

ANCIENT JEWISH CALENDAR CONSTRUCTION II

There is significant and impressive history connected with every Biblical date. It is the purpose of this series to place before readers of The Ministry dependable methods by which the chronological outline of both history and prophecy can be submitted to proof. These methods are based upon the principles governing the ancient Jewish calendar, and upon the calculation of the day of the week when occurring in any Biblical date.

The ancient Jewish year, so far as the calendar was concerned, began in the spring. Since the time of Moses, the Jewish months have always been numbered from the spring,¹ even though a king's reign may have been reckoned from the fall. Approximately the first seven months of the year comprised the period of the sacrificial feasts, which were connected with the harvests of field, vine, and tree. During the remainder of the year, adjustments were made in the length of certain months in order to balance the length of the year with the course of the sun and moon. Frequently a day was added to the eighth month, and now and again a day was taken away from the ninth. A whole lunar month was added every two or three years--commonly seven times in nineteen years to be exact.² This procedure was termed "intercalation," and the ruling was ordered only by priest or patriarch. Both Jews and Babylonians began their year with the first new moon after the vernal equinox;³ but if the crescent moon was seen even on the equinox, or a little before, then the year began 29 days later, with the subsequent visibility of the next new moon.

The hebdomad, or seven-day period, also played an outstanding part in the construction of the ancient Jewish calendar. The Passover on the Jewish "fourteenth" occurred as the last day of the first fortnight of the year; the feast of Pentecost came on the fiftieth day--seven weeks plus one day--after the feast day of unleavened bread; the seven-day feast of Tabernacles began on the next day after the first fortnight in Tishri--the month which followed the ingathering of the oil and wine. The law read:

"Thou shalt observe the feast of tabernacles seven days, after that thou hast gathered in thy corn and thy wine." Deut. 16:13.

The Sacrificial Period

The major feasts were all connected with the harvest period. The Passover and Feast of unleavened bread came at the very beginning of barley harvest, when a ripe sheaf could be offered; Pentecost--a one-day festival--occurred at the end of wheat harvest, when loaves of bread could be made of flour for the offering; and Tabernacles was appointed as the next day after a long period of hebdomads following Pentecost, and after the harvesting of the oil and the wine. Thus a little more than the first half of the Jewish year was given over to the festal sacrifices, while calendar adjustment was allotted to the second half, and thereby did not interfere with the calculated dates of the sacred festivities. These feasts can therefore be summed up as follows:

1. Passover on the fourteenth--a one-day ceremony, in harmony with which the crucifixion lamb was slain and feasted, the communion supper instituted as a memorial, and Christ Himself was arrested, tried, and slain--all on one day.
2. Feast of unleavened bread on the fifteenth--the beginning of a feast week. The first and last days of this feast week were called "holy convocations," or ceremonial sabbaths. Lev. 23:6-7; Num. 28:18.
3. Day of the wave-sheaf offering, called "morrow after the sabbath"--always occurring on the second day of the feast week of unleavened bread, that is, on the sixteenth. Lev. 23:11.
4. Feast of Pentecost--fiftieth day from the day of offering the wave sheaf, inclusive (Lev. 23:15,16), or the fiftieth day after the feast day of unleavened bread. (Always the same day of the week as the wave sheaf.)
5. Feast of Tabernacles on the fifteenth of Tishri--one day later than the first fortnight in the seventh month (Lev. 23:39), or than the long period of hebdomads after Pentecost.

Relation of Feast of Tabernacles to the First Day of Nisan

It will simplify our problem to remember that the first day of any month--lunar or solar--is always the same day of the week as the fifteenth, and that the passover on the Jewish fourteenth always followed the day and date of the Nisan full moon.⁶ Then came the feast of unleavened bread on the fifteenth, and, at the end of the sacrificial period, the feast of Tabernacles, two days later in its calendar week. The modern rabbinical calendar still observes the same ruling for Tabernacles. We shall now try to discover its origin in the

ancient calendar.

A period of exact hebdomads between Pentecost and Tabernacles is obvious for two reasons: (1) The feast of Tabernacles did not have a specific relation to the full moon of Tishri such as the Passover had to the full moon of Nisan, and hence its "fifteenth" occurred either on or after the Tishri moon full; ⁶ and (2) an additional day in the period of hebdomads following Pentecost--as might possibly occur at the end of the sixth month--would thereby have deferred Tabernacles to the sixteenth. But the fact that this feast was appointed by law always for the fifteenth, plainly shows that, on the calendar, it followed a precise number of seven-day periods after Pentecost. *The "sup-*

The appearance of the Tishri crescent commonly agreed with this calculated pattern of the sacrificial feasts. The new moon of the seventh month was regularly checked by observation. But calendar adjustment in the length of the Jewish months has always been applied to the eighthⁿ and ninth months, and this fact makes obvious the original intent to protect the exact length of the festal months. Furthermore, Jewish authorities uniformly agree that anciently, the sixth month Elul was never allowed more than 29 days on the calendar.⁷ This feature tended to relieve the calendar of a belated Tishri crescent, and the sacrificial period, therefore, always consisted of an alternate series of 30- and 29-day months. *ment was an interval of 14 days, 28:28*

The foregoing are important features that characterized the ancient feast schedule, and they consistently account for its relation to a succession of hebdomads. For Pentecost was not appointed to a lunar date like the other feasts, but was given by law a definite connection with the fifteenth-day feast of unleavened bread, than which it occurred just one day later in its calendar week.⁸ And the feast of Tabernacles, which was also one day later than the series of hebdomads after Pentecost, was, moreover, two days later in its calendar week than the feast of unleavened bread itself, or its calendar coun-

terpart, the first day of Nisan. Knowing therefore the Julian date of the first day of Nisan, and hence its corresponding day of the week,⁹ it is a simple matter to ascertain the day of week corresponding to the feast of Tabernacles.

Passover Thus Ruled The Time Of All The Other Feasts

The ancient Passover, therefore, was the ruling feast, and it governed the day of the week for every other sacrifice. No two of the principal feasts occurred on the same day of the week, as may be seen from the following series:

1. If Nisan full moon, for example, on the Jewish thirteenth¹⁰ = Thursday,
2. Passover on the fourteenth = Friday;
3. Feast of unleavened bread on the fifteenth = Saturday;
4. Pentecost--one day later in its week than the feast of unleavened bread = Sunday;
5. Tabernacles--two days later in its week than the feast of unleavened bread = Monday.

These festal relationships are incontrovertible. They show that anciently the major Jewish feasts always occurred on consecutive days of the calendar week. The modern rabbinical calendar still maintains similar relationships, even with its fictitious moons and questionable meridian.¹¹ These features are largely brought about by the dehiyeth, or "postponements," which advance some of the feasts a day later in the week, but, contrary to earlier Jewish time-keeping, thereby eliminate altogether certain week days from the calendar.¹² The ancient calendar, however, with its hebdomads and sacrificial feasts in the harvest months, had a strictly Jewish and exact form of its own. This calendar was plainly lunar, for it was checked by a crescent moon that was observed on a fixed latitude and longitude, and by a Passover "fourteenth" that had a defined relation to both crescent moon and full moon.¹³

This ancient calculation was not only quite different from the modern rabbinical form, but in several respects unlike that of any other nation of the ancient East, which had no sacrifice of the Passover lamb on its calendars. Moreover, oriental calendars do not tie any Jewish feast date to a known phase of the moon.

The Biblical New Moons--Calculated

The Biblical dates are in harmony with the principles of feast calculation set forth in this study. The dates themselves are the best proof of the argument that from very ancient time the patriarchs understood how to calculate their calendar. The flood chronicle itself is witness not only to the length of both lunar and solar year,¹⁴ and the length of the lunar months,¹⁵ but also to the festal hebdomads.¹⁶ Either this inspired calculation must have been made by Moses, at least a millennium after the flood, or else it had been passed down to posterity by his forefathers. This great prophet has left more dates on record than any other Biblical writer.

It is of outstanding significance that under the Second Temple, Nehemiah and all the people--priests, Levites, singers--entered into a solemn curse to keep the statutes and judgments of Moses--even of the new moons and set feasts. Neh. 10:29,35. But if from henceforth the length of the calendar months had been governed only according to the appearance of the crescent in the evening sky, no Jewish month, from year to year, would commonly have had the same number of days, similar to the Babylonian months. For, as every observer knows, the crescent moon frequently appears a day earlier than usual, and frequently a day later. The new moon, first visible on one evening at Jerusalem, might be seen the evening before in places west of Jerusalem; or might be invisible until the following evening according to the reckoning of places east of it.¹⁵

And on the basis of these inequalities of the moon alone, no Biblical date, or ancient historic synchronism, could with certainty be identified. The solution of the problem is found in the calculated relation of the sacrificial dates ~~themselves~~ to the calendar. In a later study we shall first demonstrate this relation in connection with the feast of Tabernacles. There are at least six instances in Bible times where seventh-month dates are tied to a known day of the week.¹⁶ Similar synchronisms are also common throughout medieval history. The circumstances underlying these dates are for the most

part connected with chronological outlines whose years can be certified; but if not, the year can be computed if the date and day of the week are given. It then remains to prove that the historical record and the calendar are in agreement. Such is the character of the Biblical synchronisms with which the prophetic periods are linked.

DOCUMENTATION

- 1 Martin P. Nilsson, Primitive Time-Keeping, p. 273. London, 1920.
- 2 Cf. Jewish Encyclopedia, art. "Calendar."
- 3 Jotham Johnson, Dura Studies, p. 5. Philadelphia, 1932.
- 4 The Great Controversy, p. 399. (On this point the Old Testament is explicit: Ex. 12:16, 2 Chron. 30:15, and 35:1 have the passover kept on the fourteenth; in Num. 9:3, Josh. 5:10, and Ezra 6:19, the feast is kept; in Num. 9:11, the feast is both kept and eaten on the fourteenth; in Lev. 23:5 and Num. 28:16, the passover is in the fourteenth.)
- 5 The Desire of Ages, p. 77; Ant. III.X.5. (Cf. these two references.)
- 6 The ancient Jewish calendar was fixed in two points: (1) by tying the Passover on 14 Nisan to the day after full moon; (2) by beginning the Jewish day at sunset. This regulated every sacrifice to the limit of the calendar, in harmony with Pentateuchal and astronomical law.
- 7 Since the time of Ezra, the month Elul is said never to have had more than 29 days. Cf. Adolf Schwarz, Der Jüdische Kalender, p. 16; Rosh Ha-shanah 19b, 32a; Beza 6b. So also the astronomers of Nehardea, the home town of Mar-Samuel (Schwarz, p. 45).
- 8 In Lev. 23:15, 16, Pentecost is computed as the fiftieth day inclusive from the day of offering the wave sheaf. Hence this feast was full fifty days after the feast of unleavened bread, occurring on the day before the wave sheaf.
- 9 The day of the week corresponding to any Julian date can be ascertained from the Julian day numbers, a table of which is given in every current Nautical Almanac, which is published by the Nautical Almanac Office, U.S. Naval Observatory.
- 10 Nations around the Mediterranean--Romans, Egyptians, Arabs, Jews, and Babylonians--have placed on record the fact that the Nisan moon commonly falls on the Jewish thirteenth in this territory.
- 11 According to Maimonides and Jewish chronologers generally, the modern Jewish calendar is based upon the "mean motions of the sun and moon, the true having been set aside."--Maimonides, Kiddusch Ha-hodesch, cap. VIII, sec. 7, 8. Tr. Mahler. Wien, 1889. (The rabbinical calculation is not involved by the inequalities of the moon.)
- 12 "For they [the Jews] have made an arrangement among themselves, that New Year shall not fall on a Sunday, Wednesday, or Friday, i.e. on the days of the sun and his two stars (Mercury and Venus); and that Passover, by which the beginning of Nisan is regulated, shall not fall on the days of the inferior stars, i.e. on Monday, Wednesday, and Friday."--Albiruni, The Chronology of Ancient Nations, p. 66. Tr. Sachau. London, 1879.
- 13 Emil Schürer: "Just this fragment [February Ministry, p. 35, end of second column] shows that Aristobulus . . . really gave a description and explanation of the Jewish law."--The Jewish People in the Time of Christ, Div. II, Part III, p. 241. Scribner's, New York.

- 14 G. Schiaparelli, Astronomy in the Old Testament, p. 127. Oxford, 1905. The author says: "We cannot doubt that this writer knew the year of 365 days. In fact, he makes the flood begin in the 500th year of Noah's life, on the seventeenth day of the second month; and the definite drying of the earth and the end of the flood he puts in the 601st year of Noah's life, on the twenty-seventh day of the second month. These months are certainly those of the Jewish calendar; that is to say, lunar periods."
- 15 E.W. Maunder, Astronomy of the Bible, p. 298. Second Edition, London.
- 16 Dedication of the first temple; Ezekiel 40:1; Nehemiah 8; John 5; John 7, 8; Wars II.XIX.1,2.

