Sarasvati (mleccha) hieroglyphs (Indus Script)

Part 2b

Tin could have come from Meluhha (Sarasvati Civilization area)

The discovery of two pure tin ingots in a ship-wreck near Haifa has produced two “Rosetta”stones to decode the “Indus script”. The epigraphs on the tin ingots have been deciphered as related to ranku “antelope”, “liquid measure”; read rebus: ranku 'tin'. As J.D. Muhly noted, the emergence of Bronze Age trade and writing system may be two related initiatives which started approximately in the Third Millennium B.C. It is surmised that the maritime-trade links between Ugarit and Meluhha might have extended from Crete to Haifa. Linking archaeology and philology is a challenging task. What language could the writings on Haifa tin ingots be? The breakthrough invention of alloying may have orthographic parallels of ligatured signs and ligatured pictorial motifs (such as a bovine body with multiple animal heads, combination of animal heads, combination of lathe and furnace on a standard device, ligaturing on a heifer, damr.a -- unicorn -- with one curved horn, pannier, kammarsala). A ligature of a tiger's face to the upper body of a woman is also presented in the round. The Sumerian myth Enki and the World Order has Enki exclaiming: 'Let the magilum-boats of Melukkha transport gold and silver for exchange!' Enki and Ninkhursag (lines 1-9, Tr. by B. Alster) has references to the products of Melukkha: 'The land Tukrish shall transport gold from Kharali, lapis lazuli, and bright...to you. The land Melukkha shall bring carnelian, desirable and precious, sissoo-wood from Magan, excellent mangroves, on bigships! The land Markhashi will (bring) precious stones, dus'ia-stones, (to hand) on the breast, mighty, diorite-stones, u-stones, s'umin-stones to you!'

urseal6 Cylinder seal; BM 122947; U. 16220 (cut down into Ur III mausolea from Larsa level; U. 16220), enstatite; Legrain, 1951, No. 632; Collon, 1987, Fig. 611.Humped bull stands before a plant, feeding from a round manger or a bundle of fodder (or, probably, a cactus); behind the bull is a scorpion and two snakes; above the whole a human figure, placed horizontally, with fantastically long arms and legs, and rays about his head.

t.agara = taberna montana (Skt.)

takaram tin, white lead, metal sheet, coated with tin (Ta.); tin, tinned iron plate (Ma.); tagarm tin (Ko.); tagara, tamara, tavara id. (Ka.) tamaru, tamara, tavara id. (Ta.): tagaramu,

tamaramu, tavaramu id. (Te.); t.agromi tin metal, alloy (Kuwi); tamara id. (Skt.)(DEDR 3001). trapu tin (AV.); tipu (Pali); tau, taua lead (Pkt.); tu~_ tin (P.); t.au zinc, pewter (Or.); taru_aum lead (OG.); tarvu~ (G.); tumba lead (Si.)(CDIAL 5992).

ran:ga, ran: pewter is an alloy of tin, lead and antimony (an~jana) (Santali).

ran:ga ron:ga, ran:ga con:ga = thorny, spikey, armed with thorns; edel dare ran:ga con:ga dareka = this cotton tree grows with spikes on it (Santali) [Note the thorns on the round object in front of the bull on the Ur cylinder seal impression – U 16220]

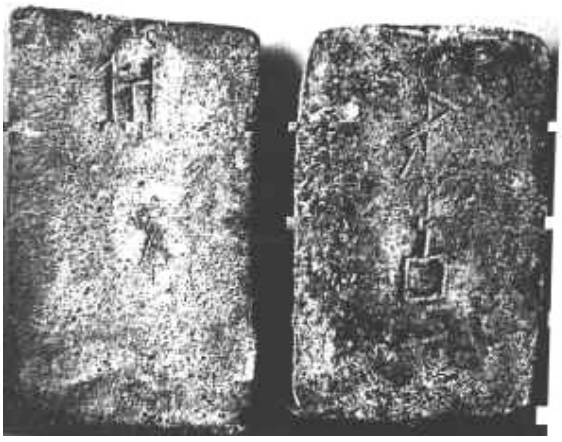
adaru d.angra 'zebu bull' (Santali); rebus: aduru 'native metal' (Ka.); aduru = gan.iyinda tegadu karagade iruva aduru = ore taken from the mine and not subjected to melting in a furnace (Ka. Siddha_nti Subrahman.ya' S'astri's new interpretation of the Amarakos'a, Bangalore, Vicaradarpana Press, 1872, p. 330); adar = fine sand (Ta.); adaru = a sparkle (Te.); ayir – iron dust, any ore (Ma.)

d.hangar 'smith' (H.)

bali = iron stone sand (Santali) bal = to bore a hole, or to puncture, with a red ho iron (Santali) [Note: the dotted circle may denote rebusError! Bookmark not defined.: bali 'iron stone sand'.]

Two tin ingots with Sarasvati epigraphs

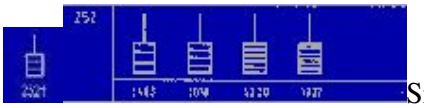
Two other rosetta stones are the two late bronze age tin ingots from the harbor of Haifa, Israel



contain glyphs used in epigraphs of Sarasvati civilization!

The picture of these two ingots was published by J.D. Muhly [New evidence for sources of and trade in bronze age tin, in: Alan D. Franklin, Jacqueline S. Olin,

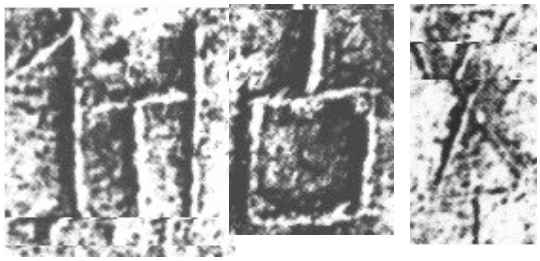
and Theodore A. Wertime, *The Search for Ancient Tin*, 1977, Seminar organized by Theodore A. Wertime and held at the Smithsonian Institution and the National Bureau of Standards, Washington, D.C., March 14-15, 1977]. Muhly notes:"A long-distance tin trade is not only feasible and possible, it was an absolute necessity. Sources of tin stone or cassiterite were few and far between, and a common source must have served many widely scattered matallurgical centers. This means that the tin would have been brought to a metallurgical center utilizing a nearby source of copper. That is, copper is likely to be a local product; the tin was almost always an import...The ingots are made of a very pure tin, but what could they have to do with Cyprus? There is certainly no tin on Cyprus, so at best the ingots could have been transhipped from that island... What the ingots do demonstrate is that metallic tin was in use during the Late Bronze Age...rather extensive use of metallic tin in the ancient eastern Mediterranean, which will probably come as a surprise to many people." (p.47)


Sign 249 
Sign 252 and variants

This pictograph clearly refers to an antelope as depicted on the Mohenjodaro copper plate inscription: (m-516b shown).

Sign 182 is a stylized glyph denoting a ram or antelope: tagar (Skt.); rebus: takaram ‘tin’ (Ta.)

da~_t.u = cross over; da.t.- (da.t.-t-) to cross (Kol.); da_t.isu – to cause to pass over (Ka.); da.t.- (da.t.y-) to cross (mark, stream, mountain, road)(Ko.); ta_t.t.uka to get over or through (Ma.); ta_n.t.u = to cross, surpass (Ta.)(DEDR 3158).



On each ingot, there are two signs as shown below:

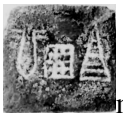
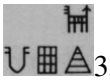
[Let us refer to these signs as, 'antelope' and X]

[Let us refer to these signs as, X and 'mould' or ‘liquid measure’].
Liquid measure: ran:ku; rebus: ran:ku = tin; rebus: ran:ku = antelope. Thus both liquid measure glyph and antelope glyphs are graphonyms (graphically denoting the same rebus substantive: ran:ku, ‘tin’.

X glyph which is common to epigraphs on both the tin ingots may refer to an ‘ingot’ or a dha_tu ‘mineral’. upadha_tu an inferior metal, a semi-metal: svarn.am ma_ks.ikam ta_rama_ks.ikam tustham ka_syam rati sindu_ram s'ila_jatu (Skt.)(Skt.lex.) siddha-rasa quick-silver (Ka.lex.) siddha-dha_tu quick-silver (Skt.); ore (as gold) (Ka.lex.) cittam < kit.t.a iron dross (Ta.lex.) siddha-patra hemp-leaves for smoking etc. (Ka.lex.) dha_tu strength, courage (Ka.); dha_tu-ged.u strength to be impaired or be gone; to become deprived of strength or courage (Ka.); dha_tunas.t.a loss of strength (Ka.)(Ka.lex.) The semant. ‘strength’ points to the dha_tu being tin since the addition of tin as an alloy strengthened copper. sapta-dha_tu, tridha_tu ‘seven/three elements’ are recurrently occurring compound lexemes in R.gveda.

In RV 6.044.23 the term used is: tridha_tu divi rocanes.u = ‘three-fold amr.tam hidden in heaven’ is the metaphor; and in RV 8.044.12 the term is: tridha_tuna_ s’arman.a_.

takar sheep, ram, goat (Ta.); tagar ram (Ka.); tagaru (Tu.); tagaramu, tagaru (Te.); tagar (M.)(DEDR 3000).

 m0516At  m0516Bt  3398 [Copper tablet; side B perhaps is a graphemic representation of an antelope; note the ligatured tail comparable to the tail on m273, b012 and k037] ri_r. high mountain (WPah.)(CDIAL 10749a)

c-023 Seal. Double-axe + other arms and armour me_n.d.ha = ram (Skt.)(CDIAL 10310).


me_l.h goat (without etymology)(Brahui); mr..e_ka (unknown meaning)(Te.); me_~ka = goat (Te.)(DEDR 5087). Rebus: med. 'iron' (Mundari)

mer.ed, me~r.ed iron; enga mer.ed soft iron; sand.i mer.ed hard iron; ispa_t mer.ed steel; dul mer.ed cast iron; i mer.ed rusty iron, also the iron of which weights are cast; bicamer.ed iron extracted from stone ore; balimer.ed iron extracted from sand ore; mer.ed-bica = iron stone ore, in contrast to bali-bica, iron sand ore (Mu.lex.)

mer.go, mer.ho = adj. rimless (vessels); mi_r.u_ adj. Brimless, rimless (vessels having no outstanding lip); mi_r.u_ bat.ite han.d.i emok do ban: jutoka = it will not do to serve beer with a rimless brass cup (it will not run out properly); mi_r.u_ celan: = a brimless

earthenware vessel; me_r. = border, edge (H.) (Santal.lex. Bodding) mi_d.u~ = having rims turned over (G.)(CDIAL 10120).

 Liquid measure: ran:ku; rebus: ran:ku = tin (Santali).

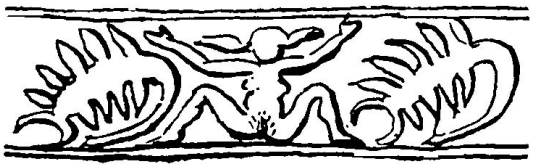
ra~_go buffalo bull (Ku.N.)(CDIAL 10559). ra~_kat. big and boorish (M.)(CDIAL 10538). cf. ran:ka slow, dull (Skt.)(CDIAL 10538

Glyphs showing mating scenes

r-an:ku, ran:ku = fornication, adultery (Te.lex.)

A bullmating with a cow. Seal impression (BM 123059). From an antique dealer in Baghdad. Cf. Gadd 1932: no. 18.

Shown together with scorpions, the reading may refer to a smelting furnace used for iron or native metal: bica ‘scorpion’ (Assamese); bica = stone ore containing iron (Mu.) [Sand containing iron ore is has a distinct lexeme: bali (Mu.); rebus: bali ‘bull’ (Skt.)] bali_varda = a bull (Skt.lex.) bel [Hem. Des. ba-i-li_ fr. Skt.] a bull; a bullock; an ox (G.lex.)



A symbolism of a woman spreading her legs apart, which recurs on an SSVC inscribed object. Cylinder-seal impression from Ur showing a squatting female. L. Legrain, 1936, Ur excavations, Vol. 3, Archaic Seal Impressions.

kut.hi, kut.i (Or.; Sad. kot.hi) (1) the smelting furnace of the blacksmith; kut.ire bica duljad.ko talkena, they were feeding the furnace with ore; (2) the name of e_kut.i has been given to the fire which, in shellac factories, warms the water bath for softening the lac so that it can be spread into sheets; to make a smelting furnace; kut.hi-o of a smelting furnace, to be made; the smelting furnace of the blacksmith is made of mud, cone-shaped, 2’ 6” dia. At the base and 1’ 6” at the top. The hole in the centre, into which the mixture of charcoal and iron ore is poured, is about 6” to 7” in dia. At the base it has two holes, a smaller one into which the nozzle of the bellow is inserted, as seen in fig. 1, and a larger one on the opposite side through which the molten iron flows out into a cavity (Mundari.lex.)

kut.hi = pubes. kola ‘foetus’ [Glyph of a foetus emerging from pudendum muliebre on a Harappa tablet.] kut.hi = the pubes (lower down than pan.d.e) (Santali.lex.) kut.hi = the womb, the female sexual organ; sorrege kut.hi menaktaea, tale tale gidrakoa lit. her womb is near, she gets children continually (H. kot.hi_, the womb) (Santali.lex.Bodding)

Language and culture as intertwined, continuing legacies

The legacy of Bharatiya language community is consistent with the other cultural facets of legacy of Bharatam Janam (Bharatiya language community).

- Legacy of architectural forms
- Legacy of metallurgy and the writing system on punch-marked coins
- Legacy of continued use of *cire perdue* technique for making utsava bera (bronze murti)
- Legacy of the writing system on Sohgaura copper plate
- Legacy of glyphs continuing on as.t.amangalaha_ra
- Legacy of the writing system on Bharhut ligatures
- Legacy: S’rivatsa glyph metaphor; S'rivatsa and s'risuktam
- Legacy: Engraved celt tool of Sembiyan-kandiyur with Sarasvati hieroglyphs: calling-card of an artisan
- Legacy of s’ankha (*turbinella pyrum*) industry
- Legacy of sindhur worn by ladies on the parting of the hair
- Legacy of worshipping s’ivalinga as a metaphor of the summit of Mt. Kailas (Manasarovar)
- Legacy of acharya wearing uttariyam leaving right-shoulder bare
- Legacy of yoga and form of respectful greeting ‘namaste’ and form of addressing a person respectfully as: **arya, ayya** (Ravana is also referred to as arya in the Great Epic Ramayana)

This legacy is evidenced by the legacy of mlecchita vikalpa as a writing system, thus enabling the decoding of Sarasvati hieroglyphs or decipherment of the Indus Script.

(This note is based on: S. Kalyanaraman, 1982, *Indian Lexicon*, available on the internet at http://www.hindunet.org/saraswati; Kalyanaraman, S., 1988*, Indus Script: A bibliography*, Manila; S. Kalyanaraman, 2004, *Sarasvati*, an encyclopaedic work in 7 volumes: Sarasvati: Civilization; Sarasvati:

R.gveda; Sarasvati: River; Sarasvati: Bharati; Sarasvati: Technology; Sarasvati: Language ; Sarasvati: Epigraphs, Bangalore, Babasaheb (Umakanta Keshav) Apte Smarak Samiti; S. Kalyanaraman, 2006, *Bharatiya Languages -- History and Formation of Jaati-bhaasha -- Mlecchita Vikalpa – Sarasvati hieroglyphs (Decipherment of Indus Script)*, Bangalore. Babasaheb (Umakanta Keshav) Apte Smaraka Samiti which includes Protovedic Continuity Theory of Bharatiya Languages http://protovedic.blogspot.com and a comprehensive corpus of inscriptions of Sarasvati civilization – Indus Script). Cf. S. Kalyanaraman, 2006, Bronze age trade and writing system of Meluhha (Mleccha) evidenced by tin ingots from the near vicinity of Haifa, presented in: Bronze Age Trade Workshop in *Fifth International Conference on Archaeology of Ancient Near East*, April 2006 http://jitnasa.india-forum.com/Docs/icaane_workshop.pdf)

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