# The Beginning of the Year

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When all of the window dressing is removed, we discover that the entire issue about when to begin the year rests with the instructions regarding the Khag of Ingathering and its *tequphath* (season of the year).

## The Tequphath

The late Jews tell of four *tequphath* (seasons) of the year (spring, summer, autumn, and winter), each calculated as a period following one of the days of a *tequphah*: the vernal equinox, the summer solstice, autumnal equinox, and winter solstice.[1] It is also important for us not to confuse the occurrence of a *tequphah* (i.e., equinox or solstice) with the season (*tequphath*). However, the same word is sometimes used in common speech for both.

To begin with, a *tequphah* (equinox or solstice), as spoken of by Scriptures, is a solar event, marking a point of passage of the earth around the sun. It represents a day wherein one of two visual effects occur. (1) A solstice day is a day when the sun, as seen along the earth's horizon, reaches its furthest point of rising or setting either on the north or south. (2) On the day of an equinox, on the other hand, the rising and setting of the sun lie on the horizon precisely in the middle between the two solstice points. As a consequence, the length of the periods of daytime and nighttime on that day of the equinox are almost exactly equivalent.

The day of a *tequphah* would be subject to the same "part of" rule that is applied to the day of a moon's conjunction.[2] On a day when the earth reaches the precise moment of an equinox or solstice, part of that day belongs to the old *tequphath* or season while the remaining part of that day belongs to the new. Accordingly, the day of a *tequphah* (equinox or solstice) is the last day of the old *tequphath* (season). As is the case with the moon, the calculation for each legal 24-hour day is determined from Mount Zion in Jerusalem.[3]

Both the equinox and the solstice are visual measurements of the sun's position along the horizon. More technically, an equinox occurs when the sun passes the point on the celestial sphere where the ecliptic intersects the celestial equator. At that time, as we have said, the length of day and night are approximately equal. A solstice occurs when the sun is at its most northern or most southern point of the ecliptic, at which time the sun has no apparent northward or southward motion. Since they are solar events, they must be guided by the rules given in Genesis, 1:14–18, which state that the sun governs only during the daytime. Therefore, the event of a *tequphah* (equinox or solstice) is always calculated during the 12 variable hours of daylight, from sunrise to sunset. For this reason, the ancients measured these days by using the shadows on sundials and from sun poles.[4] Accordingly, if the exact moment of a *tequphah* occurs at night, it cannot be counted or regulated until the next daylight period.

Since a legal 24-hour day runs from sunset to sunset, if the moment of an equinox or solstice occurs during the daytime, that entire day, which began with the previous sunset until the next sunset is counted as the last day of the previous *tequphath* (season). The next legal 24-hour day, which begins with the sunset that follows the moment of an equinox or solstice, is the first day of the new season (*tequphath*).

Important for our concerns is the little-known detail that in Scriptures there were emphasized not four seasons in the solar year but only two: the season of קַיִץ (*qayits*; harvest) and the season of חֹרֶף (*khoreph*; gathered crops), terms commonly translated as "summer and winter" but actually referring to "spring-summer" and "autumn-winter."

> • קַיִץ (*qayits*), from קוּץ (*quts*), "to *clip* off; to *spend the harvest season*," and means, "*harvest* (as the *crop*), whether the product (grain or

1 An in-depth discussion of the evidence will be presented in our forthcoming work, FSDY: *The Festivals and Sacred Days of Yahweh*, Vol. 3.

2 The "part of" rule is discussed in our Article titled, *Rules for the New Moon*. Article available at www.yahweh.org.

3 Isa., 2:3; Micah, 4:2.

4 Russell, Dugan, and Stewart, Astronomy, I, p. 151; Finegan, Jack. *Handbook of Biblical Chronology*. Princeton, New Jersey, Princeton University Press, 1964, p. 19.

> fruit) or the (dry) seasons:—summer (fruit, house)";[5] "*summer . . . summer fruits*";[6] "**summer . . . summer-fruit** (esp. figs)."[7]
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> • חרף (khoreph) means, "prop. the crop gathered, i.e. (by impl.) the autumn (and winter) season; fig. ripeness of age:—cold, winter ([house]), youth";[8] "pluck (the fruit of), eat up . . . autumn";[9] "winter . . . winter as time of sowing and early growth."[10] This period, accordingly, represents the time of both autumn and winter.

The beginning portions of the קיץ (*qayits*; spring-summer) and חרף (*khoreph*; autumn-winter) are described as the "return of the year"[11] and the "outgoing of the year."[12] Their subdivision into four seasons by later Jewish writers was based upon the common practice of using both the equinox and solstice to determine the seasons. As we shall presently see, these two greater scriptural seasons each begin with an equinox. They are the only points in time relevant to the calculation in the Scriptural calendar. The solstices, which are not directly mentioned in Scriptures and are often the focal points of pagan religions, are simply not relevant.

It is during the period of קיץ (*qayits*) that the crops come in, and the first harvests are made—i.e., spring and summer. The barley harvest begins in the Jordan Valley around the middle of April and in the higher regions of Israel up to the middle part of May.[13] During the time of unleavened bread, for example, the first crops (usually barley and vegetables) were first harvested,[14] and the time of Pentecost was the time of the harvest of first fruits.[15] The period of חרף (*khoreph*), on the other hand, was the time of gathering in of the crops and storing them—i.e., autumn and winter. This period is connected with the Khag of Ingathering and the gathering in of the crops for storage.[16]

There are two relevant passages from Scriptures naming these two seasons. In Psalm, 74:17, we read, "You have formed the קיץ (*qayits*; spring-summer) and חרף (*khoreph*; autumn-winter)." Meanwhile, in Zechariah, 14:8, we are told of the year-round flow of a sacred river, which in the time of the messiah will run out of the Temple Mount and the city of Jerusalem. Half of it will be flowing towards the eastern sea and the other half towards the western sea. The year-round status of this flow is described as occurring "in קיץ (*qayits*; spring-summer) and in חרף (*khoreph*; autumn-winter)." William Smith writes of these above passages:

> But that they signify ordinarily the two grand divisions of the year, the warm and cold seasons, is evident from their use for the whole year in the expression "summer and winter."[17]

Smith adds that "the year had two beginnings, respectively at about the vernal and the autumnal equinox."[18] Put another way, in Scriptures, there are only two seasons (*tequphath*), and these are regulated by the sun. The last 24-hour legal day of the *qayits tequphath* is the day of the autumnal equinox, and the last 24-hour legal day of *khoreph tequphath* is the day of the vernal equinox, which is also the last day of the solar year. Conversely, the first day of *qayits tequphath* is the 24-hour legal day following the day of the

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5 SEC: *Strong's Exhaustive Concordance of the Bible*, Heb. #7019, compare with #6972.

6 HEL: *Hebrew-English Lexicon*. Zondervan Edition, 1970. Catalog #6264. Samuel Bagster & Sons, LTD., London. Zondervan Publishing House, Grand Rapids, Michigan, pp. 229, 231.

7 CHAL: *A Concise Hebrew and Aramaic Lexicon of the Old Testament*. William L. Holladay. Based upon the Lexical Work of Ludwig Koehler and Walter Baumgartner. William B Eerdmans Publishing Company, Grand Rapids, Michigan, 1971, p. 318.

8 SEC, Heb. #2779.

9 HEL, p. 95.

10 CHAL, p. 117.

11 Exod., 23:16; NBD: *The New Bible Dictionary*. Ed. by J.D. Doublas. Wm. B. Eerdmans Publishing Co., Grand Rapids, Michigan, 1971.p. 178.

12 1 Kings, 20:26; 2 Chron., 36:10; NBD, p. 178.

13 ADB: *A Dictionary of the Bible, dealing with its Language, Literature, and Contents*. 4 vols. Ed. by James Hastings. Charles Scribner's Sons, New York, 1899–1902, 1, p. 49.

14 E.g., Lev., 23:10–14; Josh., 5:10–12.

15 Exod., 23:16, 34:22; Num., 28:26; Deut., 16:9f.

16 Deut., 16:13; Lev., 23:39; Exod., 23:16, 34:22.

17 DB: *A Dictionary of the Bible*. Ed. by William Smith. Revised and Edited by F. N. and M. A. Peloubet. Zondervan Publishing House, Michigan, 1948, p. 753.

18 DB, 753.

vernal equinox, also being the first day of the solar year, and the first day of the *khoreph tequphath* is the 24-hour legal day following the day of the autumnal equinox. These two seasons match perfectly, as already mentioned, with the expressions, "the תשובת (*teshubath*; return, turn) of the year" and "the צאת (*tsath*; outgoing) of the year."[19]

## Tequphath or Tequphah?

The determination of the beginning of the year ultimately comes down to identifying the *tequphath* mentioned in Exodus, 34:22. This vital passage states:

> And you shall observe . . . the Khag of האסף (*ha-asaph*; the gathering in, the Ingathering)[20] of the תקופת (*tequphath*) of the year.

To identify this particular *tequphath*, we must confirm whether or not it is a reference to a season of the year (spring-summer, autumn-winter) or to a day of an equinox (i.e., either the day of the vernal equinox or autumnal equinox). We then need to discover precisely which day or season of the year is intended by Exodus, 34:22, as the Festival of Ingathering.

### DAY OR SEASONS

The *tequphath* of Exodus, 34:22, is defined as a season by the following facts:

(1) The word for the day of a vernal or autumnal equinox is תקופה (*tequphah*), not תקופת (*tequphath*).

(2) The words used in Exodus, 34:22, "וחג האסף תקופת השנה (*u-khag ha-asaph tequphath ha-shanah*)," literally mean "and Khag of the Ingathering of the *tequphath* of the year." There is no use of a prepositional prefix, like ב (*be*; in, at, on)[21] or ל (*la*; to, for, belonging to),[22] attached to the term *tequphath*, nor does the sentence use a preposition like the word אחר (*akhar*; after)[23] or בטרם (*beterem*; before).[24] The phrase merely connects this *khag* in a general way with a *tequphath*. This detail is our first indication that the *tequphath* used here is not a day but a season of the year.

(3) This *tequphath* cannot mean "the day of the equinox" for the simple reason that the alignment of months over a series of years necessitates the fact that, during the month that the equinox occurs, there would be many times when it would never take place on any of the 7 days of Tabernacles or the eighth day of Ingathering (the 15th to the 22nd of the moon). Instead, the equinox could fall either from the 1st until the 14th or from the 23rd until the 30th day. Therefore, by context, the passage from Exodus, 34:22, can only be a reference to the season (*tequphath*). As already demonstrated, in Scriptures there are only two *tequphath* in the year, "קיץ (*qayits*; spring-summer) and חרף (*khoreph*; autumn-winter). Accordingly, our search for the identity of the *tequphath* has been narrowed to one of the two great seasons of the solar year, each calculated with regard to an equinox.

### WHICH SEASON?

The *tequphath* or season of the year in Exodus, 34:22, is a reference to the autumnal season, which begins on the day following the autumnal equinox. The following facts verify this detail:

(1) The Khag of Ingathering, also in large part called the Khag of Tabernacles, is dated to the 7th moon of the year,[25] while Phasekh (Passover) is dated to the 1st moon of the year, i.e., the moon called *ha-Abib*.[26]

(2) The Khag of Ingathering FOLLOWS the Khag of Weeks (Pentecost),[27] which is also called "the Khag of the Harvest of the first fruits of your labor, of what you sowed in the field,"[28] the "day of the first fruits,"[29] and the

19 1 Kings, 20:26; 2 Chron., 36:10 (SEC, Heb. #8666); Exod., 23:16 (SEC, Heb. #3318); compare with *The New Bible Dictionary*. Ed. by J.D. Doublas. Wm. B. Eerdmans Publishing Co., Grand Rapids, Michigan, 1971, p. 178.

20 The Heb. prefix ה (*ha*) means "the . . . demon. pron. this" ( HEL, p. 64). The term אסף (*asaph*) means, "collected, gathered" ( HEL, p. 21); "gather in (from threshing-floor and winepress) . . . harvest" ( CHAL, p. 23).

21 HEL, p. 30.

22 HEL, p. 131.

23 HEL, p. 12, "Prep. behind, after."

24 HEL, p. 101, "before that."

25 Lev., 23:34, 39, 41; Num., 29:1–39, esp. v. 12 and 35; Ezek., 45:25.

26 Exod., 12:1–20, esp. v. 2 and 18; Lev., 23:4–8; Num., 28:16–25, esp. v. 16; Deut., 16:1–8; Ezek., 45:21.

27 Exod., 23:16, 34:22; Deut., 16:9–15, 16; Num., 38:26–31, compare with 29:12–39; Lev., 23:15–44.

28 Exod., 23:16.

29 Num., 38:26.

time of "the first fruits of the harvest of wheat"[30] At this time, new food offerings were brought to Yahweh from the first fruits of the land.[31] These statements are a clear reference to the late spring harvest of first fruits, including that of wheat.

(3) The Khag of Ingathering is placed during "the outgoing of the year,"[32] i.e., in the last half of the year. The "outgoing of the year," as we have previously demonstrated, is a reference to the time "after" the autumnal equinox.[33]

(4) The Khag of Ingathering comes "with your ingathering from your grain floor and your wine press,"[34] "with your gathering in of the increase of the land,"[35] and "with the gathering in of your work from the field."[36] These statements are a reference to the great harvest that comes during the autumn of the year. In fact, it fits the definition of חרף (*khoreph*; autumn-winter), as we have demonstrated above, which means, "the *crop* gathered."

(5) Yahushua the messiah and his disciples kept the festivals of Phasekh, Pentecost, and Tabernacles in the same seasons of the year as did the Jews of that period.[37] By doing so, they confirmed that, at minimum, the first century C.E. Jewish understanding of what time of the year these festivals were held was in agreement with Scriptures. As Josephus, Philo, and several early Jewish works of this period prove, Phasekh fell in the spring near the vernal equinox. In contrast, Tabernacles (which for them included the 8th day called Ingathering) fell in the fall near the autumnal equinox.[38]

Taken together, these points of fact all prove that the Khag of Ingathering is associated with the autumnal *tequphath*. In turn, this information demonstrates that the Khag of Ingathering must be dated so that it occurs during the autumnal season, which period, as we have already shown, begins with the 24-hour legal day following the autumnal equinox—a conclusion mandated by the "part of" rule in Scriptures.[39] The Khag of Ingathering must always follow after the day of the equinox because at sunset comes the beginning of the festival. If the equinox comes anytime during that 24-hour day, then that day by definition belongs in part to the previous season. For the Khag of Ingathering to have no part of the previous season, the entire 24-hour legal day must fall within the autumnal *tequphath*.

## The Same Year

We are told several times in Scriptures that "three times in the year" those following Yahweh must attend a *khag* (i.e., the Khag of Unleavened Bread, the Khag of Weeks, and the Khag of Tabernacles/Ingathering), at which time all males are to appear worthy before Yahweh *eloahi* of Israel.[40] The question becomes, "Which year system? The solar year or the lunar year?"

The first thing that should catch our attention is the use of the otherwise redundant thought, which is found in the phrase "in the year." Since these festivals are already dated as coming in the "first" until the "seventh" lunar months, why even mention that they were required to be celebrated within the same year? Is it not manifest that, since the months are specified, that they are already described as falling within the same lunar year? It therefore, becomes apparent that the Scriptures were not referring to the lunar year but warning that all three festivals were to be celebrated within the same solar year.

Support for this understanding is gleaned in other important ways. Although the statutes of the moon are used to date the 24-hour legal days of the *moadim*,[41] the season of the year is,

30 Exod., 34:22.
31 Lev., 23:15–21.
32 Exod., 23:16.
33 An in-depth discussion of the evidence will be presented in our forthcoming work, FSDY, Vol. 3.
34 Deut., 16:13.
35 Lev., 23:39.
36 Exod., 23:16.
37 E.g., Matt., 26:17–35; Mark, 14:12–25; Luke, 2:41f, 22:1–38; John, 2:13, 23, 7:1–37, 11:55–12:19, 28:28; Acts, 2:1–5.
38 An in-depth discussion of the evidence will be presented in our forthcoming work, FSDY, Vol. 3.
39 The "part of" rule is discussed in our Article titled *Rules for the New Moon*. Article available at www.yahweh.org.
40 Exod., 23:14–17, 34:23; Deut., 16:16; 2 Chron., 8:13; compare with 1 Kings, 9:25.
41 Jer., 31:35; Ps., 104:19; compare with Lev., 23:1–44; Gen., 1:14–18.

in fact, based upon a solar reckoning. We know this detail for several reasons.

First, Scriptures directly tell us that the Khag of Ingathering is tied to the autumn *tequphath* (season)—the two *tequphath* of Scriptures both being based upon solar reckoning—as well as to the fall harvest of grain, wine, and other crops (which likewise are seasonal).[42] Similarly, the Khag of Weeks is clocked in to the time of the harvest of first fruits of wheat, which in the Promised Land comes during the spring.[43] Neither was one allowed to partake of the new harvest of the year until after the *omer* wave offering was provided, which could only be cut and waved after Phasekh was celebrated.[44] If only the lunar year was concerned, the instructions would have held their use of the new grain only until the first day of the first moon. Yet by holding their usage until after Phasekh, it did not allow any usage until after the vernal equinox. In this regard, a passage from Joshua in respect to this first cutting after the Israelites entered the land of Kanaan is relevant. According to this passage, after the Israelites celebrated the Phasekh at Gilgal, they ate "the produce of the land of Kanaan IN THAT YEAR."[45] Crops and the *tequphath* are both seasonal and their timing in the Promised Land are determined by the position of the sun, ergo the solar year.

Second, Scriptures speak of both the "return of the year"[46] and the "outgoing of the year."[47] As D. J. Wiseman points out, the "return of the year" refers to the "spring equinox" and the "going out of the year" is a reference to "the autumnal equinox."[48] This understanding is supported when Exodus, 23:15, uses the phrase "outgoing of the year" for the timing of the Khag of Ingathering, while Exodus, 34:22, connects it with the autumnal "*tequphath*." Therefore, "outgoing of the year" = the *tequphath* associated with the Khag of Ingathering. Meanwhile, the LXX translates "outgoing of the year" at the time of the Khag of Ingathering to mean "at the exodus of the year,"[49] while the "*tequphath*" connected with that festival is described as "the middle of the year."[50] These definitions can only apply to a solar year, the autumnal equinox being the middle point, the date where the solar year turns to its "outgoing" phase.

Third, the scriptural year is not purely a lunar calendar, for if that were the case there would never be a reason to intercalate a 13th moon every so many years, as was done in the time of the messiah. There would only be 12 moons per lunar year without any reference to the seasons. Yet if there were only 12 moons a year, the timing of the three *khag* periods would quickly fall out of their commanded seasons. Nevertheless, we know that the Jewish leaders intercalated the year and that the messiah kept the festivals in the same season as did the Jewish groups. J. Van Goudoever writes:

> It appears that the feasts are not only regulated by the phases of the moon but also by the orbit of the sun. In order to celebrate the feasts in the proper season one must balance the lunar and the solar (or agricultural or seasonal) influences in the liturgical calendar.[51]

It is for these reasons that historians have acknowledged that the Scriptures utilize a lunar-solar calendar.[52]

Finally, as we have amply demonstrated in our earlier chapters,[53] both the ancient Aristocratic Jewish sources and early Christian writers also report that the "same year" in which all three festivals were to be held was solar and not lunar. Epiphanius (315–403 C.E.) sums up the early Christian view when he compares it

42 Deut., 16:13; Lev., 23:39; Exod., 23:16.
43 Exod., 34:22.
44 Lev., 23:9–14.
45 Josh., 5:10–12.
46 1 Kings, 20:22, 26; 2 Chron., 36:10.
47 Exod., 23:16.
48 *The New Bible Dictionary*. Ed. by J.D. Doublas. Wm. B. Eerdmans Publishing Co., Grand Rapids, Michigan, 1971, p. 178.
49 LXX Exod., 23:16.
50 LXX Exod., 34:22.
51 B.Cal: Goudoever, J. Van. Biblical Calendars. 2nd rev. ed. by E.J. Brill Leiden, 1961, p. 5.
52 E.g., Hebrew Union College Annual, Vol. 10, pp. 5–8; B.Cal, p. 5; Roland de Vaux, Ancient Israel: Its Life and Institutions, tr. by John McHugh, London, 1961, pp. 180–183, p. 189; etc.
53 An in-depth discussion of the evidence will be presented in our forthcoming work, FSDY, Vol. 3.

with that practiced by the Pharisaic Jews during his time (these Jews by now having substantially strayed from the original practice of the Aristocratic groups). He writes:

> If we celebrate on the Jewish date, we shall sometimes celebrate after the equinox, as they often do, and we too; and again, we shall sometimes celebrate before the equinox, as they do when they celebrate alone. Therefore, if we also celebrate (with them), we will keep two Phasekhs in one year, (one) after the equinox and (one) before it; but the next year we shall not keep any Phasekh at all, and the whole will turn out to be error instead of truth. For the year will not be over before the day of the equinox; and the cycle of the course (of the sun), which the deity has given men, is not complete unless the equinox is past.[54]

Stated another way, since the day of the equinox is the last day of the solar year, if one celebrates the Phasekh after the vernal equinox and the next Phasekh before the following vernal equinox, he has celebrated two Phasekhs in one solar year. Further, the moment of the equinox must arrive before the time of sunset on the 14th of *ha-Abib* (Nisan), for it was immediately after sunset that the lamb was sacrificed, followed by the Phasekh supper.

The results of this evidence show that, although by lunar reckoning the first few days of the "first" and "seventh" moons (months)—coming as they do around the beginning and middle of the year—can fall either before, on, or after their respective equinox. Nevertheless, the festivals themselves, which are dated by the moon, must always fall within the same solar year. This lunar-solar aspect to the sacred year is both important and basic to the scriptural rules of the annual calendar.

## Ingathering and Tabernacles

We must next be cognizant of the difference between the use of the labels "the Khag of Ingathering" and "the Khag of Tabernacles," the latter forming only a part of the former. The instructions from Deuteronomy and Leviticus for the seven-day Khag of Tabernacles state:

> You shall perform the Khag of Tabernacles for yourself seven days באספך (*be-asaph-k*; in/with your gathering in)[55] from your grain floor and your wine press.[56]

> On the 15th day of the seventh moon, this is the Khag of Tabernacles of seven days to Yahweh. . . . Only, on the 15th day of the seventh moon באספך (*be-asaph-k*; in/with your gathering in) of the increase of the land, you shall keep the Khag of Yahweh seven days. . . . And you shall celebrate it a *khag* to Yahweh seven days in a year.[57]

The Khag of Tabernacles, therefore, is a "seven-day" festival to Yahweh, which is defined as occurring in the seventh moon (month) of the year and ב (*be*; in, with)[58] your "gathering in" from your grain floor and your wine press.

The instructions for beginning the year become even more specific with the definitions regarding the greater festival consisting of eight days,[59] of which Tabernacles represents only the first seven.[60] The entire eight days are named the Khag of Ingathering. The instruc-

54 Epiphanius, Pan., 6:11:5f.

55 The Hebrew ב (*be*) when attached to the beginning of a word means, "in, among, with, near, before" (HEL. 30), though the implication of "before" is certainly not in this passage. The LXX, for example translates ב (be) in our relevant verses as ἐν (*en*), meaning, "in, within, surrounded by" and "during the time" of something (GEL: *A Greek-English Lexicon*. Compiled by Henry George Liddell and Robert Scott. At the Clarendon Press, Oxford, 1996, pp. 551f); and אסף (*asaph*), "collected, gathered . . . ingathering, harvest of fruits" (HEL, p. 21), "a collection (of fruits)" (SEC, Heb. #625); and ך meaning, "Your."

56 Deut., 16:13.

57 Lev., 23:34, 39, 41.

58 See above n. 57.

59 Num., 29:12–35.

60 Lev., 23:36b, compare with Lev., 23:34–36a, 39–42. This dual system of names is equivalent to the Khag of Unleavened Bread, which was a 7-day festival that was divided between the Phasekh of the 14th and the 6 days of unleavened bread extending from the 15th through 20th of Abib (Deut., 16:1–8; Lev., 23:5–8; compare with Exod., 23:15, 34:18).

tions for observing this greater period are found in the book of Exodus:

> You shall keep . . . the Khag of Ingathering בצאת (*be-tsath*; in/with the outgoing)[61] of the year, באספך (*be-asaph-k*; in/with your gathering in) of your labors from the field.[62]

Two points are made. The Khag of Ingathering must (1) fall "בצאת (*be-tsath*; in/with the outgoing)" of the year and (2) "in/with the gathering in" of your labors from the field, i.e., during the fall harvest time. Since the Festival of Tabernacles, representing the first seven days of this festival, is specifically stated as beginning on the 15th day of the seventh moon and ending on the 21st day, the eighth day of the greater festival is the 22nd day of the seventh month. In Leviticus we read, "On the eighth day you shall have a sacred gathering,"[63] while in Numbers it states:

> You shall have an עצרת (*Atsarth*; Closing Assembly) on the eighth day. And you shall not do any work of service.[64]

This eighth day (the day following the seven days of Tabernacles) is defined once as a *sabbathon*;[65] and, it is twice called an עצרת (*Atsarth*; Closing Assembly),[66] a term used to describe the day ending a festival period.[67] For example, the last day of the seven days of unleavened bread is also referred to as an Atsarth.[68] The Jews by the first century C.E. were wont to call the entire eight days of the Khag of Ingathering by the designation "Tabernacles." For this reason, in the New Testament this eighth day is distinguished by being called, the "last great day" of the festival.[69]

In these passages, we find that the seventh month of the year is connected with the "outgoing" of the year. Meanwhile, the first moon of the year, the moon of *ha-Abib*,[70] is said to be "the beginning of moons: it is the first moon of the year to you."[71] Since the first six months of the year have already passed and with the seventh month begins the last six months of a normally 12-month year, this description as "outgoing" is generally true. Nevertheless, the outgoing of the year does not begin with the first day of the seventh month. We discover this detail in the next reference to the Khag of Ingathering, the important passage found in Exodus, 34:22. It reads:

> And you shall observe . . . a Khag of האסף (*ha-asaph*; the gathering in; Ingathering) of the תקופת (*tequphath*) of the year.

The term תקופת (*tequphath*) proves to be the key to the entire issue of how one begins the sacred year. The LXX renders this passage:

> And you shall keep to me . . . the festival of ingathering of the μεσοῦντος τοῦ ἐνιαυτοῦ (*mesountos tou eniautou*; middle of the year).

The Targum Onqelos translates *tequphath* in this verse to mean "במפקה (*be-maphqah*; in/with the outgoing)" of the year, using the same word found in its translation of Exodus, 23:16.[72]

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61 The Heb. ב (be) when attached to the beginning of a word means, "in, among, with, near, before" (GHCL: *Geninius's Hebrew and Chaldee Lexicon to the Old Testament Scriptures*. Samuel Prideaux Tregelles. Samuel Bagster and Sons, Paternoster Row, 1846, p. 30); and tax (tsath), a form of יצא (yatsa), meaning, "to go (causat. bring) out" (SEC, Heb. #3318); "go out, go forth" ( GHCL, p. 112).

62 Exod., 23:15–16, compare with Targum Onqelos. *The Bible in Aramaic: Based on Old Manuscripts and Printed Texts*. Vol. 1, "The Pentatuech According to Targum Onkelos." Leiden, E. J. Brill, 1959; and the LXX, "the festival of completion at the outgoing of the year in the gathering in of the works out of your field."

63 Lev., 23:36.

64 Num., 29:35.

65 Lev., 23:39.

66 Lev., 23:36; Num., 29:35.

67 See discussion in FSDY, p. 162, n. 63, pp. 162–164, 248, 251. Available at, www.yahweh.org. This discussion will also prove that the Jews referred to the 50th day of the Khag of Weeks (Pentecost) as an Atsarth as well.

68 Deut., 16:8.

69 John, 7:37, compare with context of 7:1–37, esp. v. 7:2, 8, 10, 14.

70 The reference to "this moon" is to the moon or month named האביב (ha-Abib; the Abib) (see Exod., 13:4, 23:15, 34:18; Deut., 16:1). During the post-Exile period, this month-name was changed by the Judahites to the Babylonian form ניסן (Nisan) (see Neh., 2:1; Esther, 3:7).

71 Exod., 12:2.

72 Targum Jonathan. *The Bible in Aramaic: Based on Old Manuscripts and Printed Texts*. Vol. 2, "The Former Prophets According to Targum Jonathan." Leiden, E. J. Brill, 1959, Exod., 34:22, compare with 23:16. Also compare these verses with those in the MT.

This *tequphath*, therefore, is a reference to "the middle part of the year" and the "outgoing of the year," which as we have already seen is connected with the seventh lunar month of the sacred calendar. Indeed, it is with the word תקופת (*tequphath*) in the instruction from Exodus, 34:22, that we shall take our first steps towards solving the riddle of how to begin the scriptural year. The key is that the *tequphath* is only connected with the Khag of Ingathering and not with the entire seventh month.

## The Solution

The solution to the problem of when to begin the scriptural year does not lie directly with the instructions for the first month (Abib/Nisan) or in the data regarding the Phasekh, as the later Christians would have it, although the Khag of Phasekh is commanded to fall within the same solar year as the Khag of Ingathering. Rather, it is skillfully concealed in the instructions regarding the observance of the Khag of Ingathering, which is attached to the Khag of Tabernacles, observed during the seventh month (Tishri) of the sacred calendar. Often overlooked is the fact that the phrase Khag of Ingathering is both inclusive and exclusive of the Khag of Tabernacles. The question now becomes, "Are all eight days of the Khag of Ingathering required to fall within the *khoreph* (autumn-winter) *tequphath* or only its last day?" Exodus, 34:33, allows for both interpretations. Yet on this one question, the entire issue of when to begin the scriptural year hinges, all other instructions being subjoined thereto.

The solution is realized once we compare the evidence for the entire eight days of the Khag of Ingathering with the seven-day portion called the Khag of Tabernacles. From the 15th until the 21st day of the seventh moon is the seven-day Khag of Tabernacles. This seven-day festival is, in turn, followed by the eighth day, i.e., the 22nd, which is an Atsarth (Closing Assembly) and high Sabbath. This dividing up and renaming of a period of a festival is very much the same as that which happened to the seven-day Khag of Unleavened Bread. At first, even after the one-time celebration of the Phasekh sacrifice on the first day of unleavened bread in Egypt, the entire seven days were still known as the days of unleavened bread. Yet after the Israelites sinned at Mount Sinai, the sacrifice of Phasekh was reinstituted as a permanent part of the Torah of Moses. The first day of this seven-day festival was renamed the Khag of Phasekh, leaving the last "six days" to carry on the designation the "Khag of Unleavened Bread."[73] Nevertheless, the entire seven-day period is called both the Khag of Unleavened Bread and the Khag of Phasekh.

In the same way, there were eight days counted to the Khag of Ingathering. Of utmost importance, this name is the first one applied in Scriptures to this festival, only being found in the book of Exodus. Further, it is only under this name that a connection with the "outgoing of the year" and the "*tequphath*" is made.[74] In the remaining books of Scriptures, the first seven days of this festival were specifically named the Khag of Tabernacles, while the eighth day was left unnamed and merely identified as the "eighth day." Therefore, this newer construct leaves the eighth day, the "last great day," to carry on the name "Khag of Ingathering." The fact that, much later, the Jews referred to all eight days as Tabernacles is not relevant, since it is not a scriptural definition.

The very fact that Yahweh conspicuously did not rename the eighth day (the "last great day") of the Khag of Ingathering demonstrates that only the last day of the festival was relevant to the instructions in Exodus, 23:16 and 34:22—i.e., that the Khag of Ingathering must always fall within the "outgoing of the year" and in its autumnal "*tequphath* (season)." This *khag* day must follow the day of the autumnal equinox, otherwise part of that 24-hour day will still be in the summer *tequphath*. This method also reveals why the ancient Israelites did not originally wait for the appearance of new moons to calculate the beginning of their months and years. Rather, they calculated far ahead, first discovering the events of the seventh month in order to calculate back to the beginning of the first month.

With this one factor, the beginning of the year and all of the festivals are set in place. The eighth day of the greater Khag of Ingathering,

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73 Deut., 16:1–8; compare with Lev., 23:5–8; Num., 28:16–25. An in-depth discussion of the evidence will be presented in our forthcoming work, FSDY, Vol. 2.

74 Exod., 23:16, 34:22.

i.e., the 22nd day of the seventh moon, is determined when that 24-hour day—as calculated by the moon—falls after the 24-hour legal day of the autumnal equinox, as calculated by the sun. Legal days are determined from sunset to sunset. Therefore, when the autumnal equinox falls on a day reckoned from sunset to sunset, the subsequent day, also reckoned from sunset to sunset, which can be identified with the 22nd day of the moon, dates the seventh month of the year. From this point, one merely counts back six moons until he arrives at the date for the new moon of the first month.

## Phasekh

Our final issue deals with the timing of the Phasekh. The question arises, "What effect does using this scriptural method for calculating the beginning of the year have on the day of Phasekh." Every time that the scriptural formula we have demonstrated above is used, we find that the 14th of ha-Abib (the first moon) will always fall after the vernal equinox. It also has as its consequence the fact that the Phasekh festival will normally fall during the first of the 12 solar segments (each segment consisting of 30º of the solar circle), each lasting approximately 30.5 days. At the same time, the single day called "the Khag of Ingathering" (the 22nd day of the seventh month) will normally fall within the seventh section of the solar year.

Another point of interest is the fact that under our current solar year—with 365.2422 days and lunar cycles of about 29.5 days—there exists an average of 186 days between the vernal and autumnal equinoxes (conversely there are 179 days between the autumnal and vernal equinoxes).[75] Therefore, if the 22nd of Tishri comes one day after the day of the autumnal equinox, Phasekh cannot come any earlier than two days after the day of the vernal equinox.

Remarkably, even with the calendar used by the quasi-Quartodeciman Christian writer Anatolius[76]—which was based entirely upon the more ancient Aristocratic system used by the Jewish priests and Quartodeciman Christians—Phasekh was never dated any earlier than the third day after the day of the vernal equinox. They dated the vernal equinox during this period to the 24th of March,[77] and the earliest that Anatolius had calculated the Phasekh was March 27.[78] Therefore, Aristobulus correctly states that the sun would be in the vernal equinoctial segment of the solar circle. Referring to the most ancient Jewish writers (i.e., those following the Aristocratic practice), he reports:

> These writers, in solving some questions which are raised with respect to Exodus, say that all alike ought to sacrifice the crossing-festival (Phasekh) AFTER THE VERNAL EQUINOX in the middle of the first month. And that is found to be when the sun passes through the first segment of the solar, or, as some among them have named it, the zodiacal circle. But this Aristobulus (third century B.C.E.) also adds, that for the festival of the Phasekh it was necessary not only that the sun should pass the equinoctial segment, but the moon also. For there are two equinoctial segments, the vernal and the autumnal, and these diametrically opposite to each other, and since the day of the Phasekh is fixed for the 14th day of the month, at twilight, the moon will have the position diametrically opposite the sun; as is to be seen in full moons. And the sun will thus be in the segment of the vernal equinox, and the moon necessarily will be at the autumnal equinox.[79]

The first century C.E. Jewish writers Philo and Josephus also recognized that, for Khag of Phasekh to occur, it had to be within the spring season and the sun would normally be in the segment called Aries (the first segment of the solar circle).[80] Socrates Scholasticus reports that this was also the view of the early Quartodeciman Christians:

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75 *The 365 Days*, by Keith Gordon Irwin, Thomas Y. Crowell Company, New York, 1963.
76 For the quasi-Quartodeciman views, see FSDY, 1, p. 139. Available at www.yahweh.org.
77 Pseudo-Chrysostom, *Paschal Hom.*, 9, SCXLVIII, 119.
78 Anatolius, *Canon Paschalis*, 14.
79 Anatolius, *Canon Paschalis*, 3–5.
80 Josephus, *Antiquities*, 3:10:5; Philo, *De Specialibus Legibus*, 1:35 §181, 2:28 §253, 160, *De Vita Mosis*, 2:41 §222.

> "For," they (the conservative Quartodecimans) said, "it ought to be celebrated when the sun is in Aries, in the month called Xanthicus by the Antiochians, and April by the Romans."[81]

The Christian writer Anatolius, citing Origen's book of Phasekh, states:

> And in this book, while declaring, with respect to the day of Phasekh, that attention must be given not only to the course of the moon and the transit of the equinox, but also to the transcensum (passage) of the sun.[82]

Why would the early Christians insist that the early Jewish priests up until the time of Yahushua the messiah always observe 14th of Abib, the day of the Phasekh, after the vernal equinox and never mention the connection with the Khag of Ingathering and the autumnal *tequphath*?

There seems little doubt that the early Quartodeciman Christians did, in fact, use the autumnal calculation to begin their year, for (1) it is known that they continued to celebrate the Festival of Tabernacles,[83] (2) their calculations agreed with those of the early Aristocratic Jews,[84] and (3) they always celebrated Phasekh after the vernal equinox. But later Christians, especially under the influence of the Roman Church, began to move away from celebrating the Festival of Tabernacles and in doing so discarded any discussion regarding that issue. Nevertheless, they did strongly continue in their own versions of the celebration of Phasekh and Pentecost. This circumstance led to the modified approach of mentioning only those aspects of the calendar pertinent to their own celebrations.

The later Christians received their information from the earlier Aristocratic Jews and Christians, who followed the more ancient priestly system. This system was based upon two pillars: first, the Khag of Ingathering must come after the day of the autumnal equinox; and second, it must fall within the same solar year as Phasekh. Both rules, as we have shown above, are scripturally based. Nevertheless, if one were to strictly follow the later Christian rule, which required only that Phasekh should follow the day of the vernal equinox, he would again find himself falling into error. For there would always be those occasions when the 14th of the moon will fall only the day immediately after the vernal equinox. In these cases, if the 14th of such a moon was established as the sole measure for the celebration of Phasekh, it would mean that the Khag of Ingathering would come "before" the autumnal equinox.

Furthermore, under the late interpretation of the Roman Church, the 14th of Abib was no longer admitted as a day on which one should celebrate Phasekh, only the first day of the week which fell from the 15 through 21st days of the first month. In accordance with this newer interpretation, the 14th was now permitted to fall on the day of the equinox.[85] The result of a strict adherence to this late Christian view, therefore, would be a mistake in the calculations for the beginning of the year and the timing of Yahweh's festivals.

The scriptural rules for beginning the year also explains the unusual Hasidic system found at Qumran. The Qumran Covenanteers argued that originally both the entire festivals of Phasekh and Tabernacles were required to fall after their respective equinox.[86] By doing so, they argued that this system of following the equinox was still to be used. Yet they were only half right. Not realizing that the solar year previous to 701 B.C.E. was 360 days with only 12 months, each 30 days long, they unfortunately tried to apply the results from the more ancient practice to a new calendric reality with a solar year of approximately 365.25 days.

Nevertheless, their claim that originally the complete festivals of both Phasekh and Taberna-

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81 Socrates Scholasticus, *Historia Ecclesiastica*, 5:22.
82 Anatolius, *Canon Paschalis*, 1.
83 Chrysostom, Adver. Jud., 1 (PG, 48, p. 848).
84 Anatolius, *Canon Paschalis*, 10, compare with 3–6.
85 Bede, *Opera Historica*, 5:21.
86 Vermes, G. *The Dead Sea Scrolls in English*. Penguin books, Middlesex, England, rev. ed. 1968, p. 43; BCal, pp. 62–70, 112–115; compare with *The Book of Jubilees*, 6:23, 29–30, 16:20–31; 1 Enoch, 72:1–82:20; Community Rules, 10:1–7, frag. 2, col. iv, 1–6; and so forth.

cles came after their respective equinox was true. They, no doubt, found a record of this fact and established their views upon it. Yet if we return to that older solar year and month system and follow the two basic rules (i.e., that all three festivals must come in the same solar year and the Khag of Ingathering must follow the autumnal equinox), we will find that the complete festivals of Phasekh and Tabernacles would always fall after their respective equinox.

The first day of the seven days of unleavened bread under both the older 360-day and newer 365.25-day solar years would always come after the vernal equinox in order to remain in the same solar year. Yet conversely, whereas today only the last day of the Khag of Ingathering need come after the autumnal equinox so that the 14th of Abib will come after the vernal equinox, in that by-gone age—when every month was 30 days long and the time between the spring and autumnal equinox was only 181 days[87]—it was not possible that the first day of unleavened bread (later called "Phasekh") could follow the day of the vernal equinox unless the entire eight days of Ingathering also followed the day of the autumnal equinox. Interesting support for this earlier length of 181 days between the vernal and autumnal equinoxes comes with the fact, with 30-day months, that the 14th of Abib (Phasekh) and the 15th of Tishri (the first day of Tabernacles) would have been exactly 181 days apart. During an ideal year, the Phasekh would fall on the day after the vernal equinox and the first day of Tabernacles would fall on the day after the autumnal equinox. Therefore, when the additional factor of the length of the year and months prior to 701 B.C.E. is taken into consideration, the error of the unusual practice at Qumran is readily uncovered.

All three *khag* periods, (the Khag of Phasekh and Unleavened Bread, the Khag of Weeks or Pentecost, and the Khag of Tabernacles and Ingathering) must fall within the same solar year.

## Conclusion

According to the above evidence from Scriptures, the beginning of the scriptural year is reckoned from the Promised Land by a simple formula.

(1) The eighth day of the Khag of Ingathering (i.e., the 22nd day of the seventh lunar month) must always come after the 24-hour legal day of the autumnal equinox.

(2) All three *khag* periods (the Khag of Phasekh and Unleavened Bread, the Khag of Weeks or Pentecost, and the Khag of Tabernacles and Ingathering) must fall within the same solar year.

In essence, the Khag of Phasekh, the first day of the first festival of the year, will always follow the vernal equinox and the Khag of Ingathering, the last day of the last festival of the year, must always follow the autumnal equinox. If either one of these festivals is placed before its respective equinox, it is not a proper scriptural year. At the same time, when these instructions are followed, Phasekh will normally fall within the first of the twelve divisions of the solar circle, while the Khag of Ingathering will normally fall within the seventh division. Within this scheme the beginning of the year is established and the early Aristocratic Jewish and Christian views are understood.

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87 At present, we have a 365.25-day year. There are 186 days between the vernal and autumnal equinoxes and 179 days between the autumnal and vernal equinoxes (The 365 Days, by Keith Gordon Irwin, p. 9). The previous orbit of the earth, which consisted of only 360 days during a year, was effected during the early spring in 701 B.C.E. (Clover, R. *The Sabbath and Jubilee Cycle*. Vol. 1 of the series on *Ancient World Chronology*. Qadesh La Yahweh Press, Garden Grove, 1992, sec. i). Publication available at www.yahweh.org. As a result, only that part of the earth's orbit lying between the vernal and autumnal would have changed. This circumstance indicates that the number of days between the autumnal and vernal continued to be about 179 days. The number of days between the vernal and autumnal, on the other hand, was less than our present year system by approximately five days, being only 181 days.