

## Can the Mist of Tradition Be Penetrated?

## What Existed Long Before the Present Jewish Calendar?

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## The Bible and the Calendar

The calendar now used worldwide follows the four seasons so accurately that in six thousand years, it would have imposed not quite two extra days. It totally ignores the course of the moon, however.

Much has been made of the nineteen-year cycle of the traditional Jewish calendar which enables it to conform to the four seasons. In six thousand years, if left uncorrected, the nineteen-year cycle would lag by 27 days, 13 hours, and about 40 minutes. But a nineteen-year cycle is ~~not~~ to correct. And it also takes into account the course of the moon.

Little has been said about the amazing feature of the traditional Jewish calendar. The moon reaches conjunction--its position between the earth and sun--at a present-day ~~XX~~ average of every 29 days, 12 hours, 44 minutes, and 2.941 seconds. That average time is slowly lessening.

The Jewish calendar is based upon a figure which over-estimates by only .492 seconds per month, but nearly two thousand years ago, it did not over-estimate. It was under-estimating and becoming precise. Over a six thousand year period, it represents the average time between lunar conjunctions (conservatively estimating) at least four times more accurately than the world's calendar has followed the sun.

Here is a unique and well-documented look into the calendar God's people would have used in Biblical times (if that can be known).

A. "From new moon to new moon, and from sabbath to sabbath, all flesh shall come to worship before me, says the Lord," (Isaiah 66:23). This commandment concerning a future age was lethargically practiced in ancient Israel. Business people of Amos's day had the attitude, "Then will the new moon be over, that we may sell grain? And the sabbath, that we may offer wheat for sale . . . ?" (Amos 8:5).

Josephus wrote of the time from sabbath noon to the next sabbath noon as being eight days (Antiquities 7:14-7). In the instructions concerning the wave offering, the seven-week period which both begins and ends on the day following the sabbath consists of fifty days (Lev. 23:15-16). In our way of thinking, Josephus identified a period of exactly seven days, and the instructions in Leviticus refer to forty-nine days. The sabbath days are seven days from one to the next.

Hard to predict natural forces determine when the next new moon is to occur, but Jonathan predicted a new moon one day beforehand when talking with David (1 Sam. 20:18). After years of observations, the average time from one new moon to the next could be estimated with increasing accuracy. Rabbi Gamaliel of around A.D. 100 is credited with the earliest precise statement in Jewish literature of this average period of time. He identified the length of time as twenty-nine days, twelve and two thirds hours, and seventy-three parts. A part equals three and a third seconds. Eighteen parts make up one minute. (Encyclopaedia Judaica; Volume 5; Page 50).

Gamaliel's figures are amazingly accurate especially at the time he lived. A study of the chart in Herman Goldstine's book New and Full Moons (Philadelphia, American Philosophical Society; 1973) displays these conclusions.

1. The time between lunar conjunctions might occasionally be more than **six** hours above or below average. The average time from one to the next occurs about every seven new moons. Conjunctions are closest together during the middle of one seven-month period and farthest apart in the midst of the next. These observations are also displayed in R. J. Bickerman's book Chronology of the Ancient World (Ithaca, N.Y.: Cornell University Press; 1962; Page 110+).

2. The total time of fourteen lunar conjunctions is quite close to the average, because the faster and slower periods balance out. In order to study to identify lunar conjunctions centuries before anything on Goldstine's chart, I found that new moons separated by eight hundred seventy-six Julian years and five days rarely vary in the time between them by more than four hours. If I read the chart for the year 567 B.C., I can pin-point with an error of about two hours on either side the time of a lunar conjunction in 1443 B.C. plus of course the error already in Goldstine's figures.

3. The period from one new moon to the next has gradually been getting shorter when compared to the length of one day. Goldstine's chart covers the years from 1001 B.C. to A.D. 1651. Lunar conjunctions in around 124 B.C. occurred on the average just over eight hundred seventy-six Julian years and five days later than corresponding conjunctions of around 1000 B.C. The average difference in days gradually dips below five by A.D. 500. It is about an hour less than five days in the period around A.D. 353-1600. Bickerman's figures show an average figure of about 4.99 days for the years around 500 B.C.-A.D. 307. Before I knew of Goldstine's book, I had only Bickerman's figures which cover 605 B.C.-A.D. 308. Not knowing any better, I extrapolated back **4.99** days in order to identify a conjunction in 1443 B.C. based upon a figure in 567 B.C. I checked my estimates with George Van Den Bergh's figures in his book Eclipses In the Second Millennium B.C. (Pages 58-59). My estimates for the 15th century B.C. averaged about forty-five minutes late. This is because I was under estimating the average length of time from one new moon to the next for the nine hundred years prior to the sixth century B.C. I did not know that this average length of time was ever-so-gradually consisting of about one less hour after each of the last several thousand years.

4. According to Gamaliel's figure, estimated conjunctions (called molads) occur around eight hundred seventy-six Julian years and just 325 parts less than five days apart. That's about right ~~XX~~ between about 300 B.C. and A.D. 600.

**B.** The above observations lack preciseness, but they are a guide into finding out just how durable Gamaliel's figure is. A speeding up of nearly an hour per thousand years means that at the time given by the rabbis for the beginning point of their calendar, (3760 B.C.), the new moons took only about **three** hours longer per thousand years. The extra time per lunar cycle hardly amounted to one **fourth** of a part per month.

Gamaliel's figure normally estimates the conjunction late. In the fourth millenium B.C., I guess it would run somewhere between **zero** hours and a day late. In around **XX** A.D. 150, it was at its earliest average point between about twelve hours late to six hours early. The new moons until that time were running slower, allowing it to catch up. Since then, however, the gradually increasing speed of the new moons has past Gamaliel's average. Today, Gamaliel's figure is only lagging another two or three hours behind about where it was in the time of maybe Joseph.

**C.** The originally intended bench mark for the estimated conjunction by the Hebrews was Friday, Julian September 26, 3760 B.C. at 8 A.M. The standard abbreviations for this figure would include 6D for Friday, the sixth day of the week. The day began at sunset, so 0H would be six P.M. at zero hours. This would put 3 **XXV** A.M. at fourteen hours or 14H. It was right on the hour so there would be zero parts, or 0P. So the Julian figure would be for 3760 B.C.: 9-26: 6D, 14H, 0P. After disagreements over centuries, the origin date most widely accepted today is 3761 B.C., ~~XXXXXXX~~ 10-7: 2D, 5H, 204P (October 7, Sunday, 204 parts after 11 P.M. Jerusalem time). (Talmudic and Rabbinical Chronology by Edgar Frank; New York: Phillip Feldheim Inc.: 1956; Pages 14-15, 20-22).

I have no idea how these precise figures were originally arrived at. 210 years of new-moon observations alone would barely allow for a figure accurate to within ten parts per lunar month. Lunar conjunctions 910 years apart would have to have an identifiable average figure accurate to within an hour and twelve minutes or 1296 parts.

The calculations for the traditional Jewish calendar are based upon Gamaliel's figure. The molad on September 26 Julian, 3760 B.C. is traditionally associated with Adam's creation. The traditional text of Genesis and later history puts Adam's creation a good 222 years earlier. Even this time from Adam's creation to the alleged origin of the calendar may not have been enough time to pin-point the precise average time from new moon to new moon. The bench mark for the Jewish calendar, therefore, seems to have been arrived at later. The fact remains that Jonathon, Saul's son, was confident in predicting a new moon. After identifying the Biblical new year and beginning of the day, only then can we see whether or not it was a standard practice to anticipate the new moon.

**D.** Only one holy day ever falls on the first day of a lunar month. That day is Trumpets day. It is called Yom Ha-Shanah meaning the Head of the Year. It begins the month of Tishri. On the tenth of this month, the trumpet was to be blown announcing the jubilee (Lev. 25:9-10). This seems to be the Scriptural basis for beginning the land sabbaths in the month of Tishri even though Abib or Nisan is the beginning of months (Ex. 12:2). For purposes of worship, Tishri is the seventh month, but the land sabbaths and the way that the calendar is worked out apply Trumpets day as the Head of the Year.

The sunshine determines the length of the year in spite of the new moons. "You shall observe . . . the feast of ~~XXX~~ ingathering at the turn of the year," God instructed Moses (Ex. 34:22). The turn of the year is the equinox. The Jews have prevented the feast of ingathering or Tabernacles from ending before the September equinox. They required Nisan 16 to fall after the spring equinox. This was part of the foundation of the present calendar. The seventh day of the feast of Tabernacles may have occasionally fallen before the equinox when the regulation was enforced in the third century A.D., but the slight drag in the 19-year-cycle soon corrected that.

**E.** The Bible does not specifically legislate the 19-year cycle, but it is an effective way of carrying out the instruction in Ex. 34:22 to keep the feast of Tabernacles at the turn of the year.

The new moons run separately from the turns of the year. The September equinox reoccurs on the average every 365 days, 5 hours, 48 minutes, and 45.7 seconds. Twelve traditional lunar months average out to 354 days, 8 hours, and 376 parts. Twelve lunar months are not enough to make a year. They fall short by 10 days, 21 hours, and ~~KXHHXXI/XXX~~ 1 and 2/3 parts. In order to compensate for this, a 13th lunar month between Adar and Nisan in late winter is inserted. The average 13-month traditional year consists of 383 days, 21 hours and 580 parts. This exceeds the sun's year by 12 days, 15 hours, and 791 and 1/3 parts.

Every two or three years, the 13th month is added. Every nineteen years, the molad is only two hours, six minutes, and thirty-five seconds later than it was before. This was much easier to discover than the precise time of the molad! After this was discovered, leap years (with the thirteenth month) could then be planned in advance.

Any nineteen-year cycle is for the purpose of keeping lunar holy days in their required solar seasons. An efficiently planned nineteen-year scheme allows the new years to vary from year to year by no more than one lunar month. Unfortunately the drag ~~XX~~ every nineteen years takes its toll of one day every 216 years and several months. Various possible nineteen-year schemes are detailed by Edgar Frank on Pages 44-47 of his book already mentioned.

The most recent 19 years began on Trumpets day of 1978. During any 19 years, the 13th month is added in years 3, 6, 9, 11, 14, 17, and 19. Leap years are always two or three years apart. It is important that the two pares of leap years separated by only two years be as far apart from one another as possible. Those two pares are years 6 and 9 and years 17 and 19.

Year 9 represents the time when leap years have been the most numerous, so that the period from Nisan of year 9 to Adar of year 9 is the latest possible period within the 19 years. So the holy days in 1936 will be very late.

Year 16 is at the time when recent leap years have been the most scarce. The period from Nisan of year 16 to Adar of year 17 is the earliest within the 19 years. So the holy days in 1924 are very early.

F. The age of the present callendar is written into the early holy days of year 16. In 1904, the molad marking Trumpets lay is on September 6, Tuesday at 235 parts after 6 P.M. (2-7, HE, OH, 2350). The first day of the feast of Tabernacles is at the turn of the year on September 23. The 19-year system drags by a day per 216 years, so that when the present system was first adopted, the feast of Tabernacles in year 17 ended before the equinox.

In 1975, the seventh day of the feast of Tabernacles was only on the fourth day of autumn, and Nisan 16 on March 23 was on the seventh day of spring. This means that the feast of Tabernacles has always been at least partly in the fall only within the last thousand years. Nisan 16 has been securely in the spring two or three centuries longer.

The contraverisal year 16 of around 300 B.C. ended up being an amazing safeguard. It means that the callendar does not need to be corrected at a time when the authority to correct it might be hard to establish. The early year also ~~XXXXXX~~ is a reminder that the system is about 1700 years old.

The present callendar is faithful to Biblical instructions, but the Bible's instructions are ~~XXXXXXXX~~ very general. The Bible gives no clear indication as to how some of the details of the ancient callendar were worked out. By checking into the accuracy of Jewish traditions, some things are evident.

G. The ancient disagreements over the origin of the callendar reveal what they believed about the 19-year cycle.

A tradition quoted in the name of Hai Gaon (who died around A.D. 1038), Millel II introduced the sacred callendar in year 4110 of creation, which was year 670 of the Seleucid era, which began on Trumpets day of A.D. 353 (Encyclopaedia Judaica Volume 5, Page 47). The Seleucid era began in the autumn of 312 B.C. The era of creation assumed here began in the late summer of 3761 B.C. Frank refers to this method of counting from 3761 B.C. as A.M. 1. Its beginning is marked traditionally by the so-called "molad Tohu," nearly twelve months before creation. Only its last five days and fourteen hours were after the beginning of creation (Frank P 14+).

The commentary of Rabbi Avaiyah (born about 1325) mentions three methods of counting. Counting from 3761 B.C. was only one method. All three used the same system of leap years. The second method counted from the alleged time of Adam's creation in 3760 B.C. Frank uses the abbreviation A.m. 2 for singling out this system. Then there is A.m. 3, counting from ~~THESE~~ 3750 B.C., ~~THE~~ September 15, Tuesday, 22H, 376P. The A.m. 1 system is used today not just for counting years of the era of creation but also for counting the years of the 19-year cycle.

Today, the 13th month is added in years 3, 6, 8, 11, 14, 17, and 19 (A.m. 1). This is the same as years 2, 5, 7, 10, 13, 16, and 18 (A.m. 2). Two other sequences (Encyclopaedia Judaica V. 5, Page 47) 1, 4, 6, 9, 12, 15, 17, and 3, 5, 8, 11, 14, 16, 19 "are but variant styles of the self-same order." One is based upon A.m. 3 and the last A.m. 4.

The above accounts of Jewish records give no hint that the Jews knew of any system of leap years different from the one they were using. Any suggestion that the system used at the time of Christ was 2, 5, 7, 10, 13, 16, 18 (A.m. 1) may be confusing ~~THE~~ later A.m. 2 figures. For this reason, I am giving up on Talmudic tradition as a source when I trace the Biblical history itself. Only when there is fragmentary evidence in support of it can the Talmud help in reconstructing real history. The Talmud does become increasingly helpful from about the time of the exile but only in about the time of the Maccabees does it become a more or less necessary tool.

**H.** The two real problems with the 3760 B.C. "origin point" of the Jewish calendar are these: (1.) It is incorrectly associated with Adam's creation. Already I have indicated how difficult it would have been to precisely predict far in advance the molad even if 222 years had past from Adam's creation to the origin of the calendar. (2.) September 26 looks like a possible origin point especially because it is on the hour at 9 A.M. But that is a Julian date. According to the present Gregorian calendar, that was August 27. The equinox would not have been until around September 24. It is as though this "bench mark" is based upon a 19-year system which was used much later, making that bench mark fictitious. The week day is a Friday, because this was allegedly the day Adam was created. Adam was created on a Friday, but not in 3760 B.C.

**I.** Secular historians have prematurely assumed that new-moon observation was the standard procedure in Judah before the exile. For lack of anything better, some use Parker and Dubberstein's Babylonian Chronology to estimate dates in the books of Ezekiel, Haggai, Zechariah, and Ezra. For example, the Jews who had returned from the exile finished building the temple on Adar 3, in year 6 of Darius I. According to the commonly used Babylonian Chronology, this was March 12, ~~XX~~ Julian, 515 B.C. That, however, was a sabbath, and it is unlikely that the temple was finished on a sabbath.

Contradictory dates as to when Jehoiachin was released from prison could easily be because one account gives a new-moon date (Jer. 52:31) while the other is based upon a Levitical calendar which anticipated the new moon that month by two days (2 Kings 25:27). The present Jewish calendar often anticipates the new moon but rarely trails it. Noah could not have used lunar observation on the ark. Yet several exact dates are given in the account of the flood.

**J.** The flood occurred long before God instructed Moses that Abib was to be the beginning of months. According to the Targums of Onkelos, the tenth month of Genesis 8:5 was the month of Tammuz as if Trumpets day began the first month.

The oldest calendars of Mesopotamia began the year in late summer or early autumn. Sargon of Agade, however, of the 26th century B.C. thereabout used what later became Nisan as the first month on a calendar with two new-year months similar to the later Biblical calendar. The first or seventh month near the beginning of autumn even was begun by a festival. This was the festival of the goddess Bau. Sargon's calendar transposed onto the flood account in the year 2324 B.C. is as follows: (Encyclopedia of Religion and Ethics by Hastings; V. 3: P.

The times of lunar conjunctions given here are extrapolated from Goldstine's figures (in Baghdad time) for May of 572--May of 571 B.C. I estimate by rigidly computing back another 1752 Julian years, 10 days, and 2 hours. The new-moon dates in Parker and Dubberstein's Babylonian Chronology serve as a guide for estimating the probable first day of the observable lunar month. Certainty is especially hopeless when the new moon is a day or two after an afternoon conjunction, so I list the earliest possible day and insert a plus sign (+) indicating that it could easily occur the following day. The new moon would be normally visible the evening beginning the dates given.

Sargon's Calendar and the Account of the Flood			
Month number	"Month of"	Lunar conjunction	New moon
1. or 7.:	Gan-mas . . . . .	Apr. 25, 9:21 A.M.	4-27, Wednesday
2. or 8.:	Gud-du-bil-sar-sar (Gen. 7:4,11)	May 25, 12:15 A.M.	5-27, Friday
	God instructs 7 days before flood	(Gen. 7:1-4)	6-5, Sunday
	Rains begin on the 17th	(Gen. 7:11-12)	6-12, Sunday
3. or 9.:	the god Bil-dar . . . . .	June 23, 3:01 P.M.	6-25+, Saturday
	Summer solstice (July 12?)		
	Rainfall ends after 40 days		7-22, Friday
4. or 10.:	Su-numun (sowing)	July 23, 5:27 A.M.	7-25, Monday
5. or 11.:	Se-dim-ku . . . . .	Aug. 21, 7:20 P.M.	8-24, Wednesday
6. or 12.:	the god Tur-zi (Tammuz)	Sept. 20, 8:21 A.M.	9-22, Thursday
	(lean year month)	(Molad: 10-10, 40, 23H, 996P)	
7. or 1.:	the Festival of the goddess Bau	Oct. 19, 8:22 P.M.	10-22, Saturday
	Waters abate 150 days (Gen. 8:14+)	ark lands on the 17th	11-7, Monday
8. or 2.:	Mu-su-gab-	Nov. 18, 7:28 A.M.	11-20, Sunday
9. or 3.:	Mes-en-du-se-a-na	Dec. 17, 5:59 P.M.	12-20, Tuesday
10. or 4.:	the Festival of Awan-a-ni	Jan. 16, 4:17 A.M.	1-18, Wednesday
	Mountain tops are seen on the 1st	(Gen. 8:5)	
11. or 5.:	Se-se-kin-a . . . . .	Feb. 14, 2:42 P.M.	2-16+, Thursday
	ending 40 days Noah sends a raven	(Gen. 8:6-7)	2-26, Sunday
	Noah sends a dove	(Gen. 8:8-9)	3-5, Sunday
	Again he does after another 7 days	(Gen. 8:10-11)	3-12, Sunday
12. or 6.:	the Festival Se-illa . . . . .	March 16, 1:30 A.M.	3-18, Saturday
	And again after another 7 days	(Gen. 8:12)	3-19, Sunday
1. or 7.:	Gan-mas . . . . .	Apr. 14, 12:59 P.M.	4-16+, Sunday
	Noah opens the ark on the 1st	(Gen. 8:13)	
2. or 8.:	Gud-lu-bil-sar-sar . . . . .	May 14, 1:34 A.M.	5-16, Tuesday
	On the 27th Noah leaves the ark	(Gen. 8:14+)	6-11, Sunday

K. Only ~~xxx~~ three of the eleven events involved with Noah's stay in the ark occurred on an unusual week day. Eight of the eleven events could easily have occurred on the same week day. Five of those are associated with a seven-day period (Although Gen. 8:7-8 leaves some question).

The problem with the calendar shown above is that one more day at least is needed to allow for 150 days from the 17th of the second month to the 17th of the seventh (Gen. 7:24, 8:3-4). One possibility is that Noah anticipated the new moons and marked each new month generally a day early. This would mean that the seven day periods of (Gen. 7:4,11, 8:6-12) actually single out sabbaths.

Some have alleged without facts that the seven-day week grew out of a gradual rounding off of one lunar month into four equal parts. "In certain Assyrian menologies the seventh, fourteenth, nineteenth, twenty-first, and twenty-eighth day of the month are designated as ill-fated days on which people had to abstain from certain actions," (The Hebrew Union College Annual Volume 17; 1942-1943; Cincinnati: Page 3). The nineteenth day is actually the forty-ninth day counting from the preceding month, so that seven seven-day periods, obviously independent of the moon, were singled out.

**L.** A summary of the evidence that the flood was in 2324 B.C. is as follows:

2324-2032 B.C.: It was 292 years (according to the Masoretic text) from the flood to Terah's 70th year (Gen. 11:10-26). Josephus confirmed this 292-year figure in Ant. 1:6:5. A later scribe added 100 years to the ages of each patriarch in Josephus's text from Arnachshal to Genur. The resulting figure of 392 years cannot be harmonized with Ant. 10:10:5 which identifies 949 years from the flood to the exodus. It was so much longer than the remaining 57 years from the 70th year of Terah to the exodus, that Josephus must have based his account from Genesis 11 on the Masoretic chronology. Naturally the rabbis did also.

2032-1972 B.C.: Another 60 years passed until Abraham's birth according to Stephen's description of events (Acts 7:4). Terah died at the age of 205 (Gen. 11:32). After his father Terah died (Acts 7:4) according to Stephen, Abraham journeyed from Haran to Canaan when he was a son of 75 years (Gen. 12:4). This means that Abraham was born when his father Terah was 130 years old.

1972-1797 B.C.: Abraham lived 175 years (Gen. 25:7).

1797-1397 B.C.: Abraham's descendants were to be sojourners in a foreign land for 400 years (Gen. 15:13). They were to be oppressed, but Abraham was to live out his days in peace (15:13,15). This indicates that the 400-year period began with Abraham's death. It ended when his descendants were finally in a land which was theirs. This occurred when the inheritances were first being divided up west of the Jordan 46 years after the Exodus ~~XXX~~ (Joshua 14:10). The exodus 46 years earlier was 354 years after Abraham's death.

This establishes (from the Bible) the basis for saying that it was 430 years from the circumcision covenant in Abraham's 99th year to the exodus (Ex. 12:40-41, Gal. 3:17). It was 76 years from the circumcision covenant to Abraham's death. It was another 354 years from his death to the exodus.  $76+354 = 430$ . The book of Jubilees, written about 120 years before Christ confirms this generally. It has discrepancies of a year or two in the key points throughout the account which are mathematical oversights which are not signs of a contradictory conclusion as much as they are departures from general agreement with what I have pointed out here.

**M.** A critical problem in dating the exodus is in the fact that it occurred forty years to the day prior to the wave offering when the manna ceased (Joshua 5:11-12). The Jewish Seder Olam Zutta (of the 3rd century A.D.) identifies this incorrectly as 41 years. For the chronology of the Talmud see Frank (Pages 11-13). The facts given in Exodus 7:7, Numbers 33:38-39, and Deuteronomy 1:3, and 34:7 rules out the claim that Aaron and Moses were considered another year older at the beginning of the autumn. They were evidently considered a year older on Abib 1. Aaron was a son of 33 years and Moses was 20 during the time of the first nine plagues (Ex. 7:7). Aaron was 24 and Moses 31 as of two weeks before the exodus (Ex. 12:2). Aaron died 39 years and 4 months later at the age of 123 years (Num. 33:38-39). Six months after Aaron's death, Moses gave the Deuteronomy (Deut. 1:3-4). Moses died a month or two later at the age of 120 (Deut. 34:7). According to the Seder Olam, they entered Canaan 33 days after Moses's death. That is only a trivial under-estimate of not even a week. Five days after they entered Canaan, the manna ceased on the day following the passover. So they must have entered Canaan in the 41st year counting inclusively from the year of the exodus.

Four days after they entered Canaan, they kept the passover on the 14th of Abib of course (Josh. 5:10). "On the morrow after the passover," they ate grain from the produce of the land (5:11-12). They had to wait until after the wave offering to eat from the land's new harvest, and this wave offering had to be on the day following a sabbath (Lev. 23:14-15). This means that they kept a sabbath passover four days after crossing the Jordan into Canaan.

The only sabbath passovers remotely allowable by Egyptian and Assyrian evidence which does not contradict the Bible are these: Lunar Abib 14, May 4, 1409 B.C., Lunar Abib 14, April 3, 1406, and Lunar Abib 13 (the 14th only by anticipation), April 27, 1403 B.C.

The 1409 date is not easily acceptable. The same system of counting years is probably used in 1 Kings 6:1 as is used in Deuteronomy 1:3, allowing only 430

years and one month from the entry into Canaan to the building of the first temple. The Jewish Seder Olam Rabbah calls for 440 years. Even with this extra year, (placing the building of the temple incorrectly in 960 B.C.) the problem is this:

Ahab died 114 years (115 inclusively) after the foundations of the temple were laid. But 355 B.C. is almost ruled out, because Ahab sent troops to Qarqar (or Karkara) to fight the Assyrians in 254 or 253 B.C. (Journal of Cuneiform Studies Volume 30/3, July-1978; "A Further Note On the Date of the Battle of Qarqar and Neo-Assyrian Chronology," by John A. Brinkman; Pages 173+). Discrepancies in the Assyrian evidence might make 355 mathematically possible; 356 would really be stretching it. The likelier meaning of 1 Kings 6:1 requires the 356 date remembered.

If 1409 is too early, what about 1406? That would put the exodus in 1446. The University of Chicago studies in honor of George R. Hughes identify this as the possible 7th year of Amenhotep II, and his father's very lengthy reign of 54 years would have encouraged Moses to remain in exile a very long time (Ex. 2:23). The details of Ex. 2:23 do not fit the widely accepted chronology dating his father's reign from 1490-1436, evidently 14 years too late.

Pharaoh Amenhotep (or Amenophis) II XXXI was involved in military campaigns in his third, seventh, and ninth years of reign (Journal of the American Research Center In Egypt Volume 6; 1967; "Amenophis II's Asiatic Campaigns," CH. VERNON; Pages 119+). He campaigned with his father between November of 1453 and March of 1450 B.C. His minor activity in XX, his third year was ignored on some monuments, so that the campaign in his seventh year was identified on monuments at Karnak and Memphis as his first campaign.

His last campaign was in his ninth year (1445-1444 B.C.). His armed forces were devastated soon after the exodus, still pursuing the Israelites in the Red Sea. Campaigns in his seventh and ninth years are more likely if the exodus was not until during his tenth year.

There are two Biblical problems with a 1446 B.C. exodus. (1.) There again, over 440 years (probably one year too many) are required from the entry into Canaan to Solomon's first temple. (2.) Moffatt would have to be correct in altering the text of ~~XX~~ 2 Kings 13:1 from identifying the 37th year of Joash of Judah to the 39th year. So in Moffatt's Bible, all dates from Saul to Joash of Judah are two years earlier than called for in the Hebrew text. Moffatt's alteration puts Jehu's revolution in 845 rather than 843 B.C. Hazael was already ruling at Damascus (2 Kings 7:14). Ben-hadad was killed by Hazael (2 Kings 8:7-15).

Ben-hadad fought the Assyrians in 846 or more likely 845 B.C. eight years after the destruction of Qarqar. After Hazael's friendly meeting with Elisha, and his ~~XXXXX~~ murdering of Ben-hadad, some time must have passed before he had deployed troops against the king of Israel who Jehu overthrew. The more consistent Assyrian king list evidence with eyewitness monuments shows Ben-hadad still ruling in 845, making it probable ~~XXXXX~~ (though not ~~XXXXXXXXXXXXX~~ absolutely proven) that 845 B.C. is too early for Jehu's revolution.

In any case, no ancient text of the Bible supports Moffatt's second guessing of 2 Kings 13:10. Without Moffatt's alteration, a ~~XXXX~~ 1446 exodus is unworkable. Incorrect attempts to work it out have been made by dating Jehu's revolution in 841 B.C. Later events especially in Samaria rule that date out. 843 B.C. is the latest really workable date for Jehu's revolution.

1403 B.C. remains as the only possible year, clearly pointed to by present evidence, as the likely year that the Israelites entered Canaan. The amazing problem here is that Abib 14 by lunar observation in 1403 was no earlier than Sunday. Few are content with the prospect that the Israelites anticipated the new moon. This is the first detailed demonstration that the Israelites anticipated the new moon which has not relied upon questionable Jewish tradition. Aharoni and Avi-yonah in the MacMillan Bible Atlas list 843 B.C. as the year of Jehu's revolution, and they are only no more than six or twelve months early in estimating the years that Hiram and Solomon reigned. They came to their conclusion without considering the evidence of 1 Kings 6:1 and Joshua 5:10-12. Still, scholars such as these

reasonably (for lack of evidence) claim that the evening lunar crescent began the lunar months in Israel. Here is ~~XX~~ what the evidence more strongly indicates.



N. The Israelite day began at sunset. The Israelites were told beforehand to put out all ~~the~~ leaven for seven days, and to eat unleavened bread from the evening of the 14th to the evening of the 21st of the first month (Ex. 12:18-19). They were told to kill their passover lambs "between the evenings" on the 14th (Ex. 12:6).

They did as they were told. (Ex. 12:22). Several hours after they killed their passover lambs, they waited out the slaying of Egypt's first-born, and then the Pharaoh ordered them to leave. "So the people took their dough before it was leavened, their kneading bowls being bound up in their mantles on their shoulders," (Ex. 12:34).

In Egypt, the natives observed a sunrise-to-sunrise day (Calendars of Ancient Egypt by Richard Parker). Suppose the Israelites ~~XXXX~~ had been instructed (Ex. 12:18-19) based upon a sunrise-to-sunrise day. This would mean that the days of unleavened bread had already begun. Their reason for not taking any leavened bread with them would be that they were doing as they had been commanded.

"They ~~XXXX~~ baked unleavened cakes of the dough which they had brought out of Egypt, for it was not leavened, (not specifically as a result of what they had been commanded but) because they were thrust out of Egypt and could not tarry, neither had they prepared for themselves any provisions," (Exodus 12:39). Evidently the command not to eat leavened bread was not yet applicable. It did not apply because the 14th day had not yet ended when they began packing their belongings. A dawn-to-dawn day would have meant that the seven days of unleavened bread had already begun. They were commanded to be in and end the seven days of unleavened bread in the evening, because the day normally began in the evening.

O. The events from the day of the exodus on Abib 15 (Num. 33:3) to what the Rabbis all agree was the second sabbath in Sivan (Seder Moel Shabbat 26B--27B) when God started instructing Moses on Mount Sinai (Ex. 24:16) is as follows:

From the Exodus to Moses's Seventh Day on Mount Sinai  
Abib 15--Julian June 16, 1443 B.C.)

Events taking place	Scriptural testimony	Egyptian lunar Calendar	Talmud Minor opinion	Talmud Major opinion	New Moon Observing	Reference (Exodus)
Molad: 4-6, 6D, 3H, 1076P						
The exodus (Num. 33:3)	Abib 15	Apr. 20	Thurs.	Friday	Apr. 22	12:40-42
Molad: 5-5, 7D, 16H, 789P						
Entering the wilderness of Sin	Ziv 15	Mar 10	Sabbath	Sunday	May 21+	16:1
First Israelite weekly sabbath	Mar 26	Ziv 22	Iyar 22	Iyar 21	Ziv 19+	16:24-30
Molad: 6-4, 2D, 5H, 502P						
Entry into wilderness of Sinai	Sivan	June 4	Sunday	Monday	June 6	19:1
The commandments and testament	"C" 1-7		Sivan 7	Sivan 6		19:16--24
Covenant made	"C"+1					24:4-15
Moses ascends mount	"C"+7					24:16
God calls to Moses from the cloud						

Moses's seventh day on Mount Sinai, seven days after God gave the ten commandments, was probably a sabbath. The molads shown above are extrapolations back from Gamaliel's figure. This fit remarkably well into the circumstances.

Uncertainties remain. The rabbis unanimously insisted that the Israelites entered the wilderness of Sinai on Sivan 1, and that the ten commandments were thundered by God on a weekly sabbath. 1443 B.C. was not the year they had in mind. They may have inadvertently right about the commandments being given on a sabbath, but their reasoning can be dispensed with here.

P. The Israelites could not have used Egyptian lunar observation, because the moon was observed at sunrise, and the Israelite day began at sunset. They did not necessarily begin their months by observing the lunar crescent. The evidence for this is found in Numbers 10:11,33.

The tabernacle was first erected on Abib 1 just short of a year after the exodus (Ex. 40:17). The new moon marking this month was around Friday March 29, 1442 B.C. The turn of the year, which almost always occurred either in Abib or the previous lunar month, was on about April 3.

The next new moon ushered in a sabbath, April 27. The Jewish rhetoric in the Seder Olam and in the Talmud Ta'anith 29A hints that the turn of the year was during the added month that year, but I suspect not.

On the twentieth day of the second lunar month (Thursday May 16 by new-moon observation (Numbers 10:11)), the Israelites left the wilderness of Sinai. After three days (Numbers 10:33), they set up camp at the location where the disaster with the quails was about to take place. They must not have traveled on the sabbath, because it was a day of solemn assembly (Lev. 23:3).

Numbers 10:33 means one of two things. If the date was strictly determined by the new moon, then they stopped for the sabbath after the second travel day and found a place to set up camp after a Sunday journey. The argument in Ta'anith 29A assumes something different. It assumes that the third day of the journey was on the twenty-second, so that no sabbath figures into it. The Ta'anith's simple view of the scripture is possible (for a 1442 B.C. event) only if the Israelites anticipated rather than strictly watched for the new moon.

**Q.** The Jewish accounts only fit if this second month was marked either by the Friday morning molad or the conjunction that following afternoon on May 24. According to the Ta'anith, the ~~XXXX~~ Israelites immediately murmured against Moses after the arrival on Iyar 22. The month-long experience with the quails ended on Sivan 21. (Numbers 11:19).

Then it was off to a new location at Hazeroth (Numbers 11:35), a journey completed in only a day. Miriam's seven-day experience with leprosy (Num. 12:15) lasted from Sivan 22 to the 29th. The journey to Paran was completed on the 29th (Num. 12:16).

The scouts were sent out on the 29th, and forty days later (Numbers 14:33-34), after the season of first ripe grapes (Numbers 13:20), they returned with their huge grape clusters (13:23) on the ninth of Ab.

Summer began on around July 5. The earliest that the spies could have set out would have been Sivan 22, and that is stretching it. That was June 23 or 24 by observation, but by anticipation it may have been earlier. Harvest conditions rule this out. They would have been returning with huge grape clusters only thirty days after the summer solstice.

By not allowing enough travel time, and by assuming that the quail, leprosy, and spying events were immediately upon arrival, surely the Ta'anith has dated the returning of the spies too early. Assuming that Abib was the month of the barley harvest, the Gezer calendar (Prichard Page 22) identifies Ab as the month of summer fruit. The spies probably returned in Ab, but later than the ninth perhaps by as much as two weeks.

**R.** The disaster with the spies occurred at Kadesh-barnea (Num. 14:30, Joshua 14:6). From the time they left there to the time that generation's men of war had perished, thirty-eight years (or two 19-year periods) passed (Deuteronomy 2:14). These 38 years were from about August of 1442 to about ~~XX~~ September of 1404, so that an identical situation with the leap years reoccurred.

Moses died about thirty-seven days before the Israelites crossed the Jordan (Deut. 34:8 30 days, =Josh. 2:22 3 days, +Josh. 3:2 3 days, +Josh. 3:5 1 day). According to the Jewish Seder Olam, Moses died on Adar 7, 33 days before the entry into Canaan which as Joshua 4:10 affirms was Abib (or Nisan) 10.

The Seder Olam Rabbah points to Nisan 10 of 2448 (Am. III) as the day of the Jordan crossing (Frank Pages 11-12). Fall-to-fall reckoning was used. Yes, it was Am. III reckoning, (from September of 3750 B.C.), because it says that the second temple was destroyed in Am. 3228 which they originally knew full-well was in A.D. 70. (Frank Page 21). Besides, Ta'anith 29A says that the first temple was destroyed on Sunday Ab 9, the year following a land sabbath, which following new-moon observation precisely describes August A.D. 70. The Seder Olam Rabbah dated the entry into Canaan as Nisan 10 of 1271 B.C.

**S.** The rabbis worked out their estimated times of the equinoxes and solstices (called Tekufoth) assuming that the Julian calendar accurately marked the seasons. According to the Seder Olam Rabbah (Section 11), Nisan began on the day of the Tekufah in the year of the entry into Canaan (Frank Page 54). A correct calculation must have been made. In the year 2448 (A.M. III), Nisan's molad was on March 25, a Friday, 253 parts before noon. The Tekufah was the following midnight on the sabbath.

The Arithmetic of Jewish tradition related to the month of the exodus paid attention to the Tekufah but not to the molads in the years which they insisted the exodus took place. Some editions of the Seder Olam identify Friday as Abib or Nisan 1, the same week day as the day of the exodus. The Tekufah was at midnight early on Friday, while the molad was earlier by 3 days, 4 hours, and 743 parts. Other editions identify Nisan 1 as a Thursday, because they numbered year 2448 by A.M. II rather than A.M. III reckoning. In that year, the Tekufah was at sunset marking the beginning of Thursday, but the molad was the following sabbath 544 parts before noon. (Frank Pages 51-53).

The situation for 1443 B.C. is the opposite. The molads work out remarkably well. The inaccurate Tekufoth fortunately do not work out. Once the Jews had concluded that God gave the commandments on a sabbath (Sivan 6 or 7), naturally putting Nisan 1 on a Thursday or Friday, a rabbi was bound to write that the Tekufah was on Nisan 1 the year of the exodus (Frank Page 52). He identified Nisan 1 as a Thursday by confusing the molad of 2448 A.M. III in with the Tekufah of 2448 A.M. II.

**T.** Confusion around the wave offering certainly did not originate with those who wrote the Talmud but can be spotted in the Septuagint. Both the Hebrew and the Septuagint in Exodus 34:22 refer to Pentecost as "the feast of sevens." Sevens refers to weeks. According to the Septuagint, seven of these sevens or weeks were to be counted from the time of the wave offering, fifty days (Leviticus 23:15). The counting was to begin on the day following a sabbath. The Jews did that. They counted from the day following the first annual sabbath. They counted seven weeks as the Septuagint says, but the Septuagint is not literally translating the Hebrew. The Hebrew says seven sabbaths not seven sevens. Evidently, it was a common practice at the time the Septuagint was being translated to have the wave offering on a day other than Sunday.

Originally, it must have been on a Sunday. Until that day, they were not to eat of the harvest of the land. Four days after entering into Canaan, the Israelites kept the passover on Abib 14, and on the morrow, they ate of the land's harvest on what must have been the Sunday of the wave offering. The instructions in Leviticus 23:10-15 do not emphatically state that the wave offering must be during the days of unleavened bread. If before crossing the Jordan in 1403 B.C., the new moon began the month of Abib, then they kept the passover as Abib 14 began after the sabbath had just ended. Then, during Sunday's morning hours, the wave offering initiated the harvest.

The contradiction involving Jehoiachin's being released from prison is a warning not to assume dating strictly by new moon observation. Davil's friend, Jonathon, knew beforehand that the new moon was about to be ~~XXXXXXXXXX~~ celebrated. Assuming that the wave offering was during the days of unleavened bread, Abib's new moon before the Jordan crossing (if in 1403 B.C.) began Abib 2 not Abib 1.

**U.** Now that they were coming into the land, they were to number the years and keep the land sabbaths every seven years in groups of fifty (Lev. 25:3-4,9-11). The Trumpet signaling the fiftieth year was blown on Atonement day, possibly because the harvest years were reckoned from that month. The Gezer calendar runs from that time of year.

Conceivably they waited until 1397 B.C. when the first lots were cast for west-bank inheritances (Joshua 13+). In either case, I can show circumstantial evidence that Trumpet's day of 1391 B.C. began a land sabbath. It's just a question as to whether that was the first or the second land sabbath kept by the Israelites.

The Talmud (Megillah 14B) displays the way in which Leviticus 25:2 was interpreted. Rashi taught that the jubilees ceased when the Israelites east of the Jordan were taken captive, because they were to be kept only when all the Israelites were in the land (see the note on the passage in the Concino edition). "The fact is that it teaches that Israel's spirit left them back, so that in that year (when Jehoiachin was being led into exile), they commenced counting again for the jubilee."

The year being discussed was 597-598 B.C. Something about this year left behind a faint echo in Jewish tradition and speculation. Long before the book of Jubilees was written in about 130 B.C., the sixtieth year was no longer counted. To this day, every seven years is still counted. Trumpets day of 1979 began a sabbatical year.

When multiples of seven years are counted back, 597-598 B.C. is included. There is good reason to include it. Ezekiel according to a tradition was taken captive on Chislev 2 (about December 19), 598 B.C.

If Exodus 23:16 and 34:22 is any indication, Chislev 3 should have been a month earlier. The Babylonians began besieging Jerusalem and took Ezekiel as a captive just as Jehoiachin was beginning his three month reign (? Kings 24:8,10). The three month reign lasted from Chislev 3 to Adar 2. Chaldean Chronicle V identifies Adar 2 (March 16) as the day Jehoiachin was taken captive and Zedekiah was installed in his place.

Out of a determination to identify the traditional Chislev 3 as around November 19 instead of in late December, could Ezekiel have been taken captive one month before Jehoiachin began to reign? Not necessarily.

Later Jewish regulations forbade intercalating the sabbatical year and the year after it, and recommended intercalating the year before the sabbatical year (Tosef., Sanhedrin 2:9, Encyclopaedia Judaica V, 5, Page 50; Anchor Bible, Books of Maccabees Page 276). A 13th month should have been added in the spring of 597 B.C. But if that year was a sabbath or jubilee, an early edition of the thirteenth month would have made Chislev 3 a month later than normal.

The Megillah 14B says that counting continued after this time. Jubilees would not have been counted, however, only every seventh year. This would include the year 423-422 B.C.

When the Seder Olam Rabbah and Talmith 22A are compared, it is evident that Trumpets day of 423 began a land sabbath. According to the Seder Olam Rabbah, the first temple was destroyed in 333 (A.M. III). That was in Ab of 421 B.C. by its reckoning. Talmith 22A says the temple was burned on Sunday Ab 9, in a year following a land sabbath. I think that the Talmith is taking details related to the destruction of the second temple and stating that this is what happened to the first temple. That is no problem. After all, the Seder Olam says that the second destruction took place 420 years after the first destruction. So, if one destruction followed a land sabbath, so did the other. No one questions the fact that A.M. 60-60, one year before the second destruction was a land sabbath, so the second temple was destroyed the year following a land sabbath. So the years 333 and 332 (A.M. III) were both sabbatical years.

Evidence of the practice not to add a thirteenth month in a land sabbath centers around the Maccabean revolt of 167-164 B.C. (Anchor Bible, books of Maccabees Pages 274-276). In my explanation, I am ironing out some discrepancies in the Anchor commentary.

The Jewish religious authorities were forced into giving up their official status late in 167 B.C. No official thirteenth month was declared as it should have been in 166 B.C. The Jews now followed a calendar which was defective. In 164 B.C., Trumpets day on this defective calendar occurred in late August. September 21 would have been its scheduled time, but a sabbatical year was beginning. Strangely however, 2 Maccabees in telling of this period contains an instruction to keep the Feast of Tabernacles in the month of Chislev. It refers to it from a letter 21 years later. This perhaps unrelated example illustrates the practice of holding a delayed Feast when necessary.

The calendar was two months defective. By keeping the feast of Tabernacles in the ninth month on the defective calendar, the correction was being made. The feast of Tabernacles was kept in early November one month later than might be expected. Why one month later? It was a sabbatical year. If the feast had been kept beginning around October 3, an extra month would be required, and traditions forbade a 13-month land sabbath.

A seven year pattern seems to go back as far as to Trumpets day of 593 B.C. Furthermore, 1293 or 1291 B.C. was the first Israelite land sabbath according to Leviticus 25:2. They must have followed a fifty-year sabbath and jubilee system until Jerusalem's destruction in 587 B.C. The last jubilee began on Trumpets day either in 605 or 593 B.C. I suspect it was 605, since they did come into the land in 1493 and could have kept a sabbatical in 1298-1297.

The regulation against a 13-month sabbatical had the effect of delaying the sabbatical by a month. It may have been done for commercial reasons. The recommendation not to intercalate the year following the land sabbath as well might have come much later.

V. Whatever motivated the regulation, it caused some late feasts of Tabernacles. It could interfere with attempts to identify whether the Jews or Israelites used an identifiable 19-year cycle.

The period from the death of Jeroboam II to Menahem's reign indicates that surprisingly, the year beginning on Trumpets day of 747 had only twelve months. Jeroboam II died in Elul of 747 shortly before the 29th year of Uzziah of Judah was to end (2 Kings 15:9). Trumpets day was October 16.

Jeroboam's son, Zechariah, reigned six months til Adar of 746 when Shallum killed him and reigned (2 Kings 15:10-12). Shallum only reigned one month (2 Kings 15:13).

Menahem killed Shallum, but not before Abib 1. This was in Azariah's thirty-ninth year, and Menahem reigned ten years (2 Kings 15:17). Menahem was overthrown, but not until after Azariah's fiftieth year had begun on Trumpets day of 736. ~~XXXX~~ Menahem numbered his years on the throne by the number of spring new-years which passed while he reigned. If he had begun to reign before Abib 1 of 746, he would have reigned eleven official years.

So in order for events to occur as they did, even one extra month would make any literal meaning of the text impossible. The year beginning on Trumpets day of 747 must not have been a leap year.

Taken literally, Josephus's Antiquities 10:2:1 does not allow for a leap year between the autumns of 589 and 587 B.C. (The Babylonians besieged Jerusalem on the tenth day of the tenth month of Zedekiah's ninth year of reign (2 Kings 25:1). This was in January of ~~XXXX~~ 589 B.C. A breach was made in the starving city's wall on Tammuz 9 of Zedekiah's eleventh year (Jer. 52:4-7). Josephus says that the siege lasted ~~XXXX~~ eighteen months until Tammuz 9. It lasted until near the end of June of 587 B.C. Any 12th month during this time would make this a period of nineteen months. The Babylonian calendar displayed by Parker and Dubberstine contains nineteen months between these two dates, with Tammuz 9 on July 29.

Some have harmonized the Ta'anith 224 with the Babylonian dates, because the Ta'anith says that the temple was burned on Sunday Ab 9. Sure enough, on the Babylonian calendar (by new-moon observation), this was Sunday August 27.

Maybe the temple was burned the first time on a Sunday, Sunday July 30, the tenth of Ab (Jer. 52:12). Josephus, who was writing only a few years later, said that both the first and second temples were destroyed on the tenth of Ab (Wars 6:4:5).

The problem is that although Jeremiah 52:12 and 2 Kings 25:3 are so similarly worded, according to Kings, the captain entered the city on Ab 7 while ~~XX~~ the book of Jeremiah dates this on the tenth. The Ta'anith makes an unsatisfactory attempt to resolve the contradiction. It's not worth explaining how it is that every attempt I know of to resolve the discrepancy is evidently patch work.

The problem with each of the two examples just presented is this. (1.) There may have been a land sabbath (originally a jubilee) in 740-747 B.C. The Jewish regulation opposed all but a year to the year following the sabbatical as well as to the sabbatical itself. I doubt that the year after the sabbatical was tampered with for a long time, and it may well have been that a similar regulation concerned only with the sabbatical year was enforced for a time. This would mean that there should have been an added month ending the winter of 747 B.C. The Jews, (unlike the Israelites) ~~XXXX~~ imposed the thirteenth month in 740, assuming a Jubilee was not involved. (2.) Josephus really cannot stand alone as a reliable source concerning anything prior to about 200 B.C. "Eighteen months" may be an approximation.

If and only if God's people used an ancient nineteen-year cycle, then these two examples show how Exodus 23:16 and 23:22 would have been enforced. The oldest method of counting used by rabbinic writers is what Frank called the A.M. III system. On it, the late summer new year in 3760 B.C. would begin year zero.

The years of the 19-year leap-year system must be numbered with a new year zero every nineteen years. Years zero included Trumpets days of 1442 B.C. (Numbers 15:1 there about), 527 B.C. (Ezekiel 33:21), and 473 B.C. (six months ~~into~~ events of Esther 3:7).

The Jewish tradition, before confusion set in, only counted from a molad which was on the hour. There is no reason why the general time was not something ancient and the exact (very precise) molad something which was worked out later. The nineteen-year cycle (if used) in ancient Judah would have been zero, two, five, eight, ten, thirteen, sixteen (A.M. III). Land sabbaths became an exception.

This would make year zero important, because its new year would have occurred earlier among the seasons than any of the other sixteen ~~XXXX~~ new years. Year eleven would have been the latest year for the Feast of Tabernacles. Years eleven included 747-746 B.C. Its molad was at ~~XXXXXX~~ 10-15, 40, 50, 601P. If the system went uncorrected until Christ's time, then Trumpets day of A.D. 33 would have been no earlier than October 12, a cool sixteen days after the turn of the year. The drag in the 19-year cycle required correction.

The system might have fallen apart for two reasons. (1.) The nineteen-year cycle ran late by one day every 216 years. (2.) Forcing an extra month before a land sabbath made holy days beginning with Passover of the sixth of the seven-year sabbatical cycle very late on occasion.

**W** It could have lasted beyond the time of Ezra and still been lost to history. Discrepancies of a cool 220 years in Jewish accounts of the time from the return of the exiles to A.D. 70 dramatically illustrated how much history they had lost.

Josephus dates the return of the exiles as 525 B.C. (Ant. 13:11:1) 421 years before the death of John Hyrcanus. He dates the return of the exiles as around 570 B.C. (Wars 6:4:2) by saying that work on the second temple began 639 years and 45 days before its destruction in A.D. 70.

Rabbi Jose ~~XXXX~~ Ben Halaftha edited the Seder Olam Rabba. He died in around A.D. 160 only about sixty-five years after the death of Josephus. According to his chronology, work on the second temple was over 100 years before its destruction. So he dates the end of the Babylonian captivity as about 251 B.C.

**X** We can know just how rapidly traditions lose their original form by seeing how the Seder Olam from its original has been altered. The original A.M. III counting was replaced by A.M. II counting, so that the destruction of the second temple was now being dated in 3222 A.M. II instead of 3323 A.M. III. The nineteen year cycle was often numbered by A.M. II dating.

That was the tip of the iceberg of confusion. A.M. I dating became popular, so that all history was counted from 3761 B.C., but too often, they did not correct the historical dates. Arthur Peier, in his book Comprehensive Hebrew Calendar (Page 425), displays A.M. II ~~XXXXXXXXXX~~ tradition dates but assumes A.M. I reckoning. So he says that tradition dates Jerusalem's destruction as A.D. 69 not A.D. 70. So even Jewish tradition since Jerusalem's fall is seen through a glass darkly. In this study I have avoided confusing faith in God's Word with faith in Jewish tradition. That should make this study especially useful.