## Newton's Date For The Crucifixion

by John P. Pratt

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Schaefer (1990) and other modern researchers are apparently not aware that Sir Isaac Newton (1733) was the first to derive a date for the crucifixion of Christ by calculating when the crescent of the new moon was first visible in order to correlate the Judean and Julian calendars. Fotheringham (1934) claimed to have been the first to have investigated thin crescent visibility (1910a), and to have thus dated the crucifixion (1910b). Apparently no one has questioned his claim, but Newton obtained similar results two centuries earlier.

## Sir Isaac Newton

Researchers from Newton to Schaefer have essentially agreed on dates of lunar visibility, but not on the resultant crucifixion date. The two most accepted dates are Friday, AD 30 April 7, and Friday AD 33 April 3. It has been known that Newton preferred Friday, AD 34 April 23, but his reasons apparently have been forgotten. Schaefer notes the date without comment, while Humphreys & Waddington (1983) and Humphries (1989) suggest that Newton's "chief reason seems to have been that 23 April is St. George's Day." On the contrary, Newton reconstructed the Judean calendar just as they did.

Newton began by dating the baptism of Christ in AD 29 during the 15th year of Tiberius Caesar (Luke 3:1, 21). He then cited evidence for a total of five (rather than four) passovers during the ministry, implying an AD 34 crucifixion. Then Newton did the calendrical analysis almost exactly as has been done since: determining in which

years the crucifixion day, 14 Nisan on the Judean calendar, could have been a Friday (John 19:14, 42). He stated that the Jews deemed the crescent visible "about 18 h after the true conjunction," which is optimistic even near the spring equinox. Using that rule to determine the first day of Nisan, he calculated the day of the week for 14 Nisan for the years AD 31-36. He thus excluded AD 31, 32 and 35 because 14 Nisan could not have been a Friday, which has been confirmed by all modern researchers. After next excluding AD 35 and 36 on historical grounds, he had narrowed the field to AD 33 April 3 andAD 34 April 23. He then found a final argument for AD 34 in the ripeness of the corn at passover, based on Luke 6:1 referring to the last day of passover two yrs prior to the crucifixion.

Thus, Newton first narrowed the possible years down to AD 33 and AD 34; had he preferred AD 33, his reasoning would probably have been researched sooner because that date now appears to be correct. The AD 34 choice has few supporters; it conflicts with the date of Paul's conversion, which Newton had apparently not considered, and arguments for a fifth passover and those based on the ripeness of the corn are not compelling. Moreover, Newton's choice of Friday, AD 34 April 23, rather than Thursday, AD 34 April 22, depended on invoking a postponement rule from the modern Hebrew calendar which Zeitlin (1966) has effectively argued was not used at that time. However, although Newton's arguments for AD 34 have not passed the test of time, the basis for his second choice of AD 33 is still sound.

Since Newton, scholarly opinion has favoured AD 30 and is only recently returning to the AD 33 date. The principal reason for having preferred AD 30 was that Christ was supposedly born about 6 BC, before the death of Herod in 4 BC, which favors AD 30 because Christ allegedly lived about 33 years. To support this theory, it was conjectured that Luke reckoned the fifteenth year of Tiberius in the AD 26-28 period, rather than AD 29. Currently, that theory is being challenged for several reasons. The strongest is what Newton implied:

Roman history indicates AD 29 was Tiberius' fifteenth year and no substantial evidence to the contrary has surfaced. Moreover, Maier (1968) has pointed out that Pilate's capitulation when accused of not being "Caesar's friend" (John 19:12), and his desire to appease Herod Antipas (Luke 23:12) require the crucifixion to have been after the death of Sejanus in AD 31. Humphreys & Waddington (1983) have suggested that reports that "the Moon appeared like blood" at the crucifixion probably referred to the lunar eclipse on 3 April AD 33, and Humphreys (1990) has refuted Schaefer's conclusion that the eclipse could not have been seen from Jerusalem. Finally, evidence is mounting that Herod died later than 4 BC, perhaps as late as AD 1 (Pratt, 1990).

Newton almost certainly would have been aware of the 4 BC death date for Herod. Barr (1985) has noted that the belief that Herod died in 4 BC was widely known after Scaliger's work appeared in 1583, that Bishop Ussher's date for the creation in 4004 BC was calculated as exactly 4,000 years before that date, and that his chronology was printed in Bibles after 1701. Newton, however, did not base his date for the crucifixion on any traditions about the birth of Christ or the length of his life. After he reviewed several opinions about the date of Christ's birth, he concluded that "there is no tradition worth considering" and then went on to deduce the crucifixion date.

Because of the difficulty of obtaining Newton's original work, the calendrical portion is included here (italics and capitalization are his):

I take it for granted that the passion was on friday the 14th day of the month *Nisan*, the great feast of the Passover on saturday the 15th day of *Nisan*, and the resurrection on the day following. Now the 14th day of *Nisan* always fell on the full moon next after the vernal Equinox; and the month began at the new moon before, not at the true conjunction, but at the first appearance of the new moon; for the *Jews* 

referred all the time of the silent moon, as they phrased it, that is, of the moon's disappearing, to the old moon; and because the first appearance might usually be about 18 h after the true conjunction, they therefore began their month from the sixth hour at evening, that is, at sun set, next after the eighteenth hour from the conjunction. And this rule they called *Jah*, designing by the letters and the number 18.

I know that *Epiphanius* tells us, if some interpret his words rightly, that the Jews used a vicious cycle, and thereby anticipated the legal new moons by two days. But this surely he spake not as a witness, for he neither understood Astronomy nor Rabbinical learning, but as arguing from his erroneous hypothesis about the time of the passion. For the Jews did not anticipate, but postpone their months: they thought it lawful to begin their months a day later than the first appearance of the new moon, because the new moon continued for more days than one; but not a day sooner, lest they should celebrate the new moon before there was any. And the Jews still keep a tradition in their books, that the *Sanhedrim* used diligently to define the new moons by sight: sending witnesses into mountainous places, and examining them about the moon's appearing, and translating the new moon from the day they had agreed on to the day before, as often as witnesses came from distant regions, who had seen it a day sooner than it was seen at Jerusalem....

Computing therefore the new moons of the first month according to the course of the moon and the rule *Jah*, and thence counting 14 days, I find that the 14th day of this month in the year of *Christ* 31, fell on tuesday *March* 27; in the year 32, on sunday *Apr*. 13; in the year 33, on friday *Apr*. 3; in the year 34, on wednesday *March* 24, or rather,

for avoiding the Equinox which fell on the same day, and for having a fitter time for harvest, on thursday *Apr*. 22, also in the year 35, on tuesday *Apr*. 12, and in the year 36, on saturday *March* 31.

But because the 15th and 21st days of *Nisan*, and a day or two of *Pentecost*, and the 10th, 15th, and 22nd of *Tisri*, were always sabbatical days or days of rest, and it was inconvenient on two sabbaths together to be prohibited burying their dead and making ready fresh meat, for in that hot region their meat would be apt in two days to corrupt: to avoid these and such like inconveniences, the Jews postponed their months a day, as often as the first day of the month *Tisri*, or which is all one, the third of the month *Nisan* was sunday, wednesday, or friday: and this rule they called Adu, by the letters aleph, daleth, waw, signifying the numbers 1, 4, 6, that is, the 1st, 4th, and 6th days of the week, which days we call sunday, wednesday, and friday. Postponing therefore by this rule the months found above; the 14th day of the month Nisan will fall in the year of Christ 31 on wednesday March 28; in the year 32 on monday Apr. 14; in the year 33 on friday Apr. 3; in the year 34, on friday Apr. 23; in the year 35, on wednesday Apr. 13; and in the year 36, on saturday March 31.

By this computation therefore the year 32 is absolutely excluded, because the Passion cannot fall on friday without making it five days after the full moon, or two days before it; whereas it ought to be upon the day of the full moon, or the next day. For the same reasons the years 31 and 35 are excluded, because in them the Passion cannot fall on friday, without making it three days after the full moon or four days before it: errors so enormous, that they would be very conspicuous in the heavens even to the vulgar eye. The year 36 is contended for by few or none, and both this and the year 35 may be thus excluded....

Thus there remain only the years 33 and 34 to be considered; and the year 33 I exclude by this argument. In the Passover two years before the Passion, then *Christ* went thro' the corn, and his disciples pluckt the ears, and rubbed them with their hands to eat; this ripeness of the corn shews that the Passover then fell late: and so did the Passover AC 32, *April* 14, but the Passover AC 31, *March* 28th, fell very early. It was not therefore two years after the year 31, but two years after 32 that *Christ* suffered.

Thus all the characters of the Passion agree to the year 34; and that is the only year to which they all agree.

In conclusion, much of Newton's derivation of the crucifixion date is not only still sound, it was based on reconstructing the Judean calendar, which is the modern technique. It was only in Newton's final step of preferring AD 34 over AD 33 that he no longer appears to be correct.

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