west. Using the mid-solstice method would put us a day late, and so also the geometric method. This explanation vindicates both writers to their exact precision. So I have given two witnesses from applied chronology, 2 BC and 597 BC.

Other nearby years to 2 BC: If we examine 3 BC, we see that the Revelation sign cannot be reproduced on the Babylonian model, nor 2 BC, nor 5 BC. Even 3 BC is too early to satisfy Luke’s data. In 3 BC, Messiah’s birth would have to be almost 3 weeks premature to match the birth of Yohanan to the priestly divisions. Advocates of earlier dates incorrectly believe Herod died in 4 BC, and therefore never propose 4 BC as the year of Messiah’s birth.

Conclusion: the principles of the Biblical Calendar explained in the narrative are able to confirm that Messiah was born on Tishri 1, 2 BC exactly as indicated in Revelation 12:1-2. And amazingly several other of the calendar rules are confirmed in the process of checking it.

We may look at the sign from another angle. Given the correct calendar principles, the alignment in Rev. 12 is for Tishri 1. So on Tishri 1 the virgin gives birth. In other words, the only way the woman does not give birth on the feast date is if you use an incorrect calendar.

Second Witness: the division of Abijah. The priestly divisions were fixed in a continuous rotation from their inception points. Seder Olam supplies the date of the first division at the destruction of the second Temple (AD 70) to be the 9th day

of the 5th month, and also on the going out of the Sabbath, which was a Sunday, August 5, AD 70. This alignment did not occur in AD 69. Reversing the rotations back to the division of Abijah in Luke 1 brings the 8th division to serve from July 6 to July 13th. The first full day after the end of this division was the new moon of Av, the 5th month. Luke tells us that Elizabeth conceived and was hidden for 5 months, until on the 6th new moon the Messenger came to Miryam. This brings us to the new moon day of the 10th month, December 10, 3 BC. Whenever Scripture mentions the month, it is the new moon day if the context does not prove otherwise by stating which day of the month it is. For example, Exodus 19:1 and Deut. 16:1. Luke tells us that Miryam's days were full when she gave birth. Therefore, she was at term. The term from conception to birth is 266 days, which is the exact number of days from Dec. 10, 3 BC (Julian day 1720671) to Sept. 1, 2 BC (Julian day 1720936). And $935-671+1$ is 266.

If the same calculation is attempted in 3 BC, the birth of Messiah would have to be premature by almost 3 weeks to occur on Tishri 1.

Test Case No. 2: The Division of Abijah

Are the rules given here consistent with the conception and birth of Yofanan the immerser? His conception occurred when his father finished his priestly rotation. We know when these occurred from Qumran documents and Seder Olam. We also know that the rotations were continuous. The division of Abijah went off duty on July 13th, 3 BC. The following day was the new moon of the 5th month, calculated for first visibility. Elisheva spent 5 months in seclusion, and then on the new moon of the 6th month, the Messenger of Yahweh appeared to Miryam. This fell on December 10, 3 BC, the 264th day of that year. The year in total had 365 days, so the number of days from the conception of Messiah in the old year are $365-264+1$. This is 102 days. Messiah was born on day 164 of the following year, and so the time from conception to birth is $102 + 164$, or 266 days. This is the exact expected day based on the due date, because the time from conception to birth averages 266 days. Now it should be noted that Luke tells us Miryam's days were full when she gave birth. Therefore, Messiah was not born prematurely. That Messiah's birth came on his exact due date is a remarkable confirmation of the calendar rules. And that the data concerning Yofanan the immerser prove out the 5 months of seclusion to be five months starting on their new moon days also is a remarkable confirmation of the rules.

Test Case No. 3: Messiah's Death and Resurrection

The Evangelists give the Sabbath as Messiah's resurrection day.⁵⁷ And they also place it on the third day before dawn, while it was still dark. This makes the fourth day of the week (Wednesday) the day of his crucifixion. This day was called

⁵⁷ Christian tradition gives Sunday. I have demonstrated elsewhere that they changed the date and their translations, and it is not the object of this paper to repeat this other work.

the day of preparation for a Sabbath. And this Sabbath was necessarily the annual Sabbath for the first day of the feast of Passover. The first day of Passover always falls on the 15th of the first month, which this year was the 5th day of the week, a Thursday. It only remains then to check and see if by the stated calendar rules the 15th of the first month falls on a Thursday.

Before we can do this, we need to derive Messiah's final year. This is done more thoroughly elsewhere. Here a summary will do. Luke places Messiah's immersion in the 15th year of Tiberius, known to be in AD 29. He was almost 30 in the fall of that year according to Luke, and the following spring at the Passover of AD 30 he began his ministry. Luke records a chronological parable in his 13th chapter which puts the total length of Messiah's ministry at four years. The end of the fourth year is accordingly in AD 34.

Calculations show the new moon was first visible on March 10, AD 34, just after sunset. The following day was a Thursday, and the first day of the month. The 8th day of this month was also a Thursday, and so also the 15th day of the month was on a Thursday, March 25th. We also find that the equinox rule holds. The new year began on March 22nd that year when the setting sun crossed over the west end of heaven.⁵⁸ Since the year had begun on March 22nd, the 15th day of this month qualifies for the first month of the year on March 25th. Conclusion: the Sabbath mentioned in the Evangelist Yohanan is confirmed to have occurred on Thursday.⁵⁹

We may derive a second historic confirmation from the prevailing Church tradition.⁶⁰ According to this tradition they believed that Messiah had died on the first day of Passover, and they also believed this date was March 25th. It turns out that March 25 is the correct day for the first day of Passover in AD 34. Also in the tradition AD 34 was the most popular year selected. For example, Bede the Venerable believed Messiah died on March 25th, AD 34. These dates were only abandoned in the face of irrefutable evidence that said day was not a Friday as required by tradition, beginning with Roger Bacon who suggested AD 33 was right when he was able to correct the ecclesiastical calendar using parts of the *Almagest*.

When the rules of orbital mechanics were revealed by Sir Isaac Newton, it was subsequently found by Passion calculators that March 25th in AD 34 was a Thursday. And since this conclusion did not fit the narrative invented by the Church for a Friday crucifixion and a Sunday resurrection, they quietly abandoned the prevailing tradition, and replaced it with dates in AD 30 and 33.

There is a third witness touching the year AD 34. Daniel prophesied that Messiah would be cut off after 69 sabbatical years from the rebuilding of Jerusalem. Jerusalem was rebuilt in the summer of 445 BC. The following year was Sabbatic as evidenced by two witnesses. On the eve of it Nehemiah enforced debt cancellation, and the Torah was read out in this year by the priest Ezra and his levitical aides.

⁵⁸ I am using biblical terms here. The matter was explained earlier. I remark that the modern equinox speaks of the sun crossing the equator. But we speak of the sun crossing the west end of heaven. The modern equinox method pleases only a Platonist. The Biblical method is the practical observational method.

⁵⁹ John 19:31. That Sabbath was a high Sabbath, or a great day, because it was an annual Sabbath.

⁶⁰ This is summarized on page. 211 of *The Good News of Messiah* by the Author, and the data are analyzed by Philipp E. Nothaft in *Dating The Passion*, Brill, 2012.

These were the precepts of the Seventh Year. From Tishri 1 of 445 BC up to Tishri 1 of 444 BC was the Sabbatical year.⁶¹ This year was the first of the 69 broken down by Daniel into 7 Sabbatical years and 62 Sabbatical years. Taking the sum as 69, the 69th sabbatical year falls between Tishri 1, AD 32 and Tishri 1, AD 33. About half a year later, in AD 34, Messiah was cut off after the terminal Sabbatical year. This proof rules out all years before AD 34, and all years after AD 40.⁶²

Test Case No. 4: An Example of System Failure

An incorrect chronology cannot be considered the confirmation of a system if it agrees with it. And a mostly incorrect chronology cannot be considered a confirmation if it only agrees with correct chronology some of the time. A broken clock is right twice a day. While it is incumbent on us to confirm what is correct, and not required that we refute every false system, it is instructive to show how some of those systems fail. For this test, I pick the system promoted by the **torahcalendar.com** website, because it has the correct year for the passion AD 34, which besides being correct, many ancient authors subscribed to until the 12th century AD, but it still held on finding advocates in Sir Isaac Newton, Joseph Scaliger, and Solomon Zeitlin even in the 20th century.

I pick this site because it attempts to apply its system more extensively to biblical chronology. For brevity sake I will refer to the author as Terry. It should be understood that Terry does not sign his work, and that the author of this theory discloses no public information. I can say no more than that a real person named Terry was somehow responsible for the content of the site. I do not even know if Terry is still his real name.⁶³

Terry asserts that the 24 priestly divisions were begun in 951 B.C.E. on the 7th new moon, wherein "1 Tishri = Sabbath, September 23, 951 B.C.E. (1374336) = Day 1/Month 7."⁶⁴ A check on this date reveals that the new moon was seen on Friday night, Sept. 22, if conditions were perfect, and possibly the next day if not. It is very likely that the date is correct for the new moon day.

Terry asserts that the 1st division (course) Jehoiarib began to serve on this

61 The entire biblical chronology of Israel is input into this determination as well as the placement of the Jubilee year. It cannot all be repeated here, but you can research it the Scroll of Biblical Chronology. The proofs mentioned are only to begin to build trust with the reader.

62 Tiberius died in March AD 37, and Pilate was deposed in late AD 36. So only the spring of AD 34, 35, and 36 remain in the competition. We know, however that Messiah's ministry was not 5 or 6 years long. This leaves only AD 34 standing.

63 One day many years ago, Terry visited in person. He brought a gift, a nice handmade laminated and spiral bound book of the calendar based on my computer program for a span of years. He was well convinced of the results of my passion chronology research. During our brief conversations I ascertained that Terry was deep into trying to reconstruct biblical chronology based on the Talmud. I did my best to convince him of the futility of this effort, but to no avail. After parting ways, I discovered the aforementioned website which clearly incorporated my passion results. It could only be Terry I concluded. But I was dismayed with the overall biblical chronology that he had surrounded it with, as well as his prophetic speculations calling for the end of days in the immediate future. Particularly bothersome was his defense of 3 BC as the birth year of Messiah. In any case, his site is a perfect example of taking a truth, the passion chronology, and surrounding it with a context that does not fit with it, seriously weakening the power of the argument.

64 Quoted from PDF paper, "The 24 Priestly Courses" on Terry's website.

new moon day. As shown from 2 Chronicles 5:11, the priests served that first week “without regard to division” (אין לשמור למחלקות)⁶⁵ For this reason, the regular rotations began in the second week of Tishri. Terry believes that Tishri 1, 951 B.C.E. is year 12 for Solomon. But I say that year 12 was in 1012 B.C. Why is there a 61 year difference? This is because Terry has adopted a shortened chronology of the kings like that of Edwin Thiele. Just for starters, this contradicts the 390 years in Ezekiel. This matter is explained in my chronology books.

When we continue to cross-examine Terry, things begin to fall apart quickly. Terry’s putative date for the 4th year of Solomon is 959/958 BC.⁶⁶ Scripture states that the Temple construction was begun on the 2nd day of the 2nd month (2 Chron. 3:2, וַיִּחַל לְבִנּוֹת בְּחֹדֶשׁ הַשְּׁנִי בַשְּׁנִי). In 958 BC, this date was Sabbath, April 17. Is it likely that building would begin on a Sabbath? But the real 4th year was 1020/1019 BC, and the 2nd day of the 2nd month in 1019 BC was: Sunday, May 1. You can check the 2nd day of the 2nd month in 958 BC for yourself on Terry’s website. It shows that it is a Sabbath.

Terry asserts that the first Temple was burned in 593 B.C.E. But Scripture says it was the 19th year of Nebuchadnezzar (Jer. 52:12). That year was 587 B.C., as may be proved by checking astronomical datings in the tablets BM 38462 and VAT 4956. What is more, there are 70 years of fasting ending in the 4th year of Darius, which does not correlate with Terry’s date. It appears that Terry’s 593 B.C.E. date is picked for no other reason than that the 1st division would be serving in his scheme when the Temple was destroyed. Terry then finds this confirmed by the Talmud, which is based on Seder Olam. And Seder Olam cannot possibly be correct since it deletes 166 years from the history between the two Temples solely for the purpose of making sure that Daniel’s prophecy cannot be applied to Messiah Yeshua. It is case of the telephone game and circular reasoning. Clearly, though, Terry has chosen to believe some of Seder Olam (really the earliest part of the Talmud), and not others, without a sufficient foundation for telling which is true and which is not.

Somehow, through strategically choosing incorrect dates in the Persian Period (which I will not bore the reader with), Terry manages to get the divisions where he needs them to be to support his 3 BC date for the birth of Messiah. He ends up with the 8th division, Abijah, between June 16, 4 BC and June 23, 4 BC. In order to achieve this, Terry must count 5 whole months, and then place the conception of Messiah near the last day of the 6th month.⁶⁷ Then it works. The problem with this calculation is that Terry must reject the Seder Olam text that says the 1st division was serving when the second Temple was destroyed. He stops numbering the divisions the month before the Av 9 date in AD 70, so we are unable to observe the mismatch. But if we carry out his numbering to Av 9, we will see that it does not align with the 1st division.

65 This is detailed at: <https://www.torahtimes.org/writings/machloket-cohanim/article.html>.

66 This assumes he correctly uses a Tishri epoch for the kings of Judah. If he does not, then he contradicts the Scripture data on the building of the Temple, begun in his 4th year, month 2, and completed in his 11th year, month 8, a span of time stated to be 7 years.

67 An additional problem is that Luke says it was the sixth month, which without a specified date, we have seen, must mean the sixth new moon from when Elizabeth became pregnant.

Providentially, the Seder Olam date for the 1st division is confirmed by the Qumran documents, which provide sufficient astronomical data to synchronize their divisional cycle to 42 BC. By this method from two difference sources we are able to confirm the divisional rotations, and not simply to trust this tradition. Luke's data on Messiah's birth, combined with Revelation 12 are a third witness that the divisional rotations are correctly placed. Luke tells us that Messiah was "nearly 30 years old" when he was immersed by John, and this was after the 15th year of Tiberius started on Sept. 18, AD 28. But Tishri 1 was on Sept 9th that year. So Yeshua would not be "nearly 30" if he were born in 3 B.C. He would be over 30 in the 15th year of Tiberius.

This is also confirmed by the length of Messiah's ministry, which was four years, as may be ascertained from the parable in Luke 13. From AD 34 takes us back to the fall of AD 29 for his baptism, and the spring of AD 30 for the first Passover of his ministry. If the baptism were in AD 28 in the fall, then we would have to suppose a year and a half for which nothing afterward is recorded. Finally, the Magi's statement that they had seen Messiah's star in the rising shows that 3 B.C. is not the year.

Test Case No. 5: The Dawn Star Rises

¹⁵Then he lifted up his parable, an utterance of Bil'am son of Be'or, and the utterance of the mighty man with perfect sight, ¹⁶the utterance of one hearing the sayings of God, and knowing the knowledge of the Most High, the vision of Shaddai he sees falling [upon him] and being cleared of eyes. ¹⁷I see him, but not now. I regard him, but not near. A star will have made way from Ya'aqov, and will have risen up a scepter from Yisra'el. (Numbers 23:17).

There is another astronomical synchronism that verifies the calendar in all particulars. The Magi, who were assiduous watchers of the planet Jupiter declared, "We have seen his star in the rising" (Mat. 2:2). In the astrological language of the Magi, this was no idle observation of a star in the east. It meant rather that they had seen his star in its helical rising, which they associated with the birth of kings. In the astrological systems of the time, each wandering star (aka planet) was assigned a fixed number of degrees for the Arc of Light, that is the distance between it and the sun to be considered the day of its helical rising. As conditions varied, and the angle of the sun to the horizon changed them, the arc of vision could differ, and thus the day of actual visibility would vary, but they paid no attention to this in fixing the auspicious dates. They used their standard angle measure instead.⁶⁸ For Jupiter this was considered to be 12 degrees. This was the canonical value according to Molnar.

"We have seen his star in the rising" fixes the birth date of Messiah, because this is what the Magi were looking for in their horoscopes. On Sept. 1, 2 BC, Jupiter was separated from the sun by 12 degrees. On the day before it was near 11 degrees. On the day after it closer to 13 degrees than 12. Jupiter was known as the king star and at helical rising it is the morning star, thus, "*I am the root and kindred of David, the bright dawn star*" (Rev. 22:16, GNM). Messiah alludes to both his royal birth and to his birth star in this text. "*Then I saw another Messenger ascending*

⁶⁸ See *The Magi's Star from the Perspective of Ancient Astrological Practices*, Michael R. Molnar. *Q. J. R. astr. Soc.* (1995) **36**, 109-126. See also *Astronomical and Historical Evaluation of Molnar's Solution*, Bradley E. Schaefer.

from the rising of the sun, having the seal of the living Almighty” (Rev. 7:2).

Astrologers generally considered that stars governed the fate of humans, which is a superstition, but could it be that the Almighty determined the king star to rise on the day of Messiah’s birth? Yes, the star was sent to announce the birth of the Almighty Son, to announce his destiny, but not to cause it. The cause and the effect are reversed. So the witness of Matthew to this alignment on the birth date of Messiah is just as powerful as the sign in Revelation 12:1-2, a witness to the ability of the Almighty to engineer things just so far in advance.

The date was the new moon day, determined by first visibility the evening before. By the rules of the circuit of days for the beginning of the year, it was the seventh new moon. It was a significant feast day, and at dawn on this day Messiah was born, and the messengers of heaven shouted a joyful song. It was Yom Teruah, the day of shouting, the day of trumpets. A significant feast day confirms the method determined from the ends of the heavens of starting the year.

Messiah was born at dawn, at the end of the watches, because it says:

For a child will have been born to us, a son will have been given unto us.

⁸And the shepherds were in the same countryside, staying in the field, and keeping the watches of the night over their flocks. ⁹And a messenger from Yāhweh stood over them, and the glory of Yāhweh shone around them. Then they were greatly frightened. ¹⁰Then the messenger said to them, “Do not be getting afraid! For behold, I bring you good news of a great joy which will be for all the people. ¹¹**For today in the city of David there will have been born for you a Savior**, who is the Anointed One, Adōnai. ¹²And this is the sign for you: You will find the baby, who will have been getting wrapped in linen strips, also lying in a feeding trough.” ¹³And suddenly, there was with the messenger a multitude of the heavenly host praising the Almighty, and saying, ¹⁴“Glory to the Almighty in the highest, and on earth peace among men of good intention.” (Luke 2:8-14).

²⁶And he who overcomes, and he who keeps my deeds until the end, TO HIM I WILL GIVE AUTHORITY OVER THE NATIONS. ²⁷THEN HE WILL RULE THEM WITH A ROD OF IRON, AS THE VESSELS OF THE POTTER ARE BROKEN TO PIECES^ψ. As I also have been receiving authority from my Fāther, ²⁸**therefore, I will give him the morning star.** ²⁹He who is having an ear, should hear what the Spīrit says to the assemblies.” (GNM, Revelation 2:26-29).

Conclusion

I believe I have provided the reader with sufficient reason to agree that the biblical calendar rules have been presented here, or at least to suspect that further research down these lines will prove beneficial. I have demonstrated that the calendar is not just a theory. It is confirmed by applied chronology. All other competing

calendars pretending to be biblical are shown to be deficient when they come up with nothing agreeable or consistent concerning biblical dates. The Rabbinic calendar fails.⁶⁹ The Qumran or Enoch calendar fails. The Lunar Sabbath calendar fails. And if there be any other calendar differing from what is presented here in more than a trivial way, then it also will fail.

Appendix I: The Rabbinic Calendar, Practical Matters

The Rabbinic Calendar was not used in biblical times. We have confirmed this. The Rabbinic Calendar cannot be proleptically calculated back before the 4th century AD to confirm or verify any biblical dates. It is seldom used to do so, and such efforts are always fruitless.⁷⁰ Those who follow this calendar should be aware of this fact, and even if they continue to use it religiously, should realize that any discussion of biblical dates should omit it. The Rabbinic calendar exposes one to a calendar not authorized in Scripture and also to the moral hazards of the authority of the Rabbis who reject Messiah. For it is they who compel Israel to follow it as they compel Israel to follow their multitude of man made traditions. The Rabbinic calendar is only authorized by Jewish tradition, as also is the Rabbinic chronology in Seder Olam. This chronology was specifically invented by Rabbi Yose ben Halaphta to dispute the messianic claims of Messiah Yeshua. I leave it up to every person to judge for themselves what the level of tolerance for the Rabbinic deviation from Scripture should be exercised in any context.

Appendix II: Applied Prophecy

I mention this under its own section. There is no reason to believe that future prophetic times and seasons will use any calendar other than the biblical one laid out here. Whatever the confusion now, before the end of days, the house of Israel will be restored, and knowledge of the correct calendar will spread to all Israel. Therefore, not only must historic chronology be studied in terms of the Scriptural calendar, but also prophetic chronology must conform to the same. For example, Sir Robert Anderson and fundamentalist interpreters came up with the notion of a prophetic year of 360 days based on statements in Revelation and from the Genesis Flood.

A 360 day year? A superficial reading of Genesis leads many to suppose that 5 months and 150 days divide out at five 30 day months, and therefore 12 such months are 360 days in a year. But for the flood year in 2483 BC, we find that the 17th day of the 2nd month was day 51 of the year on the Biblical Calendar. And the 17th day of the 7th month was day 200 of the year. By inclusive count this equals 150 days ($200-51+1=150$).

A confirmation of the biblical calendar: It turns out that every now and then

⁶⁹ In fact, most Rabbinic calendar advocates would admit what I have presented is the correct ancient calendar. They would justify their difference by justifying their calendar change.

⁷⁰ In fact, the further back before the 2nd century AD one wishes to proleptically calculate the rabbinic calendar the more often one ends up with dates placing Passover before the spring equinox.

a stretch of 5 months will turn out to be four 30 day months and one 29 day month in some permutation. It just so happens that this happened in the year of the flood between the 2nd and the 7th months.

Forty-two months. It is supposed that 42 months and 1260 days are equal. But 42 months cannot be much over 1240 days since a month averages only 29.5 days. When it is supposed that 42 months are 30 days each, then one supposes that a 360 day year is being employed. But readers are deceived by making unwarranted assumptions in complete ignorance of the Torah and the calendar taught by Scripture. Nowhere does it say the 42 months are equal to 1260 days.

An interesting property of 1260 days is that it is 180 complete weeks. I propose that these days begin on a Thursday and come to and end on a Wednesday. Furthermore, when one combines this number with the 1290 days from Daniel one ends up with 2550 days, which is the number of days from Tishri 1 to the Day of Atonement seven years later if the meeting point is counted inclusively. This is all based on intercalation using the ordinary solar year.

Another interesting property is that one may just fit 1260 days between the spring equinox in one year and the feast of Trumpets after that many days. But we are using the real spring equinox, and a real date of Yom Teruah, wherein the years are the customary lengths 365 days each, for a time, times, and the dividing of a time. So we see that these numbers have explanations within the framework of the biblical calendar without a puzzling year length with no basis in reality.

Appendix III: Karaite Doctrines, 9th Century AD

The Karaites are a sect of Jews that dissent from the Rabbinic Calendar, and their doctrines are often adopted by followers of Messiah Yeshua, sometimes even in ignorance of actual Karaite practice. For example, Seventh Day Adventists attempted to justify their 1844 chronology by appeal to the Karaites, but a more accurate knowledge of Karaite practice demonstrated that this appeal was without merit.

There are three principle Karaite doctrines which may be considered to have widespread influence beyond their own sect, (1) the sighting of the visible new moon, (2) the use of barley to determine the first month, and (3) the counting of days to Pentecost always after a weekly Sabbath. It may be seen that we are in common agreement with the Karaites on the method for determining the first day of a month, so this point will not be discussed here. Also upon the third point, the purpose of this paper is not to concentrate on the Shavuot (Pentecost) dispute. But it may be mentioned briefly, so that we will have only one point left to discuss.

The Pentecost Dispute, 9th Century AD⁷¹

The foundation of the Karaite Pentecost doctrine is the interpretation of the

⁷¹ There was an earlier phase of the Karaite Pentecost theory among the Sadducees סַדּוּקִים. After the destruction of the Temple this sect became nearly extinct. During the Second Temple their Pentecost beliefs were mainly in theory only since the Pharisees would not allow them to impose them on the people or in the Temple rituals.

word Sabbath in Lev. 23:11 to mean the weekly Sabbath, and also their “proof text” for this doctrine based on Lev. 23:16. The Lev. 23:11 text is easily answered in that there are other days called Sabbath than the weekly one. All the Evangelists had occasion in the Passion Narratives to refer to the annual Sabbath after Messiah’s crucifixion. The Rabbis give the same basic answer. The Sabbath in Lev. 23:11 is an annual one.

The Lev. 23:16 proof text depends on both Karaites and the Rabbis promoting ignorance of the actual Hebrew text. This is like the purpose of two political parties, which appear to be opposed to one another, is really to keep a third party from discovering the truth. When one disagrees with one of the two parties, it is assumed that the opposing party has the best argument. But both parties are opposed to Messiah.

The Rabbis answer the Karaite argument in Lev. 23:16 by translating, “until the day after the seventh week...” They take week to mean an irregular period of seven days, that is not necessarily starting on the first day, and ending on the seventh. And this allows them to avoid the Karaite logic demanding the day after the seventh week to be a perpetual Sunday.⁷²

The real answer to Lev. 23:16 does not lie in re-interpreting the Hebrew words to mean “seventh week,” but to keep it literal, “seventh Sabbath,” and then to translate two other parts of the text, which have been neglected, more literally, “until in the tomorrow of the seventh Sabbath you are counting a fiftieth day.” In Hebrew, the “tomorrow of” something means the time after it, and not necessarily the very day after it. The Hebrew requires the same sense in the previous verse, verse 15.

So the 50th day falls somewhere in the week after the seventh Sabbath. And this is the way to soundly disarm the Karaite proof text.

The Barley Doctrine, 9th Century AD and Onward

Positive results of barley: First, I will report what we know on the positive side. The barley doctrine, though incorrect, more often than the Rabbinic calendar gives correct results. The problem is that there is not just one party reporting the condition of the barley, but several, and the several parties disagree on the definition of ripe barley, and how ripe it has to be for what uses. The fact is that there is a definition of ripe barley that allows it to be found soon enough to agree with the observational equinox method laid out in this paper and to meet biblical requirements for the use of barley, and there are some groups using those definitions. A second point may also be noted. A least one group that does not hold faithful to Yeshua conveniently bends the definitions and circumstances to not find barley sooner than the Rabbinic calendar would declare the first month. They appear more eager to collude with the Rabbinic late intercalation of the month than to follow their own principles. And this, I believe is because they have a common interest. Both parties seek to subvert the loyalty of the faithful to Messiah Yeshua, and to promote the authority of the Rabbis to lord it over the faithful, even though the Karaite faction is itself at odds

⁷² This way of translating and reasoning, however, is no older than the Targum of Aquila and second century renditions of the LXX following it.

with the Rabbis and many of their traditions.

The good news is that an actual consistent set of barley rules, should one choose to use them, and obtain reports from Israel concerning them, results in findings soon enough to keep the months from falling behind the year. But now I must move on to pointing out the err in the doctrine itself, even if it tends to yield the same result as the biblical method.

While I have a good deal of respect for many of the people who teach this and their sincere love of Torah, I have to say that they are seriously in error about this specific matter, and that they have not truly tested the foundations of that teaching, nor do they seem to understand what the Scripture truly says about the year. It is my hope that they will come round when they see the consequences of that teaching, and are shown the truth. A small sect of Judaism called Karaites has maintained the barley tradition since the 9th century AD. And they have had much success in transferring their tradition to non-Jewish believers in Messiah. One could almost say that more Messianic Christians follow the Karaite tradition than there are actual Karaite Jews.

Many Barley Teachers Reject other Key Truths: Much less is my respect of those ministries promoting other errors along with the barley doctrine. Chief among these errors is their denial that Yeshua is the Almighty Son, and is Yahweh Almighty, sharing the nature and the name of the Father, and their denial that the Spirit is also the Almighty distinct from the Father and Son, yet one with Father and Son. They reduce the Spirit to the power of the Almighty, and make Messiah nothing more than an exalted man. The reader should be advised that this serious error is related to the same type of thinking that leads to lesser errors. Denying the Son is no small matter. This also prevents them from coming to a proper knowledge of divine forgiveness since it separates Messiah's ransom for Israel from the Almighty himself. Lack of understanding on these issues is the reason I assign for why they have not been given eyes to see and ears to hear.

Vernal Equinox: One such ministry claims that this is not mentioned in Scripture, and then tries to deconstruct those texts that mention the *tequfah* to prove their claim, but they adopt mistranslations from the KJV. For example, "And thou shalt observe the feast of weeks, and of the firstfruits of the wheat harvest, and the feast of ingathering at the year's end" (Exodus 34:22, KJV). Because of lawlessness from Christians and the blindness that results therefrom, and because the Rabbis rejected Messiah, and the blindness that results therefrom, these texts have been handed down to us mistranslated. And because ministries reject the divinity of the Son equal to that of the Father and Spirit, and adopt errs concerning the atonement based on lawlessness, they too have not been granted an opening of the eyes.

Correction for Exodus 34:22: The words, "at the year's end" are literally "Circuit of the year." There is no preposition "at" in the Hebrew, but we may supply either "at" or "in," which gives two different senses, "At the circuit of the year" would imply that point where the year begins, and "in the circuit of the year" would imply the whole circuit of the sun from its starting point to its end for a year. As proved in this paper, the year does not end in the fall, but in the spring, where it also begins.

So if we are to retain the verse division, we would have to read "...in the circuit of the year," and interpret it to mean that all three of the previously mentioned feasts are to be celebrated in the circuit of one year. But retaining the current verse division is not the most intelligible way to read the text. The most agreeable solution is to make the last few words of verse 22 the introduction to verse 23, "[In] the circuit of the year, three times in the year every male of you will see the face of the Lörd Yăhweh." This is what the text says. And so it refers to the whole circuit putting it in logical order with the three feasts, as explained before, and leaves intact the other texts which place the return of the year in the spring.

Correction for Exodus 23:16/17: A similar explanation applies to Exodus 23:17, "In the going forth of the year, during your gathering your labors from the field, three times in the year every male of you will see the⁷³ face of the Lörd Yăhweh." In this case, the word "circuit" is not used, but "going forth." It is well known that in Hebrew these words may refer to the setting out of something or the exiting of something. Given that other texts speak of the *return of the year* in the spring, it is clear that "going forth" in the sense of setting out is meant. Further, to read it otherwise as the end of the previous verse would encourage the reader to interpret gathering your labors as referring only to the time about Tabernacles. But this is not the case. The labors are gathered during Passover, during Shavuot, and leading up to Tabernacles. Seeing the context this way objectively implies from "going forth" that there is a starting point from the *tequfah* of the going forth.

Correction for 2 Chron. 24:23: "And it came to pass at the end of the year" (KJV). We might get away with saying that where the year ends, then it begins again, but what the KJV has is not what the Hebrew says. It says, "Then it is at the circuit of the year," and this time there is a preposition: לְתֵקוּפַת. So it is speaking of the day of the spring equinox, which has been shown before to be the "end" of heaven, one of the four ends of heaven. So if we are to bring the word "end" into the picture then it refers to the cardinal points of the compass, the farthest limit of heaven was perceived to be these points.

Equivocation to paganism: the argument goes that because pagans used the spring equinox to mark time, and held feast days upon it, that therefore it must be pagan. There is no shortage of sources to show that pagans made use of the spring equinox. But people who live in glass houses should not throw stones. Pagan's also made use of many other things God created, including the new moon. The nature of corruption is to take that which is legitimate and combine it with that which is not. So pagan's sacrificed to their gods on the new moon days. Is the new moon now pagan? The barley teachers' strategy with the beginning of the solar year is to deny it exists in Scripture, chiefly by adopting mistranslations from tradition, and then to turn around and equivocate its origins to paganism. This sort of argument is ubiquitous among unspiritual teachers. The sin of adding to Scripture is equal to that of taking away from it by means of adopting mistranslations. There is a logic to the point that if something is not found in Scripture, then it is not approved, and then may be suspect of having a pagan origin. But if someone first erases its presence in

⁷³ Read the text with the variant תֵּקוּפַת and not אֵל. The verb is therefore not a Niphal, "be seen."

Scripture and then makes that argument, then logic leads to error. Logic only works when the input assumptions are true.

Simple Truth Covered up: The Scripture says that three feasts are to be kept in one year. The return of the year is at the circuit of the days, and a year is measured from days to days. The only legitimate reason, therefore, to add an extra month to the old year is if failure to do so results in Passover being kept in the old year.⁷⁴ The extra month is to preserve the precept, three feasts in a year. This simple truth is covered up because all of the phrases in traditional translations relating to the start and end of a year have been mistranslated! Why was the year undefined and eliminated from the texts by textual corruption and mistranslation? The answer is very simple: Rabbis and Ecclesiastics wanted the power to dictate the calendar to their flocks based on their own authority without the higher authority of the Scriptural instructions in view of the common people. They saw in the calendar the opportunity to bind the thoughts of their flocks to their corruptions and false doctrines, so they complicated the calendar by suppressing its simple nature in Scripture, thus forcing the people to look to them for setting appointed times.

The Catholic rule tying Easter to the full moon well illustrates this obfuscation. The Church has an ecclesiastical calendar, in which are marked new moon dates, and indeed, even a 13th month when one is necessary. In 2021 the new moon day in the ecclesiastical calendar fell on March 15. It was seen on the evening of March 14, but the new moon day is correctly the next day.

Slavery to shifting sand: The barley doctrine is a Statist doctrine compared to the biblical method, because the later is easily understood. Barley, on the other hand, is subject to the shifting interpretations of what qualifies as barley, and the emotional commitments to various authorities. It is therefore an arbitrary and pernicious doctrine. It needs authorities to dictate its complexities.

Barley not mentioned at the beginning: Scripture has not mentioned barley in its original instructions for the calendar in Genesis 1:14. The lights were provided as signs for the appointed times. Appointed times (מוֹעֲדִים) are the holy days of Israel (cf. Lev. 23:2, מוֹעֲדֵי יְהוָה). Surely the list in Genesis is an exhaustive list of the signs appointed to unambiguously determine the seasons.

The attempt to determine a year by barley neglects the fact that Scripture has already defined the year as so many 'days' (Gen. 4:3; 41:1; Exodus 13:10; 1 Samuel 1:3, 20, literal Hebrew). In other words, the barley definition is offered in the absence of knowledge about the sun's role in fixing the start of the year, knowledge which is suppressed.

We must also note that the barley tradition is derived from Judaism. And the chief fault of Judaism (other than denying Messiah) is that it frequently teaches the traditions of men as if they were the commandments of the Almighty. Only in this case not all of Judaism may be faulted. The majority of the Jews, in fact, do not follow a calendar determined by barley, but one which is determined by the spring

⁷⁴ Since the year begins when the sun sets in the west, and since Passover is on the 15th of the month, the same rule logically reduces preventing the 15th day of the first month from falling back into the old year by neglecting to add an extra month.

equinox (at least in theory). I am not saying that being in the majority makes them right. They are only half right. And the Karaites are half right. And both parties will continue to be half right and half wrong so long as they do not seek to listen to exactly what Yahweh said about the calendar. In this respect, they are just like the Church in promoting a wrong calendar, but in a less degree wrong since they are closer to Torah.

The Aviv Argument: The barley arguments starts with dissecting the name of the first month, “Aviv”, which indeed means “green ears” or “ripe ears,” but it is commonly taken in the same sense as “spring.” They then quote Deuteronomy 16:1:

Observe the new moon of The Green Ear, and keep the Passover unto Yāhwēh your Almighty; for in the month of The Green Ear Yāhwēh your Almighty brought you forth out of Egypt by night.

The Definite Article: The interpretation given by Karaites is that it means, “Observe the new moon of the ripe barley...”, and that they should therefore “find” ripe barley according to their definitions at the time of the new moon for it to qualify as the new moon of the ripe barley.⁷⁵

Sound bite fallacy: Scripture says, “Observe the day of the Sabbath.” This is basically the same grammatical construction as “Observe the new moon of the Aviv.” Only the Sabbath is calculated by counting days, and not by determining whether enough percentages of people who are resting have been found to determine if the day is a Sabbath! The Karaite abuse of Deut. 16:1 should therefore be considered no more compelling than to say the Sabbath commandment is an instruction to count up the number of people resting and then draw a conclusion as to whether the day was a Sabbath.

Seriously, firstly let us look the word ‘the’, i.e. “the Aviv.” Proponents have argued that the word ‘the’ does not make it just a month name since in English, “the Aviv,” sounds ungrammatical but, “the ripe barley,” does not sound ungrammatical. This argument is superficial and is based on English and not Hebrew. Hebrew includes the word ‘the’ in many places where it sounds ungrammatical in English. For example, the word ‘gold’ in Hebrew often appears with the word ‘the’ where it makes no sense in English, “the gold.” (Genesis 2:11; 41:42; Exodus 28:5, 24, etc.) On the basis of English, one could argue that it was a special kind of ‘gold’. But evidently it is ordinary gold. Further, another month name is used with the word ‘the’, namely ‘Ethanim’ (1 Kings 8:2, הָאֶתָּנִים). This is the pre-exilic name of the seventh month. It means “The ever-flowing,” but it may be that all streams dry up in the 7th month at certain times, or at others the wadis do not completely dry up.

⁷⁵ Rabbinic Judaism is responsible for this opinion, because after the destruction of the Second Temple they interpreted this verse to allow the unripeness of barley, or fruit trees, and other factors to postpone the year, or so that is what they told the people. It is doubtful, however, that they ever said they were going to postpone the year when the decision month began the new year before the 16th of the month. They only cited the other factors while secretly using the spring equinox as required by Scripture. The reason was they wanted control of the calendar, which was their chief tool in keeping control of Jews around the world. They did not want the laity to understand matters and thus become autonomous from their authority.

So the definite article in “the Aviv” does not compel us to abandon the Scripture definition of the year. It only gives the general character of the season of the month. And so many other month names in the ancient near east were related to normal agricultural conditions in those months.⁷⁶ But never in those names is it assumed that the normal phenomenon described by the name has any determinative role in dictating when the so named months must occur. The power to determine always flows in the opposite direction. The sun determines where the months go in the year, and it is the sun that affects the temperature and growth patterns that give the months their characters. The sun’s role in fixing the location of the months is sufficient to explain both the location of the months and the yearly products of those months implied in the names. Karaites try to turn this observation on its head by explaining that the barley is responding to the sun and so giving the sun a cause and effect role in making the barley grow, and then saying the barley determines the calendar. But this is to say that the barley is the sign to make the determination, and that the sun is not the sign to make the determination. They are implicitly forced to read Gen. 1:14 as saying the sun is a sign for days, but not for years or appointed times, because they believe it is the barley that gives notice of the season and not the sun if there should ever be a conflict between the sun being a sign for the year, and the appearance of barley.

We can prove, however, that the sun is a direct sign for the year, without involving barley in the definition at all. The sun determines the day, and the Hebrew term for a year is commonly the plural of the word day, i.e. days. Only the sun determines the days in the plural term days. “From days to days,” is an idiom in Hebrew that all agree means the same as “year to year.” The term “days” is used in Hebrew to denote a fixed time period of a year. The only explanation of this idiom is that a year is fixed by a number of days and nothing else. So a year means so many days as it is long.

Barley, on the other hand, does not cycle so that one can measure a number of days, but there is a parallelism between 1 Sam. 1:20, “At the great circuit of the days” and Exodus 34:22, “the circuit of the year,” and “at the return of the year” in 2 Sam. 11:1. And finally Psa. 19:6 of the sun, “From the end point of the heavens is his going forth, and his circuit is over their end points.” Scientifically, the sun cycles or returns to the same point after a year of days. It makes a circuit. If one observes the sun and subtracts the daily motion, it will become apparent that the yearly motion is a figure 8 circuit that repeats every year.⁷⁷ This circuit is 365 or 366 days. So whenever the Hebrew uses the term “days” for a year, this is what it means, 365 or 366 days.

Hebrew idiom uses the phrase “days to days” to mean “year to year,” and thus we may deduce that the first set of days is the old year, and the second set of days is

⁷⁶ The naming of ancient months and the cycle of varying relation between lunar months and the solar years also meant that the phenomenon described by the names were not strictly confined to just the month with the name of the phenomenon. For example, “the month of plowing,” or “the month of whirling winds” describe things that vary in season and can spill over into multiple months.

⁷⁷ “In astronomy, an analemma (/ˌæ.nəˈleɪ.mə/; from Greek ἀνάλημμα *analemma* “support”)[a] is a diagram showing the position of the Sun in the sky as seen from a fixed location on Earth at the same mean solar time, as that position varies over the course of a year. The diagram will resemble a figure eight. Globes of Earth often display an analemma” (The Encyclopedia).

the new year. Therefore, the Passover must be in the new year, after the expiration of 365 days. “And you will have observed this ordinance at its appointed time from days to days.” That is one observance in the old year, and the next in the new year. But with barley, it could be that one will have found on a new moon day that is too early, wherein its 15th day is before the new year begins.

Let us go back to Gen 1:14 a bit, “And they will have been for signs, and for appointed times, and for days, and years.” Within the scope of “they” in this text are only heavenly lights. The text describes three types of light, moonlight, sunlight, and starlight. Without the sun, the celestial sphere of stars would appear exactly the same all the time, rotating in perpetuity. This is what you get if the sun is turned off. But with the sun, it will appear that the constellations rotate over a period of a year, the same constellations reappearing in the night sky at exactly the same places and time of night after 365 or 366 days. That is the sun causes the stars along its path to be seen and to not be seen on a cycle of 365 days. Thus the stars alone cannot determine a year. It is only the sun that makes them appear and disappear and reappear at night over the days of a year. So this eliminates the stars from the determination of a year.⁷⁸ Their yearly cycle is only an effect of the sun. They have no such cycle themselves. Likewise, we may eliminate the moon. A moon cycle is only 29 or 30 days, but part of a year. So the moon cannot determine a year. Therefore, this leaves the sun, and the sun only to determine a year. Nothing else mentioned in the text can measure a year. Only the sun is the sign for a year, by means of reappearing in the same constellation and in the same part of it every 365 days, or by means of its annual rising and setting cycle repeating in the same number of days.

Year deniers: Therefore, it is the sun and the sun only that determines what “days unto days” signifies, and what the days of the old year are, and what the days of the new year are. Indeed, we should say that barley advocates deny the sign for a year. They claim that a lunar year is the meaning of a year. But we have just proved that the moon is not a sign for the year, and further they prove it also, because they think barley is the sign for the year. Yet it is scientifically impossible to make the moon a sign for the year! By process of elimination the sun is the sign for the year. And by the functioning of the sun the year can only be 365 or 366 days. And by precept the Passover is to be observed from days to days, not from barley to barley.

So let us now return to Deut. 16:1 and Aviv. One should beware of arguments based on etymologies and drawing conclusions from them. Avraham means, “father of nations,” but he had this name before he was the father of nations. Can we conclude that the first new moon may then occur before there is any barley? Or should we conclude that the new moon of the first month should be indefinitely postponed when there is a famine in the land?

The Karaite tradition teaches that ‘aviv’ means a particular kind of barley, and NOT any other kind of ‘green ears’ of barley. It may be granted that their partic-

⁷⁸ A point in the stars called the equinoctial point may be marked (RA 0,0,0), but this point is determined by the sun’s return to the point after a year of time. If the sun was not present, the point would have no meaning. In ancient times it was totally impractical to use such a point of reference for the passage of a year as a proxy for the sun because the sun always outshines the constellation it is in. One must infer its location by watching which stars rise and set opposite the sun, and again the sun is essential to the method.

ular kind of barley is included in the meaning, but can they really prove that their particular kind of barley is the only meaning of 'aviv'?

Watch for: Deut. 16:1 says, "Watch for the new moon of The Green Ear." Does it mean watch for a new moon made out of a Green Ear? Of course not, but the word "of" expresses a grammatical relationship in Hebrew called "the construct." The construct can be interpreted many different ways, including the suggestion that the new moon is made out of the Green Ear. But providentially the context constrains matters and so also common sense. Obviously the moon does not change its composition to a ball of barley in the spring. Waltke and O'Connor list multiple senses of the construct, including (1) agency, (2) authorship, (3) instrument, (4) abstract subjective genitive, (5) temporal genitive, (6) possessive genitive, (7) genitive of inalienable possession, (8) genitive of relation, (9) genitive of quality, (10) partitive genitive, (11) objective genitive, (12) genitive of effect, (13), etc, and on and on. In the most general sense the genitive "A of B" means that somehow A is related to B, but only usage and context can specify what the relationship is.

Most often the name "The Green Ear" (Ha-Aviv) appears in the sense of "the month of The Green Ear" and not in the sense "the new moon of The Green Ear." So whatever the construct relation should mean for the new moon, it should also mean for the whole month. I suggest that the construct here is one of a close relationship. It means the new moon around which The Green Ears normally are present, or in the case of the sense "month of The Green Ear," the month in which The Green Ears normally are present. The definite article is generic. For example, "The cow eats grass" means "Cows eat grass." Likewise, "The Green Ear normally is present in this month" means the same as "Green Ears" (plural) normally are present. So the construct is expressing a month characterized by the presence of Green Ears.⁷⁹

A parallel construction: The key question then, in the command to "Watch for the new moon of The Green Ear," (שְׁמֹר אֶת־חֹדֶשׁ הָאָבִיב) is what are the criteria involved in watching for it? Does it necessitate watching for literal Green Ears? A parallel construction will suffice to show that it does not mean this. Deut. 5:12 says, "Observe the day of the Sabbath, for keeping it holy" (שְׁמֹר אֶת־יְוִם הַשַּׁבָּת לְקֹדְשׁוֹ). Now Sabbath means "cessation," a cessation from work. So do we determine which days are Sabbaths by checking each day to see if we find any people ceasing from work? No of course not! We determine which days are Sabbaths by counting the seven days of the week. So we see here that the name of the day, "The Sabbath" is not a directive for determining which days are Sabbaths. It is the description of a day determined to be, "the day of the Sabbath" by other means than looking for resters. So, "Observe the new moon of The Green Ear" is not a prescription to determine when it is by checking for Green Ears any more than "Observe the day of the Sabbath" is a command to determine when it is by inspecting people to see if they are working!

A parable: there was a certain sect of Jews who decided one day that, "Observe the day of the sabbath, to keep it holy" meant that they should go out and

⁷⁹ The genericness of the article may be pressed upon the Karaites, because it is exactly "green ears" that they look for, and not just a singular green ear.

find people who were ceasing from work at daybreak, and then to declare that day the rest day if they found a sufficient number. They argued over which percentages of people needed to be resting, and they also argued over how much resting there should be. Was there enough resting to satisfy the legal requirement for a minyan at the synagogue at the hour of prayer, or should they wait till the next day to see if the number of resting people increased so that a minyan was possible? Whenever sufficient resting was not found at daybreak, they postponed the Sabbath to the next day. Their star argument was that “day” meant daylight and that the definite article was used before Sabbath, “the Sabbath,” and that “Sabbath” meant ceasing, so that the sense they got from the text was “Observe the day of the ceasing, in order to sanctify it. So they ended up watching their neighbors and found them resting on Sunday. And so they also rested. (That is why we call them Reform Jews). When faced with the claims that the Sabbath was determined by counting seven days, they said with their rationalist gentile friends that biblical literalism was really Moses idolatry,” since none of them believed that Moses wrote the Torah. And so Higher Criticism was born in Germany (where they first lived), and so they excised all the passages that spoke of the literal seventh day. They justified themselves by citing another sect of Jews which had already erased the beginning of the year from Scripture. But that is another story.

Barley appears before the equinox. There is another argument that kills the barley teaching. And that is that the barley normally appears before the beginning of the year (when the sun sets west) according to even the narrow definition of the Karaites. I have collected enough records of their observations to say this is true. The barley always appears before the year begins. Where the records of this are lacking, it is because NO ONE looked, or because they looked on the new moon day, decided to prolong the year, and then did not look in the next two weeks. Finally, in the rare case that the barley does not appear before the year begins, then it is clear that extreme conditions are occurring, extreme cold, or wet, or drought. Did Yahweh intend for the calendar to be held hostage to extreme conditions? If the barley crop is too sparse to meet the Karaite definition because of a bad year, then they would postpone the sparse crop so that the starving people could not eat the new grain and live? Indeed, the law says the new grain may not be eaten until the day after the Passover.

It would seem then that the barley tradition is a burdensome tradition. For frequently it leaves the calendar in limbo up to a whole month until a select few people in Israel, who belong to a minority sect, should declare on their own human authority when the first month of the year is. Whereas Yahweh created predictable lights to set the times and seasons, the Karaites have traded in this sensible and just system for a fickle⁸⁰ system that is always subject to the opinions of men, and

⁸⁰ The observation of barley has devolved to the point of calculating what percentage of the barley should be ripe in the fields and then averaging the results. My answer to this is why don't they average when the barley is seen year over year to find out that it appears before the days of the new year begin? The Karaite is quite willing to look for the new moon on the 29th of the old month after sunset, but apparently is unwilling to look for the new year at the end of the 365th day of the old year at sunset. Equinox is a Latin derived word meaning equal night. It is slightly unscientific. The scriptural term is תקופה tequfah. This word means circuit or cycle. The tequfah is

therefore handmaid to the arrogation of authority.

Let us now look at the problem with some current Karaites. I call attention to one teacher, Nehemia Gordon, who is an absolute heretic. He denies Messiah. He teaches a false name for God, “Yehovah” and spreads a lot of ignorance concerning Hebrew among Christians discovering Torah. I have pointed out Mr. Gordon’s errors before, but he refuses to listen to me or anyone else. Others he has sent away only because they made a good argument he could not refute. It is sad that so many Christians who can see the sense in observing some of Torah are led astray by this arch-heretic. Further, he is not only promoting his calendar concerning the year, but deceives Christians concerning who Messiah Yeshua is. If he is so wrong on this latter point, then he has no spiritual authority to be right on anything else. And Mr. Gordon’s main teachings only serve to divide the flock of Messiah. If you see Messianic leaders walking hand in hand with Mr. Gordon and others like him, then beware. If those leaders who profess Messiah do not take a strong stand on Gordon’s errors concerning Messiah and that he is Yahweh Elohim, then watch out, because those leaders will soon be abandoning Messiah. Some will say that I am being unfairly judgmental of Mr. Gordon. I am not speaking on my own when I say he is a heretic and judged. I am merely repeating what Messiah already said as a warning to Israel:

¹⁸The one holding faithful to him is not getting judged, but the one who is not now confirming his faithfulness has been getting judged, because he has not been holding faithful to the name of the only kindred Son of the Almighty. (Yohanan 3:18).

What is really said is that Messianics who will take issue with me over this will not be listening to the words of Messiah. If a watchman does not give the warning, then will not the blood of those who apostatize because he did not give the warning be on the head of the negligent watchman? Do they expect Yahweh to send them a watchman to warn them if they will not accept the warning of those who are sent?

It is not up to me or anyone else to bring judgment to Mr. Gordon. Torah only delegates matters of capital crime, matters of personal injury, and property disputes to human authority. If a Jew rejects Messiah, judgment is in the hands of Messiah. But the Rabbis are not so charitable in their interpretations of the Law. They even go so far as to claim that a non-Jew who keeps Sabbath is guilty of a capital crime for cultural appropriation.⁸¹ Therefore, there should be neither listened to nor made

the point when the cycle begins to repeat, or the easily marked point at which this occurs. The Karaite apologists often demonize the term equinox by calling it pagan using association logic. They cite sun worshipers using the day of the equinox and then claim the equinox is pagan since sun worshipers have associated it with themselves. With this sort of logic one can prove anything is pagan. But since everything is not pagan, then this form of reasoning itself must be faulty. In fact, it is this sort of reasoning that is the reasoning of pagans themselves and not the spiritual logic of Scripture.

⁸¹ Sanhedrin 58b:25: And Reish Lakish says: A gentile who observed Shabbat is liable to receive the death penalty, as it is stated: “And day and night shall not cease” (Genesis 8:23), which literally means: And day and night they shall not rest. This is interpreted homiletically to mean that the descendants of Noah may not take a day of rest. And the Master said (57a) that their prohibition is their death penalty, i.e., the punishment for any prohibition with regard to descendants of Noah is execution. Ravina says: If a descendant of Noah observes a day of rest on

authorities. Because their authority is a threat to civil peace until they acknowledge and teach that Torah does not call for civil punishment of those who disagree.

Finally, a word about the ill consequences of the barley method. The barley method leaves the ancient calendar in total chaos. That is we cannot follow the motions of the sun and moon backward in time to figure out what the calendar would be for any historical year. There are no ancient barley records that are reliable. So when we say that Messiah died on the 4th day of the week, and rose on the Sabbath, then the barley advocates will say we cannot know that because we cannot know when the first month was then. They say that perhaps the barley was not observed early and that the first month was postponed. Their theory provides a rationalization for rejecting the Messiah, and also a way to foil the faithful in Messiah who are about to discover when Messiah really died, and when he really rose, and as a result they will be keeping Torah and trusting Messiah, and they will then NOT LISTEN to heretics denying Messiah like Mr. Gordon. Mr. Gordon is just a small part of Satan's scheme to ruin the calendar witness to Messiah and Torah. It is necessary for you, the reader, to understand the enemy's strategy in order to better appreciate why the controversies rage the way they do.

To sum up then. The day begins at dawn and ends at dusk. The Temple day is from dawn to dawn, as also the extended Genesis day, the wave sheaf day, and the day for eating the Passover, and the festive offering of the 15th. The day for Sabbaths is from setting to setting, as Yahweh finished all his work before setting on the sixth day. The month begins when the first light of the new moon is seen 29 or 30 days after the previous new moon, and the year begins when the sun sets in the west 365 or 366 days after it previously set in the west.

Appendix IV: Rabbinic Intercalation

AD 359 to present: The modern Rabbinic calendar uses only a putative equinox to determine whether to add a 13th month to a 12 month year. A decision month is the month that followed the 12th month of the year. They had to decide whether it would be the first month of the new year or a thirteenth month for the old year. If the equinox falls on the 16th of the decision month, or after the 16th, then it is declared to be a 13th month, but if he occurred before the 16th, up to the last moment on the 15th, then that month was made the first month. This is the same rule that I have explained to be the biblical rule. However, there is a hitch.

The Rabbinic calendar uses only an assumed equinox date, which is mathematically built into the equations for the fixed calendar. This equinox date derives from observations made about the same time the calendar was imposed on Jewish communities by the Rabbis. The fixed calendar uses a figure for the length of a year to add to the observational benchmark to calculate the equinox of the next year. Every year this figure is added to the figure for the old year. The problem is that the figure for the length of the year was not precisely accurate. It was, in fact, too

long.⁸² As a result, the date used by the fixed calendar for the equinox keeps getting pushed toward summer little by little. The putative equinox figure in the Rabbinic calendar now falls about a week late, that is a week after the true equinox which can still be observed by going out and looking to see which day the sun sets in the west.

Therefore, by reason of the incorrectly projected equinox the Rabbinic calendar frequently allows a 13th month to be added when it should not be, making the months incorrect for the whole year.

AD 73 to AD 359: Fruit, Barley and the Equinoxes

Some Rabbis, as opposed to the 9th century Karaites, did have an earlier role for barley. The most quoted source is Maimonides (Rambam) in the 12th century, long after the Sanhedrin ceased in the 4th century. His sources are mainly unofficial **בְּרִייתָא** *baraita* 's, which were traditions *outside* or *external* to the Mishnah.

It is supposed that the condition of fruit trees and the barley crop were used by the Sanhedrin in the intercalation of the year along with the equinox. It is generally supposed that the Sanhedrin might decide to calculate a 13th month into the year even though it was not justified by the equinox, but only because they did not deem the fruit trees far enough along, or the barley sufficient. Maimonides (1138-1204) states:

2. The intercalation of the year depends on three factors ... the equinox, the ripening [of barley], and the sprouting of fruit from trees.
3. If the Beit Din saw that the barley had not yet ripened and had not yet sprouted, or that the trees that normally bloom at Pesach time had still not sprouted fruit, then they relied on these two factors, and the year was intercalated even though the vernal equinox fell before the 16th of Nissan. This was done so that the ripened barley would be available, and the Omer wave-offering could be brought from it on the 16th of Nissan, and so that the fruit would sprout the entire spring (Mishnah Torah).

The only valid examples of this kind of intercalation supplied come from the period between the destruction of the Temple in AD 70 and the 4th century AD. Because before that, they only used the equinox to determine the beginning of the year and the rule of the 16th of Nissan to fix the first month.

The reason the Rabbis added agricultural and livestock conditions to requirements for the first month is the same as their reasons for their other calendar innovations: control of the Jewish dispersion. They did not at first overturn the sighting of the new moon after the Temple fell, but they did at first confuse the intercalation of the year with agricultural conditions beginning in the period between the two revolts (AD 70 to AD 135). This was deliberate, and the reason they did it was to seize authority over far flung Jewish communities with no access to the holy land. They were largely successful, but never completely successful in bringing the Jewish dispersion into

⁸² Mar Samuel reckoned the solar year at 365 days and 6 hours and R. Adda at 365 days, 5 hours, 55 minutes and 25/57 seconds. Even Adda's figure exceeds the year length, which is 365 days, 5 hours, 48 minutes, 45 seconds.

conformity with Rabbinic Judaism.

The Rabbis were ever conscious to imply that arbitrary intercalation practices had their origin in Temple times. Yet they can provide no valid example of it. They even went so far as to try to twist Scripture around into supporting their authority to determine the leap year.

Rabbi Yehuda says: The court **may intercalate** the year due to ritual impurity. **Rabbi Yehuda said:** There was **an incident involving Hezekiah, king of Judea, who intercalated the year due to ritual impurity** (II Chronicles 30:2).

רבי יהודה אומר מעברין אמר רבי יהודה מעשה בחזקיה מלך
יהודה שעבר את השנה מפני הטומאה

But this is not what Chronicles says. It says, “And then the king had taken counsel, and his princes, and all the assembly in Yerushalayim, to keep the Pesach in the second month.” בַּחֹדֶשׁ הַשֵּׁנִי So, it was not a case of adding a 13th month at all. It was a case specifically provided for in Torah, that in the case of ritual impurity, or of being far off, the Passover can be celebrated in the second month. Numbers 9:11, “In the second month, on the fourteenth day between the settings they may keep it.” In the first month they were still repairing and cleansing the Temple of Aĥaz’s idolatry. It may be said that they expanded the interpretation of Numbers 9:11 to their situation. But it was not a case of intercalation.

The Rabbis also supposed that the year could be intercalated if the fall equinox came too late in the month of Tishri, according to Exodus 23:16b, “and the feast of Ingathering in the going forth of the year” or Exodus 34:22b, “and the feast of the Ingathering [at] the circuit of the year.” But following this assumed rule would contradict the rule allowing the equinox to fall anytime before the 16th of Nissan. If the equinox falls on the 15th of Nissan, then the entire feast of Tabernacles, and the eighth day will come before the fall equinox. The rules are in conflict because they do not both work with the actual astronomy. But the Rabbis have once again misinterpreted their Hebrew text.

Exodus 23 states, “In the going forth of the year, when you gather your labors from the field, three times in the year shall see every male of you the face of the Lōrd Yăhweĥ.” The going forth of the year is not the fall equinox. It is the spring equinox. The words “in the going forth” go with the next verse, and not the one preceding it. Exodus 34 states, “[At]⁸³ the circuit of the year, three times in the year, every male of you shall see⁸⁴ the face of the Lōrd Yăhweĥ.” Once again, the key phrase goes at the start of the next verse, and circuit of the year does not refer to the fall equinox. It originates at the spring equinox when the year begins.

83 Or [In].

84 Both texts are also traditionally translated, “will appear before” Adonai to avoid the obvious anthropomorphism of being able to see Adonai. Since the passage cannot be taken literally, it must be regarded as prophetic, much like Lev. 16:30. And on one feast they did see the face of Adonai when the 70 went up the mountain. In the age to come Adonai will be seen in his Temple. One passage must read this way in Hebrew, reading אֶת פְּנֵי אֲדֹנָי. In the other the scribes erred putting אֶל instead of אֶת.

The Unforgivable Sin

In Rabbinic Judaism the unforgivable sin is contradicting their authority. But Torah does not give authority to the Rabbis. It gives it to the judges and priests, and it limits their jurisdiction to three kinds of disputes: (1) Capital offenses involving murder, idol worship, or sabbath desecration. (2) Cases involving property. (3) Cases involving personal injury. But they have twisted texts to arrogate spiritual authority to rule over every matter of conscience and thought. The people are indeed supposed to learn correct teaching, and teach correct teaching, but there is no judicial power beyond the matters listed above. The nation can indeed error in other matters that can lead to great sin, but other than gentle persuasion, there are no other legal powers that can be applied. If a person is guilty before the Almighty, then he is guilty, and the Almighty will see to it. But the State has no authority to compel any matter beyond what is delegated to them. The Rabbis do not have legitimate power to marry, to bury, or to say who is a Jew, or who is not. They have no power to determine who is a convert or not, or who is a heretic. They have no power to force compliance with any of their opinions outside the narrow powers granted to the judges. They don't even have the power to prosecute anyone over a disagreement on which days are feast days⁸⁵, even in the case of the day of Atonement. Any cutting off from Israel will be done by the Almighty in these matters. The Rabbis are not granted judicial power to prosecute anyone for accepting the true Messiah or a false messiah. The Almighty will see to it.

The religion of Statism comes from abandoning the principles of limited government taught in Scripture. It results in tyranny and persecution. Statism always becomes corrupt. The only legitimate tools are tolerance and persuasion in willing ears. If a person errs, a person errs. It is between them and the Almighty. And the Almighty himself will remove wickedness from Israel. He will take out the heart of stone, and return a heart of flesh, with ears willing to hear. If a false prophet speaks, no one has to listen to them. If he says to follow a god other than the Almighty of Israel, then he may be prosecuted. It is a capital sin. In ancient times also, every trader and foreigner was welcome to visit the holy land, so long as they did not bring their false gods with them or worship them there.

The people have every right to ignore sinners, and refuse business with them, but beyond the limited matters, no power to deprive them of life or property. A Jew is allowed not to accept Messiah Yeshua, but neither he nor a non-Jew is allowed to desecrate the seventh day and be free of prosecution. It must be said that the Rabbis, however, are experts at equivocating holding faithful to the Almighty Son and worshipping him to idolatry, and then attempting to prosecute it. Realize that there

⁸⁵ When the Temple is restored, it could be that incorrect days are selected for the Passover offering, and it may be that the priests refuse to abide by the correct days. I don't think it will be this way, but it could happen. even if briefly, or by mistake. In matters of sacrifice, the priests are held responsible for every error, and the people are absolved of any guilt so long as they are ritually pure when making an offering. The Torah makes the Levites responsible so that the people do not have to bear guilt. The people cannot be prosecuted for resting on the correct days even if the priests should only receive their offerings on the incorrect days. Neither can the people be prosecuted for working on an incorrect feast day. They are acquitted by the Almighty. Only working on the weekly Sabbath may be prosecuted. All other prosecution is up to the Almighty.

have at times been persecutors in Israel. The Almighty will see every persecutor removed, as it is written:

And he will have raised a flag for the nations, and he will have gathered the outcasts of Yisrael, and the scattered of Yehudah. He will gather them together from the four corners of the earth. And the jealousy of Ephraim will have turned away, and the adversaries of Yehudah shall be cut off. Ephraim shall not envy Yehudah, and Yehudah shall not harass Ephraim. But they will have flown down upon the shoulder of the Philistines seaward. Together they will plunder the sons of the east, Edom and Moab, the sending forth of their hand, and the sons of Ammon obeying them. (Isa. 11:12-14).

Appendix V: Rabbinic Treatment of Key Texts

The Rabbis have produced a vast literature of interpretation. When it comes to calendar texts an examination of their writings show a lack of understanding. What I wish to concentrate on here is texts defining a year and how they handle them. The Rabbis did not deny the year, but it is evident that most of them misunderstood the year texts. The Karaites produced little or no historical comment on these texts. But they denied the year, so it may be logically deduced they did not understand the texts when they came across them.

1 Samuel 1:20: “At the great circuit of the days.” Which means the day the year begins, but Rashi does not seem to get it:

And as the seasons and days passed. The minimum of seasons [תְּקוּפוֹת] is two, and the minimum of days [יָמִים] is two. Hence, [she gave birth] after six months [=two seasons] and two days.³¹ From here [we learn] that a woman who gives birth in her seventh month of pregnancy, can give birth after entering part of the seventh month.

But, Targum Jonathan understands the text, “And it was at the time of the completion of the days” (וְהָיָה לְיָמֵינוּ מִשְׁלָם יוֹמֵינוּ). But the targum misses the waw remote because the author places the conception on the new year instead of the birth. It is not clear if the targum writer really understood the text.

Rosh Hashanah 11a:15:

As it is stated about the birth of Samuel: “**And it came to pass after cycles of days** that Hannah conceived and bore a son” (1 Samuel 1:20), which is understood as follows: **The minimum of “cycles,”** seasons of three months, **is two, and the minimum of “days” is two.** Consequently, it is possible for a woman to give birth after a pregnancy of six months and two days.

The commentary notes the plural תְּקוּפוֹת, but mistakes it for a plural of number rather than an intensive plural. It can only be an intensive plural, the “great circuit.” It then proceeds to interpret the word to mean three months multiplied by two for six months. And then taking days as a plural for two, adds two days. So now we see the basis of Rashi.

Exodus 34:22: “In the going forth of the year....” I explained this previously, but the Rabbis mistake it for the fall equinox, as Ebn Ezra.

Genesis 4:3: “At the end of days...”: Chizkuni begins to make sense:

מקץ ימים, “pertaining to its being born; a complete year is called days, thereupon, because all the days return to their order as in the beginning, long and short.”⁸⁶

T

מקץ ימים שגולדו. שנה תמימה נקראת ימים על שם שכל הימים חוזרים לסידרן כבתחלה בארוכה⁸⁶ ובקצרה.

