The Calendar Debate Simplified

By Timothy Griffith

The Biblical Calendar is a hotly debated topic with a plethora of different opinions. How can we know which is the right one? Let's start with what the Bible actually requires.

Genesis 1:14 "Then God said, 'Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and years."

A Calendar must use the heavenly bodies. Furthermore, the feast of Passover must be in the spring. (This is discussed later.)

That's it! Those are the Biblical criteria for a calendar. Nothing less and nothing more.

The purpose of a calendar is to keep people in synchrony with each other. This admission allows us to disregard any "calendar" that fails to do this. To find out which calendar to use, we must whittle the pool down to what works and what does not.

Let us explore the workings of a calendar that we will label as "Calendar X." This calendar in following the Biblical guidelines for a calendar uses the sun and moon to determine the years, months and days. It is Luni-solar.

The first month on Calendar X does not begin in the dead of winter as the Gregorian does. It begins in the Passover season. Namely in the month of "Abib."

Exodus chapter 12 details the instructions for the Israelites to keep the Passover. Verse 2 states: "This month shall be your beginning of months; it shall be the first month of the year to you." Exodus 13:4, 23:15, 34:18 and Deuteronomy 16:1 call this the month of Abib.

The word Abib is number H24 in the Strong's Concordance. It is defined as: *fresh*, *young* barley ears, barley, month of ear-forming, of greening of crop, of growing green Abib, month of Exodus and Passover (March or April).

This makes sense considering that the Israelites were commanded to offer a wave sheaf when they came into the land (Leviticus 23: 9-14). Leviticus 2:14 clarifies that this was to be *abib* (green) heads of grain roasted in the fire. Joshua chapter 5 shows that this occurred immediately after Passover.

Passover is in the middle of the first month of Calendar X. Because of the ancient necessity for having young/green ears of barley at the time of Passover, the middle of the first month of Calendar X must be in what today we call "spring," and not winter or summer.

Now that the year has a starting point that is tied to the spring season, let's explore how the days and months are figured. As the year cycle is based on the sun, the months are based on the moon. How to use the moon is the big question.

There are many other calendars out there that use the moon in many different ways. A month on **Calendar F** for example begins on the day after the user sees a full moon at his locale.

Calendar J necessitates the observation of the full moon in Jerusalem for the starting point of the month to be known.

Calendar C does not use the full moon as the starting point, but rather the first visible sliver of the "new moon" at Jerusalem. Thus, once the first sliver of the "new moon" is seen, an email or telephone call can hastily spread the word to the adherents of Calendar C that the first day of whichever month has already begun. Pretty simple, right! (I might add that the usage of optical aids such as telescopes is forbidden as this would allow the user to see an even smaller and newer sliver of the new moon the previous day. And on top of that the history books can be trusted when they say that the ancients had no such devices).

Calendar B is the same as Calendar C, but with the start of the year being determined by the ripening of barley crops in Jerusalem. Actually, the sample of barley must be taken outside of Jerusalem as barley ripens faster when in close proximity to roads. Greenhouses are forbidden. So the barley must be in a large open field free from external stimulation such as drought and vehicular exhaust. Once someone finds some ripe barley as close to Jerusalem as possible, as well as fitting the other barley criteria that the Bible commands (there are none) then the next time the crescent moon is sighted that marks the first day of the year.

Calendar G is the same as Calendar B, but with the barley being checked at the user's locale. For this reason, adherents of Calendar G can almost never be in the same month as one another when separated by region. Barley ripens at different times in Texas than it does in Michigan.

Calendar X recognizes the potential for error of Calendar C and J due to communication failure, so a local observation of the first visible crescent (with the naked eye) is the key.

Bob and Bill both agree that Calendar X is the most Biblical. Their two families like to get together and celebrate the Appointed Times/Holy Days in the appropriate manner. The problem is that they live almost an hour's drive from each other.

As a lunar month is either 29 or 30 days long, both men begin to watch for the first crescent shortly after sunset in their respective locations. About half an hour after sunset following day 29 of the 6th month, Bob sees the slender crescent of the moon in the western sky about a handbreadth above the horizon. The day that concluded a little over half an hour ago was Wednesday, it is now Thursday by the Biblical reckoning of a day being counted from sunset to sunset. But more than that, because Bob saw the moon after the 29th of the month then that means the 6th month had 29 days, and the current day is the first day of the 7th month. It is the Feast of Trumpets. Luckily, Bob's wife had all the preparation work done in case the Holy day fell on Thursday or Friday.

An hour to the North, Bill has been outside looking for the crescent but in vain. There is a storm front moving through and the clouds barely allow the sunset to be seen. No crescent tonight means the 6th month had 30 days. Tomorrow night it will almost certainly be visible, but even if not, because a month cannot have more than 30 days, then Friday will be the Feast of Trumpets anyway.

The next day (Thursday), Bob calls Bill to ask if they are having car trouble. He was expecting them to be at church an hour ago. A bit confused, Bill informs Bob that he is at work right now and that the Feast of Trumpets begins this evening at sunset.

So much for gathering on our Father's Appointed Times.

All calendars that utilize visual observation to determine when a month begins have this flaw. It is not possible to keep in synchrony with each other or with our Creator using such a system.

But what if Bob had communicated better with Bill? Well, then they would have congregated on the same day as each other, but not necessarily the same day as Jeff who lives in another region, despite the fact that Jeff also uses Calendar X. And even to achieve that small level of success would be to rely heavily on the modern telephone.

Because the purpose of a calendar is to keep people in synchrony, **sighted calendars are not calendars at all!**

If visual observation cannot be relied on then that leaves only one method to figure the calendar: **Mathematics.**

Mathematics based on what? The sun and moon, of course! Genesis chapter 1 verse 14 says: "Then God said, 'Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and years." This means that the heavenly bodies are to be used to determine "seasons (moedim/Appointed Times), days, and years."

Nowhere does the Bible say *how* to use them. It does not say that the moon must be seen, nor that we are not allowed to use math to calculate the moon's phases. So let's explore some mathematical luni-solar calendars.

Calendar D does not use the observation of any visible phase of the moon but rather the absence of it altogether. This is known as the dark of the moon or, more scientifically, the conjunction. As this point cannot be precisely determined by observation, the user follows in the footsteps of the ancients and references the data on the US Naval Observatory website. Or perhaps the British version, which is even more impressive.

Calendar E requires every month to last for 30 days. It is one of the simpler abominations created by man. Twelve months of 30 days each, equaling 360 days. This is very close to the length of a solar year (~365.25 days) so Calendar E has Nothing Days that are not counted as being part of the month. These occur on the vernal equinox, summer solstice, autumnal equinox and winter solstice. The remaining 1.25 days isn't a big deal until 24 years have passed and adherents find themselves a month off of the solar cycle. But nobody ever lasts that many years on Calendar E anyway. Oh, and did I mention that a lunar cycle is not 30 days long? So Calendar E is not even Luni-solar.

Calendar H is one of the more promising candidates for the correct Biblical calendar. It is Luni-solar, has Passover in the spring, and uses math to determine the start of a month.

Instead of calculating each approaching conjunction (dark of moon), it uses the mean average of time between conjunctions taken from lunar cycles over an indefinite sample of time. This waypoint from one lunar cycle to the next is called the "molad."

This method allows for the greatest degree of accuracy possible without the usage of computers and satellites. Before we go on, we need to know what the goal is. Accuracy shall henceforth in this article be defined as "the quality of staying as close as possible to the solar and lunar cycles simultaneously."

So how close are the calculations from Calendar H? The length of time from one molad to the next is 29 days, 12 hours, 793 parts (a "part" is about 3.33 seconds). This is 29.53059 days.

Contrast this to the number arrived at using computers and satellites. This is 29.53058861 days. That is 1/1 millionth of a day difference. This seems pretty accurate!

There must be something wrong with Calendar H though right?

Well, it meets the Biblical criteria for a calendar, it can keep users in synchrony with each other, and anyone can use it. There is, in fact, nothing wrong with it. It does what is needed and does not contradict the Bible.

So what is it that people dislike about Calendar H, also known as the Hebrew Calendar?

"Postponements." Many people dislike the Hebrew Calendar because it contains mathematical adjustments to the length of the year, in order to keep the solar and lunar cycles in synchrony. Remember, the Bible does not forbid such. People that think it wrong for a mathematical rule to add a day to a month, thereby "postponing" the Holy Days, often have no issue with the Holy Days being postponed at random by clouds, smog, human error, or communication failure.

The disdain for these postponements stems from Talmudic Rabbis' misunderstanding of the reason for the "postponements." They believed that the rules existed to keep the Eighth Day of the Feast from falling on the day after a weekly Sabbath because the Talmudic Jews held a tradition of waving a lulay on that day, which they had to prepare on the previous day, which could not be done on a weekly Sabbath. Others maintained that it would be inconvenient for the day of Atonement to fall on a Friday or a Sunday.

The reality is that sometimes it is necessary to add a day to the length of a lunar month in order to keep from falling too far behind the solar year. It is a mathematical rule, and has nothing to do with "postponing" the Holy Days. It does not matter where in a year such a day may be inserted, as the outcome will be the same.

So the rejection of the Hebrew Calendar stems in large part from bad information spread by Talmudic Rabbis, who were more concerned with non-biblical traditions than the truth. The postponements of the Hebrew Calendar have nothing to do with Jewish tradition.

Some people also believe that the Hebrew Calendar could not have been used during the Bible times, and especially the time that Messiah was on earth, because it was invented by a man called Hillel II in 358 AD. A more likely explanation is that Hillel II simply made

public the mathematical calculations that the Jewish Sanhedrin had kept secret since the time of Moses.

As was demonstrated above, no kind of sighted calendar is usable at all. A calculated calendar would have been necessary going all the way back to Noah, who kept track of the months and days without observation and while being shut up in the ark for a year.

The Hebrew Calendar is not broken. There is no reason to invent a new leap year cycle or to reject the necessary adjustments known as "postponements."

The Main Takeaways:

- Sighted calendars are **not** more biblically correct than calculated.
- Sighted calendars cannot keep users in synchrony with each other.
- Sighted calendars are not actually calendars.
- Mathematical calculations are necessary for figuring a luni-solar calendar.
- The Bible does not forbid math, including the "postponements" of the Hebrew Calendar.
- There is nothing wrong with the Hebrew Calendar.
- I am aware of no luni-solar calendar that is more accurate than the Hebrew Calendar.

Notes:

Follow this link for a brief explanation of how to calculate the Calendar. This is for those who want to understand why the math works. <u>Practical Application and Mathematics of the Hebrew Calendar</u>.

Follow this link for a spread sheet that does the math for you, as well as printable monthly calendar sheets. Hebrew Calendar converter and printable calendar.

Additional reading:

Inside the Gearbox of the Hebrew Calendar.

The Hebrew Calendar Reveals the Messiah.