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15. Linen in Hittite Inventory Texts

Matteo Vigo

1. Linen terminology and trades: a general overview from the Ancient Near East

Linen makes up the largest part of the Egyptian economy and is also its main export produce. Egypt has, since the Old Kingdom, had a thriving craft industry based both on the cultivation of raw flax as well as the spinning, weaving and trading of linen cloths. Egyptian linen is referred to in writings from the middle Babylonian period as a cloth used to dress statues of deities. Linen, like patterned textiles, is undoubtedly a high quality product and can rightly claim a place alongside luxury goods, since it is always included in the exchange of gifts between sovereigns along with precious metals such as gold and silver.

1 Sumerogr. GADA (for all the transcriptions of the Sumerogram the updated HZL reading has been followed); Akkad. kitû(m); Hitt. kattanipû-(?). Cf. HW, 105, 272; Tischler 2001, 76; HEG “A-K”, 544; cf. Siegelová 1986, 376, note 14; 378, but with the example of Siegelová (1986, 621), it appears obvious that the Sumerogram has been interpreted wrongly (GAD tanipu-). Cf. Alp 1940, 33, with note 2; Güterbock 1930, Vorwort 1, No. 1; Košak 1982, 125, rev. 28, for the forms GAD tanipuliš and GAD tanipu BABBAR. The still valid study by Forbes (1964, 27–43) has been referred to for a history of linen in antiquity. In general, for the most recent study on the trade and manufacture of textiles in the ancient Near East, Völling 2008 has been referred to with its extensive bibliographic references.

A list of attestations (GADA ideographic form with and without phonetic complements), updated to Siegelová 1986, with corrections: KBo VII 23, obv. 1; KBo VII 26, obv. 37 right col. 1; KBo IX 89, rev. col. VI 5, 11; KBo IX 90, col. V 7; KBo IX 91, left edge 377; rev. B 5 (GAD.TAR(?)); Cf. Košak 1982, 29; HZL, 174, No. 173); KBo XVIII 154, rev. 1 left col. 9; KBo XVIII 170, obv. 7–9; KBo XVIII 175, obv. col. I 3–6; col. II 4, 6–7; col. V 7, 11, 13, 15; KBo XVIII 178, obv. 4; KBo XVIII 179, obv. col. II 6; KBo XVIII 180, rev. 5; KBo XVIII 181, obv. 2, 4–6, 13, 19–20, 24–26, 31; rev. 3–4, 13, 16–18, 25–28; KBo XVIII 183, obv. 1 left col. 2; KBo XVIII 184, rev. 5, 8, 9; KBo XVIII 185, obv. 3; KBo XVIII 186, left edge 1, 3; KBo XVIII 187, obv. 6–7; KBo XVIII 198, rev. 3, 8; KBo XXXI 52 + KBo VII 25, obv. right col. 8; KUB XII 1, rev. col. III 26, 31; col. IV 9; KUB XL 96 + Bo 1016, right edge 2; KUB XLII 11, obv. 7; KUB XLII 13, obv. col. II 2, 4; rev. col. V 4; col. VI 7; KUB XLII 14, rev. 2 col. IV 3, 5; KUB XLII 15, rev. left col. 6; KUB XLII 16, rev. col. IV 4, 6, 8; col. V 11; KUB XLII 17 rev. left col. 4–5; right col. 37; KUB XLII 31, obv. 1; KUB XLII 34, obv. 10, left edge 1; KUB XLII 42, obv. col. II 9, rev. col. III 77 (GADA SAR; Cf. Košak 1982, 60); KUB XLII 47, obv. 10; KUB XLII 49, obv. 2, 4, 8, 11; KUB XLII 51, obv. 5; rev. 4; KUB XLII 52, obv. 3, 5; KUB XLII 53, obv. 8, rev. 1; KUB XLII 54, obv. 3, 5; KUB XLII 55, obv. col. I 8, 11; KUB XLII 56, obv. 4–6, 9, 11, 13, 14; KUB XLII 58, obv. 4, 9; KUB XLII 59, obv. 7, 8, 12, 14, 16, 17; rev. 8, 11, 127 14–22, 26, 28; KUB XLII 61, obv. col. I 4, 9; KUB XLII 63, rev. 4; KUB XLII 69, rev. III 1, 4; KUB XLII 75, obv. 1–2; KUB XLII 106, obv. 1, 10–11, 12, 17, 20; rev. 9, 11; IBot I 31, obv. col. I 3–4, 8, 10, 20, 26; NBC 3842, rev. 7.

2 Bibliography is too vast to provide a complete list. For a recent in depth study, see Jones 2008; Kemp & Vogelsang-Eastwood 2001, 25–34, 53–55, 438, but also Vogelsang-Eastwood 1995, and before that, Vogelsang-Eastwood 1992.


4 CT 2, 2: 8: GADA ša URU Miṣir.

5 For the concept of luxury goods, see below note 117.

6 Cf. Waetzoldt 1980, 30–31; van de Mieroop 2007, 162: “Their appearance alongside gold and silver objects, and the fact that Hittite king explicitly demanded those gifts in a treaty he concluded with the king of Ugarit, demonstrate
Egyptian terminology for linen is as varied as its uses. There is no doubt however that the so-called 'king's linen' (Sumerian GADA LUGAL) is the finest of all. The Egyptian term for linen (šš nsw) is compared to the Greek word βύσσος (byssus), found on the Rosetta stone. This was the term used by Greek merchants to refer to prestigious dyed linen and it is clear that the expression was already used in Akkadian as kitū šarrī, meaning precisely 'king's linen'. The same term is also often found in the correspondence between the Egyptian and Hittite courts.

The treatment and dyeing of linen seem to be a characteristic of traditional Egyptian manufacturing.

However, trading in dyed linen increased during the New Kingdom and probably already involved foreign trade industries.

In fact, interesting data emerges from close examination of the materials listed in the so-called Hittite 'inventory texts' (CTH 240–250), also with regards to the origin of certain luxury goods such as linen.

It is difficult, for instance, to establish if a cloth mentioned in certain inventory texts and linked to the name of a specific place or city, actually originates from that place or whether it was simply crafted elsewhere using the traditional process, method and custom of the place that it has been named after. With regards to this, the observation by Košak concerning the so-called 'Egyptian chests', “It is often impossible to distinguish whether an object is simply 'from Egypt, in Egyptian style' or 'from Egypt (directly A.N.)'”, can be applied to all other objects linked directly to the name of a specific place.

There are exceptions however that may question of this assumption. Such is the case of IBoT I 31, which refers to linen cloths linked to the land of Amurru and to the city of Alašiya.

The expression ŠA KUR A-MUR-RI-kán GADAḪI.A an-da, and those alike, but not identical, such as SÍGḪA-SAR-TUM A.AB.BA-kán an-da (line 17), SÍGḪUR-RI-kán an-da (line 25), and above all BI-IB-RIḪI.A-kán an-da (line 18), clearly demonstrate that it is difficult to establish whether items

the great value of these textiles.”

8 Already Forbes 1964, 43.
10 Cf., for example, KBo XXVIII 47, rev. 3–6; KBo I 29 + KBo IX 43, rev. 1–4; KUB XXXIV 2, rev. 3–5.
11 See, among others, a recent study by Germer 1992. Alternatively Cochavi-Rainey & Lilyquist 1999, 215 who uphold that, "Patterning and color were not part of Egypt’s traditional linen industry".
12 Cf. Forbes loc. cit. See also KBo XVIII 14, rev. 3–14; KUB IV 95, obv. 7; KBo XVIII 36, rev. 11.
14 E.g. KUB XLII 11, obv. col. I 13.
15 Košak 1982, 37.
16 The text has been widely discussed. Collected bibliography in Košak 2002, selecting the reference text: CTH 241.1. See in particular Košak 1982, 4–10; Siegelová 1986, 74–86.
were simply channeled through the area or whether they are typical of that place because they were, for instance, crafted there.\textsuperscript{18} Using comparison with other documents it is, however, possible to draw up a fairly detailed assumption of the linen trade, at least as far as Cyprus is concerned.\textsuperscript{19} In a quote from ‘Ezekiel’s Prophecy on Tyros’,\textsuperscript{20} which can be dated between 580–570 BC, the materials forming the allegorical ship that represents Tyros include embroidered linen from Egypt and dyed blue and purple linen from the island (or coast) of Cyprus (‘īyyē(y) ʾēlišāh). The correspondence between Pharaoh Akhenaton and the King of Alašiya provides interesting information on the island’s linen trade.\textsuperscript{21} It is precisely from the testimonies in the el-Amarna Letters that one learns of the difficulty that Cyprus had in getting hold of this material. In EA 34 the King of Cyprus, after reminding the Egyptian Pharaoh that he had sent 100 talents of copper,\textsuperscript{22} asks in exchange for the delivery of 42 bolts of linen, 50 linen shawls and two linen robes as well as four bolts and four shawls in ‘king’s linen type’ (byssus).\textsuperscript{23} In EA 40 the “governor”\textsuperscript{24} of Cyprus promises gifts to the Egyptian Pharaoh consisting of five (ingots) of copper (for a total of three) talents of refined copper, one elephant’s tusk, one (beam)

\textsuperscript{18} It seems evident that in this context the particle -kan cannot have a local value. Košak (1982, 5) translates “contains...”; Siegelová (1986, 81) produces “darin...”. On the value of the particle -kan, see, among others, Friedrich 1940, 85–86; Neu 1993, in particular 145. It has been suggested for quite some time (Boley 2001), that the particle -kan had, at least during the Ancient and Middle Hittite periods, an absolutely non-local value (contra Hoffner & Melchert 2008, 374). The value of -kan varies depending on whether it is inserted into a nominal sentence or followed by a motion verb or by a non-motion verb. Thus, for example, the particle -kan on line 4 (with an anaphoric value) does not so much refer to the name (Alašiya and on the presence of grammatical elements characteristic of so-called ‘classic Hittite’, it should be possible to date the text further back.

\textsuperscript{19} References are made in other contexts of textiles also coming from Amurru. See for example: RS XVI 146 + 161 (a list of the worldly goods belonging to the queen mother Aḫat-Milku). Transcribed and translated by Nougayrol 1955, 182–183. See also the transcriptions and translations provided by Cochavi-Rainey & Lilysquist 1999, 180–181. Obv. 10–11: 20 TŬG.ME.MĒŠ SALLA ša KUR ḫur-ri 20 TŬG.ME.MĒŠ SALLA ša KUR.MAR.TU.KI 20 TŬGša-bat-šu, ša ḫur-ri 20 TŬGša-bat-tu, ša KUR.MAR.TU.KI. However no mention of linen is made in this passage, even though the expression TŬGnalbašu raqqatu (logographic form: TŬG.ME.MĒŠ SALLA), translatable as “the finest capes”, hints at a high quality textile. For the meaning of the word raqqatu(m) one refers to CAD “R”, 168; Nougayrol 1950, 19; Oppenheim 1947, 128. Cf. also AHw “M-S” Band II, 958: (feine Wolle?). For the textile šabattu(m), see CAD “Š” Part I, 8. Even if, from the example given, it can be deduced that a textile industry existed in the land of Amurru, we cannot establish for certain whether linen too was either produced or processed there. Cf. Klengel & Klengel 2009, 205–206.

\textsuperscript{20} The Book of Ezekiel 27.7. This passage has been studied in relation to Phoenician commerce by Moscati 1966, 108–110; cf., among others, Smith 1953, 97–110. For a general approach to the problems that can arise from the reading of the document, see van Dijk 1968, 65–66 with the relative bibliography. References are also found in Goetze 1956, 36.

\textsuperscript{21} Apart from the classic editions of the letters of el-Amarna by Knudtzon 1915; Moran 1987 and Liverani 1998; 1999; for the corpus of the Alašiya texts (EA 33–40) see Cochavi-Rainey 2003, 5–42.

\textsuperscript{22} EA 34, obv. 18. A talent of copper corresponds to approximately 30 kg of metal made into ingots in the typical ‘oxhide’ shape. For a preliminary study of ‘oxhide’ ingots and the trading of them in the Mediterranean during the 2nd millennium BC, see Parise 1968; Muhly 1977. More recently Yalçın et al. 2005, 560.

\textsuperscript{23} EA 34, obv. 22, 23, 25.

\textsuperscript{24} For the Hittite term (\textsuperscript{14}pidduri-) reference is generally made to CHD “P”, 368 with the relative bibliography; Tischler 2001, 134; HEG “P”, 638–639, with the relative bibliography. See also, among others, Carruba 1968, 29, with note 65; Steiner 1962, 135–136; Kühne 1973, 85–86; Moran 1987, 209, note 1.
of boxwood, and a ship’s mast. There is no mention of linen cloths.

These same goods are also found in the Annals of Thutmosis III (summary of the 34th year of reign), which mentions a tribute made by the ‘chief’ (wr) of ‘Asiya (Cyprus) which that year included 108.5 ingots of smelted (?) copper ore (lit. “heavy”) 2.400 deben, five (+X) ingots of lead/tin, 110 deben of lapis lazuli, one ivory tusk and two šigu-wood logs. The summary of the 38th year of reign again lists the tribute made by the ‘chief’ of ‘Asiya, which includes a certain quantity of copper ore and two horses.

A further reference to goods channeled through Cyprus found in the Annals of Thutmosis III is in the summary of the 39th year of the Pharaoh’s reign in which the tribute made by the ‘chief’ of ‘Asiya includes two ivory tusks, 40 copper ore ingots and one ingot of lead/tin.

Thus even in EA 36–37 the King of Cyprus is able to guarantee enormous quantities of copper and some horses, but there is never a mention of ‘Alašiya linen’.

According to the information provided by the texts it would be reasonable to assume that Cyprus had no thriving industry for the manufacturing of linen but that it brought it from Egypt and crafted it into undoubtedly prestigious goods, which were then channeled into the Syrian inland and to Anatolia. The expression GADA URU Alāšiya documented in the Hittite inventory texts can therefore be translated as “Cypriot linen”, in the sense of: ‘crafted in the “Alašiyan” way’.

2. Some notes on Hittite terminology for linen textiles

Cypriot linen in the form of finished goods is also mentioned in another Hittite inventory text together with a range of other materials. In the third line of the obverse there is even a mention

25 Buxus sempervirens, commonly known as boxwood, is an evergreen shrub which grows up to five meters high and is still widely found today in an area stretching from the Atlantic coast of the Iberian Peninsula to the Dodecanese islands. It is a slow growing shrub preferring a sandy, lime rich soil but which also adapts well in woodland as undergrowth. It is a highly valued and heavy hard wood which is still today widely used in the skilled crafts. During the period in question it was probably essentially used for making refined furniture and not for constructing boats. In fact, in the letter quoted above, boxwood is differentiated from the wood needed for a ship, since the specific weight of dry boxwood is larger than that of water. However it is quite interesting to underline that the only wooden diptych found in the Eastern Mediterranean until now (along the seashore of South Anatolia – Uluburun Peninsula), and dated to the end of the second millennium BC is made of boxwood. Cf. Warnock & Pendleton 1991. The boxwood is referred to in the Egyptian texts written in Akkadian as taškarinnu(m) and compared with the Egyptian ši-gu. See also CAD “T”, 280–282; AHw “S-Z” Band III, 1336–1337.

26 EA 40, obv. 10–15.


28 The Egyptian term wr means literally “the Great”, but it is generally used by the Egyptian chancellery of the 14th and 13th centuries BC to designate all foreign sovereigns, not necessarily Egyptian vassals. Cf. Erman & Grapow 1955a, 329; Moran 1987, 35–36, with note 71.

29 The Egyptian deben corresponds to approximately 91 grams of metal.

30 It was decided, for various reasons, to keep two translations for the Egyptian term ḏḥty. Initially it was thought that this term referred only to lead. Apropos this see Erman & Grapow 1955b, 606; Helk & Drenkhahn 1995, 102.

31 EA 36, obv. 5–14; EA 37, obv. 9.

32 The correspondence between ancient Near Eastern courts and Ḫatti proves that Cyprus was not, at the time in question, the only exporter of fine, skillfully processed textiles. See, for example Singer 2008, 29. Some archeological remains could perhaps reinforce the validity of the hypothesis given here and of the data collected. See, particularly, Reese 1987, 205.


34 KBo XVIII 175, obv. col. I 5. See Košak 1982, 10; Siegelová 1986, 410.
of linen from Ḫurri,\textsuperscript{35} whereas in the fourth line it refers to 39 linen shirts of which two are in red linen and one in šuḫru linen.\textsuperscript{36}

Lines 6–7 of the obverse even describe the route traveled by the produce: by caravan (ŠA KASKAL) to the Palace (\textsuperscript{35}PISAN ŠA É.GAL\textsuperscript{11M} lit. “the chest of the Palace”).\textsuperscript{37}

The linen traded in the Near East during the 2nd millennium BC. was subjected to a range of processes. In fact in KBo XVIII 175 (CTH 241.2) one also reads: “a red linen robe in the ‘Tapaspa style’”.\textsuperscript{38} In this case too it is a reference to the method of crafting the cloth.\textsuperscript{39} It should be stressed

\textsuperscript{35} [1 \textsuperscript{35}PISAN ŠA LÚGUD.DA 40 ŠU GADĀ 40 ŠUḪU-RI GADĀ, translated by Košak 1982, 13, “one small red basket: 40 linen Hurrian shirts”. In this case too the translation “Hurrian shirts (made of linen)” is preferred, rather than “linen Hurrian shirts”. ‘Hurrian shirts’, that is to say in Hurrian fashion, are in fact well documented in the Hittite texts (cf. lastly Klengel & Klengel 2009, especially in the inventories (Cf. Siegelová 1986, 650), as well as in the correspondence between Tušratta of Mittani and Amenhotep IV. (Cf. most recently Cochavi-Rainey & Lilyquist 1999, 51–164, in particular p. 144), therefore the statement “Hurrian linen” remains a čnac. See also CTH 250.1=KBo VII 23, obv. 2: "ŠUḪU-RI GADĀ ŠUḪU-RI-U-RU (?)”. Thus Siegelová 1986, 516; Košak 1982, 160, however, renounces this integration. See in particular Goetze 1955, 53, with note 53. Also it should not be forgotten that within the Hittite court there were real “corporations” of skilled craftsmen who worked for the palace, producing items that were typical of their native lands. See, among others, Klengel 2008, 72; already Hoffner 1992, 93–94. On the mobility of artisans in the ancient Near East during the second half of the 2nd millennium BC see, in general, Moorey 2001, with previous bibliography. For a study of Hurrian textiles, with particular reference to the textile industry in Nuzi, as is evident in the texts, see Zaccagnini 1981, with the preceding bibliography.

\textsuperscript{36} ŠA GADĀ 2 GADĀ ŠA 1 GADĀ ŠU-UH-U-RU. For the meaning of šaru(m), here given as šuḫru, see Košak 1982, 14, with the list of attestations and ibidem, 293. Cf. also Siegelová 1986, 339, note 6. Generally reference is made to CAD “Ş” Part III, 367–368. Veenhof (1972, 154–156) accepts the interpretation “black cloth” by Landsberger (1925, 14), who, in TC I, 27: 2 translated, “zehn schwarze Stoffe”. Also, again, AHw “S-Z” Band III, 1287 translates šaru(m) as “schwarz, grau”, accepting the equation with šāhō “schwarz werden” from Hebrew and Aramaic. As Veenhof (1972, 30, note 59) rightly observes, the cloth accompanied by this adjective is indicated in the texts as a material for packing goods. Therefore Košak (1982, 14) suggests that it could refer to an untreated (rough?) cloth, in apposition to the term ŠUGSIG, which would hence refer to a fine cloth. The possibility should not be excluded here that the term šuḫru, used as an adjective, could simply indicate an untreated and undyed cloth. Cf. Košak 1982, 202. Neither does this interpretation exclude the possibility of translating the term as “grey, black”. It would therefore appear that the adjective serves to indicate the quality of the textile rather than its colour. In fact, in the inventory texts, it often occurs next to ŠUGSIG (“fine fabric”), almost as if highlighting the difference. See the statements in Košak 1982, 14. Cf. MVaE 33 No. 155: 4, a-na 1 ŠUGŠU-RI-IM û ra-qi-tim, translated, “für 1 schwarzen Stoff oder dünnen (Stoff)”, but, “for an untreated textile or (a fine one) would be preferable.

Košak (1982, 202, 260) has also suggested that the Sumero gram ŤH.HI linked to textiles (in the forms ŠUGHI.HI, ŠUḪDAḪ.HI, ŠUḪ.HI-natar) might indicate a type of treatment, even though “not coloured” (undyed) is often given in translation. Cf. however ibidem, 16, according to the interpretation suggested in KBo XVIII 175, obv. col. I 21. Siegelová (1986, 654) on the other hand translates it as “mielert”.\textsuperscript{37} The term literally means “storm, thunderbolt” and it is often a divine attribute. Cf. Tischler 2001, 232, “auch eine Farbbezeichnung?”. The principally accepted meaning of the term probably alludes to something with dark, opaque tones; in indicating a cloth it possibly refers to poor quality or to the fact that it has undergone no treatment or dyeing process. Even if a similarity with the Akkadian term šaru(m) seems farfetched, one cannot however preclude it from belonging at least to the same semantic area. See, conversely, the equivalence of the Akkadian raqqatu(m) and the Sumerian ŠUGSAL.LA or ŠUGSIG. Cf. Veenhof 1972, 153. See also the considerations by Siegelová 1986, 204–206, note 2; HZL, No. 335, “Farbbezeichnung(?)”.

\textsuperscript{37} One would assume that in this context É.GAL\textsuperscript{11M} refers to a particular structure located in the Tempel I in Hattuša, or to the worship – administrative centre as a whole. Cf. Güterbock 1974, 305–306; Siegelová 1986, 155, note 8, with previous bibliography.

\textsuperscript{38} KBo XVIII 175, rev. col. V 11. Cf. the interpretation by Siegelová 1986, 418 in KUB XLII 14 rev. IV\textsuperscript{11} 11: "TA-PIS-PA. See Košak 1982, 17, 22; HZL, No. 244.

\textsuperscript{39} This could be a collective term (-a), derived from the name of the city (URU-TA-AP-PA-ÂŠ-PA-ÂŠ). See also Košak 1982, 22 and Siegelová 1986, 338, note 1. Cf. HEG “T,D/1”, 124–125. In order to locate the city of Tapašpa refer to del Monte & Tischler.
that this document always refers to goods that have only been provisionally inventoried since they come from convoys that are waiting to be channeled to a destination.40

In IBoT I 31, obv. 10 the expression 1 GADA elḫ-ši-pa-ki appears. It seems plausible that this expression may also refer to a type of linen. Goetze claims that the term elḫlipaki is undoubtedly to be linked to elḫlipak(k)u,41 which is often quoted in the Qatna inventories42 and translated by Bottéro as “possiblement améthyste”.43 As Bottéro himself recalls,44 the term is often cited in the el-Amarna inventories as the ḫi-li-p/ba stone.45 It is highly likely to be a precious stone, as Laroché rightly observed;46 the expression 1 GADA elḫ-li-pa-ki could therefore be translated as “elḫlipaki stone (amethyst?) coloured linen”,47 meaning dyed in a shiny bright purple colour.

In a passage from CTH 243.2.A18 another reference is made to processed linen. In KBo XVIII 170+, obv. 7 ‘bolts/rolls’49 of linen are referred to, as are ‘sheer linens’.50 A number of minas of linen and (for)51 four tunics52 with refined embroidery53 are also

1978, 400, even though one cannot exclude its geographical vicinity to Konya (URU/ku-wa-ni-ya), from which six garments originate (KBo XVIII 175, rev. col. V 8) and are placed in the same container (KBo XVIII 175, rev. col. V 5).
40 Even though the problem is extremely complex and undoubtedly requires in-depth studies, the stocking of goods should consist of three stages: provisional storing (as in this case), the listing of the goods on wooden tablets (cf. for example IBoT I 31, obv. 3), storing of the goods at their final destination (e.g. CTH 241.12 A-B) and the drawing up of an inventory. See, among others, Archi 1973, 215–216; Košak 1982, 52; Mora 2007, 538.
41 Goetze 1956, 36.
43 Bottéro 1949, 18, with note 2.
44 Bottéro loc. cit.
45 Cf. Goetze 1956, 36, note 52.
46 Laroché 1976, 76; compared to Košak 1982, 8.
47 Already Košak 1982, 6; Siegelová 1986, 80, with note 6; 81, 63, 65, with note 4. For other interpretations see, in particular, Polvani 1988, 13–14, with the bibliography suggested in the notes. Cf. hilîbâ in CAD “H”, 186.
49 In the Hittite documents the logogram PAD is mainly attested in connection with metals, designating a metal ingot; here PADD-me-eš, could be a strip, a bolt of untreated fabric (linen?). Compare Košak 1982, 112; Siegelová 1986, 338, note 1, 667; HZL, No. 295; Tischler 2001, 251. See, more recently Singer 2006, 252–258, in particular 253, note 45.
50 As far as the term hu-ua-an-d/ta-r(a) is concerned, it is probably such finely worked linen that it is sheer, almost transparent. It appears to be a neuter, abstract noun with the function of adjective. A purely homophonic association could link it back to the Hittite term huwant- “wind”. Compare Tischler 2001, 58; HEG “A-K”, 328–331. The same suggestion is made by Puhvel 1991, 430. The term also occurs in KUB XLII 43, obv. 11 (Košak 1982, 111–112; Siegelová 1986, 482–488), in KUB XLII 34, left edge, line 1 (Košak 1982, 54–55; Siegelová 1986, 56–59), also in KUB XLII 60, obv. 7 (Košak 1982, 186; Siegelová 1986, 524–525). See, for example, the adjective derived from it, attested in the neuter, plural form, huwanawarwanda. Cf. Beckman 1985, 141.
51 Like Siegelová 1986, 225, “[x +] 1 Minen Leinen (für) 4 gemusterte, erstklassige Gürtel”.
52 KBo IX 90, obv. 7. It could have been a loose fitting tunic tied at the waist (E.ÍB), to create a skirt which was slightly longer at the back. The tunic in fact often ended with a kind of tail at the back (KUN). Cf. KUB XLII 48, obv. 33, 11, 15; KUB XLII 44 (+) KBo IX 89, obv. 1–2, 7, 9. The garment E.ÍB could be associated with the Hittite tÔgapari-. Cf. Goetze 1955, 56; Tischler 2001, 72; HEG “A-K”, 490, “tunic with kilt”, maybe not to be confused with TUG IBLÁL, Hitt. tÔputaliya-, “leichtes Marschkleid der Soldaten”, thus wrongly Ünal 1978, 126. Cf. the valid observations by Goetze 1955, 56, “tunic with kilt which the ‘soldier gods’ from Yazılıkaya are wearing”. See also what is claimed by Siegelová 1986, 213–216.
53 The Akkadian word mašlu often used in the inventory texts as Akkadogram, could have meant the meaning “trimmed” or
mentioned in a list of gifts (IGI.DU₈:₆-A)⁵⁴ from different parts of Anatolia.⁵⁵

Other types of linen also existed such as karnaša linen.⁵⁶ This was, in all likelihood, a special type of cloth⁵⁷ used for covering precious pieces of furniture.⁵⁸ In the same text⁵⁹ one also comes across the expression GADA tiyalan which possibly refers to a type of cloak for special occasions worn as an over-garment.⁶⁰ Speaking of which, it is interesting to note the term used without ***“embellished”***, also in this context. The word in fact occurs nearly always next to insertions of gold and silver in the clothing. Cf. Goetze 1955, 53, note 55; CAD “M” Part I, 318, b; HZL, No. 20; Košak 1982, 202, with the relative bibliography. Lastly Klengel & Klengel 2009, 207.


⁵⁵ The textiles in this group of texts (CTH 243.3 = KBo XVIII 197 (+) 197a (+) 197b + KBo IX 89 + 90 (+) KUB XLII 44), come from the city of Panisā (KUB XLII 44, rev. col. V 5, 8), Parnaša (KUB XLII 44 + KBo IX 89, rev. col. II 1–2, 5–6, 8, 10) and Zarwiša (KBo IX 90, rev. col. V 3, 8 + KBo IX 89, rev. col. VI 1, 6). As far as the first place name is concerned it should be stressed that it was already a place of worship at the time of Arnuwanda I, initially located near Yerköy, along the old Roman road which now runs past the modern Yozgat (maybe the Hittite Ḫaranāsā; Lat. Corniaspa?) from Ḫattuša towards the south (Kaneş?). Cf. Cornelius 1967, 71; del Monte & Tischler 1978, 300–301; Siegelová 1986, 217. According to Forlanini (cited as personal communication), the city would have been located, together with Tiura, in the valley between the Melendiz/Hasan Dağ massif and the middle-Kızılirmak. The city of Parnaša is yet to be accurately located, even though it was an important place of worship. It is likely however to have been located on the north eastern banks of the Tuz Gölü and corresponds to ancient Parnassos and today’s Parlasan (lastly Forlanini 2009, 54, with previous bibliography). Already del Monte & Tischler 1978, 306. Lastly, as far as Zarwiša is concerned, it may have been near Tarḫuntašša and Karadağ, in the area between the Taurus mountains, the Ḫulaya river and the modern Ereğli. As in Forlanini 1988, 137–138. Cf. del Monte & Tischler 1978, 496; del Monte 1992, 191–192. In the light of these suggested locations, a region of textile production and trade could be hypothesized in the heart of the Hittite Lower-Land between the cities of Pašura (?), İlkkuwiani (Konya), Waššāniana (according to Forlanini [2009, 49, 68] to the west of Kültepe/Kaneş and near the Kızılirmak river), as far as Zarwiša, near Ḫurniya/Korne (personal communication by Forlanini). Cf. Košak 1982, 203.

⁵⁶ The term occurs, in association with the items on which it is placed, in KBo XVIII 181, rev. 5, 7 (integrated: kar-nja-aš-ša in KBo XVIII 181, rev. 6). In KBo XVIII 186, left edge 6, Košak (1982, 170) suggests for GADA giš: “the cloth for the karnasa-table”, while Siegelová (1986, 379) transcribes directly giš:karnašaš, even though it is evident both in the drawing of KBo XVIII, and in the fragment of the photo, that the determinative GADA appears before the noun (not Giš), and with no possibility of being mislead by the various spelling of the two symbols (cf. HZL, Nos. 174, 177), since, just before (line 3: GADA giš:šar-pa-aš) the two words appear side by side and can be clearly distinguished. The term is accompanied by the determinative indicating items made of wood (Giš) in KUB II 96, obv. 3.


⁵⁸ It is not clear if the linen takes the name of the object on which it is placed (giš:karnašaš). From the contexts in which the term occurs it cannot be excluded that it refers to a kind of throne. Compare Tischler 2001, 74. It is very probably not the same kind of linen described in KBo XVIII 181, rev. 28: GADA giš:šU:š.A (linen [for a] chair). The term karnašaš/-karnaši- could be formed by the Luwian term karna- – of unknown meaning – with the Luwoid appurtenance suffixes -aš(š)a/-aš(š):i- (as in Puvel 1997, 91). For karna- see CLL, 101, ‘?'; Tischler 2001, 73 provides, with some reserve, the motto ‘kar-na-an ma-ar-na-an e-eš-ša-ú’ of KUB I 1, col. IV 80: “schalten und walten”. Otten 1981, 29, “…soll ein jeder für die Gottheit nach besten Kräften schaffen!” According to HEG “A-K”, 513; Puvel loc. cit.; Košak 1982, 124, it is possibly a piece of furniture on which objects can be placed. In fact, in KBo XIV 33, obv. col. I 9–10, for example, it is said that the head of the palace employees brings a precious club and places it on the king’s karnaši. Compare Klinger 1996, 482–483, 775.

⁵⁹ KBo XVIII 181, rev. 14 and may be also in obv. 2, 29 and rev. 11.

⁶⁰ The term is in fact almost definitely retraceable to the verb tiyalai- (“to cover”, “to wear”, “to put over”), from which the noun tiyal-ai. In the Hittite inventories the term is clearly used as an adjective, meaning it serves to qualify the workmanship of linen and wool (that is to say the manufacture of an item of clothing). Compare Tischler 2001, 176; HEG “T,D/3”, 364. See the interesting suggestion by Siegelová 1986, 365, note 3; ibidem, 370–371, note 4.
its determinative GADA, in KUB XLII 106, obv. 4: ]x 1 TÖG GÛ.È.A.  

It should be noted that in this passage the tiyalan robe is tailored to be put on over the head through a specific hole in the cloth (TÖG GÛ.È.A). This garment is almost always linked to the land of Ḥurri. It is therefore assumed that the GÛ.È.A cloak originates from Hurrian lands.  

The element that appears to confirm the link TÖG/GADA tiyalan = cloak, is in the interpretation of the term šurīpu. In the Hittite texts it seems to have been used as an Akkadogram referring to the “freezing winter” or simply to “winter”, despite the fact that the equivalent Hittite word is known. Therefore Košak’s interpretation of the expression TÖG GÛ.È.A ḤURRI ŠURIPU tiyalan appears very convincing.  

The Luwian term 67 lakkušanzani-, often preceded by the Sumerogram for linen, 68 is of unknown etymology. This lexeme, widely attested in the Hittite inventories, always occurs in association with the term GÔ NÁ (“bed”). The textile referred to is evidently used in connection with beds. The most viable hypothesis is that the expression TÖG/GADA lakkušanzani- refers to a canopy.  

In rev. 27 one comes across the expression GADA IGI, “linen (for) the eyes”. It is quite plausible that this refers to fabrics worn for specific occasions, particularly since other garments are mentioned in the lines that follow.  

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61 For this type of garment, which is characterised by the way it is put on, see Goetze 1955, 52–54.  
62 Cf. lastly Klengel & Klengel 2009, 206.  
63 For the meaning of the word see CAD “Š” Part III, 347–348; Landsberger apud Bauer et al. 1934, 157–159.  
64 Güterbock apud Freydenk 1968, 317, was the first to give a specific meaning to šurīpu, attested as Akkadogram in the fragments of letters 453/w (left edge, line 3) and 2236/c (rev. 5). The ‘winter context’ in which this expression is inserted, ‘kinuna ŠURIPU mēkki’ (KBo XVIII 35, left edge 3; cf. KBo XVIII 79, rev. 30: ŠURIPU-wa kuitman wa[kkarī]) translated, “und jetzt ist hier viel Eis” (Hagenbuchner 1989, 166–167, 179–180), suggests to us the possibility of translating the Akkadogram ŠURIPU as “winter”. Compare AHw “Ṣ-Z” Band III, 1284. 6a.  
67 The presence of the inflected Luwian form (nominative plural) in KBo XVIII 175, rev. col. V 15: la-ak-ku-ša-an-za-ni-en-zi leads us to a Luwian origin of the term. Compare Košak 1982, 17; CLL, 121; Neumann apud Puhvel 2001, 40; Kloekhorst 2008, 515. In KBo XVIII 154, rev. 1 left col. 9, the reading (la-ak-ku-ša-an-za-ni-uš) by Güterbock in Inhaltübersicht VI of KBo XVIII, as an accusative plural, would demonstrate that the forms 1NU<-TIM> in fact anticipate Pluralia Tantum. Cf. also Goetze 1931; Idem 1955, 53, note 54. In any case, according to Starkke (1982, 361) it should be read as GADA la-ak-ku-ša-an-za-ni-iš 1, even though it is evident that the final syllable is -uš, both in the drawing in KBo XVIII and in the photo of the fragment of tablet. Compare HEG “L-M”, 19.  
68 For the list of statements in the Hittite inventory texts, see Košak 1982, 224; Siegelová 1986, 604.  
69 The term rarely occurs in conjunction with other objects. Cf. CHD “L-N”, 21, b.  
71 Compare valid considerations by Košak 1982, 17.  
72 The same expression is to be found in KUB XLII 59, rev. 20, in KUB XLII 56, obv. 4, 14, also with the phonetic ending (acc. plur. -aš) in KBo XVIII 187, obv. 7.  
3. A propos colours of fabrics in the Hittite world

In a Hittite medical text there is reference to a remedy for an ophthalmic complaint which probably causes profuse lachrymation. The treatment procedure is described in detail. A compress made with an ingredient (possibly obtained from Alasiya) which is mixed with wine in a bronze vessel and then applied to the patient. This procedure is repeated day and night for some time, during which the patient must wear a special bandage. The main ingredient in this preparation could be chrysocolla (hydrated copper silicate), a substance probably used for the same purpose also in the Akkadian ritual AMT 9, 1: 39 and mentioned again by Pluvel in a passage from his Naturalis Historia as an excellent remedy for “initia glaumatum”. It is however difficult to establish how mar(ru)wašha- should be accurately translated. In 1919 Emil Forrer, in reference to the ‘kanesic’ rendering of words originating from Luwian and vice versa, suggested linking the hydronym Maraššand/ta = Maraššantiya to the ideographic form (ISI-A) attested in the

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75 Unfortunately the text is damaged in this part. As suggested by Haas 2003, 117, “Rezept gegen vermehrte Sekretion von Tränenflüssigkeit und Brennen liegt in KUB 8.38 + KUB 44.63 vor.”, it is more likely that it is a matter of an over secretion from the eye, rather than a lack of secretion. As in CHD “L-N”, 202, “or (if) he (the patient) [lacks?] tears”. The pathology to which the text refers to is in all probability trachoma (compare Haussperger 2000, 443–444; Starke 1986, 163–164), a *chlamydia trachomatis* infection which still occurs in certain parts of the world today. A form of contagious conjunctivitis with a pronounced tendency to scar the upper eyelid, it causes in-growing eyelashes, the inability to close the eye, infections, perforation of the eyeball and blindness. The infection also affects children. It may refer to a simple conjunctivitis, much less contagious and frequent among peasants because of wounds, even only superficial ones, caused by the vegetation (the so-called harvesters’ ulcer). It is improbable that it refers to blockages of the lachrymal duct which usually only occurs for persons over 60 and therefore at an age which was at that time rarely reached. “The salts of heavy metals and the tannin from wine are still used, particularly the former. Until recently Zincometil was used (a zinc eye wash). Colloidal silver is still a treatment for gonorrheal conjunctivitis in newborns. Yellow mercuric oxide cream is used for parasites such as lice and *phtirius pubis*, which, occasionally, still today can be seen on the eyelashes. All heavy metals are disinfectants, but I cannot remember ever having come across the use of copper”. This was a personal communication (01/13/2009) by Dr. Roberto Bellucci, head physician of the ophthalmology department in the ‘Borgo Trento’ hospital in Verona. Starke (1986, 163) claims that, “Nun wird aber seit alters das Trachom (Conjunctivitis granulosa), das vor allem in subtropischen Klimazonen auftritt, gerade durch Ätzung der erkrankten Lidbindehaut mit sogenannten Blaustein oder Kupferstift behandelt (Heute verwendet man stattdessen Sulfonamide)”. So does Puhvel 2004a, 195, “Before sulfa drugs, granulation and corneal scarring caused by trachoma and conjunctivitis were treated by cauterizing diseased tissue with copper sulfate”. For a more detailed technical account of ophthalmic pathologies in the ancient Near East, see Fincke 2000 and more in general the bibliography collected by Haas 2003, 117, note 520.

77 (ISI-A) *handala*. Compare Tischler 2001, 38; HEG “A-K”, 154; HW, Band III/1, 168. The Egyptian language too has specific words to indicate bandages (particularly in linen), used in traditional medicine. Compare Forbes 1964, 43, with note 399.
78 The Hittite term *mar(ru)wašha-* seems to be borrowed from Luwian. Compare CL, 142; HEG “L-M”, 152. It is important to stress that the mineral is indicated by the omission of the determinative for stone (NA₄). It cannot be excluded, in fact it is very possible and certainly logical, that in this case, as in others, it was necessary to indicate that the mineral did not come in the form of a stone. It was also unlikely to refer to a vitreous paste made with pigments derived from it, since it was used for medical purposes. For the complex problem related to the interpretation of mineral terminology with or without the determinative NA₄, see, in general, Polvani 1988, 56–57, and the relative bibliography. For more in depth etymological research, see infra.
80 Pliny, *Naturalis Historia*, 33. 92; already cited in Polvani 1988, 66–67, notes 8–10 and by Puhvel 2004a, 195–196. It should be remembered that Strabo (Γεωργαφικά XIV, 6. 5) also cites chalcanthite (copper sulphate) and “copper rust” – from Cypriot mines – used for their medicinal purposes.
Hittite texts (the modern ḫaSa, transcription), “red river” (the old Halys, today called Kızılirmak, which in fact means “red river” in Turkish).94 Later Güterbock too, following Goetze,82 suggested placing the ideographic form ḫaSa, with the same hydronym ḫaMaraššanda, a noun possibly formed by the Luwian word *mar(ru)wa, “red?”83 together with the participle stem (-ant) from the Hittite verb derived from it.84 Laroche was the first to suggest seeing in the term mar(ru)wašha a noun derived from the Luwian *mar(ru)wa(i)- (rougir).85

The suffix -(a)sha- has been interpreted in many ways. Gusmani has suggested for some time seeing ‘Verbalabstrakta’ in nouns ending in -(a)sha.86 From a morphological point of view it is basically a matter of abstract names, often nomina actionis.87

Howard Berman,88 who was not convinced by Gusmani,89 tried to explain why the suffix -asha- added to a verb root would form words denoting names of actions or states.90

This question has since been tackled again92 and other scholars have reached similar conclusions, leaving aside the morphological issues93 and the debate on the nature of the suffix and its function when linked to verbs or nouns.94 The term mar(ru)wašha- is a nominal deverbative

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82 Goetze 1930, 25, note 50.

83 As in Laroche 1959, 69.

84 According to Güterbock himself (1956b, 116, note b), the Hittite ‘passive participle’ -ant/d is equivalent to the Luwian ‘passive’ participle -ma attested in the gloss marušam(m)a- (KUB XXII 70, rev. 11), designating a colour other than white (ḫarki-), probably found precisely together with this term (in the genitive form ma-ru-ša-aš-aš) also in IBoT I 31, obv. 16. Here Košak 1982, 6 translates, “white and red (textiles)”; Siegelová 1986, 83, “weisse marušaša”. Regarding this, see reserves by Melchert in CLL, 141. Also in IBoT III 110, obv. 6, one could suggest the integration ma-[r]-u-ša-ma[. As also in col. IV, 5–6. Compare Siegelová 1986, 394, 416–417. The relationship between the hydronym Marasšanta and the term indicating a colour could be explained phonetically with the vocal alternation (a/u) confirmed, for example, also in the cases of idalu-/adduwali-, innarawan-/annarummi-. Cf. HEG “L-M”, 149. Güterbock thus corrected the first reading of marušam(m)a-, as a neuter plural adjective indicating a colour. Cf. Güterbock 1956a, 122–123, “Either ‘black, dark’ in contrast to ‘white’”. Cf. Pušvel 2004a, 194. On questions relating to colour, see infra.

85 As in Laroche 1958, 113. Cf. now CLL, 141, *mar(ru)wa- “blacken, darken”. See, more recently HEG “L-M”, 151. For more in depth study, see infra.

86 Gusmani 1972, 254–266; in particular 265, with note 39. Now however, for a purely phonetic and phonological insight, see Melchert 1994, 122 and the examples of deverbative forms provided on pp. 69–71. On the complexity of PIE laryngeal derivatives in PA and then in strong and weak fricatives see the more recent suggestions by Kloekhorst 2008, 75–82.

87 Clear examples of these are armuwašaša- (“moonlight”) from the verb armuwal- (“rising like the moon”), maliyaša- (“approval”) from the verb malai- (“allow, approve”); ḫarnamniyaša- (“restlessness”) from the verb ḫarnamiya- (“incite, stir up”); etc.


89 Berman 1977, 234, note 8.

90 On the basis of an example, which is not even very significant, Berman (1977, 237) claims that the suffix is -asha- and not -sha- or even -sh-.

91 Berman 1977, 235, “…-asha- is added to a verb stem and forms names of actions or states corresponding in meaning to the English gerund.”

92 Starke 1979.

93 Compare, for instance, Starke 1979, 261, note 64.

94 With regards to this the three scholars draw different conclusions. According to Gusmani 1972, 262, the suffix is
form from the Luwian *mar(ru)wa-.\(^95\)

If the association of \(^\text{SA}_5\) (lit. “red river”) with \(^\text{Maras}^{\text{A}}\) is arguable at a purely ‘topographical’ level,\(^96\) it is even more so from a lexical point of view.

There are texts in which the verb *mar(ru)wa- and therefore the nouns linked to it, including mar(ru)waš-ḫa-, can hardly be seen to qualify the colour red.

KBo VI 29, obv. col. II 10–13 states the following:

\begin{quote}
numu ḫḫunuš \text{URU} \text{Šamu} ḫḫa-ya GAŠAN-YA warriššišta nu šarazzi katterraya anda :maruwait nu nepiš tekanna katkattenut.
\end{quote}

In this passage is described the epiphany of Ištar, who, on coming to the aid of Ḥattušili III, “darkened” above and below\(^97\) (all the lands of Ḥatti); shaking the sky and the earth.

In the same way the deities in KUB LIV 78, rev. 6\(^98\) and in KUB VII 38, obv. 6,\(^99\) are clearly “dark divinities”.\(^100\)

The term mar(ru)waša-, cited in the inventory text KUB XLII 18, obv. col. II 5,\(^101\) probably doesn’t refer to a precious stone, but to a mineral which is difficult to identify; perhaps to its actual pigment.

The underlying problem lies in the fact that previously the term mar(ru)waša- was interpreted based on the derivation from the verb *mar(ru)wa-, where *mar(ru)wa- = “to be red” > mar(ru)waša- = “redness”.

Nevertheless, from the examination of the Hittite texts, but above all from reading the fragments just cited, it can be deduced that the colour of the mineral is difficult to define. It also seems possible that the perceived colour of this mineral (or of colours in general) and therefore, the colour classification criteria the Hittites used, were different from ours.\(^102\)

It is more logical to think that the cited minerals in the text have a blue tone rather than red

\(^95\) Among others Weitenberg 1984, 295–296; § 800; CHD “L-N”, 202–203; HEG “L-M”, 152; CLL, 142; Puhvel 2004a, 195; Iadem 2004b, 91.


\(^97\) katterraya anda maruwait.

\(^98\) Dingir.Mes\(\text{mar-ku-wa-ya-} [-aš].\)

\(^99\) \(\text{Mar-ku-wa-ya-aš.}\)

\(^100\) The markuwayaš deities (dat. nom. plur. neuter of mark(u)waya-?) quoted in the Hittite text should correspond to markuwayanza of KUB XXIV 11, col. II 8 and KUB XXIV 9, col. II 27 (cf. Dingir.Mes\(\text{Marwānzi, nom.plur. neuter of KUB XLIV 65, col. II 11. Cf. Starke 1986, 162–163, with previous bibliography. See the list of attestations in van Gessel 1988, 299–300. For more in depth study, see CLL, 142, and the relative bibliography; HEG “L-M”, 139; Puhvel 2004b, 77–78 and lastly Kloekhorst 2008, 563.}\)

\(^101\) [\(^\text{N}3\)] \(\text{mar-ru}-\text{wa-ša-} [-aš].\) Cf. Košak 1982, 30; Siegelová 1986, 50. Looking at the drawing in KUB XLII the integration of the word is not so certain. As also Rosenkranz 1965, 247. Contra Burde 1974, 34. Within this context (a list of precious stones kept in some baskets, like a tribute), it seems probable that pigments of this substance were used to perhaps make objects from a vitreous paste. It is important to underline that in the Hittite texts the term never appears as associated with the determinative for stone. The restoration made by the editors in the reference text determine, as such, a āpāsc difficult to explain, but easily questionable.

\(^102\) As already noted by Landsberger (1967, 139) and recently confirmed by Polvani (1988, 174), the definition of certain colours by the Mesopotamian people, as with later civilisations, were somewhat different to those of today. Such is the case, for example, for the colour blue. Cf. Landsberger loc. cit., note 7. An explanation of this is given further below.
because all the other stones and objects identified are of the same colour, which does not seem to be a coincidence. If we try to apply the same logic that scholars used in trying to identify the mineral on the basis of its colour, it can be deduced that the mineral in question cannot be chrysocolla, based on the fact that it came from the island of Cyprus. Chrysocolla \([\text{Cu},\text{Al}]_2\text{H}_2\text{Si}_2\text{O}_5(\text{OH})_4\cdot n(\text{H}_2\text{O})\] is characterised by a very irregular, amorphous structure; it is formed by oxidation in copper ore deposits; it is found in crusts or very softly, green, earthy masses, and can be of varying colours from green to bright blue. Since it does not have a uniform crystalline structure, (it is amorphous and therefore a tendency to be described as a ‘mineraloid’, rather than a mineral), it is not often used in jewellery. This fact strongly hinders the possibility of integrating the determinative for stone (\(\text{NA}_4\)) into the text KUB XLII 18, obv. col. II 5, or to identify \((\text{NA}_4)\text{mar(ru)waša}ḥ\cdot\) as chrysocolla. One option automatically excludes the other.

The minerals that are often associated with chrysocolla are quartz, limonite, cuprite, malachite and azurite.

Malachite \([\text{Cu}_2(\text{CO}_3)(\text{OH})_2]\) is a mineral with a distinctive green colour, in the form of acicular clumps more or less densely united; it is rare that they form single crystals. This mineral is usually a compact mass or encrustation with a velvety texture. It is a basic copper carbonate, but is principally used as an ornamental stone. Malachite is actually one of the best-known semi-precious stones in the world. Its name derives from the Greek word for mallow. Many malachite stones contain particular combinations of other minerals. It includes azurite, mottramite, chrysocolla and limonite. Moreover, malachite is usually associated with almost all secondary copper minerals, whether they are carbonate minerals or not. Malachite is often closely associated with azurite, not only for the obvious colour of both minerals (usually green) but also because the two minerals have very similar chemical formulae. Malachite can sometimes substitute azurite, giving origin to what is usually defined in mineralogy as a ‘pseudomorph’; in this case an exact structural copy of the azurite crystals.
Malachite has low solubility and the ethyl alcohol (wine) cited in the text KUB VIII 38 + XLIV 63, rev. col. III 14, is certainly not a reagent which would dissolve it.\(^{110}\)

Azurite \([\text{Cu}_3(\text{CO}_3)_2(\text{OH})_4]\) is a basic copper carbonate, produced by weathering of copper ore deposits with a unique dark blue colour. The chromatic tone of this mineral is due to the high presence of copper.\(^{111}\) It can often be found in the form of clumps or joined together in aggregations with radial texture. Azurite is highly soluble.\(^{112}\)

From this re-examination so far one can deduce that the mineral (not stone) often cited in KUB VIII 38 + XLIV 63, rev. col. III, 11–16, is azurite.\(^{113}\) It is easily ground to a powder, is highly soluble using reagents like ethyl alcohol, and is one of the principal secondary copper minerals. The term \textit{mar(ru)waša}– cited in KUB XLII 18, obv. col. II 5 probably refers to the colour, similar to that of azurite, of the missing object.

However, the identification of minerals leaves the colour of the fabrics described in the inventory text IBoT I 31, obv. 16, open to debate. When azurite, reduced to powder and mixed with water and other reagents, it can take on a range of pigmentation. On the other hand, even the grinding of the mineral can strongly influence the tone of the final pigment that can vary from dark blue (coarse powder) to light blue (fine powder). Moreover if not ground sufficiently, the powder can become too sandy and granular, making it unsuitable to be used as a pigment. Apart from this consideration, the translation “to become dark, black(?)” from the Luwian verb *\textit{mar(ru)wa-} – from which the term \textit{mar(ru)waša}– could have been derived – seems completely acceptable.\(^{114}\)

Research into the dyeing of the fabrics cited, even in the Hittite inventory texts, would require too deep a study to be covered here.\(^{115}\) It should also be stressed, as already mentioned, that there is the risk of translating terms that refer to colour in ancient Near Eastern languages, based on words used in the treatise writings on painting belonging to the Renaissance period.\(^{116}\)

\(^{110}\) It is interesting to note that malachite is used in Egyptian medicine, along with \textit{asa foetida} and naphtha, to heal cataract problems. Cf., for example, Daglio 2008, 79.

\(^{111}\) It needs to be highlighted that, unlike lapis lazuli with which it is often confused and substituted, once azurite is reduced to powder and heated or mixed with acid reagents, it undergoes chromatic changes and becomes very dark. This process is defined as decarbonisation.

\(^{112}\) For an overview of the definition and use of minerals in the ancient Near East refer in general to Thompson 1936; Forbes 1963, 67–93 and more recently Moorey 1994, 79–103.

\(^{113}\) Starke (1986, 163) had already reached the same conclusions, today reconfirmed (personal communication). Cf. Beckman 1996, 35; Puhvel 2004a, 195.


\(^{116}\) For this reason, even today, there are many expressions connected to the literature of the ancients that seem to be too suggestive, like, for example, the “wine-dark sea”, the “hyacinth hair” of Ulysses or “black blood”, often cited in the Odyssey. With reference to the colours of fabrics cited in Hittite inventory texts see Košak 1982, 201, “The perception of colours in various cultures differs greatly and it is therefore difficult to find exact equivalents”. The starting point for this discussion can be seen in Geiger 1871, followed by Magnus 1877 and Marty 1886. See, more
4. Linen as a luxury good. A case of study: GADA\textit{lupan(n)i}

The definition of linen as a luxury good\textsuperscript{117} is confirmed by the presence of the fabric in series of inventory texts which cite the royal couple, the name of a king or a queen and objects denoting royalty or events connected to the enthronement of a sovereign.\textsuperscript{118}

In the left edge of KBo XVIII 186 there is a list of cloth items. Among these there are 14 linens\textsuperscript{119},\textsuperscript{120} perhaps related to a chair; two (cloths?) of linen presumably for a “royal seat”.\textsuperscript{120} The most difficult fabric to identify is definitely \textit{GADA\textit{lupannes}},\textsuperscript{121} quoted in line 2.

The term TÜG/GADA\textit{lupan(n)i-}\textsuperscript{122} seems to describe a type of textile craft. This, however, recurs in Hittite inventory texts with or without determinatives.\textsuperscript{123}

The evidence of the term in this passage is significant because of the presence of the expression “royal \textit{lupan(n)i-} (of linen)”.\textsuperscript{124} A similar expression appears in another inventory text (KUB XLII 22, obv. col. II, 11).\textsuperscript{125} The tablet, related to KBo XVIII 179 (duplicate of KUB XLII 27), is of great interest, because it seems to contain an inventory of goods listed on the occasion of the enthronement of King Ḫattušili III.\textsuperscript{126}

The preciousness of the object, or the material from which it is made, seems to be confirmed by the ‘substitute-king ritual’ where the substitute was dressed in royal clothes, evidently including a \textit{lupan(n)i-}.\textsuperscript{127}

Moreover, in a statue – literally “image” = ALAM – dressing ceremony, representing the king, it states as follows: “A \textit{lupan(n)i-} is placed on his head”.\textsuperscript{128}

The object in question seems to be a distinctive attribute of the Sungod, as evident in a Hittite ritual.\textsuperscript{129} Even women could wear a \textit{lupan(n)i-}, as seems to be evident in a passage of the ritual

\textsuperscript{117} The concept of luxury goods related to the complex ceremony of gift exchange between the courts of the ancient Near East defines precious objects which usually recur as the possessions of powerful sovereigns in the late Bronze Age like Egypt, Ḫatti, Assyria, Kassite Babylonia and Mittani. For a general overview of gift exchange in the ancient Near East, of the concept of luxury goods, and of international diplomatic relations, see the fundamental works of Mauss 1923–1924; Zaccagnini 1973; \textit{Idem} 1989–1990; Liverani 1990, 205–282; Thomason 2005. Most recently, Giorgieri & Mora (in print).

\textsuperscript{118} Following, as an example, are a few passages of the many texts refer specifically to linen in association with kingship.

\textsuperscript{119} Left edge 1?: GADA ta-ni-pu-ú.

\textsuperscript{120} Left edge 3: 2 GADA GIŠšar-pa-aš. For the controversial meaning of the term (GIŠ/KUŠ)šarpa- refer to CHD “Š”, 287; Tischler 2001, 146; HEG “Š/1”, 928.

\textsuperscript{121} GADA\textit{lupan}-ni-eš. Nominaive singular or plural. Cf. CHD “L-N”, 85; Puhvel 2001, 120.

\textsuperscript{122} For the meaning of the term see CHD “L-N”, 85–86; HEG “L-M”, 77–78; Puhvel 2001, 119–121, all with previous bibliography.

\textsuperscript{123} A list of references in Hittite inventory texts is available in Košak 1982, 225–226; Siegelová 1986, 605–606.

\textsuperscript{124} GADA\textit{lupan}-ni-eš LUGAL GT-71.

\textsuperscript{125} GADA\textit{lupan}-ni LUGAL-a[ни-на-аš]. As perhaps also in KUB XLII 98, obv. col. I, 10–11: TÜG[NIŠ.LAM\textsuperscript{115}šaši-aš] LUGAL GT-71 wa-a-ši-ya-an-zi wa-aš-[ši-ya-an-zi-ma] 1\textsuperscript{10}GÜ.EA ḪUR-RJ 1 TÜG.É.B 1 TÜG[šaši-aši-aš]

\textsuperscript{126} Cf. Kümmel 1967, 10.


called ‘the expansion of the cult of the Deity of the Night’.\(^{130}\)

In the inventory text IBoT I 31 (obv. 9) we find a blue \textit{lupan(n)i-} from Ašpunawiya.\(^{131}\)

In CTH 250.36\(^{132}\) it is cited again \textit{lupan(n)i-} in a fragmentary passage.\(^{133}\) Even if the tablet is extremely damaged, the presence of a number of personal names,\(^{134}\) such as the heir to the throne and the queen,\(^{135}\) provides interesting information regarding the date of the text as well as an interpretative hypothesis on the characteristics of the \textit{lupan(n)i-}. When comparing this document and other trial reports for embezzlement (e.g. the so-called Gerichtsprotokolle (KUB XIII 35+ and KUB XXVI 49)),\(^{136}\) useful information emerges about the identity of the receivers (??) of the goods cited.\(^{137}\) As already pointed out by Siegelová,\(^{138}\) the concomitant presence of some key members


\(^{134}\) KUB XLII 51, rev. x+1: \(\) x MUNUS.LUGAL .

\(^{135}\) KUB XLII 51, obs. 6: x MUNUS.LUGAL .

\(^{136}\) KUB XLII 51, obs. 6: x MUNUS.LUGAL .

\(^{137}\) To study these documents refer to the bibliography of Košak 2002, selecting the texts referred to (CTH 293 e CTH 297.6).

\(^{138}\) The Hittite inventory texts in which officers of the Hittite court are mentioned certainly deserve a more in-depth research. From the study of these texts the possiblility emerges that the listed luxury goods are reassigned and other trial reports for embezzlement (e.g. the so-called Gerichtsprotokolle (KUB XIII 35+ and KUB XXVI 49)) useful information emerges about the identity of the receivers (??) of the goods cited. As already pointed out by Siegelová, the concomitant presence of some key members
of the Hittite court, historically known and cited in other Hittite documents, suggests that the examined fragment dates to the reign of King Ḫattušili III. Without taking into consideration the possibility of a coincidence of names, the person cited in rev. 5 (EN-LUGAL-ma)\textsuperscript{139} could be the same leading officer in the Hittite court who appears as witness in the ‘Bronze Tablet’ treaty and also in other documents in the time of Tudḫaliya IV.\textsuperscript{140}

Ḫenti, the female character cited in the reverse, is unfortunately not quoted elsewhere. Yet we know from various sources a woman called Ḫenti linked to the Hittite court. In the inner register of an extremely fragmented *bulla* there remain traces of two syllables\textsuperscript{141} of which Güterbock, comparing various texts dated at the time of the reign of Šuppiluliuma I,\textsuperscript{142} suggests the name Ḫenti.\textsuperscript{143} The interpretation was subsequently accepted by Otten, who suggested to connect the name Ḫenti, to this king – documented in a ‘list of offerers’ – as being the actual wife of Šuppiluliuma I.\textsuperscript{144} On the basis of this supposed royal couple (Šuppiluliuma I – Ḫenti),\textsuperscript{145} it is then suggested that the integration of a fragmentary passage of a decree pertaining to the ‘kizzuwatnean priesthood’ of Telipinu.\textsuperscript{146} Assuming the historical credibility of the so called ‘royal lists’ are accepted with some reservation,\textsuperscript{147} the chronological sequence of the queens appearing in the text reconstructed by Carruba (Daduḫepa – Ḫenti),\textsuperscript{148} seems to be confirmed from another fragment of a ‘royal list’\textsuperscript{149} and completed by the contemporary(?)\textsuperscript{150} presence of other Middle-Hittite queens\textsuperscript{151} (Walanni – Nikkalmadi – Ašmunikkal – Duduḫepa\textsuperscript{152} – Tawannanna) in the ‘ritual of the Queen’ at Taḫurpa (the fifth day of the *nuntarrianshā* festival).\textsuperscript{153} The name Ḫenti is also found in a fragmentary letter(?) dated to the Middle-Hittite period,\textsuperscript{154} and in a very damaged text,
where a woman by the name of Ḫenti, is forbidden to eat. \[155\]

In conclusion, the presence of the name of Queen Ḫenti along with other queens of the Middle-Hittite period, suggests placing her chronologically at the time of King Šuppiluliuma I, as his second wife, in a sequence that lists the following royal couples: Walanni – Kantuzzili (?), Nīkkalmadi – Tuthaliya II (?), Ašmunikkal – Arnuwanda I, Daduḫepa\[156\] – Šuppiluliuma I (?), Tawannanna II/III(?)\[157\] – Šuppiluliuma I.\[158\]

Unfortunately, the late dating of the most of the texts (13th century BC),\[159\] excluding the fragmentary letter cited above, is not useful for identifying Ḫenti and does not even confirm the validity of the previously suggested royal couple.\[160\] From the range of references to this name in the Hittite texts it is clear that a precise identity cannot be attributed to the person called Ḫenti cited in the inventory text KUB XLII 51.\[161\]

The last name that can be matched with some certainty\[162\] is that of prince Nerikkaili, cited in line 5 of the reverse.\[163\] If we accept the identity of the person in this text as the son of King Ḫattušili III,\[164\] we can assume that the queen (MUNUS.LUGAL), cited in line 6 of the obverse, should be identified with Puduḫepa,\[165\] perhaps Nerikkaili’s mother.\[166\] Staying within the realm of speculative hypotheses it could logically follow that the tuḫukanti cited in line 2 of the obverse can be identified as Tudḫaliya IV.\[167\]

Whatever the true identity of the figures cited in the text, an important fact emerges from the analysis undertaken: the lupon(n)i- appears again as a precious fabric to give(?), not only to

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156 First wife?

157 Third wife?

158 For all suggestions see Carruba 2008, 125–141, 191.

159 Of significant importance is the dating of the text KUB XXV 14, where all queens are listed. Cf. Nakamura 2002, 188.

160 The name of a certain Mannini within the royal lists, next to the name of Arnuwanda and of the queens frequently cited (cf. Carruba 2007, 139), demonstrates the difficulty of using lists of offerings as historically reliable documents for the purpose of reconstructing the sequence of Hittite kings. For evidence of the name refer to Laroche 1966, 113, No. 747. Cf. also Košak 1978, 119. For evidence of the name within the Hittite inventory texts, see Košak 1982, 301; Siegelová 1986, 715.


163 KUB XLII 51, rev. 5: “Ne-ri-ik[]. For the prosopography of this figure refer to van den Hout 1995a, 96–105.


165 Cf. Imparati loc. cit.

166 For this hypothesis see Houwink ten Cate 1996, 43. The maternity of Puduḫepa is a problematic issue. A direct bloodline has been suggested between this queen and Tudḫaliya IV. Otherwise Nerikkaili would have been born from a previous marriage of Ḫattušili III. For an in-depth study refer to van den Hout 1999, 232 and to Frantz-Szabó & Ünal 2006, 107–108, both with previous bibliography. See also Bryce 2005, 272, with bibliography included in note 37. In the inventory text KUB XXVI 66, as previously mentioned, the queen is cited (col. III 10) together with the heir to the throne (col. III 17). Van den Hout (1995a, 98, note 125) identifies them as Puduḫepa and Nerikkaili.

167 The interpretive hypothesis, in no way verifiable, is based on the presence, within the text, of the name of the older brother of Tudḫaliya IV (Nerikkaili), without a royal title. For events relating to the appointment to the kingship (LUGAL-iz-na-ni tapariya-) of Tudḫaliya IV, in place of the designated heir to the throne (Nerikkaili) cf. Imparati, 1995, 151–153; see lastly Bryce 2005, 272, 295–297, with previous bibliography in note 1 of p. 471.
a woman (the queen), but above all to people of high status (the crown prince, or other son of the King).

The presence of the *lupan(n)i*- within the Hittite inventory texts shows that the wool or linen fabric was often decorated after undergoing specific treatments, such as dyeing. Colours of which vary from blue to green-blue.

The presence of the term *lupan(n)i*- without determinative (TÚG or GADA) in the inventory list of luxury goods, such as weapons or bronze objects and other precious metals, considerably complicates the identification of the fabric.

A clear example is the so-called ‘Inventory of Manninni’ (CTH 504), inside of which are listed *lupan(n)i*- in association with weapons.

The suggestion to identify the *lupan(n)i*- in these contexts as a textile covering of a hilt or handle of a sword is based on the interpretation of the expression: EME (+ the name of the metal of which it is composed) lu-pa-an-ni-eš GAB, often attested in the Inventory of Manninni, like “covering of the handle of the blade (sword, knife?)”. However, the Inventory of Manninni, like the majority of inventory texts, shows an extremely varied list of objects, from weapons to textiles, from votive statues to furnishings.

This fact suggests the possibility of considering the listed objects after the swords as simple metallic utensils, but not necessarily weapons.

The term EME (literally “tongue”), often cited in Hittite inventories and translated as “blade”, seems to be an object closely linked to the *lupan(n)i*. Following a reading of other passages it emerges that *lupan(n)i*- is a fabric worn on the head and it is also an attribute of kingship.

Therefore the “metal-tongue” (sometimes made of gold, silver, “black iron” or bronze) could

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168 This element could help us to confirm that the *lupan(n)i*- is actually an object worn by both men and women. As well as the examples indicated above, the *lupan(n)i*- recurs in connection with women in the document KUB XLII 49, obv. 8–9: 1168 lu-pa-an-ni-eš GAB, often attested in the Inventory of Manninni, like “covering of the handle of the blade (sword, knife?)”.

169 It is worth mentioning again the text KUB XLII 22, obv. col. II 11, where, as already pointed out, *lupan(n)i-* of royalty are cited (6 TÚG lu-pa-an-ni LIUGAL-x), together with other precious fabrics, objects and cult weapons made of bronze. The afferent tablets at CTH 241.12A–B (KUB XLII 27 (+) 23 (+) 22; KBo XVIII 179) probably describe objects provisionally stored in the ‘royal treasury’, as tributes or donations, on the occasion of the enthronement of the royal couple. Refer in general to Siegelová 1986, 32–35 for the relevant discussion regarding the problems that can result from the study of these important documents, and for the hypotheses in identifying the royal couple. Cf. note 126.

170 Keep in mind the observations made above regarding the rendering of terms, which indicate colours in the ancient languages. For evidence of coloured *lupan(n)i*- see, for example, CHD “L-N”, 86, d.


173 Like, for example CHD “L-N”, 86, 2, “EME ‘blade’ *lupan(n)i*- ‘cap’ and GAB ‘front(?)’ are here understood as parts of a GÍR ‘dagger’”. Cf. Puhvel 2001, 119, “cap(ping), pommel (on a sword’s or dagger’s hilt)”. Cf. Starke 1990, 411, note 1481.


175 For the interpretation of the term AN.BAR GE, see Maxwell-Hyslop 1980, 87–88.
probably indicate a diadem (or a part of it); that is, the metal plate – whether oval, rectangular, spherical, convex or in the shape of a zoomorphic protome – which is used to fasten a piece of cloth onto the forehead.\textsuperscript{176} The piece of cloth in question, therefore, could be the \textit{lupan(n)i-}, so the expression: X EME GAB \textit{lu-pa-an-ni-eš}, literally translatable: X (metallic) tongue (that is added) in front of a \textit{lupan(n)i-}, that is, the diadem or part of it.\textsuperscript{177} It is feasible that an inventory listing luxury goods destined for a high dignitary of the court, the king or the royal couple, would also include weapons and diadems.

The presence of ‘tongues’ of precious metal together with the term \textit{lupan(n)i-} seems necessary, even though this fabric that is tied around the head to support the diadem often does not leave archaeological traces. The validity of the suggestion, however, is supported by actual archaeological evidence.\textsuperscript{178}

\textsuperscript{176} Contra Siegelová 1984, 153–154.
\textsuperscript{177} For similar conclusions see Kümmel 1967, 31; Goetze 1955, 62; Košak 1978, 107; \textit{idem} 1982, 201. For a possible archaeological comparison see, in general, Maxwell-Hyslop 1971, 22; \textit{Eadem} 1980, 87–88 and Figs. 15.1–15.4.
\textsuperscript{178} See, above all, Frangipane et al. 2009, in particular p. 18, with the important indications of remains of fabric under the deceased’s diadem. Regarding the Hittite findings see Boehmer 1972, 38–41 and Fig. 15.5; for the gold diadems in the Syrian environment, see above all Parrot 1959, 95 and Fig. 15.6; Hauptmann & Pernicka 2004, 102 and Fig. 15.7. For other bronze diadems found in funeral contexts and positioned exactly under the head of the deceased, see Jean-Marie 1999, 166 (III Z17 S091–S0109) and Fig. 15.8. For the presence of bronze plates (diadems) in elite funeral contexts (Šakkanakku); \textit{ibidem}, 186 (III D1 S04 bis) and Fig. 15.9. This last example confirms once more the contextual presence of weapons and diadems, as symbols of kingship, acquired in life and preserved after death.
Fig. 15.5. Thin layers from Boğazköy-Ḫattuša. Among them some strips maybe were used as part of 'diadems' (Boehmer 1972, Pl. III)
Goetze’s suggestion,\textsuperscript{179} which was rejected for a long time,\textsuperscript{180} of identifying the term TÜG/\textsuperscript{GAD} \textit{lupan(n)i}- with the Sumerogram TÜG\textsuperscript{BAR.SI} (a band for the head), though based on the analysis of a single fragment of text, seems fairly satisfactory, particularly in absence of valid alternatives to justify the impossibility of such a suggestion.\textsuperscript{181}

The relationship between \textit{lupan(n)i}- and headband, often intended as part of a diadem, is supported by the possibility of substituting the term with the Sumerogram BAR.SI, as can be deduced from a number of Hittite texts, above all KUB IX 15, col. III 1 ff. The headband, sometimes

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\textsuperscript{179} Goetze 1955, 62.
\textsuperscript{180} CHD “L-N”, 86.
\textsuperscript{181} We agree with the observation of Košak 1982, 200, “It is true that the equation of lupanni- with BAR.SI is based on insufficient evidence but such objection applies even more to the new proposal advocated by CHD”.

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Fig. 15.6 (Top). Gold frontlets from the throne room of the Palace of Zimri-Lim in Mari (Parrot 1959, 95, Fig. 70);

Fig. 15.7 (Top right). Drawing of gold frontlets from the throne room of the Palace of Zimri-Lim in Mari (Hauptmann & Pernicka 2004, Pl. 158, Nos. 2598–2599)

Fig. 15.8 (Middle). Bronze frontlets from Tomb 727 in Mari (Jean-Marie 1999, Pl. 127, Nos. 2–3)

Fig. 15.9 (Left). Bronze frontlet from Tomb 1018 in Mari (Jean-Marie 1999, Pl. 205, No. 4)
adorned with jewels or thin metal layers fixed onto the forehead, is a canonical element of clothing for priests or priestesses, perhaps even worn by rulers to legitimise their own high ranking position as “High Priests”. There is less of a tendency to consider the object as an article of clothing used exclusively by men.

Little can be deduced from an etymological perspective. The term lupan(n)i- does not appear to be a word of Hittite origin. The form lu-wa-an-ni-eš, attested in KBo XVIII 170 (+) 170a, rev. 2, could suggest a word of Hattic origin, but this is invalid due to the presence of the ‘Glossenkeil’ in the derivative adjective lūpannawant- documented in KUB XXXVIII 1, col. II 7–8. Even a Hurrian derivation of the term seems to be excluded due to the fact that there is very little evidence of words that begin with the consonant l- in the Hurrian vocabulary.

The comparison of the term with other later Indo-European languages, although suggestive, raises many doubts. Thus, Indo-European origin is very difficult to support. It is therefore tricky to think of Luwian word, as Rosenkranz has already postulated and subsequently been accepted also by Melchert. The term lupan(n)i- could be a loan word or a ‘Hittite’ adaptation of a foreign word of non-Anatolian origin.

In the recent past Kammenhuber has highlighted the probable link between the term TÚGlu-pa-ri, āpāξ λεγόμενον attested in the fragmentary oracular text KUB XVIII 29, col. IV 6, and the Akkadian (TÚG/GADA) lubāru. The term generally indicates a fabric or cloth, often of high quality, and appears frequently in the Old-Babylonian and Neo-Babylonian tablets. It is also found in documents written in Akkadian from the archives of Alalah and Nuzi, as well as the Akkadian texts of Mari and of Egypt (el-Amarna). However, in some texts the fabric was perhaps used as a shawl, like in EA 14, the letter between Amenhotep IV and Burna-Buriyaš of Babylon, but above all as a headdress or headgear, such as in the ritual BRM 4. Even if the examples given are interesting, it is difficult to ascertain that the term lupan(n)i- could be an ‘Anatolian adaptation’

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183 See Košak’s doubts 1982, 200.
185 Cf., for example, Puhvel 2001, 121.
186 Cf. del Monte 1985, 154.
188 Suggested examples can be seen in HEG “L-M”, 78 and Puhvel 2001, 121.
189 The only reconstructed Indo-European root for the term is *reup-/*rup- “break, smash”, with the alternation of the liquid (*l/*r). Cf. Latin ru-m-pô “I break”, Vedic rop- “to break” (rūpa- “form, structure” and for thoroughness “beauty”). Cf. rūpin- (literally: “to have form”), but even in Old English rēofan “break”. The proposal is nevertheless clearly unfeasible from a semantic point of view.
190 Rosenkranz 1957.
191 CLL, 129.
193 Cf. Košak 2002 (CTH 577). The fragment is to be surely placed in relation to KBo LIII 110. Cf. Miller 2005a, Inhaltsübersicht VII.
194 Kammenhuber 1985, 541.
195 Cf. AHW I “A-L”, 560; CAD “L”, 228–231, 1; CDA., 184. We agree with the observation of CAD “L”, 231, “There is no reason to connect lubāru with verb labāru”, for the translation of the term lubāru “altes Gewand” of von Soden 1955, 387.
197 6:21, 44: nişi mātī subāt qaqqadīšunu šaḫtu ina lubarašunu qaqqasunu katmu, “the people of the village remove their headdress and cover their heads with their lubāru”; ina lubarušunu nukkasütu qaqqasunu katmu, “they cover their heads with cut lubāru”.

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of the Akkadian *lubāru*, above all from a linguistic point of view.

Thus, from the analysis undertaken so far, it can be confirmed that *lupan(n)i*- indicates a headband. Its use seems to be often relegated to religious contexts and is therefore a distinctive object, a luxury good. Furthermore the *lupan(n)i-* seems to be used by the king (or the queen). It also appears in inventory texts as a precious tribute offered on particular ceremonial occasions in the presence of the royal couple, and is even used as an accessory for the Sun god.

All this could possibly suggests an archaeological comparison between the *lupan(n)i*- and the image of the headdress worn by Tudḫaliya IV in the relief No. 64 of Room A of the Yazılıkaya rock sanctuary, just like the image of the royal couple in procession, carved on the Alaca Höyük orthostat, or the image of Muwatalli II engraved in relief 1 of Sirkeli. The same type

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198 The comparison offered by Puhvel 2001, 121, “The phonetic relationship of luwannt- to lupani- would match that of Hitt. kuwanna- to Lat. cuprum ‘copper’” seems to be insignificant. The alternation r/n, that makes the association of TÜC*lupari* of KUB XVIII 29, col. IV 6 to *lupan(n)i*- possible, could be a result of the stabilization of a Luwian dialect form in the kizzuwatnean area. The consolidated form of the 13th century should therefore be the product of the doubling of the nasal, where truly conjecturable, due to the long vowel, perceived as atonic, from the Akkadian *lubāru* and then the ‘Hittite’ *lupāri*, with consequent -i motion.

199 Cf. van den Hout 1993, 11.

200 Figs. 15.10–15.11.

201 Fig. 15.12.

202 Fig. 15.13.
Fig. 15.12 (Top left). Alaca Höyük: stone-block relief of the Hittite royal couple during an offering scene (Ehringhaus 2005, 8, No. 3)

Fig. 15.13 (Middle). Drawing of the relief of King Muwattallii II in Sirkeli (Ehringhaus 2005, 98, No. 176)

Fig. 15.14 (Top right). Boğazköy-Ḫattuša: Relief of the Sungod in Kammer A of Südburg (Seeher 2006, 102, No. 108)

Fig. 15.15 (Bottom). Yazılıkaya: relief of the Sungod of Heaven carved on the right wall of Kammer A (Ehringhaus 2005, 20, No. 27)
of headband, which is fixed to the head with one or more (metallic?) strings wrapped around the forehead, is evidently worn by the Sungod in the well-known representations of Room 2 of Südburg, in Ḫattuša, or relief No. 34 of Room A, also at Yazılıkaya, just to cite some examples from monumental art. Obviously it is only a speculative hypothesis that requires further investigation.

From this brief study on Hittite inventory texts it is obviously impossible to obtain significant elements to understand the techniques used to produce fabrics in the Hittite world, or even to establish whether the Hittites produced linen or, on the contrary, created trade routes across which the fabric arrived to the heart of Anatolia (other than sporadic examples such as Cyprus or northern Syria).

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203 Fig. 15.14.
204 Fig. 15.15.
205 Seen in relation to previous considerations of CHD “L-N”, 86; Kümmel 1967, 31, with note 94. We could add the images of persons in the Taşçı rock-reliefs (A–B) Figs. 15.16–15.17. They are wearing a small headdress on which a horn is attached. Cf. Kohlmeyer 1983, 75, 79. Unfortunately the reliefs are very damaged or almost completely buried underground. Cf. Ehringhaus 2005, 65–70, in particular p. 66. On the identity of persons ‘depicted’ on Taşçı reliefs see different suggestions collected by Stokkel 2005, 173.
206 For a valid overview of headdress represented in Hittite art, see Boehmer 1980–1983, 207–208. Also see the study of iconography of Tudḫaliya IV, with an in-depth study of royal headdress in van den Hout 1995b, in particular p. 565–568.
207 As rightly pointed out by van de Mieroop (2007, 165): “Northern Syria may have been a source of much desire textiles in this period, as many terms designating special garments have Hurrian names, seemingly indicating their region of origin.” Cf. Klengel 2008, 76: “Geographisch wird GAD vor allem mit dem mittelsyrischen Land Amurru sowie mit Zypern verbunden, die hier wohl als wichtige produktionsstandarte gennant werden”.

Fig. 15.16 (above): Taşçı A: detail of human figures carved on the rock (Ehringhaus 2005, 67, No. 123)

Fig. 15.17 (right): Taşçı B: detail of the image of a prayer(?) carved on the rock (Ehringhaus 2005, 69, No. 127)
The aim of this text was to provide a general picture of a particular category of luxury goods, ‘precious fabrics’ and specifically linen, that appear in the Hittite inventory texts.

Given the current state of research and resources available, analysis of the documents has demonstrated that a re-examination of terms referring to objects listed in the Hittite inventories would be highly desirable. We hope that this work can serve as an incentive for future, in-depth studies.

Abbreviations

A.N. Author’s note.
CAD The Assyrian Dictionary of the Oriental Institute of the University of Chicago – Chicago 1956–.
col. Column.
CT Cuneiform Texts from Babylonian Tablets in the British Museum – London 1986–.
EA Texts from el-Amarna, according to J. A. Knudtzon, Die El-Amarna-Tafeln, Vorderasiatische Bibliothek 2 – Leipzig 1915.
HEG J. Tischler, Hethitisches Etymologische Glossar, Innsbrucker Beiträge zur Sprachwissenschaft –Band 20) – Innsbruck 1983–.
IBoT Istanbul Arkeoloji Müzelerinde bulunan Bogazköy tabletleri – Istanbul.
KBo Keilschrifttexte aus Boghazköy – Berlin 1916–.
KUB Keilschrifturkunden aus Boghazköy – Berlin 1921–.
NBC The Nies Babylonian Collection – Yale.
obv. Obverse.
PA Proto-Anatolic.
PIE Proto-Indo-European.
rev. Reverse.
RS Field numbers of tablets excavated at Ras Shamra – Ugarit.
TC Tabletes Cappadociennes – Paris.
VBoT A. Goetze (hrsg.), Verstreute Boghazköy-Texte – Marburg 1930.

208 The contribution presented here is part of a larger nationally-funded research project aimed at an up-to-date study of the tribute practices and the treasuring and hoarding of goods in the Hittite Empire. The project is directed by Prof. Marcella Frangipane (Università La Sapienza di Roma); Prof. Clelia Mora (Università di Pavia) organizes the research undertaken at the local level, as well as that by the author, by Dr. Mauro Giorgieri (Università di Pavia), by Dr Lorenzo d’Alfonso (Università di Pavia), and by Dr. Maria Elena Balza (Freie Universität – Berlin). By the time this paper was finished a couple of new interesting articles by Horst Klengel were published (here Klengel 2008 and Klengel & Klengel 2009). Where possible they have been referred to. I am glad to read that the author proposed similar hypotheses on specific topics discussed in my paper.
Bibliography


15. Linen in Hittite Inventory Texts

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15. Linen in Hittite Inventory Texts


