Accounting texts from Boğazköy in current Hittitological research

Archéologie de la comptabilité. Culture matérielle des pratiques comptables au Proche-Orient ancien

Les textes comptables de Boğazköy dans les recherches hittitologiques actuelles
Rechnungswesen in Boğazköy aus der aktuellen hethitischen Forschung
Los textos contables de Boğazköy en las investigaciones hititológicas actuales

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1 The Hittite kingdom (ca. 1650-1180 BCE) was a prominent player on the Ancient Near Eastern scene. While at the dawn of their history Hittites occupied a small territory in the Kizil-Irmak river valley in Central Anatolia, subsequently they succeeded to extend their control far beyond the peninsula. In the heyday of their might, in the second half of the xivth century BCE, Hittite kings held sway over vast territories in the Syro-Palestine region, Middle Euphrates valley and Upper Mesopotamia. The Hittite kingdom was a heterogeneous state from ethnolinguistic and cultural point view. Its backbone was formed by the Indo-European peoples of Hittites and Luwians. Two writing systems were in use for their languages: Mesopotamian cuneiform and indigenous Anatolian hieroglyphic script. Hittites were among many other Ancient Near Eastern cultures to adopt cuneiform. Rather frequently, such a borrowing was not isolated, it could go hand in hand with adoption of different cultural phenomena, such as special forms of education based on a set of literary and ‘scientific’ compositions, some ideological and social concepts, archival and accounting practices.

2 Hittite cuneiform corpus is analogous to other cuneiform corpora of the Ancient Near East in some aspects and differs in other. The vast majority of Hittite cuneiform texts originate from the Hittite capital Hattusa / Boğazköy: ca. 27000 tablets and fragments. They are written in different languages: apart from Hittite which was official language of the empire and was used to write down the majority of the corpus, there are documents in Sumerian, Akkadian and Hurrian, languages of three influential cultures, as well as in...
Palaic, Luwian, some Indo-Aryan dialect and Hattic. Apart from the linguistic diversity, the Hittite corpus is interesting due to the distribution of different text genres. The classification of Hittite corpus was suggested by T. van den Hout:

<table>
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<tr>
<th>A. Texts with multiple copies</th>
<th>B. Texts in single copies</th>
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<tr>
<td>Historical narratives, treaties, edicts (CTH 1-147, 211-216)</td>
<td>Letters (CTH 151-210)</td>
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<td>Instructions (CTH 251-275)</td>
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<td>Festivals (CTH 591-721)</td>
<td>Cult inventories (CTH 501-530)</td>
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<td>Rituals (CTH 390-500)</td>
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<td>Mythology, Anatolian (CTH 321-338) and non-Anatolian (CTH 341-369)</td>
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<td>Hattian, Palaic, Luwian, Hurrian texts (CTH 725-791)</td>
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<td>Lexical lists (CTH 299-309)</td>
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<tr>
<td>Sumerian and Akkadian compositions (CTH 310-316, 792-819)</td>
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3 It is based on whether a text was written in multiple copies or had only one single copy. The former are called prescriptive, and the last ones descriptive. The economic and administrative texts fall into second category. That corresponds to their ephemeral nature: since they were of only temporal use and often reflected an intermediate stage of accounting operations, there was no reason to copy them.

4 Globally, there are three groups of texts that belong to the sphere of administrative and economic management. First of all, purely accounting documents, the so-called inventories (which include rosters and lists of materials and commodities), cadaster texts, cult inventory texts, and documents related to management of tablet collections: shelf lists, or catalogues, and labels⁴.

5 As for their number it can hardly exceed one thousand texts and fragments for Boğazköy collection⁵. This number deserves further corrections and precisions, at the same time it conveys a trustworthy proportion between the administrative-economic texts and the rest of the corpus. This proportion is striking, only about 3 percent of the documents are ephemeral whereas Mesopotamian archives provide a drastically different picture. One
may refer to the calculations of the specialists on Old Babylonian corpus, according to whom, the number of administrative texts, e.g., from Mari is 8,000 against 30,000 of their total number. So, the question is pending why the Hittites left so few accounting texts.

Hittite administrative and economic documentation has recently attracted a considerable attention of scholars. What follows is a brief presentation of the corpus and the related problems according to these new publications.

1. Types of texts

The main body of accounting documentation is grouped in the current version of Laroche catalogue under the numbers (230‒250) and is called “Bestandsaufnahmen”. The first ten are different lists, of places, men and women, of fields and some other. The lists of toponyms probably played a significant role for composing taxation documentation and related types of documents. The field texts (CTH 239), according to T. van den Hout, “were used by Hittite administration as a register on the basis of which either the amount of seed to be handed out or the amount of tax in relation to the yield of a field could be determined”.

The entries from 241 to 250 are inventory texts. According to M. Giorgieri and C. Mora, the inventories provide the following information: they describe the materials which are either received or distributed. The most frequently mentioned are metals (copper, tin, silver, gold and iron) either as bars, or finished objects such as cups, weapons or decorations. One can see also wool and textiles. But food and drinks are extremely rare for this type of texts: one can refer to very few documents like a bread distribution list KBo 18.189. Next the inventories give information on the containers in which the items were kept, usually boxes and chests. They note the type of transaction, either tribute (MANDATTU) or gift (IGLDU₂₄). The provenance of the goods is stated. There is also a record of persons responsible for registration and control of the goods. Finally, the receiving organism and person is mentioned, it can be either one of the storing places like “the Seal House” (ÉNA₄KIŠIB), or a temple or a single person or a group of persons. It should be noted that not all this information is obligatorily present in the inventories.

The structure and content of inventory text can be exemplified by:

IBoT 1.31 (translation by S. Košak):

Obv. (1) 1 red basket, large: filled (with) blue, red and purple wool. / (2) 1 red basket, large, on lion feet, a show piece: contains Amorite (3) linen. (Contents) jotted down on the wooden board. (4) Furthermore it also (contains) Cypriot linen: 37 (pieces). (5) 1 leather bag with straps: (contains) seeds of the Hurrian ebony. (6) 1 leather bag with tightly fastened straps: 2 ritual gowns, 1 festive garb, (7) 2 fine garments; total: 5 garments, 3 cloaks, 1 fine garment, 1 luxurious garment (8) 1 pair of red leggings, 1 pair of blue, 1 vest, (9) 1 blue vest, 1 blue head-band, present (from) Aspunawiyiya, (10) 1 yellow garment, 1 blue, while the queen put in 1 garment (11) in the colour of ehlipakki-stone, with knots. They have not yet inventorized this basket. /

(12) 1 red basket, large, on lion feet: tribute from Ankuwa, (13) the garments are accounted for on the wooden writing board. Said the queen: (14) “When I send it into the seal-house, then they will (15) make final tablet”. /

(16) 1 red basket, no feet: (contains) white and red (textiles). /

(17) 1 red basket, no feet: (contains) wool (died with) the purple of the sea. /

(18) 1 red basket: contains rhyta. Not yet inventorized. /

(19) 1 silver pyxis. /
(20) 1 red basket, on lion feet: filled with straps on linen. / 
(21) 1 basket, small, red: assorted (items) from Yarawiya. / 
(22) 1 basket, small, red: assorted (items) from the town Pasura. / 
(23) 1 basket, red: contains Hurrian shirts, ornamented with gold; (24) not inventorized. / (25) 1 white bag of smooth leather, short: contains Hurrian wool. / 
(26) 11 (pairs of) leggings (set with) crescents. Pupuli has the soap. / 

Rev. (1) (From) 9 shekels of gold a pin will be made: the hand of Zuzuli. (2) (From) 1 mina of gold a beaker will be made: the hand of Ehli-Kušuh. (3) 1 mina 15 shekels of gold: (with) the jewelers to be refined. / (4) 1 copper bathtub, 1 copper basin, 1 (set of) cymbals, (5) 1 field knife, 1 copper wash basin, 1 (set of) cymbals, (5) 1 field knife, 1 copper lance, 2 ceremonial copper axes of the secret house. / 
(6) 6 ŠA.KIŠ-garments: hand of Kapiwa; he will wash (them). / 

A large group of ephemeral texts is represented by the so-called cult inventories (CTH 501 -530). They aimed at centralizing control over the cult and managing the temple organizations which included the care of buildings, personnel and necessary materials for religious ceremonies. Judging from the cult inventories the procedure was divided in several stages. As T. van den Hout writes, “first, there were reports on the current state of the temples through consultation of temple personnel, through archival research, oracle investigations, and inventories”. Based on this research the king took a decision concerning necessary measures to improve the cult. The texts then describe what changes were made, and what the new state of affairs was. That can be illustrated with an extract from the cult inventory of the Storm-god (KBo 2.1, CTH 509, translation by H.A. Hoffner):

Šuruwa (ii. 9-20) 
“The former state (of the cult in the city Šuruwa): four deities in all — 
one stela representing the Storm-god of Šuruwa, 
one stela representing the Sungoddess, 
one stela of Mount Auwara, 
(The present state:) one iron bull-statue of one šekan in size (representing the Storm-god of Šuruwa), 
one silver stela of the Sun-goddess, on which rays are depicted in silver, 
one club with a sun disc and a crescent as ornamentation and on which is one iron figure of a standing man one šekan in size (representing the Mountain-god Auwara), 
one iron statue of a seated woman the size of a fist (representing the female deified spring Šinaraši). 

Four deities of the city Šuruwa which My Sun commissioned to be made.(Šuruwa has) ten festivals (each year): five in the fall and five in the spring. (The offerings for each festival are) 12 sheep, 6 PARISU-measures and two SŪTU of flour, [?] vessels of beer, 3 PARISU of wheat for the temple built. Piyama-tarawa is in charge of the silver and gold”. 

Another type of cult inventories is devoted to the description of sacral statues (translation by H.A. Hoffner):

(KUB 38.2 ii 8-13) 
“The Storm-god of Heaven: cult image (of) a seated man, gold-plated; in his right hand he holds a club in his left hand he holds a gold (hieroglyphic sign for) “Good (ness).” He stands on two silver-plated mountains (represented as) men. Beneath him is a silver base. Two silver animal-shaped vessels (are there). His two festivals are in fall and spring. [They give it] from the house [of the king.]”

This latter type probably also reflects a part of reports that were made in the course of inspections of cult centers. However, as is clear from these examples, cult inventories provide only indirect data on economic matters and can be hardly classified as
accounting documents in proper sense. The same is true of library management texts which helped to organize the storage of documents.

2. Question of find spots

There are different loci where the tablets were unearthed in Boğazköy, but three of them stand out for the quantity of finds. These are Temple I and House on the Slope in the Lower City, and the royal citadel, Büyükkale, in the Upper City.

Fig. 1: The site of Hattusa / Boğazköy

As for the inventory texts, they were found in the stores of the Great Temple, Temple I in the Lower City, but they are absent in the House on the Slope, the only two exceptions being KBo 18.185 and KBo 31.55 which come from the post-Hittite archaeological layer. There is a discussion about the find spot of the important document known as Inventory of Maninni (KUB 12.1). It originates from H. Winckler’s excavations and therefore lacks a documented provenance. However, there is fragment in KBo 13 from the House on the Slope which is claimed to be an indirect join to KUB 12.1. For scholars like E. Laroche, there is no problem, since they view the text as cult inventory, and House on the Slope is well known for keeping a lot of material related to cult and religion. For other scholars, like S. Košak and C. Carter, there are substantial parallels between KUB 12.1 and economic texts, namely the jewellery inventories. They regard the proposed join as unconfirmed and point out to the fact that the only known colophon mentioning Maninni was found in the Great Temple magazines. Consequently, the main text is also likely to originate from this area, and not from the House on the Slope. Summing up, there is no sound evidence
for the House on the slope as stocking place for purely economic texts. As for the Great
Temple, it was mainly the surrounding stores that housed inventories. The texts are
unearthed in rooms 5, 10, 11, 12, 14, 21, in excavation dumps in squares L/17, 19. In
absolute numbers the assemblage of economic documents from Temple I is the biggest:
there are 38 inventory texts. 27 of them date to the late New Hittite period (second half of
the XIIIth century BC)\(^1\).

On Büyükkale inventories are found in several buildings: A, B, C, D, E, K, and M. Among
them Building D clearly stands out with its 21 texts and fragments. According to van den
Hout, 35% of late New Hittite texts in this building are economic records\(^1\).

**Fig. 2: Royal citadel on the Büyükkale hill**

Hethiter und ihr Reich. Das Volk der 1000 Götter. Stuttgart; Bonn, 2002, p. 97

There are also other find spots of the inventory texts: Temple 2 in the Lower City,
Sarkale-river vale in the Upper city, but they are clearly marginal. Thus, two major
complexes responsible for economic administration in the Hittite capital can be singled
out: Temple 1 and Building D on Büyükkale.

The large number of economic texts in the Temple I is of no surprise given its strategic
position near the entry to the city, next to the gates. It is likely that its magazines served
as the first stocking place for incoming goods. There they were inventorized for the first
time, than packed and given away for further redistribution among other services and
personnel. On the contrary, it would be quite unnatural to place such office of initial
control at the royal citadel. It would either create a rather uncomfortable situation when
the scribes and clerks would have circulate between magazines in the Lower town and
citadel (everyone who visited Boğazköy can confirm that this is not an easy task) or allow
the access of goods directly to the citadel which is very problematic because there was
only one road accessible for wheeled transport.

### 3. Formal properties

From the formal point of view, Hittite inventories are divided into texts written in one
single column and in three columns on each side of the tablet. The first group is written
in a hasty and somewhat sloppy writing which evidently reflects their status of
intermediate documents subject to further processing\(^1\).
It is generally thought that this form served primarily to fix the initial receipt of tax goods. Subsequently full ledgers in three columns were composed on the basis of these texts. As T. van den Hout writes, ledgers fixed “places and manner of storage, they contained information on whether the goods were sealed or not and whether any transport documents were present”. Another way of reworking the initial documents was to write down the receiving institution, the provenance of goods, and whether the amounts paid were correct. With these full ledgers, according to van den Hout, a new stage of bureaucratic procedure started: “the raw materials were either assigned to various workshops” for production of goods, or finished products were distributed as gifts to temples and to individuals for their services. And in the end special inventories were made to provide accounts for the final goods produced by the workshops.

4. Terminology

There are some terms specific to the Hittite inventory texts:

- **MANDATTU** ‘tribute’ (Akkadian)
- **IGI.DU₃,A** ‘present, show piece’ (Sumerian)
- **lalami-** ‘accounting receipt’ (Luwian)
- **ŠU** ‘handed out to’ (Sumerian)
- **İDE** (Akkadian)

The Akkadian word **MANDATTU**, very frequent in the economic texts, designates tribute and payments made by the subjects of the Hittite crown. We have clear description of what it was and how it was imposed on the vassals of Hittite king in the juridical texts from Ugarit. In fact, they contain the list of payments to the king and additional presents for the high officials of Hatti. It is not excluded that such personal presents were marked in Hittite inventory texts by the term **IGI.DU₃,A**.

The third, **lalami-**, is a substantivized participle of the Luwian verb **lala-** ‘to take, to receive’, meaning ‘accounting receipt’. Its use can be illustrated by the following example (translation by S. Košak):

KBo 9.91 (CTH 241.5) obv. 1-18

1 la-la-me-eš TÖG hu-ni-pa GAB

2 3 TÖG maš-[ši]-aš BABBAR
3 A-NA LÜ.MEŠ a-ra-un-na
4 ÜBU Ne-ri-ik a-ša-an-du-la-aš

5 la-la-me-eš ŠA GISPAN pa-ra-a SUM-u-aš
6 2 TÖG GÜ uz-za-i-mi-ia
7 2 TÖG GÜ SA₃ 1 TÖG SÅ.GA.DU KUR Kar-₃ Du-ni-aš
8 a-na LÜ.MEŠ a-ra-un-na a-ša-an-du-la-aš ÜBU Ne-ri-ik
9 1 GİR GAB KÛ KUN SAGDU₄ DU₄ ŠU₃ A
10 Ša-na-DINGIR-LIM ′Kân-na-wa-ri-ša-an

11 la-la-me-eš tup-pa-aš GİR
12 3 GİR ŠA.BA 2 LIL 1 LÇMU
13 A-NA [LÜ.MEŠ] a-ra-un-na a-ša-an-du-la-aš
14 ÜBU Ne-ri-ik
15 la-la-me-eš GIS PISAN KUR Mi-iz-ri BI-IB-RI KÜ.BABBAR
16 (erased)
17 1 GÛ UR.MAH 2 GAL KÜ.BABBAR LÚ.MEŠ a-ra-an-na
18 a-Ša-an-du-la-aš Ne-ri-ik

(1) Receipt (for) the hunipa-cloth (of) the breast
(2) 3 white sash belts
(3) for the yeomen
(4) of the garrison of Nerik

(5) Receipt of the chest for delivery:
(6) 2 Hurrian shirts, ...
(7) 1 red shirt, 1 sash belt from Babylon
(8) for the yeomen of the garrison of Nerik.
(9) 1 dagger, (its) front (is) shimmering, its tail and pommel (are of) rock-crystal:
(10) Sunaili and Kannuwari (made/gave) it.

(11) Receipt of the chest (of) daggers:
(12) 3 daggers: thereof two field knives, 1 kitchen knife
(13) for the yeomen of the garrison
(14) of Nerik

(15) Receipt of the chest (from) Egypt, (with) silver rhyta:
(16) 1 (shaped like the) neck of a lion, 2 silver beakers: for the yeomen
(17) of the garrison of Nerik.

This term reminds of Mesopotamian ŠU.TI.A. Probably, the term ŠU, literally ‘hand’, should be regarded as a counterpart of lalami-: it is attested with personal names and should be understood as ‘handed out to’. It designated the craftsmen to whom the state gave raw materials to manufacture the products in need. There is one case, KBo 18.159, when this expression is replaced by the Akkadian preposition ĮŠTU while the structure of the text is similar to those having ŠU. T. van den Hout argues that this text should be met at the final stage of economic cycle, when the palace received the manufactured goods from the workshop.

Another key-word that appears many times is Akkadogram İDE. It is rather enigmatic, since it has no direct correspondence in Mesopotamian material. Its use is illustrated by the following example (translation by S. Košak):

KUB 40.95 II 1-4
1 URUDU GUN 3 BI-[B-RU] 1¼ NUNUZ ½ BÂN ¼ NUNUZ
2 [LÚ.MEŠ] 1/8 MA-a-ša 1/4-ša-li-šaq-a-š 3 URUDU
3 [x GIS] KUR 2 1/8 DU-pi-ia-li-š 1/8 BÂN 1 ME GIS KAK.Ü [TAG]
(1) 1 (ingot of) copper of 1 talent (in weight), 3 rhyta of beads (containing) ½ BÂN of beads:
(2) the people of Maša (delivered it), Šaliqqa checked it. 3 (ingots of) copper,
(3) x spears, 2 javelins, 5 bows, 100 arrows (were given)
(4) to Pihamunuwa, the scribe, Takišarruma and Zuzuli checked it.

According to S. Košak, the term, meaning literally in Akkadian “he knew”, must reflect a control operation on behalf of the bureaucrats receiving taxes or final products from the workshops. C. Mora further hypothesized that the term has a technical meaning “sealed”: to her mind, Hittite inventory texts not always reflected purely economic transactions of exchange and redistribution, some of them were lists of prestigious goods.
that were given to the Hittite elite as presents, IGLDA₂₈. These goods were kept in special stores in the royal citadel sealed with personal seals of the recipients. So, the very moment of depositing these goods in such stores was described in the inventories. There are important, though indirect arguments in favour of Mora’s idea, that derive from other characteristic features of inventory texts. First of all, they usually contain rather small, in comparison with the royal lists from Alalah, Ugarit, and Nuzi, quantities of materials or goods. They give a strange proportion of metals: for example, bronze very often is absent, and references to iron are not as frequent as one can expect. They mention many rare objects poorly known from other texts²⁵. All this strengthens the impression that at least some of inventories are related to the private assets, and not that of the state.

All these terms refer to different operations and stages of bureaucratic control in a very brief manner. However, we have some additional insights on how these procedures took place. We have already seen a special remark in the inventory text IBoT 1.31 saying that a preliminary description of the received goods was given on the so-called writing boards: “[T]ribute from Ankuwa, the garments are accounted for on the wooden writing board. The queen said: ‘When I send it into the seal-house, then they will make final tablet’”. There is a discussion among Hittitologists how these writing boards looked like and what script and language were used to write on them. Some scholars suggest that they were wooden tablets covered with wax and were written in cuneiform, other think that they were not necessarily wax tablets, but simple wooden ones and they were written in hieroglyphs with ink and the language was Luwian.

Another piece of information derives from a court deposition concerning the affair of Ura-Tarhuntan²⁶. Ura-Tarhuntan was a high functionary responsible for distribution of state assets between other administrators and servicemen. Evidently, he appropriated some of these assets, and therefore was accused of embezzlement. A part of accusation runs as follows (translation by H.A. Hoffner)²⁷:

(§ 1) With respect to the fact that [the queen] on several occasions turned to Ura-Tarhuntan, the son of Ukkura, the Overseer of Ten, various items — namely, chariots, items made of bronze and copper, linen garments, bows, arrows, shields, maces (or, perhaps ‘weapons’), civilian captives, large and small cattle, horses and mules, (the charge is that) he regularly failed to indicate on a sealed tablet what was issued to whom. He also had no manifest(? ) or receipt. The queen says: “Let the ‘Golden Grooms’, the queen’s šalašā-men, Ura-Tarhuntan and Ukkura proceed to make comprehensive statements under oath in the temple of Lelwani”.

And in the end of the deposition comes a justification of Ura-Tarhuntan’s father who was also involved in the case (translation by H.A. Hoffner):

(§ 28) Thus says Ukkura, the Queen’s Overseer of Ten: “When they sent me to Babylonia, I sealed the LE-U₅-tablets that I had concerning the horses and mules. Also a receipt was not formalized. For that reason I didn’t pay close attention. As soon as the horses and mules arrive, I will seal them in the same way. It was presumptuous of me, but it was not a deliberate offence. I didn’t just look the other way, saying: “Some things get lost, other don’t”. I didn’t take a horse or mule for myself or give one to anyone else”.

From these passages, we learn that the accounting documents had to be sealed, and not-sealing them was a violation of the procedure subject to persecution. The Akkadian term LE-U₅ corresponds here to the wooden writing-board in the translation of IBoT 1.31. Having based on these and other contexts, C. Mora amply reconstructed the bureaucratic procedure of goods acquisition by the palace²⁸.

Comptabilités, 8 | 0000
The first of the cited passages from Ukkura’s deposition contains yet another technical term, dušdumi-. It is marked with a glossing sign and is clearly of Luwian origin based on the same morphological model as lalami-. The interpretation of this term poses a problem, since, unlike lalami-, we do not encounter it in the economic texts. The proposed renderings are 'Beurkundung, Quittung'29 and 'manifest', as in H.A. Hoffner’s translation. Those are rather general interpretations which allow different functions of the document designated by the term. Meanwhile, the word’s etymology may be quite eloquent on the matter. I. Yakubovich has suggested that the underlying stem here is tuwa- ‘to place’ which is related to Russian stavit or Latin sisto. Dušdumi- has a reduplication of this stem, just as its Latin cognate. The initial consonantal cluster was automatically simplified, but it was kept between vowels inside the word: the intervocalic position blocked the simplification rule30. So, dušdumi- means something which is left, deposited. Since we do not have attestation of the term in the extant economic records, we may surmise that the documents of dušdumi- type were left for those who paid, a sort of payment note and quittance and were not intended to be kept in the official archives.

Another interesting issue which arises together with these observations is that some significant part of accounting terminology is Luwian. One can add here a term parzakiš ‘clay bulla’31. Sometimes they are marked with gloss sign, sometimes not.

Not only terminology, but the very way it is used can be quite specific in Hittite accounting texts. Thus, Sumerogram ŠU.NIGIN ‘total’ which is widespread in accounting documents of many epochs and regions can be placed at the beginning of a text in Hittite 32, while the general rule was to write it at the end.

5. Question of bullae

In the beginning the question was asked, why the corpus of Hittite accounting texts is so modest. Some possible answers were already mentioned and hinted at. T. van den Hout thinks that a great bulk of documentation of the initial stage of control was simply destroyed and recycled. He further argues that the Hittite economy was archaic and autarkic, and ordinary taxation could be realized without much administrative effort and didn’t demand an elaborated accounting system33. Besides he believes that there were some alternative ways to provide accounts. This is directly connected to his interpretation of bullae found on Büyükkale and Nişantepe.

Bullae are pieces of clay with seal impressions, the seals are of two types: royal and those of high dignitaries. The most important finds of clay bullae were made in 1990–91 in the Upper City, on the hill of Nişantepe: some 3400 items in a building called Westbau. The total amount of bullae with previous finds in Building D on Büyükkale is 3538 of which 2092 are sealed with royal seals and 1364 with those of high dignitaries34. Another important point is that the Nişantepe bullae were found along with royal land donations, and both groups of documents are in complementary chronological distribution: the land deeds date from Tudhaliya I to Arnuwanda I (ca. 1400), and clay bullae are of the Empire period (from 1350 on). Bullae could be used in different ways: they could seal containers, wooden writing-boards, probably, doors, could be attached as sealings to the juridical documents. Despite their multifunctionality, a question arises: what was the goal to accumulate such huge amounts of bullae in one single place? If they were collected and stored deliberately, what purpose did this collection serve for? Unfortunately, no exact
answer is possible. One of the first versions said that the bullae sealed the land deeds of
the Empire period written on perishable materials, wooden writing-boards covered with wax.  

35 C. Mora who has recently published several articles on the mystery of bullae finds is
prone to discard, at least partly, this view. To her mind, the bullae might have sealed
containers with precious items which belonged to palace elite. All these collections have
nothing to do with central state archives, they are private by their nature. The Westbau
on Nişantepe would be then analogous to store-rooms in modern banks intended to
secure precious things and assets belonging to individuals.

36 T. van den Hout is also skeptical towards the idea that Westbau bullae accompanied
juridical texts. It seems unlikely that the Hittites switched from clay to wood to write
legal documents of great importance intended to be kept for centuries. Wooden tablets
are easily destroyed, and a text written on wax can be changed. Another, strong practical
argument against this view is that there is too much bullae with royal seals: as we see in
the land donations each document had a seal of king and of several witnesses mentioned
in the text, the average number of them is four. Here the number of royal bullae is bigger
than that of all the rest by 628 entries. At the same time T. van den Hout rejects the idea
that the function of bullae was to seal the containers with goods: if it were non-perishable
goods, we should have archaeologically traceable evidence of them, but it is not the case.
If those were perishable goods, then why were they kept for decades and even centuries,
after they lost their qualities or even spoiled. So, T. van den Hout assumes that these
bullae represent a sort of non-written testimonies of passed transactions which were
important to be kept. He refers to sophisticated accounting practices in preliterate
societies, a good example being represented by finds at chalcolithic site of Arslan-tepe in
Turkey. The use of such practices — though, for a time being, they remain totally
obscure to us, — could partly account for the fact that Hittite corpus of economic texts is
so meager.

37 Recently, W. Waal has convincingly argued that the Hieroglyphic script had much longer
history than is traditionally assumed. In fact, it was used already in the period of Assyrian
colonies. W. Waal also pointed out that there are in fact no sound arguments in favor of
the use of wax-covered tablets in Anatolia. More probably, Anatolians wrote on wood
with ink, and such documents could serve for a long period of time. For example, they
came down from different regions of ancient world such as Egypt and Britain of Roman
times. These new data seem to shed a favorable light on the original idea that the
Nişantepe bullae were attached to the land deeds.

NOTES

1. The participation in the project was supported by the Russian foundation for the humanities
(14-21-17004a).
Biggs, J. Meyers and M.T. Roth (eds.), Proceedings of the 51st Rencontre Assyriologique Internationale
Accounting texts from Boğazköy in current Hittitological research


3. Van den Hout, T., « A Classified Past…», p. 213; Van den Hout, T., « The Written Legacy of the Hittites » in H. Genz & D.P. Mielke (eds.) Insights into Hittite History and Archaeology, Colloquia Antiqua 2. Leuven, Paris, 2011, p. 59-66. For an earlier version of the same classification and detailed comments see van den Hout, T., « Another view of Hittite literature » in Stefano de Martino & Franca Pecchioli Daddi (eds.) Anatolia antica. Studi in memoria de Fiorella Imparati, Firenze, 2002. p. 857-878. This classification captures essential features of the Hittite corpus, but at the same time there is at least one additional point that it should take in consideration. As in Mesopotamia, Hittite accounting texts could be written in several copies. As Mesopotamian material shows, this was caused by practical needs: in some cases all participants of a transaction wanted to have a document testifying to its completion.

Abbreviation CTH corresponds to the Catalogue des textes hittites, first compiled by a French scholar E. Laroche in 1971. Its up-to-date electronic version can be consulted at www.hethither.net.


5. The book of Siegelová, J, Hethitische Verwaltungspraxis im Lichte der Wirtschafts- und Inventardokumente, Prague, 1986 which represents the most comprehensive treatment of purely economic texts, contains edition of 119 documents. Košak, S., op. cit. has edition of 108 texts, but the material of two books significantly overlaps.


15. Ibid: 85.
16. Loc. cit.
17. Siegelová, J., op. cit., p. 4. According to the author, one sixth of the economic texts are one column tablets.
18. Van den Hout, T., « Administration and Writing... », p. 46.
22. Kempinski, A., Košak, S., « Hittite Metal "Inventories" (CTH 242) and Their Economic Implications », Tel Aviv 4/1-2, 1977, p. 88-89.
28. 1) delivery of goods packed in different containers to the palace magazines, redaction of provisional wooden tablets describing those goods; 2) sealing operations that concerned both containers and cover documents, lalami; 3) definitive acquisition of goods by the palace and their transfer under the responsibility of high ranking functionaries, the stage is accompanied by the redaction of clay ledgers to be kept in the archives, these ledgers were not sealed and contained verification İDE-formula; 4) the goods were placed in the official storage buildings, sometimes together with wooden tablets which helped to rapidly identify them; Mora, C., « I testi ittiti di inventario e gli ‘archivi’ di cretule...», p. 539-540.
34. Ibid., p. 52.
ACCOUNTING TEXTS FROM BOĞAZKÖY IN CURRENT HITTITOLICAL RESEARCH


ABSTRACTS

Accounting texts represent an important part of the Hittite textual corpus which draws a considerable attention of Hittitologists. There are several aspects that justify this interest. Hittite accounting documents are not that numerous as their counterparts in the archives of Syria and Mesopotamia. For example, the documentation concerning distribution of food rations is almost totally absent. Hittite accounts employ specific terminology that is unknown from other traditions, while Hittite use of Mesopotamian technical terms can significantly diverge from common Mesopotamian practice. Hittites wrote their accounts not only on clay, but on perishable materials, such as wood, as well. Some alternative forms of accounting, other than writing, were probably in use among the Hittites.

Les documents comptables constituent une partie importante du corpus épigraphique hittite qui suscite grandement l'intérêt des hittitologues. Plusieurs aspects justifient cet intérêt. Tout d'abord, les textes comptables hittites ne sont pas aussi nombreux que leurs homologues des archives syriennes et mésopotamiennes. Par exemple, la documentation concernant la distribution des rations alimentaires est presque totalement absente. Ensuite, la comptabilité hittite emploie une terminologie spécifique qui n'est pas connue à travers d'autres traditions. En même temps, l'utilisation par les Hittites des termes techniques mésopotamiens pouvait s'écarter des usages normatifs respectés en Mésopotamie. Enfin, les Hittites rédigeaient leurs comptes non seulement sur de l'argile, mais aussi sur des supports périssables comme le bois. Il est ainsi probable que parallèlement au recours à l'écrit, les Hittites aient pratiqué d'autres formes de comptabilité.


Los documentos contables constituyen una parte importante del corpus epigráfico hitita que suscita gran interés entre los especialistas de los hititas. Varias razones justifican este interés. Primero, los textos contables hititas no son tan numerosos como los de los archivos de Siria y Mesopotamia. Por ejemplo, la documentación relativa a la distribución de raciones de alimentos es casi inexistente. En segundo lugar, la contabilidad hitita emplea una terminología específica,
que no se conoce en otras tradiciones. Al mismo tiempo, el uso entre los hititas de términos técnicos mesopotámicos podía desviarse de los usos normativos de Mesopotamia. Por fin, los hititas redactaban sus cuentas no solo en arcilla sino también en soportes perecederos como la madera. Así, es probable que además de valerse del escrito, los hititas practicasen otras formas de contabilidad.

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AUTHOR

BORIS ALEXANDROV

Enseignant-chercheur, Université d’État de Moscou Lomonossov, Faculté d’histoire
alexandrov_b@mail.ru