

THE EVIDENCE FOR AN AUTUMNAL NEW YEAR IN PRE-EXILIC ISRAEL RECONSIDERED

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A MUCH debated question in the study of the calendar in pre-exilic Israel and Judah concerns the point at which the new year was reckoned to begin. The prevailing scholarly opinion appears to be that expressed in a typical encyclopedia article: "There is abundant indication that a new year in the fall was standard during the monarchical period."¹ Within this general view there has been room for a number of varying qualifications. Some have believed that at a time before the Judean exile the Assyrian and Babylonian spring calendar came into use in Judah.² Others have thought that it was only in Judah that autumnal

¹S. J. De Vries, "Calendar," *IDB* 1. 483-86 (484-85). So also, e.g., J. Wellhausen, *Prolegomena to the History of Ancient Israel* (Edinburgh: Black, 1885; reprinted, Cleveland: World, 1957) 108-9; K. Marti, "Year," *Encyclopaedia biblica* (London: Black, 1907) 4. 5365; S. Mowinckel, "Die Chronologie der israelitischen und jüdischen Könige," *Acta orientalia* 10 (1932) 161-277 (esp. pp. 174-76); and others mentioned in notes 2 and 3 below.

²Opinions vary about the date of the introduction of the spring calendar into Israel. They may be analyzed as follows:

(i) In the 8th century: E. Kutsch, *RGG* (3d ed., 1957), 1. 1812; followed by H.-J. Kraus, *Worship in Israel* (Oxford: Blackwell, 1966) 45; similarly W. F. Albright, *Bib* 37 (1956) 489; A. Jepsen, "Zur Chronologie der Könige von Israel und Juda," *Untersuchungen zur israelitisch-jüdischen Chronologie* (eds. A. Jepsen and R. Hanhart; BZAW 88; Berlin: Töpelmann, 1964) 28, 37.

(ii) In the reign of Manasseh: K. T. Andersen, "Die Chronologie der Könige von Israel und Juda," *ST* 23 (1969) 69-114 (esp. pp. 108-9); and V. Pavlovský and E. Vogt, "Die Jahre der Könige von Juda und Israel," *Bib* 45 (1964) 321-47, who believe that spring reckoning was used in Judah also in the reigns of Jehoram, Ahaziah, and Athaliah (848-35 B.C.) (p. 327), and was again introduced in 604 B.C. (see vi below).

(iii) In the reign of Josiah: M. Vogelstein, *Biblical Chronology: I. The Chronology of Hezekiah and his Successors* (Cincinnati: Hebrew Union College, 1944) 7. He believed that Hezekiah also had introduced a spring calendar, for which Manasseh substituted an autumn calendar.

(iv) Before 620 B.C.: J. Begrich, *Die Chronologie der Könige von Israel und Juda* (BHT 3; Tübingen: Mohr, 1929) 69-90.

(v) In the reign of Jehoiakim: R. de Vaux, *Ancient Israel* (2d ed.; London: Darton, Longman and Todd, 1965) 192.

(vi) In 604 B.C.: E. Auerbach, "Die babylonische Datierung im Pentateuch und das Alter des Priester-Kodex," *VT* 2 (1952) 334-42; "Der Wechsel des Jahres-Anfangs in Juda im Lichte des neugefundenen babylonischen Chronik," *VT* 9 (1959) 113-21; "Die

reckoning was employed, whereas northern Israel adopted a spring year at the time of the division of the Solomonic Kingdom.³ Only a handful of scholars have dissented from the prevailing opinion and have maintained that in both Israel and Judah throughout the monarchy the year was reckoned from the spring.⁴ It is the purpose of this paper to open up the question again and to test the arguments that have been advanced for the view that during the greater part of the monarchical period the year began in the autumn.

I

In setting out the evidence for an autumnal (Tishri) new year in pre-exilic times, we may leave aside the question whether the general custom of an autumnal beginning to the year was perhaps preceded by an observance of a spring new year, as has been suggested by a few scholars.⁵ The main pieces of evidence for an autumnal new year are as follows:

(1) The autumn festival of ingathering (^ʔ*āsîp*) is said in the oldest liturgical calendars of Israel (Exod 23:14-17; 34:18-23) to occur at the "going out" (^š*ēʔt*) of the year (23:16) and the "turn" (^t*qûpāb*) of the year (34:22). The implication is that the new year begins at this season.⁶

Umschaltung vom jüdischen auf den babylonischen Kalendar," *VT* 10 (1960) 69-70; "Wann eroberte Nebukadnezar Jerusalem?" *VT* 11 (1961) 128-36; followed by S. J. De Vries, *IDB*, 1. 584-85; J. Finegan, *Handbook of Biblical Chronology* (Princeton: Princeton University, 1964) 202-3. So also V. Pavlovský and E. Vogt, "Jahre der Könige," 346 (see ii above).

(vii) About 600 B.C.: E. König, "Kalendarfragen in althebräischen Schrifttum," *ZDMG* 60 (1906) 605-44.

³ So principally E. R. Thiele, *The Mysterious Numbers of the Hebrew Kings: A Reconstruction of the Chronology of the Kingdoms of Israel and Judah* (2d ed.; Grand Rapids: Eerdmans, 1965); largely followed by S. J. De Vries, "Chronology of the OT," *IDB*, 1. 580-99; K. A. Kitchen, "Chronology of the Old Testament," *New Bible Dictionary* (ed. J. D. Douglas; London: Inter-Varsity Fellowship, 1962) 212-23; S. H. Horn, "The Babylonian Chronicle and the Ancient Calendar of the Kingdom of Judah," *AUSS* 5 (1967) 12-27; R. K. Harrison, *Introduction to the Old Testament* (London: Tyndale, 1970) 181-92. Some others, who postulate the adoption of a spring calendar in Judah late in the monarchy, hold with Thiele that Israel followed a spring calendar; so Pavlovský and Vogt, and Vogelstein (see n. 2 above).

⁴ G. Schiaparelli, *Astronomy in the Old Testament* (Oxford: Clarendon, 1905) 115-16; F. A. Herzog, *Die Chronologie der beiden Königsbücher* (Alttestamentliche Abhandlungen 1/5; Münster i. W.: Aschendorff, 1909) 29-33; E. Mahler, *Handbuch der jüdischen Chronologie* (reprinted, Hildesheim: Olms, 1967) 210-20; F. X. Kugler, *Von Moses bis Paulus: Forschungen zur Geschichte Israels* (Münster: Aschendorff, 1922) 134-50; L. I. Pap, *Das israelitische Neujahrsfest* (Kampen: Kok, 1933) 18-33.

⁵ M. Vogelstein, *Biblical Chronology*, 17, 31 n. 99; W. F. Albright, *BASOR* 100 (1945) 20 n. 13; *Bib* 37 (1956) 489; D. N. Freedman, "Old Testament Chronology," *The Bible and the Ancient Near East* (ed. G. E. Wright; London: Routledge and Kegan Paul) 203-14; S. J. De Vries, "Chronology of the OT," 484.

⁶ "These definitions of the oldest legislation are so clear and distinct as to make further proof unnecessary" (K. Marti, "Year," 5365).

(2) The time of year when "kings⁷ take the field," which is generally agreed to be the spring, is called in 2 Sam 11:1 // 1 Chr 20:1 and in 1 Kgs 20:22, 26 *v'sšabat haššānāh*, "the return of the year", i.e., as R. de Vaux puts it, "the time when the year was half over, and beginning to return from winter to summer. . . . This again presumes an autumnal year."⁸

(3) The sabbatical year and jubilee year began in the autumn (Exod 23:10-11; Lev 25:1-22).⁹

(4) The building of Solomon's temple is said (1 Kgs 6:38) to have taken seven years, but it is also said to have begun in the second month (Ziv) of the fourth year of Solomon (6:1, 37) and completed in the eighth month (Bul) of the eleventh year of Solomon. If it is agreed that "reckoning was according to the inclusive system, whereby the first and last units or fractions of units of a group were included as full units in the total of the group,"¹⁰ then an autumn new year reckoning must have been in force. For on a spring (Nisan to Nisan) system the building of the temple would have taken eight years; only on an autumn (Tishri to Tishri) system could it be reckoned as occupying seven years.

(5) In 2 Kings 22-23, the account of the reforms of Josiah, the discovery of the law book which precipitated those reforms is dated to "the eighteenth year of King Josiah" (22:3), while the passover which concludes the account is also said to have been celebrated "in the eighteenth year of King Josiah" (23:23). If the year began in the spring (on the first of the month, 1:I), there is not enough time available before the date of the passover (the fourteenth of the first month, 14:I) to contain all the events that are said to have occurred between 22:3 and 23:23.¹¹ Only an autumnal new year reckoning allows sufficient time between the finding of the book and the celebration of the passover for the events of Josiah's reform.¹²

(6) In Jer 36:1 Jeremiah is commanded, in the *fourth* year of Jehoiakim, to write his prophecies in a scroll. When he has done so, he orders Baruch to read the scroll in the temple on a feast day, which Baruch does in the *fifth* year of Jehoiakim, in the ninth month (36:9), which is plainly a winter month since the king is sitting by his brazier (36:22). The narrative reads as if all these events occurred within the space of a few months, if not weeks; and this could be the case if we suppose an autumnal new year. The sequence of events could be: late in Jehoiakim's fourth year, say in September, Jeremiah is bidden to write his scroll, and Baruch gives a public reading in December (Kislev, the ninth month) of the fifth year. This would seem a more likely course of events than that which would have occurred, if a spring new year system were in use; such a

⁷ Reading, with most moderns, Qere *m'lākīm* for Kethib *ml'kym*.

⁸ R. de Vaux, *Ancient Israel*, 190; similarly J. Begrich, *Chronologie*, 88.

⁹ The argument is used, e.g., by S. J. De Vries, "Chronology of the OT," 484.

¹⁰ E. R. Thiele, *Mysterious Numbers*, 28 (see pp. 28-29 for the full argument).

¹¹ For example, E. Auerbach ("Wechsel des Jahres-Anfangs," 117-18) catalogues ten such events.

¹² This argument is advanced, e.g., by J. Wellhausen, *Prolegomena*, 108; J. Finegan, *Handbook of Biblical Chronology*, 203.

system would imply that a period of nine months at least, or 21 months at most, intervened between the writing and the reading of the scroll. For on a spring new year reckoning the scroll must have been written before the spring of the year, and not read until the following winter.¹³

Further support for the postulate of a Tishri new year reckoning in this instance is that one can offer an explanation why Jeremiah was constrained to write his prophecies in a scroll rather than deliver them orally. "The Babylonian army's departure from Babylon in May/June 604 B.C. throws the kings of southern Palestine into a panic. Jeremiah, being considered a subversive, . . . if forbidden to go to the Temple, i.e., to speak in public."¹⁴

(7) Even after the exile, it appears that Nehemiah reckoned the reign of Artaxerxes I on the basis of an autumnal new year. For while news of the destruction of Jerusalem's wall reached him "in the month Kislev in the twentieth year" (1:1), i.e., in the ninth month, reckoning from the spring, his resultant distress was noticed by the king "in the month Nisan in the twentieth year of King Artaxerxes" (2:1), i.e., in the first month of a year beginning in spring. Only if Nehemiah was using an autumn to autumn reckoning could Kislev precede Nisan in the same year. Since it is agreed that the regular Persian and Jewish practice of this time was to reckon from a spring new year, Nehemiah's system can be explained only as a reversion to an older Hebrew custom.¹⁵

(8) The instruction in the P source that Abib (= Nisan) in the spring is to be the first month of the year (Exod 12:2) is evidence that it had not always been so. "The announcement in this form and in this place makes sense only if it was to replace an earlier and different counting of the months and beginning of the year."¹⁶

(9) A number of reconstructions of the chronology of the monarchic period rest on the assumption that for some periods in Israel or Judah the regnal or civil year began in the autumn, on Tishri 1. So, for example, the system of E. R. Thiele depends entirely upon the presupposition that regnal years in Judah were reckoned from Tishri to Tishri (though in Israel a Nisan to Nisan system was used). While Thiele mentions some of the arguments in favor of an autumnal new year outlined above, he claims that "perhaps the strongest argument for the use of a Tishri-to-Tishri regnal year in Judah is that this method works, giving us a harmonious pattern of the regnal years and synchronisms, while with a Nisan-to-Nisan regnal year the old discrepancies would be retained."¹⁷

(10) A final argument, from extra-biblical evidence, is that the Gezer

¹³ For the argument, see J. Morgenstern, "The New Year for Kings," *Occident and Orient* (Gaster Anniversary volume; ed. B. Schindler; London: Taylor, 1936) 439-56.

¹⁴ K. S. Freedy and D. B. Redford, "The Dates in Ezekiel in Relation to Biblical, Babylonian and Egyptian Sources," *JAOS* 90 (1970) 462-85.

¹⁵ This argument is put forward, e.g., by E. R. Thiele, *Mysterious Numbers*, 30.

¹⁶ H. Kosmala, *VT* 14 (1964) 505-6; cf. M. Noth, *Exodus* (London: SCM, 1962) 94.

¹⁷ *Mysterious Numbers*, 30. Thiele's view was partially anticipated by M. Vogelstein (*Biblical Chronology*), who postulated a Nisan new year in Israel and variation between Nisan and Tishri new years in Judah.

calendar, dating from the period of the early monarchy, attests a year beginning in the autumn. Israel is likely to have adopted the usual Palestinian calendar, it is argued.¹⁸

II

Against these arguments the following objections may be raised:

Ad (1) It is first necessary to affirm, with E. Kutsch in a recent study,¹⁹ that *b^oṣē^t haššānāb* (Exod 23:16) must mean "at the end of the year," and not, as several have tried to prove, "at the beginning of the year."²⁰ For the fact that *yāšā^ḥ* can refer to the appearance of the sun or the stars (e.g., Gen 19:23; Neh 4:15 [Engl. 21]), and thus to the beginning of the day or the night, proves nothing about the meaning of the verb itself but only shows that the Israelites envisaged the appearance of the heavenly bodies as an exit from their "house." The correlative to *yāšā^ḥ*, "to go out, appear," is *bō^ḥ*, "to come in, disappear," and the conception is obviously patterned on the familiar daily routine of work. The idea of the *yāšā^ḥ* of the year is quite different; in this connection *yāšā^ḥ* means "to go out and away." The correlative of *yāšā^ḥ* in this context is not *bō^ḥ* but *šūb*, for we find corresponding to the *yāšā^ḥ* of the year in the autumn the *t^ošūbat* of the year in the spring (see below, *ad* 2).

But the important question is whether "at the end of the year" must mean "at the end of the calendar year."²¹ The festivals are in these passages plainly regulated by the agricultural seasons, not by the lunisolar calendar,²² so it is a

¹⁸ I leave aside the argument which used to be advanced in favor of an autumnal new year (see, e.g., K. Marti, "Year," 5365; e contra, L. I. Pap, *Das israelitische Neujahrsfest*, 27-29), that only a Tishri reckoning in Judah can allow the reference in Jeremiah to the battle of Carchemish (46:2) to be synchronized with the first year of Jehoiakim (25:1). For it is plain since the publication of the neo-Babylonian chronicles that the evidence is *prima facie* in favor of a Nisan reckoning. The battle occurred, according to the Chronicle, before the death of Nabopolassar on Ab 8, which can be synchronized with Jehoiakim's fourth year only on a Nisan basis. For further details, see my article, "Regnal Year Reckoning in the Last Years of the Kingdom of Judah," *Essays in Honour of E. C. B. MacLaurin* (ed. A. D. Crown and E. Stockton; Sydney: Devonshire, 1973 [= *Australian Journal of Biblical Archaeology* 2 (1972) 9-34, esp. pp. 28-29]).

¹⁹ " ' . . . am Ende des Jahres'. Zur Datierung des israelitischen Herbstfestes in Ex 23, 16," *ZAW* 83 (1971) 15-21. So already E. König, "Kalenderfragen," 624 n. 3; N. H. Snaith, *The Jewish New Year Festival* (London: S.P.C.K., 1947) 58-61; A. R. Johnson, *Sacral Kingship in Ancient Israel* (2d ed.; Cardiff: University of Wales, 1967) 56 n. 4.

²⁰ W. Riedel, "Miscellen. 6: בצאת השנה," *ZAW* 20 (1900) 329-32; G. B. Gray, *Sacrifice in the Old Testament* (Oxford: Clarendon, 1925) 300-1; Begrich, *Chronologie*, 80-81; S. Mowinckel, *Zum israelitischen Neujahr und zur Deutung der Thronbesteigungspsalmen* (Oslo: Dybwad, 1952) 12-14; *Psalms in Israel's Worship*, 1. 233-34; R. de Vaux, *Ancient Israel*, 190; H.-J. Kraus, *Worship in Israel*, 27 n. 2.

²¹ So A. Dillmann, "Über das Kalenderwesen der Israeliten vor dem babylonischen Exil," *Monatsberichte der königlich-preussischen Akademie der Wissenschaften zu Berlin*, 1882, pp. 914-35.

²² With the one exception that the month Abib appears in these lists, on which see below, section III.

natural supposition that it is the end of the agricultural year that is meant. E. Mahler has with justice observed that the final words of Exod 23:16 *b^oosp^okā ʔet-ma^ašékā min-bāššādeḥ*, "when you gather in your produce from the field," clearly refer to the agricultural year:²³ the year is the year of sowing, harvest, and gathering in.²⁴ There is nothing implausible in postulating two or more systems of years (cf. our fiscal year, academic year, calendar year),²⁵ and since it is clear that the "end of the year" referred to in the "festival calendars" indicates the agricultural years of the seasons, there is no good reason for claiming that Exod 23:16 refers to a calendar year ending in the autumn.

Even clearer is the evidence of the term *t^oqūpāh*, the "turn" of the year, in Exod 34:22. What is referred to here is a point in the course of the seasonal year, and not a point in a calendric system. True, "we must not introduce into those ancient texts the notion of solstice and equinox which later Judaism gave to *t^oqūpāh*,"²⁶ but that meaning is not a totally new signification; it is only a closer definition of a term that in biblical Hebrew meant "turning point."²⁷ This sense of *t^oqūpāh* is well illustrated by Ps 19:7, though the context has nothing to do with the calendar: *miqṣēh bāššāmayim mōšāʔō / ūt^oqūpātō ʕal-q^ošōtām*, "at (one) end of the sky is his exit / and his turning point is at its (other) end." What is *ʕal*²⁸ the western horizon is not the circuit of the sun but the furthest point it reaches in its circuit, the turning point at which it begins its (subterranean) return to the east.²⁹ Sir 43:7 contains another occurrence of *t^oqūpāh*. Though the verse is obscure, *t^oqūpāh* appears to refer to a point in the cycle of the moon's

²³ *Handbuch der jüdischen Chronologie*, 211-12; similarly L. I. Pap, *Das israelitische Neujahrsfest*, 21.

²⁴ It is open to question whether the beginning of a new agricultural year was thought to succeed immediately the "going out" of the old year. According to J. Pedersen, "When the last harvest is completed, and life dies away, then the year 'runs out' (Exod 23,16). But it only revives in spring time, when life once more begins its growth. That time is called 'the return of the year' (2 Sam 11, 1; 1 Kings 20,22.26). How the old Israelites looked upon the interval, we do not know. They presumably considered it a dead time, seeing that the old year slumbered before the new year was born" (*Israel: Its Life and Culture, I-II* [London: Oxford University, 1926] 489-90). Even though ideas of the death and rebirth of the year would be more at home in northern European folk culture, Pedersen is surely correct in attempting to attribute some significance to the terminology of autumn "departure" and spring "return" of the year. Further, is it not significant that the festal calendars *begin* with the spring festival?

²⁵ And clearly at some periods of Israelite-Jewish history, e.g., in the post-exilic community, a spring new year was observed alongside these festal "calendars." J. Begrich's objections to the distinction between calendar year and agricultural year (*Chronologie*, 77-79) are unconvincing because he does not see that the distinction postulated is between a system of counting *months* and a system of enumerating the *seasons*.

²⁶ R. de Vaux, *Ancient Israel*, 190. De Vaux does not hesitate, however, to define the *t^ošūbat bāššānāh* as the spring equinox.

²⁷ So too M. Vogelstein, *Biblical Chronology*, 31. It is not the "revolution" of the year, much less "the end of this revolution" (R. de Vaux, *Ancient Israel*, 190).

²⁸ Not *ʕad* (as 18 MSS and the LXX have it [*Biblia hebraica* (ed. R. Kittel; Stuttgart: Privilegierte Württembergische Bibelanstalt, 1937) 990]).

²⁹ Cf. Begrich, *Chronologie*, 80 n. 4.

waxing and waning: *whp̄s*³⁰ *ḥ. b btq̄ptw*, "and it wanes at its turning point"; LXX φωστήρ μειούμενος ἐπὶ συντελείας, "a light waning at its completion." The *t°q̄pāb* of the moon would seem to be either parallel to or the opposite of the moon's change (*bh̄stmw̄tw*) in vs. 8. Thus we may take the *t°q̄pāb* of the year in Exod 34:22 as the turning point in a seasonal sense, the time of transition from summer to winter.

Another passage where the *t°q̄pāb* of the year possibly refers to the turning from summer to winter³¹ is 1 Sam 1:19-21. The MT has it that after returning from his pilgrimage to Shiloh, "Elkanah knew Hannah his wife, and Yahweh remembered her, and it came to pass *lit°q̄pat hayyāmīm* that Hannah conceived and bore a son." Several scholars have suggested that the phrase *way°h̄i lit°q̄pat hayyāmīm* is textually misplaced³² and should be removed to the beginning of vs. 21 as a marker of the time of Elkanah's visit to Shiloh for the harvest festival. The *t°q̄pat*³³ *hayyāmīm* would thus be equivalent to the *t°q̄pat haššānāb* of Exod 34:22. A similar conclusion is reached by deleting *wattabar ḥannāb* from vs. 20;³⁴ it is the birth of the child that is then said to occur "at the turn of the year," twelve months after Hannah's prayer and shortly before Elkanah's second pilgrimage to Shiloh (vs. 21). In either case the use of *t°q̄pāb* is linked with the timing of the festival, which is based upon the agricultural year; so the passage has no relevance to the question of the beginning of the calendar year.

Before leaving 1 Sam 1:19-21, it may be worth considering the possibility that *t°q̄pat hayyāmīm* is not equivalent to *t°q̄pat haššānāb* and simply means "the turn of the days," i.e., the midsummer solstice, when the days start getting shorter. If this is so, the story gains in vividness, for it means that the hitherto barren Hannah conceived her child immediately after her return from Shiloh and gave birth to him just nine months later.³⁵ While an accurate fixing of the date of the solstice demands some fairly sophisticated observations that were perhaps not possible in ancient Israel, all that is required for this interpretation is the assumption that the lengthening and shortening of the days was a phenomenon known in pre-exilic Israel. If this explanation is correct, the passage has even less to do with questions concerning the calendar than in other interpretations.

³⁰ Presumably from *hp̄s* II, "bend down" (BDB 343b), and not from *hp̄s* I, "delight in" (as R. H. Charles, *APOT* 1. 475) has it.

³¹ "There are no spring and autumn seasons, properly speaking, but merely transitional periods. . . The 'former and the latter rain' [viz., October-November; April-early May] . . . are the first and last showers of the rainy season of winter" (R. B. Y. Scott, "Palestine, Climate of," *IDB*, 2. 621-26).

³² So *Biblia hebraica* (ed. R. Kittel) 406.

³³ Most adopt the reading of 6 MSS *t°q̄pat* instead of the usual *t°q̄pôt* of the MT.

³⁴ So, e.g., K. Budde, *Die Bücher Samuel* (Kurzer Hand-Commentar zum Alten Testament, 8; Tübingen: Mohr, 1902) 10.

³⁵ This suggestion implies that we should either delete *wattabar ḥannāb* from vs. 20 or transpose the phrase to the end of vs. 19 (so S. R. Driver, *Notes on the Hebrew Text and the Topography of the Books of Samuel* (2d ed.; Oxford: Clarendon, 1913) 16; Begrich, *Chronologie*, 79-80; similarly the LXX, which omits *ḥannāb*).

A final passage where the *t°qûpat haššānāb* seems clearly to refer to a seasonal turning-point is 2 Chr 24:23, where, however, it is a question not of the transition from summer to winter but from winter to summer. Here we read that *lit°qûpat haššānāb* the army of the Syrians came up against Joash; almost all agree that the time of year in question must be the spring,³⁶ since that is the season for the commencement of military campaigns (2 Sam 11:1 = 1 Chr 20:1; 1 Kgs 20:22, 26).³⁷ This reference to the *t°qûpāb* of the year in the spring has often been explained as a reflection of the Nisan calendar system in use in the time of the Chronicler;³⁸ *t°qûpāb* is understood as referring to the beginning of the calendar year. But it is more natural to understand *t°qûpat haššānāb* in reference to the seasonal year, for military campaigns were not mounted according to the calendar date but according to the season. It was when the year "turned" or changed after the spring rains from the wet season to the dry that armies set forth; and it is this transition, not a change of calendar date, that is referred to also by the term *t°šūbāb* (1 Sam 11:1). Nevertheless, if this interpretation of 2 Chr 24:23 is not accepted, and it is still maintained that the reference is to the calendar year, this passage is no evidence that the *t°qûpat haššānāb* in Exod 34:22 must also refer to a calendar year.

It may be concluded that references to the "end" (*šēṽt*) or the "turn" (*t°qûpāb*) of the year in the autumn invariably have to do with the cycle of the agricultural year or of the festival calendar insofar as it is based on the agricultural seasons, and therefore they are irrelevant to the question of the beginning of the calendar year of months.

Ad (2) The *t°šūbat haššānāb* is generally accepted without question as being in the spring of the year, on the basis of the references to the beginning of military campaigns at that time. N. H. Snaith, however, has dissented from this view, arguing that in Palestine "no war could possibly begin before the harvest was complete" in the autumn and that the "return of the year" must mean the late summer.³⁹ But the references he cites (Judg 6:4, 11; 1 Sam 23:1), which

³⁶ So, e.g., W. Rudolph, *Chronikbücher* (HAT 1/21; Tübingen: Mohr, 1955) 276; J. M. Myers, *II Chronicles* (AB 13; Garden City, N.Y.: Doubleday, 1965) 136.

³⁷ "Almost all the Assyrian campaigns whose dates are known with precision began between April and June" (R. de Vaux, *Ancient Israel*, 251). In Neo-Babylonian times, however, campaigns could be continued into the autumn and winter (cf. D. J. Wiseman, *Chronicles of Chaldaean Kings* (626-556 B.C.) [London: British Museum, 1958] 95), and there are some examples of campaigns beginning in the winter (cf. M. Noth, "Die Einnahme von Jerusalem im Jahre 597 v. Chr.," *ZDPV* 74 [1958] 133-57 [= *Aufsätze zur biblischen Landes- und Altertumskunde* (Neukirchen-Vluyn: Neukirchener Verlag, 1971), 1. 111-32]). J. Lewy claimed that the custom of beginning campaigns in the spring left its mark in the Assyrian names of two of the spring months: *šib'im* and *nisani* mean respectively "month of numbering of the host" and "month of the standard" ("The Assyrian Calendar," *ArOr* 11 [1939] 39).

³⁸ So W. Rudolph, *Chronikbücher*, 276; he follows J. Begrich, *Chronologie*, 79-81, 156-58.

³⁹ N. H. Snaith, *Jewish New Year Festival*, 32-36. J. Mauchline (*1 and 2 Samuel* [New Century Bible; London: Oliphants, 1971] 48) also takes "the return of the year" as

refer to forays of Midianites and Philistines at harvest time, are no evidence for the time of year at which military expeditions could begin.⁴⁰ Against his argument that a peasant economy would make warfare impossible before the completion of the harvest, it could well be argued that the round of the agricultural year would make it equally impossible before the completion of sowing in January/February (cf. the Gezer calendar: "two months are planting, two months are late planting"). In fact, the dating of the *t°šūbat haššānāb* in the spring, at least in the Chronicler's usage, has been put beyond reasonable doubt by the synchronism between 2 Chr 36:10 and the Babylonian Chronicle: the biblical text records the taking of Jehoiachin to Babylon *lit°šūbat haššānāb*, and the Babylonian text dates the appointment of the new king Zedekiah at the beginning of Adar, the month preceding Nisan,⁴¹ thus clearly in the spring.⁴²

If *t°šūbat haššānāb* has anything to do with the calendar, it is just as natural to presume that it refers to the beginning of a new year as to the midpoint of the calendar year.⁴³ But in fact, as de Vaux's definition already implies, the "return of the year" is a description of seasonal change, and therefore concerns an agricultural year rather than a calendar year.

Ad (3) The sabbatical and jubilee years are also agricultural years and not calendar years of months and days. Naturally they begin after the harvest of the old year has been gathered in, but nothing is thereby implied about the beginning of the calendar year. In the priestly legislation, in fact, the beginning of the sabbatical year does not coincide with the beginning of a postulated autumn new year, but falls on the tenth day of Tishri (Lev 25:9), not on the first. It should also be observed that the sabbatical year is attested after the exile in a period when a spring new year was in force (Neh 10:32 [Engl. 31]), thus confirming that no inferences about the beginning of the calendar year can be made from the date of the commencement of the sabbatical year.

Ad (4) This seems at first a very strong argument for autumnal new year reckoning. But its assumptions need to be examined.

First, it may be doubted whether the inclusive system of reckoning, however normal for single figures,⁴⁴ is being employed here. It is crucial in this case

the autumn, but inconsistently with his comment on 2 Sam 11:1 (p. 247), where he correlates it with the spring.

⁴⁰ See also A. R. Johnson, *Sacral Kingship in Ancient Israel* (2d ed.; Cardiff: University of Wales, 1967) 56 n. 5.

⁴¹ See D. J. Wiseman, *Chronicles of Chaldaean Kings*, 48, 72-73.

⁴² So *t°šūbat haššānāb* cannot mean the midpoint of the calendar year (as, e.g., J. Béglich [*Chronologie*, 88] thought), since the Chronicler both reckoned the year from the spring in the Babylonian-Persian manner and referred to the spring as *t°šūbat haššānāb*. Béglich attempted to avoid this criticism by suggesting that *t°šūbat haššānāb* had become by the Chronicler's time a technical term for the season of the year. But if it were such in the Chronicler's time, it may well have been so also in earlier times.

⁴³ So G. Schiaparelli (*Astronomy in the Old Testament*, 116) argued from 2 Sam 11:1 that a change to a spring new year must have occurred in the time of Solomon.

⁴⁴ See E. R. Thiele (*Mysterious Numbers*, 28 n. 12) for examples.

that the figure 7 in 6:38 forms part of a total:⁴⁵ according to 1 Kgs 9:10, by the end of 20 years (half his reign, 11:42) Solomon had built the two houses, the temple and the palace, spending seven years on the temple (6:38), and thirteen on the palace (7:1). Now inclusive 7 + inclusive 13 makes (inclusive) 19; only exclusive 7 + exclusive 13 make (exclusive) 20. It does not matter, at this point, whether or not the figures are authentic; what is being suggested is that the author responsible for employing them was using an exclusive system of reckoning.

Secondly, are the figures authentic? Here it is reasonable to distinguish between two series of figures. Series A contains the items: "in the fourth year, in the month (*yeraḥ*) Ziv"; "in the eleventh year, in the month (*yeraḥ*) Bul".⁴⁶ Series B contains the item: seven years in building the temple; thirteen years in building the palace; twenty years in building both; forty years' reign. Now series A dates are, assuming there are no scribal errors, as authentic as anything in the Solomon narratives: they are the only dates given for events of Solomon's reign,⁴⁷ and they presumably derive from temple archives; they also employ the old Canaanite nomenclature.⁴⁸ Series B dates, on the other hand, are quite clearly stylized and symbolic: Solomon reigns a round forty years, half of which are spent in building; in those twenty years he spends twice as much time on his own house as on the Lord's,⁴⁹ and the temple is built in the suitably sacred period of seven years. In other words, the "seven years" of 6:38 are not to be traced to a temple archive document reckoning up the years of temple building, but are to be attributed to the deviser of the schematic Solomonic chronology.

A further ground for the separation of the seven-year figure from the regnal year dates of series A is the awkwardness of the last clause of 6:38, *wayyibnēhā šeba^c šānīm*, where the implied subject (Solomon) is not the subject of the preceding verb, and where a strict construction of the waw consecutive puts the

⁴⁵ Totals must be reckoned exclusively; so, e.g., for regnal years, whether on the accession or non-accession year system. A similar example is provided in French: "Quinze jours" is a fortnight, but "trois quinzaines" is not 45 days; the single figure may be reckoned inclusively, but a total has to be reckoned exclusively.

⁴⁶ One should eliminate *hū² haḥōdeš haššēni* from 6:1 and *hū² haḥōdeš haššōmīni* from 6:38 as a glossator's additions, though their presence does not affect the argument. The proposal in Kittel's *Biblia hebraica* (513) to remove *ḥōdeš ziw hū²* from 6:1 rests on a misreporting of the LXX evidence and is in itself implausible.

⁴⁷ We should also include in this series the festival in Ethanīm (8:2), though the regnal year is not explicitly mentioned at that point.

⁴⁸ "The rare archaic names for the months are evidence of the originality of the document" (J. A. Montgomery and H. S. Gehman, *A Critical and Exegetical Commentary on the Books of Kings* [ICC; Edinburgh: Clark, 1951] 144).

⁴⁹ Other hints of a negative attitude to Solomon in the Solomonic narratives may be seen in the narratives about the means by which he gains the throne (1 Kings 1), and of the adversaries brought against him because of his worship of foreign gods (1 Kings 11). See also L. Delekat, "Tendenz und Theologie der David-Salomo-Erzählung," *Das Ferne und Nabe Wort: Festschrift Leonhard Rost* (BZAW 105; Berlin: Töpelmann, 1967) 26-36.

building (*wayyibnēhū*) after the completing (*kālāb*);⁵⁰ also, the clause is missing in the LXX, though that does not prove a great deal. It is, indeed, likely that the figure of seven years was derived from the regnal year dates of 6:38a; but it is suggested here that the reason why the chronologer reckoned seven rather than eight years for the temple building has nothing to do with a Tishri new year system, but is due to the significance of the number seven. The figure of thirteen years for the building of the palace is not apparently derived from any written source, but is simply the result of subtraction of seven from twenty.⁵¹

In conclusion, it may be said that the two assumptions of this argument, that an inclusive system of reckoning is employed, and that the figure of seven years for the building of the temple is an independent piece of evidence and not the result of some stylized reckoning, are both shown to be ill-founded. A Tishri new year reckoning is not ruled out, but it is not positively confirmed by the evidence.⁵²

Ad (5) In discussing the chronology of 2 Kings 22-23, we must distinguish between the likely course of events in Josiah's reign (as we are able to reconstruct them) and what the deuteronomistic historian believed to have occurred.

In the first place there is now a large measure of agreement that the reforms described in 2 Kings 22-23 as occurring in the eighteenth year of Josiah were in fact spread over a considerable number of years, both before and after that year of the finding of the book of the law. There are, indeed, too many events to fit not only into a fortnight, but even into six months (the period between an autumn new year and passover). They include, for example, defiling the high places from Geba to Beersheba, bringing all the priests out of the cities of

⁵⁰ It can hardly be maintained that *wayyibnēhū* is a pluperfect; see the discussion in S. R. Driver (*A Treatise on the Use of the Tenses in Hebrew* [2d ed.; Oxford: Clarendon, 1881] 102-107), where the use of the imperfect with *waw* consecutive to express a pluperfect sense is shown to be "certainly not the usual idiom chosen by Hebrew writers," and in fact to be probably non-existent.

⁵¹ So also M. Noth, *Könige* (BKAT 9/1; Neukirchen-Vluyn: Neukirchener Verlag, 1968) 134.

⁵² A Nisan new year reckoning is perhaps marginally to be preferred. For it appears that the temple building is said to have taken on a Nisan reckoning, seven years and five months, which can be rounded down to seven years, but on a Tishri reckoning six years and five months, which can hardly be rounded up to seven years (inclusive reckoning is not being used, it has been argued above). The five months surplus over the number of full years is accounted for by understanding the month of its "completion," the eighth month (1 Kgs 6:38) to be the month when no work remained to be done. Similarly in Gen 2:2 *kālāb* means not "to complete" but "to have finished." So here it may be assumed that work was concluded in the sixth month, the temple was dedicated in the seventh month, and building was all over in the eighth month. More complicated, and less satisfactory solutions are called for if this significance of *kālāb* is not recognized; for a catalogue of solutions, see, e.g., J. A. Montgomery and H. S. Gehman, *The Book of Kings*, 187; and S. Talmon, "Divergences in Calendar-Reckoning in Ephraim and Judah," *VT* 8 (1958) 48-74, where it is claimed that two different calendars are being employed.

Judah, visiting Bethel, slaying all the priests of the high places in the cities of Samaria (23:8, 15, 20). So on the grounds of historical plausibility, further supported by the evidence of 2 Chronicles 34 which attributes some of the events of 2 Kings 22-23 to the twelfth year of Josiah,⁵³ and by studies of the literary pre-history of the narratives of 2 Kings 22-23,⁵⁴ it can be justifiably claimed that not all the events recounted between 2 Kgs 22:3 and 23:23 took place in the eighteenth year of Josiah, and that therefore no inference about the month in which that year began can be drawn.

Still, it could be argued that what matters for the interpretation of the calendaric references is not what actually happened, but what the deuteronomistic historian thought happened. Does his account not perhaps presume an autumn new year reckoning? Here several possibilities open up: (i) He thought that all the events between 22:3 and 23:23 occurred within a fortnight (spring new year reckoning); (ii) He thought they all occurred within six months (autumn new year reckoning); (iii) He did not think about this question at all, but for purely schematic reasons arranged all his information about Josiah's reforms in a consecutive narrative bounded by the finding of the law-book and the celebration of Passover.⁵⁵ If he thought (ii) was possible, it is hard to see why he could not as easily have thought (i) was possible; for there are no explicit indications of the passage of time in the narrative, and there would have been no physical impossibility in Josiah's doing all he is said to have done in a fortnight if the word of a king is thought as good as a deed. So it is quite plausible to suggest that the Deuteronomist could have imagined that all these events occurred within the fortnight. In that case, the dates of 22:3 and 23:23 have no evidential value for the question of the beginning of the year. Nevertheless, much more plausible than (i) or (ii) is possibility (iii). Without entering more deeply into questions of the traditions available to the Deuteronomist and their relation to the Chronicler's sources, it needs only to be accepted as a reasonable probability that the date in either 22:3 or 23:23 is artificial for 2 Kings 22-23 to be eliminated as evidence for an autumnal new year.

Ad (6) Not many scholars have relied upon this argument for an autumnal new year, since it has been widely agreed that the numbering of the months from the spring as employed in Jer 36:9 proves that the spring calendar had been introduced into Judah by this time.⁵⁶ But this has not proved to be an overwhelm-

⁵³ See E. W. Nicholson, *Deuteronomy and Tradition* (Oxford: Blackwell, 1967) 7-15.

⁵⁴ See, e.g., N. Lohfink, "Die Bundesurkunde des Königs Josias (Eine Frage an die Deuteronomiumsforschung)," *Bib* 44 (1963) 261-88, 461-98.

⁵⁵ That is, "the traditionist *deliberately* ignores chronology in his ordering of the material," as M. Kessler says in another connection ("Form Critical Suggestions on Jer 36," *CBQ* 28 [1966] 389-401).

⁵⁶ So, e.g., J. Begrich, *Chronologie*, 71-72; R. de Vaux, *Ancient Israel*, 185; J. Finegan, *Handbook of Biblical Chronology*, 203; W. Rudolph, *Jeremia* (HAT 1/12; 3d ed; Tübingen: Mohr, 1968) 233.

ing objection to the argument, since some advocates of the autumn new year claim that the year was still regarded as beginning in the autumn even when the months were *numbered* from the spring.⁵⁷

But if it is difficult to explain why Jeremiah waited nine months or more before having his book read in the temple, it must be remembered that it is no less difficult to explain why he waited three months, as he must have done if the regnal years were reckoned from Tishri. Why did he not have Baruch read it at one of the assemblies during the seventh month? E. Auerbach remarks apropos of E. Vogt's statement⁵⁸ that the book was probably written in March 604: "Eine Bombe wie die Buchrolle legt der Prophet nicht für 9-10 Monate auf Eis!"⁵⁹ But neither does he keep it on ice for three months—unless he was prepared to wait until there had developed the kind of situation that had come about by December 604.⁶⁰ If Jeremiah could wait three months, he could wait nine months. All that is demanded is the postulation of an appropriate historical stimulus for the writing of the book, and such is provided by the events of 605 as well as by those of mid 604. While advocates of an autumn new year can see such a stimulus in news of the setting out of the Babylonian army for the Hatti-land in the early summer of 604 (in Jehoiakim's fourth year on a Tishri reckoning), an equally convincing historical occasion for the writing down of the prophecies is provided by the battle of Carchemish and the accession of Nebuchadrezzar in the previous year (Jehoiakim's fourth year on a Nisan reckoning).⁶¹

Ad (7) It would certainly be remarkable if Nehemiah in composing his memoirs ca. 430 B.C. had persisted in painfully translating the legal dates of the beneficent Persian ruler⁶² into a Judean system which most agree had been abandoned by the end of the seventh century in Judah and was not employed by the deuteronomistic historian, Ezekiel, P, the post-exilic prophets, or the Chronicler.⁶³ Thiele thinks that Nehemiah's usage of the Tishri new year system is

⁵⁷ So E. R. Thiele, *Mysterious Numbers*, 28; A. Malamat, "A New Record of Nebuchadrezzar's Palestinian Campaigns," *IEJ* 6 (1956) 246-56; De Vries, "Chronology of the OT," 484. Other instances of the counting of months from the spring, adduced by J. Begrich (*Chronologie*, 70-73), likewise fail to convince advocates of an autumn new year. It is true that the beginning of months and the beginning of the year do not necessarily coincide (as in the modern Jewish calendar), but the origins of such a system raise an interesting problem which will be considered below (section III. 3).

⁵⁸ "Die neubabylonische Chronik über die Schlacht bei Karkemisch und die Einnahme von Jerusalem," *VTSup* 4 (1957) 67-96.

⁵⁹ "Wechsel des Jahres-Anfangs," 116.

⁶⁰ So H. Tadmor, "Chronology of the Last Kings of Judah," *JNES* 15 (1956) 226-30 (esp. p. 227 n. 10). The date Kislev 603 there is probably a mistake for Kislev 604 (see p. 229).

⁶¹ So also Auerbach, "Wechsel des Jahres-Anfangs," 179.

⁶² As H. Tadmor puts it ("Chronology," 227 n. 10).

⁶³ See J. Finegan, *Handbook of Biblical Chronology*, 210-13.

an expression of a "spirit of intense nationalism,"⁶⁴ but he does not explain how Nehemiah happens to be alone among the intense nationalists of the exilic and post-exilic ages in expressing his patriotism in this fashion.⁶⁵

In fact the text of Neh 1:1 is not above suspicion. It is strange that the name of the king whose twentieth year it is remains unmentioned until we reach 2:1. Yet although the text does seem defective, it must be admitted that none of the emendations or interpretations of it is particularly convincing. Some have suggested that 1:1 originally mentioned the "nineteenth" year, not the twentieth;⁶⁶ but a simple scribal error of ^cēśrīm for t^oša^c ^cēśrēb seems rather unlikely, and even a sophisticated reconstruction like that of W. Rudolph is little less arbitrary.⁶⁷ If it is supposed that the memoirs of Nehemiah did not originally begin with a date and that an editor has transferred the year-date of 2:1 to the beginning of the narrative without noticing the chronological problems that were thereby created,⁶⁸ we would want to ask whence the editor derived the month date, and if he invented it, why he bothered to do so. An even less probable suggestion is that the date in 2:1 was originally "twenty-fifth,"⁶⁹ which, indeed, Josephus reckoned to be the year of Nehemiah's arrival in Jerusalem,⁷⁰ since Neh 5:14 confirms that Nehemiah was appointed governor in the twentieth year of Artaxerxes (cf. also 13:6). Implausible also is the suggestion that the twentieth year was the twentieth year since Hanani's departure from Susa.⁷¹ Perhaps the most reasonable solution, though it too leaves unexplained the

⁶⁴ *Mysterious Numbers*, 30; "fanatic nationalism," according to J. Morgenstern ("New Year for Kings," 442).

⁶⁵ The theory of a resumption of autumnal reckoning after the exile does not appear well-founded. S. H. Horn and L. H. Wood ("The Fifth Century Jewish Calendar at Elephantine," *JNES* 13 [1954] 1-20) claimed such a system was in operation at Elephantine, on the basis of the double dating of some of the Aramaic papyri according to Egyptian and Jewish reckoning. But R. A. Parker ("Some Considerations on the Nature of the Fifth-Century Jewish Calendar at Elephantine," *JNES* 14 [1955] 271-74) showed that such a system is presupposed by only one document, and argued persuasively for the possibility of a scribal error in the date contained therein. See also B. Porten, *Archives from Elephantine* (Berkeley: University of California, 1968) 197. Horn, however, seems unconvinced by Parker's proposal (see "Babylonian Chronicle," 16), as does Thiele (*Mysterious Numbers*, 30).

⁶⁶ So, e.g., F. X. Kugler, *Von Moses bis Paulus*, 194 n. 1.

⁶⁷ He supposes that 1:1 originally read כסלו שנת תשע עשרה לארתחשסתא המלך, that the similarity of the two final letters of כסלו to those of המלך brought about the omission of the intervening words, and that subsequently an editor filled the gap mechanically with the date of 2:1 (*Esra und Nehemia* [HAT 1/20; Tübingen: Mohr, 1949] 102). But why did the editor not also mention that it was the twentieth year of Artaxerxes?

⁶⁸ Cf. L. H. Brockington, *Ezra, Nehemiah and Esther* (Century Bible, New Series; London: Nelson, 1969) 127; R. de Vaux, *Ancient Israel*, 192.

⁶⁹ Cf. H. Tadmor, "Chronology," 227 n. 10.

⁷⁰ *Ant.* 11.5,7 §168.

⁷¹ G. da Deliceto, "Epoca della partenza di Hanani per Gerusalemme e anno della petizione di Neemia ad Artaserse," *Laurentianum* 4 (1963) 431-68 (cf. *ZAW* 76 [1964] 347).

omission of the king's name in 1:1, is that an original "nineteenth year" was altered to "twentieth year" by an editor of the Greek period used to reckoning royal years on the Seleucid system of an autumn new year;⁷² to wait from the Kislev of the nineteenth to the Nisan of the twentieth year, a period of fifteen months on autumnal reckoning, may have seemed to an editor an incredible tax on Nehemiah's patience.

Thus, although no perfectly satisfactory alternative to the date in Neh 1:1 can be proffered, it is clear that to base upon it an argument about when Nehemiah reckoned the new year began and hence when the pre-exilic new year began, is risky in the extreme. Once again a verdict of *non liquet* must be returned upon a passage that has at times been confidently used to support the theory of an autumn new year.

Ad (8) On the usual dating of P, this interpretation of Exod 12:2 implies that the date of the new year was still a debated question a century or more later than the time of the adoption of a spring new year in late pre-exilic times,⁷³ as is most generally agreed. This seems rather implausible. If P is to be dated earlier than the exile, the same objection does not apply. But the fundamental problem that remains, whatever the date of Exod 12:2, is that there is no evidence for interpreting it as a polemical defence of a new calendar. It can with no less justice be regarded as a natural attribution to Moses of a significant Israelite institution, the calendar. Its place at the head of the Passover law is perfectly intelligible, for just as the Passover marks the beginning of the people of Israel, so the month in which it is celebrated marks the beginning of the year. There are, therefore, no grounds for finding here evidence for an autumn new year.

Ad (9) This is not the place to embark upon a full-scale examination of the merits of the competing chronologies of the kings of Israel and Judah that have been offered,⁷⁴ nor to test Thiele's claim that only on the supposition of Tishri new year reckoning in Judah will the chronological data and synchronisms "work." Here only some theoretical observations can be made, together with a report on a sample probe of the evidence relating to one circumscribed period which I have undertaken.

First, it may be observed that when there are at the disposal of the scholar principles such as co-regency, alternation of accession and non-accession year

⁷² So H. Schneider, *Die Bücher Esra und Nehemia* (Die heilige Schrift des Alten Testaments, 4/2; Bonn: Hanstein, 1959) 163.

⁷³ It is noteworthy that S. Mowinckel finds it necessary to speak of "the (comparatively) new thing enforced here" (*Psalms in Israel's Worship*, 2. 234).

⁷⁴ E.g., J. Begrich, *Chronologie* (1929); S. Mowinckel, "Chronologie" (1932); W. F. Albright, "The Chronology of the Divided Monarchy of Israel," *BASOR* 100 (1945) 16-22; V. Pavlovský and E. Vogt, "Jahre der Könige" (1964); A. Jepsen, *Zur Chronologie der Könige von Israel und Juda* (1964); K. T. Andersen, "Chronologie" (1969). For a comparative table, see E. R. Thiele, *Mysterious Numbers* (1st ed.; Chicago: University of Chicago, 1951) 254-55.

systems, and variant dates for the new year, which are fundamentally arbitrary (i.e., can be called upon when the researcher needs them in the interest of his theory), it is possible that actual scribal errors in the text could be covered up, with resultant errors in the chronology.

Secondly, it is remarkable that virtually no scribal errors have, according to Thiele's reconstruction, occurred in the many relevant figures found in the text. A text like Ezra 2 // Nehemiah 7, preserved in parallel transmission, shows that a significant number of scribal errors is likely to have occurred.⁷⁵

Thirdly, the fact, assuming that it is a fact, that regnal years and synchronisms "work" on the basis of a Tishri new year in Judah does not preclude the possibility that on a Nisan system the figures, or most of them, will "work."⁷⁶ What is required before the Nisan system is ruled out altogether is a testing of all the possibilities using the full range of variables (co-regency, interregnum, calendar and new year reckoning), with certain given and pre-determined data (regnal years, internal and external synchronisms, plausible upper limit of scribal errors,⁷⁷ plausible age of a king at the birth of his first child,⁷⁸ etc.).

Fourthly, even if the synchronisms break down on the supposition of a Nisan new year in Israel and Judah, a Tishri new year is not the only alternative. S. Talmon, for example, has maintained that in Israel the year began one month later than in Judah, and has explained discrepancies in the biblical dates on that basis.⁷⁹

Fifthly, an investigation of the chronological data relating to the years 609-587/6 B.C. with a view to determining whether a Nisan or a Tishri system of reckoning was in operation has shown that all the data, comprising material from 2 Kings, Jeremiah, Ezekiel, and the Babylonian Chronicle can best be harmonized on the supposition of the Nisan new year reckoning.⁸⁰ Most of the arguments advanced in favor of an autumnal new year are inconclusive, and only Dan 1:1, a verse which contains problems of its own, demands a Tishri system. On the other hand, the date of the battle of Carchemish given in Jer 46:2, which we know from the Babylonian Chronicle occurred before Ab 8, can be syn-

⁷⁵ A point already made by W. F. Albright ("Chronology," 17) but perhaps exploited too freely by him (note the table of Albright's emendations provided by E. R. Thiele, *Mysterious Numbers* [1st ed.], 245).

⁷⁶ It is instructive to notice that S. Mowinckel supported his different chronological system (autumn new year in Judah and Israel right through the monarchy) with exactly the same argument as E. R. Thiele: it works! ("Chronologie," 176).

⁷⁷ If there are too many, attempts at reconstruction of a chronology are a waste of time. Some scholars have, in fact, argued that the data do not permit a precise reconstruction of the chronology; so D. N. Freedman, "Old Testament Chronology," 209; M. D. Johnson, *The Purpose of the Biblical Genealogies with Special Reference to the Genealogies of Jesus* (SNTSMS 8; Cambridge: Cambridge University, 1969) 260.

⁷⁸ Cf. the role of the acceptable limit for such a duration in the discussion by W. R. Wifall ("The Chronology of the Divided Monarchy of Israel," *ZAW* 80 [1968] 319-37).

⁷⁹ "Divergences in Calendar Reckoning in Ephraim and Judah," *VT* 8 (1958) 48-74.

⁸⁰ D. J. A. Clines, "Regnal Year Reckoning," pp. 9-34.

chronized with Jehoiakim's fourth year only on a Nisan reckoning. Further, a calculation of the probable date of Jehoiakim's accession to the throne makes it more likely than not that his regnal years were reckoned from Nisan. These results prove nothing about the reckoning of years earlier than 609, but at least they show that during the period examined it is the Nisan rather than the Tishri system that "works."

It may be that in the end Thiele's system may prove to be correct. If it is, what should be pointed out here is that it is the only surviving evidence for a Tishri new year in pre-exilic Judah. That is in itself no argument against Thiele's chronology, but it is as well to know on what grounds the almost universally accepted view of an autumn new year may be sustained.

Ad (10) The difficulty with this argument is that it proves too much. For the Gezer calendar does not simply attest a year beginning in the autumn; it attests a year beginning with "ingathering" (*ṣp*), which is the *final* element in the ancient Israelite festival calendar. Unless we are to postulate two variant systems of autumnal new year reckoning, it seems necessary to maintain that neither the Gezer calendar nor the festival calendars are calendars in the strict sense of the word. A calendar is a list of months (and days) in which the distinction between the first month and the twelfth is clearly marked and which obviously must begin with the first month. A list of seasons, on the other hand, which the Gezer calendar plainly is, does not need to begin at a particular point in the year, although, of course, in the Palestinian context it is likely to begin about the time of autumn, the most conspicuous transitional point in the seasonal year. The structure of the Gezer calendar, which is arranged according to the activities of the farmer's year and not integrated with month names or even divided into twelve periods, makes it unlikely that it is an official calendar,⁸¹ and unlikely also that it should be regarded as a calendar at all in the sense that an inference about the beginning of the civil year can be made from it.

III

Finally we may consider whether there is any evidence in favor of a spring new year in pre-exilic times. Here it must be said that if the data for an autumn new year have proved inconclusive, the evidence for a spring new year is far from cogent. Three arguments may be advanced:

(1) The four lists of festivals (the so-called festal calendars contained in Exod 23:34, Deuteronomy 16, and Leviticus 23), which range in date, according

⁸¹ As recently S. Talmon, "The Gezer Calendar and the Seasonal Cycle of Ancient Canaan," *JAOS* 83 (1963) 177-87. R. de Vaux's view, that it is "a concordance table between twelve lunations (the months of the official year, listed here without their proper names) and the periods of the agricultural year" (*Ancient Israel*, 184) is open to the objection that it is precisely the absence of month names which shows that it cannot be such a concordance.

to the conventional analysis, from the pre-monarchic to the post-exilic period, are at one in beginning the enumeration of festivals with the spring festival of Passover. This would be strange if the only year known in pre-exilic Israel began in autumn. It would be more natural if that were the case for the autumn festival to head the list. This implication could be evaded only if the phrase "at the end of the year" in Exod 23:16 is interpreted narrowly to mean that the new year began after the end of the autumn festival⁸² (contrary, of course, to the priestly calendar). But many scholars claim that "the end of the year" is a vague term and affirm that the autumn festival celebrated both the end of the old year and the beginning of the new.⁸³ If that were so, would the autumn festival not be expected to hold first place in the list?

But the argument so far begs one question: Have the seasons of the festivals anything to do with the calendar year? I have argued above (*ad* 1) that as agricultural festivals they are related in the very early lists of Exodus 23 and 34 to the agricultural, not the calendar, year, as they have been by the time of the priestly law of Leviticus 23. The one exception to this claim is the specification of the month Abib as the date of the festival of unleavened bread (Exod 23:15; 34:18; cf. Deut 16:1). It does not matter for our present purpose whether or not the reference to Abib is original in the text of Exodus 23 or 34; it is enough that it appears in a form of the festival law that dates from some period in the monarchy. Now the month Abib is surely not specified in order to prevent unleavened bread or passover from being celebrated at some other time in the year; for the same need to specify the month is not felt in the case of the other festivals. Can Abib be specified because it is a more significant month than the months in which the harvest and ingathering festivals fall, i.e., because it is the first month of the year of months? Little weight can, indeed, be placed on this argument, but some explanation of the mention of this month alone seems to be called for.

(2) A certain amount of evidence has been produced for characterizing the spring festival, Passover, as a new year festival. J. B. Segal has most recently presented an impressive range of parallels in ritual and ideology between new year festivals in other ancient near eastern cultures and the Passover in Israel and has concluded that "to the Hebrews the Passover . . . was primarily a New Year festival."⁸⁴ But quite apart from the dubiety of the assumptions inherent in any patternist approach⁸⁵ (of which Segal's work must be acknowledged as one of the most cautious examples), his case is largely undermined by the fact

⁸² So, e.g., E. Auerbach ("Wechsel des Jahresanfangs," 113 n. 1), arguing that the year began on Marḥešwan 1, after the autumn festival.

⁸³ So, e.g., S. Mowinckel, *Psalms in Israel's Worship*, 2. 234.

⁸⁴ *The Hebrew Passover* (London: Oxford University, 1963), ch. 4, esp. p. 117. So previously S. H. Hooke, *The Origins of Early Semitic Ritual* (London: Oxford University, 1938) 48-50; I. Engnell, "Paesah-Maṣṣot and the Problems of 'Patternism,'" *Orientalia suecana* 1 (1952) 39-50.

⁸⁵ See the review by H. Kosmala, *VT* 14 (1964) 504-9.

that equally remarkable parallels may be drawn between the autumn festival of tabernacles and new year themes;⁸⁶ and Segal himself does not deny that tabernacles was also a new year festival.⁸⁷

(3) The numbering of months from the spring is *prima facie* evidence of a spring new year. This argument can be countered by postulating the adoption of the Babylonian spring calendar earlier than the first reference to the numbering of months (Jer 36:9, if the references in 1 Kgs 6:1, 38 are removed as glosses). It is most improbable, however, that the months should be numbered from spring by a society that not only still used an autumn calendar but had always had an autumn calendar. To that extent the argument of Thiele and others that autumn new year reckoning persisted throughout the monarchy even when the months were plainly being counted from the spring,⁸⁸ seems quite implausible.

The conclusion of this study is that while there are no data that categorically exclude autumnal reckoning of the calendar year prior to ca. 605 B.C., there are no data that support it, not even cumulatively. On the other hand, there is one piece of evidence (the reference to Abib in the festival "calendars") which may suggest spring new year reckoning, but which certainly does not amount to a strong argument in favor of such reckoning. What can be claimed, however, is that it can no longer be confidently affirmed that in pre-exilic Israel the calendar year began in the autumn, nor can it be said with confidence that the Babylonian calendar was adopted ca. 605 B.C., nor can it be assumed that the reckoning of months according to a spring new year can be used as a criterion for dating a document in which it occurs.

⁸⁶ Cf. especially S. Mowinckel, *Psalms in Israel's Worship*, 1. 119-20; 2. 233-34.

⁸⁷ *Hebrew Passover*, 117.

⁸⁸ See note 57 above.