

Excerpt from a letter to Dr. Hook.

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### THE CYCLE CHANGE

Let us confine ourselves to three discussions concerning the calendar and not all of these will be in order:

- (1) When did the cycle change occur? 66 A.D. or 142 A.D.?
- (2) Was the authoritative Passover in Christ's day always after the equinox?
- (3) Who governed the calendar system in Palestine in the first century?

The 66 A.D. date for the calendar change of the Jews is given encouragement because Dr. Neugebauer's equinoctial tables reflect a speeding up of time relationships. He surely does not base his findings on the "secular acceleration" of the moon. That, of course, has nothing to do with equinoctial matters.

The 66 A.D. date may in one way be right (that way will be pointed out later). Of all the years between about 20 B.C. and 70 A.D., the year 66 A.D. is the most attractive to a calendar change.

There is historical evidence that in 66 a general meeting of the Great Beth Bin was convened (Edersheim, Times, vol. I, P. 239, note 1). This authoritative assembly was called primarily to enact the corrupt 18 anti-gentile decrees. However, there is no evidence that a calendar question was at stake in this particular meeting. On the surface, I would tend to doubt that this particular 66 A.D. meeting of the Great Beth Din was in any way connected with the calendar. At this meeting, though, blood flowed between the two Pharisaical schools with the Hillel schism getting the worst of it. There was hardly any question more touchy than the calendar and this "drawing of blood" could indicate they had more important things to discuss than the 18 decrees (which they all seemed to agree on).

But Josephus passes over this meeting as one of no consequence. He does mention, though, writing about 75 A.D., that Passover had to occur after the equinox--a custom which ceased only after the cycle change. If such a change was made in 66, in an authoritative manner, it becomes difficult for me to understand why he would be so dogmatic over the necessity of the full moon being in Aries.

Regardless of these secular sources, we have the testimony of the New Testament. In this case, its testimony is its silence on such an important question as this. The custom of the Church up to the death of John, as far as I am able to discern, was to follow Jewish computation in

in calendar matters. This, of course, doesn't prove one way or the other whether a cycle change was accomplished in 66. The early Church could have easily recognized the change and tacitly accepted it as the proper thing to do. But, ~~I~~ am presently inclined to believe that subsequent historical evidence shows that no change was effected in 66 and that the silence in the Jewish and Gentile Churches (true and heretical) about any Passover question precludes a change taking place so early. There would have undoubtedly (and especially) been some Gentile reaction to a change even at this early date. But there was none!

In fact, the truth is, that even in Rome and Corinth, as late as 100 A.D., those Churches were clearly abiding by the ancient Jewish computation for the calendar. Not only that, there is plain evidence that they were observing the Holy Days correctly and in a manner completely after the Jewish calendar reckoning (not, however, observing the 15th of Nisan as Passover, etc.).

I think The letter of (so-called) Clement of Rome to the Corinthians, alleged to be Paul's companion (I strongly doubt this), is a remarkable evidence of the Sacred Calendar being used in those Churches as late as 100 A.D. (There are several apparent interpolations of Clement's letter by a later hand which betrays Catholic teaching--even this is minor---but many chapters could hardly be Catholic). In particular, chapter 40 is referring to the appointed seasons of the true Sacred Calendar. No other interpretation is possible. Dr. Carrington hits the nail on the head when he writes: "Since Clement goes on to refer to the high priests, the priests, and the levites, it is clear that the 'appointed seasons' which he regards as essential must be those of the Levitical Law, that is to say, Pascha, Pentecost, New Year, Day of Atonement, Tabernacles. If words have any meaning at all, a Liturgical year of the Hebrew type must have been well established in Rome and in Corinth by the 90's" (Primitive Christian Calendar, p. 41).

By reading Clement (ch. 40), it will be apparent that the writer is referring to the Sacred Calendar--the one used by the Jewish Church of old. And the writer distinctly says that Christ had commanded the Church to observe these Biblical times and seasons. "We ought to do in order all things which the Lord (Christ) hath required us to observe at stated times. The offerings (tithes) and sacred services, which it is our duty to render, he hath commanded to be presented neither carelessly nor irregularly, but at appointed times and hour" (ch. 40).

The writer intimates the necessity of keeping the Holy Days as a fact known to both Churches, and that Christ had prescribed these seasons for divine worship. The lack of any reference to any particular season by name clearly shows that both Churches, about 100 A.D., didn't need any explanation. They

They knew the Holy Seasons the writer had in mind. There is no Sunday or Easter mentioned in Clement's writing. No wonder, then, that the learned Dr. Carrington of Toronto, without reservation, says that Clement (or whoever it was) had reference to the Passover, Pentecost, Trumpets, Atonement and Tabernacles. Even modern scholarship is beginning to recognize these facts. And, it is about time!

The reason for mentioning Clement's reference is because I think it will help us in our question. Up to this time (100 A.D.), there is no record of an authoritative change in the calendar cycles--either by the Jews or early Christians. Rome and Corinth were merely following the Churches of Judea and Asia, as if it were the natural thing. The latter were following the common Jewish reckoning. There was no controversy over the Holy Days. No disputes; no arguments or discussions; no squabbling or bickering. It was taken for granted by both churches and by all others that the Sacred Calendar was in every way proper and in order. There was no epithetical talk of the calendar being "Jewish" and that Christians should refrain from following it. No! But soon after 100 A.D. we are confronted with just the opposite feelings.

This "taking it for granted" attitude by the Gentile churches soon changed. Why did a great controversy begin to rage among the Gentile Churches after the early part of the 2nd century? Why such a hostile attitude among various groups concerning the dating of (in particular) the Passover? These controversies did not build up slowly over a period of years, but they come on the scene abruptly. Even Hurlbut recognizes a completely different "Christian" Church the last half of the 2nd century than the one at the close of the first century. I am absolutely convinced that the one major cause for this radical change was urged because the Jews saw a change was necessary in regard to Passover. When it was made, many of the Gentiles rebelled at their decision. This explains why all the sudden controversies springing up everywhere relative to the Passover.

Is it not true that Polycarp went to Rome to convince Anicetus that, after all, the Jews were right in changing the cycle? Anicetus mentions that his two predecessors had made the change to a Sunday near the full moon. This change in Rome would have occurred just before 150 A.D. Anicetus was about 162. I am inclined to believe that Anicetus' predecessors heard of the Jewish change and not understanding the reasons behind it, decided (whether in a deceived manner or deliberately, I hesitate to say) that if the Jews could be so "arbitrary" in their Passover dates, then so could the "Christian" Romans. Thus, they decided to have Passover on the resurrection day, so they thought, near the full moon. Anicetus probably saw the "common sense" of this reasoning and continued to follow it. Polycarp and the eastern churches, however, saw the gravity of the whole matter, and he journeyed to Rome in order to convince Anicetus of his error.

And it is only after 142 A.D. that we have the real Paschal controversies raging. Eusebius gives us some important information regarding the beginning of the controversy. He states that Melito, bishop of Sardis, wrote several works. Among his most important was "On the Passover". Eusebius quotes from the beginning of this work: "In the time of Servilius Paulus (164 A.D.), proconsul of Asia, at the time when Sagaris was martyred, there was great strife about the Passover which fell according to rule (i.e. the ancient rule) in those days, and this was written" (Eccl. Hist. IV, 26:3).

The strife was really over what rule was to be followed--the ancient rule which existed in the time of Christ--or the new rule that the Jews were beginning to use. It could hardly be plainer.

The new rule for the arrangement of the cycle caused a great deal of consternation throughout the Christian world. It had never before entered their minds that the Sacred Calendar was in any way Jewish--it had always been thought of as God's Calendar. But this new Jewish ruling, to most Gentiles, smacked of Jewish sectarianism. They were wondering whether to follow the calendar which Christ and the Apostles used or this arbitrary one, so they thought, of the Jews. Many of the Gentiles, while agreeing in principle with the fact that Passover should not be allowed to creep out of its proper season, completely disparaged the Jews' method for rectifying the situation. The Gentile Christians probably reasoned that they had more authority than the "Christ-rejecting" Jews to determine the proper time for Passover. So the Romans came up with the idea of a Sunday near the full moon. I think this explanation tells us a lot!

From this time forward, it became known as Judaizing to keep the new cycle arrangement. Before the cycle change, the Calendar was known as God's; after the change, the new calendar was called the Jews' and to abide by it was called Judaizing. The Gentiles failed to see that God had given the calendar computation to the Jews for custody just as He had given them the Old Testament. *Rome unto them committed the lively oracles.*

We do know, however, that Rome's and the West's decision to observe a Sunday was not accepted everywhere. Certainly, the Jewish Christians, or those who had been closely associated with the Apostles, probably saw the necessity of a cycle change and naturally accepted the new Jewish ruling (the Jews were the custodians of the calendar anyway).

Though, many Gentiles refused to recognize the New Jewish determination of the cycle and they vehemently defended the old cycle arrangement which existed in Christ's day. We have available Anatolius' letter, a mathematician of Alexandria, recorded by Eusebius, in which he stoutly condemns the Jews for their new calendar. I am not putting words into Anatolius' mouth by saying this, for I know he is referring to the cycle change effected by the Jews in his condemnation. Notice what

Anatolius says, about a century after the Paschal controversy began: "Wherefore we maintain that those who place the first month (Nisan) in it (the zodiacal sign before the equinox), and determine by it the fourteenth of the Passover, commit no slight or common blunder. And it is not an opinion of our own; but it was known to the Jews of old, even before Christ, and was carefully observed by them". Anatolius is appealing to the old rule that Passover should never occur before the equinox, and in this letter he is condemning the Jews for what he considers their heretical change in the calendar. Now notice that he refers to many important ancient sources which clearly and absolutely prove that before 142 A.D., Passover was never celebrated before Spring began. "This (truth) may be learned from what is said by Philo, Josephus, and Musaeus; and not only by them, but also by those yet more ancient, the two Agathobuli, surnamed 'Masters', and the famous Aristobolus (2nd century B.C.), who was chosen among the seventy interpreters of the sacred and divine Hebrew Scripture (i.e. the <sup>10</sup>LXX) by Ptolemy Philadelphus and his father...These writers, explaining questions in regard to the Exodus, say that all aliken should sacrifice the Passover offerings after the vernal equinox, in the middle of the first month".

Eusebius, himself, admits that Anatolius is indeed correct in his findings, but notice how Anatolius disparages his own findings. "I know that many other things have been said by them (i.e. Philo, Josephus, Aristobolus, etc.), some of them probably, and some of them approaching absolute demonstration, by which they endeavour to prove that it is altogether necessary to keep the Passover and the Feast of Unleavened Bread after the equinox. But I (Anatolius) refrain from demanding this sort of demonstration for matters from which the veil of the Mosaic law has been removed" (Eccl. Hist., VII, 32:14-19).

In regard to this Anatolius, Dr. Butcher says in his Ecclesiastical Calendar, pp. 264, 265; "Anatolius, bishop of Laodicea, an Alexandrian...(was) a great geometer and otherwise the most learned man of the age, made use of the famous Metonic Cycle of nineteen years in constructing his Paschal canon, taking for the Equinox the 19th of March. He proved from several ancient Jewish writers themselves that the Passover should never be kept before the Vernal Equinox, and therefore that their (he is speaking of the Jews) cycle was erroneous".

There can be no question about the fact that Anatolius was endeavouring to show the Jews, and some "Judaizing" Christians who followed them, that they were wrong in their "new" calendar, with the cycle change. His reason was that the Passover was now, in the new mode, occurring before the equinox. Of course, Anatolius was himself in error for maintaining that the old rule was correct (which had only been applied since the days of Ezra-- not however by Ezra--when there was no chance of Passover coming before the equinox). Anatolius does, however, effectively prove beyond doubt that in Christ's day the Passover never occurred before Spring. The controversy raged over the 17th year in a 19 year time cycle. In this year, the Passover occurs the earliest

of all. When the Jewish officials made the change in 66 A.D., the Passover in year 17 went two days BEFORE the Spring Equinox and consistently stayed BEFORE the Equinox for the next 430 years after 642 A.D. After that date, the Passover, even in this early 6 year, no longer occurred after the Equinox because of the calendar's creeping forward on the seasons.

With the above, what else do we have? We also have important evidence by Peter, bishop of Alexandria, about 295 A.D. This bishop also entered into the Paschal Controversy in a big way. In his Fragments (Ante-Nicene Fathers, vol. 6, pp. 280-1), he plainly argues that the Jews, up to the time of the destruction of Jerusalem (70 A.D.), were in every way correct in the determination of Passover. Notice how Peter mentions this: "the first month amongst the Hebrews was appointed by law, which WE KNOW to have been observed by the Jews up to the destruction of Jerusalem, because this has been handed down by the Hebrew tradition. But after the destruction of the city it was mocked at by some hardening of the heart..."

Then Peter continues: "But if they (the Jews) knew not Him who sent, and Him who was sent, there is no reason to doubt but that they have been ignorant of the Passover as prescribed by the law, so as not merely to err in their choice of the place, but also in reckoning the beginning of the month, which is first amongst the months of the year, on the fourteenth day of which, being accurately observed, AFTER the equinox, the ancients celebrated the Passover according to the divine command; whereas the MEN OF THE PRESENT DAY (the Jews) now celebrate it before the equinox, and that altogether through negligence and error, being ignorant how they celebrate it in their season..."

"Whether therefore the Jews erroneously SOMETIMES (i.e. because of cycle differences) celebrate their Passover according to the course of the moon in the month Phamenoth, or according to the intercalary month, every third year in the month Pharmuthi, matters not to us (Gentiles)".

Then Peter relates how, he felt, the Jews had turned to idolatry and spiritual fornication because of their cyclic rearrangement (para.4).

And, in summing up his argument, Peter says: "Therefore, up to the period of the Lord's Passion, and at the time of the last destruction of Jerusalem under Vespasian, the Roman emperor (70 A.D.), the people of Israel, rightly observing the fourteenth day of the lunar month, celebrate on it the Passover of the law, has been briefly demonstrated" (ibid, p. 282).

If these fragments of Peter, bishop of Alexandria, mean anything at all, then we should look for the cycle re-arrangement by the Jews to have occurred after 70 A.D.,--not before!

I think the evidence given above goes a long way in showing that it was not 66 A.D. in which the change was made. If the change had occurred while the apostles were at headquarters, the Gentiles would have had no reason whatever for the Paschal Controversy of the 2nd century. The Roman and Corinthian Churches were in complete agreement with the Jews over the calendar about the year 100 A.D. But all of a sudden, actually quite abruptly, we find a full-fledged controversy raging

immediately after 150 A.D. What was the controversy? It was over the Passover.

And, an important point to remember is that the controversy was not between Passover and Easter. No! It was over when Passover was to be held. With the Jews? And the new cycle or the gold cycle arrangement? Or with the Western Churches on a set Sunday near the full moon? The Paschal controversy was clearly over this cycle change effected by the Jews.

Not only do we find the Passover arguments centered in the East, where the Jews effected the cycle change, but the news spread like wildfire. All Asia Minor was effected. Even the churches of Gaul (whether true or heretical) were brought into the conflict.

I am quite sure this shows that 142 A.D. was the time of the change. This is especially brought home when we read Graetz's History of the Jews relative to the first half of the 2nd century. "Under the patriarchate of Simon III (140-163 A.D.) a great quarrel arose concerning the feast days and the leap year, which threatened to cause a permanent schism between the Babylonian and the Palestinian communities--a result which was only averted by the exercise of much diplomacy" (vol. 3, p. 500).

This makes it pretty plain! It was at this time that the quarrel over the leap years (which means the cycle) was raged even among the Jews.

This controversy is described in detail in another section of Graetz. He states that a new Sanhedrin was established, after the destruction of Jamnia in 135 A.D., at a place in Galilee called Usha. The first step of this new Sanhedrin was "to re-arrange the calendar which had fallen into disorder in the course of the persecution!" "This Sanhedrical college issued a call to all surviving scholars to assemble in Usha for a synod. Many responded to the call..." (History, vol. 2, p. 333).

"While the Galilean teachers (of Usha) were endeavouring to infuse new life into the Jewish religious body, to restore the Sanhedrin, and to perpetuate the oral law by means of comprehensive codifications, the Babylonian communities were on the point of creating a schism in Judaism were it not for the shrews tactics of R. Simeon. R. Hanania...attempted to create a new center of Judaism in Babylonia during the period of persecution in Judea...He organized a Sanhedrin in Nahor-Pakod...with himself as president. The Babylonian communities, hitherto dependent for their religious guidance upon Judea, but now deprived of it because of the destruction of all religious institutions in the mother country (135 A.D.), joyously welcomed the creation of a Sanhedrin of their own, and gladly submitted to its decisions and ordinances. Hanania ordained leap years and festivals in accord with the principles which were in vogue in Judea (i.e. after the old 2,5, etc. method). However, upon the organization of the Sanhedrin at Usha (in Galilee), the new college could not permit the existence of another body that would threaten the unity of Judaism, and divide it into an

Eastern and a Western Church" (History, vol. 2, pp. 341, 342).

Actually, the Jewish communities of Babylon and the West finally accepted the Usha Sanhedrin, but not without great contention. The greatest point which divided the two Sanhedrins was over the calendar. The Babylonians argued that the old Palestinian cycle arrangement should still be continued. However, those of Usha finally convinced the Babylonians that such was impossible. The Babylonians were in the end convicted of the need to change the cycle. This, of course, was done. The acceptance of the calendar change by the Babylonian and Western Jews did, in fact, keep the Jewish communities together. The change was clearly in 142 A.D. as we have always maintained (at least, the evidence is strongly in favour of that date).

I think that when the truth is known, Polycarp and many of the other true saints of God saw the necessity of letting the Jews lead in this calendar decision. However, there were many other professing Christians who, like at first the Babylonian Jews, refused to abandon the old cycle, which existed when Christ was here. However, the majority of so-called Christians decided to follow the example of Rome. They "threw up their hands" in bewilderment at the Jews and decided that since the Jews seemed to be so arbitrary with their calendar arrangement, they would determine Passover for themselves in the way that seemed best to them. These latter people, among them the Romans, determined not to "Judaize" with the "Christ-rejecting" Jews. In consequence of their action, they cut themselves off from God by refusing to adhere to a change that was clearly proper.

Even though I feel the evidence is strongly in favour of the actual change coming in 142 A.D., there may have been astronomical reasons, as early as 66 A.D., for changing the cycle arrangement. In fact, the change may have been necessary in that very year. But we are aware that 66 A.D. began the war with Rome. The Jews had other things on their minds in the years that followed. Perhaps, because of the confused and unstable conditions in Judea, the Jewish authorities were prevented from making the change in 66 A.D. or in any of the few years that followed. But when 142 A.D. came along, they felt they could no longer delay the change. This may be the answer, for Graetz shows that the calendar had been in some confusion before Simon III (in 142 A.D.) brought about the change. My opinion is that God may have deliberately caused the Jews by circumstances to delay the change in order to test the stability of the Gentile Churches. We know what happened!! Most of the Gentiles repudiated this "Jewish" change in the calendar.

In closing this section, it might be profitable to mention the account of Polycarp's martyrdom. I do not want to put much stock in this record, but it does give 2nd century reckonings of calendar events, and we might glean important information regarding chronology from it. You will notice that the Martyrdom (XXI), states Polycarp was killed on the "Great Sabbath"--the same expression which denotes the First day of Unleavened Bread in John 19:32. I see no reason for doubting this particular reference about the time of Polycarp's death.



However, it is the other information in the same chapter that may give a real clue to the cycle change. For notice that the writer says that this day was the 2nd of Xanthicus. Josephus said that the Macedonian month Xanthicus corresponded with Nisan (Ant. XI, IV, 8). Of course, it is impossible that the Feast could occur as early as Nisan 2. However, the Greek is a little unclear when this reference to the 2nd of Xanthicus is made. It says that this Xanthicus was the "standing" month: This participle is taken by many to mean "present month" and objectively it seems to mean that. But, we are cautioned by most translators to hold our opinion in abeyance because it is unclear. Mr. Stavrinides, our Greek speaking student from Cyprus, informs me, however, that the word sometimes denotes-- in a special sense--the "opening of Spring", and he gave me a quotation from Aristotle to show it. (~~The reference is, I am afraid, at the college.~~) The meaning seems to me to be that the Great Sabbath took place on the "2nd day of Xanthicus past the equinox". We know that the ancients sometimes broke their months in half in their numbering. The Romans did this in a crude way and others likewise.

If the above be true, then Passover was, in this year-- supposedly 167 A.D., on the day of the Equinox and the High Day was on the 2nd day.

However, more information is given. The true text says that this day was the 7th day before the Kalends of April (Not May as some have it). Thus, it was the 25th of March. This means that the equinox occurred either on the 23rd or 24th of March, according to whether Xanthicus 2 was the 2nd day past the equinox or the 2nd day of the equinox. In either case, it was very near the true equinox for 167 A.D.

I am not in a position, at the present time, to untangle this date mentioned in the Martyrdom, for it is unclear. Nevertheless, it is interesting that some texts say that the "Great Sabbath" was the 7th before the Kalends of May, not April. Just one month out of order! Also, Anatolius, who was insistent upon following the old Jewish cycle and forbade Passover to occur before the equinox places Passover as occurring anytime after the 22nd of Dystrus--the Macedonian month which precedes Xanthicus. Josephus said that Passover had to occur in Xanthicus. And Anatolius equates Dystrus with the Roman March while the writer of the Martyrdom says Xanthicus (the month following Dystrus) was really March. Confusion of confusion!!! However, I think this chaos can be explained by the fact that different areas were using various cycle arrangements.

#### Who Governed the Calendar System in Palestine in the First Century?

The learned Hebraist, Dr. van Goudoever has made a profitable remark in his book "Biblical Calendars". He says:

"Differences among the Israelites regarding the calendar and the time set for keeping the feasts could be (and were) disastrous both for the religious and for the social and economic life. Such a difference was in itself sufficient reason to form a sect. We shall see that there were indeed differences in the calendars and the time of keeping the feasts among the Israelites around the beginning of our era" (P. 6).

Of course, we realize that there were two general kinds of corruptions regarding the calendar. One--there were those who abandoned the Sacred Calendar altogether and manufactured their own e.g. the Essenes, authors of Enoch and Jubilees (solar calendars), etc. And two--they were those who adhered to the Sacred Calendar but disagreed when the Feasts were to be held. This latter group i.e. Sadducees (priests) and Pharisees, are the only ones, obviously, that we have to be concerned with.

Firstly, I think it can be shown that both the Pharisees and Sadducees (in general) held to the same new moons--especially the first and seventh as you mentioned. After studying this thoroughly, that is, if the Talmud is faithfully recording the facts, I can see no other alternative. The eternal bickering between the Pharisees and the Priests (Sadducees, mostly) was always over which calendar days to celebrate for Passover and Pentecost, not over the beginning of the new moons (unless my eye has overlooked a reference to this). There are probably scores of examples in the Talmud to show their Holy Day disagreements, but these references at the same time show their agreement on the calendar itself.

There is the question of reaping the omer for the wave-sheaf offering. This is highly significant in showing a symbol admitted in the New Testament. The priests were insistent that the sheaves (omer) or barley for the wave-sheaf offering should be cut by the priest on the weekly Sabbath during the days of Unleavened Bread before the sun went down. The few sheaves were then put in the temple until Sunday morning, and then they were "Waved" to God before noon, on Sunday morning, and then they were "waved" to God before noon, on Sunday. This was highly significant!

Christ was resurrected on the Sabbath just before sunset. At the same exact time that the firstfruit sheaves were being reaped by the priests. He then remained in the Father's care until Sunday morning. Then, early in the morning, He ascended to the Father at or near the very time the wave-sheaf of first fruits was "waved" to God. See Men. X. 3 and Dr. Goudever's Biblical Calendars, pp. 17, 18. Dr. Goudever, however, fails to see the significance. How blind we mortals be!

Obviously, we can see that the Priests were correct in reaping the omer on the weekly Sabbath during the day of Unleavened Bread. But the Pharisees rebelliously would not do this. They reaped the omer at the end of the 15th, still on the annual Sabbath, and waved it on the 16th before noon. Christ's resurrection and ascension shows that the Priests were right and that the Pharisees were wrong.

I have given the above as a principle---one example out of many---to show that the priests (actually Sadducees), were closer in obeying God's Old Testament ritualistic services than were the Pharisees. After all, the Scriptures say that the priests were the ones who had the right to rule in Israel. Though, I don't want to be guilty of intimating that the priests were altogether right in observing the rituals. Far from it! But they were far closer to interpreting the ritualistic laws correctly than the Pharisees.

The Great Beth Din, in the time of Christ, was, nevertheless, controlled by the Scribes and Pharisees. It had control of the calendar system. I find no example of the priests disputing their authority in this matter. The reason for this, I think, is plain. The Sadducees and Pharisees could agree on the beginnings of the months because it was not dependant upon the opinions of any man or on observation! Both the Sadducees and Pharisees clearly knew that! How could they bicker over a set of tables and the clear cut law of the calendar?  $2 \times 2$  always equals 4. No one would argue that! And, Gamaliel II said: "The new moon takes place after not less than twenty-nine days and a half and two thirds of an hour and seventy-three halakin". Once the beginning of one new moon is known, how could there be any arguments when the next one begins when both Sadducees and Pharisees had the rules of the calendar before them? Does not this reference in Rosh Hashanah 251 by Gamaliel II prove calendar tables? It seems plain to me that it does!!!

In closing, I will notice Dr. Neugebauer's tables. He may show that 66 A.D. was the year for a cycle change--- astronomically speaking---but history seems to show the change was delayed until 142 A.D.