PLACENTA, COLOSTRUM AND MECONIUM
IN HITTITE

1. It has been known since 1939 that Hittite scribes used an
Akkadogram, šalitu, to denote the afterbirth of domestic
animals. This term is invariably accompanied by a second
Akkadogram, ḫak/gurratu, whose meaning has not yet
been determined by Assyriologists.

šalitu and ḫak/gurratu

nu mān ḫaššunaš mēhini DINIR-LIM-ni kuedaniiki / šaklitšš
nu-šši naššu AMAR SILA; MĀŠ TUR našna ša-li-te mes
ša-ag-gur-ra-te / ša-argi n-at lē eštanansakati /
ḥaššunāš=at mēhini ḫorten n-at=kan DINIR. MEŠ /
menakššano le eškara / « And when at the time of (domestic
animals') giving birth, some deity has a prerogative (i.e., is
cowed an offering), and you present to him/her either a calf,
lamb or goat, kid, or' afterbirth (and) H., do not delay them
(neut. pl.) : present them (neut. pl.) on time, and do not make
the gods wait for them. »

3. [2] KBo 22.222 iii 1-7' (cult inventory or festival, CTH
330).³ nu ŠE-20-21 U[?]-I(?)-I(?)-A(?)-I(?)-I(?)-I(?)
ša-li-tu ša-ag-gur-ra-tu šeštar < (2) nu ANA 4 U
1gru Atiššiya EZEN₄ nu[-... iyazi(?)] (3) SILA₄

337
MĂŞ.TUR=kan ANdî urûI Atâhâzî[ya ... šiptâni] (4) n=as paltânânti n=at PÂNî DINGIR-LIM ŠÂLÊ.LUM [U.MI ...] (5) šitéI GALL-u=ma u21I ŠA-LI-TU u20I HÂ-Å.GUR-RA-TU (6) 1/2 BÂN ZÎ.DA 1 ÙŠI hùpparâI KAS ZAG.GAR.RA-nî [pînâz(?)] (7) BIBRÎ=kan šûnanânti « And the 'Lord of Country' [brings(?)] one(?) goât kîd [of] the ram(â-goats(?)), afterbirth(î), ŠL, ... [performs] the festival of ŠU-[...] for the Stormgod of Atâhâziya, 8 and dedicates(?) a lamb (and) goat kîd to the Stormgod of Atâhâzi[yâ ...], they stretch them (i.e., the young animals) out (on a flat surface) and place them in front of the deity [...] who[es]. Along with (them) [they give(?)] afterbirth and [SH, 1/2 BÂN of flour, (and) one hùppar- vessel of beer on the offering table. They fill rhyta. »

4. [3] KUB 18.16 ii 1-6 (oracle inquiry, NH)9 u21I A.IL=wa NU.GÂL nu=w[a GÂ]DIM.ÂMES INÂ E DUÎa U[S.S]A (2) UL pê šakarânti u20I HÂ-Å.GUR-RA-TU=wa u21I ŠA-LI-TU (3) GA NINDA GIBIL.ÂMES=wa kâš MU.3.KAM kît=at kâršanteš (4) EZEN4 GA RA-naš 10 EZEN4 šâdaš=a kâš MU.3.KAM (5) kît=at kâršanteš GÂDIM.ÂMES=za kêlê waštûwaš (6) šer TUKU-wanté mu MUSEN HÂRRI NU.SIGI, du NU.SIG; // « There is no water-carrier. They make no presentation (to) the deceased ones in the bath-house. (As for) the H,[ the afterbirth, milk and fresh/new breads—this (is) year three, since they have been omitted. (As for) the festival of churning milk and the festival of the piles of threshed and winnowed grain — this is year three, since they have been omitted. Are you deceased ones angry on account of these sins/omissions? (If so,) let the shedduck oracle be unfavorable. (Result:) unfavorable. »

5. It is possible that in several passages from oracular inquiries which parallel those mentioning the failure to offer the u20I ŠÂLITU and u20I HÂK.GUR.RÂTU the word u20I šûnnânta may represent the Hittite term underlying u20I ŠÂLITU.
6. [4] KUB 5.5 iv 21'-23' (CTH 578) SILA₄.ḪI₂.A kuit 𒈨šar-na-
štana 𒄠tar-aš-gán-na karšir (22) n-al šakuwaššar SUM-amzi
GAM-aa₄=zi zamkilatar (23) NINDA KAŠ SUM-amzi ...
SUM.ES SIG₄-su « Because they have omitted the (giving of)
lambs, afterbirth(?) and ...., shall they give them in full, and
along with them shall they give bread and beer as a fine? ... (If
so.) let the oracle entrails be favorable. ... (Result :)
favorable. »

7. [5] (NH) 578 KUB 5.5 iv 13'-21' // [SIL]A₄(?) 𒈨šar-na-an-
ta 𒄠a-ra-aš-ga-an-na kuit (14) [MÚ₄].IM₂.MA(IS) karšir n-eš
šakuwaššarši SUM-amzi (15) [GAM-acu₄=zi 1 SILA₄ zamkilani
SUM-amzi (16) [DINGIR-LI₂₄]=za KI₂₄ MIN nu MUSEN
ḪURRI SIG₂-su (17) [xx] ISTU MUNUS ŠUGI SIG₄ //
« Because [the preceding(?) year] they omitted the (giving of)
[lamb(1)?, afterbirth(?) and ..., shall they give them in full,
and [along] with them give one lamb for a fine? [...] DITTO. (If
so.) let the duck oracle be favorable. »

Annotations to the Translations

8 [3] The role of the water-carrier (𒊏A.ḪI) in connection with
the cult of the dead may have been to provide drinking water to
the deceased, but the subsequent mention of the « bath-house »
(É DU₄₂[U]S[S]A) may also suggest another purpose for the
water. kāš MU₃.KAM kuit=at karšanteš. Whether the kāš is the
near demonstrative pronoun, common gender, agreeing with
MU₄/ME₄ (« This is year three ») or is an alternate shape of
kāša, (« Just now [kāša]¹² it is year two »), I take this expression
to be equivalent to kinnur=a=wa kāša MU₂.KAM
kuit=war=s(?) karšanteš KUB 18.2₁ ii 5. The GA mentioned
immediately after the afterbirth prompted van den Hout in a
personal communication to wonder if the CIBIL modifying
NINDA could not also modify the GA, making it a candidate for
colostrum (« new milk » = colostrum).¹³ Unfortunately, I can
find no solid grammatical or orthographic evidence to make the
governing of both nouns certain. Furthermore, the mention
immediately following of the neglected festivals of churning
milk\textsuperscript{14} and of sheaves (EZN\textsubscript{4} GA RA-naš EZN\textsubscript{4}, šēlēššaš-ša) makes it
likely that the GA is offered in connection with the
former and the fresh bread with the latter. They have therefore
no direct connection with the preceding afterbirth.

9. [5] Line 14 [MUP\textsubscript{1}]M.MA(!). A time expression is needed
here on analogy with ŠA ITU.6.KAM karšan KBo 14.21 i 8, nu
mašše[n]aš ITU.[HA-es] / karšanteš KBo 14.21 ii 68-69, I4A
UD.11.KAM karš[an] ......] KUB 50.95 : 2\textsuperscript{a}, ŠA MU.7.KAM
karšan IBoT 2.129 obv 4, kēš MU-aš karšanaz KUB 5.5 i 26,
and kēš MU.3.KAM / kui-ät karšanteš in [3] above. For
another example of MU.\textsubscript{1}M.MA in an oracle text see KBo

The terms for afterbirth and related items.

10. Ever since the publication and first treatments of KUB 13.4
(my example [1]), it has been recognized that the Akkadian
\textit{̣aš-Lî-TE} \textit{̣aš} / \textit{HA-AG-[GUR]-TE} \textit{̣aš} have to do with by-
products of the birth of domestic animals. Von Brandenstein
1939 72\textsuperscript{2} correctly identified the first term with Akk. \textit{sitû-sîlu}
« Nachgeburt ». This identification was accepted by the two
latest full dictionaries of Akkadian (\textit{CAD} H 33 sub \textit{hakurratu},
\textit{CAD} S s.v., \textit{AHW} 104\textsuperscript{3} s.v.). The second term is less clear. The
Akkadian dictionaries read it as \textit{hakurratu} and merely identify it
as « a cut of meat used in offerings » (\textit{CAD} H 33) and « ein
Fleischstück » (\textit{AHW} 309).

11. Since at least \textit{sîlu} (and possibly also \textit{hakurratu})\textsuperscript{15} in
Akkadian is singular (perhaps the fem. sg, ending itself
expressed a kind of collective idea), the employment of the
plural marker \textit{MEŠ} on both terms in example [1] suggests that
the Hittite scribe was aware that the underlying terms in Hittite
(or Luwian loanword?) were plural or collective.\textsuperscript{15}

340
12. In the other occurrences of these Akkadograms ([2] and [3]), both in oracle texts, the plural marker is not employed, and the terms have the overtly nominative-accusative ending -\textit{U} for post-OB Akkadian.

13. In [2] and [3] also the terms are associated with immature animals: calves, lambs and goat-kids. It may have been that an adult female animal’s first birth had to be sacrificed together with the afterbirth. Subsequent births would then be exempt.\textsuperscript{17} Or the newborn of one animal from each flock of bearing animals would be sacrificed together with the afterbirth. It would make no sense for all the newborn to be sacrificed. From [3] it would appear also that such an offering was particularly appropriate to the spirits of the deceased.

14. The appearance in [4] and [5] in a very similar oracle passage of a pair of Hittite (or perhaps Luwian loan-)words offers the possibility of identifying at least one of them with one of the Akkadian terms.

15. As regards the singular-plural-collective issue, \textit{sarnanta} has the characteristic form of a collective (« neut. pl. »), while \textit{G\textsuperscript{A}tara\textsuperscript{G}an}, being contextually a direct object in all occurrences, could be either common gender sg. or neuter sg., although evidence to be developed below indicates that it is a neuter n-stem. As mentioned above, the fem. sg. form of Akk. \textit{sil\textit{itu}t\textit{u}} can itself be indication of an underlying collective idea in that language. But even if this is not the case in Akk., it is possible that independently in Hitt.-Luw. such a notion would be evoked by the obvious phenomenon of the composite nature of the fetal membranes. Note that in [1] the two Akkadograms are resumed by the neuter plural accusative pronoun -\textit{at}, indicating either that both underlying nouns were neutrals, or that one of them was a neuter plural « collective ». This would fit the idea that \textit{\textit{U\textsuperscript{U}}US\textit{ALIT\textsuperscript{MEST}}} was read with \textit{\textit{U\textsuperscript{U}}\textit{sarnanta}}.
16. There is a similar use of a collective in -anta for the product of a human or animal miscarriage: šarūwanta (Laws 17 and 77 in the NH copies B, C and K). In Laws 17 and 18 NH copy B has substituted the common gender «count» plural šarūwandaš, and the latest manuscript, KBo 6.4, has made it a common gender singular (§§ XVI and XVII). Although no OS manuscript is preserved for any of these laws, I suspect that the collective in -anta was the OH writing, the others being secondary. The collective form also occurs in the NS ritual text KUB 7.53 i 4-5 našma-kan MUNUS-ni DUMU.MES=ŠU okkiškanzzi našma-ši-kan / ŠU šarūwandašaš ma nauškizzzi «or if a woman’s babies keep dying or she keeps having miscarriages ».

17. šarmantu (which is a collective in form) does refer to the afterbirth (fetal membranes), and is the equivalent to Akkadian šalitu, but GA tarasgan is clearly not the equivalent to UDU ŠAKKRARRTU.

GA tar-aš-gán / G ã tar-aš-ga-an

In both KUB 5.5 i 21’ and iv 13’ the GA sign is written in direct contact with the following sign, so that reading GA tar-aš-gán-na and GA ta-ra-aš-ga-an-na as containing two separate words is unlikely. GA is therefore a determinative for a kind of milk or milky substance. Tarasgan could be the term for the colostrum, the first supply of protein-rich milk from the udder of the ewe or nanny goat. My colleague, Theo van den Hout, has indicated that he favors such an interpretation, and would link the word to the adjective tar-aš-ga-ni-ia-u-wa-an-za in KBo 10.37 i 61, ii 24, iii 48, where the newborn human (DUMU) is said to be tar-aš-ga-ni-ia-u-wa-an-za with respect to his mouth, and šēganiyananza with respect to his anus. The oft-repeated passage reads: KBo 10.37 iii 46-51 (restorations from dupl. 514/u, and the parallel KBo13.156 // UL iyat kutik UL=ma waštaš kutik[f] (47) UL=ma=kan daš kušanikkā kutik (48)
kalityanja DUMU-â± a-îs-mî-it tar-âš-ga-ni-yâl-[u]-wa-an-zâ-a
(49) [a]r-ri-îs-ša šēgniyanwânsa nu=âš=ka[n] (50)
[DiNGIR.]MEŠ pirâ artênu nu=âš=kan ãUL-âlu anda ëê (51)
sal(ê)mati:î.²⁰ Previous interpreters of this passage have
encountered difficult forms which required emendation. In each
of the two clauses the true grammatical subject of the common
gender singular adjectives tar(ê)gniyanwânsa and šēgniyanwânsa is not the body part mentioned, which are
accusatives of respect, but rather the common gender singular
DUMU-âš. There should be agreement in number between the
singular DUMU-âš and the nouns describing his body part and
the possessive suffixes where they occur (ideally âš=âš/it and
arrâ(ê)= šalâi). Yet we find plural forms a-îs-mî-it « their
mouths » (neut. pl.) and [a]r-ri-îs-ša (arriï=ê, NH com. acc. pl.)²¹ without a poss. suffix) « and anuses », which are clearly
inappropriate. The solution is found in the parallel text KBo
13.156, which is a similar ritual designed for multiple
sufferers;²² KBo 13.156 rev 1-3 [UL ëer kuitk UL=ma wašer
kui]û?ki UL=ma=kan (2) [dâer kuodenkî kuitkî kâliyan]êš
DUMU.MEŠ âš=âmē [3] tarasâgniyanwânts arriï=âš
šēgniyanwânts êš « [They have done nothing. They have not
sinned] in any way. [They have] not [taken anything from
anyone. Bûnâ] (are) the children. Their mouths [are smeared
with colostrum. And (their) anuses] smeared [with meconium] ».
Here we see the source of the problem in KBo 10.37. It was
adapted imperfectly from a ritual like that in KBo 13.156, where
there were multiple clients. Some plural forms like âš=âšmeï and
arriï (NH plural accus. in -ïes of respect²³) were accidentially
retained, when the other forms (DUMU.MEŠ, kâliyanwânts, etc.)
were changed to singulants.²⁴ In one case, ar-ri-îs-me-etï (KBo
10.37 ii 24) the NH scribe ignored the gender difference and
remodelled his hyparchetypic ar-ru-uš-mu-âš (if OS or MS; ar-
ri-îs-me-ëš if NH²⁵) to fit the adjacent form of âš=âšmeï. And
although âš itself in the compound sašgaraïï « feces orifice »
denotes the anus,²⁶ there is no reason to suspect a double
statement of the same body part here. Rather the infant’s mouth
is smeared with the colostrum (the mother’s first milk) and his anus with meconium (the newborn’s first bowel emission, more on this below). This evidence resolves the ambiguity of our accusative form tar(a)šgan as to its stem: it would be a neuter n-stem tar(a)šgan-. Formally this can either be derived by deverbal -an from a stem tarške/a- (compare maškan derived from the base of mašške/a- CHD L-N 209f.) or with by -gan from a stem *tarš-. The former is certainly much easier, since no noun-forming suffix -gan is yet known. As for the putative *tarške/a-, this could be a lexicalized -ške- like duške-, iške-, and (as duške- produced dušgarati-) could form a derivative in deverbal -an. Whether the base of the lexicalized tarške/a- was the verb tarš- «to dry (grains)», which I identified in Alimenta,26 depends on how the Hittites conceived of colostrum. It is thicker than the regular milk of the mother and darker in color. Whether they thought of this as due to a drying process similar to that of the taršan maššan I could not say.

18. Identifying the n-stem neuter noun tar(a)šgan as the base of the adjective tar(a)šganiyawant-, however, raises new questions about the analysis of the accompanying term šejuganiyawant-. The simplest solution would be to consider šejuganiyawant- an ad hoc creation on the pattern of tar(a)šganiyawant-, using the noun šejur/šējen- as a base. This account also draws support from the attested sequence of verbs tarššita ... šejuriyet in the queen’s dream, KUB 31.71 ii 9 and 11.27 In this case the well-known noun šejur denoting a liquid feces28 would be the base of the second adjective and would presumably have been the Hittites’ choice if they wanted a noun for meconium.

Returning to šarnanta

19. If my reading ūtar(a)šgan and van den Hout’s interpretation of tar-ai-ga-ni-a-ua-an-za in the KBo 10.37 passages as «covered with colostrum» are accepted, this would appear to strengthen the case for ūtar, šarnanta being «fetal membranes,
afterbirth». At least it would point to some fleshy item associated with the emergence of the newborn animal. And the collective form indicates something having the character of multiplicity, as the membranes do. The only other word in Hittite which might share the same root with ʰ₃₃₄ dataSource is ʰ₄₃₃ dataSource. It is possible that the noun ʰ₄₃₃ dataSource is based on the participle and ʰ₄₃₃ dataSource the verbal substantive of the same verb, *sərn(a)*.¹² There is, however, no trace in published texts of that verb.³⁰ As for ʰ₄₃₃ dataSource, all of its occurrences are in broken and obscure passages.³¹ All that is clear is that it is a body part of animals. The only additional information obtainable from these references depends on the restoration from an unpublished duplicate: KUB 44.15 i 7-10 (duplic. Bo 3727, Otten/Rüster, ZA 64 : Archi 1977 304) [(umu šIT])G₄ dāt nu=ššan pahḫur šēḫḫai nu ANA ʰ₄=š[n③ (8) [0] [BAL-cuntù NINDA.GUR₄.RA dāt nu=ššan 13.GIŠ 018 ERIN (9) [0] [yana dāt ANA GEŠTU UDU tepu kuerzi ʰ₄ dataSource nu=um<smo> <š=a (10) [S[t]BABBAR ḳ]epu kuerzi nu=ken İŞTU NINDA.GUR₄.RA bāšši šuḫḫai, which might indicate that the ʰ₄ dataSource of a sheep was a source of white wool, that is, it was not an internal organ. In addition KBo 23.21 : 20'-22' might suggest that it was cooked (zanuvant). So although ʰ₄ dataSource appears to be derived from the same root, and it is a body part, there is no reason to believe that it can shed additional light on the meaning of the collective noun ʰ₄ dataSource.

**ʰ₄ dataSource**

20. If ʰ₄ dataSource denotes the colostrum, and ʰ₄ dataSource the fetal membranes or afterbirth, it would follow that, while ʰ₄ dataSource is the Hittite term underlying ʰ₄ dataSource, ʰ₄ dataSource is not that underlying ʰ₄ dataSource. Assyriologists will have to give the final verdict on referent of this word.³² But given that in Hittite contexts it is part of a complex of terms all of which relate to post-partutional tissues,