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The ^{tug₂}guz-za/ ^{tug₂}GUZ.ZA at Hattuša and Beyond

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Abstract: The ^{tug₂}guz-za/ ^{tug₂}GUZ.ZA is a cloth attested in different spellings from the 3rd to 1st millennia BCE that has received diverse translations. Evidence from Ur III textile production texts, reconstructions based on experimental data, and lexical lists now converge to suggest that the cloth was defined by its thick weft. Although the ^{tug₂}guz-za/ ^{tug₂}GUZ.ZA has traditionally been connected to the *Zottenrock* of Mesopotamian visual media via the adjective guz(-za) ‘bristly, wire-haired,’ no independent evidence of shagginess has been found for the textile. Instead, this contribution demonstrates that there is another guz-za meaning ‘bright red’ that was applied to textiles and wool in the lexical lists of the 2nd millennium BCE, suggesting that the ^{tug₂}guz-za/ ^{tug₂}GUZ.ZA was conceived of as a red cloth at least in some periods.

Keywords: Textiles, Ancient Near East, Zottenrock, Hittite orthography, ^{tug₂}guz-za/ ^{tug₂}guz.za

1. Introduction

The present philological contribution arises from the author’s recently concluded work on the Hittite economic texts. Among the problems encountered in working with these texts is the large vocabulary of international luxury goods that seldom appear elsewhere in the Hittite corpus. One of these items is the ^{tug₂}GUZ.ZA,¹ which has been variously translated in Hittitological literature as “Zottendecke, [Zotten]stoff,”² “robes,”³ “GUZ.ZA-Stoffe,”⁴ or not translated at all.⁵ Endeavoring to choose between these translations occasioned a recourse to the neighboring fields of Sumerology and Assyriology, where it was noted that an even wider range of interpretations prevails. Thus, since there is no recent comprehensive discussion of the ^{tug₂}guz-za/ ^{tug₂}GUZ.ZA, and indeed, since the explanations found in the main reference works are partially incompatible, the present contribution aims at providing a history of research, a critical review of secondary literature on the subject, a discussion of the problems of interpretation, and suggestions for future paths of investigation. It should be emphasized, however, that a full understanding of this important article of *realia* must await an interdisciplinary investigation of the cloth across the two-and-a-half millennia history of the lexeme in cuneiform corpora, and no doubt further contributions of research on ancient textiles in the associated fields of art history and archaeology.

¹ Note that the ^{tug₂}guz-za/ ^{tug₂}GUZ.ZA garment is written with three different signs, varying by period. The original writing in use from the 3rd millennium to the OB period is with LUM, i.e., ^{tug₂}LUM-za/ ^{tug₂}LUM.ZA. In the post-OB 2nd millennium the garment is written with either LUM-šeššig (= SIG₄), i.e., ^{tug₂}SIG₄.ZA, or once, in a lexical list, with GU, i.e., ^{tug₂}GU-za. The form ^{tug₂}GU-za then appears in the 1st millennium lexical lists, whereas in the texts a reduplicated form ^{tug₂}LUM.LUM, sometimes written out ^{tug₂}gu-uz-gu-uz (pl. *gu-uz-gu-zu*, *gu-uz-gu-za-nu*), is used. In the following discussion, the garment will be generically referred to with ^{tug₂}guz-za/ ^{tug₂}GUZ.ZA, while specific attestations will be cited as they are written, viz. ^{tug₂}guz-za, ^{tug₂}guz-za, ^{tug₂}GUZ.ZA, ^{tug₂}GUZ(“SIG₄”).ZA.

² Kümmel (1967: 77); HZL 245, no. 310.

³ Košak (1982: 54), based on Akkadian *i’lu* and *illūku*.

⁴ Siegelová (1986: 37), based only on *illūku*.

⁵ Güterbock (1973: 85), referencing CAD I–J 90, s.v. *i’lu A* “(a garment).”

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The *tug₂guz-za/tug₂GUZ.ZA* is a type of cloth or garment attested in various spellings from the Ur III to the Late Neo-Babylonian period. In the 3rd millennium, the *tug₂guz-za* is attested as a thick, heavy cloth of medium to high quality that could apparently be worn on the body as a wrap in addition to being attested as a blanket. In the 2nd to 1st millennium, the *tug₂GUZ.ZA* appears as an internationally-attested luxury cloth used as a blanket, rug, or fine upholstery for seats and chariots. As with most ancient textiles, the bulk of attestations of the *tug₂guz-za/tug₂GUZ.ZA* is found in lists and inventories, and thus little is known of the cloth's outward appearance. Even a unique text providing a complete description of the amounts of wool and the labor necessary for crafting a *tug₂guz-za* (see the discussion of ITT 5, 9996 iii 4–rev. i 4 in section 4 below) has only afforded reconstruction of the cloth's underlying weave. Interpretations of the visual characteristics have therefore hinged on the etymology of the Sumerian word *guz-za* and on glosses of the cloth in lexical lists. On the one hand, the lexical lists show that one meaning of Sumerian *guz(-za)* was 'bristly, wire-haired' (Akk. *(h)apparrū*), leading to the original argument that the *tug₂guz-za/tug₂GUZ.ZA* was a type of shaggy cloth traditionally designated as the "Zottenrock" in Mesopotamian iconography. On the other hand, neither direct glosses in the lexical lists nor descriptions in practical texts hint at any shagginess or bristliness for the *tug₂guz-za/tug₂GUZ.ZA*. Instead, the lexical lists seem to implicitly connect the cloth with a different Sumerian *guz-za* meaning 'bright red'.

2. History of Research

Research on the *tug₂guz-za/tug₂GUZ.ZA* began with Landsberger (1934: 102), who, in a discussion of the pig variety *šah-bar-LUM* = *ap-pa-ru-u₂*, argued for the existence of a Sumerian lexeme *LUM* = *guz* 'shaggy' based on the lexical entries *gu-uzguz* = *ap-par-ru-u* 'bristly, having wiry-hair' (AO 7661 obv. i 36) and *lu₂ siki-guz-za* = *ha-ap-pa-ar-ru-u₂* 'a man with bristly/wiry (body)hair' (UM 5.147 obv. 5), adducing as additional evidence the garment *tug₂guz-za*, which he translated *Zottenrock* – 'shag-skirt'.⁶ Jacobsen (1939: 27) offered a different etymology: he transliterated *tug₂guz-za* as *tug₂hus-sa₃* and connected the garment with the color red based on the passage *tug₂ LUM DUB-še₃*, (CTNMC 44 rev. 2), which he read as "for dyeing (DUB) the cloth red (LUM)."⁷ Comparing the interpretations of Landsberger and Jacobsen, Oppenheim (1948: 65) sided with Landsberger regarding the semantics of *tug₂guz-za* ("The decisive proof that this term [scil. *tug₂guz-za*] denotes a special fabric of flocky and shaggy texture is offered by the equation in UM v 147:5 lú síg (!)-guz-za = *ha-ap-pa-ar-ru-ū* ... 'man with a guz-fleece' = 'shaggy'"), while embracing the phonology suggested by Jacobsen ("GUZ = *hunzu*, *huzzu* 'shaggy'" and suggesting (*loc. cit.*) that *guz* is "probably to be read *huz*, even *huz(z)a* as Akkadian loanword in Sumerian"). Although Oppenheim (1948: 66) conceded that "[i]t is not unlikely, as Jacobsen ... has already suggested, that the term *guz(z)a* denoted at the same time a certain treatment of the wool and a specific color," he did not mention the color red or take a

⁶ The term "Zottenrock" (better "Zottenstoff" since garments besides skirts are depicted in Mesopotamian iconography as being made from the material) has a technical sense in the art history of Mesopotamia. According to the RIA entry "Zottenstoff" (Braun-Holzinger 2017: 339–340), the term refers to a fabric composed of layered ranks of large, loose loops that is well attested in Sumerian visual media as a personal garment, sometimes also referred to as a *kaunakes*, of kings and gods (note that the RIA has no corresponding philological entry for "Zottenstoff," again reflecting the problems under discussion).

⁷ As Jacobsen (1939: 27 no. 44, note 2) argued:

LUM in our passage is evidently the same as in the word *túg LUM-za*, a special sort of cloth, where the following za indicates we should read *hus*: *túg hus-sà*. Since our passage shows that a piece of cloth may be dyed 'hus' *hus* must be the name of a colour and we may therefore identify it with *hus*, Akkadian *husšū*, 'red' ... in spite of the small difference that one is written with s, the other with š which perhaps only reflects the orthography of two different periods.

Unfortunately, Jacobsen's interpretation of DUB as *šibū* 'to dye' based on *du-u b d u b* = *ši-bu-u* (*loc. cit.*, note 1) in A III/5: 5 has not stood the test of time and this lexical entry is now interpreted instead as coming from *sebū* 'to wish' (CAD § 119). As shown by the other lexical texts cited in the CAD § s.v. *šebehū*, the lexical equivalence from Sumerian is *s a g - d u b*, lit. 'to pour out the heart' = 'to wish'. What, then, *tug₂ LUM DUB-še₃*, means in CTNMC 44 rev. 2, and whether it has anything to do with *d u b* 'to pour (out)' – or with *LUM* = *guz*, for that matter – remains unclear. A search of the online *Database of Neo-Sumerian Texts* (BDTNS) (bdtns.filol.csic.es last accessed on 13.09.2021) reveals no parallels.

position on what the specific color was. Oppenheim concluded with the observation that the ^{tug₂}guz-za was frequently listed among ^{tug₂}ni₃-lam₂ ‘festival clothes’ and was in reality an expensive cloth.

Oppenheim’s explanation was not adopted by the main Assyriological dictionaries: both CAD and AHw. follow the older reading ^{tug₂}LUM-za – with ^{tug₂}SIG₄ (= LUM-šeššig).ZA as an accepted post-OB variant – rather than ^{tug₂}guz-za /^{tug₂}GUZ.ZA (see the respective *i’lu(m)* entries: CAD I–J 90, AHw. 373b). While neither dictionary engaged with the arguments directly, by quoting the same lexical entries used by Landsberger and Jacobsen elsewhere,⁸ both dictionaries appear to have implicitly rejected the arguments of Landsberger, Jacobsen, and Oppenheim. This is all the more significant as CAD was co-edited by Oppenheim at that time. Similarly, both dictionaries declined to mention Jacobsen’s suggestion for the reading ^{tug₂}guz-za = ^{tug₂}hus-sa₃ under the *husšu* (m) entries (CAD H 261, AHw. 361b). Finally, CAD H 266, s.v. *huzzu* and AHw. 356a, s.v. *hunzu*, *hunzu’u* rejected the earlier translation as “shaggy” and defined *hunzu*, *huzzu* instead as “to be lame, to limp”/“etwa ‘lahm’?,” while retaining the equation with *gu-uz* GUZ in the lexical sections of their respective entries.⁹ With the dictionaries leaving the definition and reading of ^{tug₂}guz-za /^{tug₂}GUZ.ZA an open question as of the mid-nineteen-sixties, further study of the cloth devolved to philological commentaries of various texts in which it is encountered.

The post-dictionary commentaries and studies on the ^{tug₂}guz-za /^{tug₂}GUZ.ZA can be divided into two groups. The first group follows CAD and AHw. in that they do not commit to an interpretation of shagginess for the ^{tug₂}guz-za /^{tug₂}GUZ.ZA, though with the difference that all acknowledge a reading guz for LUM. Although the ^{tug₂}guz-za was nowhere explicitly treated in the most obvious reference work by Waetzoldt (1972) on the textile industry of the Ur III period, in his subsequent RIA entry on “Kleidung. A. Philologisch” Waetzoldt (1980–1983: 21) was cautious about the *Zottenstoff* equation: “Sollte ^{tug₂}guz-za der Zottenstoff sein, so müßte nach der aB Zeit dafür noch eine andere Bezeichnung existiert haben, da Gottheiten nach jüngeren Darstellungen ihn häufig tragen.” In the realm of Hittitology, Güterbock (1973) cited the original work of Landsberger (1934) for the reading of LUM = gu-uz, but referred readers for the meaning to CAD I–J 90, s.v. *i’lu* A “(a garment),” which makes no mention of *Zottenstoff*. The two editions of Hittite administrative texts pertaining to the palace-temple economy at Ḫattuša, which – as might be expected – contain the bulk of attestations to ^{tug₂}GUZ.ZA in the Hittite corpus, also belong to the first group: Košak (1982: 54) interpreted ^{tug₂}GUZ.ZA as “robes,” citing Güterbock (1973) and equating the term with Akkadian *i’lu* and *illūku*,¹⁰ whereas Siegelová (1986: 37) acknowledged only *illūku*, with the more cautious translation “GUZ.ZA-Stoffe.” Finally, there is the contribution of Quillien (2013) on the 1st millennium ^{tug₂}GUZ.GUZ/gu-uz-gu-uz, who, despite the phonological and ideographic similarities (^{tug₂}GUZ.GUZ being apparently a reduplicated form of the 3rd and 2nd millennium ^{tug₂}guz-za /^{tug₂}GUZ.ZA) and despite the shared usage as a covering for chariots and expensive furniture,¹¹ did not propose any connection between the ^{tug₂}guz-za /^{tug₂}GUZ.ZA and ^{tug₂}GUZ.GUZ cloths.¹²

The second group of commentaries are those that accept, at a minimum, a shaggy, flocky, or bristly appearance for the ^{tug₂}guz-za /^{tug₂}GUZ.ZA cloth, and at a maximum, identification with the *Zottenstoff* of Mesopotamian iconography. All take Oppenheim as a starting point, beginning with Kümmel, who maintained the shagginess of the cloth when commenting on its appearance in a substitution ritual for the Hittite king. Based on attestations in texts from Ḫattuša, Alalah, Ugarit, and El Amarna, where the ^{tug₂}GUZ.ZA is clearly used as a blanket and furniture covering, Kümmel (1967: 77) wrote, in contrast to Oppenheim’s translation “Zottenrock,” that the ^{tug₂}GUZ.ZA was “jedenfalls nach allen Belegen nur Stoffart oder Tuch, nicht ein bestimmtes Kleidungsstück, so daß ich hier nach Ideogramm und Gebrauch etwa ‘Zottendecke, -stoff’ ansetzen möchte.” Kümmel’s translation “Zottendecke” was followed by Archi (1983: iv), and Rüster/Neu (1989: 245, no. 310). In Assyriology, Dalley (1980: 73) came to the same conclusion, translating the term as a rug or blanket with wiry hair when

⁸ CAD A 179, s.v. *apparrū* (*happarrū*) “having wiry(?) hair”: “gu-uz LUM = ap-par-ru-u” and “lú.síg. guz.za = ha-ap-pa-ar-ru-ú”; AHw. 59a, s.v. *apparrū*, *happarrū* “mit zottigem Haar”: “lú síg(!)-guz-za = ha-ap-pa-ar-ru-ú” and “gu-uz guz = ap-par-ru-u.”

⁹ Note that the ePSD (oracc.museum.upenn.edu/epsd2) now lists the Sumerian lemma as *gum* [LAME], with *guz* read as *gum*₂.

¹⁰ The equation with *illūku*, which is not present in Güterbock (1973), presumably came from Borger (1981: 195, no. 565): “^{tug₂}guz-za = (?) *illūku*.”

¹¹ Quillien (2013: 22): “The *guzguzu* should therefore be considered an expensive and heavy cloth, sometimes decorated with red wool. It can be used as a covering for a chariot or a throne in religious ceremonies. It seems also [to] be worn as a coat by rich notables and royal agents.”

¹² Similarly, Gaspa (2018: 286) in his discussion of the synonymous *nimrā’u* garment.

commenting on the appearance of the cloth in an Old Babylonian dowry.¹³ Discussing an Old Babylonian text concerning textile finishes, Lackenbacher (1982: 143) took Oppenheim's translation of "flocky and shaggy textile" as a given ("presque sûrement un tissu poilu") and attempted to situate this attribute in a range of textile treatments described in the text.¹⁴ By 2010, Waetzoldt had accepted a translation "shaggy cloth," though without further discussion or mention of *Zottenstoff*.¹⁵ Nearer to the iconography of the classic *Zottenstoff*, Limet (1971: 15), in discussing the appearance of the ^{tug₂}guz-za in Ur III economic documents found at Tellō/Ĝirsu, cited Oppenheim to support his own translation "vêtement tissé à bouclettes" – a woven garment with "curls" or "loops." Limet (*loc. cit.*: fn. 4) also cited the equation in the lexical lists of the ^{tug₂}guz-za with the *illūku* garment (CAD I–J 86, s.v. *illūku* 2. 'a sumptuous garment'), and considered that it was the characteristic curls/loops that made the garment compatible with the idea of sumptuousness (*loc. cit.* fn. 5). Finally, the most recent, novel contribution to the "shaggy, flocky, bristly" interpretation for the ^{tug₂}guz-za / ^{tug₂}GUZ.ZA is found in Durand (2009: 35–37), who argued that the 3rd millennium ^{tug₂}guz-za was the *Zottenrock* garment, supposedly continued at Mari by the *gizzu*-cloth,¹⁶ whereas the 2nd millennium cloth "^{tug₂}SIG₄.ZA," taken by most scholars as an equivalent of ^{tug₂}GUZ.ZA,¹⁷ was an unrelated cloth marked by a thick weft and used for fine upholstery.¹⁸

If a trend emerges from the above research history, it is that the original identification of the ^{tug₂}guz-za as a "flocky and shaggy textile," despite its implicit rejection in the dictionaries, including the volumes that Oppenheim co-edited, has either been repeated uncritically or has provoked a certain level of circular reasoning: shagginess is invoked to explain certain attributes of the cloth, such as the fact that it was a fulled or carded garment, a feature which many other Neo-Sumerian textiles shared (see section 4 below), and these attributes, in turn, are used to support the definition of shagginess. In the end, although it is not impossible that the shaggy or flocky interpretation is correct, or even that the ^{tug₂}guz-za was the *Zottenstoff* as depicted in visual imagery, neither interpretation has been proven.

3. Orthography: LUM (GUZ) versus LUM-šeššig (SIG₄)

Before further assessing the evidence for the ^{tug₂}guz-za / ^{tug₂}guz-za / ^{tug₂}GUZ.ZA / ^{tug₂}GUZ("SIG₄").ZA in the text corpora and lexical lists, it is important to confirm what has been suspected, namely, that they are spellings of the same cloth. Returning to the problem of the disappearance of the writing ^{tug₂}guz-za / ^{tug₂}GUZ.ZA in post-3rd millennium texts, the accepted solution has been to interpret the ^{tug₂}SIG₄.ZA, attested from the OB period onwards, as its successor. It has been proposed that the GUZ (i.e., LUM) and SIG₄ (i.e., LUM-šeššig) signs are interchangeable in many post-OB cuneiform scripts, going back at least to Fossey (1926: 1101, under "Confusions de signes" nos. 33583, 33591 [SIG₄]: no. 33484 [LUM]). This observation was cited in discussions of ^{tug₂}guz-za / ^{tug₂}GUZ.ZA by Landsberger (1934: 102 fn. 2), Ehelolf (*apud* von Brandstein 1934: v, no. 13), Kümmel (1967: 76), Güterbock (1973: 85), and Rüster/Neu (1989: 246, no. 311). Sign confusion, and perhaps peripheral/chronological variation, was also part of the approach taken by the CAD and AHw. (again for the old reading ^{tug₂}LUM-za).¹⁹

13 Whereas Dalley neither mentioned the term "Zottenrock/-decke/-stoff," nor cited Landsberger, Oppenheim, or Kümmel, she referenced the same equation GUZ.ZA = *apparrû* 'having wiry hair.'

14 Lackenbacher (1982: 138 with fn. 9), citing Oppenheim; also Lackenbacher (1982: 143–145), discussing the obscure *šartum le-qûm*, *turnukum*, *laqâtum pânum*, and *laqâtum lâ pânum* treatments. Lackenbacher's explanations have been taken up by Soriga (2017: 31). More cautious are Firth/Nosch (2012: 72), who, after reviewing a selection of the research history of the ^{tug₂}guz-za, noted: "There is nothing in the above calculations that would indicate a knotted or looped fabric. Therefore, if the description is correct, it might possibly imply that the level of fulling, which was required to compensate for the openness of the fabric, created a 'fuzziness' of the fabric."

15 Waetzoldt (2010: 205): "we are dealing with 'shaggy cloth,'" citing only PSD Vol. 2 B, 120b: *tug₂-bar-dul₅-guz-za* "shaggy *bardul*-garment," without further discussion.

16 Though cf. the discussion under section 5.2 below.

17 See section 3 below.

18 See further section 5.1 and 5.2.

19 CAD I–J 90, s.v. *i'lu* A: "The EA and RS writing [with sig₄] may represent only a variant of the writing *túg.lum.za* . . ."; AHw. 373b, s.v. *i'lu(m)*: "Wz. ^{tug₂}sig₄.za (s. aB ^{tug₂}lum.za ŠL 565, 77; BE 6/1, 84, 8?)."

In the Hittite context, at least, the LUM and LUM-šešsig are not interchangeable. Rather, the distribution of the signs seems to be graphemically conditioned: phonetic writings and Akkadograms use LUM, while Sumerograms use LUM-šešsig. Searching the Hittite Palace-Temple Administrative, Festival, and Cult Inventory Corpora reveals that all twenty-two instances of Akkadograms and Akkadographic-complements that should orthographically use LUM are written, without exception, with LUM.²⁰ Conversely, all Sumerograms that should use LUM (GUZ, 𒄷UM) actually use SIG₄,²¹ as do the Sumerograms that should use SIG₄.²² Significantly, of the twenty-five attestations of ^{tug}GUZ.ZA, twenty-four are written ^{tug}SIG₄.ZA and only one – appearing in a broken context and possibly being a different word entirely – is written with the LUM/GUZ sign.²³ In fact, the only word in Hittite texts showing significant LUM/LUM-šešsig interchangeability is ZA.𒄷UM, Akk. šāhu (also sāhu, šīhu, sīhu), a kind of drinking vessel. It has been held at least since Ehelolf (*apud* von Brandenstein 1934: v, no. 13) that the forms ZA.𒄷UM(=LUM) and ZA.SIG₄ interchange seemingly at random, occurring sometimes in the same texts: e.g. KUB 27.13 obv. i 4, 12, 14, 24, 27 (ZA.SIG₄) versus obv. i 35 (ZA.𒄷UM); VBoT 108 obv. i 16 (ZA.SIG₄) versus obv. i 17 (ZA.𒄷UM). In the Hittite Palace-Temple Administrative Corpus (PTAC) (edited by Košak 1982 and Siegelová 1986), one finds an even split: three attestations with ZA.LUM and three with ZA.SIG₄.²⁴ Since the texts of the PTAC are from the same time period (late New Hittite), chronological variation can be ruled out, though it may be noted that the texts showing ZA.SIG₄ all come from the so-called *Bildbeschreibung* genre describing cult images and figurines, so that scribal or genre considerations could be at play. The Hittite Festival and Cult Inventory Corpora, in contrast, favor the spelling ZA.SIG₄ (18×) over ZA.LUM (3×) by a considerable margin,²⁵ though the exact sign ratios and the distribution by genre or chronology requires further research. The Palace-Temple Administrative, Festival, and Cult Inventory Corpora comprise perhaps just over 50 % of the extant Hittite corpus, and contain the majority of texts where ZA.𒄷UM ‘comb’ would be expected. If no other lexemes are found contradicting the LUM = Akkadographic, LUM-šešsig = Sumerographic distribution in Hittite, then the interchangeability of the signs in ZA.𒄷UM ought to be explained differently: the versions of ZA.𒄷UM written with LUM are actually Akkadograms, i.e., SA₃-HUM/HU₅,

20 Akkadographic and Phonetic writings using LUM in the Hittite Palace-Temple Administrative, Festival, and Cult Inventory Corpora:

DINGIR-LUM (17×): CHDS 2.91: 11'. DBH 46/2.120 obv. i(?) 5'. KBo. 8.93 rev. 3', 5'. KBo. 18.153 rev. 12//KUB 26.66 rev. iii² 3. KBo. 42.47 obv.² 7'. KBo. 58.132: 3', 4'. KUB 55.54+ obv. i 7', rev. iii 4', rev. iv 2', 11', 12'. KUB 58.62+ obv. ii 26', rev. v 17', rev. vi 3'.

AŠ-ḪA-LUM (a container) (2×): Bo. 4942 rev.¹ 5. KUB 42.42 rev. iv² 12.

ŠU₂-LUM ‘needle’ (1×): KUB 42.84 obv. 1.

ge-lum (Hurrian) (1×): KUB 32.43 obv. i 9'.

21 Sumerographic writings using SIG₄ instead of GUZ/𒄷UM in the Hittite Palace-Temple Administrative Corpus and Hittite Festival Corpus:

^{tug}GUZ.ZA (24× SIG₄, 1×? LUM): see fn. 23 below.

ZA.𒄷UM (21× SIG₄, 6× LUM): see fns. 24 and 25 below.

22 Sumerographic writings using expected SIG₄ in the Hittite Palace-Temple Administrative Corpus and Hittite Festival Corpus:

MUR₇.GU₂ (2×): KUB 38.8 obv.¹ 1. c. 5'; KUB 38.9 obv.¹ 1. c. 7'.

SIG₄ (2×): KBo. 31.166 rev. r. col. 4'. KUB 42.70 rev.² 1. c. 2'.

Note: the apparent]ša uruSIG₄ ^{ki}l(?)[in the very damaged Akkadian language text KBo. 63.270: 4' should be left out for the moment until its context can be better understood.

23 ^{tug}GUZ.ZA in the Hittite corpus:

^{tug}SIG₄.ZA (24×): Administrative texts (22×): Bo. 3804: 3'. Bo. 9003: 2'. KBo. 18.170 obv. 7'. KBo. 18.175 rev. v 6'. KBo. 18.180 rev. 5'. KBo. 18.186: lf. e. 4. KBo. 55.7: 4'. KBo. 58.2: 6'. KUB 38.13 rev.² 13'. KUB 40.96+ rev. iii² 24'. KUB 42.27 obv. i 8'. KUB 42.43: 11'. KUB 42.56: 6. KUB 42.57: 7'. KUB 42.59 rev. 21', 22'. KUB 42.84 lo. e. 16. KUB 52.96 obv. 1, 5, 6, 10, 11. Festival texts (1×): Bo. 5149: 7'. Ritual/magic texts (1×): KBo. 55.66: 7'.

^{tug}LUM.ZA (1×?): Oracle texts (1×): KBo. 67.304: 4' (written: ^{tug}GUZ.ZA; however, given oracle context, might instead be DING] IR-LUM-ZA).

24 ZA.훔UM in the Hittite Palace-Temple Administrative Corpus:

ZA.LUM (3×): Bo. 9234: 1, KUB 34.87 obv. 5', 9'.

ZA.SIG₄ (3×): KUB 38.20 obv. 7'; KUB 38.21 obv. 10', 11'.

25 ZA.훔UM in the Hittite Festival and Cult Inventory Corpora:

ZA.LUM (3×): KUB 27.13 obv. i 35; KUB 42.100+ rev. iv 19'; KUB 59.172+ obv. i 19".

ZA.SIG₄ (18×): Bo. 7287 obv.² r. col. 5', 12'; KBo. 7.27: 5'; KBo. 7.44 rev. iii 8, rev. iv 7; KBo. 13.244: 3'; KUB 42.100+ rev. iv 7', 20'; KUB 27.13 obv. i 4, 12, 14, 24, 27; KUB 27.15 obv. i 4', 9'; KUB 39.91 r. col. 7'; KUB 40.102+ rev. vi 15'; KUB 55.59 lf. e. 1.

while those with LUM-šešsig are Sumerograms, i.e., ZA.ḪUM("SIG₄"), where the quotation marks indicate the non-standard (outside of Hittite) use of the SIG₄-sign for ḪUM.²⁶

The origins of the Hittite pattern of graphemically conditioned LUM/LUM-šešsig confusion are unclear. It had long been assumed that the confusion of these signs was strictly a phenomenon of the cuneiform periphery, attested, most notably, in late second-millennium texts from El Amarna, Alalah, Ugarit, and Ḫattuša. However, Dalley (1980: 73) showed that the ^{tug₂}SIG₄.ZA was also present at Aššur and Babylon. Dalley put forth the hypothesis that the original confusion lay with murgu₂ = LUM and murgu = SIG₄, leading her to adopt the readings ^{tug₂}murgu₂-za for the 3rd millennium cloth and ^{tug₂}MURGU.ZA for its later designation. Borger (2010: 229–230) expanded on Dalley's hypothesis, arguing that the SIG₄/LUM-šešsig had always had a reading murgu (also mur₇) as one of its original readings,²⁷ whereas the signs LUM and murgu₂ were graphically distinct in the 3rd millennium,²⁸ before they coalesced into one sign in the 2nd millennium, explaining why the SIG₄/LUM confusion did not occur before this date. To state the reasoning of Borger more explicitly, it seems that the second-millennium confusion of LUM and SIG₄ originated in a phonemic confusion about words written with MURGU and MURGU₂, so that at some point all words written with SIG₄/MURGU could be written with LUM/MURGU₂ instead. However, the comparative rarity of a phonemic and Akkadographic usage for SIG₄/MURGU (Borger 2010: 230, no. 906 rejects a value mur₇) meant that the reverse was not true: very few words written with LUM could also be written with SIG₄, since LUM very rarely, and then only in Sumerograms, had the value MURGU₂. Thus, the confusion SIG₄ = murgu ≈ MURGU₂ = (post-3rd millennium) LUM did not spread among Akkadian and Akkadographic writings.

Whether the graphemic distribution of LUM for phonemic and Akkadographic writing and LUM-šešsig in Sumerograms discussed above holds elsewhere in the Hittite corpus, and possibly in other peripheral corpora of the 2nd millennium, remains to be seen. Confirmation will require inspecting the cuneiform of each instance, since modern transliteration conventions have obscured the distinction between the signs.²⁹ One avenue for future research would be to test the hypothesis of Dalley and Borger by examining the LUM/SIG₄ confusion by lexeme. If the confusion indeed originated from the homophony of the MURGU and MURGU₂-signs, then it stands to reason that the lexemes with MURGU and MURGU₂ should show the earliest and greatest incidence of confusion.

Establishing where and when the LUM/SIG₄ confusion originated and whether it is graphemically conditioned also outside of the Hittite corpus would require a comprehensive review of the other 2nd millennium cuneiform corpora, which is beyond the scope of the present study. However, a preliminary observation can be made: in addition to the anecdotal evidence of the spelling ^{tug₂}SIG₄.ZA in the peripheral and later on also the Middle Babylonian cuneiform traditions, the only lexical lists still using the spelling LUM-za in the 2nd millennium, namely Late OB Ḫh. XIX (MSL 10: 143–144, no. 23) and Nippur Ḫh. XIX (MSL 10: 147, nos. 60–63), are both early and southern (see **Table 1**).

A brief excursus must be made here regarding the phonetic realization of ^{tug₂}guz-za, since the proof establishing that LUM and SIG₄ are read "guz" in ^{tug₂}guz-za technically remains indirect: So far, no entry *^{tug₂}guz^{gu-uz-}-za has been discovered in a lexical list. Instead, virtual confirmation comes from the series ur₅-ra = *ḥubullu*, where the entry ^{tug₂}guz-za in one manuscript is duplicated by a "^{tug₂}guz-za" in another manuscript, which could only occur if the original pronunciation was something like /guz(z)a/. It had been thought that the equation ^{tug₂}guz-za = ^{tug₂}g u - za was proven earlier. As discussed by Limet (1971: 15 fn. 4):

²⁶ An analogous situation occurs with ^{tug₂}BAR.DUL₅("TE") for ^{tug₂}BAR.DUL/.DUL₅ in Hittite: see HZL 100, no. 20 and Weeden (2011: 170–171). The case for the Hittites writing DUL₅ as TE is in fact stronger than is presented by Weeden, since the only two instances of an alleged writing ^{tug₂}BAR.DUL in Hittite (KBo. 18.175 rev. vi 1, 2) are actually mis-readings of ^{tug₂}ISTAR (see photo and collation of 09.2015 in Ankara). As a result, the garment written in the wider Ancient Near East as ^{tug₂}BAR.DUL(=LU) or ^{tug₂}BAR.DUL₅(=TE.E) was written, without exception, as ^{tug₂}BAR.DUL₅("TE") at Ḫattuša. Whether the Hittites considered this "TE" to be a form of /dul/, i.e., DUL_x, is unknown.

²⁷ Borger (2010: 230): "An den mir bekannten sicheren Stellen wird n906 [i.e., MURGU ("SIG₄")] genau wie n905 [i.e., SIG₄] geschrieben."

²⁸ Borger (2010: 229): "Im 3. Jahrt. wird [MURGU₂] von LUM (mit dreimal vier parallelen Keilen) deutlich unterschieden."

²⁹ In the Hittite context, these conventions have been in place since Ehelolf. They also seem to affect other corpora: compare the transliteration of T.519 by Durand (1985: 161) with that given below in section 5.2.

Le terme *túg-guz-za* figure dans les ‘précurseurs’ de la série H.-*h*. (*SLT* 217: II, 2–4; cf. maintenant *MSL* 10, p. 147, 60–63). En revanche, dans la série elle-même, il est orthographié *gu-za* (restitué à sa place, *ibid.*, p. 135, 268–273) et expliqué dans la série H.-*g*. par *il-lu-ku*, *lu-bar sa-a-mu*

However, Limet’s claim that the *túg₂guz-za* of the Hh precursors is written *túg₂gu-za* (and thus = *illūku*) in the main series is not supported by the lexical lists known at the time. In MSL 10, both the *túg₂guz-za* entries of Nippur *Hh*. XIX (MSL 10, 147, nos. 60–63) and the *túg₂guz_x-za* (= *túg₂SIG₄-za*) entries of RS *Hh*. XIX (MSL 10, 150–151, nos. 65, 179–187), fail to correspond in either structure or location in the series to the *túg₂guz-za* entries of Standard *Hh*. XIX (MSL 10, 135, no. 268–272), thus leading the editors of MSL 10 to decline an equivalence. Fortunately, Limet has since been proven correct by a Late Neo-Babylonian duplicate to *Hg*.³⁰ XIX (SpTU 3, no. 116), which was not yet available to the editors of MSL 10. As recognized by von Weiher (1988: 235) and Weiershäuser/Hruša (2018: 222) – both without a comment on different spellings –, the [*túg₂*] *gu-za* = *illūku* in *Hg*.³¹ XIX no. 414 (see VAT 10261 rev. vi 14 in Weiershäuser/Hruša 2018: 217) and the *túg₂guz-za* in Standard *Hh*. XIX no. 268 are now duplicated by *túg₂guz-¹za¹* in SpTU 3, no. 116, obv. i 31. This, with the new data regarding the 1st millennium *túg₂GUZ.GUZ* garment, written *túg₂LUM.LUM*, and spelled phonetically *túg₂gu-uz-gu-uz*, confirms that the *túg₂guz-za*/*túg₂(GUZ.)guz(.za)* garment was pronounced from the 3rd to 1st millennium something like /gu(z)za/.

4. Manufacture and Use of the *túg₂guz-za*/*túg₂GUZ.ZA*/*túg₂GUZ.GUZ* Between the 3rd and 1st Millennia

A search in the online *Database of Neo-Sumerian Texts* (BDTNS) reveals 2,356 instances of “*guz-za*.³⁰ Of these, the vast majority are the garment *túg₂guz-za* followed by a gradation of quality, e.g., *sig₅*, *us₂*, *gen*, *3-kam*, *4-kam*, etc. (see the discussion of Waetzoldt 1972: 46–49). Almost nothing on the color of the *túg₂guz-za* is preserved.³¹ The fabric was heavy and large, but not remarkably so (Waetzoldt 2010: 204–205; cf. the detailed breakdown of the data in Firth/Nosch 2012: 73–74). Rather, the outstanding feature of the *túg₂guz-za* seems to be the relatively high amount of wool allotted for weft-threads compared to warp-threads, averaging at a ratio of 4.5 parts wool for weft to 1 part for warp, when compared to the *túg₂ni₃-lam₂* (1.5:1) and *túg₂bar-dul₅* (1:1) (Waetzoldt 1980–83: 2; 1972: 124). Despite the greater amount of wool for weft-threads, the *túg₂guz-za* took on average less time to produce than the *túg₂ni₃-lam₂*, probably due to the use of thicker weft in the *túg₂guz-za* (Waetzoldt 1972: 139, later confirmed by Firth/Nosch 2012, Andersson Strand/Cybulska 2013). Weavers were correspondingly paid less on average for a *túg₂guz-za* than for a *túg₂ni₃-lam₂* of similar quality (Waetzoldt 1972: 82). However, despite the lower average cost of the *túg₂guz-za*, the most expensive varieties could rival the *túg₂ni₃-lam₂* in time to produce: a *túg₂guz-za* of the 1st/2nd/3rd quality required 300/120/90 work days, respectively, versus 335/300/150 work days for a *túg₂ni₃-lam₂* of the same ranks (Waetzoldt 1972: 140). In fact, the costliest garment in terms of work days in the Ur III period found by Waetzoldt was a *túg₂guz-za* (or at least a garment produced using the *guz-za* technique in some way): [1 *túg₂...* *túg₂guz-za-šar₃*] (ITT 3, 6606 obv. i 3’–5’), which cost 1,200 work days to manufacture. In summary, the *túg₂guz-za* was classed among the most expensive garments of the Ur III period, but with a higher than normal range of qualities and cost compared to, e.g., the *túg₂ni₃-lam₂*.³²

³⁰ bdtns.filol.csic.es last accessed on 13.09.2021.

³¹ This fact should not come as a surprise, since as already noted by Waetzoldt (1972: 50), the specific coloration of wool and garments is rarely recorded in the economic texts of the Ur III period, leading to the assumption that only natural pigmentation was used (Waetzoldt 2010: 201–202). There is perhaps only a single instance in the BDTNS of a *túg₂guz-za* qualified by a color term, namely the enigmatic attestation *túg₂guz-za(-)NIM sig₇-sig₇* (CST 599 obv. 1). This attestation was already known to Waetzoldt, who translated *sig₇-sig₇* as “gelblich” (1972: 51), without translation or comment on the *túg₂guz-za-NIM*. On the semantics of Sum. *sig₇-sig₇*, Akk. (*w*)*arqu*, see now Thavapalan (2020: 65–79, esp. 73), with her description of *arqu* covering tan or beige wool, blond haired mammals, and gold without admixture of copper or silver. On the possibility of a separate garment/adjective “*guz-za(-)NIM*,” cf. *túg₂aktum guz-za(-)NIM* in DoCu Strasbourg 21 (BNUS 420) rev. 3. What a “high” or “early” (ePSD: *nim* ‘(to be) high, elevated; (to be) early’) *guz-za* cloth might have meant is unclear.

³² See Firth/Nosch (2012: 73–74, 80) for further thoughts on the unusual relationship between the 1st class *túg₂guz-za*, which also seems to be made of much thinner fabric, and the lower grades of the cloth.

The text ITT 5, 9996 iii 4–rev. i 4 (edited by Waetzoldt 1972 as T.32; new edition Waetzoldt 2010: 205) details the wool and labor necessary to weave a ^{tug₂}guz-za of the 4th class. The unparalleled level of detail and complete preservation of the passage stimulated two articles reconstructing the fabric based on experimental data produced by the Danish National Research Foundation's Centre for Textile Research in Copenhagen (see Firth/Nosch 2012: 68 fn. 8; Andersson Strand/Cybulská 2013: 116 fn. 10 for sources). The resulting reconstructions suggest that the greater weight of wool devoted to weft compared to warp in the garment was due to the thickness or coarseness of the weft, not its length. Firth/Nosch (2012: 70–71, with illustration) favored a balanced tabby weave, whereas Andersson Strand/Cybulská (2013: 118–120, with illustrations) suggested a gauze weave instead, though the authors of both articles acknowledged the possibility of the other's conclusions. Both reconstructions result in a fabric with a high degree of openness. As acknowledged by Firth and Nosch, there is nothing in the text to suggest that the ^{tug₂}guz-za was shaggy, knotted, or looped. After a review of the various versions of the *Zottenstoff* interpretation by Dalley (1980: 73), Durand (2009: 35), and Waetzoldt (2010: 205), the authors cautiously suggested that: “if the description is correct, it might possibly imply that the level of fulling, which was required to compensate for the openness of the fabric, created a ‘fuzziness’ of the fabric” (Firth/Nosch 2012: 72). Having achieved their goal of establishing the feasibility of the amounts of wool and labor prescribed in the text under discussion, Andersson Strand/Cybulská judiciously declined to comment on the finished appearance of the cloth.

Here it should be pointed out that the question of the level of fulling and/or teasing of the ^{tug₂}guz-za has attracted a certain amount of circular reasoning related to the cloth. That the ^{tug₂}guz-za underwent at least some level of fulling is confirmed, according to Soriga (2017: 31), by texts from Girsu listing the garment as receiving the *tug₂ sur-ra* and *tug₂ kin-di-a* treatments involving oil and alkali. However, this is not a distinctive feature of the ^{tug₂}guz-za, since a host of other fabric types, including the *tug₂ni₃-lam₂*, underwent the same processes as a finishing step (cf. tables 9.1–4 in Firth 2013: 143–46). By contrast, the statement of Soriga (2017: 31) that: “the Old Babylonian tablet AO 7026 and a lexical text demonstrate unequivocally that the shagginess of the ^{tug₂}guz-za resulted from the raising of the nap of the cloth (Akk. *mašāru*) by the fullers with at least two different kinds of teasels” cannot be followed. Although the cited lexical lists indeed demonstrate that *mašāru* is a verb for carding/teasing,³³ the application of this treatment to the ^{tug₂}guz-za is again not distinctive, since it is shown in AO 7026 that the garment is only one of many types that undergo *mašāru*. The second type of teasing proposed by Soriga for the ^{tug₂}guz-za is *šartum leqūm*, lit. “hair taking.” In AO 7026, the ^{tug₂}guz-za is one of two cloths — the other being the *tug₂bar.dib sig laharītum* (Lackenbacher 1982: 148) — that underwent *šartum leqūm*. As discussed by Lackenbacher (1982: 144):

šartum leqūm pose un problème car *leqūm*, ‘prendre’, a d’innombrables sens comme tous les verbes de ce type et c’est un verbe transitif. Je pense pas qu’il s’agisse d’enlever le poil, car les tissus guz.za ainsi traités sont «flocky and shaggy», mais de l’extraire, et *šartum leqūm* pourrait être l’équivalent du français «tirer à poils», qui signifie non pas tirer le poil mais tirer pour (obtenir) le poil

Far from unequivocal, it can be argued that Lackenbacher's interpretation of *šartum leqūm* (along with *turrukum*, *laqātum pānum*, and *laqātum lā pānum*) is based on the desire to end up with a “flocky and shaggy” cloth.³⁴ Taken literally, *šartum leqūm* should mean to remove hairs (the kemp, or non-crimped hair, being undesirable in a finished wool product); this is the apparent interpretation of CAD Š₂ 129, s.v. *šārtu* 2.c, which is translated “to pick off hair.” At a minimum, neither the interpretation of Soriga (2017: 31 fn. 45) that “[s]ince *šartum leqūm* is one of the last operations before the seizing (Akk. *puššuru*) of the cloth, in this step the hair has to be further brushed and curled,” nor the further comparison of the process to the *rattinatura* finishing

³³ MSL 42: 177, nos. 5–8; MSL 42: 205, nos. 4–5; MSL 10: 133, nos. 194–195. MSL 42: 177, no. 6: *ša i-na a-ša-gi-im i-ma-aš-ša-ru*; 8: *ša i-na ku-un-ši-li-im i-ma-[aš]-ša-ru*. See the detailed discussion of these passages in Soriga (2017: 39–40), identifying *ašāgu* and *kun-šillu* respectively as ‘camel thorn’ and ‘hedgehog skin’, the latter against earlier ‘thorn/thistle.’

³⁴ As Lackenbacher (1982: 143–144) reasoned: “Dans la mesure où TUG.GUZ.ZA ... paraît désigner presque sûrement un tissu poilu, je me demande si ces expressions difficiles à interpréter, et inattestées par ailleurs dans un contexte de ce genre, ne diffèrent pas le traitement de tissus à poil long de celui de tissus ras.”

treatment applied to the Italian cloth *panno casentino*, in which the hairs of a cloth are rubbed and pressed until the appearance of animal fur is achieved, possess any independent evidence in AO 7026.

The sartorial usage of the ^{tug₂}guz-za in practice in the Ur III period remains unclear. Waetzoldt (1980–1983: 21) classified the ^{tug₂}guz-za among the “Stoffsorten, die meist zu Ganz-Körper-Gewändern gewickelt wurden,” while noting also that the term guz-za (without determinative) could further qualify other garments. The most common garments modified by guz-za among the attestations in the BDTNS are ^{tug₂}aktum guz-za (46×), ^{tug₂}gu₂-e₃ guz-za (27×), ^{tug₂}bar-dul₅ guz-za (25×), and ^{tug₂}ni₃-lam₂ guz-za (4×). It is interesting to note that the most frequent of these “modified guz-za”, the ^{tug₂}aktum, might not have been worn on the body at all, but possibly was sort of a heavy rug (Waetzoldt 1980–1983: 22: “Wegen des großen Gewichts wohl kein Kleidungsstück, vielleicht eine Art Teppich; auch für Schlafzimmer ...”). This anticipates the primary usage of the ^{tug₂}GUZ.ZA in the 2nd millennium.

In the 2nd millennium, the ^{tug₂}GUZ.ZA is attested almost exclusively as a piece of blanket or upholstery among the gift and palace inventories of Amarna, Ugarit, Alalah, and Ḥattuša (Kümmel 1967: 77).³⁵ The same usage appears in the Old Babylonian dowry text discussed by Dalley (1980: 73: “since SIG₄.ZA is used ... for burial in this text, the meaning rug or blanket seems fairly certain”). This use as an upholstery is supported by the appearances of the ^{tug₂}GUZ(“SIG₄”).ZA in the Hittite palace administrative texts, where the cloth is attested exclusively as a furniture covering, appearing e.g., among the objects of a bedroom suite (KBo. 18.170 obv. 7’/KUB 42.43: 11’ and KUB 42.57: 7’), as a covering for chairs (KUB 42.59 rev. 21’–22’; KUB 52.96 obv. 5); and on a chariot (KUB 52.96 obv. 1). There is no evidence for the use of the ^{tug₂}GUZ.ZA/^{tug₂}GUZ(“SIG₄”).ZA as a personal garment in the 2nd millennium.

In the 1st millennium, the ^{tug₂}GUZ.GUZ/^{tug₂}gu-uz-gu-uz is attested primarily as a covering for chariots and fine furniture, though the fabric occasionally appears as a personal garment worn as a coat (Quillien 2013: 22).

5. Attributes of the ^{tug₂}guz-za/^{tug₂}GUZ.ZA: Lexical Glosses and (Local) Allographic Equivalents

Further attributes of the ^{tug₂}guz-za/^{tug₂}GUZ.ZA can be garnered, with due caution, from the lexical lists and also from the local allographic equivalents of the term in the peripheral corpora of the 2nd millennium. Borger (2010: 455, no. 900) lists three such glosses or equivalents next to ^{tug₂}guz-za: the lexical glosses *i’lu* and *illuku* (citing Limet 1971: 15–16 and “die Wörterbücher”), and the Mariote equivalent *ha/ururu*, *arruru* (Durand 1985: 161; AHw. 329a, 1559b, 1544b). A fourth term, not listed by Borger (2010), is the sub-gloss *tunaniba* found in the Practical Vocabulary Aššur (PVA) 251: ^{tug₂}SIG₄ ^{tu-na-ni-ba}za = *i’-lu*. A fifth term, *g/kizzum*, was proposed by Durand (2009: 35–36) as a revised local equivalent of the ^{tug₂}GUZ.ZA at Mari. All five terms have their complications, which are discussed below.

5.1 Glosses: *i’lu* ‘of a tight weft/of a bound weft(?)’; *tunaniba* ‘garment of Nineveh(?)’; *illuku* ‘(a) red(?) garment’

PVA 251 gives the gloss: ^{tug₂}SIG₄ ^{tu-na-ni-ba}za = *i’-lu*. The *i’lu*-garment appears in texts as a concrete object, which, based on the cognate verb *e’elu* ‘to hang up, bind’, is usually translated as a “band, sash.”³⁶ In lexical lists, *i’lu*

³⁵ Its absence from the Old Assyrian trade texts is curious, but perhaps not unexpected. According to Michel/Veenhof (2010: 230), the reason for the absence of common Old Babylonian garment types from the Old Assyrian trade network in Anatolia “must be that the Assyrians imported fairly standardized woolen textile products into Anatolia, mainly untailored fabrics, presumably of cloth, rather than a variety of ready-to-wear garments. This resulted in a limited vocabulary for the main textile items imported”

³⁶ See Postgate 2014: 417, s.v. *a’lu* (“a band, sash?”), where it was noted that the *i’lu* is associated with the ^{tug₂}GU₂·E₃ ‘coat’ in Middle Assyrian texts, functioning as an accessory with a ratio of two *ia-’a-lu*^{mes} to one ^{tug₂}GU₂·E₃ in MARV 10.82: 1. See earlier AHw. 373b, s.v. *i’lu(m)*, which suggested “eine Binde? ... (für Kopf, Fuß),” followed by Gaspa (2018: 306–307), who additionally classified the *i’lu*

appears as a gloss of ^{tug₂}guz-za (the aforementioned PVA 251) and *sulumḥū*.³⁷ Since there is no textual evidence that the ^{tug₂}guz-za / ^{tug₂}GUZ.ZA (or the obscure *sulumḥū*) was used as a band or sash in any period, and ample evidence that it was not,³⁸ the term *i'lu* possibly functioned in lexical lists as a descriptor rather than an allograph. It seems that the ^{tug₂}guz-za and *sulumḥū* were somehow “bound” or “hung up” (this sense being closer than “band” > “that which binds” to the basic *nomen actionis* meaning of the *pirs* nominal formation). Based on the textile production text CT 43, 66, Durand (1982: 405–406, 408) proposed that the verb *e'ēlu* had a technical sense referring to a certain fabric treatment, which later led him to offer the translation “à trame serrée” – (“cloth) of a tight weft” for the ^{tug₂}guz-za = *i'lu* fabric (Durand 2009: 35). Durand’s translation has the advantage that it reflects what is known about the manufacture of the ^{tug₂}guz-za from Ur III texts, namely the thickness of its weft-threads. Alternatively, it could also be speculated that the *e'ēlu* treatment referred to the potential gauze weave of the fabric proposed by Andersson Strand/Cybulská (2013), the widely-spaced warp of which, in combination with the unusually thick weft, produced a visual effect of weft threads “hung” from or bound by the warp (see Andersson Strand/Cybulská 2013: 118–120 for illustrations).

For the sub-gloss ‘tu-na-ni-ba’ in ^{tug₂}SIG₄^{tu-na-ni-ba}za = *i'lu*, Durand (2009: 36) suggested the interpretation “garment of Niniveh.” Moran’s (1992: 60 n. 43) proposal to read ^{tug₂}GUZ (“SIG₄”).ZA as ^{tug₂}tunaniba in all attestations from Amarna seems an overly heavy burden to place on what is, for now, a single lexical entry. Similarly, the early proposal of Hoffner (1968: 30) that “when the adjective ‘shaggy’ (= Akkadian *apparrū*) was intended and the ideogram was written either LUM or ^{lú}SIG.LUM.ZA, the Sumerian was pronounced *guzza* [, b]ut when the garment name (= Akkadian *i'lu*) was intended and the ideogram was written ^{tug₂}SIG₄/LUM.ZA, the Sumerian was pronounced *tunaniba*” is now difficult to maintain in view of the 1st millennium garment ^{tug₂}guzguzu. Instead, the Hurrianized professional designation *tunaniptuḥlu* ‘maker of t.’ (CAD T 473) attested at Nuzi suggests that “tunaniba” was a Hurrian-influenced local allographic equivalent for ^{tug₂}GUZ.ZA.

The gloss ^{tug₂}gu(z)-za = *illūku* appears in the duplicate commentaries Hg.^D XIX 414: [^{tug₂}]gu-za = *illūku* // Late NB Hg.^{XIX} (SPTU 3, no. 116) obv. i 31: ^{tug₂}guz-za *illūku*. As with *i'lu*, the term *illūku* is a descriptor applied to several garments, some of which are incompatible with the hypothesized understanding of ^{tug₂}guz-za as a cloth used for full-body garments or furniture coverings.³⁹ As pointed out by Limet (1971: 15 fn. 4), the defining feature of the *illūku* in lexical lists is its redness – a not uncommon quality of Mesopotamian luxury garments.⁴⁰

5.2 Local Allographs: ^{tug₂}ha/urūru ‘a thick, striated furniture fabric’; ^{tug₂}g/kizzum ‘cloth made from shear (from a dead sheep)?’

The first local allographic equivalent for ^{tug₂}GUZ.ZA, *ha/urūru*, was proposed by Durand (1985: 161), who compared two parallel texts:⁴¹

as a head-dress, with the same translation “band (for head or feet).” Note, however, that AHw.’s translation “(für Kopf, Fuß)” rests exclusively on the pair of items ^{tug₂}GUZ (“SIG₄”).ZA SAG and ^{tug₂}GUZ (“SIG₄”).ZA GIR₃ in EA 22 iv 15, EA 25 iv 50. Since, as is argued here, a one-to-one equivalence of *i'lu* and ^{tug₂}guz-za / ^{tug₂}GUZ.ZA cannot be assumed, these examples should not be taken as applicable to the *i'lu* as a garment in the absence of independent attestations for, e.g., an **i'lu ša rēši/šēpi*.

37 See lexical section of CAD S 371, s.v. *sulumḥū*, specifically Malku VI 53–55: *zu-lum-hu-u₂* = MIN (*šubātu*) *i'-li*, MIN *ki-ti ša i'-li*, *lam-huš-šu-u₂*, An VII 147–49: [...] = [MIN (*šubātu*) *i'-li*, [k]i-ti-it-tu, [la]m-ma-huš-šu-u₂].

38 The ^{tug₂}guz-za was a full-body garment in the Ur III texts, which matches the use of the ^{tug₂}GUZ.GUZ as a coat in the 1st millennium. It is in any case unclear how a band or sash could be used for covering the surfaces of pieces of furniture or chariots.

39 Specifically, *illūku* is used elsewhere in Hg. XIX to gloss ^{tug₂}ni₃-sag-il₂-keš₂-sal (^{tug₂}balla₂) ‘woman’s headdress’ and ^{tug₂}ni₃-sag-il₂-keš₂-nita (^{tug₂}balla) ‘men’s headdress’ (MSL 10: 132, no. 151 and MSL 10: 142, nos. 73 and 151, respectively). Since there is no evidence that the ^{tug₂}guz-za was used as a headdress, whether as *Zottenstoff* (Braun-Holzinger 2017: 339–340 enlisted the use of *Zottenstoff* for skirts, dresses, and shawls or capes) or a furniture covering, *illūku* should be treated, like *i'lu*, as a description rather than an allograph of ^{tug₂}guz-za.

40 Cf. the etymology of Akk. *lam(a)huššu* ‘ceremonial garment’, which should be a Sumerian loan derived from (^{tug₂}ni₃-)lam₂ ‘*ibid.*’ + *huš* ‘red’ according to Waetzoldt (1980–83: 22).

41 Note that what is transliterated here as ^{tug₂}GUZ (“SIG₄”).ZA in T.519 appears as túg-guz-za in Durand (*loc. cit.*).

T.518 obv.		T.519 obv.	
4	1/3 MA.NA <i>ṭur₂-rū</i> 1 ^{tug₂} <i>ḥu-rū-rū-i-šā</i> ₁₈ <i>-rū</i> NI ₃ .ŠU <i>puzur₄-’a₃-a</i>	4	[1/3] MA.NA <i>a-na</i> 1 ^{tug₂} <i>GUZ</i> (“SIG ₄ ”).ZA <i>i-šā-rūm</i> <i>puzur₄-’a₃-a</i>
...		...	
15	10 GIN ₂ <i>ṭur₂-rū</i> 1 ^{tug₂} <i>ḥu-rū-rū-um iš-rū</i>	15	10 GIN ₂ <i>a-na</i> 1 ^{tug₂} <i>GUZ</i> (“SIG ₄ ”).ZA <i>i-šā-rūm</i>
16	NI ₃ .ŠU <i>i₃-li₂-ma-ṣa-ri₂</i>	16	<i>i₃-li₂-ma-ṣa-ri</i>

As Durand explained, T.519 constitutes a translation of the older text, T.518, from a localized Akkadian into the standard Old Babylonian as part of an administrative reorganization under the government of Yaḥdun-Līm. Accordingly, Durand concluded that ^{tug₂}*GUZ.ZA* had a local allograph at Mari of ^{tug₂}*ḥa/urūru*, a sort of thick, striated furniture fabric, possibly based on a word for ‘ribs’ (Durand 1982: 425–426; 2009: 41–42). The convention of translating the ^{tug₂}*ḥa/urūru* with ^{tug₂}*GUZ.ZA* at Mari did not survive Yaḥdun-Līm for long: of the nearly forty dateable attestations of ^{tug₂}*guz-za* in the Mari corpus (Durand 2009: 34–35), only two post-date his reign, and they stem from the short-lived reign of his son Samu-Yamam (T.473: 4) and the Assyrian interregnum of Samsī-Addu (Hazor n° 12: 11'). By contrast, of the nearly one hundred dateable attestations of ^{tug₂}*ḥa/urūru* (Durand 2009: 40–41), all but a handful come from the reign of Zimrī-Līm. The complementary distribution of ^{tug₂}*GUZ.ZA* (Yaḥdun-Līm) / ^{tug₂}*ḥa/urūru* (pre- and post-Yaḥdun-Līm) further strengthens the case for their equivalence, since it would be inconceivable that the internationally-attested luxury cloth ^{tug₂}*GUZ.ZA* would disappear from the archives of Mari at the peak of the kingdom’s power during the reign of Zimrī-Līm.

More recently, Durand (2009: 35–36) proposed to revise his gloss of ^{tug₂}*GUZ.ZA* at Mari. Citing an unpublished text (T.101) that purports to demonstrate an equation ^{tug₂}*GUZ.ZA* = *g/kizzum* ‘cloth of (wool) shearings’ Durand argued:

Le parallèle strict qu’établit T.101 entre ^{tug₂}*gi-zu* *bé-rum* et *túg-guz-za* *bé-rū*, chacun suivant 1 *túg du-ku-tum*, rend très vraisemblable que son *túg-guz-za* n’est pas à lire à Mari *i’lum* comme l’indique le “Vocabulaire pratique” d’Aššur. Vraisemblablement “idéogramme” et “forme akkadienne” se correspondent phonétiquement et il faut poser un terme *g/kizzum* idéogrammatisé en guzza, comme *barkarrū* le fut en bar-kar-ra, etc.

Durand cited as further evidence that the attestations of the ^{tug₂}*GUZ.ZA* and ^{tug₂}*g/kizzum* at Mari shared a host of similar descriptors, including being the only terms qualified as “BAR.KAR.RA.” The previous equivalence ^{tug₂}*GUZ.ZA* = ^{tug₂}*ḥa/urūru* was dismissed (Durand 2009: 42):

Le *harrurum/hurrurum* pouvait donc être un habit fait avec un tissage particulier qui lui donnait une surface très rase, peut-être du genre de certains velours, ce qui va bien pour un tissu éventuellement employé dans l’ameublement Il faut noter que dans les deux textes parallèles T.518 et T.519, c’est à *túg-guz-za* que correspond ^{túg}*ḥu-rū-rū*, comme si c’en était la lecture phonétique et non *gizzum*. De toute façon, cela doit indiquer une proximité très grande des deux items. Or *guzza* = *gizzum* est manifestement construit sur GZZ qui signifie ‘tondre à ras’.

In effect, Durand now considered the ^{tug₂}*ḥa/urūru* attested in T.519 to be an approximation rather than an allographic equivalence, i.e., a similar enough local garment was used to translate the item written ^{tug₂}*GUZ.ZA* (glossed as “*i’lū*”) elsewhere. The Sumerogram ^{tug₂}*GUZ.ZA* was then used only as an “ideogrammatized” writing of the *g/kizzum*-garment. Durand also argued that it was the Mariote ^{tug₂}*GUZ.ZA* = *g/kizzum*, not the international ^{tug₂}*GUZ.ZA* = *i’lū* attested elsewhere in the 2nd millennium, that represented the continuation of the third-millennium ^{tug₂}*guz-za* garment, noting that the ^{tug₂}*GUZ.ZA* = *i’lū* and the Mariote *g/kizzum*-cloth, which he described as an “étoffe râche” – “rough fabric” – are attested in very different contexts, and that a rough fabric would be an infelicitous covering for furniture. The ^{tug₂}*GUZ.ZA* = *i’lū* ≈ ^{tug₂}*ḥa/urūru* remained a “cloth with a tight weft” according to his earlier argument (Durand 2009: 35; 1982: 405–406, 408), while the ^{tug₂}*GUZ.ZA* = *g/kizzum*, translated “étoffe poilue ou râche” – “hairy or rough fabric” – was the descendant of the *Zottenstoff* of the 3rd millennium.⁴²

⁴² While Durand does not use the term *Zottenrock/-stoff*, he cites Waetzoldt (1980–83: 21) in the bibliography of the *gizzum/tug₂-guz-za* entry.

One wonders if it is not better to retain Durand's earlier explanation of ^{tug₂}ha/urūru as the local name for ^{tug₂}GUZ.ZA, which is based on a direct substitution of one term for the other in a pair of translated texts, rather than supposing ^{tug₂}GUZ.ZA = *g/kizzum*, which is based on the garments sharing a similar context (but different writings) in the same text and a set of similar adjectives elsewhere. The “ribs” or striations implied by the ^{tug₂}ha/urūru would certainly be an apt description for the weft-dominated fabrics reconstructed by Firth/Nosch (2012) and Andersson Strand/Cybulská (2013). It may also be questioned why, as a “rough fabric,” the *g/kizzum* would be unsuitable for covering furniture in the 2nd millennium, but acceptable as a festival garment worn by gods and rulers in the 3rd millennium.⁴³ There is also the problem that if the ^{tug₂}GUZ.ZA was read *g/kizzum* at Mari, then the widely-attested, internationally-traded garment ^{tug₂}GUZ.ZA = “*i’lu*” ≈ ^{tug₂}ha/urūru was necessarily absent during the reign of Yaḥdun-Lim, since the ^{tug₂}ha/urūru is almost entirely absent from the Mariote corpus in this period (see again the attestations of the term in Durand 2009: 40–41), and ^{tug₂}*i’lu*, the only other possible allograph, seems never to be attested at Mari. Pending further evidence, Durand's original explanation should be preferred, namely that the international ^{tug₂}GUZ.ZA, which according to all available evidence was the continuation of the third-millennium ^{tug₂}guz-za, had a local name *ha/urūru* at Mari. The local name for the garment predominated at Mari, except during the reign of Yaḥdun-Lim, when the Sumerographic form ^{tug₂}GUZ.ZA was temporarily favored. A relationship of these cloths with the less-frequently-attested *g/izzum*-cloth, made from the shear of dead sheep, is not impossible, but remains uncertain.

6. guz-za as Textile Descriptor ‘(bright) red’ in Lexical Lists

As discussed in section 2, the initial identification of the ^{tug₂}guz-za as *Zottenrock* by Landsberger (1934) and Oppenheim (1948) was based on the adjective *guz-za* ‘hairy, shaggy’ applied to animals and men in lexical lists. Since then, no independent evidence has come to light confirming that the ^{tug₂}guz-za or the ^{tug₂}GUZ.ZA was in any way hairy, shaggy, or otherwise similar to the cloth in visual depictions that modern scholars call “Zottenstoff.” Instead, the only adjective “*guz-za*” found applied to textiles and wool in the lexical lists means ‘(bright) red’, and there is evidence, which to my knowledge has not yet been pointed out, that this adjective was perceived as identical to the ^{tug₂}guz-za, at least in the logic of the 2nd millennium lexical lists.

In the Standard Ḫb. XIX and the Ḫb. XIX Forerunners one encounters a repeated sequence of five adjectives describing textiles as, for example, in the Standard Ḫb. XIX nos. 106, 109–112 (MSL 10, 130):

Standard Ḫb. XIX

106	^{tug₂} bar-dul ₅	sal-la	raq-qa-tum	‘(fine)’
⁴⁴				
109	^{tug₂} bar-dul ₅	ḥuš-a	šu-tum	‘reddish’
110	^{tug₂} bar-dul ₅	ḥuš-a	šu-tum	‘reddish’
111	^{tug₂} bar-dul ₅	ni ₃ -mu ₄	ša ₂ lu-[bu-ši]	‘of an outfit’
112	^{tug₂} bar-dul ₅	alam	ša ₂ šal-[me]	‘of a statue’

Entries elsewhere in the Standard Ḫb. XIX show that ḥuš-a had two Akkadian readings: *ḥuššu* and *ruššu*.⁴⁵ Commentaries to Ḫb. XIX reveal that the distinction between *ḥuššu* and *ruššu*, was one of brightness, as can be seen in Ḥg.^D XIX 414–416 // Late NB Ḥg.^{XIX} (SpTU 3, no. 116) obv. i 31–33:

⁴³ This is in addition to the fact that the *g/kizzum*-material at Mari seems to be of especially low quality. As Durand (2009: 36) described it: “Le *gizzum* a pu être fait avec une laine de moindre qualité, du genre de celle qui est prélevée à des animaux morts et non pas sur pieds. Un tel matériau peut produire des tissus de qualité acceptable mais est facilement grossier.” Although this does not rule out a relationship to the 3rd millennium ^{tug₂}guz-za, since fourth- and fifth-class versions of the cloth could use warp-threads taken from slaughtered sheep (Waetzoldt 1972: 6, 124), the universally low quality of the *g/kizzum*-material should give pause.

⁴⁴ Nos. 107–108, represent an insertion not found in the Forerunner lists, where the Sumerian descriptor ša₃-ba-tuk ‘thick, padded’ with two Akkadian translations appears as a supplementary antonym of sal-la.

⁴⁵ See, e.g., ^{siki}ḥuš-a = [ḥu-uš-š]a₂-a-tum (Standard Ḫb. XIX, no. 90), ^{siki}ḥuš-a = ru-uš-ša₂-a-tum (no. 91); ^{tug₂}ḥuš-a = ḥu-uš-šu-u₂ (no. 173), ^{tug₂}ḥuš-a = ru-uš-šu-u₂ (no. 174).

Hg.^D XIX

414	[^{tug₂}]gu-za	il-lu-ku	lu-bar sa-a-mu	'a red garment'
415	[^{tug₂}]huš-a	šu-u (<i>huššu</i>)	MIN	'ditto'
416	[^{tug₂}]huš-a	ru-uš-šu-u	MIN eb-bi	'ditto, bright'

and in Late NB Hg.^{XIX} (SpTU 3, no. 116):

obv. i

31	^{tug₂} guz- ¹ za ¹	il-lu-ku	lu-bar sa-a-mu	
32	^{tug₂} huš-a	šu-u (<i>huššu</i>)	MIN	MIN
33	^{tug₂} huš-a	šu-u (<i>ruššu</i>)	MIN	

The same stereotyped, five-descriptor sequence also appears in the Hh. XIX Forerunners as, for example, the RS Hh. XIX nos. 44–48 (MSL 10, 149–150):

RS Hh. XIX (RS 20.32)

44	siki	sal-la	
45	siki	huš-a	
46	siki	guz("sig ₄ ")-za	
47	siki	ni ₃ -mu ₄	
48	siki	alam	

and the Emar Hh. XIX 6'–10' (handcopy Emar 6/1, 241; edition Rutz 2013: 197–198):

Emar Hh. XIX (Msk. 7498l)

6'	[^{tug₂} ni ₃ -lam ₂ -ma]	sal-la [
7'		huš-[a	
8'		guz("sig ₄ ")-[za	
9'		n[i ₃ -mu ₄	
10'		al[am	

The position held by huš-a / ruššu '(bright) red(dish)' in the Standard Hh. XIX is occupied by guz("sig₄")-za and gu-za in the Emar and Ras Shamra Forerunners, respectively.

The exact shade of red denoted by guz-za comes from a gloss of the five-descriptor sequence in another version of the Emar Hh. XIX, Msk. 7498j, 8'–12' (handcopy Emar 6/1, 465; edition Emar 6/3, 134):

Emar Hh. XIX (Msk. 74190j)

8'	[siki]	sal-la	ša ra-qa-ti	'(fine)'
9'		huš-a	ša hu-še-e	'red'
10'		gu-za	ša il-lu-ur-ri	'illuru-colored'
11'		ni ₃ -mu ₄	ša lu ¹ -bu-ši	'of an outfit'
12'		alam	ša ša-al-mi	'of a statue'

The equation gu-za = ša illuru in Msk. 74190j confirms the meaning guz("sig₄")-za/gu-za '(bright) red' in the five-descriptor sequence, by specifying that the shade of red was comparable to that of illuru, a flowering plant generally accepted as the poppy anemone or windflower,⁴⁶ known for its scarlet bloom, which also lent its name to the cosmetic rouge illūr pāni (CAD I–J 87, s.v. illuru).

⁴⁶ AHw. 373a: 'Anemone?'; Thavapalan (2020: 144): "likely the *Anemone coronaria* flower that grows abundantly in the Middle East."

The use of guz-za as a color term was not restricted to the peripheral Ḫh. XIX Forerunners. The Late OB Ḫh. XIX (MSL 10, 143–144), for example, shows guz-za, written with clear LUM (guz) and not LUM-šeššig (sig₄), functioning as a free-standing color adjective. Consider the following pair in sequence:

Late OB Ḫh. XIX (BM 92611)

22	siki	'sal ¹ -la
23	siki	guz-za
...		
27	tug ₂	sal-la
28	tug ₂	ḥuš

Although the full, stereotyped, five-descriptor sequence is not attested in the Emar Ḫh. XIX, RS Ḫh. XIX, and Standard Ḫh. XIX, if Late OB Ḫh. XIX nos. 22–23 and 27–28 are taken to represent shortened versions, then the guz-za in no. 23 must be one of the shades of red. Since ḥuš ‘red’ appears elsewhere in the Late OB Ḫh. XIX (e.g., no. 28 and no. 30: ^{tug₂}ni₃-lam₂ ḥuš), guz-za must be the bright red.

Breaking down the data from the lexical lists by time periods reveals the following pattern (**Table 1**): in the 2nd millennium Ḫh. XIX Forerunners, guz-za in all its variant spellings (guz-za/guz(“sig₄”)-za/gu-za) was used for both the noun, ^{tug₂}guz-za, and the adjective, guz-za ‘(bright) red.’ In the 1st millennium Standard Ḫh. XIX and the Late NB Ḥg.^{XIX} (SpTU 3, no. 116), guz-za/gu-za could only refer to the cloth, while ḥuš-a, in its reading *ruššū*, usurped guz-za/gu-za in the lexical lists as the adjective for bright red.

Table 1: Spellings and Allographs of ḥuš(-a), gu(z)-za, and ^{tug₂}guz-za in Ḫh. XIX and Ḥg.^{XIX}⁴⁷

Text(s)	Red		Bright Red		^{tug₂} guz-za	
	Spelling	Allograph	Spelling	Allograph	Spelling	Allograph
Late OB Ḫh. XIX	ḥuš	(ḥuššū)	guz-za	?	(^{tug₂} guz-za) ⁴⁸	—
Nippur Ḫh. XIX	ḥuš-a	(ḥuššū)	—	—	^{tug₂} guz-za	—
Emar and RS Ḫh. XIX	ḥuš-a	ḥuššū	guz(“sig ₄ ”)-za, gu-za	? (gloss: ša illurri)	(^{tug₂} guz(“sig ₄ ”)- za), (^{tug₂} gu-za) ⁴⁹	—
Standard Ḫh. XIX	ḥuš-a	ḥuššū	ḥuš-a	<i>ruššū</i>	^{tug₂} gu-za	—
Late NB Ḥg. ^{XIX}	ḥuš-a	(ḥuššū)	ḥuš-a	(<i>ruššū</i>)	^{tug₂} guz-za	(^{tug₂} (guz)guzu) ⁵⁰

Since the adjective guz-za denoted a shade of red when applied to textiles in the Ḫh. XIX Forerunners, it ought to be asked whether the scribes of the lexical lists considered the noun ^{tug₂}guz-za to be derived from the root guz-za ‘red’, and not from guz = *apparrū*. Variation in the pattern of the five-descriptor sequence in the Ḫh. XIX Forerunners supports this. Among the eleven occurrences of the sequence “sal-la, ḥuš-a, guz-za, ni₃-mu₄, alam” for textiles and wool, there is only one significant deviation.⁵¹ In the ^{tug₂}guz-za sequence (RS Ḫh. XIX, nos. 184–187) the expected entry *^{tug₂}guz-za guz-za is deleted and not replaced. In fact, the sequence *^{tug₂}guz-za guz-za and its 1st millennium reflex *^{tug₂}guz-za ḥuš-a (*ruššū*) are absent from all versions of Ḫh. XIX, Forerunners and Standard. In the Forerunners, the alleged ^{tug₂}guz-za ḥuš-[a]

⁴⁷ Spellings in parentheses are reconstructed.

⁴⁸ While the section containing cloths is not preserved in the Late OB Forerunner Ḫh. XIX, it may be assumed that the text continued the 3rd millennium and OB spelling of the textile with guz.

⁴⁹ Spellings for the cloth are assumed based on attestations in 2nd millennium texts from Emar, Ugarit, Hattuša, Amarna, etc. Note that a spelling ^{tug₂}GU.ZA is not attested in these corpora, but should have been possible based on the color term gu-za in contemporary lexical lists. Cf. now the appearance of ^{tug₂}GU.ZA in the MB texts CUNES 52-16-066 obv. 5 (Devecchi 2020: 286–287, no. 275) and CUNES 52-16-050 obv. 7 (Devecchi 2020: 290, no. 290).

⁵⁰ Allograph inferred from ^{tug₂}GUZ.GUZ = ^{tug₂}gu-uz-gu-uz (pl. *gu-uz-gu-zu*, *gu-uz-gu-za-nu*) as discussed by Quillien 2013.

⁵¹ The replacement of the alam descriptor with na₂ in the ^{tug₂}bar-dul₅ sequence of entries (RS Ḫh. XIX, nos. 69–73) is inconsequential, but emphasizes how rare variations were in the five-descriptor sequence.

that is supposed to be attested in Nippur Ḫh. XIX (MSL 10, 147 no. 63) based on Source I (CBS 6580) does not exist: neither the handcopy (OIP 18 “Fragment”) nor photos (cdli.ucla.edu) for Source I show evidence for ḥuš-a. Instead, both confirm that the traces after the GUZ signs in rev. v 3' and 4' begin with a ŠE-group, rather than the ḤI-group needed for a ḥuš sign.⁵² In the Standard Ḫh. XIX, the ^{tug₂}gu-za descriptor sequence (nos. 268–271) is a different set of adjectives based on social rank rather than color. Thus, the expected sequence *^{tug₂}gu-za ḥuš-a (*ruššū*) is also missing. This might be thought of as only a coincidence, except that the consistent absence of the same in the Forerunners suggests otherwise. The complete absence of *^{tug₂}gu-za guz-za and *^{tug₂}guz-za ḥuš-a (*ruššū*) across all versions of Ḫh. XIX suggests that the garment ^{tug₂}gu-za and the adjective ‘bright red’ (guz-za or ḥuš-a) were considered the same, since the most logical reason to avoid the combination would be that the sequence was perceived as duplicative.

There is no clear explanation for why the ^{tug₂}gu-za should have an association with redness in the lexical lists of the 2nd millennium. Although the 1st millennium ^{tug₂}GUZ.GUZ could be made or decorated with red wool (Quillien 2013: 22; Gaspa 2018: 286), some texts in the 2nd millennium certainly refer to the ^{tug₂}GUZ.ZA being made of other colors.⁵³ This makes simple homophony reinforced by a scribal “folk” etymology the most likely possibility. Whereas the vast majority of cloths from the Ur III period were undyed, those intended for royal use were regularly dyed ḥuš-a (Waetzoldt 2010: 202). In other words, red would have been one of the only artificial colors of textile inherited from the Ur III period. Since red ^{tug₂}gu-za cloths would certainly have existed, and since an apparently homophonous adjective guz-za corresponding to ḥuš-a (*ruššū*, *ša illuri*) existed, the pattern of the ^{tug₂}gu-za in the lexical lists suggests that the scribes assumed that the cloth itself was, at least originally, a bright red garment. Whether or not this was true for the garments of the 3rd millennium is unknown.

8. Conclusions

As stated in the introduction, the origins, original meaning, and evolution of the ^{tug₂}gu-za/^{tug₂}GUZ.ZA await further investigation in the various cuneiform corpora and in the visual imagery of the Ancient Near East. However, the above discussion allows for a few preliminary points.

1. Evidence from the Ur III period and from Mari suggests that the fabrication of the ^{tug₂}gu-za/^{tug₂}GUZ.ZA involved an abundant, thick weft that might have produced a striated or “ribbed” effect. Little else is known about the cloth’s appearance. The fabric was fulled, but there is no mention of the knots or the deep pile necessary to produce the layered ranks of loops visible in depictions of *Zottenstoff*.
2. Regarding function, the ^{tug₂}gu-za of the 3rd millennium was first and foremost a heavy personal wrapping garment and secondarily a rug or blanket (cf. discussion of ^{tug₂}aktum guz-za). In the 2nd millennium, the ^{tug₂}GUZ.ZA is thus far attested exclusively as a blanket or upholstery, whereas in the 1st millennium it is again attested in the form of the ^{tug₂}GUZ.ZA/^{tug₂}guzguzu as a coat, but more often as a blanket or upholstery.

52 Nippur Ḫh. XIX, Source I (CBS 6580)

rev. v

2' ^{tug₂}gu-za

3' ^{tug₂}gu-za ŠE(+x)[

4' ^{tug₂}gu-za ŠE(+x)[...

5' ^{tug₂}gu-za ŠE(+x)[

6' ^{tug₂}gu-za ŠE(+x)[

7' ^{tug₂}gu-za ŠE(+x)[

While it is not inconceivable that a ḥuš-a was lost after the break in CBS 6580 rev. v 5' or 6', neither is there any evidence for it. The better-preserved sequence of Source A (CBS 4608+) simply goes from ^{tug₂}gu-za dugud (rev. v 11) to the next garment, ^{tug₂}mu-ra (rev. v 12), without break.

53 E.g., in RS 16.146 + 161 (PRU III, 182–86) obv. 13: ^{tug₂}GUZ(“SIG₄”).ZA^{mes} ša^{giš}GU.ZA ša^{siki}ZA.GIN₃ “GUZ.ZA-cloths of a throne of blue wool.”

3. In the 2nd millennium lexical lists, guz-za as an adjective clearly meant a shade of red when applied to textiles, and in the 2nd and 1st millennium lexical lists the noun ^{tug₂}guz-za had a non-trivial association with red (cf. the discussion of ^{tug₂}guz-za = *illukū* and the non-existence of the sequence *^{tug₂}guz-za guz-za/ *ḥuš-a* above).

Thus, despite its association with *Zottenrock/-stoff* serving as the basis of discussion for over 90 years, confirmation that the ^{tug₂}guz-za/ ^{tug₂}GUZ.ZA was a shaggy, flocky, or bristly cloth has yet to emerge.

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