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# WHY I USE 'JERUSALEM TIME'

## A LETTER REGARDING "WHY I USE JERUSALEM TIME FOR THE CALENDAR"

Hi John,

Thanks for your email, in which you asked why I use Jerusalem time for the calendar.

Here is how I understand this question.

1) The calendar has not always been the same throughout human history. I believe Genesis shows that in Adam's time every month was exactly 30 days (i.e. 720 hours), and every year was exactly 360 days (i.e. 8640 hours, zero minutes, zero seconds).

2) The change in the length of a month and of a year is one of the many penalties God imposed on us as a result of our rebellion and disobedience. The present monthly and yearly cycles obviously complicate our lives to some degree.

3) When God introduced these changes in the monthly and yearly cycles (probably in the days of Hezekiah, shortly before the Babylonian captivity), God did not spell out exactly how we were to deal with these changes. That is usually the case with a penalty from God: God imposes the penalty and we then have to determine how to best cope with that penalty. How we deal with His penalties shows God something more about how our minds work under stress. And there are better responses, and there are worse responses to such difficult situations.

As an example: David's response to being given a choice of 3 penalties from God (1 Chron 21:11 - 13) was very likely the best possible response. It showed God something about David.

4) After the Babylonian captivity, the obvious way to determine a calendar was to keep a visual track of the new moons. The country of Israel is extremely narrow in the east-west direction. The latest sunset on the western edge of the country is barely a couple of minutes later than the earliest sunset on the eastern edge of the country. First visibility in Jerusalem would usually be the same day as first visibility for the rest of the country.

5) It was only in the days of Ezra that the Greek astronomer Meton discovered the phenomenon of "19-year cycles" (they are actually only an approximation). The detailed calculations for predicting new moons were still somewhat inaccurate, and 300 years later they were further refined by another Greek astronomer. Today still more accurate calculations are available to us.

6) Anyway, from Ezra's time down to the ministry of Jesus Christ the Jews applied a calendar in which every month was proclaimed after eye-witnesses had testified to the appearance of the new crescent. These observations were made IN JERUSALEM. In a small country like Israel (e.g. try to superimpose a map of Israel over the area of greater Los Angeles, using the same scale for both maps obviously, and you get a vivid picture of just how small that country is) the news that a new month had started could be communicated fairly effectively in a short period of time. This calendar worked well for them. It was the same as the calendar the nations around them were using.

7) So a calendar that started every month with the first visibility of the new crescent, from the perspective of Jerusalem, served the country very well. First visibility is always AFTER the conjunction has taken place. And this calendar had Jesus Christ's approval, since He observed the feasts & Holy Days during His ministry based on this calendar. It was simply the best way to deal with this matter under their circumstances.

8) When the Church spread to Ephesus and Corinth and Colossae and Rome, etc., it was no longer possible for every congregation to follow a calendar that depended on the visual sightings of the new crescents at Jerusalem, because this news could not be relayed to these other areas (Rome, etc.) in a timely manner. Therefore the calendar followed by the Church developed into one that established feasts and Holy Days based on LOCALLY OBSERVED new moon crescents. Each congregation was simply forced to keep track of the new moons in order to know when the 1st month started and when the 7th month started. This is what Paul alludes to in Col 2:16. It made no difference whether the people in Rome kept the Holy Days a day earlier (probably only very rarely) than the people in Jerusalem, because they had no way of communicating with each other in less than a month.

It was the best, and really the only option open to the Church in that era. And Christians in Jerusalem assumed that Christians in other areas kept the 1st day of each month for the same 24-hour period (plus perhaps a time zone shift?) that they kept it in Jerusalem. Both areas were true to the new moons as they were visible in their respective areas. Perhaps possibly occasionally being one day apart could never cause any conflicts, since they didn't know that the new moon had become visible in Rome a day before it became visible in Jerusalem.

9) Keep in mind that we are looking at how we deal with a penalty that God has imposed on us. It is not a matter of: visual observation of the new moons at Jerusalem is the best system, or the only system; or visual observation of the new moons at every local area is the best system or the only system. It is really primarily a matter of: what is the best possible way for us to deal with the calendar question UNDER THE CIRCUMSTANCES IN WHICH WE FIND OURSELVES?

And in different ages there may well be different answers to this question. The means at our disposal will always have an influence on how we can best deal with this matter.

10) Fast forward to today. Today we are spread around the world. But today we also have instant contact with people in every other part of the world. And today we have intimate knowledge of what is going on in other parts of the world. Today we can get into a plane and fly from a Thursday into a Friday in a matter of hours. And we can also fly from a Friday back into a Thursday in a matter of hours. It is easy for us to cross the International Dateline.

As Christians we also have a desire to be "at one" with true Christians in all other parts of the world.

11) We also have a vast amount of scientific understanding at our disposal. We can predict new moon conjunctions very precisely. We can predict sunset times for any place on earth for any given day very precisely. And we can also predict theoretical visibility of the new crescents very precisely (actual visibility is obviously also affected by atmospheric conditions, etc.).

When in Genesis the months were exactly 30 days long (to the second!), it meant that it was exactly 30 days from one lunar conjunction to the next lunar conjunction. It did not mean that it was exactly 30 days from one sunset to that sunset 30 days later, because sunset is constantly moving to an earlier or later time; and therefore the time between 2 sunsets 30 days apart was either more or less than (30 x 24 hours) 720 hours. But it was never exactly 720 hours. But the time between two consecutive lunar conjunctions was exactly 720 hours.

#### Do you follow?

12) So the original calendar in Genesis hinged on PRECISE LUNAR CONJUNCTIONS, rather than on shifting sunsets. (Since God altered the lunar conjunctions, they have obviously also lost that perfect and consistent timing that God had originally established. Today they also differ from one month to the next. But sunsets shift to earlier or later dates even in a perfect calendar system, in order to give us the seasons. But in the perfect system all lunar cycles are always of the exact same length.)

13) For our circumstances today, with our understanding of astronomy, etc., a calendar based on the visual observations (or even the calculated theoretical visual observations) of the new moons in Jerusalem is NOT a good system. Similarly, a calendar based on the visual observations of the new moons in our local areas is also NOT a good system.

14) Trying to establish a calendar based on visual observations of the first new moon crescents, because that happens to be the system that was employed at one specific point in the history of God's people, misses the point! The point is: that was the system they used because THAT WAS THE BEST THEY COULD DO UNDER THEIR CIRCUMSTANCES!

It would be like saying: because God allowed slavery and polygamy in Old Testament times, therefore it is also okay for us today to engage in slavery and in polygamy. But what was acceptable, because of their circumstances (i.e. slavery and polygamy), isn't necessarily something that God encourages.

Likewise, simply because Israel in a very limited geographic area employed a calendar that was based on visual observations, after God had altered the cycles as a penalty for sins, that does not mean that visual observations are "God's choice" for the determination of the calendar that is to be employed around the world.

15) And while the length of a day has always been determined by sunsets, we should understand that the original perfect annual calendar was based on precise lunar conjunctions, rather than on sunsets or on observed new moons. And once we have acquired the ability to predict lunar conjunctions very precisely, we have acquired a tool that is far more precise than using visually observed new moon crescents.

16) When God established the perfect monthly and yearly cycles, God did so based on perfectly timed lunar conjunctions, not on perfectly timed visually observed new moons. It follows that once we have acquired the ability to establish a calendar based on very accurately predicted lunar conjunctions, THEN we have acquired the ability to employ the same methods that God Himself used in the original calendar in Genesis. Yes, when we establish a calendar based on the time of lunar conjunctions, we today apply that to imperfect lunar cycles, whereas God applied this method to perfect lunar cycles. But at least we are applying the same method that God used.

17) This explains why I believe that the best possible calendar in God's sight that we could use today, to apply on a worldwide scale, is one that is based on the timing of the lunar conjunctions and NOT on the timing of the first visibility of the new moons in any area of the world. Some years ago I stated that I would be willing to accept a calendar based on first visibility; but since then I have come to a far clearer understanding of this question. And so for me a calendar based on visual observations is no longer a real option. I don't believe that God would want me to use visual observations when I have unlimited access to very accurate predictions of lunar conjunctions.

18) With a calendar in which the months are based on the actual lunar conjunctions, the next question is: from what location on earth do we consider the conjunction.

A lunar conjunction is one specific point in time. It doesn't matter from what locality on earth we consider that conjunction; it is always the exact same point in time. It could be expressed in London time, or in Jerusalem time, or in New York time, or in Singapore time, etc., but it is always the exact same moment in time. That's what makes the lunar conjunction such a precise tool.

First visibility, on the other hand, is a shifting target. When the new crescent is first visible in Jerusalem, that is more than two hours before it will become visible in London, which in turn is many hours before it will become visible in Los Angeles (unless there it was already visible on the previous evening), etc.

So first visibility will typically be on two consecutive days: on one specific day for some areas on earth, and on the other day for all the other areas on earth. That is why a calendar based on locally observed first visibility creates confusion and conflicts in a world of instant communications. (e.g. Some people keep the Passover today, and some people keep the Passover tomorrow, depending on locally observed new moons.)

19) When God established the perfect calendar in Genesis, based on precise lunar conjunctions, God also had to do that from the perspective of a very specific location on earth. You cannot evaluate a lunar conjunction from a perspective in outer space. The timing of the conjunction has to be expressed in terms of a specific location here on earth.

So what location did God use?

Where did God choose to place His name?

On what location was the visually observed calendar during Christ's ministry based?

When Jesus Christ returns and once again establishes a perfect calendar (very likely the perfect orbits will be re-established at the sixth seal of Revelation (see Rev 6:12-13)), on what locality will that calendar be based?

Do you have a better answer than "Jerusalem" to all of these questions? I don't.

So once we have come to accept a calendar that is based on the time of precise lunar conjunctions, then evaluating those conjunctions from the perspective of Jerusalem is the only option I can see.

These are my reasons for using "Jerusalem time" in all matters of establishing a right calendar.

Does this answer your question? Keep well.

Frank