



Abb. 3. Ass. Schleuderer. Umzeichnung: C. Wolff, nach D. Ussishkin, *The conquest of Lachish by Sennacherib* (= Publications of the Institute of Archaeology 6, 1982) Abb. 75.

hängenden linken Hand (ibid. Taf. 18b A3, 19).

Eine Anzahl von Schleuderern werden auf neuass. Reliefs aus Ninive abgebildet. Auf Reliefs im Südwest-Palast sind bei Erstürmungen von Städten hinter Bogenschützen Schleuderer aufgestellt, die in der erhobenen Rechten die geladene Schleuder schwingen und häufig in der anderen Hand ein zweites Projektil zum Nachladen halten, teils liegen weitere S.-Geschosse zu ihren Füßen (R. D. Barnett et al., *Sculptures from the Southwest Palace of Sennacherib at Nineveh* [1998] Pl. 42: 32b; 72: 85; 153: 228b; 162f.: 236 a, b; 324f.: 428 a, c; 328–334: 430a–c, 429c, 431c; 375: 482 a; 403: 516). Aus dem Nordpalast des Aššurbanipal stammen weitere Darstellungen von Schleuderern (Barnett, *Sculptures from the North Palace of Ashurbanipal at Ninive* [1976] 14 pl. 14).

Auf einem urart. Bronzegürtel befindet sich in einer Reihe von Waffentragenden auch einer mit einer S., der in der anderen

Hand einen Schild hält (H. Born/U. Seidl, *Schutzwaffen aus Assyrien und Urartu* [1995] 82, Abb. 72).

Baatz D. 1990: Schleudergeschosse aus Blei: eine waffentechnische Untersuchung, *Saalburg-Jahrbuch* 45, 59–67. – Buchholz H.-G. 1965: Die Schleuder als Waffe im ägäischen Kulturkreis, *Anadolu Araştırmaları* 2, 133–159. – Korfmann M. 1972: Schleuder und Bogen in Südwestasien: von den frühesten Belegen bis zum Beginn der historischen Stadtstaaten (= *Antiquitas* 13); id. 1973: The sling as a weapon, *Scientific American* 299/4, 34–42; id. 1986: Die Waffe Davids: ein Beitrag zur Geschichte der Fernwaffen und zu den Anfängen organisierten kriegerischen Verhaltens, *Saeculum* 37, 129–149. – Mack O. 2007: Untersuchungen zu den frühbronzezeitlichen Schleudergeschossen aus Tall Bazi, Syrien, und dem Gebrauch einer zeitlosen Fernwaffe in Vorderasien, *Magister-Arbeit München*.

B. Einwag – O. Mack

Schlitten (sledge). A. Philologisch.

§ 1. Description of the threshing sledge. –
§ 2. Words for the threshing sledge and its parts.

§ 1. Description of the threshing sledge. In Mesopotamia, a s. almost only occurs as an implement for threshing, either as a real agricultural tool or in ceremonial use.

But see Mautier* § 4.d for Neo-Ass. *ša kibāni* in CTN 3, 103, interpreted by N. Postgate as “sledges(s) for bringing bodies away from the battlefield for burial”.

Different methods are known for threshing in the Near East until recent times (Hillman 1984, 121–123; id. 1985, 8f.): beating with beaters of various types, sledging, trampling by hoofed animals and crushing by rollers. Basically, two different implements were used for sledging:

a) A board consisting of two or three slats, with the frontal part curved upward, whose bottom is covered with stone shards or metal blades. A man can stand on the board or sit on a chair attached to the board. In the Roman world this implement is called *tribulum*.

b) Two or three rollers set in a wooden frame curved upward in front and surmounted by a seat for the “driver”. Metal blades, rough basalt pebbles or toothed

wheels are attached to these rollers. In the Roman world this implement is called *plostellum poenicum* “Punic cart”, whence also the name “threshing cart/wheel”.

A detailed description of both implements is found in Dalman 1933, 78–91. Shorter descriptions: Salonen 1968, 170f. (only type a); Hillman 1984, 122; Koenen 2008. Illustrations are found in Dalman 1933 (ill. no. 16–24); Salonen 1968, pl. 34, 38, 39, 41/2, 42; Littauer/Crouwel 1990, pl. II and III; Nagel/Strommenger 1994, 203; Koenen 2008. – The literature varies as to which implement is called a s. (cf. also Steinkeller 1990, 20 n. 21a): Dalman, Koenen and Steinkeller call type b a s., Salonen, Hillman and Littauer/Crouwel type a. In this article „s.“ is used for both types.

§ 2. Words for the threshing sledge and its parts.

§ 2.1. ^{gis}bad(-rá). The most important reference is *Farmers's Instructions* (Civil 1994) 97: “(When you thresh,) the teeth of your threshing sledge (zú ^{gis}bad-rá-zu) and its leather straps should be secured with bitumen”. The bilingual version continues (Civil 1994, 44; Steinkeller 1990, 19): “When you make the oxen trample, make the hoofs of the oxen trample the grain. More than the oxen, the sledge (^{gis}bad//*gis-sappumma*) will thresh it”. See also “after I had grabbed him as a threshing sledge (^{gis}bad-rá) grabs barley” *Ninisina A* (ETCSL 4.22.1) 117. A ^{gis}bad is mentioned next to a shovel in VS 10, 197 iii 2' (Civil 1994, 95, commentary to l. 97). For possible Ur III references see Steinkeller 1990, 19 n. 19.

Which type of threshing s. is meant is not clear. Steinkeller 1990, 20 believes it must be type b, the “teeth” referring to “wooden pegs wedged into the surface of the rollers”. However, Civil 1994, 95 and 107 n. 122 rather thinks of type a, the teeth probably made of hard wood, used instead of flints and kept in place by the bitumen mentioned in *Farmer's Instructions*.

Steinkeller's argument is based on the different wording of the passage in the bilingual version of l. 97 in *Farmer's Instructions* (Civil 1994, 44): zú ^{gis}bad-zu kuš-lá-lá-ta esir ḥa-ra-ab-TAG-TAG//šimmi gissappika kurussa lū karis itti'am lū lapit, translated by Steinkeller 1990, 19 “tie the teeth of your threshing sledge with leather (straps), they should be secured with bitumen”. According to him,

in type a “the stones are simply stuck into the board, and it is obvious that neither leather straps nor bitumen would have any practical application in this unsophisticated arrangement” (ibid. 20). However, as Civil 1994, 107 n. 122 points out, this is the only manuscript in which -ta replaces -bi of the Nippur version. Moreover, lá-lá is no imperative but part of the word kuš-lá-lá = *kurussu*, as shown by lexical texts (CAD K 581b). Therefore, -ta should occur after esir. This shows that the grammar of the manuscript and its Akkadian translation are not reliable.

§ 2.2. *kissappu/kilzappu*. In *Farmer's Instructions* (see § 2.1) and in *Hh. VI* 59, *kiss/lzappu* is equated with ^{gis}bad. In the OAKk. text OAIC 33: 17 and 31, 40 and 80 “(wooden) teeth (^{gis}ZU and šinnāt) for a *kissappu*” are mentioned (cf. § 2.1 for the teeth of the threshing s.). “Teeth of the threshing sledge (šimmi kilzappi)” occur again in Persica 7, 64f.: 19 in broken context. Otherwise *kiss/lzappu* designates a footstool. As with ^{gis}bad(-rá), it is unclear which type is meant.

Steinkeller 1990, 20 opts for type b because in OAIC 33 the teeth are made of wood. On the other hand, he sees in the primary meaning of the word, “footstool”, “a strong indication that ... this term did in fact describe a threshing board. It cannot even be excluded that *kissappu* designated both implements”. But sitting is more characteristic for a threshing s. of type b than type a (see § 1, above) so that the argument seems difficult.

§ 2.3. ḤAR-ḥar-da. This word, mainly attested in Pre-Sargonic Lagaš, has been studied by Steinkeller 1990, 21–23. The object is fitted, among other things, with a “draft-pole” (ma-gid), a “frame” (še-er-du₈-na) and a “socket” (mud, for the axles²). It is made of wood, leather and felt and in one text associated with a team of equids. In DP 75 i 5, ḤAR-ḥa-da is preceded by the sign KAL, which Steinkeller identifies with the Uruk III sign ZATU 247 and translates “s.” (cf. Maultier* § 4.d). ZATU 247 depicts a canopied s. (cf. § 2.6). As ḤAR-ḥa-da in some of the references is made of exotic woods, it is not (only) an agricultural implement but perhaps (also) used in cultic ceremonies, probably in rituals at the beginning of threshing.

§ 2.4. *dajjaštu*. In Tadmor, Tigl. III. 122 Summ. 1: 11; 130 Summ. 2: 12 we read: “Bīt-Amūkāni I threshed as though with a

dajjaštu. *dajjaštu* is derived from *dāšu* “to thresh” and may be a word for “threshing s.,” as has been assumed by AHw. and CAD.

It is also possible that *dajjaštu* designates a team of oxen or other animals driven over corn, cf. *alpu dajjašu* “ox for threshing” JNES 4, 172: 328 (Hh.).

§ 2.5. *zú/šinnu*. The “teeth” of the threshing-s. figure in several texts (see §§ 2.1, 2.2 above). A further reference: “just as chaff does not remain in the tooth” (*kīma ina šinni pū lā ibittu*) BE 31, 56 r. 18.

§ 2.6. *The Uruk III signs ZATU 247 and 248 depict ceremonial s.s. Steinkeller combines ZATU 247 with the sign KAL “s.” in DP 75 i 5 (see § 2.3).*

See Steinkeller 1990, 22 and n. 32–33; Littauer/Crouwel 1990, 17 and n. 10; Nagel/Strommenger 1994, 202–204.

Salonen 1968, 175–177 also mentions the following words for “threshing s.”: ^{gis}zar-dù, ^{gis}zar-lá, ^{gis}zar-gi, *kālitu*, *kanasarru*, *zardû* and *zargû*. His interpretation is based on the meaning “sheave” for zar and the equation of most of these words (with the exception of ^{gis}zar-gi//*zargû*) in lexical texts. This interpretation is uncertain, and most of these words seem to designate parts of a chariot. – For *majjaltum* “a kind of wagon or s.” (CAD M 117) see Sänfte*.

Civil M. 1994: The Farmer’s Instructions: a Sumerian agricultural manual (= AulaOr. Suppl. 5). – Dalman G. 1933: Arbeit und Sitte in Palästina 3: von der Ernte zum Mehl: Ernten, Dreschen, Worfeln, Sieben, Verwahren, Mahlen. – Hillman G. 1984: Traditional husbandry and processing of archaic cereals in recent times: the operations, products and equipment which might feature in Sumerian texts, part 1: the glume wheats, BSA 1, 114–152; id. 1985: Part 2: the free-threshing cereals, BSA 2, 1–32. – Koenen K. 2008: Dreschen und Worfeln, WiBiLex: <http://www.wibilex.de>. – Littauer M. A./Crouwel J. H. 1990: Ceremonial threshing in the Ancient Near East 1: archaeological evidence, Iraq 52, 15–19 and pl.II–III. – Nagel W./Strommenger E. 1994: Der frühsumerische Kultschlitten: ein Vorläufer des Wagens?, Fs. B. Hrouda 201–209. – Salonen A. 1968: Agricultura Mesopotamica. – Steinkeller P. 1990: Ceremonial threshing in the Ancient Near East 2: threshing implements in Ancient Mesopotamia: cuneiform sources, Iraq 52, 19–23.

M. P. Streck

Schlitten. B. Archäologisch.

Einen Dresch-S. des Typs a (S.* A. § 1) erschließt Adams aus einem ziemlich ge-

schlossenen Fund von Feuersteinabschlägen mit Gebrauchsspuren aus einem späturukzeitl. Weiler in der Nähe von Uruk.



Abb. 1. Siegelabrollung aus Arslantepe-Malatya (Melid* B), nach M. Frangipane, Paléorient 23/1 (1997) 67 Fig. 16,1.

Von Ochsen gezogene S., die eine mit untergeschlagenen Beinen auf einem Hocker, unter einem gebogenen Baldachin sitzende Person transportieren, sind von zwei Siegelbildern (Littauer/Crouwel 1990, Fig. 1 Pl. IIa; M. Frangipani, Arslantepe V. Cretulae [2007] Pl. I, c 2683; hier Abb. 1) und einem Steinrelief (Nagel/Strommenger 1994 Taf. XXa) aus der Frühgeschichte bekannt (Abb. 1). Littauer und Crouwel leiten das Gefährt vom Dresch-S. des Typs a ab. Nagel und Strommenger sehen in diesen und dem Schriftzeichen ATU Nr. 741, 742 (= ZATU 247) Darstellungen von Kufen-S.

Der ebenfalls von Rindern (R. H. Dyson, Iraq 22 [1960] 102–104) gezogene Prunk-S. aus dem Grab der Pû-abi* in Ur wurde mit Kufen ergänzt (UE 2, 74, 78–80; Pl. 122–126).

Adams R. McC. 1975: An ancient Uruk threshing sledge or harrow?, Sumer 31, 17–20. – Littauer M. A./Crouwel J. H. 1990: Ceremonial threshing in the Ancient Near East, Iraq 52, 15–19. – Nagel W./Strommenger E. 1994: Der frühsumerische Kultschlitten: ein Vorläufer des Wagens?, Fs. B. Hrouda 201–209.

U. Seidl

Schloss s. Riegel; Siegelpraxis. B.

Schlüssel s. Riegel.

Schmelzofen s. Metalle und Metallurgie. A. I. § 6; Ofen. § 3.