

BABYLONIAN MENOLOGIES  
AND THE  
SEMITIC CALENDARS

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## INTRODUCTION

THE three lectures in this volume contain a general survey of all the Semitic calendars with special reference to the Babylonian and Assyrian menologies. Although many articles have appeared on some aspects of the Sumerian and Babylonian calendars, there is no book on the subject with the exception of a very technical and learned investigation of the various month-lists of the Sumerian cities.<sup>1</sup> This work has not been completed and the part designed to cover the Babylonian and Assyrian Holy Year, the most important part of the subject, remains unpublished. In recent years the texts of nearly the whole of the early Assyrian Church Calendar have been published,<sup>2</sup> and I have ready for press a critical edition of them as well as of the reformed calendar issued by Ašurbanipal of Assyria in the seventh century. For the text of the latter menology I have copied all the known fragments in the British Museum together with all the fragments of the almanacs. My critical edition also includes a very large number of fragments and texts which deal with special days in each month and all the omen texts from Assur, Nineveh, and Babylonia which have to do in any way with the months and days. My *Schweich Lectures* are based upon this edition of texts, at present almost entirely untranslated, and consequently this book is really an introduction to the philological edition. Since it will appear earlier than the edition of the texts, I have, so far as space allowed, given the reference to the sources on which the statements rest.

It is obvious that with so much new material at my disposal the history and influence of the Sumerian and Babylonian calendars have been elucidated in a manner far more complete and satisfactory than was possible hereto-

<sup>1</sup> Benno Landsberger, *Der kultische Kalender der Babylonier und Assyrer*, Leipzig, 1915.

<sup>2</sup> Eric Ebeling, *Keilschrifttexte aus Assur religiösen Inhalts*, Nos. 176-9.

fore. The influence of Sumerian religion and culture upon the whole history of western Asia down to our era, and continued in the Jewish calendar to our day, in the Syriac Christian calendar, and in the religious year of the Şabeans of the Middle Ages, can be traced and proved. It was natural also that with this most fortunate addition to our knowledge, placing in our hands almost a complete text which gives details of the religious and civil rules imposed upon all Babylonians and Assyrians for every day in the year, an Assyriologist should carry his investigation beyond the culture which produced it and seek to trace its influence upon Judaism, Syrian religions, and parallels if not influences in Greece and Rome. The myths of the months have particularly attracted my attention, a subject which involved arduous study of astronomical texts. Here I must at once acknowledge the valuable assistance of my learned friend, J. K. Fotheringham, D.Litt., who is now, I am glad to say, also a Fellow of our Academy. The assistance I have received from Professor D. S. Margoliouth, Professor Jeffery of Cairo, and Mr. Beeston on the early Arabic calendars has been mentioned in its proper place. My thanks are also due to Mr. J. U. Powell for assistance on the Latin calendar, and to Mr. R. McKenzie on the Greek calendar. I must apologize for the brevity of my investigations on the months Kislev, Tebit, Shebat, and Adar. The size of the volumes permitted in this series restricted the continuation of the full history of the months after Arahsamna.

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## LECTURE I

### HISTORY OF THE SUMERIAN, ACCADIAN, ASSYRIAN, AND WEST SEMITIC CALENDARS

**I**N these lectures I do not deal in detail with the Sumerian calendars of the pre-Sargonic period except in those cases where the month-name can be definitely fixed in the series or can be used to throw light upon the monthly festivals of the Nippurian calendar, whose series is certain. My object in these lectures has been to trace the myths and festivals of the Nippurian calendar which finally prevailed over all other Sumerian, Accadian, Assyrian, and West Semitic calendars, and became the monthly series of the Jewish Church. The great menologies of Assyria which were promulgated about 1000 B.C. and are clearly copies from Babylonian originals reveal traces of the myths of the old Sumerian months. To understand the rules and myths of the Babylonian and Assyrian menologies, which finally issued in the form of the great series *enbu bél arhim*, 'The fruit, lord of the month', promulgated by Ašurbanipal in the seventh century (on the basis of Babylonian originals) in fifteen tablets (twelve months and three intercalary months), it is necessary to study first of all the Sumerian calendar of Nippur on which they are based. The myths of the Sumerian months gave rise to the association of certain constellations, principally signs of the zodiac, with those myths, and in principle those constellations, which rose heliacally at the time of the monthly festivals, are those which became associated with the months. It is obvious that the process of discovering figures in the constellations to suit the monthly myths began as early as 3000 B.C., that is, when Taurus and the Pleiades were rising heliacally soon after the spring equinox. If it can be proved that the stars of this constellation are woven into the myth and festival of the first Sumerian month it proves that the

Sumerians connected the myth with that constellation when it was rising heliacally in the first month. It follows presumably that the other signs of the zodiac, if they were discovered in the early Taurus period, correspond to months in each case one month earlier than in the Aries period, when Aries was rising in the first month, that is after 500 B.C. (A date anywhere between 1100–500 B.C. can be assumed for the beginning of the Aries period.)

In the discussion of the monthly festivals and legends connected with each month I have presumed an *ideal* year beginning with the rising of Pleiades and Aldebaran in Taurus in the month *Barazaggar* of the Nippurian calendar, that is Nisan of the Babylonian. For the Aries period there are several sources (not always in agreement), which give the decans or three principal stars governing each month after about 1100 B.C. The following table, obtained by combining the various sources, is used throughout my discussion. As a general principle, to ascertain the stars and constellations rising in a month 3000–2000 B.C., when the myths of the months were associated with them, it is necessary to shift the entries for any given month one place earlier. For example, the decans of *Ayar* after 1100 B.C. would be those of Nisan in the Sumerian period 3000 to 2300 B.C. when the calendars, feasts, and myths were finally fixed. I use as a basis the *Astrolabe Pinches*.<sup>1</sup> This is controlled by Thureau-Dangin, *Uruk*, 14 Obv. 14–19, which gives the twelve regents of the *ha-la* (divisions) of the path of the sun and moon.

<sup>1</sup> Published in transcription only from two tablets, with no information as to their dates, *JRAS*, 1900, 573–5. It was reproduced by Kugler, *Sternkunde*, 1 229–30 and *Ergänzungen*, 201 with identifications of each decan with stars of Accad, Elam, and Amurru; Kugler omits the figures after each decan, but Weidner, *Handbuch*, 65–6, reproduced Pinches' copy with figures. For Weidner's explanation of the figures see my *Epic of Creation*, 153; for Fotheringham's theory see *ibid.* 154. The same figures occur on the fragmentary astrolabes, CT. 33, 11–12.

ARIES PERIOD (*after* 1100 B.C.)

## NISAN

*Iku*, 'Field star', Aries+Cetus. Way of Ea.<sup>1</sup>

*Dil-bat*, Venus, as constellation, N.E. Pisces.<sup>2</sup> Way of Anu.

*Apin*, Plough star, Triangulum. Way of Enlil.<sup>3</sup>

In Taurus period stars of Adar.

## AYAR

*Mul-mul*, 'The stars', Pleiades, called 'Seven gods'. Ea way.<sup>4</sup>  
[*Gud-an-na*, Bull of Heaven, Taurus, 85-4-30, 15.]<sup>5</sup>

<sup>1</sup> KAV. p. 123, 1; CT. 33, 2, 40, first of Anu stars and *šu-bat* <sup>d</sup>*Anim*, KAV. p. 119, 1; but CT. 33, 2, 40 called *šu-bat* <sup>d</sup>*E-a*, abode of Ea; Vir. *Ish.* xxvi 1; but CT. 33, 3, 36, the star lù-KU-MAL rises Nisan 1, and BM. 85-4-30, 15 = Brown, *Researches*, II 46, makes lù-KU-MAL the regent of Nisan, see Kugler, *Ergänz.* 168; Weidner, HB. 121. lù-KU-MAL = *agarru*, hireling, is a name for Aries, Weidner, HB. 161. Both names are late and have no reference to the word Aries, ram. Also lù-KU-MAL = *agrum*, CT. 41, 49 Rev. 7; from the glosses, *ibid.* 4 and 7, the reading is *gu-un-ga(r)*; the Sumerians named this constellation 'The Hireling', labourer for some unknown reason. The Babylonians did not see a *ram* in this constellation. See Jeremias, A.G. 214. In the Taurus period this constellation governed Adar. And in Adar sacrifices to Ea and the Ea cult are prominent. Langdon, *Archives of Draham*, No. 49; Genouillac, *Trouwaille*, 77. Therefore 'The Hireling' and 'Canal Star' were connected with Ea. But one of the symbols of Ea is the *ram*, Langdon, *Sem. Myth.* 106 at top. In view of the fact that the other constellations are all of Babylonian origin it is curious that this is the only evidence that they knew the sign as Aries. Aries as the star *gunga* is Tammuz, CT. 33, 2, 43; *lù gunga*, regent of Nisan, Thureau-Dangin, *Uruk*, 14, 14; 12 Rev. section 8. BM. 85-4-30, 15 is now 77821 in the British Museum and is more correctly published in *The Babylonian Legends of the Creation*, a brochure published by the British Museum, photo. p. 27, text copy, p. 75.

<sup>2</sup> So Weidner, HB. 71, surely right; KAV. p. 123, 2. An Anu star, CT. 33, 3, 13.

<sup>3</sup> CT. 33, 3, 37 gives <sup>mul</sup>*gàm*, rising Nisan, 20; part of Auriga, Kugler, *Ergänz.* 54; 209; Weidner, *Tallqvist Vol.* 355. *gamlu*, a curved weapon, CT. 33, 1, 4, in the hand of Marduk, V Raw. 46 A 3. Enlil star, CT. 33, 1, 1.

<sup>4</sup> So KAV. p. 123, 2, but Anu way, CT. 33, 2, 44; 9, 9. Constellation of Ayar, Vir. *Ish.* xxvi 3; *Uruk*, 14, 14. Rises Ayar 1, CT. 33, 3, 38.

<sup>5</sup> The Babylonians discovered this sign, <sup>mul</sup>*gù-an-na*, KAV. p. 119 1



*Šu-gi*, The old man, here Auriga?.<sup>1</sup> Way of Anu.<sup>2</sup>

*Anunîtu*, Star of goddess Anunit. Enlil way.<sup>3</sup>

[<sup>is</sup>*u*li-e, Star of the tablet, Aldebaran.]<sup>4</sup>

In Taurus period stars of Nisan.

## SIVAN

*Sibzianna*, 'Faithful shepherd of heaven', Orion. Ea way.<sup>5</sup>

*Ur-a*,<sup>6</sup> 'Water-dog', Canis Minor?

*Muš*, 'The serpent', Hydra. Enlil way.<sup>7</sup>

[*Maš-tab-gal-gal-la*, 'Great twins', Gemini.]<sup>8</sup>

In Taurus period stars of Ayar.

## TAMMUZ

*Kaksisa*, 'The javelin', Sirius. Ea way.<sup>9</sup>

*Maštabba*, 'The twins', Gemini minores. Anu way.<sup>10</sup>

26, not later than 1000 B.C., and probably much earlier. *mul-mul* and <sup>mul</sup>*gud-(an-na)*, regents of Ayar, Thureau-Dangin, *Uruk*, 12 Rev. section 9.

<sup>1</sup> So Weidner, HB. 70. Visible in Ayar, Harper, *Lett.* 679, 6. But CT. 33, 4, 12, *šu-gi* rises Adar 15, hence Kugler, *Ergänz.* 14; 53; 208, Perseus.

<sup>2</sup> So KAV. p. 123, 2; but, CT. 33, 1, 3, Enlil way; also 6, iv 5.

<sup>3</sup> So KAV. p. 123, 3; but Anu way, CT. 33, 2, 42. Rises, Shebat 25, CT. 33, 4, 11, and hence Kugler, *Ergänz.* 217 and p. 11, S.W. Pisces. So also Weidner, HB. 72, reckoning for 4000 B.C.

<sup>4</sup> CT. 33, 3, 39, rises Ayar 25.

<sup>5</sup> So KAV. p. 123, 3. But Anu way, CT. 33, 2 II 2; 9 Rev. 10. The only regent of Sivan, Vir. *Isht.* xxvi 7.

<sup>6</sup> KAV. p. 123, 3, *ur-gu-la*, great lion, Anu way. *Ur-gu-la* is Leo and rises more than a month after Orion, hence it is impossible here. *Ur-a* also Clay, *Morgan*, iv 20, 1. The only regent of *Ab*, *Uruk*, 14, 16.

<sup>7</sup> So KAV. p. 123, 3; but CT. 33, 2 II 8, Anu way. Pinches gives the sign NAGAR not MUŠ.

<sup>8</sup> 85, 4, 30, 15. Enlil way, CT. 33, 1, 5. For Kugler's attempt to explain how Leo and Hydra were falsely assigned to Sivan for mythological reasons, see Kugler, *Ergänz.* 205. *Uruk*, 14, 15, *ül-maš-maš*, only regent of Sivan, i.e. Gemini. *Uruk*, 12 Rev. section 10, has <sup>mul</sup>*maš-maš*, Gemini, and <sup>mul</sup>*sib-(zi-an-na)*, Orion, as regents of Sivan.

<sup>9</sup> But CT. 33, 2 II 6, Anu way; also 9, 11. Only regent of Tammuz, Vir. *Isht.* xxvi 9. The Babylonians did not see a dog in the constellation Canis major, but a bow, <sup>mul</sup>*pan*, see *Epic of Creation*, 176.

<sup>10</sup> But CT. 33, 1, 6, Enlil way. They rise Tammuz 5, or 10 days

*Altar*, 'The destroyer', Cancer. Enlil way.<sup>1</sup> Var. *Bulug*, crab.  
In Taurus period regents of Sivan.

## AB

*Pan*, Bow star, Canis major. Ea way.<sup>2</sup>

*Mastabbagalgal*, 'Great twins', Gemini. Anu way.<sup>3</sup>

*Margidda*, 'Long wagon', Ursa major. Enlil way.<sup>4</sup>

[*Ur-a*, 'Water-dog', here certainly Leo.]<sup>5</sup>

[*Bir*, 'The kidney.']\*<sup>6</sup>

In Taurus period regents of Tammuz.



## ELUL

*Bir*, *Kalitu*, 'Kidney star', part of Virgo (?).<sup>7</sup> Ea way.

*Ugga*, 'Raven', Corvus. Anu way.<sup>8</sup>

*Šu-pa*, 'The brilliant star', Arcturus. Enlil way.<sup>9</sup>

Since in the Taurus period there was a myth concerning the purification of Ishtar in Elul, the constellation Virgo before Sirius, 33, 4, 41, hence order of risings is not followed here. They are described as bearded, Weidner, AOF. iv 74, 8.

<sup>1</sup> So KAV. p. 123, 4, where Cancer is represented by Jupiter, since its hypsoma is in Cancer. 85-4-30, 15 has *al-lul*, Cancer, as the only regent of Tammuz; also CT. 33, 4, 41, *al-lul* 'the wicked, rebellious star'. The Babylonians also named this sign BULUG, crab (?), written , probably an error for , Thureau-Dangin, *Uruk*, 14 Obv. 15, regent of the fourth (*riba-ni-tum*) division of the path of the sun. See Neugebauer-Weidner, BSGW. 67<sup>2</sup>, 31, 10 and p. 73; 83; AJSL. 40, 191, 4-6; *Uruk*, 11 Obv. 4. It is certain that this sign was known as *crab*; *abzamakku* as epithet gives no help, Weidner, AOF. iv 80. Cancer is an Anu star in other texts, Weidner, AOF. iv 80 n. 1. <sup>mul</sup>*al-lul*, Cancer, regent of Tammuz, *Uruk*, 12 Rev. section 11; here Cancer is identified with the city KA + NE - KA + NE, i.e. Fire city, originally connected with the fire-worship of Sivan. *Allul* as second regent of Tebit (see below) is false.

<sup>2</sup> KAV. p. 123, 5, but Anu way, CT. 33, 2, 7. Rises with Regulus ( $\alpha$  Leonis), Ab 5, CT. 33, 4, 44. <sup>3</sup> But Enlil way, CT. 33, 1, 5.

<sup>4</sup> Also CT. 33, 1, 15, restored by Kugler, *Ergänz.* 55.

<sup>5</sup> *Uruk*, 14, 16. <sup>mul</sup>*Ur-gu-la*, *Uruk*, 12 Rev. section 10; Leo.

<sup>6</sup> Regent of Ab in Vir. *Isht.* xxvi 12. See *Elul*. On identifications see OECT. vi 75 n. 1.

<sup>7</sup> Kugler, *Ergänz.* 203, *Vela*; Weidner, HB. 71, Carina and Vela.

<sup>8</sup> Also CT. 33, 2, 9; 9 Rev. 11.

<sup>9</sup> Also CT. 33, 1, 12.

should occur in Teshrit in the period of the astrolabes, but it is not found there. Spica, <sup>mul</sup>absim, represented as a maiden holding an ear of corn,<sup>1</sup> rises Elul 25 or at the end of the month,<sup>2</sup> and was known as goddess Shala of the ear of corn.<sup>3</sup> Three texts give spica, 'the ear of corn', as the only regent of Elul.<sup>4</sup> It is certain that the Babylonians saw Virgo here, and that they regarded it as the corn-goddess Nidaba; see Gudea, Cyl. A 6, 1, Nidaba *mul kù-ba*, 'the holy star', hence the Sumerians already knew this constellation as 'corn-goddess', rising in time of Gudea at the *beginning* of Elul. [*He-gál-a-a*, Star of plenty, Coma Berenices? Enlil way.]<sup>5</sup> [*Dil-bat*, Venus in Elul, that is Eridanus.]<sup>6</sup> [*Eridu*, Star of Eridu, Vela, and Eridanus. Ea way.]<sup>7</sup>

## TESHRIT

*Ninmah*, Star of the goddess Ninmah, Carina?, Hydra?.  
Ea way.<sup>8</sup>

*Zibanitu*, The scales, Libra. Anu way.<sup>9</sup>

*Entena-maš-guz*,<sup>10</sup> 'Boar star', Centaurus. Enlil way.<sup>11</sup>

<sup>1</sup> See the design, *Sem. Myth.*, p. 305; Thureau-Dangin, *Uruk*, No. 12.

<sup>2</sup> CT. 33, 4, 47.

<sup>3</sup> CT. 33, 2 Rev. 10.

<sup>4</sup> Thureau-Dangin, *Uruk*, 14 Obv. 16 (KI-HAL = absim); 85, 4, 30, 15, *ab-sim*; <sup>mul</sup>*ab-sim*, *Uruk*, 12 Rev. section 1.

<sup>5</sup> Vir. *Ish.* xxvi 15; star of goddess Zarpanit.

<sup>6</sup> Ibid. 16 and see 81, 7-6, 102 l. 4 = PSBA. 1909, Pl. iv.

<sup>7</sup> Regent of Elul, PSBA. 1909, 24, Pl. iv 4. Rises Elul 10, CT. 33, 4, 45. See Kugler, *Ergänz.* 221; Hommel, *Geographie*, 371; *Sem. Myth.* sub 'Eridu'. Weidner, HB. 120, thinks it is the Southern Cross.

<sup>8</sup> KAV. p. 123, 7; CT. 33, 3, 21, at right of Vela and Eridanus. See p. 106.

<sup>9</sup> An Anu constellation, CT. 33, 2, II, 11; 9, Rev. 10. Thureau-Dangin, *Uruk*, 14, 17, <sup>ul</sup>*giš-rin*, 'the scales', *gišrinnu* as regent of Teshrit; also 12 Rev. section 2, there star of Nippur. See p. 99.

<sup>10</sup> Astrolabe Pinches *stg*, also KAV. p. 123, 7 and inner ring of Teshrit, CT. 33, 12, below, with [*zi-ba-an-*]na in middle ring = *Zibanitu*. But *stg*, *gunu* of LUM, which is more common, must have been read *guz*. See LUM (*gu-uz*) = *apparrú*, swamp-boar, *Voc. Scheil*, 36, and BM. 93059, 11 and *šaḥ-maš-guz* = *apparrú*, CT. 14, 1 B 33. Hence star *entena*, the swamp-boar; cf. RA. 14, 22, 24.

<sup>11</sup> But Ea way, CT. 33, 3, 22. Weidner, AOF. iv 80 n. 5 argues

Since the New year festival of Teshrit is based upon the myth of the judgement of souls, and this myth was connected with the scales, *Libra*, it is impossible to place the origin of this myth earlier than about 2000 B.C., when *Libra* would be rising toward the beginning of Teshrit. In other words the myth of judgement at New Year in Teshrit must be much later than the same myth of Nisan, connected with *Taurus*. For purposes of mythology and monthly festivals the stars of Teshrit here cannot be put back into Elul as regents of the sixth month in the *Taurus* period.<sup>1</sup>

Note that *Libra* is the star of Nippur, seat of the Enlil cult (Thureau-Dangin, *Uruk*, 12 Reverse).

#### ARAHSAMNA

*Uridim*, 'The mad dog', *Lupus*. Ea way.<sup>2</sup>

*Girtab*, 'Scorpion star', *Scorpio*. Anu way.<sup>3</sup>

*Rabbu*<sup>4</sup> 'The blazing star', *Corona borealis*?

*Scorpio* was regent of Teshrit 3000 B.C. and no mythology of that month is connected with it. It is said to be the star of the city *Hisku* and the stone breccia is sacred to it.<sup>5</sup>

The regents of Arahsamna in the Mul-Apin series are: 'Scorpio', rises on the fifth; head of Capricorn 'she-goat', with 'Breast of Scorpio', rises on fifteenth.<sup>6</sup>

*Lupus* is placed in Teshrit by the same series.<sup>7</sup>

against *Centaurus*. Only regent of Teshrit, PSBA. 1909, 24, Pl. iv. Regent of Teshrit rising on 15th, AJSL. 40, 190, 2 with <sup>mul</sup>*Ur-ku* 'Great dog', *Hercules*. Syriac month *hazîrân*, p. 65.

<sup>1</sup> *Vir. Isht.* xxvi 18 gives *Scorpio* as regent of Teshrit, preserving the astronomy of the *Taurus* period.

<sup>2</sup> Also CT. 33, 3, 27.

<sup>3</sup> So KAV. p. 123, 8, but Ea way, CT. 33, 3, 29. Only regent of eighth month, *Uruk*, 14 Obv. 17, and 85, 4, 30, 15. In astrolabe, CT. 33, 11, *uridim* in first decan, *girtab* in second, as also 33, 12 below.

<sup>4</sup> Written *lugal* in Astrolabe Pinches, KAV. p. 123, 8, and CT. 33, 12, below, third decan of Arahsamna. The sign is a confusion for *rab* (as often in other texts) since *Rab-bu* is a star of Arahsamna, Weidner, HB. 24 and 119. *Corona borealis* is Weidner's identification, HB. 71; Kugler, 1, 254 thinks it part of *Ophiuchus*.

<sup>5</sup> Thureau-Dangin, *Uruk*, 12 Rev.

<sup>6</sup> AJSL. 40, 190, 4-5 = CT. 33, 4, 3-4.

<sup>7</sup> *Ibid.* 190, 2, rising on the 15th.

## KISLEV

*Zalbatānu*, 'Star that abounds in death', Capricorn as  
hypsoma of Mars. Ea way.<sup>1</sup>

*Ugkadua*, 'The raging lion, Panther', Pegasus. Anu way.<sup>2</sup>

*Uza*, 'She-goat', head of Capricorn. Enlil way.<sup>3</sup>

[*Pabilsag*,<sup>4</sup> Sagittarius. Ea way.]<sup>5</sup>

[*Gir-an-na*, Scorpio.]<sup>6</sup>

Regents of Arahšamna in the Taurus period.

## TEBIT

*Gula*, 'The great star', *Piscis austrinus*? Ea way.<sup>7</sup>

*Alluttu*,<sup>8</sup> Dolphin (?), *Delphinus* (?). Anu way.

*d-mušen, erú*, Eagle, *Aquila*. Enlil way.<sup>9</sup>

[*Uza*, 'She-goat', head of Capricorn.]<sup>10</sup>

[*ül-máš*, 'The kid', Capricorn.]<sup>11</sup>

<sup>1</sup> See Weidner, HB. 71.

<sup>2</sup> But CT. 33, 1, 28 Enlil way. Rises Kislev 15th, with *Aquila* and *Sagittarius*, CT. 33, 4, 5 = AJSL. 40, 190, 6.

<sup>3</sup> Also CT. 33, 1, 24, said to be <sup>d</sup>Gu-la. Commonly identified with *Lyra*.

<sup>4</sup> Meaning unknown, but reading certain after PBS. x 176, 5. That the Babylonians saw an archer is certain from the description of *θ Ophiuchi*, which forms the point of the arrow of *Pabilsag*, Kugler, 1, 261 and *Ergänz.* 224. Identified with *Ninurta* the war-god. For design of the archer see King, *Boundary Stones*, Pl. xxxix, 12th century B.C.

<sup>5</sup> CT. 33, 3, 33. Only regent of Kislev, Thureau-Dangin, *Uruk*, 12 Rev. fourth sector. Written *ül-Pa*, 14 Obv. 18. Only regent of Kislev, 85, 4, 30, 15.

<sup>6</sup> PSBA, 1909, 24, Pl. iv 7.

<sup>7</sup> KAV. p. 123, 10. As regent of Tebit, Southern fish, Kugler, *Ergänz.* 12-13. As regent of Shebat certainly *Aquarius*, Kugler, 1, 30 and 261-2; Weidner, HB. 72. Ea star and identified with Ea, CT. 33, 3, 20. Ea way also, CT. 32, 3, 20.

<sup>8</sup> *al-lu-ut-tum*, KAV. p. 123, 10-20; 124, 31; 122, 26. Pinches' texts falsely *al-lul*, Cancer. See Weidner, HB. 68. *alluttu* is probably some kind of fish, and hence dolphin is suggested by the location of *Delphinus*. See Weidner, *Reallexikon der Assyriologie*, 71; Ebeling, *Tod und Leben*, 14, note c; Meissner MVAG. 1905, 247, where *gar-bun-na*, SAI. 9236, is not *alluttu*, but *šlibbu*, tortoise.

<sup>9</sup> KAV. p. 123, 10; Anu way, CT. 33, 2, 12, and identified with <sup>d</sup>Ilbaba. On reading *erú*, see Langdon, *Etana*, 37 n. 4.

<sup>10</sup> Only regent of Tebit, PSBA. 1909, 24, Pl. iv 8.

<sup>11</sup> Thureau-Dangin, *Uruk*, 14 Obv. 18; but <sup>mul</sup>*sugur-máš*, 'Fish-ram',

It is certain that the Babylonians knew the 'Water-pourer', ὕδροχόος, Aquarius. *Gula* is Aquarius regularly and this is the constellation of the water-god Ea. The mythological name of Aquarius is *ku-li-li*, *ku-lu-lu*, 'Fish-man'; see Langdon, *Creat.* 89, n. 6, and figures of Aquarius, *Sem. Myth.* 86; 95. In the *mul apin* series the regent of Tebit is <sup>mul</sup>*Šimmaḥ*, Swallow star (<sup>mul</sup>*Šinunutum*), also called 'Star of the storm',<sup>1</sup> Western Aquarius.

## SHEBAT

*Numušda*, 'Star of the water crustacea', Grus. Ea way.<sup>2</sup>

*Šimmaḥ*, 'Swallow star', Western Aquarius. Anu way.<sup>3</sup>

*Damu*, 'Star of the god Damu', otherwise 'Swine star' as god

Damu, probably Delphinus (sea-hog).<sup>4</sup> Enlil way.

The regular regent of Shebat is the constellation *Gula*, Aquarius.<sup>5</sup>

## ADAR

*Kua*, 'The fish', Pisces, Southern Fish. Ea way.<sup>6</sup>

regent of Tebit, *Uruk*, 12 Rev. section 5. Capricorn was portrayed as a ram with body of a fish, 'skate-goat'. See *Sem. Myth.* 105. *suḡur*, only regent of Tebit, 85, 4, 30, 15. Capricorn is identified with the temple of Ishtar, *Uruk*, 12 Rev.

<sup>1</sup> CT. 33, 4, 7 = AJSL. 40, 190, 9; Kugler, *Ergänz.* 162; 216; identified with the Euphrates, V Raw. 46 A 34; Weidner, *Babyloniaca* vi 160, Northern Piscis.

<sup>2</sup> KAV. p. 123, 11; CT. 33, 3, 27. First decan of Shebat, CT. 33, 12. As regent of rainy season *Numušda* was identified with the rain-god Adad.

<sup>3</sup> KAV. p. 123, 11; CT. 33, 2, 41 (as *Šinunutu*). Jeremiah, HB. 226, takes this for the Southern Fish and compares after Weidner the Greek ἰχθύς χελιδονίας, Swallow Fish.

<sup>4</sup> So if <sup>mul</sup>*ŠAH*, 'swine star' (= <sup>d</sup>*Da-mu*, CT. 33, 1, 29 in Enlil way) is the same as <sup>mul</sup>*Da-mu*. See Kugler, *Ergänz.* 59; Weidner, HB. 73.

<sup>5</sup> Thureau-Dangin, *Uruk*, 14 Obv. 19, *ül-gu*; <sup>mul</sup>*gu-la*, 12 Rev. section 6; 85, 4, 30, 15, Kugler, 1, 229.

<sup>6</sup> KAV. p. 123, 12; CT. 33, 3, 19. Only regent of Adar, PSBA. 1909, 24, Pl. iv 10; rises Adar 15 with Perseus, CT. 33, 4, 12 = AJSL. 40, 190, 14. The regular regent of Adar is *ül zib-[ba-ti]*, the 'tails of the fish', *Uruk*, 14 Obv. 20; but 12 Rev. section 7 has <sup>mul</sup>*Iku*, here certainly Pisces.

*Ká*, 'Fox star'. A constellation near Pisces.<sup>1</sup> Enlil way.<sup>2</sup>  
*mul-á-Marduk*, 'Star of Marduk', Perseus.<sup>3</sup> Anu way.<sup>4</sup>  
 [*ül zib(ba-ti)*, Star of the tails of the Fish.]<sup>5</sup>

A striking aspect of Sumero-Babylonian religion is the association of myths with each of the months and the attempt to find in the regnal constellations of the months figures which correspond to the ideas involved in the monthly myths. The monthly festivals were based upon these myths, which together with the festivals originated in the Sumerian period between 3000–2000 B.C. The Sumerians devised lunar calendars in each of their great cities which can be traced in most cases to about 3000 B.C. The lunar calendar with its system of intercalating a month originally *before* the twelfth month, *šegurkud*, barley harvest, to keep the season of harvest in its place, was never abandoned throughout the entire history of the Sumerians, Babylonians, and Assyrians.<sup>6</sup> It was still in use right down to the Christian era, when this mighty civilization perished under the rule of Parthia.

The lunar calendar is based upon the period from the

<sup>1</sup> Usually Alcor, Greek  $\alpha\lambda\omega\pi\eta\varsigma$ , 'Fox star', in Ursa major. Kugler, *Ergänz.* 55; Weidner, *OLZ.* 1913, 152. Here some other constellation in the ecliptic. Enlil star, *CT.* 33, 1, 17.

<sup>2</sup> So KAV. p. 123, 12, in *third* decan. Kugler, *ibid.* 204, thinks that 'Fox star' is not a constellation here but a title of the planet Mars.

<sup>3</sup> So Weidner, *HB.* 73. Uncertain. Kugler, *Ergänz.* 204 takes it for Jupiter.

<sup>4</sup> So KAV. p. 123, 12 as *second* decan.

<sup>5</sup> *Uruk*, 14 Obv. 19. *Ibid.* 12 Rev. section 7 has *mul Iku* the 'Field star' as regent of Adar, usually Aries+Cetus. Here clearly Pisces. *BM.* 77821 has *ül Iku u rikis* (DIM) *núni* (HĀ), 'Field star and band of the fish'. Weidner, *HB.* 121 takes *rikis nuni* for  $\eta, \zeta, \delta, \epsilon$  Piscium. Kugler I, 29 takes *ül KUR šá dur* (*rikis nu-nu*) for  $\eta$  Piscium. The term clearly denotes the band between Northern and Southern Pisces at the bend of which stands  $\alpha$  Piscium. See Jeremias, *HB.* 226. This band between the two fishes is shown on the disk of Denderah; see Jeremias, *HB.* fig. 126 and *ZDMG.* 77, 84.

<sup>6</sup> The Babylonians adopted the system of intercalating *after* the twelfth month, and there is also a system of intercalating after the sixth month *Elul* and after the first month *Nisan*.

moon's first appearance after sunset to its disappearance on the morning of the 28th day. Babylonian astronomers of the sixth century B.C. had arrived at an almost accurate calculation of the length of the lunar month, 29 days, 44 minutes,  $3\frac{1}{3}$  seconds.<sup>1</sup> Modern astronomy cannot improve upon this result for the period 600–100 B.C. Hipparchus of Nicaea in Asia Minor, one of the founders of Greek astronomy (middle of second century B.C.), and all his successors to Ptolemaeus of Alexandria in the second century A.D. based their studies upon the work of Babylonian astronomers of Erech, Barsippa, and Babylon. Geminus of Rhodes in his *Εισαγωγή εις τὰ φαινόμενα*, *Introduction to Celestial Phenomena*, written in the time of Christ, named the Chaldeans as discoverers of the exact motions of the moon. Such precise calculations of the lunar month were the result of more than 2,000 years of observation and continuous records.

Here in our northern hemisphere there is an unbroken history of the religious calendars and monthly myths from the Sumerian calendars of 3000 B.C. through Babylonia, Judea, and Christianity to our own times. I shall now trace the history of the various Semitic calendars of Babylonia Assyria, Aramaea, Canaan, Phoenicia, and Judaea and show how this medley of Semitic calendars was finally displaced by the Nippurian calendar; how all these Semitic peoples abandoned their native calendars and only the translations of the Sumerian month-names, the Sumerian myths and festivals survived and determined the character of the church calendar of Babylonia and Assyria, which in turn gave Judaism its series of fixed festivals. The myths of the months, the festivals based upon them, their survival in Judaism, their parallels in Greece and Rome; these are the principal subjects which I discuss in this volume, serving as an introduction to my edition of the Old Assyrian, New Assyrian, and Babylonian calendars. Here were combined the legends of the constellations with the legends of the

<sup>1</sup> Reckoning by Cidinas; see Fotheringham, *Nautical Almanac*, 1931, p. 736 (383 B.C.).



seasons in remarkable manner. They had no Ovid to rehearse the tales of the months, but the opening lines of the *Fasti* describe precisely what the Babylonian and Assyrian church calendars really are:

The times in order through the Latin year  
Together with their causes,  
And the starry signs that set beneath the earth  
And rise again may I sing.

In Babylonian literature there is only one attempt to do for the calendar what Ovid did for the first six Latin months. It is only a fragment from a large tablet in the British Museum, written about the time of Nebuchadnezzar. Here a scribe rehearsed the legends of the twelve months. In the second month (Ayar) Bêl (Marduk) conquered the dragon of chaos. In the third month Sivan (May-June) Bêl decided to destroy mankind in the deluge. In the fourth month, Tammuz (June-July), is recorded an astrological omen which occurred in a remote age and foretold the destruction of Babylon by the Elamites. The commentary on Tammuz gives the valuable information that Perseus and the Pleiades were the hypsoma of the Moon; Aries of the Sun; [Capricorn] of Mars; [Cancer] of Jupiter. Here the scribe indicated the points in the ecliptic where the planets have the most potent effect (hypsoma) upon the lives of men, and the same astrological system passed into Greek astrology. In the tenth month Tebit (Dec.-Jan.) is recorded the legend that Tiamat, dragon of chaos, rules the constellation Capricorn. It was the sign in the zodiac that governed rituals against demons in the dark days of January when ghosts rose from hell and when men were put to the ordeal to test their guilt.<sup>1</sup>

Wave upon wave of Semitic invasion overflowed into ancient Sumer. When the first South Arabic invasion reached that classic soil some time before 3000 B.C. they found the various Sumerian cities each using different

<sup>1</sup> The text is published by L. W. King, *The Seven Tablets of Creation*, II 67-71 and transcribed, I, 211-14; a translation by Landsberger, AOF. I 69-78 and Jeremias, *Handbuch*,<sup>2</sup> 121-2.

calendars for the twelve lunar months. These illiterate Semites, like the Canaanites, Hebrews, and Phoenicians, had their own names for the twelve months of the year. Eleven of these month-names have survived; these invaders, who are the earliest Semitic people known to us, had no writing of their own and borrowed the Sumerian cuneiform script, religion, and calendars and adopted the Sumerian religious year. They wrote the names of the months according to the calendar of the Sumerian city where they happened to be transacting their business.<sup>1</sup> But when the first important documents of the Semites appear in the time of the Empire of Agade it is evident that the calendar of the Sumerians at Nippur had already been adopted as the usual one.<sup>2</sup> The primitive names for months among the earliest Semites of Babylonia have no similarity whatsoever to those which have survived in South Arabic inscriptions.

The Accadian month-names known from texts of the Agade period are: (1) *hu-un-ti*, (2) *ša-ni-i*, (3) *ša-bit-tum*, (4) *ha-ni-i*, *ha-ni-it*, (5) *ba-ḥi-ir maḥrûm*, (6) *ba-ḥi-ir arkûm*, (7) *i-ba-ša-aš*, (8) *iḫ-šum*, (9) *ti-ru*, (10) *za-lul*, (11) *ga-da-lá* (?).<sup>3</sup>

These names have no connexion with the South Arabic month-names which have been compiled for me by Mr. A. F. L. Beeston, B.A., of Christ Church, Oxford. In the following alphabetically arranged list I have marked Sabaean names with *S*, Minaean with *M*, and Qatabanian with *Q*.<sup>4</sup>

<sup>1</sup> For the names used by Accadians at Lagash, see Thureau-Dangin, RA. iv 83; ZA. xv 410. At Nippur the standard Nippurian series must have been used; see Barton, PBS. ix 90, <sup>iii</sup>*kin-d. Innini*, sixth month; 95, <sup>iii</sup>*dû-kug*, seventh month; with <sup>iii</sup>*šegurkud*, twelfth month.

<sup>2</sup> In the *Cruciform Monument*, CT. 32, 1-4, assigned to Manistusu (2667-2653 B.C.) by Thureau-Dangin and L. W. King, RA vii 179; ix 91; see Col. xi 15-18, 3 *ezen-gal-gal ezen hu-un-ti ezen* <sup>iii</sup>*izi-izi-gar ezen* <sup>iii</sup>*apin-dû-a*, The great feasts, feast of *huntu* (Nisan), feast of torches (Ab), feast of *apindûa* (Arahsamna).

<sup>3</sup> The last two were found by Meek on Kerkuk tablets, *Annual of the American Schools of Oriental Research*, xiii 10. These names have no relation to the Himyaritic months. Meek now reads *ga-da-ad* (?).

<sup>4</sup> See also Mordtmann, *Beiträge, Zeitschrift für Assyriologie*, p. 46;

These names are generally preceded by *warah* *dû*, 'month of'.

- (1) *dû* 'l-n- . . . (MVAG. 37, 1, p. 55, 7). *S*.
- (2) *dû* 'b-h-y, month of the fathers (?)<sup>1</sup> *S*.
- (3) *dû* 'th-r-t, month of the goddess 'Athrat.<sup>2</sup> *M*.
- (4) (*dû*) 'b-r n-g-w-t, meaning unknown. *M*.
- (5) *dû* 'm, month of the god 'Am,<sup>3</sup> and see also the third Assyrian month *arah* <sup>d</sup>*Sin*, p. 33. *Q*.
- (6) *dû* b-g-'m, meaning unknown.
- (7) *dû* b-r-m, and b-r-m k-d-m-n, 'the former b-r-m', hence certainly a 'second b-r-m', b-r-m '-h-r-n existed. Meaning unknown. *Q*.
- (8) *dû* b-š-m-m, month of the god b-š-m. *Q*.
- (9) *dû* d-th-', month of early grass (𐩦𐩣𐩪). *S*. In Sabaeen *datha*' is the regular word for the spring season.
- (10) *dû* d'-w-n, meaning unknown; it comes after sowing. *S*. Also d'-w-n 'h-r-t-n, 'the latter *dā'wan*'.
- (11) *dû* d-n-m, meaning unknown. *S*.
- (12) *dû* f-l-s-m, from the verb f-l-s, to flee.<sup>4</sup> *S*.
- (13) *dû* f-r-'-m, month of the crops. *S*, *Q*. Identical with the month n-y-l.<sup>5</sup>
- (14) *dû* p-k-h-w, meaning unknown. *Q*.
- (15) *dû* h-ḏ-r, the plural of this word means 'courts'. *M*.
- (16) *dû* h-g-t-n, month of the pilgrimage. *S*.
- (17) *dû* h-r-f, month of plucking fruit. *S*. This word also means autumn as does ṣ-r-b, autumn.
- (18) *dû* m-'-n, month of the city Ma'an.<sup>6</sup>

D. H. Müller, *Sabäische Denkmäler*, 1883, p. 51; Rhodokanakis, *Sitz-Ber. der Akademie der Wissenschaften in Wien*, 194, p. 81. Literature given by Professor D. S. Margoliouth. <sup>1</sup> Suggested by Conti Rossini.

<sup>2</sup> This occurs in Glaser, 282, 7-8, and is surely the same as the Babylonian *Ašratu*, West Semitic *Aširtu*, Phoenician at Ras Shamra *Ašerat*. See Nielsen, *Handbuch*, 1, 226.

<sup>3</sup> 'am, ancestor, uncle, title of the Moon-god. See *Sem. Myth.* 5.

<sup>4</sup> This Sabaeen verb appears in Accadian as *parāšu*.

<sup>5</sup> CIS. iv 601, 18.

<sup>6</sup> If this is right it must refer to a yearly festival of the Sabaeans at their chief city.

- (19) *đú m-đ-r'-n*, meaning unknown. *S.*
- (20) *đú m-h-g-t-n*, month of the pilgrimage. *S.* Same as No. 16.
- (21) *đú m-h-z-d-m*, month of reaping. Also with *k-d-m-t-n*, 'former month of reaping'. *S.* This is the same verb as Arabic *ḥaṣada*, Canaanitish<sup>1</sup> 'aṣād, Accadian *eṣēdu*, to harvest.
- (22) *đú n-s-w-r'-h-r-n*, the latter *nswr*. *S.*
- (23) *đú n-y-l*, month of crops. Same as No. 13. *S.*
- (24) (*đú*) *k-i-z, kēz*, month of fruit harvest. *S.* The word is also used for summer in Sabeian.<sup>2</sup>
- (25) *đú ṣ-r-b-n*, month of harvest, *ṣarab* is the word for autumn. *S.*
- (26) *đú s-l'-m*. Meaning unknown. *S.*
- (27) *đú š-m-s-y*, month of the suns, i.e. Sun-goddesses. *S.*
- (28) *đú th-w-r-m*,<sup>3</sup> month of the bull, a god? *S.*
- (29) *đú th-b-t-n*, meaning unknown; a spring month. *S.*
- (30) *đú t-m-n'*, month of the city Tamana'. *Q.*
- (31) *đú t-n-f-t*, month of fasting.

The word *m-l-y-m*, winter, is also said to be a month-name.

This is the only genuinely Semitic calendar which contains mythological month-names, see Nos. 3, 5, 8, 27, 28. Most of them are agricultural and some obviously refer to festivals. All months marked 'former' and 'latter' are of course intercalary.

It is obvious that the early Semites (Accadians), wherever be their origin, agree with the South Arabic peoples in using an intercalary month to keep the names to their seasons. All later Arabic calendars are strictly lunar and the names fall eleven days later each year and in thirty-three years each month passes through the entire solar year. In such a system agricultural names of months and association of months with fixed stars are impossible. But in Accadian there is already

<sup>1</sup> See fourth Gezer month, p. 24.

<sup>2</sup> The same month as *kēš*, in Canaanite. See p. 25.

<sup>3</sup> This cannot be astronomical for 'Taurus, since star-names have not been found in South Arabic.

a 'former and later' month called *baḥir*,<sup>1</sup> i.e. an intercalary month, probably the twelfth. *ḥuntu* occurs in *isinni ḥu-un-ti*, feast of *ḥuntu*, one of the three great Shamash festivals.<sup>2</sup> The name survived into the Hammurabi period and occurs as *araḥ ḥu-um-tum*.<sup>3</sup> *araḥ ṣanī* means 'second month'.<sup>4</sup>

The meaning of *ṣabittum* is unknown.<sup>5</sup> *ḥani*<sup>6</sup> and *ḥanīt*<sup>7</sup> may be 'month of the Hanite god' or goddess.<sup>8</sup> This implies an ancient connexion between Agade and Assyria, but the land Hanigalbat does not appear in this period.<sup>9</sup> *ibašaš*<sup>10</sup> is obscure, and *ikṣum*<sup>11</sup> cannot be explained. *tīru*<sup>12</sup> survives in the Hammurabi period.<sup>13</sup>

<sup>1</sup> Luckenbill, *Adab*, 92; *Inv.* 1 1079. *baḥir*, warm?, from *baḥāru*, Arab. *baḥara*, to steam. *lu ba-ḥir*, let it steam, Kūchler, *Med.* 6, 16; 6, 20; *likṣi lu ba-ḥir*, let it cool, steam off, 24, 44. See Thompson, *PRSM.* xviii 3 n. 1.

<sup>2</sup> CT. 32, 4 xi 14, where it precedes the festivals of Ab and Arah-samna.

<sup>3</sup> VS. ix 191, 24, where it ends a list *sibut ṣa-tim*, *Teshrit*, *Tammuz*, *Tebit*, *Ḥumtum*. Landsberger, *Kal.* 84 regards *sibūt ṣatim*, i.e. 'seventhness' of the year, as the third month, Sivan, basing his argument on BA. v 488, where a year runs from the first of *araḥ sibūtīm* to the end of Ayar. If this is so then *ḥumtu*, being one of the first four months since it falls before Ab, must be the first month, 3 and 4 (*Sibūtū* and *Tammuz*) being named on VS. ix 191, and Ayar is excluded since it occurs phonetically elsewhere. A decision is impossible since *Sibūtū*, seventh month, beginning with Teshrit, is Nisan in the Susa series, and *araḥ Sibūtīm* on VS. ix 139 has variant Nisan on the envelope.

<sup>4</sup> RA. 22, 153, *ṣā-ni-i*; Luckenbill, *Adab*, 117.

<sup>5</sup> RTC. 106. Formally *ṣābittu* may be part. fem. sing. of *ṣabātu* and mean 'the seizing' goddess or demoness, i.e. month when the demoness seizes, referring to a myth, but true Semitic months are never based on mythology. The early Assyrian *araḥ Bēlat ekalli* is probably taken from a Sumerian myth.

<sup>6</sup> RTC. 117.

<sup>7</sup> On Nuzi tablets (Meek).

<sup>8</sup> I made this suggestion in SBP. 156 n. 11. <sup>mat</sup>*Ḥani* = *Ḥanigalbat*, a province in Mesopotamia; see AB. 1, 116 n. 7.

<sup>9</sup> Manistusu built a temple at Nineveh, Thompson, *Annals of Archaeology* xix 105.

<sup>11</sup> *Inv.* 1, 1291.

<sup>10</sup> *Adab* 165. *ipašaš*?

<sup>12</sup> On a Kish tablet.

<sup>13</sup> CT. 6, 42 B, a slave hired for one year begins work in *E-lu-li* and is discharged in *ti-ri-im*. But PBS. viii 186, a house rented for one year;

The importance of these month-names is that they represent the oldest known Semitic calendar and come from that prehistoric Semitic people whose language fixed for ever the vocabulary and grammar of the later Babylonian and Assyrian peoples.

The church calendar of Babylonia and Assyria, which had such profound influence upon the Jewish, Aramaic, and Phoenician calendars, the primitive Accadians did not originate. Almost immediately after their arrival in Mesopotamia they began to abandon their own Semitic months in favour of the church calendars of the Sumerians. Sargon united the Sumerian and Accadian peoples into a military empire which ruled from Persia to Phoenicia, from Anatolia to the southern sea; in this Semitic empire the Sumerian calendar of Nippur became the normal rule for the months and the monthly festivals. The religious calendar of a people usually maintains itself tenaciously through all vicissitudes; the conquering Semites of Accad threw aside the calendar which they had inherited from their prehistoric home because in Mesopotamia they found an advanced Sumerian civilization whose great religion was based upon a church calendar. To adopt that religion meant to adopt the monthly festivals; it meant to lay aside every one of the primitive names for the months in favour of mythological and cult names; it meant the acceptance of a church calendar based upon monthly feasts of mythological and astronomical character. Here soon after 3000 B.C. began that revolution of Semitic religion which profoundly influenced the Semitic races of Western Asia. The Sumerian church calendar, which connected each month with some theological myth, with some constellation in heaven woven into the monthly festival, finally passed beyond the borders

tenancy taken up in *ti-ri-im* and ended in *isinni a-bi*. Hence *tiru* = Ab and Tammuz. The evidence of BE. VI 36, 22, *arah ti-ri* day 1 and same contract 35, 29, <sup>iii</sup>Arahsamna, day 1, is not sufficient to prove that *tiru* is the eighth month, for the contract may have been repeated later in the year.

of Mesopotamia. Backed by its almost universal adoption in business transactions in the wide empires of Assyria and Babylonia, by the elaborate manner in which the Assyrians wrote the menologies with instructions for each day of the year, it completely supplanted the old Hebrew calendar after the Second Captivity; it spread in the Aramaic lands of Syria and Nabataea and displaced the agricultural calendars of Canaan and Phoenicia.

The Accadians had adopted the calendar of Nippur, the seat of the greatest of all Sumerian cults. Nippur was the seat of the Earth-god and his pantheon; it was a centre of learning from early times, where theological poems, chronological records, text-books on philology and syntax were written. The views of the Nippurian schoolmen prevailed in most Sumerian capitals and their works were edited with Semitic translations, especially their liturgical books, becoming the canonical liturgies of the Babylonian and Assyrian temples. It cannot surprise, then, that their views about the myths of the months and their religious calendar prevailed in every Sumerian capital and finally displaced every known Semitic calendar in Western Asia, save in Arabia. It seems clear that the fixed Jewish festivals were taken directly from the great menologies and almanacs of Babylonia and Assyria, which in turn go back directly to the Sumerians of Nippur. The calendar is the framework of any civilization, the time index for all business transactions and religious observances, the rule by which all daily life is regulated. Therefore, with the universal adoption of the Nippurian months the unlettered Semite of Babylonia found it necessary to have translations of these twelve month-names into his own Accadian speech. With the Amorite invasion of Sumer and Accad about 2300 B.C. the Accadians introduced a set of twelve names of the months which are translations of the Nippurian series. Although the scribes almost invariably wrote the Sumerian names in all documents the ordinary Semite learned the Accadian rendering. It is these translations which prevailed in western Asia, namely, Nisan, Ayar,

Sivan, Tammuz, Ab, Elul, Teshrit, Arahsamna, Kislev, Tebit, Shebat, Adar. These were the names used by the Aramaeans and Hebrews in the late period, and are still the names used by Jews to this day. There is no evidence that the Nisan-Adar month-names were ever a *real Semitic* list or were ever used by any Semitic people originally.<sup>1</sup>

The meanings of the words borrowed by the Jews were almost entirely unknown to them. When the Semites of Babylonia adopted the name *Du'uzi* for the fourth month (July), that was due entirely to the fact that the Sumerians celebrated the death of Tammuz in that month. No Semitic race had ever possessed a cult of the dying Tammuz, god of pastures and flocks, who perished in the summer sun. In the Sumerian calendar of Ur this month was known as the 'Feast of the breaking of bread for the god Ninazu', another name for Tammuz. In the second month, Ayar or April, Tammuz had married the virgin goddess Ishtar; in the fourth month he died and descended into hell, and the Sumerians broke bread at the funeral feast for the dead god. This was the myth of June in every Sumerian city. In July, or month of Ab, there were burning of torches and festivals for the dead god. In the sixth month there was the purification of Ishtar at Nippur, a festival for Tammuz at Lagash and Ur, rendered *Elulu*, 'the purification', by the Semites. The months Tammuz, Ab, Elul—or June, July, August—formed a great cycle of the cult of the dying god and his mother the virgin Ishtar. How then did the Semites obtain the names for these months, Tammuz, Ab, Elul? Did they inherit them from a primitive Semitic race of shepherds and farmers who invaded Mesopotamia from Syria and Canaan and founded the Amoritic kingdoms of Babylonia and Assyria in the twenty-fourth century? That is wholly incredible in view of the fact that these names

<sup>1</sup> It may be objected here that certain of these names are written phonetically in the First Dynasty, *A-ja-rum*, *Abi*, *Abum* (at Susa), *Elulu*, *Elunum*, *Adaru*, *Adari* (at Susa). These are only the current renderings of the Sumerian calendar.



precisely express some salient feature of the Sumerian myths and cults in those months.

Let us take for example the name of the fifth Jewish month Ab,<sup>1</sup> borrowed from the Babylonian Abu. Obviously the Talmudic scholars did not know what this word meant. Now the name of this month at Lagash, one of the Sumerian capitals, was 'Feast of the eating of millet' in honour of the god Ningirsu, a local name for Tammuz. At Ur it was called the 'Feast of Ninazu', the name of Tammuz while he slept in the lower world; at Nippur it was known as the 'Month of torches' (*izi-izi-gar*).<sup>2</sup> The Babylonians rendered the name in the Nippurian calendar by 'month of the festival of the *abu*', and *apu*, *abu* is the Babylonian word for firewood, torch. The rituals of this month, therefore, consisted in eating bread in the funeral feasts for the dead god of life, who now reposed in hell, and in carrying torches by night for the souls of the dead. A Sumerian and Babylonian commentary explains the cult and myth of this month:

'Ab is the month of Sirius and the god Ninurta. Fire-brands are lighted, and there is burning of torches for the souls of the dead. The fire-god descends from heaven. The heroes in the courts of the nether world ascend by the gates on the ninth day.'<sup>3</sup>

Torches lit the way of the souls of the dead who ascended on the night of the 9th of Ab. The Sun-god, who had reached his zenith at the summer solstice in the preceding month Tammuz, now begins his long decline toward the winter solstice, and the myth runs that the god of the burning fire now begins his descent from heaven. The burning torches also signified the declining sun of the summer solstice, and in his decline the Sun-god was known as Nergal, 'Lord of the vast city of the dead'. The constellation Corvus which rose in this month at 3000 B.C. was identified with Nergal,<sup>4</sup> god of the burning July sun (see p. 5 *sub* Elul).

<sup>1</sup> *Ab* does not occur in the Hebrew and Aramaic of the Old Testament, but is first recorded in the Aramaic Papyri of Egypt in the fifth century B.C., Cowley, *Aramaic Papyri*, No. 14, 1.

<sup>2</sup> See *i-zi-ga-ri* = *tiparu*, torch, RA. XI 146, 36.

<sup>3</sup> KAV. 218, p. 119 II 1-16; Weidner, HB. 86.

<sup>4</sup> CT. 26, 42 II 14.

On the 15th of Ab there was a Jewish festival, which Josephus says was the festival of the wood-bearers, who brought fuel for the altar 'that a supply might never fail; for it remains eternally unquenched'. In the ordinances promulgated by Nehemiah, in the time of Artaxerxes I, for the restoration of Jewish religion after the Exile, it is written: 'And we cast lots, the priests, the Levites and the people for the wood offering, to bring it into the house of our god to burn upon the altar of Yav our god as it is written in the Law.' To supply wood for the eternal fire of the altar was undoubtedly an ancient custom revived by Nehemiah.<sup>1</sup> This emphasis upon the month of Ab as the time for supplying the eternal fire of the altar is in fact not mentioned in the laws of the ancient Hebrews. Is it an ancient Canaanite ritual, or is it based upon the midsummer fires of the same month of the Sumerian, Babylonian, and Assyrian calendars? Obviously the Jews in exile in Babylonia knew the calendars of the temples there; they knew the myths of the months. So effective was the influence of Babylonia upon them that they abandoned their own names for the months and accepted the Babylonian names. But the church calendars of Babylonia and Assyria had preserved the Sumerian ordinances of a remote past. The myth and cult of each great monthly festival were indicated in most cases by the name of the month. Ab was the festival of burning fires for

<sup>1</sup> Ab 15th is marked as the date of the rising of <sup>mul</sup>Pan, the Bow Star, Canis Major (excluding Sirius), CT. 33, 7, 22-3, but 4, 44 on the *fifth* of Ab. The Bow Star was identified with Ishtar as goddess of war, *Tammuz and Ishtar*, 168-9; V Raw. 46 A 23; CT. 33, 2 II 7; Vir. *Isht.* Suppl.<sup>2</sup>, No. 67, 15; KAV. p. 121, 15. As regnal star of Ab, see p. 5. Since Spica was also identified with Ishtar, the Bow Star sometimes means Spica, Virgo, CT. 26, 40 I 12+K. 13677, and also Ishtar's planet Venus, Vir. *Isht.*, No. 29, 15. When the Bow Star rose in Ab there was an Ishtar festival at Arbela, Streck, *Assurb.* II 112, 16-19; 190, 7; K. 2652, 7 in S. A. Smith, *Assurb.* III p. 11. Ab 15th as date of the rising of Canis Major may be connected with the Persian *Sacaea* on the 16th of Lóos (August); see JRAS. 1924, 66; Zimmern, KAT.<sup>3</sup> 427. But the *Sacaea* festival has no ceremony connected with torches and fires.

the midsummer sun, and the word itself conveyed this sense. Had this myth and ritual spread to the Semitic peoples of the West long before Nehemiah? When the Jews borrowed the word *Ab* for the fifth month they must have known what the word meant. Somehow this knowledge was never passed on to their descendants.

This same festival of the midsummer fires, the *anşara*, survives among the Mohammedans of North Africa, where they celebrate it on the 24th of June with bonfires. The festival passed into Spain and survived as St. John's Day on the 24th of June. Here in Europe this pagan myth is also known as St. John's Day on the 23rd of June. All this goes back to the festal fires of the remote antiquity. They were for some reason attached to the myth of John the Baptist in the Christian calendar, and in one way or another to the great myth of Tammuz, the god who was slain by the summer heat; and in Sardinia to this day the ritual of the Adonis gardens is incorporated into the festival of St. John's Day.

The *ninth* of *Ab*<sup>1</sup> in the Assyrian calendar is marked as the day when the souls of dead men are released from their confinement in the nether world. Their prison gates were opened and they returned to share the mournful parentalia with the living on earth. But *Ab* the *ninth* is the great day of lamentation in the Jewish calendar. On this day was sung the Book of Lamentations, and a special book of dirges has been written for it, a day of wailing in remembrance of Jewish calamities. This day was instituted in the Rabbinic period and is continued to our own times; it was explained as a day of remembrance for the Fall of Jerusalem at the hands of Nebuchadnezzar in 586 B.C. and for its destruction by Titus A.D. 70. The Hebrew records in the Book of the Kings placed the fall of Jerusalem on the 7th of *Ab*; Jeremiah says that it took place on the 10th. The later Jewish choice of *Ab* the *ninth* seems to have been taken directly from the Assyrian and Babylonian calendars.<sup>2</sup>

<sup>1</sup> See p. 20.

<sup>2</sup> The Babylonian Almanac, V Raw. 48, col. v has this entry against

I have chosen the name of the fifth month Ab as an illustration to prove that the names of the twelve months which the Babylonians introduced with the Amorite invasion of Mesopotamia in the twenty-fourth century are surely mere attempts to reproduce some salient feature of the Sumerian festivals for each month, or to give their idea of what the names in the Sumerian calendars meant. It serves to show how the dates of many Jewish festivals were fixed after the Exile. By the universal adoption of the Babylonian month-names in Syria, Judaea, and all Aramaic lands the dates of the fixed festivals also became known.

In the twenty-fourth century came then the second great wave of Semitic invasion into Babylonia which resulted in the founding of the First Babylonian Dynasty. At the same time this invasion spread to the northern lands of the old Empire of Agade and resulted in the founding of Assyria. This is known as the invasion of the Amorites, which means nothing linguistically. They are held to be Arabians, Canaanites, or Aramaeans. Had they been Canaanites surely some ancient Canaanite month-names would have been introduced into the Accadian language. Most of the Canaanite month-names are known. Four have survived in the Hebrew records: *Ābīb*, *Živ*, *Ētānīm*, and *Būl*. In the reformed calendar, which shifted the beginning of the Canaanite year from the autumn to the spring, *Ābīb* became the first month since Passover occurred in it,<sup>1</sup> a feast dated Nisan 14th in the new Jewish-Babylonian system.<sup>2</sup> *Živ* is the second month.<sup>3</sup> *Ētānīm*<sup>4</sup> the seventh month, originally first month, belongs also to the Phoenician calendar. *Būl* is the eighth month, originally second,<sup>5</sup> and is also Phoenician. These are all agricultural names; *Ābīb*, month of the

Ab 9, *sūka ba'u la iba'i ibizza immar*, 'One may not enter a street, (if he does) he will see calamity'.

<sup>1</sup> Dt. 16, 1; Ex. 12, 1-28.      <sup>2</sup> Ez. 45, 21; Ex. 12, 14; Lev. 23, 5.

<sup>3</sup> 1 Ki. 6, 1; Punic-Phoenician *Žib*.

<sup>4</sup> 1 Ki. 8, 2; Cooke, NSI. Nos. 20 and 30, fourth century B.C.

<sup>5</sup> 1 Ki. 6, 38; NSI. 32.

ripe ears of corn, April, and *Bûl*, probably the same as Accadian *bûlu*, cattle, are clearly of agricultural origin. The original calendar began in the autumn and was regulated by the ingathering of fruits, the *'āsîph*.<sup>1</sup> All these names were supplanted in the Exilic period by the Babylonian equivalents, Nisan for *Ābîb*, Ayar for *Zîv*, Teshrit for *Êtânîm* and Arahsamna for *Bûl*. The old Canaanite series began with the *'āsîph* and *Ābîb* was the seventh month. Out of this confusion caused by renumbering the months (after the Babylonian series) arose the Jewish custom of distinguishing between the ecclesiastical year beginning with Nisan, and the civil year beginning with Teshrî. The civil year is really a survival of the original year which obtained among all Canaanitish peoples, Hebrews, Phoenicians, Moabites, and Edomites.<sup>2</sup>

A stone slab inscribed with a list of Canaanite months was discovered at Gezer, but it is uncertain whether it is intended to be a real calendar or merely a promiscuous list of the agricultural activities of the year.<sup>3</sup> According to Dalman's arrangement the list runs from October to July with omission of two months. The latest interpretation is given in the following table.

1. *'óseph*, ingathering, October.
2. *zērā'*, sowing, December.
3. *lékeš*, late sowing, February.<sup>4</sup>
4. *'āšād pēšet*, harvesting of flax, March.<sup>5</sup>

<sup>1</sup> Ex. 23, 16; 34, 22. The *ḥag ha 'āsîph*, was preserved as the name of the seventh month (Teshrî) under the form *Ag* < *ḥag* in the Greek-Syrian calendar of Heliopolis (Ba'albek), Benfey, *Monatsnamen*, 21-2; 177. See 'Tabernacles', in Cheyne's *Encyclopaedia Biblica*; fixed in post-exilic times Teshrî 15-21.

<sup>2</sup> Charles Virolleaud writes me that the early Phoenicians at Ras Shamrâ had no names for the months but simply numbered them 1, 2, 3, &c. On this point judgement must be suspended until these early Phoenician texts are fully studied.

<sup>3</sup> Macalister, *Excavations at Gezer*, II 24-8.

<sup>4</sup> *špš*, late grass. So Lidsbarski; G. B. Gray renders 'spring gathering', May-June. <sup>5</sup> Harvesting of flax occurs before barley harvest.

5. *kāšār se'ōrim*, harvesting of barley, April.
6. *kāšār kól*, harvesting of all (the rest), May.
7. *zāmār*, pruning vines, June.<sup>1</sup>
8. *kēš*, fruit harvest.

Obviously this list begins the year in the autumn.

The order of the ten Phoenician months has not been fixed with the exception of three which occur in Hebrew. The list is:

1. 'Étānīm, first month, Sept.–Oct. Fixed by the Hebrew.
2. Būl, second month, Oct.–Nov.
3. Zābāh-šāšīm.
4. Ziv, eighth month, April–May.
5. Hiyār.
6. Māpā<sup>2</sup>.
7. Kārār.<sup>2</sup>
8. Pe'ullat.
9. Mārzeaḥ.<sup>3</sup>
10. Marpā', marpā'im.<sup>4</sup>

These lists contain all the known primitive West Semitic months. As to Aramaic only one name has survived which can be defined as early. At Palmyra, where the Babylonian names were employed, curiously Arahsamna, 'eighth month', does not appear; for this month the original Aramaic *Kinūn*<sup>5</sup> was retained probably because Arahsamna was only a numerical notation and conveyed no cult meaning. *Kinūn*, however, is the only supposedly West Semitic name found in the Babylonian calendar, and if so was obviously imported with the Amorite invasion.

<sup>1</sup> This is difficult; for pruning in Palestine falls in February.

<sup>2</sup> See p. 124, n. 3.

<sup>3</sup> Fasting? Aramaic *marzeḥā*, OLZ, 1908, 513. The Phoenician is taken from a late Sidonian inscription at Athens, 96 B.C. The text has *lē-marzeah*, 'at the time of lamentations (?)' and may not be a month-name. See NSI. 95. Sarsowsky thinks it is the month of the Tammuz wailings, see OLZ. 1908, 513.

<sup>4</sup> Month of ghosts?

<sup>5</sup> Month of the hearth-fire.

The Pre-Islamic calendar<sup>1</sup> has been compiled for me by Professors D. S. Margoliouth and Arthur Jeffery (Cairo):

1. *Mu'tamir*, month of one that seeks advice.<sup>2</sup> Also *māmir*.
2. *Nājir*, hot month.
3. *Ḥawwān*, perfidious.
4. *Buṣṣān*, *buṣān*, *wabṣān*, *wubṣān*.
5. *Šibān*, cold and cloudy. Also *Ḥanīn*, yearning desire.
6. *Malḥān*, month of cold and snow. Also *Runnā*.
7. *Al-Aṣamm*, the deaf.
8. *Wa'il*, mountain goat.
9. *Nātik*, that which yields fire.
10. *'Ādhil*, month of him that reproves.
11. *Huwā'*. Also *Warnat*, female chameleon.
12. *Burak*, that which remains fixed.

Another pre-Islamic list from the same sources is:

1. *Mūjib*, making necessary, obligatory.
2. *Mūjaz*, summarily composed, epitome.
3. *Maurid*, way to water.
4. *Malzaj*, from *lazij*, be elastic, meaning?
5. *Maṣdar*, flowing, source?, or lion, wolf?
6. *Haubar*. Panther.
7. *M-w-y-l*, *mau'il*, refuge.
8. *Mauhib*, gift, favour.
10. *Jaifal*, from *jafal*, be swift.
11. *M-ḥ-l-s*, continuous travel.
12. *Masbal*, or *musabbal*? *musabbil*?

Purely Semitic month-names have rarely any relation to myths and legends as have the Sumerian names in most cases. Therefore if the months in the Babylonian and Assyrian

<sup>1</sup> From Abu 'Alī al-Marzūqī, *Kitāb al-Azminah wal-Amkinah*, Hyderabad A.H. 1332, vol. I, 279. The names are said to have been used by the people of 'Ād.

<sup>2</sup> But if the Arabs had in mind here the rising of Pleiades, and *tanmartu*, the first old Assyrian month, is connected with the verb *amāru*, then Jeffery's translation is wrong. See p. 32, n. 2.

calendars are usually of mythological origin they are non-Semitic, that is of Sumerian origin. Not one of the Babylonian names of the months in the regular calendar is traceable to any Semitic source; they are in fact only translations of the Sumerian month-names.

The second Semitic invasion of Mesopotamia, *c.* 2300 B.C., almost certainly came from the home-land of the Aramaeans in Syria. The invaders founded the dynasties of Babylonia and Assyria. Founded upon the ruins of the Accadian and Sumerian kingdoms, adopting the Accadian language and accepting fully, as their Semitic predecessors had done, the Sumerian religion and calendar, the new ruling class directed the destinies of Western Asia from Babylon, Assur, and Nineveh until the time of Cyrus. The Sumerian religious year followed in the wake of their conquests and spread over Western Asia precisely as the Roman calendar spread into all parts of the Roman Empire.

Problems of profound historical import are involved here. Who were these new founders of empires at Babylon and Assur? What part did the Habiri or Hebrews play in this vast upheaval in Semitic lands?

Three views are strenuously defended.

(a) The Amorites were Canaanites and the Habiri entered Mesopotamia with them. If this were true, why has no single trace of their month-names survived in their vast literature?

(b) They were a North Arabic people. If so, the same objection can be raised. It is true that we know next to nothing about North Arabic until after the Christian period. Pre-Mohammedan month-names are not those of Islam.

(c) The Amorites came from Syria and were Aramaeans. From the wide steppes of the upper Euphrates, from the Lebanons and the plains of the north they poured into Assyria, Sumer, and Accad. They, of course, had names for the months, but the early history of the Aramaic peoples from 2300 to 800 B.C. is a total blank in our records. We know that the name of their *eighth* month was *kinūn* or



*kanūn*, the month of the hearth-fires. But this is the only West Semitic month which appears in Babylonia in the records of the Amoritic kingdom of Sumu-abu, Hammurabi-Amraphel, and Samsuditana. Nothing could prove more clearly that the Amoritic kingdoms of Isin and Babylon and of Assyria really are not Canaanite or Arabic but *Aramaic*.<sup>1</sup>

The following Semitic names of months appear in the times of the Amoritic dynasty at Babylon, although they ordinarily used the Nippur calendar or Semitic renderings of it. Since the Semitic language current in Babylonia and Assyria at the time of the Amoritic or Aramaic invasion was Accadian, the ruling Aramaic class adopted that language, and consequently the Semitic renderings of the Nippur month-names, *Nisan*, *Ayar*, &c., are in Accadian. However, a few of their own native month-names do occur under Accadian forms. I assume that the Aramaic year began with the autumn equinox as does the Canaanite list of months at Gezer. Consequently one of the Aramaic names is *Sibūtu*, seventh month, reckoning from Teshrit; it must also have begun in the winter, December or Kislev; for *Sibūtu* is not only Nisan but also Sivan, i.e. first and third months (reckoning from the spring calendar).<sup>2</sup>

When *Sibūtu* was used in the Susa calendar (see below) for the seventh month that can mean only the *numerical order* after the adoption of a spring calendar by the *Accadians* of Elam and has no connexion with its use by the Amoritic inhabitants of Babylonia. The use of this name in Babylonia, in my opinion, proves that they, i.e. the Aramaeans, normally regarded Teshrit as the first month, i.e. September, and consequently they rendered the Sumerian name for

<sup>1</sup> This is also the conclusion of Julius Lewy on phonetic grounds. For the defence of the Canaanite character of the Amorite kingdoms see Theo Bauer, *Ostkanaanäer*; literature *ibid.* p. 1, n. 2. The force of this argument depends upon the theory that *kimūn* is of Aramaic origin. A Sumerian origin is, however, possible; see pp. 133-5.

<sup>2</sup> See p. 16, n. 3.

this month which follows the equinox (i.e. *dù-kug*) not by any word to seize the salient feature of the myth and cult but by a word meaning 'beginning, opening of the year', i.e. *tešřitu*. Since the verb *šerû*, to begin, is extremely common in Aramaic it is not improbable that the Syriac *Tešřitā*, October–November, really belongs to the original Aramaic list and is not simply a loan-word from Babylonian *tešřitu*. In other words *tešřitā* may have been identified with *dù-kug*, and is not an Accadian rendering.

Beside *Sibûtu* and *Tešřitu* the following list of Semitic month-names occurring in the Hammurabi period may be given.

(a) *arah ša-an-du-tim*,<sup>1</sup> explained as equal to harvest time, hence March or April. Also *ša-du-tim*,<sup>2</sup> *ša-ad-du-tim*,<sup>3</sup> *ina šandûtim* is used simply for 'at harvest'.<sup>4</sup> This name may be a survival from the Agade period like *humtu* and *tîru*. The word is derived from *šadādu*, which seems to mean 'reap'.

(b) *arah ki-nu-ni*,<sup>5</sup> *arah ki-nu-nu*.<sup>6</sup> This may be an Aramaic month-name brought by the Amorites into Babylonia and Assyria. It occurs in the early Assyrian calendar at Nuzi, *arah gi-nu-nu ša ál ilāni*, 'month of the *ginūnu* of the city of the gods', probably referring to the sacred hearth-fire at the capital Assur.<sup>7</sup> At Hana on the middle Euphrates and in the centre of the Aramaic lands the occurrence of *arah ki-nu-nim*<sup>8</sup> is significant. The Palmyrene *kinûn* or *kanûn* replaces Arahsamna in that Aramaic calendar and is known to be the equivalent of the Greek Δίος (eighth month).<sup>9</sup> The Syriac name is *Kānôn*, December, and the latter *Kānôn*, January. For rituals of the *kinūnu*, brazier, hearth-fire, see Arahsamna, Kislev, and Tebit, in Chapter III.

<sup>1</sup> VS. viii 137, 7+16, after *ina ūm ebūri*; 93, 9; ix 30, 7; Meissner, APR. II, 9; PBS. viii 193, 9.

<sup>2</sup> VS. viii 39, 11; 42, 7; Scheil, *Sippar*, 103, Rev. 1.

<sup>3</sup> VS. viii 44, 8.

<sup>4</sup> Ranke, BE. vi 27, 7.

<sup>5</sup> BE. vi 21, 11.

<sup>6</sup> CT. 4, 27 B 21; BE. vi 32, 10.

<sup>7</sup> Chiera, *Excavations at Nuzi*, Harvard, Vol. I, 34, 5.

<sup>8</sup> *Syria*, 1924, p. 271, Rev. 8; JA. 1909, 152, 54; VS. vii 204, 56.

<sup>9</sup> Cooke, NSI. 294.

(c) *arah ma-mi-tim*,<sup>1</sup> 'month of the curse', known to be equivalent of Tebit since it ends when the month *isinni-d-Adad* or Shebat begins.<sup>2</sup> *arah ma-mi-a-tim*,<sup>3</sup> *arhu ma-mi-tum*.<sup>4</sup>

(d) *arah ka-ti ir-ši-tim*, 'month of the hand of the earth (nether world)', a name obviously given to one of the winter months as a time of danger from demons.<sup>5</sup>

(e) *arah di-in-šu-um*.<sup>6</sup>

(f) *arah na-ab-ri*,<sup>7</sup> month of the manifestation, referring to the feast of lights in mid-winter? At Ur in the ninth (or tenth) month *ezen-mag*, i.e. Kislev, November, a text mentions sacrifices of bulls, at the *na-ab-ri-um*, in the temple of *Bêlat-suĥnir*,<sup>8</sup> who seems to be an underworld goddess similar to Allatum. I take this word to mean 'manifestation', from the verb *barû*, and to correspond to the Nip-purian name of Kislev, *kan-kan-è*, 'bringing forth of braziers',<sup>9</sup> showing of lights in honour of the resurrection of the Sun-god at the winter solstice.<sup>10</sup>

(g) *arah hu-um-tum*, a survival from the old Accadian calendar.<sup>11</sup>

(h) *arah ti-ri-im*, from the old Accadian.<sup>12</sup> Compare *tiritum* at Hana.<sup>13</sup>

<sup>1</sup> CT. 6, 41 A 15.

<sup>2</sup> See Mercer, *The Oath*, 28.

<sup>3</sup> Scheil, RA. 13, 132. This is an Accadian epithet of Tebit as the month of the goddess *Mamit*, consort of Nergal, to whom Tebit was sacrificed.

<sup>4</sup> VS. XIII 15, 8.

<sup>5</sup> VS. IX 132, 7; Landsberger, *Kal.* 86.

<sup>6</sup> Only at Larsa, Jean, *Bab.* x 222.

<sup>7</sup> CT. 4, 50 A 32; *na-ab-ri-i*, LC. 182, 15. A contract, CT. 33, 42, provides that the renter of a field must provide oil and a sucking-pig in the month *E-lu-nu* (Elul) at the *isinnu* festival, and at the *na-ab-ri-i*; see Kohler-Ungnad 1705; wherefore it might be inferred that *arah nabri* is Elul. *ina na-ab-ri-i*, at the time of the *nabri*, a date fixed by the writer of a letter for his arrival, VS. XVI 64, 18 = Kraus, *Altbabyl. Briefe*, No. 2.

<sup>8</sup> Legrain, *Ur* 272; 284.

<sup>9</sup> See *Kislev* in Chap. III.

<sup>10</sup> Ungnad, *Materialen* 69, explains *nabru* as 'divination', a ceremony of divination. My interpretation is now proved by the pre-Sargonic month name at Ur, *ezen-sag-û*, see p. 158.

<sup>11</sup> See p. 13.

<sup>12</sup> See p. 13.

<sup>13</sup> See p. 41.

EARLY ASSYRIAN AND CAPPADOCIAN MONTHS<sup>1</sup>

Aramaic names were almost completely suppressed by Sumerian culture when the Amorites conquered Babylonia. Here they were in much closer contact with the Sumerian people than in the northern kingdom at Assur, where they must have gained supremacy about the same time. Therefore, if any primitive Semitic calendar had a chance of resisting, at least for a time, the increasing influence of the ancient Sumerian calendar it was in the early history of Assyria. Fortunately this Aramaic version of the calendar has been preserved not only in numerous contracts but in official lists.<sup>2</sup> According to the local Assyrian lists, which were also used in Cappadocia in the twenty-second century, the year began with *arah ƙarrāti*, that is Adar or March. It is, therefore, doubtful whether this is any longer a pure Semitic calendar, and several of the names in it show the influence of the myths of the corresponding Sumerian calendar.

(12) 1. *arah ƙar-ra-a-ti*, month of cold (?), describing March in northern Mesopotamia, probably a primitive Aramaic name for March–April.<sup>3</sup>

<sup>1</sup> The numbers in brackets indicate the order in V Raw. 43, list 6 under each month.

<sup>2</sup> The principal source is list 6 under each month on K. 104, where names from various calendars are given as equivalents of the Nippur Sumerian calendar, V Raw. 43. Fragmentary lists in transcription from Assur are published by Ehelolf and Landsberger, ZDMG. 74, 216–19. VAT. 9909 begins with *ƙarrāte* and ends with *šippi* = Shebat, i.e. *ƙarrāte* is here the first month and *šippi* the last; in other words Adar is the *first* and Shebat the last. VAT. 10319 has a series *kuzalli* (4th month), *abu šarrāni* (10th), *hibur* (11th). VAT. 8695 has from *ša kināti* (7th) to *abu šarrani* (9th). VAT. 9674 has from *ƙarrātu* to *tanmartu*, where again *ƙarrātu* = Adar is the first month. VAT. 8695 and 10319 do not permit an inference and the month-numbers given above are based upon a series beginning *ƙarrāti*.

<sup>3</sup> V Raw. 43 B 12 = Adar. In KAJI. 99 this seems to be the twelfth month; harvesters are hired to cut grain during two months and twelve days *ina pani šatti*, at the beginning of the year, i.e. probably during the first two months. But the tablet is dated *arah ƙarrātum*, hence

(1) 2. *arah tan-mar-te*, month of heliacal rising (of Pleiades). This name was applied to the month March–April by the early Assyrians as a description of the first month in the Nippurian calendar as adopted by their own people in the south. *tanmartu* is explained as equivalent to the first Nippurian month <sup>iii</sup>*Bara-zag-gar*.<sup>1</sup> As will be seen from the myth of the month *Barazaggar* in Chapter II the Sumerian name means ‘month of him that sits in the holy chamber’, referring to the assembly of the gods when Enlil sat before them in the cosmic chamber and decreed fates for the New Year. This was associated with the rising of Taurus and the Pleiades. Hence the Semites of the north rendered *Barazaggar* by the *astronomical* aspect of the myth, whereas in the south the Babylonians rendered it by *Nisannu*, ‘first month’.<sup>2</sup> Sennacherib as late as the seventh century preserves a record of the meaning of *tanmartu* as used by his early ancestors. Recording his reconstruction of the *bît akîti*, house of the New Year’s festival at Assur, he has written: ‘In the month *bar-sag-sag*, the first month, (month) of the father Enlil, month of the appearance (*na-an-mur-ti*) of the Plough Star, festival of the banquet<sup>3</sup> of the king of the gods Ashur.’<sup>4</sup>

*ḫarrātum* must be the last month of the preceding year. Variants: *ḫar-ra-tu* VAT. 9674; *ḫar-ra-te*, KAJI. 49, 24; *ḫar-ra-a-tum*, 43, 20; *ga-ra-a-tim*, ZDMG. 74, 218. In Cappadocian, Lewy, MVAG. 33, No. 30, 12–13 *et p.* *ḫar-ra-tu-meš*, KAJI. 118, 24.

<sup>1</sup> VAT. 9904, 4, and restore V Raw. 43 A 2 [*arah tan-mar-te*] = <sup>iii</sup>*Bara-zag-gar*, i.e. Nisan.

<sup>2</sup> *tanmartu* is derived from *namāru*, and *tāmartu*, regular word for ‘heliacal rising’, from *amāru*; cf. *nanmurti* <sup>mu</sup>*Apin*, ‘rising of Triangulum’, KAH. II 122, 24–5. *arah tan-mar-tu*, VAT. 9674; KAJI. 51, 21; 194, 8; KAH. I 5, 35 (Adad-nirari I, 13th century). *tan-wa-ar-ta*, Cappadocian, Lewy, MVAG. 33, No. 82, 15; *ta-an-wa-ar-ta*, Golénischeff, *Tab. Capp.* 9, 9. The first Pre-Islamic month *موتمر* is pointed as Part VIII of *’amāru* by Jeffery, see p. 26. Margoliouth, however, thinks that there may be a connexion with *tanmartu*. If so, Arabic *mu’tamir* means not ‘he that seeks advice’, but ‘leader’, month when the first sign of the Zodiac appears.

<sup>3</sup> *ki-ri-ti*, invitation to a banquet, invitation of Ashur (= Enlil) to the gods to assemble for the New Year’s festival. <sup>4</sup> KAH. II 122, 24–5.

It is certain that the Sumerian myth had been attached to *Tanmartu* in the early Assyrian calendar; Sennacherib goes on to say that this ceremony had been neglected since ancient days,<sup>1</sup> which apparently proves that the word *tanmartu* was actually used to describe the month Barazaggar. The Plough Star has been identified with Triangulum above and Arietis,<sup>2</sup> but it certainly included Pleiades; for it is indicated by seven stars,<sup>3</sup> and was assigned to Enlil, since this god summoned the assembly when the Pleiades rose in the Taurus period.<sup>4</sup> *Tanmartu*, therefore, is no primitive Aramaic-Accadian name, but a word applied to the first month under Sumerian influence.

(2) 3. *arah* <sup>d</sup>.*Sin*, month of the god Sin, Moon-god.<sup>5</sup> The third month, Sivan, is the month of the Moon-god, Sin, in the Assyrian calendars,<sup>6</sup> where he represents the Fire-god, based upon the Sumerian myth that the third month was sacred to the Fire-god (page 116). This undoubtedly explains the Assyrian name. See also the same 'month of the Moon-god' ('*Am*) in South Arabic, p. 14.

(3) 4. *arah* *ku-zal-li*, month of the shepherd.<sup>7</sup>

<sup>1</sup> *ša ultu ûmê rûkûti . . . im-ša*, *ibid.* 26-7; Luckenbill, *Ancient Records* II 184.

<sup>2</sup> Kugler, *Sternkunde, Ergänz.* 208.

<sup>3</sup> Weidner, *Bab.* VI 157.

<sup>4</sup> The ideal year began in the Sumerian calendar with the rising of Pleiades. At 3000 B.C. Schoch reckons this April 6, Gregorian; Fotheringham, March 30; at 2000 B.C. Kugler gives April 21, *Sternkunde, Ergänz.* 229. See Schoch, *Planetentafeln für Jedermann*, Pl. XLIV.

<sup>5</sup> Identified with *Ayar*, second month, V Raw. 43 A 8. KAH. II 34, 48 Var. D, *arah* EŠ-*in*, i.e. *Sin(in)*; Cappadocian, MVAG. 33, 276, 19; *arah* *Zu-en*, KAJI. 57, 29; 65, 28; *arah* <sup>d</sup>.*Sin*, 319, 14. But Nisan is called *arah* <sup>d</sup>.*Sin*, p. 68, n. 4, l. 10.

<sup>6</sup> IV Raw. 33, K. 2049 and see Chapter III.

<sup>7</sup> Identified with Sivan, third month, V Raw. 43 A 14; VAT. 9909, 5. Cappadocian, Lewy, MVAG. 33, 262, 32, *et p.* *ku-zal-lu*, KAJI. 19, 22; 122, 19 *et p.* Syr. *karztlā*, shepherd. See *kurillu* in the Nuzi list. Probably so called from the fourth Nippurian month *šu-numun*, rendered *Tammuz* in Babylonia, and for the god Tammuz as shepherd, see SBP. 318, 9; BE. 30, 6, 5 ff.; OECT. I, 40, 29. There was a festival of the goddess *Tašmetu* on the 28th of *ku-zal-lu*, KAV. 110.

(4) 5. *arah* *al-la-na-a-ti*, month of the shepherdess.<sup>1</sup> On the second of <sup>*arah*</sup> *Al-la-na-tu* there were wine-offerings for the feast (*ka-zal*), 'when the gods were called to the temple', and 'for the forest', on the same day; also for the feast on the fifth.<sup>2</sup> The same offerings for a festival occur on days 13 and 14, and 6, 8, 9 (or 19).<sup>3</sup>

*allallu* means 'shepherd boy',<sup>4</sup> and seems to be the same as Syriac *'allānā*, shepherd; it is presumed that an hypothetical *allānu* means the same, hence the rendering 'month of the shepherdess', probably based upon some unknown myth in connexion with the month Ab.<sup>5</sup> If *allanatu* means shepherdess it must refer to Ishtar, for whom the Assyrians in the time of Ašurbanipal held a festival when her constellation, the Bow Star, rose in Ab.<sup>6</sup> Ishtar as shepherdess is otherwise known.<sup>7</sup> The ceremonies and myths of the fifth month (Ab) are principally concerned with Tammuz in the lower world.<sup>8</sup> See p. 44 on the month of *Bēlit-ilī* at Susa.

(5) 6. *arah* <sup>*d.*</sup> *Bēlat-ekalli*,<sup>9</sup> month of the goddess queen of

<sup>1</sup> Identified with Tammuz, fourth month, V Raw. 43 A 20; *al-la-na-a-tum*, KAJI. 6, 35. <sup>2</sup> KAV. 158; Schroeder, ZA. 34, 164.

<sup>3</sup> Ibid. 157 and III. These directions correspond to Ab in the Babylonian almanac. With offering *a-na kišti* (<sup>*6*</sup>*tūr*), to the forest, on the 2nd of *Allanatu*, see *ki-iš-ti ili*, '(offering to) the forest of god' on the 2nd of Ab, V Raw. 48 v 2.

<sup>4</sup> Proved by CT. 14, 14, S. 995, 12, *sipa-tūr* (gu), 'the little shepherd bird' = *al-lal-lum*.

<sup>5</sup> *alanū* 'the far away' in *lugal ki-bad-du* = *šarru a-la-nu-u*, a title of Tammuz, II Raw. 47 B 30, is not the word in question. See also [ki-]pa (BAD)-du = *a-la-nu-u*, CT. 19, 47 Rev. 17, Syn. *nasīhu*, 'the seized away', *munnarbu*, 'he that fled', titles of Tammuz. For Ishtar worship in the month Ab at Susa, see Scheil, *Dél. Per.* x 32, sacrifices to <sup>*d.*</sup> *Innini-uru-an-na*.

<sup>6</sup> See p. 5 and Streck, *Assurbanipal* II 112, 16-17; 72 IX 9. The festival of Ishtar of Arbela at Milkia is called *isinni* <sup>*iat*</sup> *šat-ri*, Thureau-Dangin, *Rituels*, p. 112, and was celebrated in the *bīt akīti*, Streck, *ibid.* 328, 45-8; 332, 18-23.

<sup>7</sup> RA. 13, 108, 12 = 113, 12.

<sup>8</sup> See Chap. III.

<sup>9</sup> Usually *arah* <sup>*d.*</sup> *Nin-é-gal*; explained by Ab, V Raw. 43 A 26. Written *arah be-el-ti é-gal-lim*, Cappadocian, Driver, *Bab.* x 87, No. 35; *arah*

the palace (underworld). The myth of this month should be taken from the sixth Nippurian month *kin-<sup>d</sup>Innini*, month of the mission of Ishtar, rendered *Elulu*, month of the washing, by the Babylonians.<sup>1</sup> The Babylonians, rendering the salient aspect of ceremonies of the sixth Sumerian month by *elulu*, washing, based their translation on a myth of the bathing of Ishtar and not on the real meaning of *kin-<sup>d</sup>Innini*, 'mission of Ishtar',<sup>2</sup> which almost certainly refers to the descent of Ishtar into the lower world to seek for Tammuz,<sup>3</sup> a myth celebrated in the sixth month. The sixth month Elul was sacred to Ishtar,<sup>4</sup> and the Tammuz myth must have figured in the ceremonies of this month, for it was known as the month of the 'festival of Tammuz' among the Sumerians of Lagash.<sup>5</sup> The Assyrians designated this month by a name of the goddess Ishtar<sup>6</sup> as queen in the lower world and is probably taken from a myth of the 'mission of Ishtar' in the Nippurian calendar. For Ninegal in Teshrit, see p. 104.

(6) 7. *arah ša sa-ra-a-ti*, meaning unknown.<sup>7</sup> Since this

<sup>d</sup>*Nin-é-gal-lim*, KAJI. 29, 23; KAH. II 34, 48. The same myth is reflected in the month-name *Igikurra* at Hana. See p. 41.

<sup>1</sup> On the ceremonies of the cleansing of Ishtar, see Chap. III.

<sup>2</sup> <sup>iii</sup>*kin*; explained by *ši-pir ištarāti*, i.e. Elul, the mission of the Ishtars, Streck, *Assurb.* I 26, 32; 118, 77 (Var. *Ištar*). <sup>3</sup> See *Sem. Myth.* 326-35.

<sup>4</sup> IV Raw. 33, K. 2049, 6, as *be-lit mātāti*, 'queen of the lands'.

<sup>5</sup> Langdon, *Drehem* 11 and 15; Thureau-Dangin, RA. 4, 84; *ezen-<sup>d</sup>Dumu-zi*, RTC. 403. Landsberger, *Kal.* 62, casts doubt on this as the sixth month, but RTC. 403, Rev. II states that from <sup>iii</sup>*ezen-<sup>d</sup>Dungi* to <sup>iii</sup>*dirig šegurkud* are seven months.

<sup>6</sup> <sup>d</sup>*Nin-é-gal-la*, or *gašan-égalla* is explained as *bélit ummanātim*, queen of hosts, in a list of underworld deities, SBP. 156, 44, and as consort of *Uraša* = Ninurta, at Dilbat, 142, 7; Weidner, AKF. II 12, 8; see AB. 2 n. 5; BA. II 203, 13. She is clearly an underworld deity, with Damkina, preceding Lugalgirra and Meslamtaea, titles of Nergal, RA. 10, 71 II 5. In *Bab.* IV 233 II 1, clearly a title of Ereshkigal, goddess of the lower world. But BE. 31, 36, 13, Ninegalla is a title of Ishtar in the lower world. She is the same as Lagamal, consort of *Uraša*, BE. 31, 17 n. 3; as title of Ishtar, see JRAS. 1926, 35, 16.

<sup>7</sup> V Raw. 43 A 32, makes this the sixth month Elul.



corresponds to *tešrītu*, 'beginning' (of the autumn year), one is attracted by the possibility that *sarātu* represents the Aramaic *šarīūthā*, *šarwāiā*, 'beginning', month of the beginning, first month of the old West Semitic year, and that the Assyrians only chose another derivative of the common Semitic verb *ša-r-w*, Ethiopic *s-r-ī*, to express this meaning.<sup>1</sup>

(7) 8. *araḥ ša ki-na-a-ti*, month of the families. This month corresponds to Arahsamna, 'eighth month' in Babylonia, and to *apin-dū-a*, 'the month of ploughing', in the Nippurian calendar, and to *kinūn*, 'month of the hearth-fire', in the old Aramaic. Rituals with the *kinūnu* occur in the menologies for this month.<sup>2</sup> No myth has survived concerning the eighth month in Sumer and Babylonia, and it is curious that not Arahsamna but *Teshrit*, the seventh month, is described as the month *ša kināti*,<sup>3</sup> and in two lists *ša kināti* is made equivalent to *Teshrit*.<sup>4</sup> If the order of months accepted here is correct, and the mythology of the other months indicates that it is so, then the 'ceremonies of the families', or parentalia for the souls of the dead, occurred in Arahsamna in Assyria, not in *Teshrit* as in Babylonia.

(8) 9. *araḥ mu-ḥur ilāni*.<sup>5</sup> Meaning unknown. It corre-

<sup>1</sup> This assumes that *š* was pronounced *s* always in this word, but in the early Assyrian period and in Cappadocian this phenomenon is rare; see Thureau-Dangin, RA. 30, 94 n. 3. Also *sá-ra-tim*, Lewy, MVAG. 33, p. 25, No. 27, 11; *sa-ra-ti*, KAJI. 69, 21; 36 Rev. 6; 15, 27; often *za(sa)-ra-tim*, *za-ra-ti*, Bab. vi 191, No. 8, 7; Lewy, MVAG. 33, p. 226, 9; Golénischeff, 6, 13 *et p.* The pronunciation *s* is undeniable and no variant *ša-ra-ti* exists.

<sup>2</sup> See Chap. III.

<sup>3</sup> CT. 41, 39, 7.

<sup>4</sup> V Raw. 43 A 39; VAT. 9909, 7 in ZDMG. 74, 216; *araḥ ša ki-na-te*, also VAT. 8695, *ibid.* p. 217. *ki-na-ti*, KAJI. 20, 27; 22, 23; *ki-na-te*, 120, 31; *ki-na-tim*, Cappadocian, Driver, Bab. x 96, No. 43, 11. The full form is *araḥ na-ar-ma-ak A-šur ša ki-na-tim*, 'Month of the ablution of Ashur, (month) of the families', CT. Cap. Tab. iv 13, 115142, 12-14; Nies iv 210, 12-14 has the same text with Var. *araḥ ša kinātim*. See Lewy, MVAG. 1933, p. 58.

<sup>5</sup> So restore V Raw. 43 A 45, where it is explained by Arahsamna, eighth month. KAJI. 1, 35; 72, 22; 137, 1. *mu-ḥu-ur* (Var. *ḥur*) *ilāni*,

sponds to Kislev, *kan-kan-è* in the Nippurian calendar, *ezen-mağ*, 'month of the great festival', in the Ur calendar, and *mu-šu-dū* at Lagash. The ceremony characteristic of this month, December, is the carrying torches and lights,<sup>1</sup> and sacrifices to the gods of the lower world. In the Susa calendar the ninth month is called *araḥ tam-ḫi-ri*. *tamḫiru* and *muḫur* must have the same meaning and probably 'reception', month of the reception of the gods. The mythology is obscure but in some way refers to the resurrection of the Sun-god Nergal at the winter solstice, when the god of vegetation returns from the lower world and is again received with rejoicing by the gods of earth and sky.<sup>2</sup>

(9) 10. *araḥ a-bu šarrāni*, month of the father of kings, corresponding to Tebit in Babylonia, January. The month was known as 'the famous festival of Anu',<sup>3</sup> and Anu bestowed kingship upon men.<sup>4</sup> The name is, therefore, taken from Sumerian mythology and from the name of this month at Ur, *ezen-an-na*, month of the festival of heaven, or of the heaven-god. In this month the elders of the cities who had died ascended from the lower world, at Nippur called *ezen ab-è-ka*, 'festival of the ascent of the elders'. By 'elders'<sup>5</sup> the myth probably includes 'kings'. The Assyrians, therefore, obtained this name from the myth that this month was sacred to Anu, the heaven-god and father of kings.<sup>6</sup> In the Susa calendar the name *silititu* for this month remains obscure.<sup>7</sup> The mythology proves that this is the tenth month, not the ninth.

AKA. 12; *mu-ḫur ilāni*, KAH. 1 8, 42; Cappadocian, *ma-ḫu-ur ill*, Lewy, No. 78, 17; *ma-ḫu-ur i-ll*, RA. 8, 145, 9; 147, 13; *Bab. IV* 78, 7 (RA. 8, 146 n. 1).

<sup>1</sup> See Chap. III.

<sup>2</sup> No list preserves the name in its order, but as only one place is missing in the lists, i.e. the ninth place, it is presumed that *muḫur ilāni* must be the ninth month; Ehelolf-Landsberger, ZDMG. 74, 217.

<sup>3</sup> *isinnu štru ša* <sup>d.</sup> *Anim*, KAV. p. 120 III 17.

<sup>4</sup> Langdon, *Etana*, 9, 27. <sup>5</sup> *ab-ba = šibātu*, KAV. p. 120, 13+19.

<sup>6</sup> On the myths of Tebit see Chap. III.

<sup>7</sup> V Raw. 43 A 51 is to be restored [*araḥ a-bu lugal-meš*] = Kislev, ninth month, and VAT. 9909, 8 has *araḥ a-bu NIŠ-meš*; *a-bu lugal-meš*,

(10) 11. *arah* *Hi-bur*, month of the (river) Hibur, month of the river of death,<sup>1</sup> apparently so named as the month when demons are particularly dangerous. Shebat was the month of demons in Jewish mythology and an Assyrian menology has the entry for Shebat 30th: 'On the thirtieth let him bow to Adad; wine he shall not drink; in the river the *šidānu* will not seize him.'<sup>2</sup> To utter an imprecation against a ghost is to say 'May he cross the Hubur river',<sup>3</sup> and the ship which crosses it reaches the quay of death.<sup>4</sup> 'Thou shalt cross the Hubur river', addressed to the demoness of plague, was said to be an ancient saying.<sup>5</sup> The demoness Lamashtu is cursed and sent across the Hubur river in a boat.<sup>6</sup> The demon conducts men to the Hubur river, meaning that they are led to death,<sup>7</sup> and Nergal, lord of the dead, is 'king of the Hubur',<sup>8</sup> the world-encircling stream, the bitter sea, over which first brooded Tiamat, dragon of Chaos.<sup>9</sup> Gilgamesh had crossed the Hubur river<sup>10</sup> and a prayer to Tammuz, who yearly descended to Arallû, reads, 'When thou crossest the *Hu-bur* curse him (the demon) in the name of Ea.'<sup>11</sup>

The belief in the danger from demons in the eleventh month, Shebat, February, reveals itself in *arah* *huldubbê*, month when demons were expelled, of the Susa calendar.

KAJI. 149, 32; *a-ab* lugal-me, 127, 19. Cappadocian *áb ša-ra-ni*, Lewy, No. 14, 8; 29, 12; 33, 4; 46, 7, *et p.*

<sup>1</sup> Explained by Tebit, tenth month, VAT. 9909, 9, and so restore V Raw. 43 A 57. *arah* *Hu-bur*, KAJI. 17, 22; 26, 17; *Hi-bur*, 37, 6; 289, 16; VAT. 10319, ZDMG. 74, 217; *Hu-bu-ur*, Lewy, p. 33, No. 26, 7 *et p.*

<sup>2</sup> K. 3769 in Virolleaud, *Fragments*, 20, 28; K. 7079 Rev. 1, 32.

<sup>3</sup> *ndr* *Hu-bur li-bir*, KAR. 178 Rev. vi 51, on Ab 25th; so restore 227 Obv. 11 45.

<sup>4</sup> KAR. 196 Rev. 11 58.

<sup>5</sup> Craig, RT. 44, 17 = Ebeling, *Kohelet*, p. 6. A synonym of the Hubur river is *uruh mîti*, way of death.

<sup>6</sup> Drawings of Lamashtu cursed and sent across the Hubur river are common. See *Sem. Myth.* 367-71.

<sup>7</sup> *Babylonian Wisdom*, 61, 7.

<sup>8</sup> CT. 24, 36, 61.

<sup>9</sup> Langdon, *Epic of Creation*, 84, 132; 96, 19; 112, 23; 118, 81. Cf. *Hu-bur pal-ka-ti*, the wide Hubur, King, *Creat.* 1, 197, 9.

<sup>10</sup> PBS. x 197, 42.

<sup>11</sup> RA. 13, 116, 3-4 = 112, 3-4.

The Babylonians found no mythology of this kind in the Sumerian calendar, for they rendered the month by *šabašu*, month of storms, describing the rainy season, and the Nippur Sumerian calendar describes it as 'month of emmer'. At Ur it was called month of the festival of the god Mekigal, rendered by *ezen* <sup>d.</sup>*Adad*, 'feast of the storm-god',<sup>1</sup> and the month was sacred to Adad. If the Semites of Elam and Assyria found a reason for designating this month as a time of danger from demons, in Sumerian the source has been found for the ninth month of the Ur calendar, or *tenth* (towards the end of the last Ur dynasty). In tablets dated by *ezen-mağ* there are offerings to the *ki-Ḫabur*,<sup>2</sup> in the temple of Adad, that is to the 'place of the river of the lower world'. The goddess of this river of death, *Ḫuburitum*, was worshipped in the *ninth* (*tenth*) month<sup>3</sup> and there was a ritual known as *nabrium* to the goddesses of the lower world, *Allatum*, *Bêlat-suh̄nir*, *Bêlat-dabbaran* in the ninth month of the Ur calendar.<sup>4</sup> For *araḫ Ḫibur* = Kislev, ninth month, see below, p. 40.

(11) 12. *araḫ šip-pi*, month of orchards.<sup>5</sup>

In this early Assyrian list which begins the year with a month corresponding to Adar, the twelfth month of the Babylonian calendar, most of the names are taken from the mythology of the Sumerian calendars. If it begins with the twelfth month that is probably due to the fact that towards

<sup>1</sup> *araḫ isinni* <sup>d.</sup>*Adad* was one of the Babylonian renderings for the eleventh month of the Sumerian calendar. See VS. IX 6, 11 = 5, 12; here a house is rented for one year; the contract runs from the first day of intercalary Adar and ends in *araḫ ezen* <sup>d.</sup>*Adad*.

<sup>2</sup> Legrain, *Ur*, 272, 9; 284, 13 in the temple of Bêlitsuh̄nir. Note that *ki-ḡabur* (A+ḪA) = *šapliš*, beneath; cf. *ki-gu-bu-ur-ra* = *šapliš*, opposed to *eliš*, AL.<sup>3</sup> 136, 3 = SBH. 99, 50; *gu-bu-ru*, SBP. 86, 42. On *Ḫabur* as part of Eridu see BL. 115 n. 2.

<sup>3</sup> Legrain, *Ur*, 350, 2. <sup>4</sup> See the Babylonian month *araḫ nabri*, p. 30.

<sup>5</sup> Explained as Shebat, eleventh month, VAT. 9909, 10; *araḫ šip-pu* = Shebat, V Raw. 43 B 6. *ši-ip-ú* KAJI. 4, 32; *ši-pi*, 10, 1; *ši-ib-bi*, 11, 24; *ši-ip-pu*, 241, 13; *ši-pu*, VAT. 9375, 13 = *Studia Orientalia* 1, 263. Cappadocian, *ši-ip-im*, Lewy, p. 33, No. 23, 7; *ši-ip-e-im*, 81, 14; CT. *Cap. Tab.* 146 A 19.

the end of the last dynasty of Ur the Sumerian calendar at Ur and Umma also began the year with *šegurkud*, or Adar, as does also the calendar used by the Accadians in Elam. The secondary Ur calendar may have been brought to Assyria by the last kings of Ur, before the Aramaic invasion obtained control of Assyria.<sup>1</sup>

These early Assyrian names continued to be used in Assyria as late as Tiglath-Pileser I (end of the twelfth century) and an inscription of that king states that in his time *arah Hi-bur* was *Kislev*, thus beginning the year with Ayar.<sup>2</sup> This is not long after the time when the early Assyrian names alone were in use and proves that during the Cassite period the northern kingdom began to adopt the Sumerian calendar long since current in Babylonia. It is uncertain when this change took place; when the Sumerian names of the Nippurian calendar came into universal use in Assyria, it is also uncertain whether the Assyrians translated them after the Babylonian manner or after their own earlier renderings. In the time of Tiglath-Pileser I it is entirely possible that *barazaggar*, first Sumerian month, was rendered *Tanmartu* and not *Nisannu*. Long after the Nippur calendar obtained ascendancy in Assyria the antiquarian Shalmanasar III (858–824 B.C.) still used *arah mu-ḥur-ilāni*, the old name of the ninth month.<sup>3</sup>

This does not exhaust the month-names of the old Assyrian kingdom. The following months appear in Cappadocian texts but their positions are unknown:

(a) *arah zi-bi* (or *št-pt*) *bi-ri-im*.<sup>4</sup>

(b) *arah ša ti-i-na-tim*,<sup>5</sup> month of figs?

<sup>1</sup> For evidence that Bur-Sin of Ur ruled at Assur in the twenty-fourth century see AB. p. 2; Langdon-Fotheringham, *Venus Tablets*, 87 n. 2; Fish, *Drehem*, 149, 4.

<sup>2</sup> Cited by Ehelolf and Landsberger, ZDMG. 74, 217. The Ayar year was also current at Susa. See below.

<sup>3</sup> Andrae, WVDO. x 41; ZDMG. 74, 217.

<sup>4</sup> Clay, *Nies*, iv 207, 10 = Lewy, No. 31. Is this the same as *arah zi(št)-ip-e-im*?

<sup>5</sup> Driver, *Bab.* x 102, No. 52, 5. *ti-i-na-tim*, Lewy, No. 47, 9; 51,

At Hana on the middle Euphrates, the centre of the early Amorite-Aramaic people, in the early Cassite period, and in the time when the old Assyrian calendar was still in use, the following months occur:

(a) *arah ki-nu-nim*, which was current also in Babylonia for the eighth month.<sup>1</sup> This is probably an original Aramaic month-name.

(b) *arah te-ri-tum*.<sup>2</sup> Is this connected with the old Accadian *arah tiri*?

(c) *arah* <sup>a</sup>*Bêlit-bi-ri*.<sup>3</sup> This is of mythological, hence Sumerian, origin.

(d) *arah* <sup>a</sup>*Igi-kur-ra*, 'month of the goddess of the face of the earth', goddess of the gate of the lower world. The myth on which this name is based must be the same as in *Bêlat ekalli*, sixth old Assyrian month,<sup>4</sup> and reproduces the name of the sixth month at Nippur, *kin*-<sup>a</sup>*Innini*, referring to the descent of Ishtar into Arallû by the seven gates.<sup>5</sup> The goddess *Igikurra* may be simply an epithet of Ishtar as an underworld deity, describing her when she descended to seek for Tammuz,<sup>6</sup> and equivalent to *Bêlat ekalli*. The name is explained in a commentary by 'gate of the goddess of the lower world', and the month-name at Hana must refer either to the *goddess of the lower world* (Ereshkigal) or to *Ishtar* as she who passed the seven gates to reach the abode of Ereshkigal.<sup>7</sup>

(e) *arah bi-ri-iš-ša-ar-ru* or *biri izzarru*.<sup>8</sup>

In the old Assyrian and early Aramaic calendars at  
12. The Hebrew pl. of *tê'ēnā*, 'fig', is *tê'ēnīm*; Syr. *tê'ttā* has plurals, *tê'né*, *tê'ēnājjā*, *tê'ēnīn*. It may correspond to the Canaanite *jarah kēš*, 'fruit-picking'.

<sup>1</sup> See p. 29.

<sup>2</sup> LC. 237, 33.

<sup>3</sup> Thureau-Dangin, *Syria*, 1924, 277; Sayce, PSBA. 1912, 52.

<sup>4</sup> See p. 34.

<sup>5</sup> *igikurra* is an epithet of Arallû, PSBA. 1916, 56, 3. The month occurs in *Syria*, 1924, 270, 33; 273, 21.

<sup>6</sup> In fact <sup>a</sup>*igi-kur-za*, read *ganzir*, is Ishtar, CT. 25, 8, 12.

<sup>7</sup> *ga-an-ši-ir*, literally 'gate of misery', is a gloss on *igi-kur*, MAG. III 3, 51 l. 140. *ga-an-ši-ir* = *bāb ilat iršiti*, l. 141.

<sup>8</sup> Clay, *Morgan*, IV 52, 30.

Assur and Hana we are in the presence of an evolution from primitive Semitic month-names to the introduction of mythological names based upon the Sumerian calendars. Even here few old Aramaic or Accadian names have survived. There is here the same attempt to render salient aspects of the myths of Sumer as in the southern kingdom where the series Nisan-Adar was obtained in the same manner. The difference in practice between the Babylonians and Assyrians after the Amorite invasion was caused by the more tenacious Semitic character of the northern kingdom, and by the greater Sumerian influence in Babylonia. In the northern kingdom most of the names are actually written phonetically, whereas the usual practice in Babylonia was to write the Sumerian names. About the twelfth century Babylonian influence finally prevailed throughout Assyria and the Nippurian names came into common use there. Consequently when the first great Church Calendars were written in Babylonia in the Cassite period and copied by the Assyrians about 1000 B.C. the months are all written in the Nippurian manner.

The Accadians in the time of the Agade dynasty, four centuries before the Amoritic conquests, had incorporated Elam in their empire,<sup>1</sup> and under the dynasty of Ur, the Accadians, who had occupied Elam, introduced a Semitic version of the Nippurian and Ur calendars there, beginning with Adar. This was undoubtedly due, as in Assyria, to the influence of the order in the late Ur calendar where *šegurkud* or Adar was the first month. The texts in which the so-called *Susa calendar* is used are all from the period of the first Babylonian dynasty.<sup>2</sup>

Two of the month-names are the same as the Babylonian

<sup>1</sup> *Cambridge Ancient History* 1, 408 ff.

<sup>2</sup> They are all from Susa and published by Scheil: (a) *Tablettes de l'Époque d'Adda Pakšu, Dél. Per.* x 14-80; Adda Pakšu, contemporary of Sumu-abu, *ibid.* 14-15; (b) *Actes Juridiques Susiens*, *ibid.* xxii; for dates, see p. v; (c) *Actes Juridiques Susiens*, *ibid.* xxiii; (d) *Actes Juridiques Susiens*, *ibid.*, xxiv.

renderings of the Nippur calendar, i.e. *Adaru* and *Abu*; consequently the Nippur calendar must have been the basis for these Accadian names at Susa. *Abu* is the *fifth* month in both Babylonian and Susa calendars. Since the *seventh* Susa month is named *šebûti*, *sibûti*, 'seventh', counting from Adar, and Virolleaud, *Shamash* 14, 14 makes Adaru the first month, there can be no doubt but that it began the year.

The other official lists place Adar opposite to Ayar, thus making the whole calendar two months later. Consequently these lists, in giving the Nippurian equivalents, cannot be used at all for determining the *meanings*, but only for the season.

The order is established by two official lists<sup>1</sup> and by internal evidence of the contracts. A star set against the names means that it was also used in Assyrian astronomy.

\*1. *araḥ a-da-ri*,<sup>2</sup> 'month of threshing'. Both official lists give Adar at Susa as equivalent to Ayar. This is the Babylonian rendering of *šegurkud*, twelfth month in the Nippurian calendar; in the Ur series it is the first month towards the end of the Dungi period, as at Umma and secondary Assyrian series. In view of the name of the *second* month Adaru cannot be the month of threshing = harvest month; obviously the Accadians at Susa employed Adaru merely because it was the first month.<sup>3</sup>

\*2. *araḥ šī-ri-' ebūri*, 'month of the vegetation of harvest'.<sup>4</sup>

<sup>1</sup> V Raw. 43, fifth name in each list; PSBA. 1912, 293, Sp. II 381, published by Pinches; Virolleaud, *Astrol. Shamash*, 14, 14-53 = Weidner, *Bab.* IV 165-9. See Scheil, RA. 23, 42; Landsberger, *Kal.* 87.

<sup>2</sup> V Raw. 43 A 7; Sp. II 381, 3; Vir. *Sham.* 14, 14; *araḥ a-da-ru-um*, *Dél. Per.* x 3 Rev. 3; 14 Rev. 3, *et p.* *araḥ a-da-ri* XXIII 179, Obv. 3 *et p.*; see *ibid.*, p. 179; XXII 108, 8 *et p.*; see *ibid.*, p. 181.

<sup>3</sup> They evidently did not know the meaning of this word, or if they did, it was employed for April regardless of its meaning; note that *abu*, fourth month, is used as equivalent of *kin*-<sup>a</sup> *Innini* regardless of the meaning.

<sup>4</sup> Sp. II 381, 4, explained by Sivan; *šī-ir-i ebūri* = Sivan, V Raw. 43 A 13; second month, Vir. *Sham.* 14, 19; *Dél. Per.* XXIII 184, 4.



A variant<sup>1</sup> is *araḥ še-ir-i ša e-ši-di*, 'month of the vegetation of reaping'. But the fourth month is described as harvest time; see below. I take this to mean the month of mowing hay. *araḥ a-šag dingir-ra še-gur-kud* seems to be still another name for the second month, meaning 'harvesting the field of god'.<sup>2</sup>

\*3. *araḥ pi-ti bābi*, 'month of opening the gate'. This is explained by the month Tammuz in the official lists,<sup>3</sup> and late Assyrian texts assure the identity of this month with Tammuz. 'The opening of the gate' here must refer to opening the gates of the lower world for the descent of Tammuz and not to the myths of the months Teshrit and Tebit where the gates of hell are opened that souls may rise for the parentalia.

\*4. *araḥ 4. Maḥ*, 'month of the great goddess'. This is explained as the fifth month of the Nippurian calendar, Ab.<sup>4</sup> The goddess *Maḥ* is usually *Bēlit-ilī*, queen of the gods, the great mother goddess,<sup>5</sup> the goddess of child-birth. This cannot have anything to do with the myths and ceremonies of the Sumerian month *izi-izi-gar = Ab*, since the Susa calendar has the month-name *abu*. See the fifth month.<sup>6</sup>

\*5. *araḥ a-bi*, 'month of torches', although the equivalent

<sup>1</sup> *Dél. Per.* xxiii 182, 5; 192, 4; xxii 24, 5.

<sup>2</sup> *Dél. Per.* x 124. Uncertain, possibly fourth month. Also *a-šag dingir-ra*, see under seventh month.

<sup>3</sup> Sp. ii 381, 5; V Raw. 43 A 19; *pi-it bābi*, third month, *Vir. Sham.* 14, 24; *pi-it ba-ba-a*, *Dél. Per.* xxii 123, 4; *pi-it ba-ba-(ba!)-a*, 40, 4. *araḥ bad kā* follows Sivan, BA. iii 333 ii 14 (Sivan l. 10); see *ibid.*, p. 244, 4.

<sup>4</sup> Sp. ii 381, 6; V Raw. 43 A 25. Fourth month, *Vir. Sham.* 14, 29. *Passim* in *Dél. Per.*; see xxii 26, 6; 28, 12 &c.

<sup>5</sup> *Sem. Myth.*, 109-15.

<sup>6</sup> Susa texts refer to *araḥ 4. Maḥ* as the harvest month; *ina e-bu-ri ina araḥ 4. Maḥ*, *Dél. Per.* xxiii 179, 6; 184, 5; 186, 6; 191, 5; 192, 7-8; 197, 6. In distinction from *širi'ebūri*, *širi' ša ešīdi*, I take this to mean the reaping of corn. Also *araḥ še-ir-ḥu-um kunāši ešīdi*, 'month of the reaping of the vegetation of emmer' probably belongs here, *Dél. Per.* x 11, 7; also *še-ir-ḥu-um še'i ešīdi*, 'month of reaping the vegetation of barley', *Dél. Per.* x 12, 17.

of Elul at Susa,<sup>1</sup> is only a copy of the Babylonian rendering of the fifth month of the Nippur calendar. The texts from Susa, however, prove that the ceremonies of this month were those of Elul, one text referring to sacrifices to Ishtar of the holy city. This was the month of the 'mission of Ishtar' and of the legend of her washing in the springs of Dilmun.

\*6. *arah la-lu-bi-e*, month of *lalubû*, meaning unknown. The official lists identify this month with Teshrit.<sup>2</sup>

\*7. *arah si-bu-tû*, 'seventh month'.<sup>3</sup> I take *arah iklı ili eriši*, month of tilling the field of god, as the name current at Susa, where the word 'seventh' is never used.<sup>4</sup>

8. *arah ši-ri-' e-ri-šu*, 'month of tilling the vegetation' (corn-land)<sup>5</sup> = Kislev, December.

9. *arah tam-ħi-ri* = Tebit, January.<sup>6</sup>

\*10. *arah si-li-li-ti*,<sup>7</sup> meaning unknown = Shebat, February.

\*11. *arah ħuldubbê*, month of 'O *rābišu* demon depart' =

<sup>1</sup> Sp. II 381, 7; V Raw. 43 A 31; given as fifth month, Vir. *Sham.*, 14, 34. *arah a-bu-um*, *Dél. Per.* x 24; 32; *a-bi*, xxii 96, 8; 129, 13. See especially x 24 which mentions sacrifices to the new moon of *E-lu-lu*; also No. 32, sacrifices to *Innini uru an-na*.

<sup>2</sup> Sp. II 381, 8; V Raw. 43 A 38. Sixth month, Vir. *Sham.* 14, 39. *la-lu-bu-um*, *Dél. Per.* x 6, 6; 21, 5; *la-lu-bi-e*, xxii 37, 11; *la-an-lu-be* xxiii 326. In astronomical texts, Vir. *Astrol. Suppl.*<sup>2</sup>, p. 80, No. 56, 1.

<sup>3</sup> Sp. II 381, 9 = Arah-samna; V Raw. 43 A 44 [*si-bu-ti. še-bu-ti*, Vir. *Astrol. Suppl.*<sup>2</sup>, p. 73, 99; *Ishtar* vii 43, where it is explained by Arah-samna; *Suppl.*<sup>1</sup> xl 7; *ibid.*, p. 80, No. 56, 2, where it follows *la-lu-[bi-e]*.

<sup>4</sup> See the order *lalubum*, a-šag dingira-uru-a (*erēšu*) and *serħum eriši* (*uru-a*), *Dél. Per.* x 6; 21.

<sup>5</sup> Sp. II 381, 10. Pinches, PSBA. 1912, 293, cites the Var. *iti ab-sim-uru-ši*, i.e. *širi' eriši*. So restore V Raw. 43 A 50. At Susa *še-ir-ħu-um eriši*, *Dél. Per.* x 21, 9; 58, 9; *še-ir-i ša e-ri-si* xxii 87, 9; 124, 5.

<sup>6</sup> Sp. II 381, 11 = V Raw. 43 A 56 = Tebit. *tam-ħi-ru-um*, *Dél. Per.* x 2, Rev. 5; 43 Rev. 3; 64 Rev. 3; *tām-ħi-ri*, 112 Rev. 2; 119; xxiv 369, 12; 363, 21; xxiii 214. For the reading (not *tamħiri*) see Thureau-Dangin, *Syl. Acc.* 37 n. 1. This has obviously the same meaning as *muhur ilāni*, ninth or eighth month in Assyria.

<sup>7</sup> SP. II 381, 12; V Raw. 43 B 5; CT. 26, 41 A 6 = Shebat; also RA. 17, 119 Rev. 3 = Shebat; Thompson, *Rep.* 49, 1+4 *arah si-li-li-ti*

Adar, March.<sup>1</sup> The name preserves a superstition that this month was particularly dangerous because of demons, similar to the Jewish superstition concerning Shebat. See *arah* *Hibur* eleventh Assyrian month.

12. For the twelfth month the official lists gave a name equivalent to Nisan, April, but it has not been preserved.<sup>2</sup> One of the names in the following list must be conjectured to have stood here.

- (a) *tár-bi-tum*, *Dél. Per.* x 17, given as intercalary, R.A. 23, 41. It is probable that this is the equivalent of Nisan and the twelfth month.<sup>3</sup> Nisan was the intercalary month of the Susa series in the official list, PSBA. 1912, 293, 1-2.
- (b) *da-ti-um*, *Dél. Per.* x 45; 57; 81; 82; 85.
- (c) *la-ah-ḥu-um*, *Dél. Per.* x 15; 28 *et p.*
- (d) *ḥar-te-pu-um*.<sup>4</sup>
- (e) *ḥu-ūr-šu-pu-um*, *Dél. Per.* x 80; xxiv 343, 6; *ḥur-šu-pi-um*, xxiii 300, 5; 302, 5.
- (f) *arah* *ilu-šar-ru* (?), *Dél. Per.* xxiv 343, 8.<sup>5</sup>

explained by Shebat. *zi-lí-lí-ti* suits the traces of copy in CT. 26, 41 A 6 better, as in *Dél. Per.* xxii 89, 9; 93, 7; 120, 4; 121, 4; 128, 13; *zi-lí-lí-tum*, xxiv 385, 6; xxiii 291, 13 *et p.* *zi-lí-lí-tum*, x 2, Rev. 6 *et p.*

<sup>1</sup> Loan-word from *ḡul-dub-è*; for this derivation, cf. *ḡul-dub è-ba-ra* 'Oh demon go away', title of an incantation, Harp. *Lett.* 24 Rev. 9. *ḡul-dub* = *rābišu*, PBS. v 136, iv 8. *ḡul-dub é al-è*, the demon of the house will depart, and *ḡulu-a-šú nu-ub-[te]*, not come nigh unto man, BL. 12, 6. *arah* *ḡul-dub-bi-e* = Adar, SP. ii 381, 13; *ḡul-dub-ba-è* = Adar, V Raw. 43 B 10, misplaced, should be in l. 11. *ḡul-dub-ba-a* = Adar, CT. 26, 41 A 7; *arah* *ḡul-dub-ba-e* (*ḡuldubbé*), glossed (*ḡu-ul-du-bi-e*) = Adar, RA. 17, 119 Rev. 3-4. *ḡu-ul-tu-up-pi*, *Dél. Per.* xxii 105, 7; *ḡu-ul-tu-bi* 23, 4; *ḡu-uš-tu-[up-pi]*, 100, 7; *ḡu-ul-tu-pi*, *ḡu-ul-tu-up-pi*, *ḡu-ul-tu-ub-bi-e*, *ḡu-ul-tu-up-pi-e*, *ibid.*, p. 189; xxiii 206. *arah* *ḡul-dub-e*, *Vir. Astrol.* S<sup>2</sup> LVI 8-10.

<sup>2</sup> The name should stand in V Raw. 43 A 1 and PSBA. 1912, 293, 1-2.

<sup>3</sup> Both Assyrian menologies provide for an intercalary Nisan, KAR. 178, Obv. iv 1-40 = 179, Obv. i 17-ii 11; K. 2514. These must be a heritage from the old Accadian Susa calendar. Scheil, RA. 23, 42, thinks that this is Elul, which is intercalary in the menologies.

<sup>4</sup> So read by Scheil, RA. 23, 41.

<sup>5</sup> Text uncertain.

*še-ir-ḫu-um* occurs *passim* as the name of a month but it may be for either 2 or 8 in this series. From the texts it is impossible to determine which month the scribe means.<sup>1</sup> It may be identical with *šerḫum kunāšī ešīdi*, which I have assigned to the fourth position.

*še-ir-ḫi ili* is also unplaced, xxiii 294; 295; 299; 304.

None of these names agrees with the native Accadian list of the Agade period,<sup>2</sup> which is the only genuinely Semitic calendar in cuneiform texts. The Accadian calendar in Elam is based almost entirely upon Sumerian mythology, and two of its month-names agree with the Babylonian renderings of the Sumerian equivalents, Adar and Ab. It is, however, a real Semitic calendar and if traces of it are found in Babylonia<sup>3</sup> itself some explanation must be given for its use in astronomy by the Assyrians of the late period. Since the Accadians of the Agade period had already begun to adopt the Nippur calendar, this Semitic calendar cannot have originated among them. Did it originate in Elam among the Accadians there when the kings of Ur ruled that land? If so, why do the Assyrian copies of Babylonian astronomical works show a decided preference for the Elamitic series? Obviously the Babylonian astronomers of the Hammurabi period must have used this calendar, otherwise the survival in Assyria would be inexplicable.

Thus in the history of the Babylonian and Assyrian religious calendars there arose three Semitic month-lists: (a) the Nisan-Adar list of Babylonia, based directly upon the Sumerian calendar; (b) the early Assyrian, *ḫarratu-šippu* list, based upon the late Ur calendar; (c) the Accadian list of Elam, based upon the Ur calendar. Most of the names in all three calendars reflect the Sumerian myths of the months. In the evolution of the Church Year we are

<sup>1</sup> *Dél. Per.* x 38; 56; 83; 84, 105; *ina araḫ še-ir-*<sup>2</sup>, xxiii 187, 4.

<sup>2</sup> p. 13.

<sup>3</sup> The Accadian calendar of Susa must have been originally in use among the Accadians of Babylonia. Note that Nisan was also intercalary in CT. 8, 27 A 32, reign of Abi-ešu'.

almost entirely concerned with the Babylonian year Nisan-Adar. The great menologies, which arose in Babylonia perhaps as early as 2000 B.C., resulted in the detailed directions found in the Assyrian menologies of the tenth century. Ašurbanipal's reformed calendar of the seventh century, which attempted to more or less regulate all the twelve months and three intercalary months of the holy year on the basis of the earlier directions for Nisan, was also a copy from Babylonia.

Details of how the Sumerian legends and festivals of the months descended down this long and complicated course of history, finally filtering into Judaism, Islam, Mandaean, and classical lands, must be deferred here. The fact to be kept in mind is that the Babylonian calendar which finally suppressed all others in western Asia is mythological in its origin and not Semitic. The Babylonians now introduced almanacs and menologies to inform the people what they should do or not do every day of the lunar year.<sup>1</sup> The texts of the earliest menology have been found at Assur, and are dated *circa* 1000 B.C.

(1) A very large tablet, VAT. 10564, carries six long columns on each side, in all twelve columns, almost entirely intact. This great text contains the Church Calendar for all the twelve months Nisan to Adar, and uses intercalary Nisan. The instructions for Nisan are given in detail for each day, but for the remaining months the instructions are more brief, on the whole containing only such special instructions as were necessary to supplement the Nisan instructions, which were generally applicable to all the months.<sup>2</sup> A broken duplicate of VAT. 10564 is 10503. Both tablets

<sup>1</sup> The menologies are at least as old as the fourteenth century. See p. 51.

<sup>2</sup> KAR. 178 Obv. III 82 = 179 Obv. I 10, *ki-ma araḥ Nisanni*, meaning that certain rules of Nisan apply to all months, i.e. 'they are like Nisan'. At the end of Ašurbanipal's reformed calendar, K. 4093 Rev. II 11, colophon of Intercalary Adar the same note occurs, *ki-i šd araḥ Nisannima*.

TEXTS OF THE ASSYRIAN TENTH-CENTURY CALENDAR 49  
are published by Ebeling, *Keilschrifttexte aus Assur Religiösen Inhalts*, 178, 179.

(2) A large tablet, VAT. 10110, carries two columns on each side and gives the instructions for Nisan. KAR. 176.

(3) A large tablet, VAT. 9663, carries four columns on each side. This tablet contains promiscuous directions for the days and months. The obverse columns I–III give the months in which it is propitious to do certain things.

A palace may be founded in Ayar, Sivan, Ab, Elul, Tebit, Shebat, Adar.

One may move out of a house in Sivan, Ab, Arahsamna, Tebit, Shebat, Adar.

One may return to his house in Nisan, Ayar, Sivan, Teshrit, Arahsamna, Shebat, Adar.

A king may build a temple or repair a holy place only in Shebat and Adar.

A king may clean his garments in Nisan, Ayar, Sivan, Ab, Teshrit, Arahsamna, Shebat, Adar.<sup>1</sup>

One may recite a penitential psalm in Nisan, Sivan, Ab, Teshrit, Arahsamna, Shebat, and Adar. This rule applies apparently to the king only. The instructions for cleaning a king's garments (*šarru šubat-su libbib*) are clearly connected with his instructions to recite a penitential psalm. The months for the two lists are identical except Ayar, which appears among the months for cleaning garments but not among the months for reciting a psalm. Moreover, the days of the months for both rites are nearly the same. In the old menology, *šigû lissi*, 'let him recite a penitential psalm', is

<sup>1</sup> According to KAR. 176 and 178, the days set aside for cleaning the king's garments in Nisan are 1, 6, 16, 27. This rule should apply to the same days in Ayar, Sivan, Ab, Teshrit, Arahsamna, Shebat, Adar. But for Sivan it is ordered for days 6+15; for Arahsamna, day 7. The directions for the other months omit it, implying that Nisan rules are to be followed. The reformed calendar *enbu bél arḫim*, so far as preserved, orders the king to clean his garments on the 16th of all these months, but here also the prohibition for Tammuz, Elul, Kislev, Tebit must have been enforced; for the text of Elul II is preserved and omits this direction. Nisan II forbids the king to clean his garment on the 6th.

ordered for Nisan days 6, 16, 27 (*sic*), 28. Nisan II forbids this on days 6, 16, 26, 28, but the reformed seventh-century calendar orders it for Nisan II 16 and forbids it Nisan II 6.<sup>1</sup> The old calendar forbids the *šigú* days 6, 16, 26, 28 of Ayar,<sup>2</sup> and orders it Sivan 6, 16, 26, 28, as does also the new calendar.<sup>3</sup> On the whole<sup>4</sup> the calendars agree with the rule of the months and days.<sup>5</sup> It is permissible to change one's occupation or business<sup>6</sup> only in Nisan, Ayar, Sivan, Shebat, and Adar. One is not allowed to take purgatives to move the bowels freely in Nisan and Tebit.<sup>7</sup>

The months favourable for bringing a bride into a house are Nisan, Ayar, Sivan, Elul, Teshrit, Arahsamna, Shebat, and Adar, but days 1 and 3 are unfavourable. The time of the conjunction<sup>8</sup> of the sun and moon is favourable, and so is the morning watch of the night, but the evening and middle watches are unfavourable. The above selections from this tablet will enable the reader to understand how it served as a book of directions for important undertakings.

Obverse iv then gives a list of the days or half-days of each month which were regarded as propitious in the calendars of the south, at Sippar, Nippur, Babylon, Ur, Larsa, Erech, and Eridu.<sup>9</sup> This copy made for Assyria ends with the note, 'The days which are lucky for thee are 7×60 (242). . . . Copy from Sippar, Nippur, Babylon, Larsa, Ur, Uruk, and Eridu. The scholars have copied and selected. To Nazimaruttash their king they gave it for regulating the

<sup>1</sup> K. 2514, broken away after day 20.

<sup>2</sup> Of the new calendar no text is known for Ayar.

<sup>3</sup> K. 4068.

<sup>4</sup> Exceptions are noted in my edition of the texts.

<sup>5</sup> The old calendar for Elul orders a *šigú* for days 6, 16, 26, 28, against the rule that it is not permissible in this month.

<sup>6</sup> *išdiha-šu e-ni*, KAR. 177, Obv. III 13.

<sup>7</sup> *irré-šu liširu-šu*, 'Let his bowels move freely', in all months except Nisan and Tebit, KAR. 177 Obv. III 15-17; see IV Raw. 33\* IV 21; K. 2809 Rev. II 9.

<sup>8</sup> *mithuratum*, KAR. 177 Obv. III 37.

<sup>9</sup> Nisan, Ayar, Sivan, and Tammuz are broken away and so are Tebit, Shebat, and Adar.

work of days, for begetting children, for removing the grain heaps, and for bringing to success anything desirable.<sup>1</sup>

The tablet then gives the lucky days or half-days in each month after a copy of an older calendar at Assur.<sup>2</sup> The lucky days in the southern and northern calendars are not in complete agreement. Then follow special instructions for days 3, 5, 7, 12, 13, 15, 16 of Nisan.<sup>3</sup> After this follow special instructions for the first nine days of Teshrit of which a large number of duplicates are known.<sup>4</sup>

The tablet, therefore, was intended to be a great compendium of special directions for the year, adding instructions for the two holy periods or New Year festivals. The New Year festival in Nisan ran through the first sixteen days in the old Babylonian holy year; in the time of Nebuchadnezzar it was reduced to the first *eleven* days, owing to the discovery of the *epact* or eleven days difference between the lunar and solar years.

This early Babylonian calendar, of which only the tenth-century edition of Assyria has been preserved, used Nisan as the only intercalary month.<sup>5</sup> But the Sumerian calendars on which it was based used intercalary Adar. Semitic tradition prevailed here, for the Semitic series used in Elam had some unknown name for Nisan as the twelfth month, possibly *tarbîtum*. Logic and tradition are incorrigibly

<sup>1</sup> It is certain that Nazimaruttash, Cassite king (*circa* 1327-1302), was not recognized as king of Assyria; this was in fact the period when the kings of Assyria were actually masters of the Cassite kingdom. See King, *History of Babylon*, 243. The Assyrian scribes must mean that it was Babylonian scholars who had edited these calendars in the time of Nazimaruttash, and that copies were found in the cities mentioned. It does prove that the Babylonians as early as the fourteenth century had already edited these calendars for the Cassite kings.

<sup>2</sup> KAR. 177 Rev. iv 4-39.

<sup>3</sup> KAR. 177 Rev. iv 40-5 + III 1-7, restored by Ki. 1904-10-9, 67, Obv. 12-15 and Falkenstein, *Uruk*, 54, 5-11. The former text is from the library of Ašurbanipal and the second is a copy made by a scribe of Erech at Babylon in the Neo-Babylonian period.

<sup>4</sup> See Chap. II.

<sup>5</sup> See p. 46, n. 3.



confused here. Basing their holy year upon the Sumerian Church Calendar, which ended the year with Adar and began it with Nisan, the Babylonians, when they constructed a *Church Calendar*, made Nisan the *first* month. But in their own *Civil Calendar* as used in Babylonia and Elam Nisan was the last month<sup>1</sup> and intercalary.<sup>2</sup> Consequently the Babylonian and Assyrian calendars at first admitted only intercalary Nisan.

In the seventh century this old Babylonian menology was replaced in Assyria by a great reformed calendar known as the series *enbu bêl arhim*, 'The fruit (moon) is lord of the month', in fifteen tablets, one for each month and one for each of the three intercalary months Nisan, Elul, and Adar. It is not certain that this reformed calendar of Ašurbanipal ever existed in Babylonia. At the end of the twelfth tablet or menology for Tebit there is a note saying that it is a copy from an older tablet.<sup>3</sup> I presume, therefore, that sometime after the twelfth century this very formal and rigid canonical calendar was finally adopted in Babylonia. The religious acts permissible in each month and day are based upon the earlier holy year and books of instructions described above, but the influence of Sumerian mythology is more discernible, each month being assigned to a god, and the deities to whom each day was sacred is carefully entered. At the end of each tablet the scribe enters the acts permissible in that month. The Babylonian texts on the Church Calendar have suffered a more sad fate, few having been found up to the present. A large single-column tablet of a series which originally gave the rituals for the important ceremonies of each month has been preserved in two duplicates.<sup>4</sup> Only the rites for Arahsamna, Kislev, Tebit are preserved. There is also a large fragmentary tablet carrying at

<sup>1</sup> See p. 46.

<sup>2</sup> See p. 47, n. 3.

<sup>3</sup> K. 2809 Rev. II 21, *tuppu 12-kam enbu bêl ar-ši-im . . . ki-i šî tup-pi labiri [šašir-ma barim] li-ū-um . . .* This is the only scribal note of the kind in the entire series as known at present.

<sup>4</sup> Reisner, SBH. 144; Clay, *Morgan*, IV 24.

least three columns on each side which contained the principal rituals in each month for the whole year.<sup>1</sup> Among other fragments of the Babylonian menologies special attention should be called to a remarkable commentary on Teshrit utilized in Chapter II.<sup>2</sup>

In Assyria tablets of special instructions for important days of each month have also been found,<sup>3</sup> to which is attached special instructions for Teshrit.<sup>4</sup> An Assyrian tablet (fragment) has special instructions for days 8-18 of Nisan.<sup>5</sup>

The Babylonian almanac,<sup>6</sup> which probably dates from the time of Ezra and Nehemiah, contains notes on each of the days of the twelve months. The entries agree generally with those on the old Assyrian calendar, but are frequently one day higher. For example, Tebit 5 is entered in the almanac as *šu-bat lum-ni* 'abode (omen) of evil', whereas the menology has *šubat lumni* for the *sixth* day.<sup>7</sup> Numerous examples of this disparity of one day run through the whole almanac and its Assyrian duplicates, so that for some reason days which are designated as lucky, or unlucky, days of

<sup>1</sup> Reisner, SBH. 145-6, edited by Jensen, KB. vi Part 2, 24 ff.

<sup>2</sup> Text by C. J. Gadd, CT. 41, 39.

<sup>3</sup> K. 3769 and duplicate K. 6482. The combined text covers the year from the end of Tammuz to the end of Adar; *Bab.* iv 119; Virolleaud, *Fragments*, 19, 1-8 = III Raw. 55, No. 5, A 53-60; *Vir. Frag.* 19, 9-28; K. 6482 from my copy. See *Bab.* iv 104-6.

<sup>4</sup> K. 6482, Rev. 8-12, with duplicates K. 6695, 4-9 and K. 8068. See *Bab.* i 204-6.

<sup>5</sup> K. 3765; see *Bab.* iv 108.

<sup>6</sup> V Raw. 48-9. Assyrian duplicates are: for Teshrit 1-17, K. 3560. Obv. i restores V Raw. 49 vii; K. 4326 Obv. = ZA. 18, 230, Arah-samna 12-24; K. 3560 Obv. ii 1-6 = Arah-samna, 25-30, which follows K. 4326 Obv. immediately (K. 3560 and 4326 belong to the same tablet). Kislev 1-10 on K. 3560 Obv. ii 7-16. Shebat 24-30 on K. 3564 Rev. 1-7; days 22-30 on K. 3560 Rev. i 1-9. Adar 1-28 on K. 3560 Rev. i 10-17 + K. 4326 Rev. Days 1-14 on K. 3564. A duplicate from Erech of the same period is Falkenstein, *Uruk*, No. 53, which carries parts of Tammuz, Ab, Elul, Teshrit, Arah-samna, and Kislev.

<sup>7</sup> KAR. 178 Rev. ii 41.

weeping or rejoicing, &c., fall one day earlier in the calendars later than the tenth century.

A good many days in this almanac, as in the old menology, are marked 'half of the day is lucky', corresponding to the mark set against certain days in the Roman calendars, EN = *endotercisus*, 'cut into parts'; in Rome this meant that morning and evening of such days were *nefastus*, unlucky, or business could not be done then, but the middle of the day was *fastus*.<sup>1</sup> The almanac marks the following days as 'half lucky', Ab 6; Teshrit 8, 13; Tebit 11, 17, 24, 27; Shebat 10, 29 (or 30 on Var.); for Nisan in the late period the statement depends upon an Assyrian text;<sup>2</sup> days 4 and 6 are so marked. It is possible that the Babylonian almanac, which is the only one the Romans could have known, as it was in use as late as 100 B.C., had only nine of these days corresponding to the eight used in the Roman calendar, March 13; August 22; October 14; December 12; January 10, 14; February 16, 26.

Warde Fowler remarks that they all fell on a day preceding some festival or on the day before the Ides. No such rule obtained in Babylonia. The old Assyrian menology marked many more days in the year after this manner. When the calendars marked a day *magir*, favourable, lucky, they could not possibly have meant the same as the Romans did in marking a day F = *fastus*, i.e. a day when civil business could be transacted; for days 7, 14, 19, 21, 28 when all work was forbidden are often marked *magir*. In marking the days *magir* or *la magir* (unfavourable) throughout the year the Babylonians obviously meant *lucky* or *unlucky*.

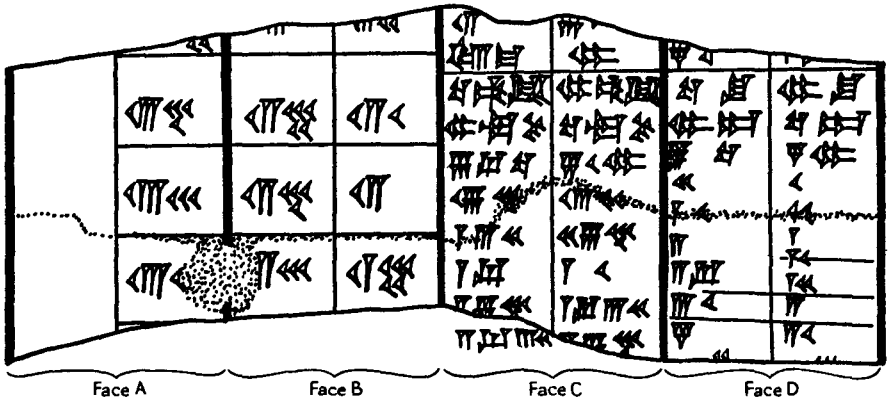
The Sumerians and Babylonians began the day at sunset, as the Greeks did. A day ran from sunset to sunset.<sup>3</sup> At Rome, at least in the time of the Republic, the day began at midnight. The Babylonians divided the day into 12 hours of equal length, one hour being 30 degrees of the sun's supposed revolution. But a more complicated system arose.

<sup>1</sup> See Warde Fowler, *Roman Festivals*, 10.

<sup>2</sup> Boissier, DA. 101.

<sup>3</sup> See *Revue d'Assyriologie*, 28, 15-16.

The night was divided into three watches, and the daylight into three watches. The night was held to be 12 hours long at any time of the year and so was the daylight. Consequently if the length of daylight in July is divided by 12 a much longer hour is obtained than a daylight hour in January. This is called the temporal hour, *hora temporalis* in Latin, ὥρα καιρικὴ in Greek. The water-clock showed pre-



cisely how long a *real* hour was, but how could they discover the length of temporal hours?

The Babylonians found a ready method for reading the lengths of temporal hours for each month, but all days in each month are reckoned on the same basis. Mr. Gadd discovered a fragment of a small ivory prism in the British Museum,<sup>1</sup> which carries on each of its four faces a double column of figures. The copy and transcription were sent to Dr. J. K. Fotheringham, who discovered that the columns on two of the faces gave (when restored) a system of reckoning the length of a temporal hour by day or night in each month. The prism was originally only about 2½ inches long and ½ inch wide. It could be carried about in one's pocket and gave a quick method of reckoning for any one capable of making the calculations.

The figure gives Mr. Gadd's copy of the four faces of the

<sup>1</sup> Formerly but deficiently copied by Lenormant, *Choix de Textes*, No. 86, where he took the prism to be *Règles d'un Jeu*.

fragment from the middle of the prism. Faces A and B cannot be interpreted. Face C from line 3 onward begins the section on Ayar and Elul, Arahsamna and Adar and is interpreted in my restoration, pp. 60-1, lines 18-32. Face D from line 2 onward begins the section on Tammuz and Tebit, the summer and winter solstices, consequently Tammuz includes our June 21 and Tebit our December 21. This is interpreted on pp. 62-3, lines 16-30.

Mathematically the whole day was reckoned as 12 hours, or double hours of 120 minutes each. A double hour is a *bêru*, and this was divided into 30 *uš* or units of 4 minutes. Now if the night and daylight are also reckoned as 12 temporal hours each the problem is to find out how many *bêru* and *uš* (in real time) are in any temporal hour. Obviously 24 temporal hours constitute a day and this is divided into two parts of 12 hours each, thus being the origin of our 24-hour day (in real hours) and also the system on which our 12-hour clocks are based. In this discussion those who are unacquainted with the ancient system of temporal hours should remember that the Babylonian 12-hour half-day is not 12 *real hours* but invariably means the length of daylight or night.<sup>1</sup>

Nisan in this system includes the spring equinox, March 21, and Teshrit the autumn equinox, September 21 in an ideal year. Of that there can be no longer any possible doubt. Day and night are regarded as of equal lengths in both months on this prism and here the table is precisely like a modern clock,  $\frac{1}{12}$ th of night is one temporal hour and also *one real hour*, and so is  $\frac{1}{12}$ th of daylight. At the summer solstice (Tammuz) daylight is twice as long as night; at the winter solstice (Tebit) night is twice as long as daylight. So the table roughly and somewhat inaccurately reckons the hours.

This quickly disposes of four months. On this system the

<sup>1</sup> My discussion is now based not so much on what remains of the prism but upon the certain restoration of it for the whole year based upon Fotheringham's discovery of the principles of reckoning by means of Gadd's fragment.

month *before* the summer solstice and the month *after* the summer solstice, or Sivan and Ab, will have the same lengths of daylight and night. That is, a day in Sivan equals a day in Ab. The month *before* the winter solstice and the month *after* the winter solstice, or Kislev and Shebat, will have the same lengths of daylight and night. The month *after* the spring equinox and the month *before* the autumn equinox have the same lengths of daylight and night. The month *after* the autumn equinox and the month *before* the spring equinox will have the same lengths of daylight and night. These six principles gave rise to the *four* groups of reckoning for the whole year in my restored edition, the eight months outside the solstices and equinoxes being compressed into *two* groups by an ingenious method of *inversion*, and it is precisely here that Fotheringham has shown his astonishing brilliance by discovering how groups of four months were worked into *one* group. It is doubtful whether any other mathematician in Europe could have solved this problem so quickly.<sup>1</sup>

The scheme, then, is to compress the tables in sections. In each of the four sections the number of *bêru* (= 120') and *uš* (= 4') of daylight of a day in the two months under discussion is set over against the number of *bêru* and *uš* in a night of the same months. In case of a group of four months where two of them stand in inverse ratio as regards daylight and night all that is necessary is to invert day and night for them.<sup>2</sup> Then follows the conversion into 1, 2, 3, up to 12 temporal hours in each group. The following table states *in parvo* the scheme of the prism.

#### THE GROUPS EXPRESSED IN DAYS AND NIGHTS

- (A) Nisan+Teshrit—equal lengths.
- (B) Tammuz+Tebit—inverse.
- (C) Ayar+Elul—equal.
- (D) Adar+Arahsamna—equal.

<sup>1</sup> Fotheringham gave a short explanation of his discovery in *The Observatory*, December, 1932, 338-40.

<sup>2</sup> See p. 60, l. 20.

C and D inverse, i.e. daylight in C = night in D; night in C = daylight in D.

(E) Ab + Sivan—equal.

(F) Kislev + Shebat—equal.

E and F inverse, i.e. daylight in E = night in F; night in E = daylight in F.<sup>1</sup>

The prism preserves the end of group A, length of 12 temporal hours, given as 6 *bêru* in *real* hours of daylight or night, i.e. 12 hours of day or night are 12 *real* hours in Nisan and Teshrit. Group B occupies the section on face D, lines 3–11 (pp. 62–3, ll. 16–25) (where it breaks away) and ends the table. Groups C, D occupy the second section of the table, face C. It is headed by daylight in Ayar + Elul, and night in Arah-samna and Adar, and by night in Ayar and Elul and day in Arah-samna and Adar. Face C, Col. I, line 5 = page 60, l. 20, gives the length in *real* time of daylight in Ayar and Elul or  $6\frac{2}{3}$  *bêru*, being in our time ( $1 \text{ bêru} = 120 \text{ minutes}$ )  $6\frac{2}{3} \times 120' = 800' = 13^{\text{hr}} \cdot 20'$ . The table leaves the observer to understand that a night in Arah-samna and Adar is 13 hours and 20 minutes. In other words day in group C = night in D.

Col. II 5 (p. 60, l. 20) gives the length of the night in Ayar and Elul in *real* time, i.e. 5 *bêru* 10 *uš* or  $10^{\text{hr}} \cdot 40'$  in our time. From line 6 (p. 60, l. 21) downward the observer is now told how long 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 temporal hours are by day and night.

Line 6 (p. 60, l. 21) supposes the following problem. 'If there are  $6\frac{2}{3}$  *bêru* daylight, what is one temporal hour, or what is  $\frac{1}{12}$  of this daylight?'  $6\frac{2}{3}$  *bêru* (or 6 *bêru* 20 *uš*) divided by 12; i.e. 200 *uš* divided by 12 =  $16\frac{2}{3}$  *uš*. Now to express fractions of the *uš* =  $\frac{1}{360}$  part of a circle (or 4' in time), the Babylonians divided the *uš* or  $1^\circ$  into 60 parts of 4 seconds each. Hence  $\frac{2}{3}$  *uš* is written with 40, or  $\frac{40}{60}$  *uš*. Now Col. I, l. 6, has the figure 16:40. Daylight hour (temporal) is then  $16\frac{2}{3} \times 4'$  in our time, or 66' 40" or  $1^{\text{hr}} \cdot 6' 40''$ .

Col. II, l. 6 has 13:20 or  $13 \text{ uš} + \frac{20}{60} \text{ uš}$  or  $13\frac{1}{3} \text{ uš} = 53' 20''$  length of one temporal hour by night in Ayar and Elul.

<sup>1</sup> In the following discussion (') = minute, (") = seconds.

A temporal hour of day plus a temporal hour of night always equals 2 hours. Hence

$$\begin{array}{r} \text{Day } 66' \quad 40'' \\ \text{Night } 53' \quad 20'' \\ \hline 120' = 2 \text{ hrs.} \end{array}$$

This is reckoning time by the unit  $1^\circ$  of solar motion =  $4'$  in our time. Hence one hour is precisely one hour of our time and day and night (each 12 hours) = 24 temporal hours. This is the origin of modern time-reckoning, the difference consisting only in the fact that the Babylonian temporal hour is defined by us as a *real* hour and does not change with the lengths of the days and nights.

Line 7 (p. 60, l. 22) poses the problem: 'How long are two temporal hours?' Line 6 gave  $16\frac{2}{3} \text{ us}$  daylight for one temporal hour. Line 7 gives 1 *béru*  $3\frac{1}{3} \text{ us}$  or  $33\frac{1}{3} \text{ us} = 16\frac{2}{3} \times 2$ .

With these examples in mind the whole prism can be reconstructed.

## FACE C

## EQUINOXES

## A

## Col. I

## Col. II

- |   |  |
|---|--|
| 1. Day of Nisan + Teshrit.  | Night of Nisan + Teshrit.                                      |
| 2. Night of Nisan + Teshrit.  | Day of Nisan + Teshrit.  |
| *3. 6 ( <i>béru</i> ) = 12 real hours of daylight.                              | 6 ( <i>béru</i> ) = 12 real hours of night.                    |
| 4. One temporal hour of day is 15 ( <i>us</i> ) = 1 hr.                         | One temporal hour of night is 15 ( <i>us</i> ) = 1 hr.         |
| 5. One ( <i>béru</i> ), length of 2 temporal hours, day = 2 hrs.                | One ( <i>béru</i> ) length of 2 temporal hours, night = 2 hrs. |
| 6. 1 ( <i>béru</i> ) 15 ( <i>us</i> ), length of 3 temporal hours, day = 3 hrs. | Same for 3 hrs. night.   |
| 7. 2 ( <i>béru</i> ) = 4 tem. hrs. = 4 hrs.                                     | Same for 4 hrs. night.   |
| 8. 2 ( <i>béru</i> ) 15 ( <i>us</i> ) = 5 tem. hrs. = 5 hrs.                    | Same for night.  |
| 9. 3 ( <i>béru</i> ) = 6 tem. hrs.  | Same for night.  |
| 10. 3 ( <i>béru</i> ) 15 ( <i>us</i> ) = 7 tem. hrs.                            | Same for night.  |



## Col. I.

## Col. II.

- |   |                         |
|---|-------------------------|
| 11. 4 ( <i>béru</i> ) = 8 tem. hrs.                   | Same for night.         |
| 12. 4 ( <i>béru</i> ) 15 ( <i>uš</i> ) = 9 tem. hrs.  | Same for night.         |
| 13. 5 ( <i>béru</i> ) = 10 tem. hrs.                  | Same for night.         |
| 14. 5 ( <i>béru</i> ) 15 ( <i>uš</i> ) = 11 tem. hrs. | Same for night.         |
| 15. 6 ( <i>béru</i> ) = 12 tem. hrs.                  | Same for night.         |
| 16. 12 (tem. hrs.) = 6 ( <i>béru</i> ).               | (Here begins the text.) |
| 17. <i>sikila-ma</i> , light = <i>gig</i> , night.    |                         |

Daytime in Nisan and Teshrit = night in Nisan and Teshrit.

## GROUPS NEAR EQUINOXES

## B

- |  |  |
|--|--|
| 18. Daylight in Ayar and Elul is the same.   | Night in Ayar and Elul is the same.  |
| 19. Night in Arahsamna and Adar is the same.   | Day in Arahs. and Adar is the same.  |
| *20. $6\frac{2}{3}$ ( <i>béru</i> ), length of day in real hours in Ayar and Elul = $13^{\text{hr.}} 20'$ . Also = night in Arahs. and Adar. | 5 <i>béru</i> 10 ( <i>uš</i> ) night in Ayar + Elul; day in Arahs. + Adar = $10^{\text{hr.}} 40'$ .                          |
| 21. $16 : 40$ ( <i>uš</i> ) = $66' 40''$ = one tem. hr., in day of Ayar and Elul; in night of Arahs. and Adar.                               | $13 : 20$ ( <i>uš</i> ) = $53' 20''$ = one tem. hr. in night of Ayar + Elul; in day of Arahs. + Adar.                        |
| 22. 1 ( <i>béru</i> ) $3\frac{1}{3}$ ( <i>uš</i> ) = 2 tem. hrs. day in C., night in D = $2^{\text{hr.}} 13' 20''$ .                         | $26\frac{2}{3}$ ( <i>uš</i> ) = 2 tem. hrs. night in C, day in D = $1^{\text{hr.}} 46' 20''$ .                               |
| 23. $1\frac{2}{3}$ ( <i>béru</i> ) = 3 tem. hrs. day in C, night in D = $3^{\text{hr.}} 40'$ .   | 1 ( <i>béru</i> ) 10 ( <i>uš</i> ) = 3 tem. hrs. night in C, day in D = $2^{\text{hr.}} 20'$ .                               |
| 24. 2 ( <i>béru</i> ) $6\frac{2}{3}$ ( <i>uš</i> ) = 4 tem. hrs. day in C, night in D = $4^{\text{hr.}} 26' 40''$ .                          | $1\frac{2}{3}$ ( <i>béru</i> ) $3\frac{1}{3}$ ( <i>uš</i> ) = 4 tem. hrs. night in C, day in D = $3^{\text{hr.}} 33' 20''$ . |
| 25. $2\frac{2}{3}$ ( <i>béru</i> ) $3\frac{1}{3}$ ( <i>uš</i> ) = 5 tem. hrs. day in C, night in D = $5^{\text{hr.}} 33' 20''$ .             | 2 ( <i>béru</i> ) $6\frac{2}{3}$ ( <i>uš</i> ) = 5 tem. hrs. night in C, day in D = $4^{\text{hr.}} 26' 40''$ .              |
| 26. 3 ( <i>béru</i> ) 10 ( <i>uš</i> ) = 6 tem. hrs. day in C, night in D = $6^{\text{hr.}} 40'$ .   | $2\frac{2}{3}$ ( <i>béru</i> ) = 6 tem. hrs. night in C, day in D = $5^{\text{hr.}} 20'$ .                                   |

Col. I.

Col. II.

- |   |   |
|---|---|
| <p>27. <math>3\frac{2}{3}</math> (<i>béru</i>) <math>6\frac{2}{3}</math> (<i>uś</i>) = 7 tem. hrs. day in C, night in D = <math>7^{\text{hr.}} 46' 40''</math>.</p> <p>28. 4 (<i>béru</i>) <math>13\frac{1}{3}</math> (<i>uś</i>) = 8 tem. hrs. day in C, night in D = <math>8^{\text{hr.}} 53' 20''</math>.</p> <p>29. 5 (<i>béru</i>) = 9 tem. hrs. day in C, night in D = 10 hrs.</p> <p>30. 5 (<i>béru</i>) <math>16\frac{2}{3}</math> (<i>uś</i>) = 10 tem. hrs. day in C, night in D = <math>11^{\text{hr.}} 6' 40''</math>.</p> <p>31. 6 (<i>béru</i>) <math>3\frac{1}{3}</math> (<i>uś</i>) = 11 tem. hrs. day in C, night in D = <math>12^{\text{hr.}} 13' 20''</math>.</p> <p>32. <math>6\frac{2}{3}</math> (<i>béru</i>) = 12 tem. hrs. day in C, night in D = <math>13^{\text{hr.}} 20'</math> (length of daylight in Ayar and Elul, of night in Arah. and Adar).</p> | <p>3 (<i>béru</i>) <math>3\frac{1}{3}</math> (<i>uś</i>) = 7 tem. hrs. night in C, day in D = <math>6^{\text{hr.}} 13' 20''</math>.</p> <p>3 (<i>béru</i>) <math>16\frac{2}{3}</math> (<i>uś</i>) = 8 tem. hrs. night in C, day in D = <math>7^{\text{hr.}} 6' 20''</math>.</p> <p>4 (<i>béru</i>) = 9 tem. hrs. night in C, day in D = 8 hrs.</p> <p>4 (<i>béru</i>) <math>13\frac{1}{3}</math> (<i>uś</i>) = 10 tem. hrs. night in C, day in D = <math>8^{\text{hr.}} 53' 20''</math>.</p> <p><math>4\frac{2}{3}</math> (<i>béru</i>) <math>6\frac{2}{3}</math> (<i>uś</i>) = 11 tem. hrs. night in C, day in D = <math>9^{\text{hr.}} 46' 40''</math>.</p> <p>5 (<i>béru</i>) 10 (<i>uś</i>) = 12 tem. hrs. night in C, day in D = <math>10^{\text{hr.}} 40'</math> (length of a night in C, length of a day in D). Same as l. 20.</p> |
|---|---|

End of Face C

GROUPS NEAR SOLSTICES

FACE D

C

- |   |   |
|---|---|
| <p>1. Daylight in Sivan and Ab is the same.</p> <p>2. Night in Kislev and Shebat is the same.</p> <p>*3. 7 (<i>béru</i>) 10 (<i>uś</i>) length<sup>1</sup> of day in <i>real</i> hours in E, night in F = <math>14^{\text{hr.}} 40'</math>.</p> <p>4. <math>18\frac{1}{3}</math> (<i>uś</i>) = <math>1^{\text{hr.}} 13' 20''</math> = 1 tem. hr. day in E, night in F.</p> <p>5. 1 (<i>béru</i>) <math>6\frac{2}{3}</math> (<i>uś</i>) = 2 tem. hrs. day in E, night in F = <math>2^{\text{hr.}} 26' 40''</math>.</p> <p>6. <math>1\frac{2}{3}</math> (<i>béru</i>) 5 (<i>uś</i>) = 3 tem. hrs. day in E, night in F = <math>3^{\text{hr.}} 40'</math>.</p> | <p>Night in Sivan and Ab is the same.</p> <p>Day in Kislev and Shebat is the same.</p> <p><math>4\frac{2}{3}</math> (<i>béru</i>) length of night in <i>real</i> hours in E, day in F = 9 hr. 20'.</p> <p><math>11\frac{2}{3}</math> (<i>uś</i>) = <math>46' 40''</math> = 1 tem. hr. night in E, day in F.</p> <p><math>23\frac{1}{3}</math> (<i>uś</i>) = 2 tem. hrs. night in E, day in F = <math>1^{\text{hr.}} 33' 20''</math>.</p> <p>1 (<i>béru</i>) 5 (<i>uś</i>) = 3 tem. hrs. night in E, day in F = <math>2^{\text{hr.}} 20'</math>.</p> |
|---|---|

<sup>1</sup> Obtained by adding  $\frac{2}{3}$  to  $6\frac{2}{3}$  in Face C 20.

## Col. I.

## Col. II.

- |  |   |
|--|---|
| 7. 2 ( <i>bêru</i> ) $13\frac{1}{2}$ ( <i>uš</i> ) = 4 tem. hrs. day in E, night in F = $4^{\text{hr.}} 53' 20''$ .                | 1 ( <i>bêru</i> ) $16\frac{2}{3}$ ( <i>uš</i> ) = 4 tem. hrs. night in E, day in F = $3^{\text{hr.}} 6' 40''$ .               |
| 8. 3 ( <i>bêru</i> ) $1\frac{2}{3}$ ( <i>uš</i> ) = 5 tem. hrs. day in E, night in F = $6^{\text{hr.}} 6' 40''$ .                  | $1\frac{2}{3}$ ( <i>bêru</i> ) $8\frac{1}{2}$ ( <i>uš</i> ) = 5 tem. hrs. night in E, day in F = $3^{\text{hr.}} 53' 20''$ .  |
| 9. $3\frac{2}{3}$ ( <i>bêru</i> ) = 6 tem. hrs. day in E, night in F = $7^{\text{hr.}} 20'$ .                                      | 2 ( <i>bêru</i> ) 10 ( <i>uš</i> ) = 6 tem. hrs. night in E, day in F = $4^{\text{hr.}} 40'$ .                                |
| 10. 4 ( <i>bêru</i> ) $8\frac{1}{2}$ ( <i>uš</i> ) = 7 tem. hrs. day in E, night in F = $8^{\text{hr.}} 33' 20''$ .                | $2\frac{2}{3}$ ( <i>bêru</i> ) $1\frac{2}{3}$ ( <i>uš</i> ) = 7 tem. hrs. night in E, day in F = $5^{\text{hr.}} 26' 40''$ .  |
| 11. $4\frac{2}{3}$ ( <i>bêru</i> ) $6\frac{2}{3}$ ( <i>uš</i> ) = 8 tem. hrs. day in E, night in F = $9^{\text{hr.}} 46' 40''$ .   | 3 ( <i>bêru</i> ) $3\frac{1}{2}$ ( <i>uš</i> ) = 8 tem. hrs. night in E, day in F = $6^{\text{hr.}} 13' 20''$ .               |
| 12. 5 ( <i>bêru</i> ) 15 ( <i>uš</i> ) = 9 tem. hrs. day in E, night in F = 11 hrs.  | 3 ( <i>bêru</i> ) 15 ( <i>uš</i> ) = 9 tem. hrs. night in E, day in F = 7 hrs.  |
| 13. 6 ( <i>bêru</i> ) $3\frac{1}{2}$ ( <i>uš</i> ) = 10 tem. hrs. day in E, night in F = $12^{\text{hr.}} 13' 20''$ .              | $3\frac{2}{3}$ ( <i>bêru</i> ) $6\frac{2}{3}$ ( <i>uš</i> ) = 10 tem. hrs. night in E, day in F = $7^{\text{hr.}} 46' 40''$ . |
| 14. $6\frac{2}{3}$ ( <i>bêru</i> ) $1\frac{2}{3}$ ( <i>uš</i> ) = 11 tem. hrs. day in E, night in F = $13^{\text{hr.}} 26' 40''$ . | 4 ( <i>bêru</i> ) $8\frac{1}{2}$ ( <i>uš</i> ) = 11 tem. hrs. night in E, day in F = $8^{\text{hr.}} 33' 20''$ .              |
| 15. 7 ( <i>bêru</i> ) 10 ( <i>uš</i> ) = 12 tem. hrs. day in E, night in F = $14^{\text{hr.}} 40'$ .                               | $4\frac{2}{3}$ ( <i>bêru</i> ) = 12 tem. hrs. night in E, day in F = $9^{\text{hr.}} 20'$ .                                   |

## SOLSTICES

## D

- |  |  |
|--|--|
| 16, 17. Day in Tammuz equals night in Tebit.   | Night in Tammuz equals day in Tebit.   |
| 18. 8 ( <i>bêru</i> ) = day in <i>real</i> hours in Tammuz, night in Tebit = 16 hrs.                     | 4 ( <i>bêru</i> ) = night in <i>real</i> hours in Tammuz, day in Tebit = 8 hrs.    |
| 19. 20 ( <i>uš</i> ) = 1 tem. hr. day in Tam., night in Teb. = $1^{\text{hr.}} 20'$ .                    | 10 ( <i>uš</i> ) = 1 tem. hr. night in Tam., day in Teb. = $40'$ .                 |
| 20. 1 ( <i>bêru</i> ) 10 ( <i>uš</i> ) = 2 tem. hrs. day in Tam., night in Teb. = $2^{\text{hr.}} 40'$ . | 20 ( <i>uš</i> ) = 2 tem. hrs. night in Tam., day in Teb. = $1^{\text{hr.}} 20'$ . |
| 21. 2 ( <i>bêru</i> ) = 3 tem. hrs. day in Tam., night in Teb. = 4 hrs.                                  | 1 ( <i>bêru</i> ) = 3 tem. hrs. day in Tam., night in Teb. = 2 hrs.                |

Col. I.

Col. II.

- |   |   |
|---|---|
| <p>22. <math>2\frac{2}{3}</math> (<i>béru</i>) = 4 tem. hrs. day in Tam., night in Teb. = 5<sup>hr.</sup> 20'.</p> <p>23. 3 (<i>béru</i>) 10 (<i>uš</i>) = 5 tem. hrs. day in Tam., night in Teb. = 6<sup>hr.</sup> 40'.</p> <p>24. 4 (<i>béru</i>) = 6 tem. hrs. day in Tam., night in Teb. = 8 hrs.</p> <p>25. <math>4\frac{2}{3}</math> (<i>béru</i>) = 7 tem. hrs. day in Tam., night in Teb. = 9<sup>hr.</sup> 20'.</p> <p>26. 5 (<i>béru</i>) 10 (<i>uš</i>) = 8 tem. hrs. day in Tam., night in Teb. = 10<sup>hr.</sup> 40'.</p> <p>27. 6 (<i>béru</i>) = 9 tem. hrs. day in Tam., night in Teb. = 12 hours.</p> <p>28. <math>6\frac{2}{3}</math> (<i>béru</i>) = 10 tem. hrs. day in Tam., night in Teb. = 13<sup>hr.</sup> 20'.</p> <p>29. 7 (<i>béru</i>) 10 (<i>uš</i>) = 11 tem. hrs. day in Tam., night in Teb. = 14<sup>hr.</sup> 40'.</p> <p>30. 8 (<i>béru</i>) = 12 tem. hrs. day in Tam., night in Teb.</p> | <p>1 (<i>béru</i>) 10 (<i>uš</i>) = 4 tem. hrs. night in Tam., day in Teb. = 2<sup>hr.</sup> 40'.</p> <p>1 (<i>béru</i>) 20 (<i>uš</i>) = 5 tem. hrs. night in Tam., day in Teb. = 3<sup>hr.</sup> 20'.</p> <p>2 (<i>béru</i>) = 6 tem. hrs. night in Tam., day in Teb. = 4 hrs.</p> <p>2 (<i>béru</i>) 10 (<i>uš</i>) = 7 tem. hrs. night in Tam., day in Teb. = 4<sup>hr.</sup> 40'.</p> <p><math>2\frac{2}{3}</math> (<i>béru</i>) = 8 tem. hrs. night in Tam., day in Teb. = 5<sup>hr.</sup> 20'.</p> <p>3 (<i>béru</i>) = 9 tem. hours night in Tam., day in Teb. = 6 hours.</p> <p>3 (<i>béru</i>) 10 (<i>uš</i>) = 10 tem. hrs. night in Tam., day in Teb. = 6<sup>hr.</sup> 40'.</p> <p><math>3\frac{2}{3}</math> (<i>béru</i>) = 11 tem. hrs. night in Tam., day in Teb. = 7<sup>hr.</sup> 20'.</p> <p>4 (<i>béru</i>) = 12 tem. hrs. night in Tam., day in Teb.</p> |
|---|---|

The prism was found by Mr. R. D. Barnett, Assistant in the Assyrian Department of the British Museum. The fragment measures 14 mm. × 11 mm. and its present height is 12 mm. It is published by permission of the Keeper of Egyptian and Assyrian Antiquities. It came to the Museum in 1856 from the excavations of Loftus, and a record exists that he found it in the centre of the mound of Kuyunjik, so that it cannot be later than the seventh century.

EQUINOX GROUP

- |   |  |
|---|--|
| <p>12. Adar</p> <p>1. Spring equinox=Nisan</p> <p>2. Ayar ]</p> <p>6. Elul ]</p> <p>7. Autumn equinox=Teshrit.]</p> <p>8. Arahsamna.]</p> |  |
|---|--|

## SOLSTICE GROUP

- |                            |   |
|----------------------------|---|
| 3. Sivan                   | } |
| 4. Summer solstice=Tammuz. |   |
| 5. Ab                      |   |
| 9. Kislev.                 | } |
| 10. Winter solstice=Tebit. |   |
| 11. Shebat                 |   |

This prism proves that in the seventh century B.C. they fixed the beginning of the year at the new moon near the spring equinox. It proves that division of day and night into 12 hours each existed in Babylonia as in Egypt before it was known in Greece and Rome. The great Church Calendars of Assyria and Babylonia which I shall discuss in my next lectures are then based upon a year beginning with March, precisely as did the religious calendar of Rome.

This rapid sketch of the historical influences which gave the ancient world its greatest Church Calendar has been written under most favourable circumstances. The discoveries of the last decades have placed the complete Babylonian Holy Year in our hands. We are now guided by a clear light down the halls of ancient history for 3,000 years; in this long history, involving the fate of nations, of civilization and religion, not natural and primitive religion but theology, mythology, and mysticism triumphed. That was entirely due to the power of the Sumerian temple schools. Babylonia, Assyria, and Judaism passed on this Holy Year to the West. It is based upon a striving after spiritual things. Here gradually the daily life of man becomes more and more regulated by a system which tends to suppress primitive rituals. The fate of man now rests in the constellations of heaven, in the hands of the gods, and the calendars direct his way in all things.

## ADDENDUM TO CHAPTER I

The Aramaic calendar as used at Palmyra and by the Nabataeans from the first century B.C. and as late as the third century A.D. was borrowed directly from the Babylonian and post-exilic

system with the exception of Arahšamna. See p. 29. It is therefore presumed that throughout the Aramaic lands, Syria and northern Mesopotamia, the order of the months in the Roman period was: 1. Nīsān. 2. Īyār. 3. Sīvān. 4. Tamūz.<sup>1</sup> 5. Āb. 6. Ēlūl. 7. Teshrî. 8. Kānūn. 9. Kislūl. 10. Ṭebeṭ. 11. Shebāṭ. 12. Ādār.<sup>2</sup> Since the Jewish list preserved the entire Babylonian system it is difficult to understand why the later Aramaic-Syriac list, as used by Christian writers as early as the first century, not only reverts to the old Semitic custom of beginning both civil and religious year with Teshrî, but also changes the order and introduces old Aramaic<sup>3</sup> names. The Syriac list is:

(7)	1.	<i>Teshrîn kadmāḵā</i>	Former Teshrî = <i>Teshrît</i> <sup>4</sup>
(8)	2.	<i>Teshrîn ahrāḵā</i>	Latter Teshrî = <i>Arahšamna-kanūn</i>
(9)	3.	<i>Kanūn kadmāḵā</i>	Former Kanūn = <i>Kislîmu</i> = <i>Kislūl</i>
(10)	4.	<i>Kanūn ahrāḵā</i>	Latter Kanūn = <i>Ṭebeṭu</i>
(11)	5.	<i>Shebāṭ</i>	Shebat = <i>Shebāṭu</i>
(12)	6.	<i>Adār</i>	Adar = <i>Adaru</i>
(1)	7.	<i>Nīsān</i>	Nisan = <i>Nisanu</i>
(2)	8.	<i>Īyār</i>	Ayar = <i>Ayar. Īyār</i>
(3)	9.	<i>Ḥazîrān</i> <sup>5</sup>	Sivan = <i>Simānu, Sīvān</i>
(4)	10.	<i>Tammūz</i>	Tammūz = <i>Du'uzu, Tammūz</i>
(5)	11.	<i>Āb</i>	Ab = <i>Abu, Āb.</i>
(6)	12.	<i>Ēlūl</i>	Elul = <i>Elūlu, Ēlūl</i>

In this list Kislev and Tebit are both dropped out and *Kanūn*, November, in the earlier Aramaic list now comes one place later and is also used as a second *Kanūn*. *Ḥazîrān* supplants Sivan, being adopted for astronomical reasons. At Baalbek (Heliopolis) this

<sup>1</sup> Not found in Aramaic inscriptions.

<sup>2</sup> Also an unplaced month at Palmyra, *kanūn*, Lidzbarski, *Nord-semitische Epigraphik*, 363; 476, No. 10, l. 8. <sup>3</sup> *kanūn* and *ḥazîrān*.

<sup>4</sup> This column gives the Babylonian and older Aramaic equivalents.

<sup>5</sup> Syriac *ḥazîra*, pig, sow, is certainly Accadian *ḥumšîru*, Arabic *ḥinzîr*, pig, hog; Hebrew *ḥazîr*; the constellation Entenamašguz = *ḥabašîrānu*, governing Teshrit, certainly means 'Boar Star'; see p. 6; and for *ḥabašîrānu*, R.A. 14, 22, 24. It is, therefore, entirely possible that *ḥabašîrānu* passed into Syriac as *ḥazîrān*, but if 'the month of the Boar Star' is *Teshrît* in Babylonian, how can it become Sivan or June in Syriac? Weidner, AOF. iv 80 n. 5 thinks *ḥabašîrānu* is near Cancer and Cancer is a regent of Tammuz, in Taurus period of Sivan, see p. 5. It seems safe to regard *ḥazîrān* as of astronomical origin, but the astronomical difficulty is insuperable unless there was another Boar Star in the region of Canis and Orion. See p. 119 for Sirius as Ninurta the boar.

Syriac series has been preserved in Greek<sup>1</sup> and shows a stage somewhat earlier than the Christian Syriac series but later than the Palmyrene.

1. ΑΥ<sup>2</sup> = Teshrîn the former, month of the Jewish *ḥag*.
2. θισριν, θισρι, θορι = the Teshrîn the latter (Arahsamna).
3. γελων, γελωνφ, γελωμ, for γεσλωμ<sup>3</sup> = Kislimu, Kislev = former Kanūn.
4. χανουν, χανου = Latter Kanūn (Tebit)
5. σοβαθ = Shebāt.
6. αδαρ, αδαλ = Ādār
7. νεισαν, νυασαν, νισα = Nîsān
8. ιαραρ, αραρ = Īyār
9. εζηρ, οζηρ = *ḥazîrānu* (Sivan)
10. θαμιζα, θαμμουζ = Tammūz
11. αβ = Āb
12. ιλουλ = Ēlūl.

In this list there are two Teshrits also, the former, under Jewish influence, being called simply 'the festival'. Kislev is retained in its place but *Kanūn* now comes two months later than in the Palmyrene series,<sup>4</sup> corresponding to *Tebit*. Since all these Aramaic calendars are taken from Babylonia, the rituals with the *kanūn* or brazier might occur in months 8, 9, 10 of the Babylonian series or 2, 3, 4 of the Aramaic series.

The Syrian-Arabic calendar of the Middle Ages, while retaining the Christian Syriac names, has the old Babylonian order. 1. Nîsān. 2. Īyyar. 3. Ḥazîrān. 4. Tammūz. 5. Āb. 6. Īlūl. 7. Teshrîn al-'awwal, the former Teshrîn. 8. Teshrîn aththānî, the second Teshrîn. 9. Kanūn al-'awwal, the former Kanūn. 10. Kanūn aththānî, the second Kanūn. 11. Shubāt. 12. Adhār.<sup>5</sup>

<sup>1</sup> *Hemerologium Florentinum*; Leiden manuscripts and others in Ideler, *Handbuch der Mathematischen Chronologie*, I, 430; Theodor Benfey and Moriz Stern, *Monatsnamen*, 21-2; 168. This learned book, published 1836, before Assyriology had cleared up the source of the Jewish month-names, is almost entirely devoted to the astonishing theory that the series Nisan-Adar is derived from Zend and Pehlevi. *Nox nocti indicat scientiam*.

<sup>2</sup> My text is composite, made from all the important variants.

<sup>3</sup> Benfey and Stern, p. 169. This word stands nearer to the Babylonian than the Aramaic *Kislūl*, Hebrew *Kislēv*.

<sup>4</sup> Note that ceremonies with the *kinūnu*, brazier, are characteristic of Arahsamna, Kislev, and Tebit, Reisner SBH. 144, ll. 8, 10, 26, 28, 29, 32, 51, 52, 53, 54 restored by Clay, *Morgan*, IV 25.

<sup>5</sup> En-Nedîm in Chwolsohn, *Ssabier*, II 23-36.

LECTURE II  
THE MENOLOGIES AND ALMANACS FOR  
NISAN AND TESHKIT

I HAVE traced the history of the Sumerian and Babylonian calendars from 3000 B.C. to the time of the promulgation of the first monthly and daily Church Calendar in Assyria in the tenth century. We have seen that the Sumerian official calendar began with March or the rising of Pleiades; that a prehistoric calendar existed which began with the seventh month or autumn equinox; that the Amorite invasion brought to Babylonia and Assyria a primitive Aramaic calendar also beginning in the autumn or Teshrit. The Church Calendars, therefore, regard Nisan and Teshrit as the most holy months. Both contain New Year festivals and special attention must be given to them. The myths of these two months, their daily regulations and cults provide the subject of this lecture. The Babylonians accepted the Sumerian myths of the months, their monthly legends; they developed festivals based upon these myths. The daily directions contained in the menologies were used by everybody in Babylonia and Assyria.

For example let us take a letter written by a priest to the king in the seventh century. The king wished to know whether he might do a certain public work on the 15th day of a certain month. He received the reply that the astrologers had read the calendar and discovered that the 15th and 17th were both unpropitious and that he must do his work on the 16th.<sup>1</sup>

The first month of the year Nisan corresponds to March-April in the Roman calendar. This is the time when the Sun-god, victorious over winter's darkness, begins his ascent toward the zenith of heaven. The Sumerians at Nippur

<sup>1</sup> Harp. *Lett.* 362. The calendar referred to here is *enbu bél ar-ti*, Rev. 7.



believed that the earth-god, Enlil, in the first month sat in his cosmic chamber and held a convocation of the gods to fix the fates of all men for the coming year. The Sumerian word is *iti bár-zag-gar*,<sup>1</sup> explained by the Accadians as 'month of him that sits in the sanctuary'.<sup>2</sup> The month almost certainly began originally with the new moon nearest the equinox, and in it fell ordinarily the heliacal rising of the Pleiades and Taurus.<sup>3</sup> At that time, at least according to Babylonian custom, kings laid down their divine rights for a day<sup>4</sup> and received again their throne and sceptre from the high priest of Enlil or Marduk.<sup>5</sup> The commentary on Nisan runs: 'Nisan is the month of the constellation *Ikú* (Aries), which is the throne-room of Anu. The king is lifted up, the king is installed.<sup>5</sup> The blessed springing forth of vegetation<sup>6</sup> of (by) Anu and Enlil. Month of the Moon-god, first born of Enlil.'

Since in the late period *mul Iku* governed Nisan, when the New Year festival of Marduk was instituted, this constellation was identified with Babylon.<sup>7</sup> There is no reason in the myths of this month to assign it to the Moon-god, and the scribes in fact assigned it regularly to Anu and Enlil<sup>8</sup>

<sup>1</sup> The first day of *iti bara-zag-gar* is called the *mu-gibil*, New Year, Meissner, APR. No. 65, 14-15.

<sup>2</sup> *āšīb aširtum*, CT. 19, 5 Rev. 6.

<sup>3</sup> See pp. 3-4 *sub* Ayar.

<sup>4</sup> An Assyrian commentary of the tenth century, KAV. p. 119 Col. 1 has the following explanation:

## Sumerian.

## Accadian.

- |                                     |   |
|-------------------------------------|---|
| 1. [iti bara] mul Iku bara an-na    | 7. <i>arah Nisanu i-ku-u šu-bat</i> <sup>d</sup> A-nim        |
| 2. bara il-la bara gar-ra           | 8. <i>šarru</i> (lugal) <i>in-na-aš-ši šarru iškakan(an)</i>  |
| 3. ? gar ?-ra-an sig-ga             | 9. <i>šur-ru-ù damkuš sa</i> <sup>d</sup> A-nim               |
| 4. an-na <sup>d</sup> En-lil-lá-ge  | 10. <i>ù</i> <sup>d</sup> En-lil <i>arah</i> <sup>d</sup> Sin |
| 5. iti <sup>d</sup> Nannar dumu-sag | 11. <i>māri reš-ti-i ša</i> <sup>d</sup> En-lil               |
| 6. <sup>d</sup> En-lil-lá-ge        |   |

<sup>5</sup> Ceremony of the 5th day of Nisan, Thureau-Dangin, *Rit.* 144, 415-52.

<sup>6</sup> *šurrú* is taken from *šer'u*, Delitzsch, H.W. 687, since *šer'u* explains *iku*, Virolleaud, *Adad*, VII 18.

<sup>7</sup> CT. 19, 19, 80.

<sup>8</sup> K. 2049 in IV Raw. 33. The Assyrian scribe in the commentary probably refers to the 'month of Sin' in the old calendar, p. 33.

on the basis of the older connexion of the month with Taurus, in the Sumerian period.<sup>1</sup> All through the ages, from 3000 B.C. to the Greek period, Nisan was sacred to Enlil. At Babylon Marduk-Bêl usurped the place of Enlil in the old New Year's myth and festival. The festival at Babylon began on the 1st of Nisan and lasted eleven days, a period which was probably based upon the epact.<sup>2</sup> On the eighth fell the convocation of the gods under the presidency of Marduk at Babylon, and of Ashur in Assyria. Then was written 'the eternal fate, the fate of life, and Nabû, scribe of the gods, wrote the tablets'. But in the old mythology the tablets of fate belonged to Enlil,<sup>3</sup> and that was undoubtedly the belief among the Sumerians when they named this month *barazaggar*.

Since Taurus governed this month 3000–2000 B.C., when the myth arose concerning the Sumerian month, the legend of the assembly and the decree of fates was connected with that constellation. The principal star of Taurus is Aldebaran,<sup>4</sup> called 'star of the tablet' long after Taurus had ceased to govern Nisan. Why then did the Arabs name the great star in the head of Taurus *Aldebaran* (*al-dabarānu*) 'the fore-caster' or 'the writer'? Surely they had inherited this same myth that with the rising of Taurus the gods wrote the fates of all men.<sup>5</sup> The natural meaning of *al-dabaran* in Arabic

<sup>1</sup> Taurus is an *Anu* star, CT. 33 II 1.

<sup>2</sup> Note that the special instructions for Nisan in the old calendar, KAR. 177 Rev. IV 40–III 7 and late Erech text, Falkenstein, *Uruk*, 54, 5–11 and Ki. 1904–10–9, 12–15, for days 3, 5, 7, 12, 13, 15, 16 has a period of 16 days, i.e. up to the full moon, which is probably the period of the old festival. These special instructions do not differ much from the regular Nisan calendar in KAR. 176 and 178.

<sup>3</sup> Legend of Zû; see *Sem. Myth.* 101–2; confided by Enlil to Ninurta, SBP. 208, 5.

<sup>4</sup> *mul-gū-an-na*, Taurus, defined as *ilu is<sup>u</sup>li-e agi d.A-nim*, 'god of the tablet, crown of Anu', CT. 33, 2 II 1 restored by Virolleaud, *Suppl.*<sup>2</sup> No. 67 Col. 1 and KAV. p. 110 I 26+32. Aldebaran is usually written *mul giš-da(le'u)*. See Kugler I Taf. IV 25 and p. 29 and Jeremias, *Das Alter der Bab. Astronomie*, 33, 13, *mul-mul is<sup>u</sup>li-e*, i.e. Pleiades and Tablet (Aldebaran).

<sup>5</sup> *al-dabarānu* surely means 'the writer' or 'forecaster' and not 'the one

is 'the follower', and the Arabists accept this on the grounds that two other names for Aldebaran mean 'follower'. If this is correct perhaps the Arabians misunderstood the real meaning of the word after its connexion with the myth had been forgotten. The myth of the writing of fates in the New Year survived in Islam, but the months being strictly lunar have there no astronomical association.

Nabû, the divine scribe, who bears the tablets of fates, figures, then, in the old myth of Nisan. Here are legend and astronomy so old that they can be definitely assigned to the Nippurian calendar and the early Taurus period. In late mythology Marduk assembled the gods to decree fate on Nisan 8 and 11.<sup>1</sup> The special day must have been the 8th, for Nabû, 'bearer of the tablets of fate',<sup>2</sup> who assembles the Igigi and Anunnaki, had a 'shrine of fates'<sup>3</sup> at Barsippa, from which he departed on Nisan 5 for the 'shrine of fates' in Esagila at Babylon and returned on the eleventh.<sup>4</sup> Now it is curious that Nisan 8 is marked as a festal day of Nabû together with days 4 and 17 of that month in the reformed calendar, and hence this festival (*eššešû*) of Nabû was ex-

who follows after', the meaning commonly given in English lexicons 'because it follows Pleiades', i.e. rises after Pleiades. This meaning has been given to *dabarân* because it is said to be the same as *tālî al-naġmi*, 'Follower of Pleiades'; Lane, *Arabic Lexicon*, 296; *Dictionary of Islam*, sub 'Al-Debaran'. The ordinary meaning of *dabara* is 'to follow', but it also means 'write a book' and 'forecast'. It cannot be the rump of Taurus, Lane, p. 847, for it stands in the face of this constellation. Aldebaran is also said to be *al-tābi'u al-naġmi*, or *tuwaibi'un*, the follower of the Pleiades, Lane, 296. If these identifications are certain in Arabic and 'the follower of Pleiades' really is Hyades and Aldebaran, the meaning 'forecaster', 'writer' is excluded. Hava, *Arabic-English*, 195, derives Aldebaran from *dibratun*, 'Western part of the sky', i.e. from root meaning 'follow after'. The meanings 'to manage', 'arrange', 'forecast' are certain, but 'to write', 'compose a book' lacks confirmation and may be a confusion for *dhabara*.

<sup>1</sup> VAB. iv 126, 54-64.

<sup>2</sup> King, *Magic*, 22, 3; Unger, *Stele des Bêl-Harran-ušur*, Taf. II 3.

<sup>3</sup> *bara-nam-meš*.

<sup>4</sup> *Museum Journal*, xiv 275, 75-7; CT. 37, 10, 9.

tended to days 4, 8, 17 of all months.<sup>1</sup> Is it possible that the legend of writing the tablets on days 4, 8, 17 of Nisan obtained in the older myth of this month?<sup>2</sup>

In the Babylonian New Year festival a white bull (GUD-UD) was sacrificed on Nisan 5 and a hymn called the 'Divine Bull, brilliant light' was sung, said to be the bull of Anu, i.e. Taurus.<sup>3</sup> Thureau-Dangin has cited the *Georgica* of Virgil on this legend,

The white bull who with golden horns opens the year.

The first day of Nisan was sacred to Enlil owing to this myth of Sumerian origin.<sup>4</sup> Consequently the first of every month became sacred to Enlil in the reformed calendar.<sup>5</sup> In the reformed calendar for the first day of each month the following instructions are given: 'When on the first day the moon appears (i.e. evening of first day) by night the shepherd of the great peoples<sup>6</sup> [offers] his food-offering, a *white kid* for the new moon. The king shall wash himself. In the morning his food-offering he shall set forth to Shamash and the Queen of the Lands, to Sin and Mah.' Since the instructions for each day of all months in this reformed calendar were largely nothing but a sterile application of the rules of Nisan, it is obvious that the 'white kid' originally pertained to the first day of Nisan, and symbolized Taurus instead of a white bull. Curiously the old Assyrian instructions for Nisan first make no reference to this.

At Ur the first month was in fact named *iti maš-dà-kú*,<sup>7</sup>

<sup>1</sup> Nisan 4, *eššešu* of *Na-bi-um*, old calendar, KAR. 178, I, 31 = 176 I 22. For day 8 the text has <sup>d</sup>MAḪ, error for AG = *Nabú*?

<sup>2</sup> For a detailed description of the assembly of the gods in Babylon, in a late text, see Pinches, PSBA. 1908, 84, Col. D. A better translation in Zimmern, *Neujahrsfest*, II 49.

<sup>3</sup> Thureau-Dangin, *Rit.* 146, 458-62.

<sup>4</sup> Old calendar, KAR. 178, I, 1.

<sup>5</sup> Anu was added to Enlil because Anu was god of Taurus.

<sup>6</sup> Title of the king as high priest.

<sup>7</sup> So always in temple records, R.A. 7, 188, 4682 Rev. 7; Langdon, *Drehem*, 7 n. 3; Landsberger, *Kal.* 68. But Radau, EBH. 299, 2, *maš-kug-kú*, i.e. *šabita ellita akālu*. The rendering 'white kid' for *maš-dà*

'month of eating the kid', and a variant has 'month of eating the *white kid*'. This name is surely based upon a ritual wherein a white kid is substituted for the white bull, symbol of Taurus. According to one text the governor of Lagash presided over this ceremony under the kings of Ur,<sup>1</sup> and sacrifices were made to Enlil in this month on the 22nd day,<sup>2</sup> or on the 20th.<sup>3</sup> On tablets dated by intercalary *ezen-mekigal*, corresponding to Nisan, sacrifices were made to Enlil on day 4,<sup>4</sup> day 7;<sup>5</sup> one text has sacrifices to Enlil and Ninlil on days 6 and 7 where the ritual is called 'feast of the porphyry bed of Gimil-Sin'.<sup>6</sup>

At Lagash the Sumerians named this month <sup>iii</sup>*ezen* <sup>d.</sup>*Ningirsu-ka gan-maš-ba*, 'month of the feast of Ningirsu, the apportioning of *ganmaš*',<sup>7</sup> or simply *ezen gan-maš*, 'feast of the *ganmaš*', or usually month *gan-maš*. The meaning of this name is obscure, but it obviously contains the same word 'kid' (*maš*).<sup>8</sup>

The Nippurian name *barazaggar* was rendered by *ni-sa-an-nu* in Accadian,<sup>9</sup> a Sumerian loan word<sup>10</sup> meaning 'first'; hence Nisan means simply 'first month'. The word means also 'sacrificer', 'to sacrifice',<sup>11</sup> and if this be the sense then

*kug-ta* in the menologies, IV Raw. 33\* I 3; K. 2514 I 2; IV Raw. 32 I 3 restored by K. 4788 is uncertain. 'Clean kid' is the usual rendering. 'White bull' in the text cited above is written *alpu pišū* (*gud-lág*). For *kug* = *ellu* in the sense 'white', the meaning *kug* = *kaspu*, silver, can be deduced, and see *el-lum* = *halpū*, *kuššū*, snow, V Raw. 24, No. 2, 9-10; also *limsi kima el-li*, let him wash (his hair) like snow, *Epic Gilgamesh* xi 240, 248.

<sup>1</sup> Radau, EBH. 299 note.

<sup>2</sup> Langdon, *Drehem*, No. 22.

<sup>3</sup> CT. 32, 44, 103442; Schneider, *Drehem*, No. 22.

<sup>4</sup> CT. 32, 41-3.

<sup>5</sup> Schneider, *Drehem*, No. 25.

<sup>6</sup> CT. 32, 12, I, 1-12.

<sup>7</sup> Allotte de la Fuÿe, DP. 152 xi 1. Also <sup>iii</sup>*ninda gan-maš-ka*, DP. 229 xx 3.

<sup>8</sup> See Langdon, *Drehem*, 8 n. 1.

<sup>9</sup> Clay, *Morgan*, iv, 34, 23.

<sup>10</sup> For *ni-sag* = *nisanni*, *nisaggu*, Syn. *reštū*, first, *kabtu*, *ašaridu*, *šakkanakku*, chief, governor, see CT. 12, 7 A 33; 11, 39, Rm. 341, Obv. 10, *ni-sag* = *reštū*. The etymology is *sag*, head, with prefix *ni*.

<sup>11</sup> From *ne-sag* PBS. x, 297, 30.

the Accadians may have intended by *nisannu* to convey the sense 'month of the sacrificer', referring to the offering of a white bull or kid in honour of Taurus.<sup>1</sup> This name then passed into Hebrew, Nabataean, and Aramaic as *Nisān*.<sup>2</sup>

The gods assigned to each day of Nisan in the old menology afterward became the deities of the same days in the other months, and the regulations for Nisan became those of the other months;<sup>3</sup> this menology simply directs that the Nisan rites apply to other months.<sup>4</sup> The reformed calendar of Ašurbanipal actually enters them in the text, but this edition introduces a *septem* principle into the lunar month based upon rest days 7, 14, 19, 21, 28. The idea of dividing the period of the normal visibility of the moon, twenty-eight days, into four parts or weeks becomes clear in the seventh-century calendar. The history of the calendar of Nisan is, therefore, of supreme importance. I examine here the contents of the menology of the tenth century for Nisan and compare it with Nisan in the Ašurbanipal series.<sup>5</sup> The reader must bear in mind that no text for Nisan in the Ašurbanipal series exists. It is assumed that Nisan II was the same as Nisan I.

#### DAY I

- (A) God Enlil; sinister; difficult for the sick; a physician may not lay his hand upon the sick, a prophet may utter no word; it is not suited to do anything desirable. The king and lord may speak boldly. Lucky. Fish and lovenge may not be eaten. The king shall clean his garment. King must make offering to Enlil, Ninlil, Shamash, and Nusku. KAR. 178, I, 1-14+176, I, 2-7.

<sup>1</sup> The Assyrians understood *nisannu* to mean 'first'; see the distorted ideogram <sup>iii</sup>*bar-sag-sag*, used by Senacherib for Nisan, and explained by *arḫu reš-tu-u*, KAH. II 122, 24, there called month of father Enlil.

<sup>2</sup> *Nisān* in the Syrian Arabic of the Šabeans at Harran. Chwolsohn, II 23. In that cult a steer was sacrificed to the Moon-goddess on the 6th of Nisan. <sup>3</sup> See p. 48.

<sup>4</sup> Under certain general rules negative or affirmative.

<sup>5</sup> K. 2514 preserves days 1-20 (of intercalary Nisan); Sm. 948 preserves days 17-24; ZA. 19, 378-9. Here (A) is the old calendar, (B) the reformed calendar, (C) notes from other sources.

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- (B) Anu and Enlil. Lucky. When the new moon appears by night the king offers a white kid, bathes, and in the morning makes sacrifices to Shamash, *Bêlit* of the lands, Sin and Mah. K. 2514, 1-4, Nisan II.
- (C) Entirely lucky, Assyrian almanac, K. 3634, 1, ZA. 18, 228; DA. 102 Rev. 1, 1.

## DAY 2

- (A) The Ishtars. One may not go into the street, nor go to law or consult a seer. Unlucky. Fish and lovenge may not be eaten. KAR. 178, 1, 15-19; 176, 1, 8-12.
- (B) The Ishtars. Unlucky.<sup>1</sup> Offerings to gods . . .<sup>2</sup>
- (C) One may take oath, but not go to law. K. 3634, 2.

## DAY 3

- (A) Ritual by night for Marduk. Fish and lovenge one may not eat. One may take a woman, and bring a wife into the house. Offerings to Sin and Shamash. KAR. 178, 1, 21-30 = 176, 1, 13-21.
- (B) Ritual by night for Marduk and Zarpanit. Unlucky. Offerings by night before Marduk and Ishtar. K. 2514, 7-9.
- (C) Fish forbidden, K. 3634, 3; fish and lovenge forbidden, KAR. 177 Rev. IV, 40-1; Falkenstein, *Uruk*, 54, 5; Ki. 1904-10-9, 67, Obv. 12.

## DAY 4

- (A) Festival of Nabû; half the day lucky. One may not go out into the street, not go to judgement or a seer. King makes offerings to Marduk, Zarpanit, Nabû, Tashmet. KAR. 178, 1, 31-7; 176, 1, 22-8.
- (B) Festival of Nabû and Marduk. Lucky. Offerings to Nabû and Tashmet by night. K. 2514, 10-11.
- (C) Half the day lucky, K. 3634, 4; DA. 101 Rev. 1, 3-4.

## DAY 5

- (A) Day of Bêl of Ekur. One may not go to law. King makes offerings to Sin. KAR. 178 Obv. 1, 38-41; 176, 1, 29-31.
- (B) Day of Bêl of Ekur and Bêlit of Ekur. Lucky. King makes offerings before Ashur and Ninlil by night. K. 2514, 12-13.
- (C) One may not go to law. KAR. 177 Rev. IV, 42; *Uruk* 54, 6; Ki. 1904-10-9, 67, Obv. 13.

<sup>1</sup> No text of Nisan I is known; this is taken from KAR. 177 Rev. IV 4, where day 2 is not among lucky days. On K. 2514, day 2 of Nisan II is lucky.

<sup>2</sup> Broken on K. 2514.

## DAY 6

- (A) Adad. The king may not go into the street. One may not go to judgement or a seer. Lucky. King makes offering to Nabû, recites a penitential psalm, and cleans his garment. . . . KAR. 178, 1, 42-7; 176, 1, 32-5.
- (B) Adad and Ninlil. Lucky.<sup>1</sup> The king shall recite a penitential psalm<sup>2</sup> and clean his garments,<sup>2</sup> and make offerings to Adad.
- (C) Half the day is lucky. DA. 101 Rev. 1, 5-7.

## DAY 7

- (A) Ritual by night for Ea; gift to Marduk. [Lucky] and sinister. Difficult for the sick; physicians not to practise and seers not to prophesy. Unsited for doing anything desirable. Offerings to god . . . and Shamash. KAR. 178 Obv. 1, 48-55.
- (B) Ritual by night to Marduk<sup>3</sup> and Zarpanit. Lucky and sinister. King as shepherd of the peoples may eat no cooked flesh and baked bread. He may not change his garments nor put on clean garments, may not make sacrifices, ride in a chariot, nor speak as a lord. Seer shall not prophesy and physicians not practise. Unsited for doing anything desirable. Offerings to Marduk and Ishtar. He shall make sacrifices.<sup>4</sup> K. 2514, 17-22.
- (C) One may not go to law (*dašātu*). KAR. 177 Rev. IV, 44; *Uruk*, 54, 7; Ki. 1904-10-9, 67, Obv. 13.

## DAY 8

- (A) Festival of goddess Maḥ (*sic*). Text deficient. Offerings of king to his god. KAR. 178, 1, 56-9.
- (B) Festival of Nabû. Lucky. The shepherd of peoples shall prepare for sacrifices by night. Offerings to Nabû and Tashmet. K. 2514, 23-4.
- (C) Marked with unintelligible signs ZA-?-KU(?)-PAP. DA. 101 Rev. 1, 8. In broken text, *Bab.* IV, 108, 1, one must pour water left and right [to the west].

<sup>1</sup> Marked half lucky, KAR. 177 Rev. IV, 4.

<sup>2</sup> Presumed. Nisan II day 6 forbids this.

<sup>3</sup> Reformed calendar substitutes Marduk, son of Ea, for Ea.

<sup>4</sup> The reformed calendar for days 7, 14, 19, 21, 28 has *niḫē ul inaḫḫi* after *ibbuti ul iltabbaš*, and then *niḫē inaḫḫi* at the end after *nindaba-šu ukan*. I do not understand why sacrifices are forbidden in one line and permitted in another unless the instructions refer to different parts of the day.



## DAY 9

- (A) Gula. [Lucky.] Difficult for the sick. Physicians may not practise and the seer may not speak. Unsuitable for doing anything desirable. One may not go to law. Offering by the king to [Gula?]. KAR. 178, I, 60-6.
- (B) Ninurta and Gula. Lucky. King makes offerings by night before Ninurta and Gula, and sacrifices. K. 2514, 26-7.
- (C) One may not go out into a street. Offerings to Sin and Shamash. *Bab.* IV 108, 2.

## DAY 10

- (A) Text destroyed on KAR. 178 Obv. I, 67 ff.
- (B) Bêlit-ekur (Ninlil) and Sakut. Lucky. King makes offerings before the constellation Wagon Star (of Ninlil) and the star 'Son of Emah' (Sakut), and sacrifices. K. 2514, 28-9.
- (C) *Si quivis cum femina coit*,<sup>1</sup> god will seize him. DA. 101 Rev. I, 9. One may not go to judgement or to a seer. *Bab.* IV, 108, 3.

## DAY 11

- (A) Text destroyed. KAR. 176, II, 2-4.
- (B) A *šalam* (sacrifice) to the 'station(s)' of Tashmet and Zarpanit.<sup>2</sup> Lucky. When the moon comes to the point when it bears a crown of light the king makes an offering. K. 2514, 30-2.
- (C) Gladness of the heart. DA. 101 Rev. I, 10. Offerings to Sin and Shamash. *Bab.* IV, 108, 4.

## DAY 12

- (A) Text destroyed. KAR. 176, II, 6-10.
- (B) Giving of bread of Enlil and Ninlil. Lucky. Offerings to Enlil and Ninlil. Sacrifices.
- (C) One may not sell grain. KAR. 177 Rev. III, I; *Uruk*, 54, 8; Ki. 1904-10-9, 67 Obv. 14. Offerings to Sin and Shamash. *Bab.* IV 108, 6.

## DAY 13

- (A) Text destroyed. Offering to Sin. KAR. 176, III, 11-15.
- (B) Sin and Mah. Unlucky. Sin bears a full crown. King gives offerings to Shamash and the Queen of the Lands (Ishtar), to Sin and Mah. All that the shepherd of the peoples commands is acceptable with god. The words of his mouth shall be heard. K. 2514, 35-7.

<sup>1</sup> *a-šag-ga*. See *Sem. Myth.*, 403, n. 15 and pp. 196-7.

<sup>2</sup> Probably two constellations or stars in Virgo.

- (C) One may take a wife. One may not be merry. KAR. 177 Rev. III, 3; *Uruk* 54, 9; Ki. 1904-10-9, 67 Obv. 14. Offering to Sin. One must worship Sin. *Bab.* IV, 108, 8.

DAY 14

- (A) Ninlil. Lucky and sinister, difficult for the sick. Physicians may not practise and seers not prophesy. Unsuitable to do anything desirable. If one works he will lose his money. One may not swear in the name of god, nor worship Sin and Shamash. King must make offerings to Sin, Shamash, and Ningal (wife of Sin). One may bring a wife into his house; he may put his house in order. KAR. 178, II, 1-14; 176, II, 16-27.
- (B) Ninlil and Nergal. Lucky and sinister. The shepherd of peoples may not eat cooked flesh or baked bread; he may not change his garments nor put on clean garments. He may not make sacrifices, nor ride in a chariot, nor speak as a lord. The prophet may not prophesy and the physician may not lay his hand upon the sick. It is unsuitable to do anything desirable. The king must make offerings by night to Ninlil and Nergal. He shall make sacrifices. Income (*ir-bu*) . . . K. 2514, 38-43.
- (C) The Moon-god (Sin) will not receive a man's confession of sin at once. One may not say 'accept my petition'. Sin and Shamash adore Anu. *Bab.* IV, 108, 10.

DAY 15

- (A) Nineanna. One may not take oath, nor transact business. The king makes offerings to Sin. One may not bow down to his god. KAR. 178, II, 15-23; 176, II, 28-35.
- (B) Nineanna. 'Casting of accounts' of Sin and Mah. Lucky. The king makes offerings to Shamash and the Queen of the Lands, to Sin and Mah; he must make sacrifices. K. 2514, 43-5.
- (C) One must make offering to Sin and Shamash. (Sin) will not receive the confessions of sins. One may not say 'accept my petition'. One shall not transact business. *Bab.* IV 108, 13-16. One may not take oath. KAR. 177 Rev. III, 5; *Uruk*, 54, 10; Ki. 1904-10-9, 67 Obv. 15.

DAY 16

- (A) Ritual by night to [Marduk]. Text broken. The king makes offering to Šulpae (Jupiter = Marduk). He must clean his garment. The king shall recite a penitential psalm, and clean his garment. . . . KAR. 178, II, 24-33; 176, II, 36.

- (B) Ritual by night to Marduk and Zarpanit. Lucky. The king must clean his garment. Before he enters to recite a penitential psalm by night before Marduk and Ishtar he shall make offering. He shall make sacrifices. In the morning he shall make offerings to Shamash, the Queen of the Lands, Sin, and Mah. K. 2514, 46-9.
- (C) One may not mention the name of god (take oath). KAR. 177 Rev. III, 6; *Uruk*, 54, 11. Ishtar, Sin, and Shamash will be gracious and one may acquire a wife. *Bab.* IV, 108, 17.

## DAY 17

- (A) Festival (*eššēšū*). Unlucky. Physicians may not practise. The king makes offerings to Sin and Ningal, to Gula, to the god and goddess of his city. Ningal will intercede for him with Sin. KAR. 178, II, 34-9.
- (B) Festival of Nabû and Marduk. Lucky.<sup>1</sup> King makes offerings to Nabû and Tashmet by night, and sacrifices.
- (C) Offerings to [Nabû and Tashmet]. Ningal intercedes for him with Sin. *Bab.* IV, 108, 19-20; ZA. 19, 378, 3.

## DAY 18

- (A) Text broken. Lucky. One will escape from ruin and humiliation. A hunter may not catch fish, bird, or wild beast; for it is an abomination to Girra. The king makes offering to the Pleiades. KAR. 178, II, 40-5; 176 Rev. I, 1-4.
- (B) Festival (*isinnu*) of Sin and Shamash. Lucky. The hunter may not catch fish, bird, or wild beast. King makes offering to Pleiades, to Shamash, the Queen of the Lands, to Sin and Mah; he sacrifices. ZA. 19, 378, 4-7. Nisan II has simply offerings to Shamash, Queen of Lands, Sin, and Mah; he sacrifices. K. 2514, 52-3.
- (C) Same instructions about the hunter as in (A). *Bab.* IV, 108, 21-3.

## DAY 19

- (A) Day of wrath of Gula. Sinister. Difficult for the sick. Physicians may not practise, and the seer speak not. Unsuitable for doing anything desirable. Prayer and weeping shall the assembly institute. Because of Bau (= Gula) one shall not sweep his house,<sup>2</sup> nor wash his feet, nor complete the construc-

<sup>1</sup> *Sic* for Nisan II, but Nisan II day 17 is unlucky in the old calendar, KAR. 178, IV, 22.

<sup>2</sup> KAR. 176 Rev. I, 9, from end to l. 11, read A-ŠI (*takribtam*) ù

tion of his house. King makes offering to Orion. KAR. 176 Rev. I, 5-15; 178, II, 46-58.

- (B) Day of wrath of Gula. Lucky. Sinister.<sup>1</sup> Physicians may not practise. Unsited for doing anything desirable. Because of Bau one may not sweep his house nor wash his feet, nor complete the construction of his house. King makes offering to Orion. ZA. 19, 378, 8-12. Nisan II. Day of wrath of Gula. Lucky, sinister. The shepherd of peoples may not eat anything cooked, [change his garment, or put on clean garments]. He shall not sacrifice, [ride in a chariot, nor speak as a ruler]. The seer may not speak. King makes offerings to Ninurta and Gula. K. 2514, 54-7.

DAY 20

- (A) Shamash. Sinister. Half the day lucky. King makes offerings to Shamash, Aya (wife of Shamash), and Bunene (messenger of Shamash). KAR. 176 Rev. I, 16-18; 178, II, 59-63.
- (B) The king may not eat any flesh touched by fire, nor change his garment, nor put on clean garments. He shall not sacrifice, nor ride in a chariot, [nor speak as a ruler]. The seer may not speak. [King] makes [offering] to Gula. ZA. 19, 378, 13-16.<sup>2</sup> Nisan II. ['Bright day.' Day of the giving of bread of Sin and Shamash. Lucky. King] sets forth bread to Shamash, the Queen of the Lands, Sin, and Mah. He makes sacrifices. K. 2514, 58-9.

DAY 21

- (A) Day of the reckoning of Shamash. Unlucky,<sup>3</sup> sinister. Difficult for the sick. Physicians may not practise and a seer may not speak. Unsited for doing anything desirable. Let the king speak many charitable words (abound in good deeds). Because of Bau one may not sweep his house, nor wash his feet. The king makes offering to Shamash and Bau. All work of the weavers must cease,<sup>4</sup> and may it not prosper. KAR. 176 Rev. I, 19-27; 178, II, 64-75.

*bi-ki-tam puhru* (ŠAB-MEŠ-GAL) *i-šá-kan. aš-šum* <sup>a</sup>[Ba-u] *bit-su la i-šá-[piš]*; 178, II, 51-2.

<sup>1</sup> Unlucky in old calendar, KAR. 177 Rev. IV, 7.

<sup>2</sup> This regulation for Nisan 20 is an exception to all the known rules for the 20th of any month.

<sup>3</sup> So KAR. 177 Rev. IV, 7. But lucky in reformed calendar.

<sup>4</sup> *ba-al-šu-ut li-pi-it-ti* <sup>a</sup>*Tag-túg ja išir.*

- (B) Day of reckoning of Sin and Shamash. Lucky. Text destroyed. ZA. 19, 378, 17.

## DAY 22

- (A) Burnt offering to Enlil. Lucky and sinister. Text broken. His god and Shamash mentioned. KAR. 176 Rev. I, 28-30; 178, II, 76-9.
- (B) [Day of reckoning of Sin. Festival of Ninegal. . . .] Lucky. Eclipse of Shamash. . . . He will hear him. [King makes offering to Shamash] and the Queen of the Lands. [He sacrifices.] ZA. 19, 379, 1-4.

## DAY 23

- (A) Text destroyed. Unlucky.<sup>1</sup>
- (B) [Festival of Shamash and] Adad. Lucky. [The king makes offerings to Shamash and Adad] and sacrifices. ZA. 19, 379, 5-7.

## DAY 24

- (A) Text destroyed. Day dedicated to Sin (?). Ninurta mentioned. KAR. 176, Rev. I, 34-8.
- (B) Festival of Enegal and Ninegal. Day of the decrees of the goddesses. Lucky. King makes offerings to Enegal and Ninegal. ZA. 19, 379, 8-9.

## DAY 25

No text preserved in either old or new calendars. In reformed calendar this day in all known months is described as the day of the procession of Enlil and the Bêlit of Babylon. Since offerings are made by night to Enlil before the Plough Star, and to Bêlit of Babylon before the Wagon Star (i.e. star of Ninlil), Bêlit of Babylon is Ninlil.<sup>2</sup> Lucky day.

## DAY 26

- (A) Festival (*isinnu*) of the River-goddess. The king to Sin and Shamash must not prostrate himself in prayer. Sin and Shamash will render his decision in everything and he must make offerings to them.<sup>3</sup> KAR. 178 III 1-5.

<sup>1</sup> So KAR. 176 Rev. IV 7.

<sup>2</sup> So Elul II in IV Raw. 33, III, 22-5; K. 8372 Rev. I, 12-15, where Ishtar of Babylon replaces *Bêlit* of Babylon. The regular entry for Arahsamna, IV Raw. 33\* III 18; Shebat, K. 7079; Adar, K. 4093.

<sup>3</sup> In the reformed calendar the *isinni* of the River-goddess falls on the 27th day, with a musical festival of Nergal. Elul II, IV Raw. 33, III, 30;

- (B) No text. For this day all known months have the same as day 28 in the old calendar. Day of the brick of Ea and Mah. Lucky. The king may not recite a penitential psalm Elul II, but must do so Arahsamna, Shebat. Offerings to Ea and Mah. Sacrifices.

DAY 27

- (A) Song-service to Nergal.<sup>1</sup> Unlucky. Day of penance (*gabraḥḫu*). King not permitted to prostrate himself to Sin and Shamash, but makes offering to Anu and recites a penitential psalm, and cleans his garment. KAR. 178, III, 6–13. Day of sorrow for waning moon.
- (B) No text. In all known months, song-service to Nergal and festival (*isinnu*) of River-goddess (as on 26th in old menology), probably in preparation for the descent of the moon into the lower world, i.e. crossing the river of death. The king makes offerings to Nergal and River-goddess, and sacrifices. Elul II, IV Raw. 33, III, 30–2; Arahsamna, IV Raw. 33\* III, 25–7; Shebat, K. 7079 Rev. I, 9–12, which adds that one may not eat flesh of the ox; Adar II, K. 4093 Rev. I, 11–12.

DAY 28

- (A) Laying of the wall (*igaru*) of Mah. Lucky and sinister. Difficult for the sick. Physicians may not practise and the seer may speak no word. Unsited for doing anything desirable. One may not go out into the street, but one may approach a shrine. One may not prostrate himself to Sin and Shamash. One must bow down to his own god, but not pray for himself. He must worship his god. The king must recite a penitential psalm.<sup>2</sup> KAR. 178 Obv. III, 14–36; 176 Rev. II, 1–8.
- (B) No text preserved; in those months where this day is preserved the following instructions occur. Day of Ea, day of the ravishment of the Moon-god. Day of Nergal. Lucky (some months), unlucky (some months). Sinister. Same instructions for eating, clothes, physicians, seers, work, riding in a chariot as on days 7, 14, 21. King makes offerings to Ea and Mah, sacrifices and recites a penitential psalm in those months when it is permitted.<sup>3</sup>

Arahsamna, 33\* III, 25; Shebat, K. 7079 Rev. I, 11; Adar II, K. 4093 Rev. I, 11.

<sup>1</sup> Ideogram defaced but certainly for Nergal.

<sup>2</sup> But Nisan II forbids this on the 28th. KAR. 179, II, 5; 178, IV, 36.

<sup>3</sup> See p. 49.

## DAY 29

- (A) Day of the ravishment of the Moon-god. Sinister. Lucky. Difficult for the sick. Physicians may not practise and the seer may utter no word. Unsuitable for work. One may not go out into the road. Eclipse (i.e. time of mourning) of Sin and Shamash. One may not pray for himself, but shall pray to Sin and Shamash. King makes offerings to Anu, Nergal, and Nanā. One may not go out of the gate. KAR. 178, III, 37-50; 176, Rev. II, 9-23.
- (B) No text. From texts in other months: day of the ravishment of the Moon-god, when the Igigi (gods of heaven and earth) and the Anunnaki (gods of the lower world) are assembled. Lucky. King must change his garment (Sivan), make offerings to Sin and Mah, and sacrifice. One may bring a wife into his house (Shebat). KAR. 178, III, 37-50; 176 Rev. II, 9-23.

## DAY 30

- (A) Day of Anu. Lucky and sinister. Difficult for the sick. Same instructions for physicians, seers, work, and going into the street as day 29. One may not bow down to Sin and Shamash, nor pray to his god, nor pray for himself. One must worship Sin and Shamash. KAR. 178, III, 51-63; 176 Rev. II, 24-34.
- (B) No text. From texts in other months. Day of Anu and Enlil. King makes offerings to Anu and Enlil, and sacrifices. Usually lucky. Shebat unlucky. One must bow down to Adad,<sup>1</sup> and may not drink wine (Shebat).

In the tenth-century menology the instructions for each day usually end<sup>2</sup> *kurmat-su ana* (here follow names of deities) *liškun-(ma) ma-ḫir*, 'Let him provide his food-offering for the god or gods . . . and it shall be received'. Only days 2, 22, 28 (?), 30 omit this.

In the reformed menology of Ašurbanipal the same instruction always comes near the end of each day<sup>3</sup> and ends *nīš ḫati-šu itti ili ma-gir*,<sup>4</sup> 'The lifting of his hand will be acceptable to god'. It should be noted, however, that *appa-šu ul ilabbin*, 'he shall not prostrate his face',<sup>5</sup> occurs in days 28 and 30 of Nisan, and also on days 14, 15, 26, 27 in the

<sup>1</sup> *Bab. iv*, 106, 39; K. 7079 Rev. I, 30-3.

<sup>2</sup> Rarely before the end.

<sup>4</sup> Also *maḫir*, and *še-mi*.

<sup>3</sup> As *nindabá-šu ana . . . ù-kan*.

<sup>5</sup> Always to sun and moon.

old menology. This act of prostrating oneself to the Sun-god and Moon-god can have no connexion with the *šigû* or penitential psalm, which is ordered for days 6, 16, 27, 28 of Nisan. In other words, on some days a *šigû* is ordered when prostration to Sin and Shamash are forbidden.<sup>1</sup>

In the old and new menologies as well as in the almanacs an omen is usually attached at the end of the instructions for each day. The old menology often adds *libba-šu iṭāb*, 'his heart will be happy' (if he does all these things) or in the negative 'his heart will not be happy' (if he fails to do these things). Occasionally all three classes of texts use *šaghulla*, 'there will be joy of heart'. The reformed calendar prefers almost universally the omen 'the lifting of his hand<sup>2</sup> will be acceptable with god', a phrase never used in the tenth-century menology nor in the almanacs. Sometimes both menologies have *mala ikabbû itti ili magir*, 'whatsoever he says will be acceptable with god',<sup>3</sup> and *amat pī-šu šemat*, 'the word of his mouth will be acceptable'.<sup>4</sup> It is obvious that the ordinary prayers of 'lifting the hand' in rituals of expiation could be said on any day of the year, even on the most terrible day of the months, the nineteenth.<sup>5</sup>

Now from the résumé of Nisan given above it will be seen that days 1, 7, 9, 14, 19, 21, 28, 29, 30 are rest-days, when physicians may not practise nor seers prophesy. In the reformed calendar these nine days are reduced to 7, 14, 19, 21, 28, or almost the *septem* principle, or division of the

<sup>1</sup> In the reformed menology *ana . . . liškēn* occurs in the same day with *šigû lissi*, Sivan 16, K. 8373. Since 'let him bow down to gods . . .' in the Ašurbanipal edition is probably the same as *appa-šu ilabbin*, 'he shall prostrate his face', the *šigû* cannot mean the same thing.

<sup>2</sup> Referring always to the king.

<sup>3</sup> On the 13th of Nisan II; Sivan 11th and Arahsamna 13th (IV Raw. 33\* II, 5-6, restored).

<sup>4</sup> Only Nisan II day 13. *niš ḫati-šu itti ili magir* often occurs with days 7, 14, 21, 28 or *uḫulgallû* days in the seventh-century calendar. But Harp. Lett. 23, Obv. 21 says that the *mašmašu* priest may not say the *niš ḫati* on any *uḫulgallû* day.

<sup>5</sup> So in preserved texts for this day Elul II and Shebat.



lunar month into weeks of 7 days; the last week adds one or two days until the new moon of the next month, when the first week of the next month begins. The new calendar insists on a certain amount of fasting and refraining from riding on the part of the king. These instructions are written into this menology for days 7, 14, 19, 21, 28 of every month.

Days 26 and 27 were also days of sorrow and penance preparatory to the 28th, when the Moon-god crossed the river of death and joined Nergal, lord of the dead, in the darkness of Arallû. Services to the gods of hell mark the two days before the eclipse of the moon. During the whole of the 29th and 30th, while the moon remained invisible, none could travel by road or go out of his gate.<sup>1</sup> A special rubric was drawn up which forbids going out of a gate on the 29th day of all the months.<sup>2</sup> Another text has, 'Go not out of the gate on the 29th; (if one does) fire will fall on the house of the man'.<sup>3</sup> Omens for going out of the gate on the 29th of each month have been listed by an Assyrian scribe.<sup>4</sup>

'If on the 29th of Nisan thou goest out of the gate . . . verily, O man, thou shalt die.'

'If on the 29th of Ayar thou goest out of the gate thy house . . .,<sup>5</sup> with gloom (*ik-li-ta*) shall thy house be filled.'<sup>6</sup>

'If on the 29th of Sivan thou goest out of the gate, there will be destruction of the house.'

'If on the 29th of Tammuz one goes out of the gate, the wife of that man will die.'

The menology for Tebit 29 has, 'The king shall not go out of the gate; he will meet with witchcraft in the wind of the street'.<sup>7</sup>

<sup>1</sup> *Bab.* I, 202, 27.

<sup>2</sup> KAR. 177 Obv. II, 22.

<sup>3</sup> KAR. 392 Rev. 21, probably for Tebit. If this rule were enforced no business could be done on Tebit 29. In fact contracts dated on this day are unknown, with one exception in the reign Nabunidus, Dougherty, YOS. VI No. 27, 5, which may be an error for 28. For Tebit 29, see KAR. 178 Rev. II, 73.

<sup>4</sup> Virolleaud, *Bab.* IV, 202, 27 ff.

<sup>5</sup> *an-ni-bi-ti*, how read?

<sup>6</sup> The king is forbidden to go out of his gate on Ayar 29; KAR. 179, III, 10.

<sup>7</sup> KAR. 178 Rev. II, 73-4.

Before I enter into a further discussion of the problem of the Sabbath week it is necessary to say a word concerning the probable date of these rules about days on which physicians could not heal, prophets could declare no omens, and men might not pursue their ordinary vocations. When and where did these rules originate? They are found only in the Assyrian promulgations of the church breviaries of the tenth and seventh centuries. But Babylonia and not Assyria exercised the principal influence upon Judaea. The Jewish calendar was borrowed from Babylonia two centuries after the Assyrian Empire fell in 612 B.C. The editors of the tenth-century calendars state that they had copied the menologies from older copies. One of them mentions in his note that Eridu, the ancient Sumerian city in the extreme south, possessed the Babylonian original. They also state that they copied at Sippar, Nippur, Babylon, Ur, Larsa, and Erech. The tenth-century breviaries of Assyria have an appendix which gives a ready table for finding the lucky days in each month. This table of lucky days has two sections; one gives the views of the Babylonians, the other of the Assyrians. It is, therefore, obvious that the tenth-century Assyrian calendar is of Babylonian origin; these rules undoubtedly date from the great classical period of Babylonian civilization, the age of Hammurabi.

The institution of rest-days, enforced so rigidly that even the sick might not be attended by a physician, is then of great antiquity in both Babylonia and Assyria. The Pharisees rebuked the disciples of Jesus for plucking ears of corn on the Sabbath. The crowning offence of Jesus in the eyes of the Pharisees was the healing of the man with a palsied hand on the Sabbath: 'And they watched him whether he would heal on the Sabbath day that they might accuse him.'

These strict rules about healing, working, travelling on certain days do not belong to early Hebrew religion. They are post-exilic and rather obviously under Babylonian influence. Josephus, who wrote in New Testament times, also

says that 'it is not lawful for us to travel either on the Sabbath or feast-days'.

These rules were known in Babylonia, and the problem is whether the days coincide with the Hebrew sabbaths. That the Babylonian menologies forbade work on certain days is beyond doubt. One breviary for selected days of the year states that all work is forbidden during the entire month of Teshrit.<sup>1</sup>

The menology of the tenth century has the formula:

A physician shall not lay his hand upon the sick;  
The prophet shall declare no word.  
It is not suitable for executing any affair.

This formula occurs in the tenth-century menology in Nisan for days 1, 7, 9, 14, 19, 21, 28, 29, 30, i.e. 9 rest-days.<sup>2</sup> It is clear that the first day of the month was originally a day of rest and fasting: so were days 7, 9, 14, 19, 21, 28, 29, 30. Undoubtedly these mark stages in the phenomena of the moon; the first quarter, full moon, first quarter of the old moon, day of the moon's disappearance, that is, 7, 14, 21, 28, are clearly moon-phases. There is, here, already in the tenth century textual evidence for the idea of a seven-day week. The reformed calendar admits only 7, 14, 19, 21, 28.

The 19th day of all months is marked 'day of wrath' of the goddess Gula. No work was done; weeping and lamentation filled the land; no one might wash his feet on the 19th, change his garments, nor eat any cooked food.

Ašurbanipal in the seventh century promulgated a calendar with a definite scheme of a seven-day week, a regulation of the month by which all men were to rest on days 7, 14,

<sup>1</sup> K. 3769, 16. An historical cylinder is dated Elul 28, Streck, *Assurb.* 90 n. 2. The rule that a prophet must not deliver an oracle on days 7, 14, 19, 21, 28 can be tested by the liver omens published by Klauber and Knudtzon. The oracles are never dated on any of these days. See Klauber, *Politisch-Religiöse Texte*; Knudtzon, *Gebete an den Sonnengott*.

<sup>2</sup> Entered in Nisan only with colophon directing that the rules apply to the other months.

19, 21, 28. The old menology of Nisan made the two days of the dark of the moon, 29, 30, rest-days, so that each lunar month had 9 rest-days, on which neither the sick could be cured nor a man in difficulty consult a prophet; none might travel and fasting was enforced.

In the seventh century days 1, 9, 29, 30 were dropped; days 7, 14, 19, 21, 28 became rest-days in all the months. No one has ever explained why the 19th was retained. The persistent emphasis upon this day of wrath of the goddess of childbirth and healing from the earliest times to the end of this civilization is difficult to explain. The *dies irae* of Babylonia began by some peculiar myth concerning the 19th day after the first new moon.

Any explanation of the *dies irae* of Babylonia must be sought in some myth concerning the 19th of the first month. 'For the sake of Bau (Gula) one may not sweep his house', see p. 78. Why should the 19th day after the moon of the spring equinox be a day of wrath of the great goddess of medicine? It corresponds to the *quinquatus* of the Roman farmers' calendar, the 19th of March, five days after the full moon. Ovid says that *Minerva* was born on that day, she being the Pallas Athena of the Greeks, described by him as patroness of those who banish sickness by Phoebus' art.

Latin scholars discount Ovid's explanation and claim that the Roman 19th of March was a day sacred to Mars when the arms of Roman soldiers were purified. Although *Minerva* and *Gula* are both goddesses of medicine, there is still no explanation either in Babylonian or Latin mythology as to why the 19th should be a day of wrath in all the calendars of ancient Chaldea.<sup>1</sup> On the 19th of every month

<sup>1</sup> On this day KAR. 176 Rev. I, 15 = 178 Obv. II, 57-8 has an offering to <sup>m</sup>Sibzianna, and ZA. 19, 378, 12 (late edition of Nisan) has the same entry. The texts of the 19th day for the *enbu bél arhim* series, so far as preserved, substitute for Sibzianna, <sup>d</sup>*Ninurta* <sup>d</sup>*Gula*, i.e. Ninurta and Gula; so Sivan, K. 8373; Elul II, IV Raw. 32, II, 46; Arahsamna, IV Raw. 33\* II, 44; Tebit, K. 2809 Obv. II, 8; Adar K. 4093 Obv. II, 30. <sup>m</sup>Sibzianna (= Orion) is identified with Tammuz, CT. 24, 9, K. 11035, 9 = 25, 7, K. 7663, 9; with <sup>d</sup>Ninsubur messenger of Anu and

the Babylonians fasted, forbade all work and held the day in mournful memory of the wrath of the goddess Gula. On this day the king set forth food-offering to the constellation Orion, who, they said, had been slain with weapons. But the beautiful young hunter of Greek mythology, Orion, was also slain by the arrow of Artemis. Now the Sumerians called this constellation Sibzianna, 'the faithful shepherd of heaven'. Why then did the Greeks also call it Orion unless the myth of this constellation was the same among Sumerians and Greeks?

There was then a legend in Sumerian and in Greece that a beautiful hunter had been slain by a goddess—in Greece because this young god had assaulted her; in Babylonia because he had rejected her. Is there a reason for connecting the giant hunter of the sky (who stands with his dog Canis between Taurus and Castor and Pollux) with Nisan, or with the 19th of March? The rising of Orion in Nisan could occur only in the remote age before 3000 B.C., the period of the Gemini. Why should the *rising* of the slain hunter Tammuz who had been chained to Orion coincide with a day kept in memory of the wrath of the goddess who slew him?

Artemis' arrow by fateful error slew Orion in the wild sea waves. Some myth of this kind, commemorated down the ages by marking the 19th of Nisan as the day of wrath and lamenta-

Ishtar, KAV. p. 119, 1, 38-40, where the Accad. rendering has *šitaddalu* <sup>d</sup>*Papsukkal*, 'he who was slain by weapons, Papsukkal', instead of Nin-subur, ll. 45-7. <sup>m</sup>*Sibzianna* = <sup>d</sup>*Papsukkal* of Anu and Ishtar, also CT. 33, 2, 11 2. Since Sibzianna, 'the faithful shepherd of heaven', is Orion, and identical with the Greek constellation 'Ὠρίων, there must be a connexion between Tammuz and the Greek myth of Orion. Gula is said to be the mother of <sup>d</sup>Ab-Ú(ba) = Tammuz, SBP. 156, 38; *Tammuz and Ishtar*, 8 n. 1. The texts refer to Sibzianna slain by weapons, and the Greek myth records how Orion the beautiful youth and hunter was slain by Artemis with an arrow because of his love-affair with Eos; others said that he offered violence to Artemis, who killed him with an arrow. Tammuz does not figure as a hunter in Sumerian mythology, but Ninurta = Nimrod probably did.

tion in Babylonia, surely existed in most remote Sumerian antiquity. The death of Tammuz or Orion by the weapon of the goddess obsessed the religious imagination of Babylonia and Assyria, and they extended the commemoration to the 19th of every month. The legend has been preserved in Hebrew by that antiquarian poet the author of Job:

‘Dost thou fasten the bands of the Pleiades  
Or untie the cords of Orion?’<sup>1</sup>

Omitting the 19th day of rest, the remaining days 7, 14, 21, 28 in the calendar of the seventh century obviously constitute the seven-day division of the month. This scheme is fully carried out somewhere between 1000 B.C. and 600 B.C. Here the weeks do not continue in a regular cycle regardless of the new moon. Each month has four weeks, beginning with the new moon. Days 29 and 30, or in case of a 29-day month, day 29, are simply thrown out of the four-week system. I have no doubt but that this was the old Hebrew scheme also. In other words the fourth week has one or two extra days. Every month must begin with the first day of the first week.

Is then the Hebrew Sabbath of Babylonian origin? Certainly the late Pharisaic adherence to the law which forbade healing or even an act of mercy on the Sabbath is due largely to the Babylonian and Assyrian Church Calendar. This Pharisaic attitude is traceable to the Exilic period in Hebrew. A Hebrew was stoned to death for gathering sticks on the Sabbath day, according to a passage in the Priestly document of Numbers, 15, 32–6. The institution of days 7, 14, 21, 28 of every month as rest-days was, then, carried out after 1000 B.C. The idea obtained up to that period and at that time it included day 1, New Moon, days 9+19, and days 29, 30, Dark of the Moon. All of these were thrown

<sup>1</sup> Job 38, 31. The Hebrew *kesil* = Orion has never been explained, but since Tammuz is known in mythology as ‘a fool, cripple’, Sum. *lil*, it is probable that *kesil* is the ordinary Hebrew word ‘fool’. See OECT. II, 12 n. 3; *Sem. Myth.* 234. For *lillu*, the god who was bound, *mu-lu-lil*, see Thureau-Dangin, RA. 19, 178, 18; 179, 8.

out to obtain a seven-day week throughout the year in the reformation of the calendar about 700 B.C.

On these days the prophet might not issue an omen, but from the year 1911 B.C., a millennium before these rules were introduced into all the months, a document dated on the 21st of Adar exists, in which a seer explains how on that day he consulted a sheep's liver and informed the king Ammizaduga of Babylon that he could give orders to make a statue of his predecessor Hammurabi.<sup>1</sup>

If, then, the Assyrian menologies appoint days 7, 14, 19, 21, 28 as rest-days, you naturally ask—did they call these days *sabbaths*? There is nothing in the official calendars of any period or place to show that they did. The Greeks also divided the month according to the phases of the moon, but they obtained a system of decads, first 10 days ἰστέμενος, the waxing month, μεσῶν, second 10 days, middle month, φθίνων, the last 10 days, waning month.

But the Greeks in the time of Homer and Hesiod divided the month into two parts, days 1–15 and 15–30, the waxing and the waning month.

Now the 15th of the month in Babylonian is called *šapattu*, or *šabattu*;<sup>2</sup> this word is described as 'day of the resting of the heart',<sup>3</sup> day when the heart of god is appeased. 'Ishtar the queen who answers (the gods) in my stead, sister of Marduk' is called 'mother of the *šá-bat-tū* day', which is the 'father of the month'.<sup>4</sup> *šabattu* is defined<sup>5</sup> as 'the day', and comes after the 14th in an astronomical text.<sup>6</sup> It is also defined by 'coming to rest', end of a period.<sup>7</sup> If one says,

<sup>1</sup> Bab. II, 259.      <sup>2</sup> *úm 15-kam = šá-bát-ti*, PSBA. 1904, 46, K. 6012, 13.

<sup>3</sup> *úm nu-uh lib-bi = šá-bát-tum*, CT. 18, 23, K. 4397, 17; Var. *ú-um nu-uh lib-bi = ša-ba-tū*, Von Soden, AS. No. 1, 1, 114. Cf. ZUR (zu-ur) = *nuhhu*, *šabattum* causing (the heart of god) to be appeased on the *šabattu* day, CT. 12, 10 A 24–5, syn. *sullú*, *suppá*, to pray.

<sup>4</sup> Craig, RT. II, 11, Obv. 24–5. Where Var. Meek, BA. x, 81 Rev. 4–5 has 'mother of the 15th day'.      <sup>5</sup> UD(ú) = *šá-bat-tum*, CT. 12, 6 A 24.

<sup>6</sup> *ša-bà-tum*, Bab. VI, 8, 5. For *šapattu* as middle of the month, see *Epic of Creation*, 160, 18.

<sup>7</sup> PA(*šig*) = *šá-bat-tum*, *ša-tum*, end, CT. 12, 22, 38180, Rev. 8–9 and

'either on the day of the New Moon, on the 7th, or on the *šapattu* day (complete it)', the 15th day is meant.<sup>1</sup>

Hence *šabattu*, *šapattu*, *šabattu* means 'end of the first half of the month', middle of the month as the Assyrian scribes explain it.<sup>2</sup> The Greeks also divided the month into two parts, and for purposes of reckoning accounts the Sumerians used the same system,<sup>3</sup> and the Babylonians described the second half of the month as 'the latter period of 15 days',<sup>4</sup> and the 'former half' was known as the 'former period of 15 days'.<sup>5</sup> Hence they said 'former *šabattu*' and 'latter *šabattu*'. The word means literally the 'day which divides the month', end of a series of days.<sup>6</sup> The Egyptians also see *ka-te ka-la u-mi*, 'at the end of any day', opposed to *ina šerim*, 'in the morning', KAR. 212, III, 6; cf. l. 4. For *šig*, to repose, v. CT. 17, 33, 19, *ge-en-ib-sig-ga = lipšah*, may it repose, and PA(si-ig) = *pašāhu*, Haupt, *Accad. Sprache*, Taf. XII, 10. *šig = napāšu*, to breathe freely, rest, 38180 Rev. 6, and *inapuš*, he is lazy, PBS. VIII, 196, 17.

<sup>1</sup> Ungnad, *Briefe*, 246, 28. *ina ar-ḫi si-bu-ti u ša-pa-at-ti*, on the day of the new moon, on the 7th or on the 15th, CT. VI 6, Obv. B 20 = Langdon, *Paradis*, Pl. x, but uncertain text. See *ibid.* p. 39 n. 1.

<sup>2</sup> AN(sa-a) = *ša-bat-ti*, i.e. 'half' = *šabattu*, Ass. 523, IV, 25; *ina um ša AN = ina mišil* (BAR) *arḫi*, i.e. on the day of the *šabattu* = in the middle of the month, Virolleaud, *Shamash*, XIII, 17. On *sa = mišlu*, v. RA. 28, 165-6.

<sup>3</sup> See Landsberger, *Kal.* 93 n. 5.

<sup>4</sup> *um 15-kam ar-ki-tum*, Strassmaier, *Camb.* 292, 2.

<sup>5</sup> *um 15-kam maḫrī-tū*, Cyr. 67, 2; *Dar.* 32, 2. *ar-ki-tum u maḫrī-tum*, *Camb.* 65, 3; the writings *um 15-kam arkītu*, *maḫrītu*, are to be read *šabattu arkītu*, *šabattu maḫrītu*. For *b > p* and original *šabattu*, see Landsberger, *Kal.* 133; Zimmern, *Fremdwörter*, 67.

<sup>6</sup> Root *šabātu* = *gamāru*, to be complete, CT. 18, 13 A 12; see above *šabattum = katū*. This is probably the same verb as Arabic *sabata*, 'to cut off, cease, rest'; Hebrew *šābāt*, 'cease from work, rest'. The Egyptians use the word *s-m-d-t* for the 15th day, i.e. the half of the month, Διχομηνία, 'dividing the month', full moon, written with a half-moon, and they also divided the 36 decans into two parts, the 18th being called *s-m-d*, Σματ, the divider, Sethe, *Die Zeitrechnung der alten Aegypter* 47-8; Ramses IV, twelfth century. Brugsch renders *s-m-d* by the divider (*smad*). The word is as old as the Middle Kingdom, 2000-1788 B.C., but I cannot believe that it is borrowed from *šabattu*, as Zimmern, *Fremdw.* 67, suggests. Zimmern gives the Egyptian root as *s-b-t*, but I see no reason for this. In any case *smad*, *smadt*, divider, 15th day, is the same Semitic word as



named the 15th day *šamadt*, the divider; consequently the Babylonian word *šabattu* is probably the Hebrew word *šabbat*, Sabbath, the 7th day of each lunar week. Now if this Babylonian word is used for the 15th day only<sup>1</sup> and the Hebrew word for every 7th day on which all work was prohibited, it is natural to suppose that *šabattu* or the 15th should be a rest-day also. There is no trace of this at all in the menologies.<sup>2</sup> The 15th day never has any reference to its being unsuitable for work, nor is the work of physicians and diviners prohibited. The following table gives full information on this day so far as our sources permit.<sup>3</sup>

## NISAN

*Tenth-Century Calendar.*

Day of <sup>a</sup>Nineanna. King may not speak. Trade in grain not permitted. King sets forth food-offering to Moon-god. Man may not worship his god. KAR. 176, II, 28-35 = 178, II, 15-33. 177 Rev. III, 5 = Falkenstein, *Uruk*, 54, 10. Lucky day, KAR. 177 Rev. IV, 5.

*Ašurbanipal Calendar and other sources. Babyl. Almanac.*

Food-offering to moon and sun. Man may not confess his sins (*zakar šiḫḫi-šu*), nor say 'accept my prayer'. One may trade for grain or money. K. 3765, 13-16 = *Bab.* IV, 108.

*šabattu*. *š-m-d* is rendered σμαρ in Greek. Gardiner, *Egyptian Grammar*, p. 475, N 13, says that *šmd-t* is uncertain for 15th day and only . . . . *nt* certain. Erman-Grapow, *Egyptian Dictionary*, IV 147, gives *šmd-t* (?). *smdt* cannot be a loan-word from *šabattu* since *b* in words borrowed by Egypt is always rendered *b*; see Ranke, *Keilschriftliches Material*, 89. I believe that the Egyptian root *š-m-d* is the Babylonian *šabātu*, 'to divide, cut off, come to an end', Arabic *sabata*, and is an Egyptian form of this root *š-b-t* > *š-m-d*.

<sup>1</sup> See list of days on which a man prays for the soul of god and king, days 2, 7, 15, *šm nubatti*, *šm eššēki*, 19-20, *šm bubbuli*, *šm rimki*, *šm limutti*, and day 30, King, *Magic*, 61, 11-12.

<sup>2</sup> See note 1 above, where this is one of the days of prayer when a service of expiation is held. *Šurpu* 8, 24-6, names days 7, 15, 19, 20, 25, 30 among days which have power over demons.

<sup>3</sup> The 15th is *per se* not 'full moon day', but the *end* of the first half of the month.

INTERCALARY NISAN

Marked *pa-ka-nu*, KAR. 178 Day of <sup>d</sup>Nineanna. Day of  
 Obv. iv, 18. reckoning of Moon-god and  
 goddess Maḥ. King sets food-  
 offering to Shamash, *Bēlit-  
 mātāti*, Sin and Maḥ. Sacri-  
 fices, prayers. Lucky day. K.  
 2514 Obv. 44-5.

AYAR

Marked *piḫlatum*, KAR. 178 Babylonian Almanac, V Raw.  
 Obv. iv, 69. Lucky day, 177 48, marks Ayar 14, *bizlatum*.  
 Rev. iv, 6.

SIVAN

Food-offering to Enmešarra Same as Nisan II, but adds wor-  
 and Gula. King may take ship (*liš-kén*) of Enmešarra and  
 a wife. King may wash his Gula. Unlucky. Almanac, V  
 garment. KAR. 178 Obv. v, Raw. 48 has the mark *lamassa*  
 39-43. Unlucky day, l. 39. *irtaš-si*, He will obtain a pro-  
 Also omitted from lucky days, tecting genius.  
 177 Rev. iv, 10.

TAMMUZ

Banquet of god; god is gracious. Missing in our sources. Al-  
 Very lucky day. KAR. 178 manac, V Raw. 48, gives *antalu*  
 Obv. vi, 39. But unlucky, 177 of Moon-god and Falk., *Uruk*,  
 Rev. iv, 12-13, being omitted 53 1 8, *an-ta-lù* of Shamash,  
 from lucky days. Banquet = 'eclipse' = penance.  
 day of penance.

AB

Menology missing. Lucky day, Menology missing. Almanac, V  
 177 Rev. iv, 16. Raw. 48 lucky; also Falk.,  
*Uruk*, 53 II, 5.

ELUL

King sets forth food-offering to Almanac, V Raw. 48, lucky.  
 Anu and Ishtar. Lucky. 178 Falk., *Uruk*, 53 III 9, a man  
 Rev. v, 46-8. Lucky, 177 Rev. may not speak (*la itammu*). See  
 iv, 18. Nisan.

## ELUL II

Menology does not recognize this month. Same as Nisan II. Lucky. IV Raw. 32 II 23-6. Almanacs do not recognize this month, but southern calendars do, KAR. 177 Obv. iv, 6-7.

## TESHRIT

King sets forth food-offering to Marduk. Very lucky day. KAR. 178 Rev. iv, 82-4. Lucky, 177 Rev. iv, 20. Menology missing. Almanac, V Raw. 49, VII, 17, *aššata* [*irtašī*]. One may take a wife. See Sivan.

## ARAHŠAMNA

One has no rival (the king?), KAR. 178 Rev. III, 48-9. Lucky, 177 Rev. iv, 23. Also lucky in southern calendars, 177 Obv. iv, 11. Same as Nisan II, Sivan. Adds king may bring his wife to his house. IV Raw. 33\* II, 17-20. Almanac, lucky. V Raw. 49 VIII; Falk., *Uruk*, 53 Rev. II.

## KISLEV

Marked unlucky, KAR. 178 Rev. II, 17. Probably same in northern calendar, 177 Rev. iv 25, Southern, 177 Obv. iv 13 omits from lucky days. Menology missing. Day of Anaššat of Dunnu-sa'id, of Bêlit of Agade of the temple Emašdari, Clay, *Morgan*, iv 25, 39-40 = SBH. 144, 19. Prayer to Nergal. Lifting of date palm. Good for journey, K. 3769 Rev. 29-30 = Vir., *Frag.*, 20. But Almanac, V Raw. 49 IX one may not go into a street.

## TEBIT

Marked lucky, KAR. 178 Rev. II, 55. Half the day lucky, 177 Rev. iv, 28. Menology missing. Almanac, V Raw. 49 X, unlucky.

## ŠEBAT

Menology missing, KAR. 178 Rev. I; 179 Rev. II. Probably lucky, restore 177 Rev. iv, 30, at end [15]. Menology missing, K. 7082. Almanac, V Raw. 49 XI, lucky.

ADAR

King may wash his garments. Menology missing. Lucky.  
 He will obtain his desire. Boissier, DA. 102 Rev. III 8.  
 Lucky. KAR. 178 Rev. 141-2. Almanac, V Raw. 49 XII, 13  
 Also 177 Rev. IV, 34, lucky. (restored), lucky.

ADAR II

Not admitted in KAR. 178-9. Missing in menology, K. 4093.  
 177 Rev. IV, 37 (northern),  
 lucky; Obv. IV, 23 (southern),  
 lucky.

The reformed calendar standardizes this day on the basis of Nisan in the tenth-century calendar. It now becomes throughout the year the day of the goddess *Nin-é-an-na*,<sup>1</sup> a title of Ishtar whose sacred number was 15. On the rest-days 7, 14, 19, 21, 28, trade and cleaning garments never occur. The only acts permitted on these days are offerings to certain gods, sacrifices, and prayer.

Ašurbanipal's reformed calendar then had five rest-days and they are marked 'sad days' in the calendar.<sup>2</sup> The Pharisaic spirit now prevails in Babylonia and Assyria. Obviously this was the influence which turned the Hebrew

<sup>1</sup> This deity is not found in the great lists CT. 24-5. She is prominent in the inscriptions of Nebuchadnezzar II, who built her temple at Babylon, VAB. IV, 74, 9, &c., p. 305; *Museum Journal*, 1923, 276, 37. In Cassite period, RA. 16, 73 No. 11; 72 No. 9; 73 No. 10; in list, Craig, RT. 58, 8 with Zamama, after Antum and before Ishtar and Nanā. Consort of Adad, Harper, *Memorial Vol.* 396; <sup>d</sup>*Nin-é-an-na šá UD . . .* followed by *Šarrat-šamé*, Thureau-Dangin, *Rit.* 73, Obv. 13. Among deities of 7th day of Kislef, Clay, *Morgan*, IV, 25, 22, followed by Ishtars of Erech and Agade, with *Nin-é-an-na dur-e*. Since 15 is the sacred number of Ishtar the title must refer to her, but why it was chosen for this day is not clear. Note that offerings are made to Anu and Ishtar, Elul 15.

<sup>2</sup> Note that the reformed calendars mark days 7, 14, 19, 21, 28 as *uḫulgallu* or *ūmu limnu* days, i.e. 'evil days', 'dangerous days', but generally marked *magir*, 'lucky'. See the Table, p. 145. If *ud-ḡe-gdl* is for *ud-gidi* = *ūmu na'duru*, then these days are described as 'sad days', since *ud-ḡe-gdl* is a variant of *ud-ḡul-gdl*.

Sabbath into a day after the manner of the Protestant Puritans.

The problem as to why the Hebrews chose the Babylonian word *šabattu* as a name for these days of rest is a mystery. The idea of a regular seventh day of rest arose in Babylonia; of that there can be no doubt. The Babylonians had a special name for these days; it is in fact *uḫulgallú*, or *úmu limnu*, that is 'day when it is dangerous to break the rules'. Their *šabattu* means the 15th day which divides the month. The word means 'divider' and the 15th is in no manner a rest-day. The Hebrews seem to have borrowed this word through a complete misunderstanding of the Babylonian calendar. After they had applied it to the rest-days they derived a verb *šābāt* from it which means 'to rest'.

The great festival of Nisan in the Jewish calendar, the offering of first-fruits and the first-born of the herds, was fixed by Ezekiel on the 14th of this month. Now the old Assyrian calendar marks the 14th of Nisan II by the 'bringing in' of offerings,<sup>1</sup> and so does the reformed calendar of the seventh century. It has been presumed that the Hebrew *Passover* and *Feast of Unleavened Bread* had been finally fixed on the 14th of Nisan because it falls on the day of the full moon. Ezekiel may have had this in mind, but the Assyrian note on the offering of first-fruits of the harvest on this day is as old as the tenth century and probably much more ancient. This can hardly be a mere coincidence. Ezekiel almost certainly obtained the date of the *Passover* directly from the Babylonian Church year-books.

The first month of the year seems to have been regarded as most holy and dangerous. The character of Nisan may be seen from the following table:

- (1) No palace could be founded in that month.
- (2) The foundation of a house could not be put down.

<sup>1</sup> KAR. 178 Obv. iv, 17, *mu-un-túm* = *šurubtu*. For this K. 2514, 43 has *ir-bu* . . . These are of course omens and not instructions, but since the words occur for this day only, they are surely based upon a custom of bringing offerings on Nisan 14.

- (3) A family could not move out of a house in Nisan.
- (4) A family could not move in at any time during Nisan.
- (5) But a family could move into a new house in Nisan.
- (6) No temple could be built in this month nor in any month except Shebat and Adar.
- (7) A tomb might not be made in Nisan.
- (8) No one could be buried in a grave in this month.
- (9) A well could not be opened.
- (10) No one was allowed to take aperient medicine.
- (11) A man could not sweep his roof.
- (12) It was a lucky month for the birth of males, and for marriage.

## TESHRIT (SEPTEMBER-OCTOBER)

The Sumerians divided the twelve lunar months into two parts, precisely as did the Egyptians.<sup>1</sup> There is consequently a *second* New Year in the Sumerian and Babylonian calendars. The custom of beginning the year in the autumn after the feast of ingathering of the last fruits, the *ḥag hā'āsīp*, at the end of the year, was the original Hebrew custom. The Canaanites began the year with the feast of ingathering 'ōsep.<sup>2</sup> Not until the Exile did the Hebrews adopt Nisan or the spring equinox as the first month. *Ābīb*, the old Hebrew name for Nisan, was in reality the seventh month originally. When documents of the Old Testament name *Ābīb* the first month they are speaking in terms of the Babylonian calendar.

This ancient tradition of the Canaanite and Hebrew people could not be suppressed by the Babylonian reformation of the calendar. They had celebrated the New Year in the month *Êtānīm* or September from the days of the remote antiquity. But Ezekiel and the Hebrew patriots of the Exilic period also found in the Babylonian books of the Holy Year a similar tradition. In fact, if Ezekiel had in his hands a copy of the menology he found that Teshrit has at

<sup>1</sup> Sethe, *Zeitrechnung*, 43. At Umma the Sumerian calendar names the seventh month *min-éš*, 'the second festival', PSBA. 1913, 47.

<sup>2</sup> See p. 24.

least six special tablets for the feast of the New Year during the first nine days of Teshrit.

At Nippur the Sumerians named the seventh month *dù-kug*, 'month of the holy chamber', called *ašar šimāti*, 'place of fates', in Ubušukina in Esagila, where on the days 8 and 11 of Nisan the gods decreed the fates of all men.<sup>1</sup> *Dukug* is also the chamber of the water-god Ea in the nether sea.<sup>2</sup> The 'festival of the Dukug' in Sumerian was, therefore, a New Year ceremony based upon the same mythology as the New Year festival of Nisan. This festival was held at the beginning of the second half of the year throughout Sumer, as the evidence of a tablet dated by the Ur calendar shows. At that city the seventh month<sup>3</sup> was known as *d-ki-ti*, 'month of the New Year festival', *akitti* being a special name for this mythological series of ceremonies.<sup>4</sup> But a tablet dated in the month *Akitti* and in the year 40 of Dungi contains a list of sheep and kids for the 'festival of the Dukug'.<sup>5</sup> This Sumerian name conveys the same sense mythologically as *barazaggar*, the word for Nisan, but it cannot be traced to a period before the Agade period, 2732-2549 B.C.

The Babylonian rendering of *dukug* by *teš-ri-tu*,<sup>6</sup> 'the

<sup>1</sup> VAB. IV, 126, 54-64.

<sup>2</sup> *Epic of Creation*, p. 202, n. 2.

<sup>3</sup> Sixth in the old series, seventh toward the end of the last kingdom of Ur. See Thureau-Dangin, *Rit.* 87. <sup>4</sup>*d-ki-ti* has now been found in pre-Sargonic texts from Ur.

<sup>4</sup> Taken from *bit akitti*. The official list gives <sup>4</sup>*d-ki-ti* = <sup>4</sup>*dù-kug*, V Raw. 43 A 34. But *akitti* at Ur and Adab may have no connexion with a New Year; see p. 126, n. 4; and the Adab calendar has both <sup>4</sup>*d-ki-ti* and <sup>4</sup>*dù-kug*, Luckenbill, *Adab*, 89; 147 also 84; 91.

<sup>5</sup> Legrain, *Ur*, 21, 4-12. Part of these sacrifices were made in the *tummal*, same as Tummal(ki), a place sacred to Ninlil, said to be three days' journey (from Nippur), Legrain, *Ur*, No. 4. Poebel, *OLZ.* 1924, 263 wants to read *ib-ma-al* and identified it with *ib-gal*, but this is excluded by <sup>4</sup>*Egi-tùm-ma-al* = Ninlil, and <sup>4</sup>*Īb-gal* = <sup>4</sup>Inninni. If the Tummal be the same as *bit akitti*, outside Nippur, it is strange that it should be the seat of the cult of Ninlil and not Enlil.

<sup>6</sup> Haupt, *ASKT.* 64, 7; *teš-ri-tum*, *PSBA.* 1912, 293, 8, entered as explanation of *la-lu-bi-e*, and the only Accadian word used in the second

beginning' of the year, in no way translates the original meaning. The early Assyrian rendering *ša kināti* refers to a cult of the souls of the dead in this month,<sup>1</sup> and the rendering at Susa by *lalubū* is obscure.<sup>2</sup> About 2000 B.C. the constellation which governed this month was connected with judgement of the living and the dead, the time when the gods fixed the fates, and consequently the Babylonians out of pure imagination saw the sign of the scales, Libra, here.<sup>3</sup> *mul'Zibanna*, i.e. 'the star *Zib* of heaven', Accadian loan-word *kakkab Zibanītu*, 'the scales', Libra, was a name assigned to this constellation when it was still regarded as part of Scorpio. This word does not mean 'scales', but when the Babylonians for mythological reasons saw the symbol of judgement in these stars it was called *mul'rin*, 'the scales',<sup>4</sup> and hence *zibanītu* also came to mean 'scales'. In astronomy *mul'Zi-ba-an-na* continued to be the name of the 'horn of Scorpio',<sup>5</sup> and the Arabic *zubānāyāni*, 'shears of Scorpio', is derived from it; Libra in Greek is also *χηλαί*, 'shears of Scorpio'; *Chelai enim Scorpii Libram faciunt*.<sup>6</sup> Libra as the constellation of the hypsoma of Saturn was identified with Shamash, and hence Saturn is described as the 'star of justice and righteousness'.<sup>7</sup> This idea survives in the Mandean legend of Abathur, 'he of the scales',<sup>8</sup> the angel with the *mozānīyā* 'scales', who dwells in the lower world and passes judgement on the souls.<sup>9</sup> With this idea is con-

column. Aramaic *Tiṣṛī*, Cooke, NSI. 98, 1 (Nabataean), 123, 5 (Palmyrene), Jewish *Tiṣṛī*; it does not occur in the Hebrew and Aramaic of the Bible. Arabic-Syrian of the Harranians, *Teṣṛīn* (former and latter), Chwolsohn, II, 31-2. In the Greek calendar at Baalbek, *Thisri*, *Thisirin*, *Thori*, *Thoiri*, *Thorin*, and *Thuri*; *ibid.* 229, n. 255.

<sup>1</sup> See p. 36.

<sup>2</sup> See p. 45.

<sup>3</sup> See p. 7.

<sup>4</sup> Weidner, H.B. 122, VAT. 7847; see also p. 6, n. 9.

<sup>5</sup> CT. 33, 9 Rev. 10; 2, II, 11.

<sup>6</sup> Kugler, *Ergänz.* 64 and I, 37.

<sup>7</sup> RA. 14, 21, 18. Hence Teshrit was sacred to Shamash, K. 2049, 7; IV Raw. 33, IV, 11; CT. 41, 39, Rev. 5.

<sup>8</sup> Persian, after Andreas in Lidzbarski, *Johannesbuch*, p. xxix.

<sup>9</sup> Lidzbarski, *ibid.* 232-4; 14, 14-23.



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nected Arabic *zabāniyat*, 'watchmen of hell',<sup>1</sup> borrowed  
from *Zibanītu*.

In the late Hebrew calendar the 1st day of Teshrit was  
a day of judgement; so Psalm 81, 4-5: 'On the day of the  
new moon blow up the trumpet (and) at the full moon on  
the day of our feast; for this is a law unto Israel, a (day of)  
judgement (*mišpāt*) of the god of Jacob.' The Talmud,  
Targum, and the whole of Jewish tradition connect this  
passage with Teshrit.<sup>2</sup> The myth of a general judgement  
of souls goes back to the Babylonian belief based upon the  
passing of the sun beyond the equator and the beginning  
of his descent into the lower world, when Libra rises heliac-  
ally. According to the Talmud,<sup>3</sup> from Teshrit 1st to the  
Day of Atonement (10th) is a period of the condemnation  
of the doubtful and the Mishna describes Teshrit 1st as a  
day of judgement.<sup>4</sup> These are the ten terrible days<sup>5</sup> of the  
world's judgement in Jewish tradition. Then are written  
the three books of the good, the doubtful, and the damned,  
a myth undoubtedly inherited from Babylonia and latterly  
transferred to the first eleven days (epact) of Nisan by the  
Babylonians. The same belief is preserved in Arabic tradi-  
tion being attached to the ninth month, Ramadan, when  
Allah decides the fate of spirits, men, animals, and birds.  
According to Sumerian tradition a goddess kept the tablets  
of fate in Arallû.<sup>6</sup>

<sup>1</sup> *zibniyat*, Pl. *zabāniyat*, Coran, Sura, 96, 18; Vollers, ZDMG. 51, 324.

<sup>2</sup> See Baethgen, *Psalmen*, 250; *Jewish Encyclopedia*, IX 256. I take *mišpāt lē'lōhē Ya'aqōb* for 'judgement which is the right of the god of Jacob', κριση, *judicium* of Septuagint and Vulgate, a judgement, a divine order, which harmonizes with *hōk*, law in verse 5<sup>b</sup>. *mišpāt* I take to refer to the new moon or 1st of Teshrit only, in view of the Babylonian mythology. But the day of the full moon of Teshrit, or Feast of Tabernacles, was also a day of judgement. See Danby, *Mishnah*, 188 § 2.

<sup>3</sup> L. Goldschmidt, *Der Bab. Talmud*, 328-33.

<sup>4</sup> On New Year's Day all that come into the world pass before him; Danby, *Mishnah*, 188 § 2.

<sup>5</sup> *yōmīm nōrā'im*.

<sup>6</sup> PBS. x 132 n. 3.

The date of the Day of Atonement on the *tenth* of Teshrit in Hebrew religion is probably connected with the calendars, which have special directions for the first nine days<sup>1</sup> outside the regular calendar. A list of instructions for special days of each month has the rule that for the whole of Teshrit 'all work is not to be'.<sup>2</sup> I give here a résumé of the special rules for Teshrit, days 1-9. A = Old Assyrian. B = Ašurbanipal's edition. C = Notes from other sources.

## DAY 1

- (A) On the 1st of Teshrit one may not face a heavy wind on the plain or the *hallulā* demoness will wed him. Onions he may not eat or a scorpion will sting him. Flesh of the *tumanu* pig one may not eat, it is an abomination to Enlil. KAR. 177 Rev. III 8-15; 147, 5-8; 177 Rev. II 48-1, 8.
- (B) One may not enter the house of a wine-merchant, for (if he does) judgement will be rendered him. Let him set forth offerings to Ea and it shall be received. *Bab.* IV 107, 1. The text then has a duplicate of A. Also Ki. 1904-10-9, 67, Obv. 16-17.
- (C) On ordinary old calendar (text broken), offerings to Enlil, Ninlil, and Nusku. KAR. 178 Rev. IV, 14-31. Almanacs, lucky day. Falkenstein, *Uruk*, 53 Rev. I, 1; K. 3560, Obv. I, 1.

## DAY 2

- (A) If one eats onions an old man in the family will die. Fennel and watercress, cooked meat, and flesh of oxen, goats, and swine not to be eaten; all these rules if broken incur hatred, ulcers, and asthma. One may not descend into a well or ascend to the roof of a house. KAR. 177 Rev. III, 16-26; 147 Obv. 9-14. 177 Rev. I, 4-8.
- (B) *Bab.* IV 107, 4-5 = KAR. 177 Rev. I, 4-8.
- (C) On ordinary old calendar, fish not to be eaten, and the king

<sup>1</sup> Five copies of the instructions for these days exist. (1) KAR. 177 Rev. III, 8-11, 47, the Assyrian text, days 1-8, followed by (2) a copy of the Babylonian text, Rev. II, 48-1 end; (3) Assyrian text on KAR. 147, days 1-8; (4) the Babylonian text was attached to a list of special days of all the months on K. 3769, 6482, 8068, and 6695; *Bab.* IV, 107 and I 204-6. (5) Ki. 1904-10, 9, 67, Obv. 16-Rev. 21. The Assyrian calendar admits only days 1-8 as special New Year days.

<sup>2</sup> K. 3769, 16. Restore IV Raw. 33, IV, 11, *ka-la-ma ep-[še-tu-šu ja-a-nu]*.

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must make offerings to Enlil and his own god. KAR. 178  
Rev. iv 20-21. Almanacs, unlucky day. *Uruk*, 53 Rev. 1, 2;  
K. 3560 Obv. 1, 2.

#### DAY 3

- (A) If one eat fish he will be disgraced and his abode will collapse upon him. One may not stand where asses have roamed,<sup>1</sup> nor irrigate a field of sesame, nor come nigh a woman. KAR. 177 Rev. iii 27-33; 147, Obv. 15-18. The copy from Babylonia, 177 Rev. 1, 9-14 has the same rules and adds: 'If one eats dates he will fall ill with *riḫitu* disease', and 'If he traps birds his storehouse will not prosper'.
- (B) *Bab.* iv 107, 6-9, duplicate of A.
- (C) On ordinary old calendar, if one frees a trapped bird he will be released from his trouble, the king must make offerings to Enlil and his own god and wash his garment. Almanacs. One may not eat fish. *Uruk*, 53 Rev. 1, 3; K. 3560, Obv. 1, 3.

#### DAY 4

- (A) One may not cross a river, eat fowl, dates, and onions. A trapped bird must be released. One may not ride out to a village. KAR. 177 Rev. iii, 34-41; 147, Obv. 19-24. The copy from Babylonia, 177 Rev. 1, 15-21, has the rules forbidding one to cross a river, to ride out to a village, to eat flesh of oxen, goats, and swine, and to stand where asses have roamed.
- (B) *Bab.* iv 107, 10-11, duplicate of KAR. 177 Rev. 1, 15-21.
- (C) On ordinary old calendar, eating fish is forbidden and the king must make offerings to Enlil and his own god. KAR. 178 Rev. iv, 25-6. Almanacs. The trapped bird one must set free. *Uruk*, 53 Rev. 1, 4; K. 3560 Obv. 1, 4.

#### DAY 5

- (A) Eating fennel and watercress, flesh of swine, roasted flesh, flesh of oxen and goats is forbidden. One may not stand behind a mortar. KAR. 177 Rev. iii, 42-9; 147 Obv. 25-31; 177 Rev. ii, 1-6 has 'If one eat dates he will have palsy; one may not descend into a garden nor irrigate a field of sesame'. The copy from Babylonia, 177 Rev. 1, 22-7 has 'He shall not

<sup>1</sup> *a-ṣag anṣu gur-gur*, for which *Bab.* iv 107, 7, has *a-ṣar imeru* [*issaharu*]. See also day 6, KAR. 177 Rev. ii 14, *a-ṣar*, with Var. *a-ṣag*, 147 Rev. 5. The same rule occurs in days 4, 6, 7 but I do not understand the reason for it.

descend into a garden, for the god Igisigsig,<sup>1</sup> gardener of Enlil, would smite him. He shall not eat lovage and watercress, for the *šiku* disease would seize him. Where a mortar has been laid one may not stand, for he will fall sick with *sagallu* disease.'

- (B) *Bab.* iv 107, 12-14, duplicate of KAR. 177 Rev. I, 22-7.  
 (C) The ordinary old calendar has 'lucky day', and the king must set forth offerings to Enlil and to his own god. KAR. 178 Rev. iv 27-8. Almanacs. One may not eat lovage. *Uruk*, 53 Rev. I, 5; K. 3560 Obv. I, 5.

## DAY 6

- (A) One may not come nigh a woman, ascend to a roof, descend into a well or garden, nor enter a *laundry* (*bit musāti*). He may not cross a meadow, stand where a mortar has been laid, nor stand where asses have roamed. KAR. 177 Rev. II, 7-17; 147 Rev. I-7. The copy from Babylonia has, 'If one goes to law he will commit a transgression; he may not enter a *laundry*, for the spy demon will smite him; he may not eat flesh of the *ham* (*mašdū*), for a curse will seize him.' KAR. 177 Rev. I, 28-31.  
 (B) *Bab.* iv 107, 15-16, duplicate of 177 Rev. I, 28-31.  
 (C) The ordinary calendar has 'lucky day'; the king must set forth his offering to his god and goddess. On this day the king must show an act of mercy and he will then prevail over his adversary. KAR. 178 Rev. iv, 29-31. Almanacs. Lucky day. *Uruk*, 53 Rev. I, 6; K. 3560 Obv. I, 6.

## DAY 7

- (A) One may not eat flesh of the *tumanu* pig. Where a mortar has been laid or where asses have roamed one may not stand; he may not cross a place flooded by a levee, leap over a rivulet, walk in the road, enter villages, descend into a well, enter a *laundry*, ascend to a roof or descend into a garden, cross a river, or walk on a littoral marsh; he may not irrigate a field of sesame; in his house let him wail and mourn. 'He may not meet the grain-goddess on the plain.'<sup>2</sup> He may not eat figs, but wail and mourn in his house, then will Ninlil intercede for him with Enlil. He may not take an oath. KAR. 177 Rev. II, 18-40; 147 Rev. 8-23. The copy from Babylonia has 'One may not eat anything at all, it is an abomination to the god Urasha and

<sup>1</sup> Variants 177 Rev. II 4 and 147 Obv. 30 have *a.šū-riid*, a title of Nusku, KAR. 58, 45.

<sup>2</sup> Possibly 'not face the wind'.

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the goddess Ninegal. If he takes an oath god will seize him.'  
177 Rev. 1, 32-4.

(B) *Bab.* iv 107, 17-18, duplicate of KAR. 177 Rev. 1, 32-4.

(C) The ordinary calendar has equally long directions, text damaged. The king may not ride in a boat, nor face a strong wind; may not cross a river or leap over a rivulet; must recite a penitential psalm; he may not eat dove, chicken, fish, lovage, and the owner of a garden may not eat the root of lovage or he will become blind. One may not sleep in his bed-chamber. The king must set forth offering to Ninlil. Almanacs. Lucky at lawsuits. *Uruk*, 53 Rev. 1, 7; K. 3560 Obv. 1, 7.

#### DAY 8

(A) Day of gladness, day of Enlil. The minister in attendance on the prince shall purge himself, wash and cleanse himself. Let one fill his house and make glad. One shall not go to a strange woman, but to his beloved.. KAR. 177 Rev. 41-6; 147 Rev. 24-6. Copy from Babylonia. (The king) shall purge and cleanse himself; he shall make a gift to his god, and pour out a libation; set forth an offering to his god, and so Ninegal will intercede for him with Urasha. 177 Rev. 1, 35-40.

(B) *Bab.* iv 107, 19-20, duplicate of 177 Rev. 1, 35-40.

(C) On old calendar, text damaged. King sets forth an offering to his god. Almanacs. Half of this day is lucky.

#### DAY 9

(A) Copy from Babylonia. (The king) sacrifices to the constellation the 'she-goat' (head of Capricorn), sets forth offerings to her (i.e. Gula as goddess of the constellation), and extols her in heaven and earth. All the year sickness shall not come nigh him.

(B) Text lost on K. 8068.

(C) On ordinary calendar this is a lucky day for lawsuits. The king sets forth his offering to Nusku (god of new moon). KAR. 178 Rev. iv, 73-4. Almanacs. Lucky in lawsuits.

Days 1-7 of Teshrit are, therefore, a period of penance in both Babylonian and Assyrian menologies, ending with the most sombre and mournful day of the year, the *seventh*. Days 1, 2, 3, 4, 5, 7 all mention Enlil, the god who in the old Sumerian myth convened the divine assembly to decree fates at the beginning of the year. The seven-day period

is followed by rejoicing for the same god, and in Babylonia there is a second day of rejoicing on the 9th with offerings to the goddess of healing.

As a time of judgement when a god is implored to intercede with another on behalf of men, this month was also the time of making offerings to the dead. A commentary explains this. 'Teshrit is (the month) of the "Yoke of Enlil".<sup>1</sup> The emblems are cleaned. People and prince purge themselves. Pure sacrifices of the lands for the year shall be made to the Anunnaki (gods of the lower world). From the gate of the Apsû shall they come up.<sup>2</sup> Funeral offerings are made to Lugaldugug, "king of the Dugug", to Ea (god of the Apsû) and to Ninki (wife of Ea). Month of the grandfather of Enlil.'<sup>3</sup> Teshrit or October, then, was the traditional time for sacrifices to the dead, when the Sun-god begins his descent to the land of the dead. The same ceremony survived in the Syrian calendar as late as the Middle Ages. In the former Teshrîn of the Şabeans at Harran, in the middle of the month, they burnt food-offerings<sup>4</sup> to the dead during the night, and burnt a bone from the thigh of a camel to the dog of the wicked working<sup>5</sup> female (goddess) that this dog of the terrible underworld<sup>6</sup> goddess frighten not the dead. And they poured out wine on the fire for the dead that they might drink while they ate the burnt food-offerings.<sup>7</sup> The reference to the demoness of hell, who with her dogs frightens the souls of the dead, may be of Greek origin. The only reference to a goddess with dogs in Babylonian mythology is found in an incantation to Ninkarrak (Gula), whom

<sup>1</sup> Northern Boötes and Corona.

<sup>2</sup> So Sumerian: but Accadian, 'the gate of the Apsu is opened'.

<sup>3</sup> Sumerian and Accadian versions, KAV. p. 120 II 22-38.

<sup>4</sup> Corresponding to the *kispu* of the Assyrian commentary.

<sup>5</sup> *mu'dhiyat*.

<sup>6</sup> Chwolsohn, *Ssabier*, II 31 n. 237 takes this female worker of iniquity for a deity corresponding to Hekate with her dogs.

<sup>7</sup> The Syrians at Heliopolis called this month the *ḥag*, Greek *Ag*, referring to the Feast of Ingathering, or Feast of Tabernacles. See p. 24, n. 1.

the sufferer beseeches to hold back her whelps.<sup>1</sup> There is no reference to Gula, goddess of healing, whose symbol was a dog, in the instructions for Teshrit except on day 9, and here worship of her constellation wards off sickness. If the Syrian myth of a lower-world goddess and her dogs is based upon Babylonian mythology it must refer to *Ninegal*, the underworld goddess mentioned in the instructions for days 7, 8.

The Greek Attic month Boēdromiōn corresponds to Teshrit, and on the 5th of Boēdromiōn fell the *Genesisia*, feast of ancestors.<sup>2</sup> There is a connexion between the Babylonian, Greek, and Syrian rites for the dead in this month, and the opening of the gate of the nether sea for the dead to arise (p. 105, n. 2) corresponds to the Roman *mundus patet*, 'the earth is open', of the Roman calendar on August 24.<sup>3</sup> Also on October 5 and November 8 the souls arose from a pit on the Palatine Hill, which was closed by a *lapis manalis*, 'stone of the manes', removed on those days. All these rites have survived in the Christian calendar, November 2, All Souls' Day.

There is a Babylonian commentary devoted to Teshrit<sup>4</sup> which begins with an omen. 'If in Teshrit one demolishes a house in a city and its brick wall is laid [his god will lead him in prosperity].<sup>5</sup> In Teshrit rises the star of Ninmah, the child-bearing'.<sup>6</sup> The commentary apparently refers to a drawing of *Libra* beneath the border of which comments on words were written and the text. Teshrit is then explained as the 'month of the families', i.e. of family feast for the dead, and *Libra* is called the 'balancer', governing the time of the equinox. One is forbidden to make a *kunsag*,

<sup>1</sup> *Sem. Myth.* 182.

<sup>2</sup> γενέτης. Deubner, *Attische Feste*, 229. On the 17th a young pig was sacrificed to Demeter and Core, underworld goddesses, *CIG.*<sup>2</sup> 1, part 2, 1367.

<sup>3</sup> Fowler, *Roman Festivals*, 211.

<sup>4</sup> Text published by C. J. Gadd, *CT.* 41, 39.

<sup>5</sup> Restored by Clay, *Morgan*, IV, 24, 1 and 5.

<sup>6</sup> See also p. 6, n. 8.

a shrine, a chapel, or a royal chapel, or any earth construction in Teshrit.<sup>1</sup> One may repair 'his god' (i.e. his statue) or 'his god who has fallen into ruin', in Teshrit.<sup>2</sup> If fire falls on a house in Teshrit the gods will despise the king of the land.<sup>3</sup> On the 29th one may not go out of the gate. Teshrit is the month of the heroic Shamash, when Libra rises, and here the 'dark star' Saturn is mentioned as the star of Shamash. Then the mortuary sacrifices are made to the Anunnaki (gods of the lower world). The month is sacred to 'the king of the *Dukug*', grandfather of Enlil, who is the water-god Ea. It appears, then, that in genuine Sumerian tradition it was Ea who sat in the Holy Chamber in the month *Dukug* and not Enlil.

It calls for remark that in the late period the New Year festivals whether in the spring or autumn both cover *eleven* days at Babylon in Nisan, at Erech in Teshrit. This is undoubtedly due to the astronomical discovery in the late period that the lunar year of 354 days is eleven days short of the solar year 365 days. The Assyrian menologies could not have known this, for there the period is seven days of fasting and two days of festivity. The Jewish period, days 1-10 inclusive ending with the Day of Atonement, may have been based upon the 11-day *epact* of Babylonia. The eleven days of the *epact* were known to the Assyrians, as the following text of the seventh century proves.<sup>4</sup>

<sup>1</sup> Same rule KAR. 177 Obv. II 13-15, allowed only in Shebat and Adar; allowed Nisan, Shebat, Adar, DA. 100, 11-14.

<sup>2</sup> Same rule, KAR. 212 Obv. I, 2 + 13; 177 Obv. II 18-20.

<sup>3</sup> Same omen KAR. 212 Rev. I, 52 + 64.

<sup>4</sup> III Raw. 52, No. 3, Rev. 6-61, from K. 2848 and Var. 2847; Virolleaud, *Bab.* IV 109-13 transcribed the entire tablet, using also duplicates K. 7685; Rm. 2, 589, *ibid.* 120-2. The text is complete in 82 lines with colophon. It begins with titles of fourteen omen tablets, 'signs of earth', a section confined to bird and animal omens, omens from cities and is in fact entirely confined to terrestrial events. Then follow the titles of eleven omen tablets, 'signs of heaven'. Then follow two sections, which give directions for interpreting the omens. A third section follows: 'Total 25 tablets of signs of heaven and earth whose



COMMENTARY ON THE LUNAR AND SOLAR YEARS<sup>1</sup>

57. There are 12 months in the year = 360 days. The length (measure) of the New Year festival in thy hand retain.
58. The eclipse (dark of the moon), the dawn, the heliacal rising of the stars, their fixed periods,
59. The harmonizing (epact) at the beginning of the year in Aries, the rising of the moon and sun in Adar and Elul,<sup>2</sup>
60. The heliacal rising and appearance of the moon, which monthly appears, thou shalt look for.<sup>3</sup>
61. The opposition of sun and moon thou shalt observe<sup>4</sup> and let it answer thee.
62. And of the year its months, of the month its days thou shalt seek to find and whatsoever thou doest . . .
63. When at the appearance of the moon the day passed into darkness, and darkness fell,
64. When at the eclipse (darkness of the moon) the day passed into darkness and darkness fell,
65. For the incompleteness<sup>5</sup> of the full time of the eclipse (dark of the moon) and for the appearance of the new moon<sup>6</sup> [thou shalt look.]
66. And the year . . .<sup>7</sup>
67. Twelve months in thy hand thou shalt retain. For the incompleteness<sup>5</sup> of the days of the place of the [sun<sup>8</sup> seek.]
68. The opposition of sun and moon shalt thou retain in thy hand.
69. The place of the celestial equator seek and the days to be filled in thou shalt know,<sup>9</sup> and then

good and evil will arrive. The omen(s), as many as are in heaven, or are seen on earth, into their contents thou shalt examine. This is their solution.<sup>7</sup> After these sections the scribe adds the long commentary on the lunar and solar years.

<sup>1</sup> For transcription see Virolleaud, *Bab.* iv 112, 57-82.

<sup>2</sup> Here obviously Adar and Elul, 12th and 6th months indicate the equinoxes.

<sup>3</sup> *tešte'i* = kin-kin.

<sup>4</sup> *tanaššar* = ŠEŠ. *šitkultu*, balancing, superior conjunction, time of full moon.

<sup>5</sup> *la šukluli*; see Meissner, SAI. 2475.

<sup>6</sup> Literally *enbi bél* [*arḫim*], 'the fruit, lord of the month'.

<sup>7</sup> Break in the Babylonian original from which the Assyrian scribe copied.

<sup>8</sup> i.e. look for the difference between the lunar and solar years.

<sup>9</sup> *aš-ri šip-ki tešte'i-ma ūme atrūti lu-u ti-di-i*. In l. 68 opposition *šitkultu* is here surely astronomical inferior conjunction, time of the calculated

70. fix thou the year, and complete its supplement;<sup>1</sup>. . . nor shalt thou err.
71. Nisan, Ayar, Sivan, Tammuz, Ab, Elul, Teshrit, Arahsamna, Kislev, Tebit, Shebat, Adar, and the *zagmuk* or New Year period (which completes the solar year) to the end.
72. For the entry of an army into camp it is lucky in Nisan, Sivan, Tammuz, Elul, Teshrit (?), Arahsamna, Kislev, Tebit, Shebat; unlucky in Ayar, Ab, and Adar.
73. For an army in battle at a city or for conquering the hostile land, lucky in Ayar, Elul, Teshrit, Arahsamna, Adar; other months unlucky.
- 74-6. To purge a plundered city or a plundered land,<sup>2</sup> it is lucky in Nisan, Teshrit, Tebit; unlucky in Ayar. Thou shalt retain (these matters) in thy hand.
77. The evening watch, middle watch, morning watch, (these) are the watch(es) of the entire night.
78. For the army to take up a march, it is unlucky in the evening watch, lucky in the middle watch, and unlucky in the morning watch.
79. For an army to conquer a city, it is lucky in the evening watch, unlucky in the middle watch, and lucky in the morning watch.
80. To conquer a city and (its) army; to take up a march<sup>3</sup> is lucky in the 'harmonizing' days.

This text states distinctly (l. 71) that the New Year festival of eleven days is a supplement to the lunar year. This is the oldest evidence for the discovery of the exact length of the difference between the lunar and solar year in the history of astronomy. The text copied by a scribe of the seventh century undoubtedly reproduces an older Babylonian document. This precedes the mention of the epact in Greece by four centuries.

new moon of the first month. At the end of twelve months, granted that the preceding year began at the equinox or when the sun passes the equator, this opposition occurs eleven days before the sun reaches the *šipku*, equator.

<sup>1</sup> *di-ri-ša* = *atra-ša*. Or is *dirū*, *di-ri*, a loan-word? If so, why not *di-ra-a*?

<sup>2</sup> *đlam ekmam u mātam ekmatam ubbubu*.

<sup>3</sup> *šu-šur ḥarrani*.

## LECTURE III

### A. THE TAMMUZ-ISHTAR CYCLE OF MONTHS AYAR, SIVAN, TAMMUZ, AB, ELUL

**M**Y previous lecture explained how both Sumerians and Babylonians divided the year into two equal parts of six months each; how at the beginning of each half in Nisan and Teshrit they had New Year festivals and the seasons of penance, for eleven days at the beginning of each; the Hebrews on taking this system over kept their old beginning of the year in Teshrit and adopted the same season of penance. I shall now describe the five months of the first half of the Babylonian year, 2, 3, 4, 5, 6, Ayar, Sivan, Tammuz, Ab, Elul. See p. 19.

AYAR (April–May), or the second month after the spring equinox, the Sumerians of Nippur named *gusisa*, running from about April 15th to May 15th normally. *gusisa* means probably ‘festival of the procession of the oxen’. When the constellation Orion (star of Tammuz) rose in this month the god of vegetation and flocks is said to have married the Earth-goddess. The month *gū-si-sá*<sup>1</sup> was also an intercalary month in Sumerian.<sup>2</sup> At ancient Lagash the name of this month was *gū-du-izi-mú-a*<sup>3</sup> *Ninā-ka*, but the name of the goddess of canals and fish, *Ninā*, is often omitted.<sup>3</sup> In the age of Sargon of Agade *gū-du-izi-mú-mú* is usual.<sup>4</sup> In the late Sumerian period *gár* for *gud*, bull, is common,<sup>5</sup> alongside *gū-ta-izi-mú-mú*<sup>6</sup> and *gū-du-mú-mú*.<sup>7</sup> Both at Nip-

<sup>1</sup> Var. *gū-si-su*, Langdon, *Drehem*, p. 8. The reading *gud*, *gū*, ox, is proved by the name of Taurus, <sup>mu</sup>*gud-an-na*, written <sup>mu</sup>*gū-an-na*, KAV. p. 119, 26; and by <sup>mu</sup>*gu-si-si*, PSBA. 1899, 159, 7.

<sup>2</sup> *Bab.* VII 240, 17.

<sup>3</sup> RTC. 32; DP. 143; VS. XIV, No. 4; Landsberger, *Kal.* 46.

<sup>4</sup> *Inventaire de Tello*, I, 1148; 1357 *et p.* See Thureau-Dangin, ZA. 15, 68.

<sup>5</sup> For *gár* = *alpu*, see CT. 25, 6, 22. For the Ur period see <sup>mu</sup>*GUD-ra-izi-mú-mú*, RA. 8, 87 n. 1; Reisner, TU. 222.

<sup>6</sup> Pinches, *Amherst*, 70.

<sup>7</sup> TU. 50; 209, *et p.*

pur and Lagash the second month was, therefore, named after some ceremony with oxen, and at Nippur certainly a procession (*alpê ulteššeru*) of oxen as the calendar and commentaries prove. The Lagash name originally was the month 'the oxen-*izi-mu* of the goddess Ninā'.<sup>1</sup> The *izimumu* ceremony refers to torch-processions in the month Tammuz.<sup>2</sup> Hence at Lagash the name seems to mean 'oxen of the torch (procession) in honour of the goddess Ninā'.<sup>3</sup>

At Ur the month was known as *ŠEŠ-da-kú* or *DUN-da-kú*,<sup>4</sup> a festival of eating some animal, and in this month fell the *ezen gū-si-su* or 'festival of the procession of oxen',<sup>5</sup> on days 12, 20, 21, with sacrifices of cows and oxen to Enlil and Ninlil, and on the 21st a sacrifice on behalf of the mother of the Enlils. In the same month at Nippur fell the *ezen-ga(n)-si*<sup>6</sup> to the 'queen of the brides', certainly referring to the divine marriage in Ayar. And there was a gate at Nippur known as 'gate of the king who conducts the oxen'.<sup>7</sup>

The Nippurian name was finally adopted in all Sumerian provinces and throughout Babylonia, and was translated into Accadian by *a-ia-rum*,<sup>8</sup> *a-a-ru*,<sup>9</sup> in early Assyrian *a-ri*,<sup>10</sup> *ia-ri*,<sup>11</sup> Jewish 'iār, the form also used in Syrian Arabic,<sup>12</sup> Aramaic 'iār; at Heliopolis the Greek transcription in the

<sup>1</sup> *izi-mu-mu* is proved by V Raw. 43 A 5, where [<sup>iii</sup>*gū-du-i*]-*si-mu-mu* at Lagash = *gū-si-sá*, Ayar. Text collated by Mr. Gadd. Landsberger, *Kal.* 46 suggested this. See *izi-mu-mu-da*, Tammuz 9 and 16 in V Raw. 48, and *ni-pi-iḫ iṣati* for Tammuz 9, in KAR. 178 VI 28; same Idgr. = *iṣatum napihtum* 'a flaming fire' said of Venus, ASKT. 129, 11-14.

<sup>2</sup> See KAR. 357, 10 = Ebeling, *Tod und Leben*, 50, 15, *izi mu-ah* = *ab-ra tanapaḥ*, thou shalt kindle firewood (at the head of a bed).

<sup>3</sup> Only a suggestion.

<sup>4</sup> Langdon, *Drehem* 8; Landsberger, *Kal.* 69.

<sup>5</sup> Genouillac, *Drehem*, 5527, Obv. 1-13.

<sup>6</sup> *Bab.* VII, 237, No. 2.

<sup>7</sup> Clay, BE. IX 69. This certainly refers to the god of the marriage festival; see <sup>4</sup>*Lugal-si-sá*, RTC. 247 19; Gudea, Cyl. B, 8, 21. Cf. *uzu lugal-si-sá* = *i-ša-ru, membrum virile*, Kish, 1924, 799 Obv. II 16.

<sup>8</sup> VS. IX 33, 4.

<sup>9</sup> ASKT. 64, 2.

<sup>10</sup> RA. 23, 128, No. 54, 9.

<sup>11</sup> Chiera, *Nuzi*, Harvard I, 24, 12.

<sup>12</sup> Chwolsohn II 25 § 2, 1.

Christian period was Iarar, Arar.<sup>1</sup> Since the Sumerian *si-sa* means *šutéšuru*, to go in procession, the Accadian *Ayāru* is almost certainly derived from the verb *āru*, 'to go on a way'.<sup>2</sup> The Accadians, therefore, by this word were rendering the salient aspect of the Sumerian festival for this month.

A neo-Babylonian book of special instructions contains the following comments on Ayar.<sup>3</sup> Ayar is the month of Ningirsu the high priest of Enlil, the month when one drives oxen in procession.<sup>4</sup> On the *second* day at the time of repose (sunset) Nabû is clothed in a garment of divine power for the marriage festival.<sup>5</sup> He then goes in procession<sup>6</sup> to the temple *Ehuršaba* and enters before the divine princess (his wife Tashmet)<sup>7</sup> where all is prepared for the marriage, and there on a bed they sleep. On the *sixth* day Nabû goes forth into a garden. On the *seventh* he proceeds in procession<sup>8</sup> to a chapel in Eanna, temple of the virgin goddess Ishtar, a survival of an older marriage of Tammuz and Ishtar. Again he descends into a garden of Anu and sits down. 'Since he has taken over the kingship of Anu and completed (the marriage ceremony)'. On the *seventeenth* Nanā hastens from her temple *Ehuršaba* and proceeds in procession<sup>8</sup> to a garden. In this text the divine marriage of Ayar in Babylonia was that of Nabû and Tashmet and was held on days 2-6, and that of Tammuz and Ishtar on days 7-17. Reference is then made to rituals of Enlil in

<sup>1</sup> *Hemerologium Florentinum* and Leiden manuscript in Benfey, *Monatsnamen*, 21-2; 168. See p. 66.

<sup>2</sup> 𒀭𒊩, as Delitzsch, H. W. 50 wrote. See also Zimmern, *Beiträge*, 88 n. 7; Ungnad, ZA. 31, 39. Marduk went in procession from Assur to Babylon ('i-i-ra), Lehmann, *Šamaš-šum-ukin* II 7, 15. *gud-e šu-dūl-a si-sá-a-da* 'to conduct oxen by the yoke', Gudea, Cyl. B 15, 10. In K. 738, Pinches, *Oriental Record* II 39, Rev., <sup>iii</sup>*gud-si-sá = ša-e-ru ar-ḥu šu-te-šur ka-la-ma : ina eli šu-mi-šu i-da-gi-il : iti = ar-ḥu : gud = nap-ḥa-ru : gud = ka-la-ma : si-sá = e-še-ru ša búl šéri* (read *más* <sup>d</sup>*gir-an-na*). Sign *gir* = NITAH. Here *gud* is falsely taken for 'totality' and *si-sá* for *išāru, ešēru*, to thrive, said of cattle, as in Streck, *Assurb.* II 6, 48-50.

<sup>3</sup> Reisner, SBH. 145 II 12-32. Jensen, KB. VI<sup>2</sup>, 26; Behrens, LSS. II<sup>1</sup>, p. 38, n. 1. <sup>4</sup> *alpé ustéšir.* <sup>5</sup> *ḥadaššútu.* <sup>6</sup> *uštéšir išadaḥu.*

<sup>7</sup> That this is Tashmet is proved by Harp., *Lett.* 366, 7. <sup>8</sup> *uštéšir.*

Nippur. Ayar was, therefore, originally the month of a marriage festival in the old Sumerian cities, at Nippur and Lagash almost certainly of Ningirsu and Bau.

This ceremony is also described in two Assyrian letters. One is addressed to the 'son of the king'. 'On the *third* of Ayar in Calah thou shalt prepare the bed of Nabû. Nabû will enter into the house of the (bridal) bed. On the *fourth* day is the return of Nabû.'<sup>1</sup> The writer then says that Nabû will go out of the *adru*<sup>2</sup> of the palace (*ekallu*) into the garden where sacrifices are to be made. The chariot driver of the gods<sup>3</sup> comes to bring Nabû away from the garden and causes him to enter again into (his temple). The charioteer then departs. According to this letter the divine marriage occurred on the night between days 3 and 4, after which there was a procession to and from a garden. Another letter<sup>4</sup> addressed to the king states that on the *fourth* of Ayar during daylight toward evening<sup>5</sup> Nabû and Tashmet enter the sleeping-chamber. From the *fifth* to the *tenth* Nabû and Tashmet remain in their bridal chamber.<sup>6</sup> The chief minister (on guard of the chamber) must kneel and Nabû departs on the *eleventh* and goes to the park (*ambassu*), where he slays wild bulls and lions. He then returns to his throne-room (*šubtu*).

In the Babylonian menology an older Tammuz-Ishtar marriage is referred to on days 7-17 and on the *seventh* day the old Assyrian calendar forbids any one to marry.<sup>7</sup> The

<sup>1</sup> Harp., *Lett.* 66, 7-10.

<sup>2</sup> Usually taken for 'threshing floor', 'barn'. Here it refers to a palace chamber.

<sup>3</sup> A religious office, one who drives the chariot of the statue of a god in a procession.

<sup>4</sup> Harp., *Lett.*, No. 366; Behrens, *Briefe*, p. 37.

<sup>5</sup> i.e. on the evening of the fifth day.

<sup>6</sup> Before these lines is an obscure statement which says that on the 5th they shall cause them to eat *ša-ku-su* of the king and the chief minister shall sit (probably on guard) and that they shall bring a lion's head (and) a *tallakku* to the palace. Apparently the nuptials take place in the palace.

<sup>7</sup> KAR. 178 iv 59.

almanac forbids marriage on the *fifth*,<sup>1</sup> but the old menology seems to allow it. On the *fifteenth* a prisoner was released;<sup>2</sup> and another Assyrian letter<sup>3</sup> describes the *fifteenth* as *te-bi šuklulu* 'the going up of the procession is finished', and the *eighteenth* as the day *šátam pušur* for which the almanac has *zakattam pušur*,<sup>4</sup> both obscure references to the completion of the ceremony.

Ayar or 'month of the marriage procession' corresponds to the Roman April under the protection of Venus (*tutela Veneris*). If this ceremony of a divine marriage found its way into Italy it would explain the *Veneralia* of April 1 at Rome, when patrician women prayed to the chaste Venus (*Verticordia*) and the poor to *Fortuna Virilis* who gives good luck with men; then they bathed in men's baths and gave themselves over to general licentiousness, a custom which seems to have come to Italy from Cyprus.<sup>5</sup> The myth is surely the real explanation of why April in Rome and Europe became the month most favourable for marriages. This is also the time of the great feast of Artemis in the Attic calendar, the month Mounichion corresponding to Artemisios in the Macedonian year.

The Babylonians assigned Ayar to Ningirsu, god of irrigation and a local form of Tammuz at Lagash; his consort Bau-Gula is also frequently identified with Ishtar. Consequently the ceremony of 'giving bread' to Gula on the twelfth,<sup>6</sup> or the day after the marriage ceremony was completed according to one source,<sup>7</sup> must be connected with this ritual. An Assyrian scribe informed the king that he might do anything he desires on Ayar 10, 15, 16, 18, 20, 22, 24, 26, all of which are favourable for worship of god. The

<sup>1</sup> V Raw. 48 II, [*dam na-an-tuk*].

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<sup>3</sup> Harp., *Lett.* 1140 Rev. 6-8.

<sup>4</sup> V Raw. 48 II day 18. One may slay a serpent on the 20th; *ibid.*, and Harp. 1140 Rev. 9; it is a good omen to do so.

<sup>5</sup> Fowler, *Roman Festivals*, 67-9, and see especially the note of Verrius in the calendar of Philocalus, *ibid.* 67.

<sup>6</sup> Streck, *Assurb.* II 2, 12.

<sup>7</sup> p. 113.

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Since the myth of Ayar is of early Sumerian origin, as proved by the name at Nippur, any connexion with the stars must be sought in the constellations governing Ayar in the Taurus period. The principal constellation would be Orion.<sup>7</sup> Orion was in fact identified with Tammuz and Ninsubur (a type of Tammuz), but the myth here refers to Tammuz as the slain god in the month Tammuz. Ovid began his poem on April:

*Alma, fave, dixi, geminorum mater amorum,*

"O fruitful mother of the twin loves", said I, "grant me thy favour", and he derived *Aprilis* from Aphrodite.

SIVAN (May-June) in the Nippurian calendar was named *šig-ù-šub-ba-gar*,<sup>8</sup> 'month when the brick is made in the mould', and is the only one of the cycle of months 2-6 which was not based upon the Tammuz-Ishtar cult. The calendar of the Sumerian city Umma has this name as the second month of a year beginning with Adar.<sup>9</sup> Sargon of Assyria described

<sup>1</sup> KAV. I, 12-25; Weidner, H.B. 85.

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<sup>3</sup> *gud-si-sá-e-ne = alpe ultéšeru.*

<sup>4</sup> For which SBH. 145, 13 has *nu-šá-aš-šá-a ba-ma-a-tu*, 'the hill-lakes are opened (split)'.

<sup>5</sup> K. 2049, 2; Streck, II 2, 11; 258 II 3.

<sup>6</sup> p. 3.

<sup>7</sup> p. 4.

<sup>8</sup> BE. III 13; *šig-ù-šub-ba-gd-ra*, YOS. IV 92; *šig-giš-ì-šub-ba-gd*, *ibid.* 196; *giš-ì-šub-ba-gd-ra*, 231; *šig-giš-ì-šub-ba-gd-ra*, Nikolski, II 200 Rev. 5. By the Babylonians shortened to *šig*, *šig-ga*, *šig-a*. Also *sig*, PSBA. 1909, Pl. IV 11.

<sup>9</sup> PSBA. 1913, 48. In Contenau, *Umma* 8, *šig-giš-ì-šub-gd (gd-ra*, No. 16).



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Sivan as the month when he caused bricks to be made.<sup>1</sup> At Ur the Sumerians named the third month (old style) *ū-be-mušen-kú*, 'month of the eating of the *ube* bird, or *ū-be-mušen-mu*, 'month of sacrificing the *ube* bird'.<sup>3</sup> At Ur this month had a ceremony of eating the *ŠEŠ-da* (some animal) on the first day, and consequently the month of eating the *ube* bird began with a ceremony which gave its name to the *second* month.<sup>4</sup> At Lagash the third month was known as 'the festival of the god Negin'.<sup>5</sup> The scribes define Negin as a title of the War-god Ninurta,<sup>6</sup> probably a title used at Kêš-Opis, and also say that Negin was 'Lord of the city, (his) name at Nippur'.<sup>7</sup> In the myth of Sivan Negin was the *Fire-god* by whose assistance bricks were made, and the scribes also explained his name as meaning the Fire-god who consumes the offerings.<sup>8</sup> But at Nippur the Fire-god was *Nusku*, a title of the Moon-god,<sup>9</sup> and consequently the Assyrians (certainly copying from Babylonian) said that Sivan was sacred to the Moon-god, Sin, first-born son of Enlil.<sup>10</sup> The official list erroneously identified *ū-be-mušen-kú* with the month Tammuz, and its authors, not knowing the old name of Ayar at Ur, inserted an Assyrian name for Sivan, *Ši-i-taš*. We do not know where the Assyrians obtained this name, but it is certainly Sivan; for Sargon of Assyria says that the month *Šitaš* is the month of the son of Enlil,<sup>11</sup> the decider of decisions, who causes signs of light

<sup>1</sup> Winckler, *Sargon*, p. 90, 69.      <sup>2</sup> Var. *ub-be*, *Inventaire* II 649.

<sup>3</sup> See Langdon, *Drehem*, p. 9; Landsberger, *Kal.* 69.

<sup>4</sup> Legrain, *Ur*, 321. See above, p. 111.

<sup>5</sup> *ezen* <sup>d</sup>*Nin-gún-na* in V Raw. 43 A 11. *ezen* <sup>d</sup>*Ne-gún-na-ka*, or *Ne-gún* in Lagash texts, Langdon, *Drehem*, p. 9; Landsberger, *Kal.* 42. <sup>d</sup>*Nin-gún* in II Raw. 59 A 40 = <sup>d</sup>*Ne-gún* in CT. 24, 26, 112-13, son of *Bélit-ilī*. At Umma the *ninth* month was named 'month of <sup>d</sup>*Ne-gún*', which I fail to understand. This would be Kislev, December.

<sup>6</sup> CT. 25, 12, 23.

<sup>7</sup> CT. 24, 14, 13.

<sup>8</sup> PBS. x 342, 7-10, Negin, 'he that burns by fire'.

<sup>9</sup> *Babylonian Liturgies*, 142, and see *arah* <sup>d</sup>*Sin* in Assyria, p. 33.

<sup>10</sup> K. 2049, 3; Streck, *Assurb.* II 70, 97; 40, 110; 204, 17.

<sup>11</sup> *bi-in* <sup>d</sup>*Dara-gal*.

to be seen,<sup>1</sup> (month of) Nannar of heaven and earth, hero of the gods, god Sin, and this month was called 'month of the god of bricks', by the decree of Anu, Enlil, and Ea, and it was the month for baking bricks, for building cities and houses.<sup>2</sup> In this month there was a festival to Nabû, the scribe who wrote on clay tablets, baked by the god of fire.<sup>3</sup>

The third month at Nippur was, therefore, sacred to the Moon-god as the deity who had bestowed upon mankind the priceless gift of fire. That it should be especially connected with brick-making and writing on clay tablets is entirely explicable by the fact that the baked brick was the only means of building and means of writing in Sumer and Accad. The rituals of this month commemorated the supreme gift of the gods to man. In the civilization of the Sumerians and Babylonians the baked brick was absolutely indispensable; for stone does not exist in that land.

On the 25th of Sivan there was a procession of *Bêlit* of Babylon,<sup>4</sup> who has no connexion at all with the myth of this month; for it occurs on the 25th of all months. As to the Roman calendar, where June corresponds to Sivan, the principal ceremony was the *Vestalia*, June 9, the celebration of *Vesta*, goddess of household fires. The period June 5-14, until the temple of *Vesta* was cleansed on the 15th, was nefast in Rome, when no marriages could take place. The *Vestalia* was clearly a fire cult, and since it fell in the same month as that sacred to the Fire-god in Sumer and Babylonia there may well be a connexion here. Borrowing may be excluded by the fact that in Sumer the deity is a male and in Rome a female. As to the Accadian rendering of *šig-ù-šub-ba-gar*, 'month or time of brick-making', by *si-ma-nu*, *si-man-nu*,<sup>5</sup> this

<sup>1</sup> *mušaklim šaddi*. See Legrain, *Museum Journal*, xiv 285, 8, Nannar . . . *mukallim ša-ad-du*.

<sup>2</sup> Lyon, *Sargon*, 57-8.

<sup>3</sup> *Ibid.*, l. 59, *ina úm eššēši*. Note that some rite for Nabû fell on Sivan 22, SBH. 145 III 2-3. In Sivan on a festal day *úm eššēšu* (in reformed calendar this can be one of the three days 4, 8, 17, all sacred to Nabû)

<sup>4</sup> Streck, *Assurb.* II 70, 98; 204, 19.

<sup>5</sup> ASKT. 64, 3.

word may mean nothing more than the ordinary word *simānu*, 'fixed season', season (of brick-making). It passed into Hebrew and Aramaic as *šūyān*, Sivan; Greek, *Seiouan*. In Syria in the Roman period at Heliopolis a name for Sivan was retained in the calendar, *Ezer*, *Ozir*, the *Ḥazirān* of Syriac,<sup>1</sup> 'month of the Boar (Star)'.

The Assyrian commentary on Sivan falsely assigned Taurus to Sivan in mythology and has 'Sivan is the month of Taurus, the tablet star,<sup>2</sup> crown of Anu. That star is like the Fire-god.<sup>3</sup> Month of the brick mould of the king. The king shall bake (bricks) of the mould. The lands shall build their houses. Month of the "god of bricks" (Kulla) of the Land.'<sup>4</sup> Here the myth of the Fire-god is connected with Taurus, regent of Nisan in the Sumerian period. The regnal star of the 'month of brick-making' in the Aries period was Sirius, together with Gemini and Cancer. In fact Sirius was identified with Girra the Fire-god<sup>5</sup> and with Ninurta,<sup>6</sup> who was in fact also known under the title Negin, god of this month at Lagash. It was natural that the Fire-god should be identified with the Javelin Star, Sirius,<sup>7</sup> which 'glows like copper'.<sup>8</sup>

The menologies of both the tenth<sup>9</sup> and seventh<sup>10</sup> centuries are well preserved and reveal no trace of a festival in Sivan nor worship of Sirius. The Greek festivals of Prometheus (*Promethia*) and Hephaistus (*Hephaistia*), characterized by renewing household fires by torches lighted at the altar of the Fire-god, seems to have no parallel in the rites of Sivan. This month was lucky for doing most things according to

<sup>1</sup> See p. 65, n. 5.

<sup>2</sup> See p. 69 for the origin of this.

<sup>3</sup> Sumerian KA + NE (ur-gú), PBS. XII, No. 10, 4; Ni. 7889. See Langdon, *Epic of Creation*, 52, K. 9138, 7; PBS. X 153, 12; 154, 24; 155, 29.

<sup>4</sup> KAV. p. 119 Col. I 26-37; Weidner, HB. 85.

<sup>5</sup> <sup>d</sup>GIŠ-BAR, Burrows, JRAS. *Centenary Volume* (1923) 34, 11.

<sup>6</sup> Ibid. 34-6.

<sup>7</sup> See p. 4.

<sup>8</sup> L. W. King, AKA. 140, 15.

<sup>9</sup> KAR. 178 v 11-vi 6; 179 III 15-iv 20.

<sup>10</sup> K. 4068.

the calendars, especially for beginning work on buildings, repairing houses, &c. One could clean his garments, recite a penitential psalm, make offering to god, sell grain, but not build a tomb in Sivan. The king could take part in the temple rituals in this month, and it was lucky for marriages.

In the month *Ḥaziran* the Šabeans at Harran celebrated a mystery on the 27th to the god Shemāl and the god who shoots with the arrow, who can hardly be other than Ninurta (Nimrod), god of the Javelin Star. They also placed offerings in seven portions on a table to the seven gods (= *sibitti ilāni*), certainly the Pleiades in Taurus. The priest then shot an arrow to which was attached a fire-brand made of inflammable wood which whizzed like a rocket.<sup>1</sup> There is, here, surely in the Middle Ages a heritage of the ancient Sumerian worship of the Fire-god and his constellation Sirius, the Javelin or Arrow Star. Ninurta, god of Sirius, was in fact known as *ḥumširu*, the boar, and consequently the Syriac name of Sivan can be nothing more than a survival of a cult of Sirius or Ninurta as the Boar Star.<sup>2</sup>

TAMMUZ (June–July), or the fourth month, the Sumerians at Nippur named *šū-numun*,<sup>3</sup> a name also adopted at Lagash from the Agade period onward and universally used in Babylonia and Assyria (after the fourteenth century).<sup>4</sup> Also *šū-še-numun* occurs,<sup>5</sup> and since *še-numun* is the ordinary word for ‘seed corn’, this name describes this midsummer season as having to do with seed corn, and possibly the time of threshing. *še-numun*, ‘seed’, is also used for ‘offspring’.<sup>6</sup> The

<sup>1</sup> See Chwolsohn, *Ssabier*, II 26.

<sup>2</sup> The evidence can be read in *Semitic Mythology*, p. 132, and SBP. p. 66, n. 3.

<sup>3</sup> This is the sixth month in the Umma calendar, which begins with Adar, PSBA. 1913, 48.

<sup>4</sup> *šū-numun-na*, V Raw. 43 A 15–20; BE. VI<sup>2</sup>, 74, 17, and *passim* in Cassite period. *šū-numun-a*, BE. VI<sup>2</sup>, 99, 19, is regular in the Hammurabi period.

<sup>5</sup> BE. III 53.

<sup>6</sup> RA. 8, 138 II 7; *Dél. Per.* VI 8 II 10; CT. 29, 48, 6.

month is also called *šū-ninda-numun-a*,<sup>1</sup> a phrase containing the words 'bread of seed corn'. The Sumerians at Ur (old style) has *ki-sig-<sup>d</sup>.Nin-a-zu*, 'month of the breaking of bread to the god Ninazu', a ceremony described at Lagash by *ezen šū-numun*, 'feast of the . . . seed corn'.<sup>2</sup> But Ninazu 'lord of healing' is a title of Tammuz after his death and as god in the lower world, hence also of Nergal lord of the land of the dead.<sup>3</sup> Moreover, the Nippurian *šū-numun-na* was rendered by *Du-u-zu*, month of Tammuz,<sup>4</sup> which passed into the Jewish calendar as month Tammūz, into Aramaic as T-m-w-z (Tamūz).<sup>5</sup> Hence in the 'month of seed corn', or 'bread of seed corn', the Accadians learned of a feast (of breaking of bread) for Tammuz, lord of life, who died in midsummer. It is, therefore, almost certain that *šūnumun* at Nippur meant the month of breaking bread made from corn, a festival which survived in this month among the Šabeans of Harran. In the middle of the month Tammuz fell their celebration *Buḳat*, 'wailing' by weeping women in honour of Ta'uz. They then ate nothing ground in the mill, but only soaked wheat, chick-peas, dates, and raisins.<sup>6</sup> The same celebration was maintained by the Nabateans.<sup>7</sup> A late Babylonian calendar of special instructions says that Tammuz was a month of lamentation (*te-kil-[ti]*), month of

<sup>1</sup> CT. 34, 2; Thureau-Dangin, *Sargon*, l. 6. *šū-ni-gi-na*, *šū-nig-gi-na*, VS. ix 183; Bu. 88-5-12, 273, cited by Landsberger, *Kal.* 30, are not considered here; cf. *šū-nim-ma*, after Adar II, KAR. 212 III 43.

<sup>2</sup> ZA. 15, 410 (Agade period).

<sup>3</sup> SBP. 304, 13 and for Tammuz as Nergal, see *Sem. Myth.* 351.

<sup>4</sup> ASKT. 64, 4. Var. *du'-u-zu*. In the Hammurabi period the form *arah<sup>d</sup>.Dumu-zi*, 'month of the god Tammuz', occurs, VS. viii 84, 33; 48, 7; and without *dingir*, 59, 10.

<sup>5</sup> de Vogüé, *Syrie Centrale*, 3, 6. For the Syriac-Greek calendar, see pp. 65-6.

<sup>6</sup> En-Nedīm, in Chwolsohn, II 27; this Arabic writer obtained his information from an Arabic Christian writer, Abū Jūsuf Abscha'a el Qathī'i, said to have written A.D. 893-912. See also Maqrizī, an Arabic author who quotes the Arabic work *el-Falā'hah en Nabathījah*, 'Agriculture of the Nabateans', on the Tammuz wailings in the month named after him, *ibid.* 607. <sup>7</sup> *Ibid.* 606; the Nabateans wrote *Tamūz*.

the binding of the god [Tammuz] when wailing was instituted (*rikis sipitti*),<sup>1</sup> and an omen taken from the sheep's liver says that if a certain sign on it occurs in this month 'the god of man will seek offerings for the dead Tammuz'.<sup>2</sup>

The old Assyrian menology orders weeping and liturgies for the second day,<sup>3</sup> and the Babylonian almanac says that on the 10th there is to be mourning; it is a day of trouble and gloom,<sup>4</sup> when one might not go out into a street.<sup>5</sup> On the 9th there was a procession of torches, and on the 17th a procession with torches was held when the king made offering to the 'Lord of Cutha', or Nergal.<sup>6</sup> This agrees with the middle of the month as the time of the Tammuz wailing as retained by the Şabeans, and the Jewish fast on the 17th was obviously taken from the Babylonian calendar. The Jews latterly explained the sorrowful rites of the 17th as a day of mourning for the destruction of Jerusalem by Titus in A.D. 70.<sup>7</sup> The Phoenicians also had a month *Marzeah* 'feast of mourning', which was undoubtedly the same as the Babylonian Tammuz.<sup>8</sup>

When John of Gischala fought the last battle for the Jewish state at the siege of Jerusalem daily sacrifice was abandoned on the 17th of Panemos (Tammuz). In Babylonia the god Tammuz was said to have descended to the lower world on the 18th of Tammuz and to have risen on the 28th of Kislev (December).<sup>9</sup> Another passage in the same

<sup>1</sup> SBH. 145 III 12-15.

<sup>2</sup> CT. 28, 44, K. 717, 4.

<sup>3</sup> KAR. 178 VI 10.

<sup>4</sup> V Raw. 48 IV.

<sup>5</sup> Falkenstein, *Uruk*, 53, I, 3.

<sup>6</sup> KAR. 178 VI 44-5. The almanac, V Raw. 48 IV has the *nipiḫ išāti*, 'flaming of fire', torch procession on the 16th; so also *Uruk*, 53, I, 9.

<sup>7</sup> It is also kept in memory of the sack of Jerusalem by Nebuchadnezzar on the 9th of the fourth month (i.e. Tammuz), according to Jeremiah 39, 2, and as the day when Moses broke the tablets of the Law. All these historical explanations are obviously attempts to elucidate a ceremony and a date whose origin had been forgotten. See the *Jewish Encyclopaedia*, sub 'Tammuz'.

<sup>8</sup> See Sarsowsky in *Harkavy Festschrift*; Pick in OLZ. 1908, 513; Clermont-Ganneau in Cooke, NSI. 95. See p. 25.

<sup>9</sup> ZA. 6, 244, 52-4, a tablet dated 138 B.C.



text<sup>1</sup> seems to date the descent of Tammuz on the 11th, corresponding to the Babylonian almanac's direction for wailing on the 10th.

Josephus also places the Adonis (Tammuz) wailings in the fourth month<sup>2</sup> and says: 'In the month June the lover of Venus, and a most beautiful youth, is said to have been slain and straightway to have lived again; this same month they call by the same name (Tammuz), and they celebrate an annual solemn ceremony for him in which he is wailed by women<sup>3</sup> as one dead and afterward he is hymned and praised as one who lives again.' Two almanacs of the Seleucid period describe the 18th of Tammuz as a 'day of terror (*gilittum*) of the road', describing the descent of the dead god on this day.<sup>4</sup>

The Assyrian commentary<sup>5</sup> on this month reads: 'Tammuz is the month of the constellation Orion, him that was smitten by weapons, which is the month of Ninsubur or Papsukkal, far-famed messenger of Anu. Month when seed corn is stored, and the early seed corn is brought forth. There is wailing for the god Ninrurugu. Month when Tammuz the shepherd is bound.' Here Orion (in the Aries period regnal stars of Sivan<sup>6</sup>) is falsely assigned to the fourth month, because, as star of Ayar in the Taurus period, Orion had been identified with the shepherd Tammuz in the marriage with Ishtar. Ninsubur is the title of Tammuz here, and since Ninsubur is a special aspect of Ninurta and an earlier name for him,<sup>7</sup> the Assyrians held this month to be sacred to the 'heroic Ninurta'.<sup>8</sup> It is clear from the commentary that the old Sumerian name refers to the season when seed corn was stored and loaned for the next season.<sup>9</sup>

<sup>1</sup> See PBS. x 330.

<sup>2</sup> *Explanatio in Ezechielem*, Migne, 25, 85.

<sup>3</sup> For the weeping of women for Tammuz in Jerusalem in the time of Ezekiel, see Ezekiel 8, 14, a vision dated on the 5th of the *fifth* month, 8, 1, after the Septuagint text; Hebrew text *sixth* month.

<sup>4</sup> V Raw. 48 iv 23; Falkenstein, *Uruk*, 53, 1, 12. *gilittum* is glossed *nakrūtum* (PAP), hostility.

<sup>5</sup> KAV. p. 119, 1, 38-50.

<sup>6</sup> See p. 4.

<sup>7</sup> *Sem. Myth.* 93.

<sup>8</sup> K. 2049; K. 2809 Rev. 11 26.

<sup>9</sup> *numun nim ta-è-dé* = *numun-ni har-ši šu-ši-i*, 'early seed is brought

The name may be purely agricultural and by origin may have no connexion with the Tammuz wailings, as did the name at Ur. *nu-mu-un-e*, 'the seed', 'offspring', is a title of Tammuz;<sup>1</sup> despite the commentary and the usual meaning of *numun*, it is possible that *šunumun* actually refers to Tammuz. The Accadian calendar of Elam described this month as the time when the gates of hell were opened for the descent of the dying god,<sup>2</sup> and the early Assyrian name refers to Tammuz as the shepherd.<sup>3</sup> A fragmentary passage on a day of this month (number broken away) has, '. . . let one announce his glad tidings; [a prisoner] he shall release and so the mouth which curses him will bless him.'<sup>4</sup>

It is probable that the lamentations for Adonis in Greece also occurred in July. Plutarch is the authority for this, and whatever be the arguments which classical scholars adduce for a time in autumn when flowers were thrown into the sea at Athens, symbolic of the dead Adonis, they must reckon with the facts of the Babylonian, Aramaic, and Hebrew calendars. The cult came to Greece from Syria, and it is incredible that the time of the yearly wailings were not the same unless climatic conditions caused it to be placed later in the year.

AB (July–August), the fifth month, has been discussed in the first lecture,<sup>5</sup> where the name was chosen to prove how the Babylonian month-names were only translations or general renderings of the Sumerian names. After the season of wailing for Tammuz came the feasts of torches, funeral meals for the dead god, and families entertained the ghosts of their dead relatives at the *parentalia*. The midsummer fires signified the decline of the sun from the solstice, and this was the ceremony on which the Nippurian name *izi-*

forth', rented for early sowing, to be paid at harvest. I do not understand *šu* in *šu-numun-na*.

<sup>1</sup> BE. 31, 43, 3 = JRAS. 1932, 940.

<sup>2</sup> p. 44.

<sup>3</sup> p. 33.

<sup>4</sup> *Bab.* iv 119, 2–3. The text of Ašurbanipal's edition has not been found for the fourth month.

<sup>5</sup> See pp. 20–23.

*izi-gar*, 'the month of torches',<sup>1</sup> was based. The Accadians rendered the name by *a-bi*, *a-bu-um*.<sup>2</sup> There was a 'festival of the firewood' (*ezen a-bi*)<sup>3</sup> in this month.

No text for the first fifteen days of Ab has been preserved in the tenth-century calendar,<sup>4</sup> and no part of the tablet on Ab has been recovered in the reformed calendar. Hence their remarks on days 9 and 15, so important in the Jewish year,<sup>5</sup> are unknown. Ezekiel's date of the Tammuz wailings on Ab 5 is marked *těšú*, calamity, in the almanac.<sup>6</sup> The 15th,

<sup>1</sup> For citations see Langdon, *Drehem*, p. 10; Landsberger, *Kal.* 32. *izi-izi-gar-ra*, RA. 8, 186; Myhrman, BE. III 126, 30; Syria, 1931, Pl. 49 Rev. I end. A reading *bil-bil-gar* > *bibigar*, *bebegar* is possible, RA. 28, 128, 34-5 and see NE-NE (bi-lf), i.e. *bili-bili* = *ina išätim napihtim*, 'by the flaming torch' said of Ishtar = Venus, SBH. 104, 29. Despite the ending *gar-ra*, *ne-ne-nig* is also possible; NE-NE-GAR (ni-ni-ig) = *nin-ni-ku*! [ku], CT. 19, 11, K. 10085, 2; *ninig* = ŠU (= *ninikku*, *ši-ki-bu-ur-ru*, followed by [NE-NE] GAR = *a-bu*, ZA. 8, 202, 13-15, hence this reading seems to be intended when it means the month *abu*. *ninini-ku* and *kikiburu* are both Sumerian loan words for 'torch'. See NE (*še-ik*) = *bašālu*, AJSL. 36, 159 B 26. I have decided for *izigar*, p. 20, n. 2, since this is the reading for torch. <sup>2</sup> ASKT. 64, 5, and at Susa, see p. 44.

<sup>3</sup> VS. VIII 47, 9 = 48, 8, Sinmuballit, year 16; *ezen izi-izi-gar*, 28, 8 = 29, 8, same reign, year 8; *ezen a-bi* IX 55, 5; CT. 8, 42 c 18. *i-si-in a-bi*, APR. 14, 9; and a tablet dated *izi-izi-gar*, mentions the *ezen izi-izi-gar*, BA. v 501, No. 27. *abu*, firebrand, torch, firewood, is usually *apu* in early Babylonian; *i-ša-at a-pi-im*, Pinches, JRAS. Centenary Volume, 71, 24; *apū*, from *epū*, to burn, bake, Prt. *i-pi*, l. 25. But *Code Ham*. Epilogue, 440-3, *kima išätim iz-zi-tim ša a-bi-im* (or *a-pi-im*) *ništ-šu likme*. *a-pū-u* = *ašagu*, rush, firewood, fuel, CT. 18, 3 c 35. *ištu a-pi*, from among the rushes, RA. 18, 166, 15 (Seleucid period). *a-pi ku-pi*, rush of the thicket, S. Smith, *Sennacherib*, p. 72, 72. *a-pi* in Thureau-Dangin, *Sargon*, 266; *a-pi-iš*, 327. *giš-gi-a* = *a-pa*, Nies II 22, 15. *mu-gi* = *ana a-pi*, Clay, *Morgan* IV 9, 21. King, AKA. 262, 23, *kima kan a-bi*, like the reed-rush. *a-ba*, Weissbach, VAB. III 25, 34. *apū*, therefore, is the original word. Sarsowski, *Harkavy Festschrift* explains *Ab* as 'month of fires', but arrives at this conclusion by deriving the early Canaanite month כרר (*kirr* is his reading) from *girru*, fire, and this he equates with *Ab*. See p. 25. <sup>4</sup> See KAR. 178. Rev. VI, begins with end of day 16.

<sup>5</sup> See pp. 20-1.

<sup>6</sup> V Raw. 48 v *áš-HU*, surely error for *áš-NAM* = *těšú*; see *te-šu-u*, Arahsmna 8, *ibid.* 49 VIII.

or day of the Hebrew festival of the wood-bearers, was the date of the rising of the Bow Star, Canis Major;<sup>1</sup> in another text it rises on the 5th.<sup>2</sup> These dates have been connected with the Persian Sacaea on Lôos (= Ab) the 16th.<sup>3</sup> The old menology has a long entry against day 19. There was a ceremony of plunging in the river, a mystery, and a ceremony for overcoming an adversary by placing a *pasu* of clay, on which was written the accuser's name, in coriander and casting it into the river. The 20th was a day of sorrow when one might not cross a river, and the 25th a day of grief when an image of the ghost of a father was made; a prayer was said over it confessing the dead father's sins, evidently to avoid the visiting of the sins of the ancestors on the living. There are long directions for purifying the living against the sins committed by any one of the family; these rituals of lustration on Ab 25 are similar to the lustrations by bathing on St. John's Day.<sup>4</sup> On the 26th one might not go near any woman, but he must pour out water to the souls of the dead (the Anunnaki) in the garden. If a man ate any fowl on this day he would die by headache and fever.<sup>5</sup>

The regnal star of Ab in the Aries period was Canis Major (excluding Sirius), said to be the constellation of the Elamitic Ishtar, daughter of Enlil,<sup>6</sup> and of Ishtar of Babylon.<sup>7</sup> The rising of this constellation in Ab was the festival of the 'honoured queen, daughter of Enlil', that is Ishtar of Arbela;<sup>8</sup> Ab is also described as the month of the Bow Star and month of the mighty daughter of Sin (i.e. Ishtar).<sup>9</sup> If the date Ab 15 be assumed as the time of the rising of Canis, then this festival of Ishtar fell on the same date as the Jewish festival of bringing wood for the altar. The

<sup>1</sup> CT. 33, 7, 22-3.

<sup>2</sup> CT. 33, 4, 44.

<sup>3</sup> Zimmern, KAT.<sup>3</sup> 427; Sarsowsky, *Harkavy Festschrift*, 13 ff., says Ab 15 was an ancient Jewish feast. See OLZ. Vol. XI 512.

<sup>4</sup> Sir James Frazer, *Adonis, Attis, Osiris*, 204.

<sup>5</sup> K. 3769, 10-11.

<sup>6</sup> CT. 3, 2 II 7.

<sup>7</sup> V Raw. 46 A 23.

<sup>8</sup> Streck, *Assurb.* II 112, 16-17; S. A. Smith, *Assurb.* III 11, 7.

<sup>9</sup> *Ibid.* 72 IX 9.

festival of Ishtar of Arbela at Milkia<sup>1</sup> is also called 'festival of the goddess Shatri',<sup>2</sup> celebrated in the *bît akîti*.

ELUL (September), the sixth month, was known in the Nippurian calendar as the *ezen-kin-<sup>d</sup>Innini*, 'festival of the sending or mission of Ishtar',<sup>3</sup> and is undoubtedly based upon the myth of Ishtar's descent into Arallû to seek for the dead Tammuz. This month ends the great Tammuz-Ishtar cycle, Ayar the marriage, Tammuz, death of the young god, Ab, time of funeral offerings to him when he sleeps in the lower world, and Elul, time of the descent of his lover Ishtar. At Ur this month was known as *akîti*,<sup>4</sup> or month of the New Year festival, which seems to have been shoved out of its place as the seventh month originally to make way for a festival to the emperor Dungi, a name given to the seventh month in the late period. The fact is that the original Ur calendar is unknown.<sup>5</sup> That the celebration of Ishtar's mission at Ur fell in *Akîti* is proved by a tablet dated on the 11th of this month when sacrifices were brought for the 'festival of the mission of Innini',<sup>6</sup> for Anu and Innini; followed by sacrifices to *Allatum*, queen of hell. The Sumerians at Lagash named this same month 'the festival of Tammuz',<sup>7</sup> wherefore the Nippur name 'festival

<sup>1</sup> Thureau-Dangin, *Rit.* 112.

<sup>2</sup> Streck, *ibid.* II 328, 45-8; 332, 18-23.

<sup>3</sup> Langdon, *Drehem*, p. 15; a variant is *kin-an-na*, King, LIH. p. xxxv n. 3.

<sup>4</sup> Note that this is also the sixth month at Adab, or in tablets written at Adab, in the Agade period, Luckenbill, *Adab*, 89; 147. Perhaps *akîti* has no connexion with a New Year's festival at Ur and Adab, and see above where Ishtar's festival in Milkia was celebrated in *bît akîti*.

<sup>5</sup> Since my lectures were delivered I have had the opportunity to study the pre-Sargonic tablets from Ur, to be edited by Father Burrows. See the Addendum to this chapter.

<sup>6</sup> Legrain, *Ur*, 323, 7-14.

<sup>7</sup> <sup>ii</sup>*ezen-<sup>d</sup>Dumuzi*, RTC. 403 I 4; Inv. II 663, Dungi period. This name has not been found earlier than the last Ur dynasty at Lagash, although Thureau-Dangin, RA. 4, 83; ZA. 15, 410; Kugler, ZA. 22, 68; *Sternkunde*, II 174, both give this as certain in the Agade period at Lagash. See Landsberger, *Kal.* 62. The Lagash list in V Raw. 43, third

of the mission of Ishtar (= Innini)' must be interpreted as having to do with the Tammuz myth.

It is not entirely certain that the ceremony of this month refers to the descent of Ishtar, but my argument is based upon the certain fact that the ceremony contained a ritual of the purification of Ishtar. *kin* in Sumerian means *šipru*, mission, work to be done, and the scribes said that Elul was the *ši-pir ištarāti*, 'month of the mission (or ceremony?) of the Ishtars', or on a variant 'month of the mission of Ishtar'.<sup>1</sup> But the Sumerian commentary on Elul has: 'Elul is (the month of) the Bow Star (Spica) of Ishtar, the Elamite, the mother-Ishtars cleanse themselves in the river, yearly she washes herself.'<sup>2</sup> The Accadian rendering is: 'Elul is the month of the mission of Ishtar, the Elamite; the Ishtars cleanse<sup>3</sup> themselves in the river, yearly they wash themselves.'<sup>4</sup>

The legend of the bathing of Ishtar in a fountain in Dilmun is referred to in Sumerian texts. 'I washed (my) head in the fountain of the mountain of Dilmun', she said of herself;<sup>5</sup> she bathed where the sun rises and washed herself in the flood of the river,<sup>6</sup> and at the well of washing, in the well she washed her head.<sup>7</sup> But, when Ishtar descended by the seven gates of hell to seek for Tammuz, Ereshkigal queen of Arallû ordered her messenger Namtaru to wash her with the waters of life before she was sent back to earth.<sup>8</sup> Since the Accadians regarded the principal ceremony of

name in each month list, has, so far as the text is preserved, some names unknown at Lagash. *ki-si<sup>g</sup>*<sup>4</sup> *Ba-ú* stands where *ezen-<sup>4</sup>* *Dumu-zi* should be, A 29. A month *é . . . an* is given for the eighth month, A 42; *eš-ga-zu (ri?)* is given for the eleventh month; and *me-e-ki-ga(SAL)-al* is given for the twelfth month.

<sup>1</sup> Streck, *Assurb.* II 26, 32; 118, 77.

<sup>2</sup> Sumerian version, KAV. p. 120, 16-18; Var. BA. v 704, 14-15, [id-]da-a-ni-šú im-mi-in-lağ-lağ = [ina nāri-]ši-na u-tab-ba-a, 'they cleanse themselves in their river'.

<sup>3</sup> *utallala*, π<sup>2</sup> of *elēlu*.

<sup>4</sup> Ibid. 19-21.

<sup>5</sup> ASKT. 127, 37.

<sup>6</sup> JRAS. 1932, 917, 19; 918, 21.

<sup>7</sup> Langdon, *Paradis*, 246, 47.

<sup>8</sup> CT. 15, 48, 38 = KAR. I Rev. 33.

'the mission of Ishtar' as one of purification, they rendered the Sumerian name by *Elulu*, 'month of purification',<sup>1</sup> deriving this noun from the same verb that the Accadians used in 'the Ishtars cleanse themselves in the river'. *Elulu*, then, refers to the purification of the virgin Ishtar, and it is difficult to decide whether it refers to a ceremony based on the poem of her descent to Arallû or to the myth of her bathing in the sacred land Dilmun. There is a parallel myth in Greek concerning Hera who bathed yearly in a spring at Nauplia to recover her virginity after her marriage with Zeus.<sup>2</sup> Perhaps this is the reason for the yearly purification of Ishtar in Elul after her marriage with Tammuz in Ayar. Aelian<sup>3</sup> preserves a similar Syrian story that Hera bathed at the source of the Habur (in northern Mesopotamia) after marriage with Zeus, which surely, as a Syrian legend, refers to Adad and Atargatis.<sup>4</sup> Elul corresponds to the Roman *mensis sextilis*, and the important festival of that month on the Ides (13th) is that of *Dianae in Aventina* or *Sacrum Deanae*.<sup>5</sup> This was a Roman holiday for slaves; the Roman women washed their heads,<sup>6</sup> a custom which surely refers to the purification of Diana or Artemis. The Assyrians, in rendering the idea of the myth of the mission of Ishtar, chose the name 'month of the queen of the palace', referring to Ishtar as queen in Arallû,<sup>7</sup> and this provides the principal argument for supposing that the Sumerian<sup>8</sup> and Assyrian poems on the descent of Ishtar were recited as part of the ritual of Elul.

<sup>1</sup> <sup>44</sup>kin-<sup>d</sup>Innini = *U-lu-lu*, ASKT. 64, 6. Instead of the Sumerian word, *e-lu-li*, *e-lu-lu* are sometimes used in the Hammurabi period, King, LIH. III p. xxxv n. 3; *e-lu-nim*, CT. 33, 42, 12. See Landsberger, *Kal.* 83, n. 2. There was a festival at Susa in the month Ab (= Elul) called *ud-sar ša e-lu-li ša <sup>d</sup>Innini uru-an-na*, 'day of the New Moon, (day) of the purification of Ishtar of the heavenly city (= Erech)', Scheil, *Dél. Per.* x 24.

<sup>2</sup> Pausanias, II 38, 2.

<sup>3</sup> *De Nat. An.* XII 30.

<sup>4</sup> *Sem. Myth.* 37.

<sup>5</sup> Fowler, *Roman Festivals*, 198-202.

<sup>6</sup> Plutarch, *Questiones Romanae*, 100.

<sup>7</sup> See p. 35.

<sup>8</sup> See PSBA. 1916, 55-7 and *Sem. Myth.* 412 n. 1.

Elul was sacred to Ishtar, queen of the lands,<sup>1</sup> and the tenth-century menology<sup>2</sup> orders the king to make offerings to her on days 10, 12, 13, 14, 15, 16, 27. On the 9th he must make offerings to Ea, the Water-god, and to the River-goddess. The River-goddess appears only here in the menologies and probably refers to the myth of the bathing of Ishtar. *Elul* passed into Hebrew as *Elûl*, and for the Aramaic and Syriac forms see p. 65. Of the myth and festival of this month no trace has survived in the Hebrew and Aramaic calendars. The *Şabeans* had a ceremony of washing themselves secretly on the 3rd of Elul in honour of their chief god Shemâl. On the 26th they worshipped Sun and Venus, and on the 27th and 28th there were offerings to Shemâl and the demons.<sup>3</sup>

## B. CYCLE OF AUTUMN AND WINTER MONTHS

I come now to the five months which constitute the parallel part of the second half of the year, months 8, 9, 10, 11, 12. *Arahsamna* following Teshrit is roughly November; we now enter the period when the Sun-god descends toward the winter darkness. He now becomes lord of the land of the dead, and the descending Sun-god controls the myths of the following months until the winter solstice. In November fall the autumn rains and the ploughing season begins. Therefore the Sumerians of Nippur named the eighth month *apin-dû-a*, 'opening (the soil) with the plough'.<sup>4</sup> *apin*, Accadian *epinnu*, plough, is also rendered by *nartabu*, water-machine, *shadowf*.<sup>5</sup> At Ur the name which seems to

<sup>1</sup> K. 2049, 6.

<sup>2</sup> KAR. 178 Rev. v 9-iv 13. The special instructions on days 10, 16, 20 of Elul, K. 3769, 12-15 do not refer to any ceremony connected with Ishtar.

<sup>3</sup> Chowlsohn, II 29-31.

<sup>4</sup> Langdon, *Drehem*, p. 11; Landsberger, *Kal.* 34. A tablet from Kut-el-Hai near Telloh, period of Hammurabi, has <sup>si</sup>*apin-dû-lá* (sic!), Scheil, RT. 31, Notes, No. 3. <sup>si</sup>*apin-dû-a*, Strassmaier, *Warka* 41, 39. See Weidner, H.B. 98.

<sup>5</sup> *apin* never means 'water-course', hence Landsberger's interpretation, 'month when water-courses are opened', is impossible, although Weidner H.B. 98 agrees with him.



correspond to this name is *šu-Eš-ša*.<sup>1</sup> *ešša* is the word for *three*, and it is suggested that the name means the *third* month in a year beginning with the sixth month (*akīti*) at Ur.<sup>2</sup> This affords no help at all; the calendar at Lagash has 'month of the festival of Bau', corresponding to *apindua* at Nippur, but this must have been originally the old New Year month, for Gudea states clearly that *ezen-d-Bau* or the festival of the goddess Bau is the same as the 'day of the New Year',<sup>3</sup> when there was a marriage of Bau (and Nin-girsu).<sup>4</sup> In fact the official list has 'month of the festival of Bau' at Lagash as the *seventh* month or *first* in an autumn calendar.<sup>5</sup> However the sources disagree, there is no doubt but that at Lagash the festival of Bau fell in a month which was also known as 'month of the festival of the temple court',<sup>6</sup> and there were offerings to Ninazu and Ereshkigal, both underworld deities, in the month *ezen-d-Bau*.<sup>7</sup> No help can be obtained from early Sumerian sources concerning the cult and ceremonies of this month, which has a purely agricultural name at Nippur.

The Assyrian commentary has: (Sumerian) 'The plough and spade are brought forth into the field. The festival (*akītu*)<sup>8</sup> of tilling (*ur*)<sup>9</sup> is enacted. Month of Adad, great bull

<sup>1</sup> *Eš*, written usually with three slanted wedges, BE. III 46; also three upright wedges, Radau, EBH. 229, 15. Now found in pre-Sargonic texts at Ur.

<sup>2</sup> Even if *ešša* means 'three' or 'third', *šu* remains unexplained. See Langdon, *Drehem*, p. 11; Landsberger, *Kal.* 52.

<sup>3</sup> Thureau-Dangin, SAK. 80 v 1; 84 III 5.

<sup>4</sup> If this is the eighth month or *second* in a year beginning with the seventh, then it corresponds to *Ayar* (or *second* month in the Nisan system) when the marriage of Tammuz and Ishtar occurred.

<sup>5</sup> V Raw. 43 A 36.

<sup>6</sup> <sup>iii</sup>*ezen-kisal-la-(ka)*, Langdon, *Drehem*, p. 11 n. 10; VS. XIV 74 XII 1-2.

<sup>7</sup> DP. 51 II 5; III 4; VI 8; VII 5.

<sup>8</sup> Usually New Year festival, and see above, where the New Year festival at Lagash fell in the eighth month.

<sup>9</sup> *ur*, phonetic for APIN(uru) = *erēšu*. The seventh month at Lagash until it was supplanted by *ezen-d-Dungi* was <sup>iii</sup>*ur*; see Langdon, *Drehem*, p. 11; RTC. 276 has <sup>iii</sup>*ur-ba-bad*, 'month when tilling began'.

of heaven and earth.<sup>1</sup> (Accadian) 'Arahsamna (month) of the unbinding of the "band"<sup>2</sup> (*giš-maġ*). Spade and plough they bring forth into the field. The festival of tilling (*e-ri-ši*) is enacted. Month of Adad, great bull of heaven and earth.<sup>3</sup> Arahsamna is held to be sacred to the Rain and Thunder-god, since this is the season of November rains, and there was a festival to celebrate the opening of the soil with the plough. The Accadian text has a reference to 'the unbinding of the band' (*pa-tar mirdīti*); now the menologies for this month for days 6, 16, 26 refer to a custom of releasing a debtor or a prisoner. 'The sixth day is lucky. (The king) shall recite a penitential psalm. Before he enters for the psalm a person pledged for debt as a *substitute*<sup>4</sup> for silver let him ransom and his heart will be glad.' 'On the sixteenth one shall [not eat] dates and so shall that man become old. (The king) shall recite a penitential psalm; he shall manumit a slave; he shall release a prisoner (*kasā*) and so shall his trouble [be unbound].<sup>5</sup> 'On the twenty-sixth let him (the king) bow down to Sin; his food-offering he shall not set forth, or there will be *seizing* by the "mountain of god". He shall recite a penitential psalm; let him release a prisoner or he will come to harm.<sup>6</sup>

These texts generally use *lip-tur*, 'let him release', in the injunction for releasing a prisoner, which leads one to infer that the commentary means to describe Arahsamna as the month when a prisoner was released by the phrase 'unbinding of the band'.<sup>7</sup> The custom of releasing a prisoner also

<sup>1</sup> KAV. p. 120 II 39-42.

<sup>2</sup> *mirdītu*, net, band, cage, syn. *mesū*, *mesirru*, *kiskibirru*, *kamaru*, MAG. IV 265, 214-18. Weidner compares *mirdītu* with Talmudic *mardayyā*, 'pick', HB. 98.

<sup>3</sup> KAV. p. 120 II 43-6.

<sup>4</sup> KAR. 178 Rev. III 36 has *d-muš-ri-du* of unknown meaning, but the *enbu bél arḥim* text, IV Raw. 33\* I, 25, has *za-kūr kasḫim lip-tur*.

<sup>5</sup> Ibid. 50-3. The *enbu* edition, IV Raw. 33\* II 23-4, has *kalā* for *kasā*.

<sup>6</sup> KAR. 178 Rev. III 62-5. See also IV Raw. 33\* III 21.

<sup>7</sup> The scribes may have given the exegesis *engar-dū-a* and not *apin-dū-a*,

occurs on the 16th of Adar,<sup>1</sup> and on some day in Tammuz (date broken away).<sup>2</sup> There is no explanation as to why Arahšamna should be chosen especially for this ceremony unless there was some myth concerning the release of Tammuz then. The Jewish custom fell at the Passover, Nisan 14-22, and is mentioned in the New Testament at the trial of Jesus by Pilate. For said Pilate, 'Ye have a custom, that I should release unto you one at the Passover'.<sup>3</sup> No similar law is mentioned in Hebrew.<sup>4</sup>

The Babylonians assigned this month to *apḫalli ilāni* <sup>4</sup>*Marduk*, 'the sage of the gods, Marduk',<sup>5</sup> who in this connexion is also described as *bēl naḫbi* 'lord of the deep'.<sup>6</sup> The myth of this month was clearly connected with the underworld sea, the *apsū* over which Ea, god of fresh water, presided. Ea, father of Marduk, has the title 'lord of the deep',<sup>7</sup> and was patron god of farmers (*ikkaru*).<sup>8</sup> The season although *apin* is proved to be the reading by <sup>81</sup>*apin-na*, KAV. p. 120 II 40. If so, then *engar* may be taken for *ikkaru*, *ērišu*, *irrišu*, farmer, irrigator, and *dū-a* for *paṭāru*, both possible. Then 'farmer' may be taken as a title of Tammuz as the farmer or ox-driver (*riḏalḫé*), ploughman, who was released from his bondage in the eighth month.

<sup>1</sup> *ka-la-a ušēši*, 'he shall cause a prisoner to come forth', KAR. 178 Rev. 1, 43.

<sup>2</sup> [*ka-la-*]a *limašši-ir*, Bab. IV 119, 3.

<sup>3</sup> John 18, 39; cf. Mt. 27, 15; Mk. 15, 9; Luke 23, 17. The passage in Luke 'He had of necessity to release unto them some one at the feast' is said to be a gloss, and if so from the hand of an antiquarian who knew the custom.

<sup>4</sup> It is useless to compare the Roman *lectisternium*, 'banquet of the couch', established 397 B.C. to prevent the recurrence of a plague, Livy V 13, 5-8. Livy says that then there was a general amnesty when prisoners were unbound. Even more futile is the appeal to Josephus, *Antiquities*, xx 9, 3, where Annanias requested the procurator Albinus to release prisoners on a certain occasion. The custom is Babylonian and was borrowed by Judaism after the Exile.

<sup>5</sup> K. 2049, 8; same title of Marduk, *Epic of Creation*, p. 138, 93.

<sup>6</sup> IV Raw. 33\* 1, 1; see also King, *Magic* 12, 28, *bēl naḫbē*, 'lord of the deeps', after his titles *bēl duḫdi mušaznin ḫegalli*, 'lord of abundance, who causes plenty to fall as rain'.

<sup>7</sup> JRAS. 1927, 537, 21; *Maḫlū* V 181.

<sup>8</sup> CT. 24, 43, 135.

is, therefore, assigned to the deities who preside over springs which flow from the nether world sea, which again shows the agricultural nature of the myth of the month. If any suggestion of a myth can be obtained from the regnal stars of Arahsamna in the Taurus period resort must be made to Capricorn, Pegasus, and Sagittarius.<sup>1</sup> Nergal was god of Mars whose hypsoma was in Capricorn and also god of Pegasus. Sagittarius was identified with Ninurta,<sup>2</sup> lord of Larak and administrator of the underworld.<sup>3</sup>

The Sumerian ceremonies in this month must have been so uninteresting that they made no impression upon the Accadians and they rendered the name by the colourless word *Arah-samna*, 'Eighth month' simply.<sup>4</sup> This word passed into post-exilic Hebrew as *Marhešvān*,<sup>5</sup> and into late Hebrew in the same form; the Septuagint Greek has *Marsouanes*. The Aramaic people refused to employ this colourless word and adhered to the name *Kinun*, *Kanun*,<sup>6</sup> already in use by the Accadians when the Sumerian calendar was translated in the Hammurabi period. The persistence of the use of the word *Kinun* in Aramaic lands led me to infer in my first lecture that it is of Aramaic origin. Now it is certain that the characteristic ceremonies of Arahsamna, Kislev (December), and Tebit (January) in the Babylonian calendar are based upon the *kinūnu* or 'hearth-fires'. The word is not only good Aramaic but also widely used in Accadian. It may, in fact, be derived from Sumerian *gunni*,<sup>7</sup> the regular word for *kinunu*. On the *eighteenth* of Arahsamna, a day sacred to Shamash, two *kinūnu*, braziers, were covered and set before the sons of Bêl, i.e. Adad and Shamash.<sup>8</sup> Another

<sup>1</sup> See p. 8.

<sup>2</sup> CT. 25, 13, 33.

<sup>3</sup> *Šakanakki iršitim*, CT. 16, 13 A 42.

<sup>4</sup> ASKT. 64, 9.

<sup>5</sup> It occurs first in the Aramaic Papyri of the Jews in Egypt, fifth century B.C., Cowley, *Aramaic Papyri*, No. 17, 7 and often.

<sup>6</sup> See p. 29 and p. 65.

<sup>7</sup> Written *KI-NE*, 'place of fire'.

<sup>8</sup> Inferred from the chapels or temples where these braziers were placed, Enamhe and Esakudkalamma.

brazier was covered in the chapel of Esagila, temple of Marduk in Babylon, and there were song-services by the psalmists.<sup>1</sup> On the *twenty-fifth*, sacred to Zamama of Kish, a cow was slain before a kettledrum and fire placed in a brazier.<sup>2</sup> On this day no one might go out into the street.<sup>3</sup> On the *ninth* of Kislev, a day sacred to the god Sharšarbi (Nergal), two braziers were covered with a mourner's garment.<sup>4</sup> On Kislev *seventeenth*, sacred to Nabû, two braziers of cedar were covered in the chapel.<sup>5</sup> On Kislev *twenty-second*, sacred to Urash (Ninurta), a brazier was clothed with a mourner's garment.<sup>6</sup> On Tebit *tenth* fire was put in braziers to Bêl (Marduk), Ninurta, Nabû, Ninsubur, Nergal, and Namtar; with them was set a brazier on a censer to Ishtar of Erech.<sup>7</sup> In Assyria a bull was slaughtered to Nabû on days *sixteen* and *seventeen* of Tebit, and a brazier was set forth on the *nineteenth*.<sup>8</sup> Hence during the winter months November, December, January the late menologies have ceremonies with the brazier, and in all places the word is written in Sumerian, *gunni*. Assuming that this custom is of Sumerian origin, which would be proved if the Accadian name *Kinûnu* was based upon Sumerian rites for the month of ploughing (*apin-dû-a*), then the widely spread Aramaic preference of this name to Arahšamna is due to myths and rituals which for them seemed the essential feature in the calendar for the eighth month. *Kinûn bitî*, 'brazier of the house', was a household deity and explained by 'house of the protecting genius'.<sup>9</sup> No trace of a ritual of the hearth-fire has been found in Sumerian. The reader is left to weigh the arguments as to whether this name and the rituals came into Babylonian with the Ara-

<sup>1</sup> Clay, *Morgan*, IV 25, 4-10.

<sup>2</sup> Ibid. 12-16; SBH. 144, 2-4.

<sup>3</sup> KAR. 178 Rev. III 61. This rule is entered against day 27 on K. 3560, and V Raw. 49 VIII.

<sup>4</sup> Clay, *Morgan*, IV 25, 26-9; SBH. 144, 12.

<sup>5</sup> Ibid. 41-2; SBH. 144, 20.

<sup>6</sup> Ibid., I. 46; SBH. 144, 22.

<sup>7</sup> Ibid., II. 50-4; SBH. 144 Rev. 1-5.

<sup>8</sup> Thompson, *Reports*, 151 Rev. 7-8.

<sup>9</sup> *bît šēdi bit lamassi*, Craig, RT. 57, 31.

maic invasion and *kinūnu* was then rendered into Sumerian by KI-NE 'place of fire' and pronounced *gunni* after *kinūnu*, or whether the word and rituals were of Sumerian origin.<sup>1</sup> In Arah-samna, then, began the rites of covering the brazier on certain days of the winter months in sign of mourning for the waning Sun-god. Now the hearth-fires were lighted, and the genius of the hearth now presided over the homes of men.

Worship of the Lares or household gods has probably survived in the Şabeian rites of Second Teshrit (= Arah-samna), where for nine days, 21st to 29th, they fasted to the *rabb-al-baht*, 'Lord of good luck'. They broke bread, mixed it with barley and myrrh, and strewed it throughout their houses, saying, 'O ye night-wanderers of good luck, here you have bread for your dogs,<sup>2</sup> barley and straw for your cattle, oil for your lamps, and myrrh for your garlands. Enter in peace and go out in peace and leave good reward for us and our children.'<sup>3</sup>

KISLEV,<sup>4</sup> the ninth month (Nov.-Dec.), was known at Nippur as *kan-kan-è*, the feast of lighting braziers, which fell on days 9, 10, 17, 22 in the late Babylonian calendar. We come now to the darkest period of the year in which falls the winter solstice, the resurrection of Tammuz and the turning back of the Sun-god from the darkness of the lower world. The ninth month is almost entirely confined to rituals for the gods of the dead, ceremonies to the genius of the hearth-fires and the resurrection of Tammuz. The carrying of lights to hasten the return of the Sun-god and

<sup>1</sup> This is Zimmern's opinion, *Fremdwörter*, 32-3. *gunni* occurs in a syllabary CT. 11, 50 A 25, and it is probable that *gunni* is taken from *kin-ne*. Not much help is obtained by the Assyrian name *muḥur ilāni*, p. 36.

<sup>2</sup> For the dog as watcher of homes, see *Sem. Myth.* 182.

<sup>3</sup> Chwolsohn, *Ssabier*, II 32. He identifies the 'Lord of good luck' with the West Semitic god of fortune, Gad, *ibid.*, p. 226.

<sup>4</sup> I am obliged to treat Kislev, Tebit, Shebat, and Adar very briefly owing to lack of space. The evidence and full investigation must be left to the critical edition of the texts.

the passing of the winter's darkness is the salient feature of Kislev. The Sumerians at Lagash named it *mu-šu-dū* (var. *dū*), meaning probably 'month of carrying fire', and at Ur *ezen-maġ*, 'month of the supreme festival', in which fell the 'feast of manifestation', *nabrûm*,<sup>1</sup> possibly meaning 'display of lights'. The Accadian rendering *kislîmu* is obscure and its meaning unknown.

The Jewish Church has also a feast of lights in Kislev, the *Hanukkā*, instituted by Judas Maccabeus in 165 B.C. The *Hanukkā* occurs on the 25th of Kislev or December in the present Jewish calendar. This festival is said to go back to Nehemiah, who served in the court of Artaxerxes. He restored the walls of Jerusalem and relit the altar fire in the temple in 445 B.C.,<sup>2</sup> on Kislev 25. After the temple was again desecrated by Antiochus Epiphanes in 165 B.C. Judas Maccabeus again relit the altar fires on the 25th of Kislev. So was established in Judaism the *Hanukkā*, feast of dedication, feast of purification, celebrated with lighted lamps. The Talmud calls this the feast of illumination, and Josephus says that it was the feast of lights.<sup>3</sup> Now the author of II Maccabees has two reasons for fixing this festival of lights on Kislev 25 in memory of the reconsecration of the temple and the relighting of the eternal altar fire. One is that Nehemiah, when he returned from the Exile in the fifth century, had chosen this date; another reason was that Antiochus had desecrated the temple on Kislev 25.<sup>4</sup> 'Bearing wands wreathed with leaves, fair boughs, and palms, they offered hymns of praise to him who had prospered the cleansing of his own place.' The Gospel of John refers to this rehabilitation of the old feast of lights, 'Then was the feast of the dedication (*encaenium*) in Jerusalem and it was winter'.<sup>5</sup>

<sup>1</sup> See p. 30.

<sup>2</sup> II Maccabees 1, 18-19.

<sup>3</sup> φῶτα, Josephus, *Antiquities*, XII 319-25.

<sup>4</sup> II Maccabees 10, 1-8.

<sup>5</sup> John 10, 22. The reason for fixing on Kislev 25 because of the date of desecration by Antiochus three years before is expressly stated in

The Jews, after the new institution in 162 B.C., celebrated the Ḥanukkā by placing lights at the doors of their houses, and these were held so sacred that none might read by them. The traditions vary as to the date, and some said that it was on the 15th of December or Kislev. But it is obvious that this post-exilic feast of lights in December must have been brought to Jerusalem by Nehemiah from Babylonia. Surely by his long residence in the Babylonian Exile Nehemiah knew the Church Calendar of Babylonia. There he must have known that feasts of torches and braziers were characteristic of the season December. The Assyrian and Babylonian calendar orders worship of Nergal, god of the winter sun, on the 15th of Kislev, and then the celebrants bore palms, precisely as the Jews did at the Ḥanukkā on the 25th of Kislev.

The Babylonians date the resurrection of Nergal or Tammuz on the 27th or 28th of Kislev. The Nabateans celebrated the birth of Dusares on the 25th of December. There is here a confusion of dates for the rebirth of the Sun-god at the winter solstice in ancient Semitic traditions. The month of Kislev is characterized by feasts of lights in the Sumerian and Babylonian calendar to celebrate the resurrection of the Sun-god and of Tammuz. This certainly gave the Jews the Ḥanukkā or feast of lights. The Church Calendars of Babylonia offer days 9, 10, 15, 17, 22 as a choice for these feasts but never the 25th. The astronomical texts offer the 28th. The Jews of the Exile certainly knew these dates, but why they and the Nabataeans fixed upon the 25th is not clear unless there is truth in the explanation that Nehemiah chose the 25th. The Ḥanukkā on the 25th of Kislev obviously influenced the early Christians to fix the birth of Christ on the 25th of December. The exact day is unimportant. The substance of the myth of the resurrection of Tammuz, the rebirth of the sun celebrated by the

I Macc. 4, 36-41. See Moffatt's edition of II Macc. in Charles, *Apochrypha*, I, 145; on Nehemiah tradition, *ibid.* 132-3; on I Macc., see Stanley Cook, *ibid.* I, 81-2.



feast of lights—these were the influences which gave Judaism its *Hanukka* and Christianity its Christmas Day.

On this day the Sumerians recited the hymn:

O Nergal, mighty one, at whose cry the closed door opens.

O lord that comest by night, for whom the bolted doors open of themselves.

O lord that comest by night, the child-bearing mother be dear to thee.

The Latin Christian hymns of the Nativity inherit the same spirit and traditions of remote antiquity:

Festa dies agitur  
Mundo salus redditur,  
In quā sol exoritur  
Qui mundum replet lumine.

The day is celebrated as a feast;  
Salvation is restored to the world;  
The day whereon the sun rises (again),  
Which fills the world with light.

In Kislev the homes and streets of Babylonian and Assyrian cities flamed with lights by night as Nergal, lord of the winter sun, ascended from the nether world, and his constellation Pegasus rose to govern the month of the winter solstice. At the same season in Greece, on the 8th of the month Poseidon, fell the festival *Posidea*, when cakes and wine were offered to the underworld deity Poseidon.

In Kislev the Assyrian calendars repeatedly order ceremonies to hasten the return of the earth's fruitfulness. On the 1st of Kislev water was poured out before the cattle and a priest waved aloft a date-palm. On the 6th and 15th water was poured out to Ereshkigal, goddess of the nether world, the Greek Demeter, and an old woman held aloft date-palms. On the 30th bean-stalks were held above the heads of worshippers and prayers said to the great Earth-goddess.

Now all these mystic rites of mid-winter to secure fruitful harvest and to encourage the resurrected Sun-god to go forth triumphantly for the blessing of mankind correspond pre-

cisely to the Greek festival that fell on the 26th of the Attic month Poseidon. This Greek festival, the Halôa, feast of the garden, in honour of Demeter the Earth-goddess at the winter solstice had also mystic rites to ensure fruitful harvests. Apparently only women took part in the licentious mysteries at Eleusis at the Halôa<sup>1</sup> in Greece, which corresponds to the direction of the Assyrian calendar for the 6th of Kislev, when the rites are conducted by an old woman.

The rites of Kislev, therefore, rest upon two principles: firstly the myth of the resurrection of the Sun-god celebrated with lights, which gave Judaism its feast of lights and Christianity its Noel or day of Nativity; secondly, the rites of sympathetic magic with palms, bean-stalks, and pouring of water before the cattle to ensure a fruitful harvest and to prevent drought. The Greeks had this second festival on the 26th of the month Poseidon. Whether there is borrowing of an ancient Sumero-Babylonian mystic ritual here or whether the idea is a common heritage of both peoples, the fact remains that they chose the same season and almost the same day for the gay festival of the winter solstice. The gaiety of Christmas is inherited from the myth and magic of ancient peoples.

TEBIT, the tenth month, roughly Dec.–Jan., was known in the Sumerian calendar of Nippur as the *ab-e(d)*, or time when the elders of the city rise from the lower world. Ishum, the messenger of the gods, opens their gates of bondage and their ghosts return to sit in the council of the elders of the cities. The elders of the cities lamented during the whole month of January. At Ur the Sumerians named this month 'feast of heaven', and sacrificed to the Moon-god and the planet Venus. The Babylonians for some reason gave this month the name *Tebîtu*, 'the month of the plunging (into water)', and they must have taken this description from some ritual which the Sumerians used for January. It is impossible to make any reasoned explanation of all these Sumerian myths and festivals for Tebit. Why so much

<sup>1</sup> On the Halôa, see Deubner, *Attische Feste*, 60–7.

attention was paid to the cults of the Heaven-god, Venus, and the Moon in this mid-winter season cannot be explained. The Babylonians in the time of Ezekiel and Nehemiah had ceremonies with burning braziers on the 10th of Tebit, and fires were lit before Ishtar the goddess of Erech. On the 10th of Tebit the Assyrian calendar orders offerings to the constellation Orion, which was now setting and entering its period of invisibility. The Babylonian almanac says that no one might enter a street on the 10th of Tebit. Therefore the 10th of Tebit was *the* important day of this month in the Church calendar. Now Ezekiel in the ninth year of the first Babylonian captivity, i.e. in 588 B.C. prophesied on the 10th of Tebit (tenth month in the text) that Nebuchadnezzar would attack Jerusalem on this same day.<sup>1</sup> This is the actual date given by the Hebrew historians.<sup>2</sup> The date was already marked as a national fast in the time of Zechariah (end of sixth century).<sup>3</sup> Since the sack of Jerusalem by Titus in A.D. 70, the 10th of Tebit has remained a fast-day in the Jewish calendar.<sup>4</sup>

The one thing certain about the tenth month is that it was extremely unlucky. The Babylonians called it 'the month of the curse'. A family might not leave a house or move into it in Tebit, nor could any repairs be made in a house in this month. No one might make a statue of a god, bring a gift to a god, set forth food-offerings, clean his garments, or recite a penitential psalm. Selling corn in Tebit was forbidden, marriages were doomed to failure in Tammuz (July), Elul (August), Kislev, and Tebit. A male child born in Tebit would be unfortunate.

The two most unlucky months are Tammuz at the summer solstice and Tebit at the winter solstice, or months 4 and 10. This is undoubtedly due to the myths that Tam-

<sup>1</sup> Ez. 24, 1-2.

<sup>2</sup> II Kings 25, 1, 9th year, 10th month, 10th day; cf. Jeremiah, 39, 1; 52, 4.

<sup>3</sup> Zech. 8, 19.

<sup>4</sup> See Giesebrecht, *Berufsbegabung der alten Propheten*, 174; Krätzschmar, *Ezekiel*, p. 195; Goldschmidt, *Der Bab. Talmud*, III 340.

muz died in July and the ghosts of the elders returned to earth during the whole of January.

SHEBAT, the eleventh month, roughly February, has a purely agricultural name in the Nippurian calendar, *zizan*, 'month of emmer wheat', for which there is no explanation unless it refers to the blades which now spring from the earth with rains of February. The early Assyrian calendar describes this season as 'month of the orchards'.<sup>1</sup> The Sumerians at Ur described it as 'month of the rain and the Storm-god'. In fact February is the season of storms and heavy rain in Mesopotamia, and after the Sumerian calendar had been adopted in Babylonia and Assyria, the eleventh month was always sacred to the god of storms. There is no myth in connexion with this month; only the emphasis upon the worship of the Storm-god among the Sumerians gave the Semites any clue to a word for this month. The Babylonians, therefore, called the eleventh month *šabātu*, month of the blowing of storms, the month of winds and rain. Naturally they may have made up this name for themselves. There was no myth or festival to translate here. *šabātu* passed into the Jewish and Aramaic calendars as *šebaṭ*, Greek *sabat*.

The calendars mark days 20, 24, 30 as of special importance. On the 20th one might not drink any water, and must pray to Shamash the Sun-god. On the 24th one must stand on the bank of the river and pray to the Water-god (Ea); he might drink no wine on that day.

On the 30th one must pray to the Storm-god and drink no wine.

Shebat was a lucky month for marriages, and here the Greek calendar has the same season for marriages, naming the month, in fact, *Gamēlion*, 'the marrying-month'. Demons were particularly dangerous in February. This was an old Sumerian myth that the devils infest the homes and fields of man in Shebat; consequently the Accadians of the Elamitic province named this month *huldubba-ē*, meaning

<sup>1</sup> See p. 39.

'O loitering devil depart'. Jewish mythology inherited this same belief, and throughout the history of Judaism Shebat has always been a time when devils, demons, and all evil spirits are at large.

ADAR, the twelfth month, corresponding roughly to March–April, was universally known in all Sumerian cities as the month of barley harvest; it ends with rising of Pleiades from 3000 to 500 B.C. This is a purely agricultural name. The Babylonians rendered the Sumerian name by *Adaru*, 'month of the threshing-floor', and so it passed into the Jewish calendar as Adar. At the end of each lunar year the Sumerians examined the condition of the cornfields. If by the annual loss of the eleven days, by which the lunar year lags behind the solar year and the seasons, Adar would fall too early for harvest, they inserted a 'former Adar' at the end of the year. By this system of inserting an intercalary Adar *before* and not after this month, the month of barley harvest was kept approximately in its season. The Sumerians always used this system. In the later Babylonian and Assyrian calendars they took no notice of what the name meant. Month of barley harvest might fall a whole month too early. Then arose the practice of inserting the extra Adar *after* it.

The Sumerians seem to have had a ceremony of waving a sheaf of grain in this month to celebrate the time of putting the sickle to the corn. In the early calendar this festival of the harvest corresponds obviously to the Hebrew Nisan, when the first sheaf of the harvest was waved.<sup>1</sup> This was fixed by Ezekiel for the 14th of Nisan. Now began the seven days' feast of unleavened bread lasting until the 20th,<sup>2</sup> in the Hebrew Church Calendar. This festival was then combined with the Passover held on the same date.<sup>3</sup> Now it is extraordinary that the New Testament refers to the custom of releasing a prisoner at the Passover, Nisan 14–20, and the old Assyrian calendar says that the king must release

<sup>1</sup> Lev. 23, 11, there combined with the (Passover) lamb, v. 12.

<sup>2</sup> Ex. 12, 15–20.

<sup>3</sup> Num. 9, 11–14.

a prisoner on the 16th of Adar.<sup>1</sup> There seems to be here a remarkable parallel between the ancient Sumerian custom of celebrating the cutting of the first sheaf in Adar, and the same ancient Hebrew-Canaanite custom. Moreover the release of a prisoner at this time must have been an old Babylonian regulation introduced into the calendar of the harvest month before the tenth century.

There is no particular myth associated with Adar in Sumerian except that the month was sacred to the god of wisdom and water, Ea. On the 13th of Adar the tenth-century menology forbids eating fish and fowl, and on the octave of this day, the 20th, is another fast, when milk, flesh, and wine were forbidden and no one was allowed to wear anything to cover his hands.<sup>2</sup> The two fasts, seven days apart, covering the period 13-20 in the harvest month is suspiciously like the Hebrew regulation of the fast of unleavened bread from Nisan 14 to 20. There may be, then, a direct connexion between the Hebrew Passover and the Babylonian calendar.

Confining the discussion to the Church Calendar of the late period which the post-exilic Hebrews obviously used, I finally note those days of the lunar month which have special names.

#### CULT AND SECULAR NAMES FOR DAYS

K. 6012<sup>3</sup>= Pinches, PSBA. 1904, 56; Hilprecht, BE. xx 44.

- |   |   |
|---|---|
| 1. ud = <i>ú-mu</i>                       | Day. <sup>4</sup>                       |
| 2. ud-sā-ám = <i>mi-šil ú-mu</i>          | A half day (of daylight). <sup>5</sup>  |
| 3. ud-1-kam = <i>úmu-kal</i> <sup>6</sup> | A whole day (of daylight). <sup>7</sup> |

<sup>1</sup> KAR. 178 Rev. 1, 43.

<sup>2</sup> K. 3769; Virolleaud, *Frag.*, p. 20, 29-31.

<sup>3</sup> Restored by unpublished duplicates.

<sup>4</sup> Here 'day' in the sense of daylight.

<sup>5</sup> Probably afternoon. See RA. 28, 165-6.

<sup>6</sup> Var. *ú-mu-ak-kal*. Cf. *ú-ma-ka-al*, RA. 8, 67, 8 = CT. 36, 4 1 32.

<sup>7</sup> So certainly, V Raw. 25 A 20; *ú-ma-ak-kal*, AJSL. 28, 231, § 5, there in sense of 'one day', *dies*, 24 hours. *šabaté* ud-i-kam, clothing for *one*

4. ud-2-kam = <i>ši-na-[a]</i> <sup>1</sup>	Two days.
5. ud-3-kam = <i>še-la-[al-tu<sup>2</sup> úmū]</i>	Three days.
6. ud-4-kam = <i>ir-bit [ú-mu]</i>	Four days.
7. ud-5-kam = <i>ha-miš(!)-[ti úmū]</i>	Five days.
8. ud-6-kam = <i>šeš-ši-[ti úmū]</i>	Six days.
9. ud-7-kam = <i>si-ib-[ti<sup>3</sup> úmū]</i>	Seven days.
10. ud-8-kam = <i>sa-man-ti úmū</i>	Eight days.
11. ud-9-kam = <i>til-ti úmū</i>	Nine days.
12. ud-10-kam = <i>e-ši-ir<sup>4</sup>-ti úmū</i>	Ten days.
13. ud-15-kam = <i>šá-bat-ti</i> (completion)	<i>šabattu</i> day, end of first half of month.
14. ud-19-kam = <i>ib-bu-ú</i>	(Day of) wrath.
15. ud-20-kam = <i>eš-ru-u</i>	Twenty days.
16. ud-25-kam = <i>ar-ḥu . . .</i> <sup>5</sup>	Month . . .
17. ud-30-kam = <i>še-la-ša-a</i>	Thirty days.
18. ud-ná-ám = <i>bu-ub-bu-lum</i>	Time of the moon's ravishment. Days 28-9.
19. ud-gul-gál = <i>uḫulgal-lum</i>	Dangerous day. Days 7, 14, 19, 21, 28. <sup>6</sup>
20. ud-gul-gál = <i>ú-mu lim-[nu]</i>	Evil (i.e. dangerous) day, sad day.

The following table shows the *uḫulgallu* days of the calendar, Zimmern, *Rt.* 52, 6; so also render ZA. 16, 192, 27 = RA. 18, 185. *ú-mu-ak-kal lištabri*, let it stay on a whole day, one day, CT. 17, 26, 73 = 16, 35, 29.

<sup>1</sup> Var. *ši-nu-u*. See Hilprecht, *Assyriaca* 69.

<sup>2</sup> Var. *še-lal-tu*.

<sup>3</sup> Var. *sib-ti*.

<sup>4</sup> Pinches gives *KI-IS!*

<sup>5</sup> Copy BAD (?). . . . If a five-day week system is implied here this would be the end of the fifth week, as *šabattu* is the end of the first half of the bimensal system. If a reading *arḫu tál-la* (*ḫatú, gamru*), 'month completed', is assumed no sense can be made of it; for on a five-week system this is not the end of the month. Zimmern, ZDMG. 58, 200 n. 7, suggested this on the ground that the 25th day begins the last week, which is impossible arithmetically. Landsberger, *Kal.* 140 suggests *baḫ-lu*, meaning what? The text has no Sumerian ideograms in Col. II, hence *tál-la* is excluded.

<sup>6</sup> Not necessarily unlucky, but sinister. A day may be both *uḫulgallu* and *magru*, lucky. See Nisan 1, KAR. 178 Obv. 1, 2, *uḫulgallu*, but l. 7 *dū-še = kališ magir*, entirely lucky. Nisan 14 *úm magir* and *uḫulgallu*, KAR. 176 Obv. II 17 = 178 II 2, where *magir* = *kimin*; also K. 2514, Nisan 7, *ud še ud-gul-gál*.

dars. Unless marked with \* also *magir*, *šemû*, lucky; marked † half the day lucky.

*Tenth-Century Assyrian*

## NISAN I

- Day 1, KAR. 178, I, 2; *magir*, l. 7.  
 ,, 7, KAR. 178, I, 50.  
 ,, 14, KAR. 178 II 2 = 176  
 II 17.  
 † ,, 19, KAR. 176 Rev. I, 6 =  
 178 II 47.  
 † ,, 20, KAR. 176 Rev. I, 16 =  
 178 II 60.  
 ,, 21, KAR. 176 Rev. I, 20 =  
 178 II 65.  
 ,, 28, KAR. 176 Rev. II 2 =  
 178 III 15.  
 \* ,, 29, KAR. 176 Rev. II 10 =  
 178 III 38.  
 ,, 30, KAR. 176 Rev. II 25 =  
 178 III 52.

In summary of rubrics, *lu ú-  
 [gûl]-gál*, 178 III 68; 179 Obv.  
 I, 8.

## NISAN II

KAR. 178 IV 2-40 enters only  
*magir* and *la magir* days = Var.  
 179 I, 17-II 11.

## AYAR

KAR. 178 IV 41-V 10 = 179 II  
 10-III 14 enters only *magir* and  
*la magir* days.

## SIVAN

KAR. 178 V 11-VI 6 = 179 III  
 15-IV 20 enters only *magir* and  
*la magir* days.

*Seventh-Century Assyrian*

## NISAN I

19. *magir* and *uhulgallu*, ZA. 19,  
 378, 8.  
 21. ZA. 19, 378, 18 (restored).

## NISAN II

Day 7, K. 2514 Obv. 17.  
 ,, 14, K. 2514, Obv. 38.  
 ,, 19, K. 2514, Obv. 54.

## AYAR

No text known. Babylonian al-  
 manac, V Raw. 48 II for 28th  
 [*ud-gûl-*]gál *ma-gir*.

## SIVAN

- \*Day 7, K. 4068, &c. Obv. 121  
 (restored), has *úm la magir*.  
 \*Day 21, K. 4068, &c. Obv. II  
 44, has *úm la magir*.  
 \*Day 28, K. 4068, &c. Rev. I, 34  
 [*úm la ? magir*].



*Tenth-Century Assyrian**Seventh-Century Assyrian*

## TAMMUZ

## TAMMUZ

KAR. 178 VI 7-72 enters only *magir* and *la magir* days. No text known.

## AB

## AB

KAR. Rev. VI-V 8 enters *magir* and *la magir* only. No text known.

## ELUL

## ELUL I

KAR. Rev. V 9-IV 13 enters *magir* and *la magir* only. No text known.

## ELUL II

Day 7, IV Raw. 32 I, 29.  
 „ 14, *ibid.* II 14.  
 „ 19, *ibid.* II 40.  
 „ 21, *ibid.* Rev. I, 2.  
 „ 28, *ibid.* Rev. I, 34.

## TESHRIT

## TESHRIT

KAR. 178 Rev. IV 14-III 25 enters *magir* and *la magir* only. No text known.

## ARAHSAMNA

## ARAHSAMNA

KAR. 178 Rev. III 26-73 enters *magir* and *la magir* only. Day 7, IV Raw. 33\* I, 29.  
 „ 14, *ibid.* II 7 (restored).  
 „ 19, *ibid.* II 38 (restored).  
 „ 21, *ibid.* II 53 (restored).  
 „ 28, *ibid.* III 29.

## KISLEV

## KISLEV

KAR. 178 Rev. II 1-30 enters *magir* and *la magir* only. No text known.

## TEBIT

## TEBIT

KAR. 178 Rev. II 36-79 enters *magir* and *la magir* only. Here note day 7 *šabat utukki*, seizing by a ghost. Day 7, K. 2809 Obv. I 3.  
 „ 14 (broken away).  
 \* „ 19, K. 2809 Obv. II 2, *la magir*.  
 „ 21, *ibid.* Obv. II 14.  
 „ 28 (broken away).  
 Cf. Babylonian almanac, V Raw. 49 x, day 6 has *utukku aḫū ša taḫdē*, wicked ghost of destruction.

## SHEBAT

KAR. 179 Rev. II 1-7+178  
Rev. I, 1-19 enters *magir* and  
*la magir* only.

## SHEBAT

Day 7, K. 7082 Obv. I 26.  
,, 14 (broken away).  
,, 19, K. 11650 Obv. II 10.  
,, 21, K. 9479 Obv. II 8.  
,, 28, K. 7079 Rev. I, 14.

## ADAR

KAR. 178 Rev. I, 31-74; 179  
Rev. I, 1-4. Enters *magir* and  
*la magir* only, but *résumé* 178,  
Rev. I, 64-6 days [1], 7, 19, 21,  
24, [28], [29], 30 are 9 *uhul-*  
*gallu* days. In text I. 39, day 14  
*magir*; day 19 *la magir*, day 21  
*la magir*.

## ADAR

No text known for Adar I.  
Adar II, K. 4093.  
Day 7, Obv. I 20.  
,, 14 (broken away).  
,, 19, Obv. II 24.  
,, 21, Obv. II 84.  
,, 28, Rev. I, 15.

In the old calendar it will be seen from the entries \* that most of the *uhulgallu* days are also lucky days in both the old and reformed calendars; also the old calendar from Nisan entries and Adar *résumé* has nine of these days in each month and in Nisan every one of these is a rest-day except the 20th. In the seventh-century calendar *uhulgallu* is confined to the five rest-days which may be either lucky or unlucky. Hence *uhulgallu* or *úmu limnu* must mean simply 'dangerous', day when the rules cannot be broken without incurring severe punishment. According to Harper, *Lett.* 23, 21 the *uhulgallé* day is *la tábu*, 'not good', and on this day no *mašmašu* priest could say a prayer of the lifting of the hand. In the seventh-century calendar *uhulgallu*, then, refers to days 7, 14, 19, 21, 28. K. 106 = Bois-sier, DA. 100-2, Rev. I 21 says that Nisan 1, 4, 6, 8, 10, 11 have no *ud gé-gál* among them; Rev. II 20, no *ud gé-gál* in Shebat 1, 11, 13, 17, 22, 26; Rev. III 21, no *ud-gé-gál* in Adar 1, 3, 4, 8, 13, 15, 20, 22, 24, 28 (*sic*),<sup>1</sup> 30. Here *ud-gé-gál* must be for *ud-gul-gál* as in King, *Magic* 61, 12, Var. or it is the same as *ud* 𒀭𒀭 (gi-di) = *ú-mu na'duru*, dark, sad day, CT. 18, 30 A. 23.

<sup>1</sup> Read 29?

*bubulum*, day 29, KAR. 178 III 37; 176 Rev. II 9; Sivan, K. 4068 Rev. I, 33, day 28; Rev. I, 43, day 29; days 28+29, Elul II, IV Raw. 33 III 33+45; Arahšamna, days 28+29, IV Raw. 33\* III 28+39; Tebit, K. 2809 Rev. I, days [28] and 29. Shebat, K. 7079 Rev. I, days 28 and [29]; Adar II, K. 4093 Rev. I, days 28 and 29.

## CONTINUATION OF K. 6012

21. ud ki-sig-ga = *um* [*ki-is-pi*].<sup>1</sup> Day of the funeral offerings. (Day 29th = *bubulu*.)  
 22. ud tu-a = *um ri-im-ki*. Day of pouring out water (to souls of the dead), day 29.  
 23. ud sikil-e-de = *um te-lil-tum*. Day of purification, probably 6+16.

It is uncertain whether *um telilti* refers to only *one* day of the year or to more than one, or to certain days in each month.

(1) To the washing of Ishtar in Elul, day unknown. *ama* <sup>d</sup>Innini-e-ne <sup>d</sup>id-lu-RU-GU sikil-e-ne mu-bi in-lag-lag = <sup>d</sup>Ištarāti ina <sup>d</sup>Nāri utallala šattu-šu utabbaba, 'The Ishtars in the river wash themselves, yearly they cleanse themselves', KAV. p. 120, 17-18 = 20-1, comment on Elul. Hence *elēlu* and *ebēbu*, i.e. sikil and lag-lag, both mean to cleanse by washing.

(2) Teshrit 8, KAR. 177 Rev. II 42 = 147 Rev. 24 has a direction for the *man-ziz rubi*, assistant of the prince, lag-lag-meš šu-lug-si lag-lag = Bab. IV 107, 19 [*li-te-lil*] *lim-te-is-si* [*li-te-bi-ib*] = KAR. 177 Rev. I, 35; 'Let him purge himself, wash himself, cleanse himself.' On the 8th (?) of Nisan *te-lil-tum uš-te-šir*, 'one shall perform the ritual of washing correctly', SBH. 145, 2. It is probable from Arahšamna, IV Raw. 33\* I, 3, *šarru lim-te-si*, that the seventh-century calendar ordered the king to wash himself

<sup>1</sup> *ki-sig-ga* usually *kasāp kispi*, to perform the *kispu*, funeral feast. But also *kispu* only; *udu ki-sig-ga* = *immer ri-im-ki*, *ki-is-pi*, *kisikkī*, Chiera, LT. 44, I, 13-15; *ki-sig-ga ki-sip*, perform the *kispu*, Tebit 29th, K. 2809. Same time as the *um bubalu*, Von Soden, LT. I XI 109 = CT. 18, 23, K. 4397, 13.

on the *first* day of each month; Elul II, *ibid.* 32, 1, 4 broken away; at this line every fragment of the *enbu bēl arhim* series for various months is broken.

(3) *ûm tēliliti* may refer to *šubat-su* laḡ-laḡ, let him clean his garment, ex. KAR. 176 Obv. 1, 2 = 178 1, 9; IV Raw. 33\* 11 22 (day 16, *Arahsamna*) for which K. 8373 II 15 has *li-bi-ib* (without *šubat-su*), for *Sivan* 16th, i.e. *šarru* (*šubat-su*) *libib*, let the king clean his garment. K. 2514, 46, *šarru šubat-su li-[bi-ib]*, for *Nisan* II, day 16. Elul II, day 16, IV Raw. 32 11 27-30, omits this.

This rule for *Arahsamna* occurs in the omen, IV Raw. 33\* iv 19, 'If in A. the king cleans (washes) his garment his palace will attain old age'; same instruction for *Sivan*, K. 8373 Rev. 11 18 with omen, *libba-šu iṭāb*, 'his heart will be glad'. It does not occur in the omens for *Ṭebit*, K. 2809. In the tenth-century calendar *šubat-su* in-laḡ-laḡ is permissible in *Nisan*, *Ayar*, *Sivan*, *Ab*, *Teshrit*, *Arahsamna*, *Shebat*, *Adar*, KAR. 177 11 25-7; i.e. not in *Tammuz*, *Elul*, *Kislev*, and *Ṭebit*. Since *ebēbu*, *elēlu* both mean to wash, as proved by (1), (2) above, *ûm tēliltum* may refer to day 16 of the months cited above, when the washing of the king's garment is permissible in the seventh-century calendar. In the tenth-century calendar this is ordered for *Nisan* I, KAR. 176 1, 2; *Nisan* 16, KAR. 178 11 31; *Nisan* 27, KAR. 178 111 13; *Sivan* 6, KAR. 178 v 20; *Nisan* 6, 178 1, 47. In the *enbu* calendar, *Sivan* 6, K. 4068 1, 19. It is probable that *ûm tēliliti*, being a fixed day, refers to the washing of garments on the 16th of the eight months mentioned above, and to *Teshrit* 8, and to 6th of *Nisan* and *Sivan*. The 6, 16, 28 of *Nisan*, *Sivan*, *Elul*, *Teshrit*, *Arahsamna*, 16 and 28 of *Ṭebit*, 16 of *Shebat*, are all *šigû* days. It is clear that saying the *šigû* is connected with cleaning garments. KAR. 178 111 12-13 has cleaning garments and *šigû* on *Nisan* 27 also. *šigû iṣasi*, he shall recite a psalm, is ordered for *Nisan*, *Sivan*, *Ab*, *Teshrit*, *Arahsamna*, *Adar*, KAR. 177 11 28-9 immediately after the list for cleaning garments. It will be seen that *Ayar* and *Shebat*

do not permit the *šigû*, but order the cleaning of garments. It is clear from K. 2514, 14, *šigû-ú ul išessi(si) šubat-su ul ubbab*, (the king) 'shall not recite a psalm, he shall not clean his garments', that the two acts hang together and that when a *šigû* was forbidden, so was washing garments. The *šigû* in the old calendar occurs Nisan 6, 16, 27, 28; Sivan 6, 16 [28]; Elul 6, 16, 26, 28 with evil omen, since it was forbidden in Elul; Teshrit 28; Arahsamna 6, 16, 26, 28; Tebit 6 (*sic*). It is prohibited Nisan II 6, 16, 28; Ayar 6, 16, 28; Tammuz 6; Kislev 6, 16, [28]; Tebit 16, 28.

The *enbu* calendar so far as preserved has *šigû* Nisan II 16; Sivan 6, 16, 28; Arahsamna 6, 16, 26, [28]; Shebat 6. Prohibited Nisan II 6; Elul II 6-16; Shebat 28.

## K. 6012

24. ud-ezen = *ám i-sin-nu*.<sup>1</sup> Day of fixed festival (days 22, 23, 24, 27).  
 25. ud-éš-éš = *ám eš-še-e-šu*.<sup>2</sup> Festival day (of Nabû, days 4, 8, 17).

<sup>1</sup> In Hammurabi period six *ezen* yearly, CT. 4, 45 c 5; in 8, 41 c 13, there are three yearly *ezen*; also 8, 37 A 7; 8, 42 c 12; 6, 44 A 12; 6, 48 B 15, three *ezen* of Shamash yearly; four *ezen* of Shamash, 2, 41, 35; three in BE. vi 42, 11. The New Year festival, *zagmuk*, is called *nig-ezem-ma*, Reisner, TU. 308 II 6. Each month had some great *ezen* from which the month was often named in Sumerian, *ezen-an-na*, *ezen*-<sup>d</sup>*Mekigal*, *ezen*-<sup>d</sup>*Negun*, *ezen*-<sup>d</sup>*Bau*, &c. The three great Shamash feasts were in the months *Huntu* (Nisan), Ab, and Arahsamna, CT. 32 XI 15-19 (Manistusu). These are fixed feasts. In the seventh century *enbu bêl arhim* menology the *isinnu* of Shamash and Adad falls on the 23rd of all months where the texts are known; of <sup>d</sup>Ninegal on the 22nd; of <sup>d</sup>Enegal and <sup>d</sup>Ninegal on the 24th; of the River-goddess, Nisan 26, KAR. 178 III 1 (restored), but 27th day in all known texts of *enbu bêl arhim*.

<sup>2</sup> In the old calendar, Nisan 4, *eššešu* of Nabû; Nisan 8, of <sup>d</sup>Maḥ; Nisan 17, *eššešu* simply, but offerings to Sin and Ningal, Gula, god and goddess of his city; KAR. 178 and 176. In the seventh-century calendar the days 4, 8, 17 of all the months are *eššešu* days to Nabû, with offering at night to Nabu and Tašmet. Nisan II 4, K. 2514, of Nabu and Marduk; Sivan 4, K. 4068; Elul II, IV Raw. 32 I 16; Arahsamna, IV Raw. 33\* I 16; Shebat, K. 7082 I 15; Adar II, K. 4093 I 8. Nisan II 8, K. 2514, to Nabû; Sivan 8, K. 4068; Elul II 8, IV Raw. 32 I 39; Arahsamna, 8, IV Raw. 33\* I 38; Tebit, 8, K. 2809; Shebat 8, K. 7082.

26. *ud ud-sar* = *ûm ar-ûi*. Day of the new moon.  
 27. *ud á-ki-it* = *ûm akítum*.<sup>1</sup> Day of the New Year procession,  
 Nisan 10.

CLAY, *Morgan*, IV 34 Obv. I

1. . . . .

2. [ud] eš-eš = *eš-[še-e-šu]* = K. 6012, 25.  
 3. *ud ud-sar* = *ar-[hu]* = K. 6012, 26.  
 4. *ud á-ki-it* = *a-[ki-tu]* = K. 6012, 27.  
 5. *ud-da-zal-la* = *uddazallû*. Dawn. Longest day.<sup>2</sup>  
 6. *ud-da-bu-la* = *uddabulû*. Sunset (?). Shortest day?  
 7. *ud gid-da* = *û-mu na[m-ru]*. Bright day, 20th day.<sup>3</sup>

Adar II 8 (restored), K. 4093. Nisan II 17, to [Nabû] and Marduk, K. 2514, with offerings to Nabû and Tašmet; Sivan 17, K. 8373, to Nabû and [Tašmet]; Elul II 17, IV Raw. 32 II 31, to Nabû and Tašmet; Arahšamna 17 (broken away); Shebat 17 (broken away); Adar II (broken away).

Therefore in the Assyrian calendar *eššêšu* is exclusively used of days 4, 8, 17, and in King, *Magic*, 61, 11 *ud éš-éš* must refer to these days. In Sumerian it is used of days 7 and 15; for day 7 see *éš-éš é ud* 7, Nikolski, *Ur*, 471, 4; for day 15, Legrain, *Ur*, 89, 9; 279, 3; PBS. VIII 60, 6; Legrain, 111, 7 + 3; Nies, *Ur*, 174, 4; on *ud-sar*, new moon day and 15th, Nies, 39, 2; Lau, OBT. 251 II; on *ud-sar*, Legrain, 41, 14; 346, 12.

<sup>1</sup> *akítu* does not occur in the calendars. Usually it means the New Year festival in Nisan and Teshrit, also the temple especially built for the procession to it outside the city. See Thureau-Dangin, *Rit.* 86-8; Landsberger, *Kal.* 79; Pallis, *The Babylonian Akítu*. In the syllabary the *akítu* day is probably Nisan 10, day of the procession to the *bit akítu*, VAB. IV 283, IX 3-10; *uštêšir ana kirib é-sizkur-ra*, 'he (Marduk) goes in procession to the house of sacrifices' on the 10th of Nisan, SBH. 145, 4; II. 3-6 are directions for Nisan 10. *é-sizkur* = *bit ikribi*, Langdon, *Epic of Creation*, 204, 99.

<sup>2</sup> The Nineveh prism makes the longest day 16 real hours, but *uddazallû* as longest day is 14<sup>hr.</sup> 24', RA. 28, 16; another sense is *uddazallû* =  $\frac{3}{20}$  of a day or 3<sup>hr.</sup> 36', OLZ. 1917, 264.

<sup>3</sup> Also Von Soden, LT. I XI 108, [ud-da]-gid-da = *ûmu n[am-ru]* restored by CT. 18, 23 K. 4397, 12. [ud-da]-gid = *ûmu nam-rum*; this compared with l. 8 should mean 'long day', 'summer day', but the evidence excludes any such meaning. *ud-lâg* = *ûmu nam-ru*, CT. 18, 30 A 24 is obviously the same day, and *ud-lâg* describes the 20th of Nisan II, K. 2514; 20th of Elul II, IV Raw. 32-3; 20th of Arahšamma, *ibid.* 33\*; 20th of Shebat, K. 11650; 20th of Adar II, K. 11650. Nisan I, day 20, omits it, ZA. 19, 378, 13; Tebit 20 omits it, K. 2809. Obviously

8. ud gūd-da = (*û-mu*) *ku-ru-û*. The short day. (Winter.)  
 9. ud á-[mi-b]i = *ša-am-ša-a*. Twilight.  
 10. ud-da-bi = [*û-mi-*]*šam*. Daily.  
 11. ud-gub-ba = *tur-(ri!)-rum*. Midday? The turning?  
 12. ud-gam-ma<sup>1</sup> = *kid-da-at û-mu*. 'Sinking of the day', Sunset.  
 13. itu = *ár-ḫu*. Month.  
 14. itu-šú = *a-na arḫi*. Monthly.  
 15. ud-itu-šú = *a-na û-mu arḫi*. Daily in the month.  
 16. sag-itu-šú = *a-na ri-eš arḫi*. At the beginning of the month.  
 17. egir itu-šú = *a-na ár-kat arḫi*<sup>2</sup>. At the end of the month.  
 18. ud kàš-ám = *û-mu li-is-mu*. 'The fleeting day'?<sup>3</sup>  
 19. ud-sar = *ár-ḫu*. Month = Day of new moon.  
 20. sag-ud-sar = *ri-eš ár-ḫi*. Beginning of the month.  
 21. zag-mu = *zagsmuku*. New Year.

Here follows the Nippurian list of month-names with Accadian renderings. Obv. II is a broken duplicate of Col. I.

VAT. 10068 XI = Von Soden, Lex. Tab. No. 1 and  
 K. 4397 = CT. 18, 23.

- K. 4397, 6. . . . = *û-mu pa-ni*. Yesterday? Heretofore.  
 7. . . . = *ûmu maḫ-ri*. Formerly.  
 8. . . . = *ûmu maḫ-ri*. „  
 9. . . . *a-nu: ûm maḫ-ri: û-sur-um* = *ûm maḫ-ri*.  
 (Var. XI 106) 10. [*û-um*] *a-da-nu* = *û-mu ma-lu-û-tum* (Var. *ti*).  
 Fixed day = full days, appointed time.  
 (Var. 107) 11. [*û-mu ra-*]*ḫu-u* = *ûmu mar-šu*.<sup>4</sup> Day that *be-witches* = difficult day.

'long day' in Shebat is excluded. The 20th is always a day sacred to Sin and Shamash with exception of Nisan I 20, so far as the texts are known. In CT. 2, 18 the *ud-da-gid-da* days are *našḫu*, 'omitted', and by comparing the accounts (see Langdon, *Drehem*, 13 n. 7) and assuming that *uddagidda* is the 20th it appears that Ab 20 was *namru*, Teshrit 20 and Tammuz 20 were not *namru*. Hence so far as our sources go the *namru* months are Nisan II, Elul and Elul II, Arahsamma, Shebat, [Adar], and Adar II, Ab. Not *namru* are Nisan I, Tammuz, Tebit. Ayar, Sivan, and Kislev cannot be described, as no text for day 20 exists in the *enbu* series.

<sup>1</sup> Cf. KAR. 267, 3; 184, Rev. 17; ZA. 16, 160, 25.

<sup>2</sup> Cf. *egir-mu* = *arkat šatti*, end of the year.

<sup>3</sup> From context this should be 'calculated conjunction' of moon and sun, day before new moon is visible.

<sup>4</sup> Difficult day, probably refers to days marked *ana marši naḫutu*, a

- (Var. 108) 12. *ud-gid-(da)* = *úmu nam-rum*. Bright day, 20th.  
 (Var. 109) 13. *ú-um ki-is-pi* = *úmu bu-bu-lum*. Day of the parentalia = day of the moon's ravishment.  
 (Var. 110-111) 14. [*úm*] *nu-bat-ti*: *úm bubulum*: *úm i-dir-ti* = *úm bubulum*.<sup>1</sup> Day of night ceremony = day of moon's ravishment; day of gloom = *idem*. Days 3, 7, 16, ceremony on nights preceding daylight.

day difficult for the sick, KAR. 178, I, 2, Nisan 1; 178, I, 50 (*na-ku-ut*), Nisan 7; 176 II 17, Nisan 14; 176 Rev. 16, Nisan 19; also Nisan 21 and 28. In other words, in the tenth-century calendar all days *uhulgallu* and days when a physician may not tend the sick, i.e. 1, 7, 14, 19, 21, 28, are marked *ana marši naḫut* (*naḫud*, Arab. *naḫada*, cf. IV Raw. 38 II 20). The formulae for Nisan are extended to all the other months by inference in the old calendar. But what is *raḫú*? Days 7, 14, 19, 21, 28 omit this rubric in the new calendar.

<sup>1</sup> Here *úm nabatti* is explained by day of the moon's darkness, which disagrees entirely with both old and new calendars. This note is found for days 3, 7, 16 only, in KAR. 178, I, 21 (Nisan 3) = 176, I, 13, for Marduk; 178, I, 48 (Nisan 7) for Ea; 178 II 24 = 176 II 36 (Nisan 16) for [Marduk?]. Since the colophon of Nisan states that the general rubrics for Nisan apply to all other months, days 3, 7, 16 were already fixed as *nubattu* days in Babylonia before the tenth century. The reformed calendar of Ašurbanipal has the same entries for these days, but abbs that service is *by night* on Nisan II 3 (*Marduk and Zarpanit*) with offerings *ina múši* to *Marduk* and *Ishtar*, K. 2514, 7-8; *ibid.*, day 7, *Marduk* and *Zarpanit* with same night-offerings; *ibid.*, day 16, precisely the same. Sivan 3, 7, 16 on K. 4068; Elul II, IV Raw. 32-3, all have identical instructions for days 3, 7, 16. Arahšamna, IV R. 33\* has the same for days 3, 7, but for 16, *nubattu* of *Marduk* and *Zarpanit* is followed by offering in the *morning* to *Shamash*, *Bêlit-mâtâti*, *Sin* and *Maḫ*. *Tebit*, K. 2809 (day 3 lost); day 7 identical with *Nisan* (day 16 lost). *Shebat*, K. 7082, *Adar* II, K. 4093, identical with *Nisan*. Since these are all *Marduk* ceremonies, *Marduk* is *bêl nu-bat-ti*, lord of the night-ceremony, *Maḫlu* II 157; VII 19. Since days 4, 8, 17 are *eššêšu* days and among days when one prays for the soul of the king (*úm nu-bat-ti úm eššêši* occur together, *King, Magic*, 61, 11), it has been suggested that this is a service of preparation for the festal days (of *Nabû*); so *Landsberger, Kal.*, after *Lotz* and *Steinmetzer*. This theory is ruined by the fact that the days began in the evening. *Harp. Lett.* I 23 Obv. 19, *ina nu-bat-ti* seems to mean simply 'by night' = Rev. 1, *ina ši-a-ri ina nu-bat-ti mu-šu ša úmi 15-kam*, in the morning (and) at the *nubattu* of night on the 15th. *úmu 10-kam ina nu-bat-ti*, on the 10th by night, ritual



- (Var. 112) 15. *ûm (û-um) ib-bu-u = û-um ug-ga-ti (tû)*. Day of wrath. Day 19.
- (Var. 113) 16. *ûm (û-um) ib-ba-ra (îp-pi-ri) = ûm ri-îi-iš-ti<sup>2</sup>. Adad.*<sup>1</sup> 'Day of the storm' = 'Day of the downpour of Adad'.
- (Var. 114) 17. *ûm (û-um) nu-uḫ lib-bi = ša-bat-tum*. Day of the resting of the heart = The divider, day 15.
18. *su-um-mu = si-ma-nu*. Fixed season.
- (Var. 115) 19. *sa-ḫar û-me = li-la-a-tum(te)*, Turning of the day, evening.
- (Var. 116) 20. *tam-ḫu-û(u) = lîlātu*. Evening.
- (Var. 117) 21. *ša-an-ša-la<sup>2</sup> = ištu ûm šalšî*, since three days = day before yesterday.
- (Var. 118) 22. *am-ša-la = mu-šam-ma*. Yesterday.
- (Var. 119) 23. *û-ku-nu-ru-û(u) = ti-ma-li(lu)*. Yesterday.<sup>3</sup>
- (Var. 120) 24. *ti-ma-li(lu) = mu-šam-ma*. Yesterday.
- (Var. 121) 25. [*û-gu-di-lu-]u = iš-ten û-me*. Day after to-morrow.<sup>4</sup> Lit. 'one day'.
- (Var. 122) 25<sup>b</sup>. *ul-la(lu)-tiš = išten ûme*.<sup>5</sup>
- (Var. 123) 26. [*iš-tu]ul-la-nu = iš-tu ša-a-ti, iš-tu ul-li-e*. Since long ago.
- (Var. 124) 27. *še-ir-tum(tû) = ka-ša-a-tum(tû)*. Morning, cool of the morning.
- (Var. 125) 28. *ka-aš-šu, ka-am-šu = mu-uš-la-lu*. Midday. Siesta.

of the *kanûnu*, brazier, *ibid.* 49, 14-15. A ritual *ina nu-bat-ti* on the 11th day, *ibid.* 15, 7; on the 25th, 612, 5. See, further, Behrens, *Briefe*, 101-3, where other examples of *nubattu* (contrasted with *šiaru, šáru*, morning) prove that it means 'night' simply. Also 'rest by night', 'halt for night-rest', *ibid.* 104; Streck, *Assurb.* II 72 n. 5.

<sup>1</sup> This has some reference to a specific day. *ibbara* for *imbara = imbaru*, storm, loan-word *ippiru, ibbaru* (Clay, *Atarhasis*, Pl. I Col. II 70). The only day sacred to Adad is the 6th, but why should any special day be called 'storm or downpour of Adad'? Does this refer to the *šigû išassi*, 'he shall chant a lament', usually ordered for the 6th day?

<sup>2</sup> See *AJSL.* 28, 226, 50. Same as *iš-tu am-ša-li*, Poebel, *PBS.* v 152 XI 12.

<sup>3</sup> *ukunurû*, loan-word from *û-ku-nu-ri-a*, *PBS.* v 152 XI 7; *ZA.* 4, 155, 15.

<sup>4</sup> So Meissner (after Landsberger), *Beiträge* II, p. 2. So restore *PBS.* v 152 XI 2.

<sup>5</sup> *ul-li-ti-iš*, *PBS.* *ibid.* 3 = [ud]-tiš-ta? Hence a Sumerian word *ul*, syn. *ug* = day.

- (Var. 126) 29. *ka-ra-ru-u* = *mušlalu*. Siesta.  
 29b. *a-ši-tum*<sup>1</sup> = *mušlalu*. Siesta.

## CULT-DAY NAMES

To this list the *šadāhu* or procession-day must be added, on which none of the syllabaries has any comment, nor does the list of instructions for the months, KAR. 177, mention it. This falls invariably on the 25th of all months of the *enbu bêl arhim* series where a text for this day is available. In the old calendar of Nisan this day is broken away on both texts, KAR. 176 and 178. For *Sivan* 25, K. 8372 has *ša-da-hu ša* <sup>d</sup>*En-lil* <sup>d</sup>*Ištar-Bâbili* (*ki*) *ka-ri-it ilâni*, 'Day of the procession of Enlil and Ishtar of Babylon, banquet of the gods'. By night the king must set forth food-offering to Enlil before <sup>mul</sup>Apin (Triangulum) and to Ishtar of Babylon before <sup>mul</sup>Margidda (Ursa Major). For *Elul* II, day 25, IV Raw. 33 III 22-5 has the same rubric,<sup>2</sup> omitting 'banquet of the gods'; *Arahsamna* 25 in IV Raw. 33\* III 15-19 is the same as *Elul* II, but adds that the king may not go out into the street. *Shebat* 25 on K. 7079 Rev. I 1-4 in a broken text has *šadāhu* of [Enlil] and [Belit-Bâbili]; offerings by night to Enlil before <sup>mul</sup>Apin, to [Bêlit-Bâbili] before <sup>mul</sup>[Margidda]. *Adar* II day 25 on K. 4093 Rev. I 4-7 in a broken passage is the same as *Shebat*.

It is probable that this procession of Enlil and Ishtar of Babylon, or Bêlit of Babylon occurred on the 25th of every month in both old and new calendars, since Margidda is the star of Ninlil,<sup>3</sup> CT. 33, I, 15; OECT. VI 75, 14.

In *Bab.* VI 157, <sup>mul</sup>Apin is indicated by seven stars, hence it includes Pleiades, and is the star of Enlil, CT. 33, I, 1, restored by V Raw. 46 A 1, <sup>mul</sup>*apin a-lik pa-ni kakkabâni šu-ut* <sup>d</sup>*En-lil*, 'the Plough Star which goes before the stars of Enlil', in V Raw. 46 identified with <sup>d</sup>Ašur = Enlil. Since this star governs the third decan of Nisan in the Astrolabe Pinches, Kugler, *Sternk.* I 230 and KAV. p. 123, I, it is

<sup>1</sup> Or pseudo-ideogram, *a-ši-ib*?    <sup>2</sup> *Be-lit-Bâbili* instead of *Ištar-Bâbili*.

<sup>3</sup> Replaced by Ishtar of Babylon, or Queen of Babylon in the calendars.

obvious that its connexion with Nisan 25 in the Taurus period must have been the original reason for a ceremony to Enlil on this day. Before 700 B.C. this star in an ideal year rose in Nisan and opened the year. It is difficult to see why Nisan 25 should have been chosen as the day to honour Enlil and Ninlil (= later *Bélit* of Babylon). From Nisan the ceremony then spread to the other months.

The results reached by the priesthood of the last calendar issued by them are formal, stiff, Pharisaic. The life of man was now entirely controlled by phases of the moon. Nineteen of the days of each month had special names. Gloomy day meant days of rest, washing-day meant days 6 and 16 when the king could clean his garments, 'day of pouring out water' meant the 29th, when during the moon's eclipse water was poured for the souls of the dead. All festivals of hoary antiquity based upon monthly myths are now fixed days and associated with stars. One could read here when it was permissible to marry, build a house, dig a well, recite a psalm, buy and sell, go on a journey, or sweep the house. Any conceivable act of man on any of the 354 days of the lunar year was governed by this complicated calendar. The king's life must have been as severe as that of a priest in the most ascetic of Christian orders. He seems to have been chosen to represent the piety of the whole nation. Indeed, if any king actually fulfilled all the orders appointed for him in these Babylonian calendars he could have time for little else. The layman is hardly ever mentioned here; probably he was satisfied that the head of his Church, the great royal high priest, did all the piety necessary for the nation.

The fact is, however, that the swarms of priests of many orders, who thronged the temples of Sumer, Babylonia, and Assyria, were really those who kept the letter of the law. On all matters of procedure they consulted these calendars. Observation of the law rather than the spirit of justice and mercy was inherited by the Pharisees, and their strict adherence to the rule of rest-days still regulates the manners of a great part of mankind to this day.

## ADDENDUM

### THE PRE-SARGONIC CALENDAR AT UR

By the courtesy of Mr. Woolley and the Trustees of the British Museum I have been permitted to see fifty-two tablets from Ur and the copies by Father Eric Burrows, who has kindly placed his own results at my disposal. This group of texts comes from the period of the pre-Sargonic tablets from Lagash and date *circa* 3000–2800 B.C. The information is particularly valuable since these tablets provide the first opportunity to trace the important Ur calendar before the last dynasty of Ur in the twenty-fourth century. The following month-names occur in these texts.<sup>1</sup> Names marked \* do not occur in the calendar of the third dynasty.

(1) <sup>iii</sup>*izi-UM-ka*, No. 46. This text has a list of sacrifices. Col. I 3, one bull for the *udu(LU)-izi-UM*; col. II 3–6, one bull and three lambs *izi-UM-ka* in the *kisal-maġ*, 'great court', for the goddess Innini. Col. IV 3–4 has ten ewes, the *maš-da-ri-a izi-UM-šú*, 'tax for the *izi*-festival'.<sup>2</sup> Since this tablet is dated <sup>iii</sup>*izi-UM-ka*, and UM is rendered by *isinnu*,<sup>3</sup> the month should be read, despite the order of signs, *iti-ezén-izi*; *udu-izi-UM* = *udu ezén-izi*, where *udu* stands for *iti*, *itu*; *izi-UM-ka* = *ezén-izi-ka*; *izi-UM-šú* = *ezén-izi-šú*, 'for the festival of *izi*'. No. 39 has a list of sheep and lambs, *maš-da-ri-a izi-UM-izi-gar-šú* (read *ezén izi-izi-gar-šú*), i.e. 'tax for the festival of the torch', and is the same as the Nippurian month <sup>iii</sup>*izi-izi-gar*, or Abu, fifth month, and the *ezen a-bi*, 'festival of firewood', in Babylonia.<sup>4</sup> The Sumerians at Ur had, therefore, this same midsummer festival, and in the time of the last dynasty they changed the name to 'month of the festival of the god Ninazu', for mythological reasons.<sup>5</sup>

(2) <sup>iii</sup>*d-ki-ta-ka*, No. 44. This is the month of the *akitu* or New Year festival at Ur, Teshrit, a name also current for this month in the later Ur calendar.<sup>6</sup>

\* (3) <sup>iii</sup>*ezen-maġ-d-Nin-é-gal-ka*, No. 47. 'Month of the great festival of Ninegal.' This is probably the source of the early Assyrian name of the sixth month *arah* <sup>d</sup>*Belti-elkalli*.<sup>7</sup>

(4) <sup>iii</sup>*ezen-maġ-d-Nannara-ka*, Nos. 41, 45. No. 45 also mentions

<sup>1</sup> Numbers refer to Burrows's edition.

<sup>2</sup> Cf. Reisner, TU. 276, dates for the *maš-da-ri-a* of the *akiti* festival.

<sup>3</sup> CT. 41, 26, 21.

<sup>4</sup> See p. 124, n. 3

<sup>5</sup> See p. 20, and Langdon, *Drehem*, p. 10.

<sup>6</sup> See p. 98.

<sup>7</sup> See p. 34.

*ezen-mag*-<sup>d</sup>*Nannara-ge* (without *iti*), and has sacrifices to <sup>d</sup>Innini and <sup>d</sup>Nannar. This is probably the origin of the month *ezen-mag* in the later Ur calendar.<sup>1</sup> In this month fell the *nabrú*, at Ur, and No. 17 has an account of sheep for the *ezen-sag-ú*. Now *sag-ú* means *barú*, 'to behold',<sup>2</sup> and consequently this is the 'festival of the *nabrú*', thus proved to be pre-Sargonic at Ur.

(5) <sup>iii</sup>*šu-Eš*<sup>3</sup>-<sup>d</sup>*Nannara-ka*, No. 13. This is the original of the eighth or ninth month *šu-Eš-ša* in the later Ur calendar.<sup>4</sup> 'The *šu-Eš* of Nannar' is a complete mystery, the meaning of *šu-Eš* is unknown and cannot possibly have any connexion with a 'third' month reckoning from *akitu*.

(6) <sup>iii</sup>?<sup>5</sup>-*sag-kú-ka*, No. 43. This name did not survive in the later Ur calendar.

\* (7) <sup>iii</sup>*AB-PEŠ-kú*-<sup>d</sup>*En-ki-ka*, No. 15.

\* (8) <sup>iii</sup>*kuda*<sup>6</sup>-*ka*, No. 13.

\* (9) <sup>iii</sup>*amar-kàr*?<sup>7</sup>-*ka*.

\* (10) In No. 38 there is a festival, *ezen-mag*-<sup>d</sup>*Nin-EZEN x LA*, 'great festival of the goddess X'. This deity is identical with Ningal, the Moon-goddess.

Combining this list with twelve names in the calendar of the third dynasty,<sup>8</sup> it will be seen that there were five festivals of eating various animals at Ur, all of which gave their names to months. Since Ur was the principal centre of the cult of the Moon-god, Nannar, and the Moon-goddess, Ningal, it is natural that three of the pre-Sargonic month-names refer to feasts in honour of these deities.

<sup>1</sup> See p. 136, and p. 30.      <sup>2</sup> RA. 11, 146, 36.      <sup>3</sup> Written .

<sup>4</sup> See p. 130.      <sup>5</sup> The sign is defaced; the traces resemble *SIZKUR*.

<sup>6</sup> Sign TAR. This may be for *šegurkud*.

<sup>7</sup> Defaced, *kàr*, *am*, or *NE*?

<sup>8</sup> Langdon, *Drehem*, 15, list E.

## LIST OF ABBREVIATIONS

- AB. *Altorientalische Bibliothek*, by Ebeling, Meissner, Weidner.  
AJSL. *American Journal of Semitic Languages*.  
AKA. *Annals of the Kings of Assyria*, by L. W. King.  
AKF. *Archiv für Keilschriftforschung*, ed. Weidner.  
AOF. *Archiv für Orientforschung*, ed. Weidner.  
APR. *Beiträge zum Altbabylonischen Privatrecht*, by Meissner.  
ASKT. *Akkadische und Sumerische Keilschrifttexte*, by P. Haupt.
- BA. *Beiträge zur Assyriologie*.  
Bab. *Babyloniaca*, ed. Charles Viroilleaud.  
*Babylonian Liturgies*, by S. Langdon.  
*Babylonian Wisdom*, by S. Langdon.  
BE. *Babylonian Expedition of the University of Pennsylvania*.  
Behrens, *Briefe. Assyrisch-babylonische Briefe*, by E. Behrens, LSS. II, 1.  
BL. *Babylonian Liturgies*, q.v.  
BSGW. *Berichte der philologisch-hist. Klasse der Kgl. Sächsischen Gesellschaft der Wissenschaften*.
- Chiera, LT. *Sumerian Lexical Texts*, by Edward Chiera.  
Chwolsohn, *Die Ssabier und der Ssabismus*.  
CIG. *Corpus Inscriptionum Graecarum*.  
CIS. *Corpus Inscriptionum Semiticarum*.  
Clay, Morgan. *Babylonian Records in the Library of J. Pierpont Morgan*, by A. T. Clay.  
Contenau, *Umma. Umma sous la Dynastie d'Ur*, by G. Contenau.  
Craig, RT. *Religious Texts*, by J. A. Craig.  
CT. *Cuneiform Texts*, published by the British Museum.
- DA. *Documents assyriens*, by A. Boissier.  
Del., HW. Friedrich Delitzsch, *Assyrisches Handwörterbuch*.  
Dél. Per. *Délégation en Perse*. Texts edited chiefly by V. Scheil.  
DP. *Documents présargoniques*, by Allotte de la Fuÿe.
- Genouillac, *Dréhem*. H. de Genouillac, *Tablettes de Dréhem*.  
*Inv. Inventaire des Tablettes de Tello*.
- JA. *Journal Asiatique*.  
Jeremias, AG. Alfred Jeremias, *Handbuch der altbabylonischen Geistes-  
kultur*, second edition. Or HB.  
JRAS. *Journal of the Royal Asiatic Society*.
- KAH. *Keilschrifttexte aus Assur Historischen Inhalts*.  
KAJI. *Keilschrifttexte aus Assur Juristischen Inhalts*, by E. Ebeling.

- KAR. *Keilschrifttexte aus Assur Religiösen Inhalts*, by E. Ebeling.  
 KAT. *Keilschrift und Altes Testament*, 3rd ed., by H. Zimmern.  
 KAV. *Keilschrifttexte aus Assur Verschiedenen Inhalts*, by O. Schroeder.  
 KB. *Keilschriftliche Bibliothek*.  
 King, *Creat. The Seven Tablets of Creation*, by L. W. King.  
 KÜchler, *Med. Friedrich KÜchler, Beiträge zur Kenntnis der Assyrisch-Babylonischen Medizin*.  
 Kugler, *Sternk. F. X. Kugler, Sternkunde und Sterndienst*.  
 Landsberger, *Kal. Der Kultische Kalender der Babylonier und Assyrer*.  
 Lau, *OBT. Julius Lau, Old Babylonian Temple Records*.  
 LC. *Lettres et Contrats*, by F. Thureau-Dangin.  
 Legrain, *Ur. Temps des Rois d'Ur*, by Leon Legrain.  
 Lewy. Julius Lewy, *Die altassyrischen Rechtsurkunden vom Kültepe*.  
 LIH. *Letters and Inscriptions of Hammurabi*, by L. W. King.  
 LSS. *Leipziger Semitistische Studien*, ed. Zimmern and Landsberger.  
 Lyon, *Sargon. Keilschrifttexte Sargon's*, by D. G. Lyon.  
 MAG. *Mitteilungen der Altorientalischen Gesellschaft*, ed. Meissner.  
 Maqlú. *Die assyrische Beschwörungsserie Maqlú*, by K. L. Tallquist.  
 Meissner, *Beiträge. Beiträge zum Assyrischen Wörterbuch*, by B. Meissner.  
 MVAG. *Mitteilungen der Vorderasiatischen Gesellschaft*.  
 NSI. *North Semitic Inscriptions*, by G. A. Cooke.  
 Nikolski. *Documents of Economic Accounts of the most Ancient Period of Chaldea*. Nikolski II, same title, period of Agade and last dynasty of Ur, by M. V. Nikolski (Russian).  
 OECT. *Oxford Editions of Cuneiform Texts*.  
 OLZ. *Orientalistische Literaturzeitung*.  
 PBS. Publications of the Babylonian Section of the University Museum, Philadelphia.  
 Pinches, *Amherst. The Amherst Tablets*, by T. G. Pinches.  
 PRSM. *Proceedings of the Royal Society of Medicine*.  
 PSBA. *Proceedings of the Society of Biblical Archaeology*.  
 RA. *Revue d'Assyriologie*.  
 Radau, *EBH. Early Babylonian History*, by Hugo Radau.  
 Raw. I, II, III, IV, V. *Cuneiform Inscriptions of Western Asia*, founded by Sir Henry Rawlinson, copied by George Smith, Edwin Norris, and T. G. Pinches.  
 Reisner, *TU. Tempelurkunden aus Telloh*, by G. Reisner.  
 RT. *Recueil de Travaux*, ed. Maspero.  
 RTC. *Recueil de Tablettes Chaldéennes*, by F. Thureau-Dangin.  
 SAI. *Seltene assyrische Ideogramme*, by B. Meissner.  
 SBH. *Sumerisch-Babylonische Hymnen*, by G. Reisner.

- SBP. *Sumerian and Babylonian Psalms*, by S. Langdon.
- Schneider, *Drehem. Die Drehem- und Dfoha Urkunden*, by N. Schneider.  
*Analecta Orientalia*.
- Sem. Myth. *Semitic Mythology*, by S. Langdon.
- Streck, *Assurb. Assurbanipal und die letzten assyrischen Könige*, by M. Streck.
- Studia Orientalia*, usually referred to as *Tallqvist Volume*. Societas  
Orientalis Fennica. Volume of essays dedicated to Knut Tallqvist,  
Helsingfors, 1925.
- Tallqvist Vol.* See *Studia Orientalia*.
- Tammuz and Ishtar*, by S. Langdon.
- Thompson, *Rep. Reports of the Magicians and Astrologers*, by R. C.  
Thompson.
- Thureau-Dangin, *Rit. Rituels Accadiens*, by F. Thureau-Dangin.
- *Syl. Acc. Le Syllabar Accadien*.
- *Uruk. Tablettes d'Uruk*.
- Ungnad, *Briefe. Babylonische Briefe*, by A. Ungnad, VAB. VI.
- Uruk.* Refers to Thureau-Dangin, *Tablettes d'Uruk*.
- VAB. *Vorderasiatische Bibliothek*.
- VAT. Museum signature for tablets in the Royal Museum, Berlin,  
Vorderasiatische Abteilung.
- Vir. *Ishtar, Sham., Astrol. Suppl.*<sup>1</sup>, *Suppl.*<sup>2</sup> Refers to various parts of  
Charles Virolleaud's *Astrologie Chaldéenne* and the *Supplément*, parts  
one and two.
- Vir. *Frag. Fragments de textes divinatoires*, by Charles Virolleaud.
- Von Soden, LT. *Die lexikalischen Tafelserien der Babylonier und Assyrer*,  
by W. von Soden.
- VS. *Vorderasiatische Schriftdenkmäler*.
- Weidner, HB. *Handbuch der Babylonischen Astronomie*, by E. F. Weidner.
- Winckler, *Sargon. Die Keilschrifttexte Sargons*, by Hugo Winckler.
- WVDO. *Wissenschaftliche Veröffentlichungen der Deutschen Orientgesellschaft*.
- YOS. *Yale Oriental Series*.
- ZA. *Zeitschrift für Assyriologie*.
- ZDMG. *Zeitschrift der Deutschen Morgenländischen Gesellschaft*.
- Zimmern, *Beiträge. Beiträge zur Kenntnis der babylonischen Religion*, by  
Heinrich Zimmern.
- Zimmern, *Fremdw. Akkadische Fremdwörter*, by H. Zimmern.
- Zimmern, *Rt. Ritualtafeln für den Wahrsager, Beschwörer, und Sänger*, by  
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