terrestrial and celestial order in ancient Mesopotamia, in: R. J. A. Talbert (ed.), Ancient perspectives: maps and their place in Mesopotamia, Egypt, Greece, and Rome, 9–46. – Weidner E. F. 1967: Gestirndarstellungen. – Wilson M. 2008: Education in the earliest schools: cuneiform manuscripts in the Cotsen Collection. – Wiseman D. J. 1972: A Babylonian architect?, AnSt. 22, 141–147.

P. Mander

Zeit (time). A. In Mesopotamien.

§ 1. Time in general. – § 2. Cyclical time. – § 3. Linear time.

§ 1. Time in general. The most common word for "t." in Sum. and Akk. is u$_4$/ūmu. The basic meaning of both words is "day", but they can also mean a specific moment in t. (CAD U/W 144–148 s. v. 1b) and, mostly in the plural, a span of t. (ibid. 150–153 1d). The latter meaning includes the general notion of t., e. g., when something is built or established *ana dārîš ūmī* etc. "forever" (ibid. 152f. 1d5′). In a similar sense, but more rarely, the plural of *šattu* "year" also denotes long duration (CAD Š/2, 205 s. v. 1j4′), e. g., *kalû šanātim* "all years" = "forever".

The statement of von Soden 1974, 37 (also Wilcke 1982, 33) that there is no separate word for "t. in general" in Akk. is correct but of limited significance, because the pl. *ūmū* "days" fits this notion well. The question is not so much a gap in the lexicon but rather the scarcity of statements about "t. in general", e. g., a complete lack of philosophical discourse. Note also that Engl. "t." originally meant "limited stretch of continued existence; period or point in the course of this", and only from the 14th cent. AD onwards acquires the meaning "indefinite continuous duration" (The Oxford Concise Dictionary of English Etymology, www. oxfordreference.com).

Also *sima/ānu* denotes a specific moment or a t. span, but with the additional nuance of rightness and appropriateness, comparable to Greek καιρός: the proper season of the year, the t. when a celestial phenomenon is expected, the t. appropriate for rituals and offerings etc. (for refs. s. CAD S 269f. s. v.). Negated, it means the improper t.: a sickness afflicting a person at a premature age, the occurrence of the sun at an unseasonable t., a messenger appearing at an improper t. etc. (ibid.).

After 600, the word *sima/ānu* develops the meaning "seasonal hour" (Tag*, Tageszeiten. A. § 1.4).

Different from *sima/anu*, *adānu/adannu* describes a moment or t. span set, agreed upon or determined by the gods. Thus it is the word used for appointments or terms (CAD A/1, 97–101 s. v. 1, 2a–b). A certain overlap in meaning between *adānu/adannu* and *sima/ānu* can be observed, e. g., when celestial phenomena are said to happen: *ina lā adānīšu/adannišu* "at its unusual t." (CAD A/1, 101 s. v. 2b3′; cf. *ina lā sima/ānišu* CAD S 269 c).

§ 2. Cyclical time. According to Ee. V, cyclical t. was created by Marduk. The creation of the stars, the moon and the sun primarily served to fix the calendar (Lambert 2013, 172). Marduk *uʾaddī šatta*, "determined the year" (V 3), by setting up three stars for each of the twelve months (V 4). The phases of the moon organize the month (V 15–26; ibid. 186), and the sun regulates the day; in the broken passage V 26–47 (ibid. 192) are mentioned *ibnīma ūmu*, "he created the day […]" (V 39), and *maṣṣarāt mūši u i[mmi]*, "the watches of night and d[ay]" (V 46).

Other texts also deal with the creation and the emergence of cyclical t. or the responsibility of certain gods for it (ibid. 172–180). The moon-god Nanna "interchanges day (u$_4$) and night (ĝi$_6$), makes firm the month (iti), keeps the year (mu) intact" (RIME 4, 220: 4–6 [Kudur-Mabuk]; Lambert 2013, 172). In a Kurigalzu inscription, he is responsible "for organizing 30 days (u$_4$) in a month (iti)" (ibid. 175). An, Enlil, and Ea created day (u$_4$-da/ūmu) and night (ĝi$_6$/mūšu) for Sîn and Šamaš (TCL 6, 51 r. 3f.; Lambert 2013, 173), and in the omen series *Enūma Anu Enlil* "divided night (mūša) from daylight (urra), [measure]d the month (arḫa) and created the year" (ibid. 177); for another passage from *Enūma Anu Enlil*, s. Mondgott* A. I. § 4. A Šamaš incantation knows a t. "when days (ūmū) and nights (mūšū) became recognizable" (SpTU 3, 67: 12; Streck 2002, 236; Tag*, Tageszeiten. A. § 2.5). Two fragm. texts seem to recount

details in the creation of the watches of day and night (K. 10817 + 11118: 21, EN.NUN U$_4$.ZAL.L[E], "watch when the day begins to shine"; cf. Lambert 2013, 178f.).

> Further details on cyclical t. in the RlA are found in Kalender*; Nacht*; Sommer* und Winter; Tag*, Tageszeiten. On clocks s. Klepsydra*. S. a. Gehlken 1991; Brown/Fermor/Walker 1999–2000; Hunger 2001–2002.

§ 3. Linear time.

§ 3.1. *In the languages.* Verbal tense in Sum. and Akk. expresses past, present and future (absolute tense), anteriority, simultaneity and posteriority (relative tense), and aspect (imperfectivity/perfectivity).

> For details s. the grammars, e. g., Streck, Altbabylonisches Lehrbuch (2014²) 68–82. For a comparison of Akk. and Sum. verbal tense s. id. 1998.

Furthermore, nouns and particles (prepositions, subjunctions, adverbs) express t. in Sum. and Akk. Many of them are identical with and most probably go back to words with local meaning, e. g. *ina* "in", *adī* "until" in both local and temporal sense. As in many languages (cf. Zeit* B), some of these words use the t.-moving metaphor "earlier/in front, later/behind", e. g., igi/*pānu*, *maḫru* "front" = "past", eĝer/*warkītu/aḫrâtu* "back" = "future" and derived particles: the earlier event is "before", "preceding", "in front", the later event "after", "following", or "behind".

> Note that these expressions are not speaker-anchored: Neither is the past "in front of" the speaker's eyes, nor the future "behind" his back. For temporal adverbs in Akk. and the t.-moving metaphor s. Streck 2016.

§ 3.2. On the *theological* level, linear t. was apparently represented by a pair of gods, ancestors of the sky-god An, *Dūri Dāri*, "Ever and Ever" (Darî* [2]; Duri*; Kosmogonie* § 3; Lambert, Or. 54 [1985] 190; C. Ambos, Mesopotamische Baurituale [2004] 106f.: 112''b; Wilcke 2007, 42; G. Barjamovic/M. T. Larsen, AoF 35 [2008] 149).

> If this pair of gods really represents t. we are certainly dealing with linear t., to be distinguished – pace Dietrich 2001a, 76f. ("Schöpfung und Zeit") –

from cyclical t. (calendar etc.), which emerges or is created by the gods in primeval t. (§ 3.3).

§ 3.3. *History.* In the Mesopot. world-view, the world had a beginning in primeval t. Most widespread is the notion that the world and its components were created by the gods or by divine procreation (Kosmogonie*; Mythologie* A. I. § 5.3 [p. 546f.] and fig. 5f. [p. 558–560]; Wilcke 2007, 17–26). A frequent motif is that, before creation, the world was in a state of immaturity: items of the later cosmos and civilization did not yet exist (Streck 2002, 240–251). This also includes the non-existence of cyclical t. (ibid. 241). A different motif describes the primeval world as a paradise (Paradies* § 2).

Mesopot. texts offer several accounts of apocalyptical destructions resembling eschatological concepts (Dietrich 2001b). Thus, when the god Marduk left his house, the regulations of heaven and earth disintegrated, heavenly bodies changed their positions, the yield of the fields and water diminished, living offspring declined (*Erra Epic* I 132–136). The most prominent of these accounts is the story of the deluge (Sintflut*). However, a true counterpart of cosmogony, a universal eschatology and the vision of an end of the entire world including t. is not explicitly attested in cun. texts. The deluge, for example, marks the end of the world before and at the same time the beginning of the world after the flood. On the contrary, some texts mention that mankind and therefore also t. will last forever (Steinert 2012, 76), e. g., *nišū* [*lū*] *dārâ dārîš* CTMMA 2, 42 v 14 "[let] people (after the flood) last forever".

> Lambert 1978 discusses the passage in Seneca, *Naturales Quaestiones* III 29, attributed to Berossos, stating a final catastrophe brought about by the course of the planets. He concludes that there is no evidence of a Mesopot. origin of this statement. – A. Annus, SAAS 14 (2002) 187 and S. Parpola, Melammu 6 (2014) 22 believe that apocalyptic Messianism was modelled by the god Ninurta. Similarities are, however, at best superficial. There is no identification of the Ass. king with Ninurta (Streck, Or. 76 [2007] 285), and there is no Mesopot. evidence for an eschatological judgement.

An implicit reference to the notion that t. will end can perhaps be seen in two ex-

pressions for the distant future, *ana labār ūmī* "for the 'old age' of days" (CAD L 13), and *ana/adī ṣât ūmī* and sim. "for/until the 'leaving' of days" (CAD Ṣ 117f.).

The notion of linear t. after the beginning of the world finds its most vivid expression in kinglists, chronicles (Königslisten* und Chroniken), the different means of dating the years of a king's reign by year names (Datenlisten*) or eponyms (Eponymen*), as well as genealogies and other expressions in royal inscriptions emphasizing dynastic continuity (Königtum* B. §§ 16–18). History is divided into the periods before and after the flood (Sintflut* § 4) and into dynasties (bala/*palû*; CAD P 73f. 3). An era with a continuous numbering of years only starts after the capture of Babylon by Seleucus, and the year 311/310 BC (in the Bab. calendar) was counted subsequently as year 1 of the Sel. Era (Seleukiden*, Seleukidenreich. § 3.1 p. 373).

On hist. thinking in Mesopotamia s. Wilcke 1982; id. 1988; and id. 2001.

The most clear expression of Mesopot. concern for the future is divination, which attempts not so much to predict the future but to give perspectives for managing it (Omina* und Orakel. A. § 1.3). An overlap between linear and cyclical t. is found in hist. omens based on the idea that past events may re-occur in the future (Wilcke 1988, 124).

§ 3.4. *Lifetime*. Not only history but also the life of the individual from birth until death (Tod*) and afterlife in the netherworld (Unterwelt*) was basically perceived in Mesopotamia as linear. Mortality, a basic difference between men and gods (Steinert 2012, 76), and the uniqueness of life is a frequent motif in Sum. and Akk. literature. Thus, e. g., *The ballade of early rulers* (Wilcke 1988, 138; AulaOr. Suppl. 23, 142–144; SEAL 7.3.5.2) asks "where are the great kings of former days up to now" (l. 17) and states "the entire life … is only a glance" (l. 9). Physical mortality is also the basic motive of the *Epic of Gilgameš* (Gilgameš* p. 364); a sort of immortality can only be achieved by posthumous reputation.

An overlap between linear and cyclical t. is found in "Ersatznamen", expressing the concept of the rebirth of a deceased relative in the new-born child.

On "Ersatznamen" s. J. J. Stamm, Die akkadische Namengebung (= MVAeG 44, 1939) 278–306.

Brown D./Fermor J./Walker C. 1999–2000: The water clock in Mesopotamia, AfO 46–47, 130–148. – Dietrich M. 2001a: Zeitloses Urbild und zeitgebundenes Abbild nach der babylonischen Mythologie, MARG 13, 49–79; id. 2001b: "Ich habe die Ordnungen von Himmel und Erde aufgelöst": eschatologische Vorstellungen in der babylonischen Mythologie, in: id. (ed.), Endzeiterwartungen und Endzeitvorstellungen in den verschiedenen Religionen (= Forschungen zur Anthropologie und Religionsgeschichte 34), 15–41. – Gehlken E. 1991: Der längste Tag in Babylon (MUL.APIN und die Wasseruhr), NABU 1991/95. – Hunger H. 2001–2002: Zur Wasseruhr: ein Nachtrag zu AfO 46/47, AfO 48–49, 75. – Lambert W. G. 1978: Berossus and Babylonian eschatology, Iraq 38, 171–173; id. 2013: Babylonian creation myths (= MesCiv. 16). – von Soden W. 1974: Sprache, Denken und Begriffsbildung im Alten Orient (= AbhMainz 1973/6). – Steinert U. 2012: Aspekte des Menschseins im alten Mesopotamien (= CunMon. 44). – Streck M. P. 1998: The tense systems in the Sumerian-Akkadian linguistic area, ASJ 20, 181–199; id. 2002: Die Prologe der sumerischen Epen, Or. 71, 189–266; id. 2016: Temporal adverbs in Akkadian, in: L. Edzard (ed.), The Morpho-syntactic and lexical encoding of tense and aspect in Semitic (= AKM 104), 9–21. – Wilcke C. 1982: Zum Geschichtsbewußtsein im alten Mesopotamien, in: H. Müller-Karpe (ed.), Archäologie und Geschichtsbewußtsein (= AVA Koll. 3), 31–52; id. 1988: Die sumerische Königsliste und erzählte Vergangenheit, in: J. von Ungern-Sternberg (ed.), Vergangenheit in mündlicher Überlieferung (= Colloquium Rauricum 1), 113–140; id. 2001: Gestaltetes Altertum in antiker Gegenwart: Königslisten und Historiographie des älteren Mesopotamien, in: D. Kuhn/H. Stahl (ed.), Die Gegenwart des Altertums: Formen und Funktionen des Altertumsbezugs in den Hochkulturen der Alten Welt, 93–116; id. 2007: Vom altorientalischen Blick auf die Anfänge, in: E. Angehrn (ed.), Anfang und Ursprung (= Colloquium Rauricum 10), 3–59.

M. P. Streck

Zeit (time). B. Bei den Hethitern.

The Hittites seem to have had no abstract word for "t." in the sense of the sequence of natural and human events and