# Over the Mountains and Far Away

Studies in Near Eastern history and archaeology

presented to Mirjo Salvini on the occasion of his 80th birthday

edited by

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### Granaries in Urartu and Neighboring States and the Monumentalization of Administrative Records

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Abstract: The present article revisits the Urartian inscriptions concerning granaries and discusses them in a broader ancient Near Eastern context. In comparison with Hieroglyphic Luwian and Assyrian sources from the Middle and Neo-Assyrian period it highlights the characteristics of the Urartian inscriptions and addresses them as monumentalized manifestations of archival records of the storage of grain. On the basis of detailed analyses of the Urartian and other ancient Near Eastern sources it will be argued that the Urartian verb *šu*- which describes the royal activities related to granaries has the meaning 'to fill' rather than 'to build' or 'install'. Furthermore, the structure and function of an *ašihuši* building, which according to some inscriptions was related to granaries, will be discussed in the light of Middle Assyrian administrative records. Special attention will be laid on CTU I A 9–20 from Arin-berd and the phrases *andani* DUB-*ti-ni-e* and *šalmathi* DUB-*ti-ni-e* in lines 8 and 10 of this text. This study thus aims to contribute to the understanding of an important institution for the safeguarding of the food supply, which obviously played a prominent role both in the Urartian state administration and the royal ideology of the Urartian kings.

Keywords: Urartian inscriptions, granaries in Urartu, the Neo-Hittite states and Assyria, monumental inscriptions, administrative records, monumentalization of archival records, Urartian šu- 'fill', Urartian andani 'right (side)', Urartian šalmathi 'left (side)', Urartian (<sup>(E)</sup> ari 'granary', barzidibduni building, ašihusi building

#### 1. Introduction<sup>1</sup>

<sup>(33)</sup>\*Now therefore, let Pharaoh select a discerning and wise man, and set him over the land of Egypt. <sup>(34)</sup>Let Pharaoh do *this*, and let him appoint officers over the land, to collect one-fifth *of the produce* of the land of Egypt in the seven plentiful years. <sup>(35)</sup>And let them gather all the food of those good years that are coming, and store up grain under the authority of Pharaoh, and let them keep food in the cities. <sup>(36)</sup>Then that food shall be as a reserve for the land for the seven years of famine which shall be in the land of Egypt, that the land may not perish during the famine.'

Genesis 41.33-36 (New King James Version)

The biblical story of Joseph is certainly the most familiar text of the ancient Near East which mentions royal granaries and demonstrates their significance for safeguarding the food supply.

According to the story God warns the Egyptian pharao in a dream of an impending seven year famine. Thereby he compels him to store great amounts of grain during seven years of rich harvest to the extant that the population can be kept alive during the following years of famine. After interpreting the dream of the pharao, Joseph is entrusted with the storage of grain. Joseph's effort is portrayed in very vivid and figurative language. Thus, the text narrates that Joseph 'gathered up all the food of the seven years which were in the land of Egypt, and laid up the food in the cities' so that he gathered as much grain 'as the sand of the sea, until he stopped counting, for *it was* immeasurable' (Genesis 41, 48–49).

Besides this famous biblical narrative there are also numerous other textual and archaeological sources from ancient Egypt and the ancient Near East informing us about the storage of grain, the respective storage facilities, and their administration.<sup>2</sup>

The written sources belong to various genres ranging from administrative records, legal texts, letters and inscriptions to narrative texts.

Among them is the famous account of Sargon's II's eighth campaign in the year 714 BC against Urartu in his letter to the god Aššur. In several passages Sargon reports that he looted the granaries of cities under Urartu's control. By doing so, he depicts the storage facilities and the amount of grain with words that are similar to those of the Joseph story. Sargon states that he opened 'innumerable large amount of granaries' and let his troops eat 'infinite quantities of grain'.<sup>3</sup> In col. iii 262–263 Sargon further refers to the function of the granaries as long-term storage facilities for grain. He reports that he let his army load the huge stores of grain, which had been heaped up in the granaries over a long time for the sustenance of the land and its people, on horses, mules, camels and donkeys,

<sup>&</sup>lt;sup>1</sup> For comments on a previous version of this article I would like to thank Denise Bolton, Stephan Kroll, Tatjana Tumanik (all LMU Munich), and Craig Melchert (UCLA, Los Angeles). The article was inspired by a conversation with Mirjo Salvini during the preparation of the Electronic Corpus of Urartian Texts (http://oracc.museum.upenn.edu/ecut). I would like to thank the honoree for the generous support of the project and the good and fruitful cooperation. In Anlehnung an die urartäischen Segensformeln wünsche ich Dir, lieber Mirjo, *ulguše, pişuše, alsuiše* und *ušmaše*!

<sup>&</sup>lt;sup>2</sup> For Egypt see Papazian 2013: 59-70 with further literature; for depictions of granaries in tombs of the Old Kingdom see Siebels 2001: 85-99; for ancient Near Eastern written records see Breckwoldt 2011: 636-637 with further literature; for ancient Near Eastern archaeological findings see Margueron 2011: 637-639 with further literature; for the Hittite kingdom of the 2nd millenium see Seeher 2000: 261-301.

<sup>&</sup>lt;sup>3</sup>TCL 3 ii 166 (similarily, ii 186, ii 197 and iii 295): *qi-ra-te-šu-nu ma-a'-da-a-ti la-a mi-na ú-pat-ti-ma* ŠE.PAD.MEŠ *la ni-i-bi um-ma-ni ú-šá-a-kil.* For a new edition of the whole text see Mayer 2013; for an English translation see Fales 2017. A handcopy of the tablet (Louvre AO 5372) has been published by Thureau-Dangin 1912: Plates I–XXII, for photographs see Thureau-Dangin 1912: plates XXIII–XXX. For a list of additional fragments held in Berlin see Mayer 2013; 3.

and piled them up anew inside his encampment (as high) as ruin-mounds.  $\!\!^4$ 

Sargon's description certainly aims to highlight primarily his and his army's great achievements. At the same time, though, it reflects Sargon's appreciation of the Urartian facilities for the long-term storage of grain and their considerable number and size. That his account had a real basis is confirmed by several Urartian stone and rock inscriptions.

Compared to the great number of archival texts dealing with grain storage, stone inscriptions adressing this topic are much scarcer in the ancient Near East. The Urartian inscriptions take a prominent role among them due to their contents and great number. It is particularly notable that most of these inscriptions exclusively record the filling of the granaries by the ruler and specify the amount of grain stored in them. Only a small number of inscriptions are more elaborate in that they mention also the construction of an appertaining building.

This characteristic makes them appear to be monumentalized manifestations of archival records of the storage of grain. Among the ancient Near Eastern sources similar inscriptions are to my knowledge only known from the Neo-Hittite states. However, only two of them show a greater resemblance to the Urartian sources in that they record the amount of grain stored in the granaries.

This distinctive element in the Urartian epigraphic sources, along with Sargon's account, indicates that the granaries and the related buildings played a prominent role, not only in the state administration, but also in the royal ideology of the Urartian kings. Therefore it is hardly astonishing that they have already been addressed in several studies.<sup>5</sup>

The present study adds to this by discussing the Urartian sources in a broader ancient Near Eastern context. In particular, I will revisit the meaning of the verb *šu*- which appears in the standard formula with the word *`ari* 'granary' as object. Furthermore, I will reconsider the structure and function of an *ašiluši* building, which is mentioned in two inscriptions along with one or two granaries, in the light of Middle Assyrian administrative records. In doing so, I will pay special attention to CTU I A 9–20 from Arin-berd and the phrases *andani* DUB-*ti-ni-e* and *šalmathi* DUB-*ti-ni-e* in lines 8 and 10 of this text. In addition, the inscribed stone objects and the process of monumentalizing archival records reflected in the Urartian inscriptions will be addressed in light of other sources from the ancient world.

#### 2. References

The Urartian word for granary is <sup>(É)</sup> *ari* or rather <sup>(É)</sup> *are/ara*.<sup>6</sup> Apparently, the word can refer both to a whole building, a

section of the building, or a single storeroom belonging to it. The latter is shown by two inscriptions of Sarduri II, son of Argišti I. Thus, CTU I A 9–19 from Armavir, mentions two granaries as part of a *barzidibduni* building (<sup>*É*</sup>*barzidibduni*), whereas CTU I A 9–20 from Arin-berd mentions two granaries related to an *ašiḫuši* building (<sup>*É*</sup>*ašiḫuši*).

Furthermore, the great variety between the specifications of the amounts of grain stored in the granaries, ranging from 1432 to 32,000 *kapi*, indicates great differences in size. For instance, CTU I A 14–5 of Rusa, son of Erimena on a fragmentary stone block from Armavir reports the storage of 1432 *kapi* of grain (likely 12,960 l) whereas in CTU I A 8–29 of Argišti I the specified amount of grain is 32,057 *kapi* (likely 961,710 liter).<sup>7</sup>

The earliest attestation of the term  ${}^{(E)}$  ari 'granary' is to be found in CTU I A 5–66 of Minua, son of Išpuini. Further references are attested in nine inscriptions of Minua's son Argišti I, 17 inscriptions of Sarduri, son of Argišti I and two inscriptions of Rusa, son of Erimena.<sup>8</sup>

Altogether, 37 forms of the word '*ari* are attested in these inscriptions. Three of them are only partially preserved, but on contextual grounds are clearly to be identified as writings of '*ari*. Among the 37 attestations are 35 attestations in the absolutive singular ('*ari*) and two are in the absolutive plural ('*arili*). The attestations in CTU I A 9–19 lines 8 and 9 are to be interpreted as dative singular forms ('*ariee*).

The absolutive singular forms appear in four different syllabic writings:

1. 'a-a-ri (4x): A.4	CTU I A 8–27.5, A 8–28 B.3, A 8–29.4, A 8–32
2. °a-a-ri-e (2x):	CTU I A 5-66.3, A 9-19.11
3. <sup>°</sup> a-ri (24x):	CTU I A 8-6.4, A 8-28A.3, A 8-28C.3, A
8-28D.3, A 8-28E.3	, A 8–30.3, A 8–31.5, A 8–32.4, A 8–33.5, A
8-34.4, A 9-22A.3,	
	A 9–23.3, A 9–24.5, A 9–25.5, A 9–26.5, A
9–27.5, A 9–28.5,	
9–33.5, A 9–34.4,	A 9–29.5, A 9–30.3, A 9–31.3, A 9–32.3, A
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	A 9–35.5
4. °a-ri-e (1x):	CTU I A 14–6.2

<sup>11).</sup> Here, the *kapi* unit is exclusively used as a measurement of grain, whereas the measurement of wine is *aqarqi* and the measurement of oil is *tirusi*.

<sup>&</sup>lt;sup>4</sup> TCL 3 iii 262; <sup>(262)</sup>tab-ka-ni GAL.MEŠ ša ŠE.PAD.MEŠ ŠE.GIG.MEŠ ša i-na u<sub>4</sub>-me ma-a'-du-ti a-na ba-lat KUR ù UN.MEŠ iš-pu-ku qi-ra-a-te <sup>(263)</sup> nap-ţiar um-ma-ni-ia i-na ANŠE.KUR.RA.MEŠ <sup>ANŠE</sup>pa-re-e ANŠE.A.AB. BA.<MEŠ> ANŠE.MEŠ ú-šá-az-bíl-ma i-na qé-reb uš-man-ni-ia ki-ma DU<sub>6</sub>. MEŠ ú-šap-pik<sup>1</sup>.

 <sup>&</sup>lt;sup>5</sup> See in particular Çifçi 2017: 75-80; Salvini 1969: 7-24; 1998a: 131-149.
 See further Balkan 1960: 99-131; Çifçi 2017: 75-80; Dalalyan 2011: 91-97; Dinçol 1987: 95-104; Kossian 1997: 27-34; Salvini 1998b: 123-129; 2010: 364-367; Payne 2005: 86-94; Linke 2015: 308-312.

<sup>&</sup>lt;sup>6</sup>For the meaning see, e.g., König 1955: 110 ('Magazin', viz. 'storeroom'); Melikišvili 1971: 249-250 (= UKN II): 'зернохранилище' viz. 'granary'. That it was a storeroom for the storage of grain is indicated by a list of booty in the annals of Sarduri, son of Argišti (CTU I A 9-3 vii 10-

<sup>&</sup>lt;sup>7</sup> The equivalent 1 *kapi* = 30 liters is based on the assumption that 1 kapi equals 1 BANEŠ. This equation is based on the fact that in the inscription CTU I A 9-19 of Sarduri II the amount of the grain stored in one room is given in *kapi*, while the amount of grain stored in the other room is given in BANEŠ, which in the Neo-Assyrian standard presumably equals 30 liters. For a discussion see Salvini 2010: 364-367 with further literature.

<sup>&</sup>lt;sup>8</sup> The chronology of the Urartian kings, particularly with regard to Rusa, son of Erimena, is still a matter of debate. For the discussion see, inter alia, Salvini 2007; Fuchs 2012; Kroll 2012; Roaf 2012; Seidl 2012; Linke 2015: 308–312. I follow here the chronology suggested by Roaf (Sarduri, son of Argišti → Rusa, son of Erimena → Rusa, son of Sarduri (opponent of Sargon II) → Argišti, son of Rusa). This chronology is also supported by the granary inscriptions, which in this case would have been authored by three kings in immediate sequence: Minua, son of Išpuini (approx. 820–785/780); Argišti I, son of Minua (approx. 785/780–756); Sarduri II, son of Argišti (approx. 756–735 or later); and Rusa, son of Erimena (from 722 or earlier to 714/713).

Among the three partially preserved forms, there are two forms of which only the first sign 'A is preserved (CTU I A 8–34.4, A 9–21.3) and one form of which the first sign 'A and the first half of the second sign RI is identifiable (CTU I A 14–5.2). For reasons of space all forms are likely to be restored by non-plene writings ('a-ri).<sup>9</sup>

The attestations in the absolutive plural are also non-plene writings (*`a-ri-li*, CTU I A 9–19.8, A 9–20.7). The dative singular forms are both written *`a-ri-e* (CTU I A 9–19.8.9).

Within the overall amount of 37 attestations 10 forms are preceded by the determinative É. Except for the absolutive singular form in CTU I A 14–6.2 ( $^{\acute{e}^{2}}a$ -*ri*-*e*) all absolutive singular forms with plene writing are written without determinatives.

Eight attestations of the absolutive singular forms without plene writing are preceded by the determinative É (CTU I A 9–21.3, A 14–5.2, A 8–30.3, A 9–22 A.3, A 9–22 B.3, A 9–23.3, A 9–24.5, A 9–31.3), the remaining 18 attestations are written without a determinative (CTU I A 8–6.4, A 8–28 A.3, A 8–28 C.3, A 8–28 D.3, A 8–28 E.3, A 8–31.5, A 8–32.4, A 8–33.5, A 9–25.5, A 9–26.5, A 9–27.5, A 9–28.5, A 9–29.5, A 9–30.3, A 9–32.3, A 9–33.5, A 9–34.4, A 9–35.5). Among the three fragmentary forms one is preceded by the determinative É (CTU I A 14.5.2) whereas the other two attestations are not (CTU I A 8–34.4, A 14–5.2). In CTU I A 8–6.4 the sign preceding <sup>°</sup>*a-ri* is not identifiable.

One of the absolutive plural forms is attested with the determinative É (CTU I A 9–19.7), the two other attestations are written without it (CTU I A 9–19.8 and A 9–19.9). The latter is also true for the dative singular forms in CTU I A 9–19.8 and A 9–19.9.

# 3. Types, proveniences and archaeological contexts of the inscribed objects

Most of the inscriptions referring to granaries are engraved in stone blocks or stone slabs which were part of the building structure of their respective buildings. However, the inscription CTU I A 5–66 of Minua and thus the eldest inscription referring to a granary, is inscribed in a niche in the rocks of the north-western slope of Van Kalesi.<sup>10</sup> Besides A 5–66, there is only one granary inscription from Sardurihinili/ Çavuştepe which had apparently been found in situ (A 9–31 of Sarduri, son of Argišti, the founder of the city. In contrast to A 5–66, A 9–31 can be assigned to a room which probably was used as a granary, namely room 2 of Uçkale whose measurements are  $11 \times 8.8$  m = 98.8 m<sup>2</sup>. Also other inscriptions of Çavuştepe have been found close to rooms that might be identified with the '*ari* buildings the inscriptions refer to.<sup>11</sup>

Furthermore, one inscription of Minua's son Argišti I mentioning a granary is engraved in a stele discovered in the mountains near Sarıkamış (CTU I A 8–6). This text, however, shows not one of the standard formulae, but refers to a granary in the framework of military achievements. Due to its fragmentary state, the exact wording remains unclear.<sup>12</sup>

The inscriptions on stone blocks or stone slabs dating from the reigns of Minua, Argišti I, Sarduri II and Rusa, son of Erimena are all very short and formulaic. They can be divided into seven different types: Type 1. Type 1 consists of a verbal clause regarding the royal activity on the granary and a verbless clause specifying the amount of grain stored in it. The verbal clause is referring to the granary by the word *`ari* in the absolutive singular preceded by the demonstrative pronoun *ini* 'this' and in some cases by the determinative É 'house'. At the beginning of the clause the ruler is mentioned by name and patronym as agent of the action in the ergative case. It is followed by a deictic reference to the granary in the absolutive singular and *šu=u=ni*, hence the third person singular preterite with singular object of the transitive verb *šu* 'to fill'.<sup>13</sup> The verbless clause consists of a number, the word *kapi* denoting the measurement unit of grain and the word *ištini* 'here'.

One of these inscriptions is authored by Argišti I (A 8–22), the other ones are authored by either Sarduri II or Rusa, son of Erimena. Among the inscriptions of Sarduri II are CTU I A 9–22 (with the duplicates A and B) on a stone block from Arin-berd and the inscriptions CTU I A 9–30, A 9–31, and A 9–32 which are all engraved in stone slabs from Çavuştepe. The two inscriptions of Rusa, son of Erimena concerning granaries, namely CTU I A 14–5 (stone fragment found at the slope of Armavir) and A 14–6 (stone from Arin-berd) belong both to this type.

As an example CTU I A 9–22 A will be cited:

1 <sup>m.d</sup>sar₅ -du-ri-i-še 2 <sup>m</sup>ar-giš-ti-ḫi-ni-še 3 i-ni ²a-ri šú-ni 4 10 LIM 1 ME ka-pi iš-ti-ni

 $^{(1-3)}$  Sarduri, son of Argišti, filled this granary.  $^{(4)}$  10,100 kapi (of grain are) here.

Type 2. Type 2 is a variant of Type 1. In addition to the latter's formula the verbal clause shows an adverbial phrase specifying the location of the granary ( ${}^{\underline{\ell}}a\underline{s}i\underline{h}u\underline{s}i=ni\,p\overline{i}$  'under the *asiliusi* building'). This type is only attested in CTU I A 8–30 of Argišti I from Argištihinili/Armavir.<sup>14</sup>

Type 3. Similar to Types 1 and 2, Type 3 consists of a verbal clause referring to the filling of the granary and a verbless clause specifying the amount of grain stored in it. In contrast to the formular of Types 1 and 2 the verbal clause refers to the support of the god Haldi through which the deed was achieved. Two versions of this phrase are attested. First, a phrase made up by the word *ušmaši* 'protection' in the ablativ-instrumental case as head noun and the name of the god as genitive modifier (with 'Suffixaufnahme'): <sup>d</sup>Haldi=i=NI=ni ušmaši=ni 'through the protection of the god Haldi' and second, a similar construction with the word alsuiši 'greatness' in the ablative-instrumental case dHaldi=i=NI=ni alsuiši=ni 'through the greatness of the god Haldi'. The first variant (Type 3.1) is attested in inscriptions of Minua (CTU I A 5-66) and Argišti (A 8-27; A 8-29; A 8-31; A 8-32; and likely also A 8-34 where the word following the genitive modifier in line 1 is not preserved). The second variant (Type 3.2) is attested in inscriptions of Sarduri II (CTU I A 9-22A; A 9-24; A 9–25; A 9–26; A 9–27; A 9–28; A 9–29; A 9–33 and A 9–35A).

Type 4. Type 4 is only attested in CTU I A 9–19 of Sarduri II on a stone slab from Armavir. It consists of two verbal clauses referring to a *barzidibduni* building and appertaining granaries, two verbless clauses specifying the amount of

<sup>°</sup>Thus also Salvini 2008a: 629.

<sup>&</sup>lt;sup>10</sup> See Salvini 2008a: 248.

<sup>&</sup>lt;sup>11</sup>For further information see Payne 2005: 86–88 and Salvini 2010: 364.

 $<sup>^{\</sup>rm 12}$  For a translation see Salvini 2008a: 347.

<sup>&</sup>lt;sup>13</sup> For the meaning of the verb *šu*- 'to fill' see section 4.

<sup>&</sup>lt;sup>14</sup> For a discussion of the word *ašihuši* see section 5.

grain stored in them and a verbless clause consisting of the ruler's name and epithets ('Sarduri, mighty king, king of the Bia lands, lord of the city Țušpa').

The first verbal clause (lines 1–6a) states that Sarduri made the *barzidibiduni* building through the support of the god Haldi in a deictic expression: <sup>d</sup>hal-di-ni-ni al-su-i-ši-ni <sup>md</sup>sar<sub>5</sub>-du-riše <sup>m</sup>ar-giš-ti-hi-ni-še i-ni <sup>E</sup>bar-zi-di-ib-du-ni za-du-ni 'through the greatness of the god Haldi, Sarduri, son of Argišti made this *barzidibduni* building'.

The second verbal clause (lines 6b–7) is connected to the first by the conjunction *e*'a 'and'. It reports the filling of the granaries by the ruler in a deictic expression made up by the demonstrative pronoun *ini* and the word for granary in the absolutive plural accompanied by the determinative É 'house' and the congruent form of the verb *šu*- in the 3. person singular preterite: e-'a i-ni-li <sup>É</sup>'a-ri-li šú-'a-li 'and he filled these granaries'.

The two verbless clauses (lines 8–10 and lines 11–12) specifying the amount of grain stored in both granaries refer to them using the dative forms 1-*si=ni 'ari=e* 'in the first granary' and 2-*ni 'ari=e* followed by the respective number of *kapi* or, respectively BANEŠ measures and the local adverb *ištini* 'here', or, respectively 'there': (8) 1-si-ni 'a-ri-e (9) 10 LIM 1 LIM 8 ME 84 (10) ka-pi iš-ti-ni (11) 2-ni 'a-a-ri-e (12) 8 LIM 2 ME BANEŠ iš-ti-ni 'in the first granary there (are) 11,884 *kapi* (of grain), in the second there (are) 8200 BANEŠ'.

Type 5. Type 5 is similar to Type 4 in that it refers to two granaries belonging to a building. In case of Type 5 it is not a *barzidibduni*, but an *ašihusi* building. Whereas the formula of the verbal clauses is the same as in Type 4, the verbless clauses specifying the amount of grain are different in that they refer to the granaries by the adverbal clauses *andani* DUB-*ti=ne* 'on the right side of the inscription'.<sup>15</sup> Moreover, the name of the ruler in the following verbless clause is followed by a patronym which is missing in the formula of Type 4 (CTU I A 9–19). Type 5 is attested only once, namely in CTU I A 9–20 of Sarduri II, son of Argišti I, on a stone slab from Arin-berd. The inscription will be discussed in more detail further below.

Type 6. This type is only attested once, namely in CTU I A 9–23 of Sarduri II from Arin-berd. It consists of a verbal clause reporting the ruler's activity on the granary. The structure of this clause is similar to that of Type 1. In contrast to Types 1–5, a verbless clause specifying the amount of grain stored in the granary is missing. The fact that line 4 is left blank suggests that the clause was intended to be added at a later time.

Type 7. Type 7 is similar to Type 6 in that it lacks a verbless clause specifying the amount of grain stored in the granary. Since lines 6 and 7 are left blank the verbless clause was probably intended to be added at a later time, as is presumably the case in Type 6. Similar to Type 3.1 the verbal clause refers to the support of the god Haldi by the phrase *Haldi=i=NI=ni ušmaši=ni* 'through the protection of the god Haldi'. Type 7 is attested only once, namely in CTU I A 8–33 from Pirabat.

#### 4. The verb *šu*- and its meaning

The meaning of the word *šu*- has been differently defined. Some scholars translate the word with 'build, construct,

install'<sup>16</sup> (according to Salvini possibly with the basic meaning 'dig, exacavate'),<sup>17</sup> while others assume the meaning 'to fill' or 'heap up'.<sup>18</sup>

To date, a detailed analysis is still wanting. I will therefore discuss the reasons for or against these interpretations and argue that the meaning 'to fill' is more likely.

1. In several inscriptions the statement reporting the activity of the ruler specified by the verb *šu*- is followed by a specification of the amount of grain stored in the building. If the verb *šu*- had the meaning 'to fill', both phrases would be directly linked; the amount of grain stored in the building would be the immediate consequence of the ruler's action stated in the preceding sentence. This direct relationship would not exist if the meaning of *šu*- was 'to build' or 'to install'.

2. The construction of buildings is usually referred to by phrases with the verb šid-, or its derivative *šidišt-* 'build, construct' or the verb *zad-* 'do, make'.<sup>19</sup> The meaning 'install, create, establish, found' is otherwise conveyed by the verb *ter-* (with the basic meaning 'put'). It is used with a great variety of objects like DUB 'inscription', *tini* 'name', *ardiše* 'ritual', *meše* 'tribute' and different sorts of gardens (<sup>GIS</sup>zari 'fruit orchard', <sup>GIS</sup>ulde 'vineyard').<sup>20</sup>

It is therefore unlikely that the construction of granaries is expressed by a different verb, namely *šu*-. Since *šu*- exclusively is used with *`ari* or the plural form *`arili* as its subject it likely refers to a characteristic activity regarding granaries. This would be the case if the meaning of *šu*- were 'to fill'.

3. The meaning 'to fill' is further supported by written sources from other ancient Near Eastern regions. Thus, most texts referring to granaries provide information about the contents of the store rooms. Typical positive activities involving granaries are the filling with grain or, respectively, the heaping up of the latter. Other texts refer to negative activities like the unauthorized opening of the buildings and the theft of the stored grain. The following are some examples referring to both royal and non-royal granaries.

# Hieroglyphic Luwian inscriptions of the first half of the first millenium BC

Similar to the Urartian rulers Minua, Argišti I, Sarduri II, and Rusa, son of Erimena, some rulers of the Neo-Hittite states refer to granaries in their inscriptions. By doing so, they report that they filled them up.

Thus, the ruler Azatiwatas declares in the Hieroglyphic-Phoenician bilingual text from Karatepe that he filled the granaries of the city Pahar:<sup>21</sup>

<sup>&</sup>lt;sup>15</sup> For this translation and alternative interpretations see section 5.

<sup>&</sup>lt;sup>16</sup> Melikišvili 1960: 407 ('устраивать' 'install, establish'; создавать 'create, found'); Salvini 1969: 9, 11, 12 ('fare, costruire'); Dinçol 1987: 96 *passim* ('errichten'); Salvini 1998a: 131; 1998b: 127 ('make, excavate'); Wilhelm and Akdoğan 2011: 220 ('bauen', 'gründen').

<sup>&</sup>lt;sup>17</sup> See Salvini 1998a: 146 ('scavare'); 1998b: 127 ('make, excavate').

<sup>&</sup>lt;sup>18</sup> König 1955-1957: 110 (= HchI 95), 202 ('füllen') and subsequently Balkan 1960: 111; Kossian 1997: 29-30 ('fill' and possibly a calque of the Luwian *su*(*wa*)-); Arutjunjan 2001: 137 *passim* ('насыпал(?)'). <sup>19</sup> For a convincing interpretation for the use of šid- and šidišt- on the one hand and *zad*- 'do, make' on the other see Salvini 1998a: 146. <sup>20</sup> For references see CTU II: 212-214.

<sup>&</sup>lt;sup>21</sup>CHLI I Karatepe 1, §VII (Hawkins 2000: 45-68). The city Pahar is also mentioned in a statue inscription of Shalmaneser III (858-824 BC)

Hu. |("MANUS<sup>-</sup>")su-wá/í-ha-ha-wá/i |pa-há-+ra/i-wa/iní-zi(URBS) |(<">\*255")kar-ru-nazi

Ho. [...]-ha+ra/i-wa/i-n[i-z]i(URBS) (\*255)ka-ru-na-ziPhoen. w-ml' ink 'grt p'r

And I filled the Paharean granaries (or 'the granaries of Pahar').

Similarily, the ruler Laramas boasts that he filled granary after granary in Gurgum:

4. §7 |(\*255)ka-la/i/u-na-'wa/i?<sup>?</sup> |(\*255)ka-la/i/u-na x-ta |(X)su-wa/i-ha I filled granary on(?) granary.<sup>22</sup>

Timed granary on(?) granary....

Another inscription of Laramas which had been found in iskenderun reports the provision of a millstone and a granary and the supply of 4400 *zipattani*-measures (of grain).

1.

2. §1 (B) |wa/i-na \*179.SCALPRUM-na ("\*69")tara/i-wa/i-i-ha §2 (A) |("POST")á-pa-pa-wa/i-mu-ta |<sup>?</sup> REL-za |("PES") á-wa/i-tà

3. §3  $|a-wa/i|za||-na^{-i}$  (\*\*255")ka-ru-na-na (\*CAPERE")u-pa-ha-<sup>i</sup> §4 wa/i-tu-u-(B)ta<sup>-i</sup> 4xMILLE 4xCENTUM a-ta (\*CAPERE")||

4. u-pa-ha |zi-i-na ("\*256")zi-pa-ta-na-ti

... I provided(?) it (as) a millstone(?), and because it/they became available to me, I brought this granary, and into it I brought 4400, here by the *zipattani*-measure(?).<sup>23</sup>

Furthermore, the author of the inscription Karkamiš A 30h makes known that he filled the granaries of the goddess Kubaba(?), which nobody had filled before, with 3000 measurements of grain(?) and 4000 measurements of wine:

1. §1 '(DEUS)ku+'AVIS (\*256)ka-\*282-na NEG3 REL-i-sa-ha su-su-tá

2. §2 \*a-wa/i-tá DOMUS-sa-' || DOMINUS-na mu-' a-tá x-pa-tá §3 \*a-wa/i-na su-wa/i-ha su-wa/i-ha 3xMILLE(?) X 4xMILLE(?) wa/i-ní-ti

No one used to fill Kubaba's(?) granary, (but) she/they ...ed me House-Lord (and) I filled it with 3000 (measures of) cereal(?) (and) with 4000 (measures of) wine.<sup>24</sup>

The filling up of a granary is also attested in §96 and §97 of the Hittite Laws (16. century BC) as a penalty for its looting. Thus, a man who burglarizes a granary is obliged to refill it. Additionally he must pay 12 shekels of silver if he is a free man, (§96) or 6 shekels of silver if he is a slave (§97). Cf. §97 (version A, KBo 6.2 iv 51-52):<sup>25</sup>

51 [tá]k-ku ARAD-aš ḫal-ki-aš ÉSAG-an ta-i-e-ez-zi ÉS[AG-aš-ša ḫal-ki-in

ú-e-mi-ez-zi] ÉSAG-an ḫal-ki-it

52 [šu]-un-na-i Ù 6 GÍN KÙ.BABBAR pa-a-i [pár-na-aš-še-e-a šuwa-i-ez]-zi If a slave burglarizes a granary [and finds grain in the] gran[ary], he shall [f]ill the granary with grain and shall pay 6 shekel silver. And he (the damaged party) shall look to his (the perpetrator's) house for it.

Both in the Hittite laws and most Hieroglyphic Luwian inscriptions the action regarding the granary is referred to by the verb *suwe/a-.*<sup>26</sup> In Hittite the verb as well as the related adjective *šu-* 'full' is written with <*š>* or rather the cuneiform sign ŠU whereas the Hieroglyphic Luwian verb is written with the sign SU. If in Urartian <*š>* as in Hittite represents [s], the stem of the verb with the meaning 'to fill' would in all three languages be *su-*. Kossian therefore convincingly suggested that the word might be a loan word originating in the Caucasian region.<sup>27</sup> In any case, the Hieroglyphic Luwian and Hittite texts as well as the internal evidence of the Urartian inscriptions suggest that the basic meaning of the Urartian verb *šu-* is 'to fill' rather than 'to build, install'.

Similarily, inscriptions of the Neo-Assyrian period mention the filling of granaries. Unlike the Urartian inscriptions they do not refer explicitly to the storage buildings, but only to the grain they piled up within them ( $tab\bar{a}ku$ ).<sup>28</sup>

# 5. Royal granaries belonging to *ašihuši* buildings and the terminology of CTU I A 9–20 from Arin-berd

As already mentioned, some inscriptions refer to granaries as part of a building complex, namely a construction called <sup>(É)</sup> *barzidibduni* or a building called <sup>(É)</sup>*ašiḫuši*.

Thus, CTU I A 8–30 from Argištihinili/Armavir (listed above as Type 2) refers to a granary under an *ašihuši* building filled by Argišti I whereas CTU I A 9–20 (Type 5) reports the construction of an *ašihuši* building and the filling up of two appertaining granaries by Argišti I's son Sarduri II. Similarily, CTU I A 9–19 on a stone slab from Argštihinili/Armavir mentions the construction of a *barzidibduni* building and two related granaries.

Moreover, the fact that CTU I A 8–29 reporting the filling of a granary by Argišti I was found in the area of a tower temple (Urartian <sup>( $\ell$ )</sup>susi) suggests that granaries could also be part of such temples. The special significance of the adjoining granary is highlighted by the exceptional nature of the inscribed object, namely a perfectly square-cut stone ashlar of red porphyry and its superbly carved inscription.<sup>29</sup>

The supposed structure of these buildings have been discussed in a number of publications by different scholars.<sup>30</sup> Some information about the function of the *barzidibduni* building is provided by a rectangular stone block bearing CTU I A 5–60 of Minua from Kohbants. The text reports that Minua built a *barzidibduni* and established a sacrificial ritual there. The middle section of the text (lines 7–12) is only partially

<sup>29</sup> See Salvini 2008a: 363-364 with further references.

as the royal residence of Que and was presumably the capital of the Adana Plains. See, e.g. Green 2010: 253-254.

<sup>&</sup>lt;sup>22</sup> CHLI I Maraş 8 §7 (Hawkins 2000: 253–254).

<sup>&</sup>lt;sup>23</sup> CHLI I IV.3 İskenderun (Hawkins 2000: 259). The quoted passage is followed by a curse formula (§5–7).

<sup>&</sup>lt;sup>24</sup> CHLI I II.42 Karkamiš A 30h (Hawkins 2000: 177-178).

<sup>&</sup>lt;sup>25</sup> Edited by Hoffner 1997: 95.

<sup>&</sup>lt;sup>26</sup> An exception is the above cited inscription from iskenderun (CHLI I/1 IV.3 iskenderun; Hawkins 2000: 259).

<sup>&</sup>lt;sup>27</sup> Kossian 1997: 29-30.

<sup>&</sup>lt;sup>28</sup> Cf. RIMA 2 A.0.87.1 vi ll. 102–103 (Tiglath-pileser I); RIMA 2 A.0.98.2 ll. 64–65 (Aššur-dān II); RIMA 2 A.0.99.2 l. 44 (Adad-nārārī II); RIMA 2 A.0.100.5 l.132 and A.0.100.3 r. 3' (probably a duplicate; Tukultī-Ninurta II); RIMA 2 A.0.101.17 ii 26–28; A.0.101.19 l. 85 (Aššur-nāṣirapli II); RINAP 4 Nr. 113 iv 1–3 (Esarhaddon).

<sup>&</sup>lt;sup>30</sup> See, e.g., Wilhelm and Akdoğan 2011: 219-227 (ašihusi building); Seidl 1993: 558-564 (ašihusi building); Salvini 1998a: 131-149 (barzidibduni and ašihusi building); 2014-2016: 205-206 (susi temple); Dan and Herles 2017: 107-152 (susi temple).

intelligible. In conjunction with the other information the mention of the troops (line 7, partially restored) and kings (line 11), however, suggest that the *barzidibduni* building was a cult building which played an important role for the kingship and the military.

With regard to the *ašihusi* building, the proximal space deixis *ini* <sup>£</sup>*ašihuse* 'this *ašihusi* building' in CTU I A 12–10 of Rusa, son of Argišti which is engraved in ten beautifully decorated cubic stone blocks of basalt allows us to identify the archaeological remains as part of the respective building. The same is true for CTU IV A 8–42 on a stone fragment.<sup>31</sup>

In contrast to CTU I A 8–30 and A 9–20 and similar to CTU IV A 8–42, CTU I A 12–10 of Rusa, son of Argišti does not refer to granaries. Yet, the fact that the blocks obviously had fallen down from a higher point into large *pithoi* storage rooms shows that also in this case the granaries were situated below the respective *ašiļusi* building.<sup>32</sup>

Furthermore, CTU I A 5–65 of Minua, son of Išpuini, shows a similar proximal space deixis to an *ašihusi* building. Since the inscription is attested in three duplicates on cylindrical column bases it can be concluded that such a building had, or could have had, columns.

On the grounds of this archaeological and textual information, Salvini convincingly concluded 'that the *ašihusi* building was an important representation building of the Urartian fortresses, which was directly and architectonically connected to the storage rooms (silos and cellars)'.<sup>33</sup>

Whereas Salvini refrained from giving a more specific definition or etymological explanation of the term *ašiļusi*, other scholars suggested that it was a temple building, a sanctuary for libation offerings, or a banquet hall.<sup>34</sup>

The interpretation as a building for libations, which was based on an etymological explanation by König, was for good reasons rejected by Salvini.<sup>35</sup> The interpretation as a banquet hall suggested by Wilhelm and Akodoğan is, however, better founded.

Based on Salvini's hypothesis that the noun is to be analysed as \* $a\check{s}i$ -h(i)=usi and thus as a compound of the root \* $a\check{s}i$ , the derivational suffix -hi 'belonging to' and the suffix -usi which is also attested as a suffix in the word  $uri\check{s}husi$ ,<sup>36</sup> Wilhelm and Akdoğan interpret the word as a cognate of Hurrian  $a\check{s}ohe$  (or, respectively,  $a\check{z}o\check{g}e$ ) with the suffix -usi.

Since *ašohe* in the passage KBo 32.13 i 23–24 par. KBo 32.13 ii 24–26 of the Hurrian-Hittite bilingual text is translated

with Hittite  $ad\bar{a}tar$  (state of) eating', a derived noun from the verb ed-/ad- 'to eat', they conclude that the Urartian  $a\check{s}ihusi$  building functioned as a building for the consumption of food.<sup>37</sup>

Based on the Urartian evidence and the fact that the passage in the bilingual text as well as other attestations of the Hurrian word refer to banquets of deities, Wilhelm and Akdoğan convincingly argued that the *ašihusi* building was likely a banquet hall.<sup>38</sup>

As for its structure, CTU I A 8–30 and A 9–20, as well as the archaeological evidence, are illuminating. CTU I A 8–30 indicates that the *ašiļusi* building was built above a granary. Similarily, CTU I A 9–20 shows that the *ašiļusi* building and the granaries mentioned in this inscription were situated close to each other.

CTU I A 9–20, however, does not indicate that the granaries were located below the *ašiļusi* building. Yet, since the text does not provide precise information about the spacial link between the *ašiļusi* building and the granaries, it can very well be that the *ašiļusi*, similarly to the one mentioned in CTU I A 8–30, was built on top of the storage rooms.

Apart from the number of storage rooms, the structure of the building complexes mentioned in the two inscriptions might therefore be similar in that the respective granaries were located in the basement or cellar. The evidence of CTU I A 9–20 points additionally to a building complex consisting of a corridor or courtyard leading to two storage rooms for grain: one on its right and another one on its left side.

That one of the granaries referred to in CTU I A 9–20 was situated on the left side of the building complex and the other one on its right can be deduced by the wording of lines 8–12 of the inscription. Since these lines have been translated in different ways it appears reasonable to discuss them in detail in their context:<sup>39</sup>

1 <sup>d</sup>hal-di-i-ni-ni 2 al-su-ú-i-ši-ni 3 <sup>md</sup>sar<sub>5</sub>-du-ri-i-še 4 <sup>m</sup>ar-giš-ti-ḫi-ni-še 5 i-ni <sup>é</sup>a-ši-hu-si 6 za-du-ni e-'a i-ni-li 7 °a-ri-li šú-°a-li 8 an-da-ni DUB-ti-ni-e 9 10 LIM 2 LIM 6 ME BANEŠ iš-ti-ni 10 sal-ma-at-hi DUB-ti-ni-e 11 10 LIM 1 LIM 5 ME BANEŠ iš-ti-ni 12 PAP 20 LIM 4 LIM 1 ME BANEŠ iš-ti-ni 13 <sup>md</sup>sar<sub>e</sub>-du-ri-i-ni 14 mar-gi-iš-ti-e-hi 15 MAN DAN-NU MAN KURbi-a-i-na-ú-e 16 a-lu-si <sup>URU</sup>tu-uš-pa URU

While Salvini, Wilhelm and Akdogan interpret *andani* and *salmathi* as adverbs without a dependent noun and DUB-*ti*-*ni-e* as an absolutive singular form and thus translate: 'on the right side (there is) an inscription (of the contents): 12,600 BANEŠ are here, on the left side (there is) an inscription

<sup>&</sup>lt;sup>31</sup>First edited by Wilhelm and Akdoğan 2011: 219-225.

<sup>&</sup>lt;sup>32</sup> See Seidl 1993: 558-564; Salvini 1998a: 144-145.

<sup>&</sup>lt;sup>33</sup> Salvini 1998b: 127. See also the detailed discussion of CTU I A 12–10 and its archaeological context in this article. For further literature see Salvini 1998a: 131-148; 2008a: 582 (CTU I A 12–10).

<sup>&</sup>lt;sup>34</sup> See König 1955-1957: 74 and 145 who offered two alternative translations: 'Tempel des Götterturms' and 'Kultraum für die Trankopfer' (= HchI). Subsequently also Bilgiç and Öğün 1965: 18 and Mayer-Opificius 1993: 267-268. For the interpretation as a banquet hall see Wilhelm and Akdoğan 2011: 219-227.

<sup>&</sup>lt;sup>35</sup> See Salvini 1998b: 124-125.

<sup>&</sup>lt;sup>36</sup> Both words has already been related to each other by Melikišvili 1960: 391 who interpets *urišhusi* as as a derivation of *urišhi* 'weapon' possibly denoting a weapons room or house. For the meaning of *urišhusi* see also Salvini 1979a: 584-586 and 1998b: 126 with note 13 who translates the word as 'treasury'.

<sup>&</sup>lt;sup>37</sup> Edited by Neu 1996: 220-272.

<sup>&</sup>lt;sup>38</sup> See Wilhelm and Akdoğan 2011: 219-227.

<sup>&</sup>lt;sup>39</sup> The transliteration is based on the one given by Salvini 2008a: 444-445 (= CTU I A 9–20).

(of the contents): 11,500 BANEŠ are here<sup>\*40</sup> or, respectively, 'according to the inscription on the right ..., according to the inscription on the left<sup>\*41</sup>, Melikišvili and Arutjunjan understand DUB-*ti*-*ni*-*e* as a dependent noun of *andani* or, respectively, *salmathi*.

Melikišvili 1971: 250 translates the clauses as follows:

с одной (стороны) надписи (зернохранилище, которое вмещает) 12,600 капу, с другой (стороны) надписи (зернохранилище, которое вмещает) 11,500 капу.

On the one (side) of the inscription<sup>(gen. sg.)</sup> (is a granary that contains) 12,600 *kapi*, on the other (side) of the inscription – (a granary that contains) 11,500 *kapi*.

Arutjunjan 2011: 269 (= KUKN 265) gives no translation for andani and salmathi, but translates DUB-ti-ni-e, as Melikišvili does, аs надписи (genitive sg. of надпись 'inscription') and thus dependent on andani or, respectively, salmathi.

Neither authors, however, identify the case of the correspondent Urartian word DUB-*ti-ni-e* which in my view is most likely to be a noun in the ablative-instrumental case. Thus, the local adverbs *andani* and *salmathi* which have been convincingly interpreted by Salvini as 'on the right side' and 'on the left side', are also elsewhere construed with a dependent noun with the ending ni/e.<sup>42</sup> The dependent noun can either precede or follow the local adverb.

The grammatical function of the two words can be compared with *edini* 'because of, for', *bedini* 'on behalf of' and probably also *kuruni* 'at the side of' which seem to function as postpositions construed with nouns ending in *ni/ne*, and thus likely the ablative-instrumental case.<sup>43</sup> As in Hurrian they are likely originally nouns functioning as postpositions and sometimes also as prepositions.<sup>44</sup>

Cf. the following attestations:

CTU I A 5-21 lines 9-13:

 $^{(9)\text{URU}}$ ú-qu-'a-a-ni  $^{(10)}$ a-da-ni 'a-la-du-ni  $^{(11)\text{URU}}$ zu-gu-ḫí-e $^{(12)\text{URU}}$ ir-nu-ni-n[i] $^{(13)\text{URU}}$ a-ba-si-i-n[i]

On the right side of the city Uqu'a (URU) *Qu'a=ni adani*) I subdued the city Zugube, the city Irnuni and the city Abasini.

CTU I A 9-3 vi 5b-6:

(<sup>vi 5b)</sup>an-da-ni <sup>KUR</sup>e-ri-a-ḫi 'a-al-du-bi sal-ma-at-ḫi <sup>(vi 6a)KUR</sup>qu-ria-ni-ni uš-ta-di <sup>KUR</sup>i-ga-ni-e-di

On the right right I subdued the land Eriaḥi, on the left side of the land Quriani (*salmatḥi* <sup>KUR</sup>*quriani=ni*) I went on a campaign to the land Igani.

CTU I A 9-4 lines 12-15:

<sup>43</sup> See Salvini and Wegner 2014: 33.

<sup>44</sup> See Wegner 2007: 114-115.

<sup>(12)</sup>i-ku-ka-ni U<sub>4</sub>-ME-ni-e uš-ta-di KUR-ni-di an-da-ni <sup>(13)KUR</sup>qala-'a-ni 'a-al-du-bi ku-țu-bi pa-ri <sup>KUR</sup>kar-ni-ši-e <sup>(14)KUR</sup>ba-ba-ni sal-ma-at-ți <sup>URU</sup>mì-li-ți<sub>5</sub>-a-ni ku-țu-bi pa-ri <sup>(15)KUR</sup>mu-šá-ni-e <sup>URU</sup>za-ab-šá a-su-ni

In the same days I went on a campaign towards the region, on the right side I subdued the land Qala'a, I came to the land Karniši, mountainous land, on the left side of the city Miliția (salmatți <sup>URU</sup>Miliția=ni) I came to the land Muša near to the city Zabša.

Furthermore the absolutive singular case of DUB 'inscription' is otherwise spelled DUB-te.<sup>45</sup>

Another reason that speaks against interpreting DUB-*ti-ni-e* as an absolutive singular is the fact that in this case CTU I A 9–20 would refer to two other inscriptions on its left and right side, each of them specifying the amount of grain stored in their respective rooms. Since these inscriptions are not preserved and such a scenario (viz. an inscription referring to other near-by inscriptions and their contents) is, to my knowledge, otherwise not attested, the interpretation of DUB-*ti-ni-e* as a dependent noun of *andani* or, respectively *salmathi* in the ablative case (DUB-*ti=ne*) is preferable.

Thus, CTU I A 9–20 points presumably not to further inscriptions, but to two granaries situated on its left and right side. Hence, it is likely to be translated in the following way:

<sup>(1-2)</sup>Through the greatness of the god Haldi <sup>(3-4)</sup>Sarduri, son of Argišti <sup>(5-7)</sup>made this *ašiļusi* building and filled these granaries. <sup>(8-9)</sup>On the right side of the inscription (t)here (are) 12,600 BANEŠ (of grain), <sup>(10-11)</sup>On the left side (t)here are 11,500 BANEŠ (of grain). <sup>(12)</sup>Altogether (t)here are 24,100 BANEŠ (of grain). <sup>(13-16)</sup>Sarduri, son of Argišti, mighty king, king of the Bia lands, lord of the city Țušpa.

This evidence is of particular interest when compared with Middle Assyrian administrative records from Ashur (Qalat Šerqat), Kār-Tukultī-Ninurta (Tulul al-'Aqr), and Dūr-Katlimmu (Tell Šeḥ-Ḥamad), and some other cities mentioning <sup>£</sup>karmū buildings that have been identified as granaries. Thus, many of these records specify the location of the storage room in which the grain is stored by the terms 'on the right side' (ana emittāni) or 'on the left side' (ana šumelāni).

Cf., for instance, the following attestations:<sup>46</sup>

MARV 2, 23 (Ashur):

 $^{(rev.\,10')}$ (barley) [a-n]a tar-ba-[și] $^{(11)}$ [š]a <sup>É</sup>kar-mi i+na e-ra-be a-na e[-m]i- i[t-te] $^{(12)}$ [i+n]a <sup>É</sup>kar-mi ša qa-an-ni ša U[DU]N pa-pi-[ri]

(barley) piled up (ka[rim], line 17') in the courtyard of the granary, at the entrance to the right, (and?) in the granary which (is) close to the oven of the beer bread.

### MARV 2, 23 (Ashur):

<sup>(rev. 18)</sup>(barley) a-na tar-ba-și ša <sup>£</sup>[kar-mi] <sup>(19)</sup>ša be-ta-nu i+na e-ra-be a-na šu-me-[li] <sup>(20)</sup>i+na <sup>£</sup>kar-mi ša SUḪUR si-mi-il-t[e] <sup>(21)</sup>ša ma-šar-tu-šu a-na tar- ʿba ̀-ba-ṣi ša-ʿak-nu-tu-ni ̈

<sup>&</sup>lt;sup>40</sup>Thus Salvini 2008a: 445: 'a destra c'è un'iscrizione dal tenore '12,600 BANEŠ (sono) qui (contenute)', a sinistra(?) c'è un'iscrizione dal tenore '11,500 BANEŠ (sono) qui (contenute)'.

<sup>&</sup>lt;sup>41</sup>Thus Wilhelm and Akdoğan 2011: 'Der Inschrift rechts (zufolge) sind 12,600 *kapi*-Maßeinheiten (Getreide) darin, der Inschrift links (zufolge sind) 12,600 *kapi*-Maßeinheiten (Getreide) darin, …'.

 $<sup>^{42}</sup>$  For the interpretation of and ani and salmathi as cognates of Hurrian wandan(n)i 'right' and šaphali 'left' see Salvini 1970: 409-410.

<sup>&</sup>lt;sup>45</sup> Cf., e.g. CTU I A 2–5 line 4, A 3–4 obv. 32', A 5–24 rev. 13. For further references see CTU II: 403-404.

 $<sup>^{\</sup>rm 46}$  The transliterations and translations given here are based on Faist and Llop 2012: 20-23.

(barley) stored (tabik, line 24') in the courtyard of the inner granary, at the entrance to the left, in the granary which (is) next to the staircase, whose point where the grain was extracted is directed to the courtyard.

No. 69 (DeZ 2494) (Dūr-Katlimmu): <sup>(29)</sup>... ŠE ... a-na <sup>£</sup>kar-me <sup>(30)</sup>ša ri'-bi-t[e] i+na e-ra-bi a-na šu-mala <sup>(31)</sup>ta-bi-ik

... barley ... is stored in the granary of the main street at the entrance to the left.

No. 93 (DeZ 2528) (Dūr-Katlimmu/Tell Šeh-Hamad):

<sup>(8)</sup>(barley) i+na <sup>É</sup>kar-me <sup>(9)</sup>ša e-ra-be <sup>(10)</sup>a-na e-me-ta <sup>(11)</sup>ta-bi-ik

(barley) is stored in the granary of the entrance to the right.

Moreover, some texts mention more than one granary:

No. 75 (DeZ 3848/15) (Dūr-Katlimmu/Tell Šeḥ-Ḥamad): <sup>(22)</sup>(barley) ... i+na 2 <sup>£</sup>kar-ma-ni tab-ki! ... <sup>(30)</sup>... ŠE i+na kar!-me ša 15 <sup>£</sup>kar-me TUR<sup>? (31)</sup>URU<sup>?</sup>.DU-PI tab-ki x

(barley) is stored in two granaries ... (barley) is stored in the granary on the right, the little granary, ...

No. 90 (DeZ 2513) (Dūr-Katlimmu/Tell Šeḫ-Ḥamad): <sup>(2)</sup>(barley) i+na 2 <sup> $\acute{E}$ </sup>kar-ma-ni <sup>(3)</sup>i+na É <sup>(1)</sup>ḫu-la-lu ... <sup>(5)</sup>(barley) a-na 1 <sup> $\acute{E}$ </sup>kar-me <sup>(6)</sup>a-na <sup>(1)</sup>ḫu<sup>2</sup>-ub<sup>2</sup>-re-e-ni

(barley is stored) in two granaries at Hulālu's house ... (barley is stored) in one granary at Hubrenu's.

One of the granaries of Dūr-Katlimmu very likely belonged to building P, excavated in this city.<sup>47</sup> Its lower floor consisted of a long central corridor leading to smaller rooms on its left and right side. In one of these rooms, namely room A, a thick layer of carbonized grain had been found proving that the room was used for the storage of grain. Moreover, also clay sealings on sacks, vessels and doors have been found in the room, as have many texts. On the basis of these texts the building complex could be identified as the govenor's palace of Dūr-Katlimmu.<sup>48</sup>

There is, however, no indication that the building consisted of a portico which might have served as a banquet hall. Instead, the second storey, like the first storey, was composed of several rather small rooms. Therefore, this building cannot be considered a parallel for the *ašiḫusi* building with its appertaining granaries.

It is more illuminating to compare the Urartian and Assyrian texts with particular consideration for the objects used as writing material, their archaeological contexts, and the contents and function of the texts.

In doing so, it becomes obvious that the Urartian inscriptions reporting the filling of granaries and specifying the amount of grain stored in them show a resemblance to administrative records which were usually written down on clay or perishable material and kept in archives. These Urartian inscriptions can therefore be regarded as monumental representations of archival records. They are not, however, one-to-one counterparts of the latter. Instead, most of them show elements that are typical for ancient Near Eastern royal inscriptions. These are, in particular, the reference to divine support through which the deed was accomplished (inscriptions of Types 3a and b), and the enumeration of royal epithets as in CTU I A 9–19 of Sarduri II (Type 4). Further, also the proximal space deixis to the buildings is a typical element of monumental inscriptions.

However, except for the proximal space deixis, these elements are not present in the Types 1, 2, 5 and 6 inscriptions of Sarduri II and Rusa, son of Erimena. The primary function of these inscriptions is to record administrative activities rather than to highlight the greatness of the rulers and their magnificient achievements.

As the comparison with the Hieroglyphic Luwian inscription CHLI I Karkamiš A 30h from the Neo-Hittite states shows, Urartu is not the only culture where this phenomenon can be observed. On the contrary, from the first millenium onwards a tendency to engrave texts of administrative contents on stone monuments is also noticeable in other regions, in particular, the Greco-Roman world.<sup>49</sup>

While this phenomenon has been studied in view of these sources, the Urartian and Neo-Hittite inscriptions have, to my knowledge, not been the subject of scholarly analysis in this regard. Since these aspects are of great importance for the study of the ancient world, and especially written culture, it seems appropriate to highlight that this phenomenon is already apparent before the Hellenistic period.

As for the relationship between Urartu and Assyria, the Urartian inscriptions make clear that their kings, although having borrowed the cuneiform script (and other achievements) from Assyria, forged new pathways in using this writing.

#### Bibliography

- Arutjunjan, N.V. 2001. Korpus urartskix klinoobraznyx nadpisej. Yerevan: Izdatel'stvo 'Gitutjun' NAN RA.
- Balkan, K. 1960. Ein urartäischer Tempel auf Anzavurtepe bei Patnos und hier entdeckte Inschriften. *Anatolia* 5: 99–131.
- Bilgiç, E. and B. Öğün 1965. Second Season Excavation at Kef Kalesi of Adilcevaz. Anadolu / Anatolia 9: 13–19.
- Breckwoldt, T. 2011. Speicher (storage). A. Philologisch. Reallexikon der Assyriologie und Vorderasiatischen Archäologie 12/7: 636–637.
- Çifçi, A. 2017. The Socio-Economic Organisation of the Urartian Kingdom (Culture and History of the Ancient Near East 89). Leiden and Boston: Brill.
- Corbier, M. 2006. Donner à voir, donner à lire. Mémoire et communication dans la Rome ancienne. Paris: CNRS Éditions.
- Dalalyan, T. 2011. On the kapi-Measurement in Ancient Near-Eastern Languages. Aramazd: Armenian Journal of Near Eastern Studies 6/1: 91–97.
- Dan, R. and M. Herles 2017. From the Gate of Haldi to the 'Module'. A Study of Urartian Architectural 'Module' and the Oshakan Fortress. *Akkadica* 138: 107–152.
- Davies, J.K. 2003. Greek Archives: From Record to Monument, in M. Brosius (ed.) Ancient Archives and Archival Traditions. Concepts of Record-Keeping in the Ancient World: 323–343. Oxford: Oxford Press.

<sup>&</sup>lt;sup>47</sup> See Jakob 2003: 323-325.

 $<sup>^{48}</sup>$  For a description of the building see Pfälzner 1995: 105-114 with figures 81a-83; for the identification of the architectonic structure as a  $^{\rm E}karm\bar{u}$  see Jakob 2003: 325.

<sup>&</sup>lt;sup>49</sup> See, e.g., Davies 2003; Corbier 2006; Haensch 2009.

- Dinçol, A.M. 1987. Urartäische Inschriften aus Çavuştepe-Sarduriḥinili. Anadolu 21: 95–104.
- Faist, B. and J. Llop 2012. The Assyrian Royal Granary (karmu), in G. del Olmo Lete, J. Vidal and N. Wyatt (eds) The Perfumes of Seven Tamarisks. Studies in Honour of Wilfred G.E. Watson (Alter Orient und Altes Testament 394): 19–35. Münster: Ugarit-Verlag.
- Fales, F.M. 2017. The Letter to the God Aššur Recounting Sargon's Eighth Campain (714 BCE), in K.L. Younger Jr. (ed.) The Context of Scripture, Volume 4: Supplements: 199– 215. Leiden and Boston: Brill.
- Freydank, H. 1982. Mittelassyrische Rechtsurkunden und Verwaltungstexte, Bd. II. Berlin: Akademie-Verlag.
- Fuchs, A. 2012. Urartu in der Zeit, in S. Kroll, C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds) Biainili-Urartu. The Proceedings of the Symposium held in Munich 12-14 October 2007 (Acta Iranica 51): 135–161, Leuven: Peeters.
- Grayson, A.K. 1991. Assyrian Rulers of the Early First Millenium BC I (1114-859 BC) (The Royal Inscriptions of Mesopotamia, Assyrian Periods 2). Toronto: University of Toronto Press.
- Green, D.J. 2010. 'I Undertook Great Works' (Forschungen zum Alten Testament 2/41). Tübingen: Mohr Siebeck.
- Haensch, R. (ed.) 2009. Selbstdarstellung und Kommunikation. Die Veröffentlichung staatlicher Urkunden auf Stein und Bronze in der Römischen Welt. Internationales Kolloquium an der Kommission für Alte Geschichte und Epigraphik (1. bis 3. Juli 2006) (Vestigia 61). München: Beck.
- Hawkins, J.D. 2000. Corpus of Hieroglyphic Luwian Inscriptions. Volume I: Inscriptions of the Iron Age. Berlin and New York: Walter de Gruyter.
- Hoffner, H.A, Jr. 1997. *The Laws of the Hittites. A Critical Edition* (Documenta et Monumenta Orientis Antiqui 23). Leiden, New York and Köln: Brill.
- Jakob, S. 2003. Mittelassyrische Verwaltung und Sozialstruktur. Untersuchungen (Cuneiform Monographs 29). Leiden and Boston: Brill. Styx.
- König, F.H. 1955-1957. Handbuch der chaldischen Inschriften (Archiv für Orientforschung, Beiheft 9). Graz: Selbstverlag des Herausgebers.
- Kroll, S. 2012. Rusa Erimena in archäologischem Kontext, in S. Kroll, C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds) Biainili-Urartu. The Proceedings of the Symposium held in Munich 12-14 October 2007 (Acta Iranica 51): 183–186, Leuven: Peeters.
- Kossian, A.V. 1997. On Anatolian-Urartian Linguistic Contacts. Journal of Indo-European Studies 25: 27–34.
- Leichty, E. 2011. *The Royal Inscriptions of Esarhaddon, King of Assyria (680-669 BC)* (The Royal Inscriptions of the Neo Assyrian Period 4). Winona Lake: Eisenbrauns.
- Linke, J. 2015. Das Charisma der Könige. Zur Konzeption des altorientalische Königtums im Hinblick auf Urartu. Wiesbaden: Harrassowitz.
- Llop, J. 2005. Die königlichen 'großen Speicher' (karmūrabi'ūtu) der Stadt Assur in der Regierungszeit Salmanassers I. und Tukultī-Ninurtas I. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 137: 41–55.
- Margueron, J.-C. 2011. Speicher (magasin). B. Archäologisch. Reallexikon der Assyriologie und Vorderasiatischen Archäologie 12/7: 637–639.
- Mayer, W. 2013. Assyrien und Urariu I. Der Achte Feldzug Sargons II. im Jahre 714. v. Chr. (Alter Orient und Altes Testament 395/1). Münster: Ugarit-Verlag.
- Mayer-Opificius, R. 1993. Gedanken zur Bedeutung des urartäischen Ortes Kefkalesi. Istanbuler Mitteilungen 43: 267–278.
- Melikišvili, G.A. 1960. Urartskie klinoobraznye nadpisi. Moscow: Izdatil'stvo Akademij nauk SSSR (= UKN).

- Melikišvili, G.A. 1971. Urartskje klinoobraznye nadpisi. Vestnik drevnej istorii (Journal of Ancient History) 3(117): 229–255 (= UKN II).
- Neu, E. 1996. Das hurritische Epos der Freilassung I. Untersuchungen zu einem hurritisch-hethitischen Textensemble (Studien zu den Boğazköy-Texten 32). Wiesbaden: Harrassowitz.
- Papazian, H. 2013. The Central Administration of the Resources in the Old Kingdom: Departments, Treasuries, Granaries and Work Centers, in J.C. Moreno Garvía (ed.) Ancient Egyptian Administration (Handbook of Oriental Studies 1/104): 41–84. Leiden and Boston: Brill.
- Payne, M. 2005. Urartian Measures of Volume (Ancient Near Eastern Studies, Supplement 16). Leuven, Paris and Dudley. MA: Peeters.
- Pfälzner, P. 1995. Mittanische und mittelassyrische Keramik (Berichte der Ausgrabung Tell Šēḥ Hamad / Dūr-Katlimmu 3). Berlin: Dietrich Reimer Verlag.
- Roaf, M. 2012. Could Rusa Son of Erimena Have Been King of Urartu During Sargon's Eighth Campaign, in S. Kroll, C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds) Biainili-Urartu. The Proceedings of the Symposium held in Munich 12-14 October 2007 (Acta Iranica 51): 187–216, Leuven: Peeters.
- Röllig, W. 2008. Land- und Viehwirtschaft am unteren Hābūr in mittelassyrischer Zeit (Berichte der Ausgrabung Tell Šēḥ Ḥamad / Dūr-Katlimmu 9). Wiesbaden: Harrassowitz.
- Salvini, M. 1969. Nuove iscrizioni urartee dagli scavi di Arinberd, nell'Armenia sovietica. *Studi Micenei ed Egeo-Anatolici* 9: 7–24.
- Salvini, M. 1970. Einige neue urarțăisch-hurritische Wortgleichungen. *Orientalia, Nova Series* 39: 409–411.
- Salvini, M. 1979a. Una 'bilingue' assiro-urartea, in O. Carruba (ed.) Studia Mediterranea Piero Meriggi dicata, Volume 1: 575-593. Pavia: Aurora Edizioni.
- Salvini, M. 1979b. Das susi-Heiligtum von Karmir-blur und der urartäische Turmtempel. Archäologische Mitteilungen aus Iran 12: 249–269.
- Salvini, M. 1998a. I granai delle città urartee, in S. de Martino and F. Imparati (eds) *Studi e Testi I* (Eothen 9): 131–149. Firenze: LoGisma.
- Salvini, M. 1998b. The Inscription of the Urartian King Rusa II at Kefkalesi (Adilcevaz). *Studi Micenei ed Egeo-Anatolici* 40: 123–129.
- Salvini, M. 2008a. Corpus dei testi urartei. Volume I. Le iscrizioni su pietra e roccia (Documenta Asiana VIII/1). Roma: CNR -Istituto di studi sulle civiltà dell'Egeo e del Vicino Oriente.
- Salvini, M. 2008b. Corpus dei testi urartei. Volume II. Le iscrizioni su pietra e roccia. Thesaurus (Documenta Asiana VIII/2). Roma: CNR - Istituto di studi sulle civiltà dell'Egeo e del Vicino Oriente.
- Salvini, M. 2008c. Corpus dei testi urartei. Volume III. Le iscrizioni su pietra e roccia. Tavole (Documenta Asiana VIII/3). Roma: CNR - Istituto di studi sulle civiltà dell'Egeo e del Vicino Oriente.
- Salvini, M. 2010. Review of M. Payne, Urartian Measures of Volume, Ancient Near Eastern Studies, Supplement 16, Peeters, Leuven, Paris and Dudley, MA 2005. *Ancient West and East* 9: 359–368.
- Salvini, M. 2012. Corpus dei testi urartei. Volume IV. Iscrizioni su bronzi, argilla e altri supporti. Nuove iscrizioni su pietra. Paleografia generale (Documenta Asiana VIII/4). Roma: CNR -Istituto di studi sulle civiltà dell'Egeo e del Vicino Oriente.
- Salvini, M. 2014–2016. Turmtempel. Reallexikon der Assyriologie und Vorderasiatischen Archäologie 14: 205–206.
- Salvini, M. and I. Wegner 2014. Einführung in die urartäische Sprache. Wiesbaden: Harrassowitz.
- Seeher, J. 2000. Getreidelagerung in unterirdischen Großspeichern: Zur Methode und ihrer Anwendung im 2. Jahrtausend v. Chr. Studi Micenei ed Egeo-Anatolici 42/2: 261–301.

- Seidl, U. 1993. Urartäische Bauskulpturen, in M.J. Mellink, E. Porada and T. Özgüç (eds) *Aspects of Art and Iconography. Anatolia and its Neighbors. Studies in Honor of Nimet Özgüç:* 557–564. Ankara: Türk Tarih Kurumu Basımevi.
- Seidl, U. 2012. Rusa son of Erimena, Rusa son of Argišti and Rusahinili/Toprakkale, in S. Kroll, C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds) *Biainili-Urartu. The Proceedings of the Symposium held in Munich 12-14 October* 2007 (Acta Iranica 51): 177–181, Leuven: Peeters.
- Siebels, R. 2001. Representations of Granaries in Old Kingdom Egypt. Bulletin of the Australian Centre for Egyptology 12: 85–99.
- Thureau-Dangin, F. 1912. *Une Relation de la huitième campagne de Sargon (714 av. J.-C.)*. Paris: Paul Geuthner.
- Wegner, I. 2007. Einführung in die hurritische Sprache. 2., überarbeitete Auflage. Wiesbaden: Harrassowitz.
- Wilhelm, G. and R. Ákdoğan. 2011. Eine Inschrift Argištis I. mit Erwähnung eines ašihusi-Gebäudes. Studi Micenei ed Egeo-Anatolici 53: 219–227.

#### Abbreviations of text editions

CHLI I	= Hawkins 2000.
CTU I	= Salvini 2008a.

- CTU II = Salvini 2008b.
- CTU III = Salvini 2008c.
- CTU IV = Salvini 2012.
- HchI = König 1955–1957.
- KBo = Keilschrifturkunden aus Boghazköi. Volumes 1–6. Leipzig 1920–1921: J.C. Hinrichs'sche Buchhandlung, Volumes 7ff. Berlin: Gebr. Mann.
- KUKN = Arutjunjan 2001.

MARV 2 = Freydank 1982.

RIMA 2 = Grayson 1991.

RINAP 4 = Leichty 2011.

- TCL = Thureau-Dangin 1912.
- UKN = Melikišvili 1960.
- UKN II = Melikišvili 1971.