

A FIRST LINK BETWEEN THE ṚGVEDIC PANJAB AND MESOPOTAMIA: *śimbala/śalmali*, AND *GIŠgišimmar*?

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1. The exact nature of the language(s) of the Indus civilization has escaped us so far. True, many scholars, notably Asko Parpola, have maintained that the language of the Indus inscriptions is an early form of Dravidian. As is well known, he has proceeded to show that certain combination of Indus characters indicate names of asterisms, such as the Pleiades, which make sense when read as early Dravidian.

However, all such combinatory work is based on facts gleaned, on the one hand, from the Caṅkam, from later Tamil texts, and from other Dravidian languages, and on the other, from combinations of the otherwise still unread Indus signs. In consequence, the question remains what the language(s) of the Indus civilization could have been in addition to, or other than, early Dravidian.

In a number of recent papers, I have tried to show that a closer study of the substrate words found in the texts more or less immediately following the disintegration of the Indus civilization, that is the Ṛgveda and other early Vedic texts, can indicate what language was spoken in the Panjab during the second millennium BCE.

At minimum, this language could be called an unknown prefixing language (Mayrhofer), and at maximum, a form of early Munda (Kuiper). My own position is somewhere in the middle, as I believe that not many *direct* links with Archaic Munda have been shown so far.¹ I have therefore called this ancient Panjab

¹ However, one has to take into account the present situation of Munda studies. After the initial reconstruction of Proto-Munda (and Austro-Asiatic) phonetics by Pinnow (1959) and the brief summary of the state of the art by Zide (1969), no complete overview has been published, and many research papers are available only as mimeographs, xeroxes, or manuscripts. We especially need a good, up to date description of S. Munda, which seems to differ substantially from N. Munda. As Zide has suggested, a new reconstruction of Proto-Munda would result in a monosyllabic language working with few suffixes and many living prefixes. – In addition, the time difference between our Munda sources (hardly older than 200 years) and the reconstructed Proto-Munda (several millenniums BCE) has to be taken into account; many changes in grammatical forms and in syntax, but especially in vocabulary (IA influences!), have taken place that simply escape our observations.

language “Para-Munda”. (I leave open other designations such as the **Sende-Višampaž*, i.e. the “Indus-Sarsuti”, or simply, the “Harappan” language).

While the c. 300 loan-words in the RV could function as the Rosetta Stone of the Indus script (Witzel 1999), the actual link between the substrate language and the Indus script remains open so far, as most of the RV words refer to plants and animals or are personal and place names, all of which makes any identification of any logographic² Indus character with one of the 300 words rather difficult.

In addition, the question of the Indus period language(s) of Sindh remains open. Again, I have tried to indicate a few words that might have belonged to second millennium Sindh (Witzel 1999). Interestingly, when comparing several of them with their Panjab relatives, they show typical dialect distinctions, such as *an/o* (see below). Both languages seem to have been closely related and perhaps were nothing but distant (dialect?) forms of each other, somewhat similar to the relationship between the modern NIA Panjabi and Sindhi languages.³

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2. However, another side of the question has been left open so far, namely: do we have other early sources for words from the Panjab/Sindh region,⁴ or, to be precise, from all the major Indus areas, i.e. Baluchistan, Sindh, N. Gujarat, Panjab, and Harjana? Just as for the Panjab, we do not have early written sources for Sindh and, unfortunately, the Vedic and early post-Vedic tradition does not supply many data either. Even in the Epic, the Sindhu-Sauvira area (Sindh) is by and large a blank.⁵

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3. However, there exist some 55 words transmitted by the early Mesopotamians that indicate objects, plants and animals imported from Dilmun (Bahrain), Makan (Oman and the opposite Baluchi coast), and Meluhha (Baluchistan-Sindh).⁶

² Certainly, there also are syllabic characters, such as the probable suffixes (“rimmed vessel”, “arrow”, “comb” signs, etc.), but these are even more difficult to establish phonetically.

³ One should also take note of the several differences in the Indus script, which is not homogenous, as it always tends to look in publications. Certain characters are only (or by a large margin, such as 90%) used in Mohenjo Daro; others only in Harappa (Wells 1999).

⁴ See also A. Parpola on *kinnara* and Mesopotamian equivalents (Parpola, preprint).

⁵ Note, however, the traditions about Jayadratha in Mbh.

⁶ See Possehl 1996. However, note the difference made below between trees from Makan and those of the plains of Meluhha, which points more to an identification of Meluhha with the flat plains of Sindh than one of Meluhha as (E.) Baluchistan + Sindh. (W. Baluchistan and the opposite Oman coast = *Makan*, later Old Persian *Maka*, modern *Makran*).

Recently, G. Possehl (1996) has collected and discussed all of them. Some are of special interest as they refer directly to Meluhha. There is one word among them, *GIŠgišimmar*, that has a relation to two of the 300-odd loan-words in the RV: *śalmali* at 7.50.3, 10.85.20, and *śimbala* at 3.53.22.⁷

About ten years before the present investigation, Kuiper had pointed out that both words are closely connected.⁸ They refer to the Salmalia or Seemul tree ('cotton tree' or 'silk-cotton tree'), technically *Salmalia malabarica* or *Bombax malabaricum*, also called *Bombax heptaphyllum*. D. Brandis⁹ characterizes it as a very large deciduous tree (leafless from December until April), with large buttresses at the base. The stem of young trees is covered with sharp conical prickles. The wood is very soft, white and turns black on exposure. The flowers are large and scarlet, occasionally white. The seeds are glabrous and embedded in dense silky wool, hence the English name. The tree is found in sub-Himalayan tracts eastwards, up to 3,500 ft., but is often cultivated. Local names, according to Brandis, include Hindustani *simal*, *shembal*.¹⁰ Sanskrit sources agree with him that it is a very large tree (ŚB 13.2.7.4)¹¹, with thorns,¹² red flowers, and seeds embedded in wool (see, for example, PW s.v.). Manu includes it among the trees used as landmarks, to indicate the boundary of village land.¹³

⁷ If the identification of this tree is correct, as it seems when comparing the NIA continuants, we still have to explain why the RV talks about the poison of this tree and the use of its soft wood for a chariot! Note RV 7.50.3 for poison, 10.85.20 for a chariot made of *śalmali* wood; cf. also RV 3.53.22 about an axe splitting a *śimbala* tree. Cf. Nirukta 12.8 (below, note 12).

⁸ Kuiper 1991: 65. On cases where Vedic has *-lm-* for **mm-*: "different dissimilations of **śammallśimmal*". On this question cf. further Witzel 1999.

⁹ The following information is taken from Dietrich Brandis, *Indian Trees* (1906: 77). Syed 1992 (see pp. 540, 548ff.) was not available to me.

¹⁰ Brandis lists also: Marathi *sayar*, Kannada *burla* (see DEDR 4366), *sauri*, Telugu *burgha*, *buraga* (DEDR 4366, cf. Skt. *pūraṇī*), Tamil and Malayalam *illavū* (DEDR 495), "Kol" (i.e. Munda) *idel*, Burmese *letpan*; one may add now DEDR 4378 Tamil *pūlai*; DEDR 5539 Tamil *vēli*. The IA forms (CDIAL 12351) point to quite diverse versions of the original OIA word, always a good indicator of an original loan word: *śalmali*, *śimbala* and **śāimbala* (for the last two see below): OIA *śalmali* (RV), *śālmali*, *śālmali* (Manu), Pkt. *saṃbali*, *sāmali* (*sālīya* 'belonging to the Ś. tree'), Panjabi *sambhal*, Gujarati **śālmari* > *sāmar*, Marathi **śāmvāri* > *sāvar*, *sāvri*. Cf. also Macdonell & Keith 1912, II: 380.

¹¹ Transl. Eggeling: "'The cotton tree with growth.' He confers growth on the cotton tree (*salmalia malabarica*) whence the cotton tree grows largest among trees." Eggeling adds from Stewart & Brandis, *Forest Flora*, p. 31: "is a very large tree of rapid growth, attaining a height of 150 feet and a girth of 40 ft." – Similarly VS 23.13 *śālmaliṛ vṛddhyā*, on which Mahīdhara comments: *śālmaliṛ vṛkṣaviśeṣo 'vṛddhyā tām avatu; "śālmaliṛ vanaspatinām varṣiṣtham vardhate" iti śruteḥ* (= ŚB).

¹² Nir. 12.8: *śālmaliṛ suśaro bhavati | śaravān vā*. 'Śālmaliṛ (silk-cotton tree) is so called because it is easy to pierce, or as it abounds in pricking thorns' (Sarup); cf. Mbh. 7.144.4, etc.

¹³ Manu 8.246. The village boundary is marked with trees: Nyagrodha, Aśvattha, Kiṃśuka, cotton trees, Śāla, palmyra palms, and trees with milky juice (Bühler).

The Śālmali tree is widely attested from early Vedic onwards.¹⁴ There are a number of variant forms¹⁵ and derivatives.

On the other hand, *śimbala* may specifically refer to the flower and pod-like fruit of the Salmalia tree. A first hint was provided by Sāyaṇa *ad* RV 3.53.22.¹⁶ Yet, continuants¹⁷ and derivatives¹⁸ still indicate the silk-cotton tree itself, and they point, especially in the MIA and NIA languages, to an original connection with a word for ‘pod’. This is attested widely as *śimba* ‘pod’¹⁹, and in derivatives,²⁰ also for pod-like vegetables, legumes such as beans.

¹⁴ They include, according to PW (neglecting most secondary designations, names of other plants, persons, for which see PW), etc.: Mbh. 3.61.3, 7.144.4 (thorns), etc., Harivaṃśa, Rām. 3.51.193 (sharp thorns), etc.; Suśruta; ViṣṇuPur., MārKP., BhāgP.; Ṛtusamhāra; Varāh. BrS.; Kathāsar., Pañcat., Hitop. – *aṣṭhīla śālmaleḥ* ‘the pods/fruits of the Ś.’: Mbh. 3.133.9, 5.73.19, etc., Harivaṃśa, Rām. – *ś.-puṣpa*: Suśr.; *ś.-vṛtta*: Suśr. – *śālmali-veṣṭa* ‘resin of the Ś.’: Suśr.; Lex. – Secondly, *śālmali* or its derivatives are used as the name of a tree or river (Rām.) in a hell or as the name of a hell: Manu 4.90, Yājñ. 3.222; Rām., MārKP.; or as name of a Dvīpa: *śālmalika dvīpa* Mbh. 6.13.6; *śālmala-dvīpa* ViṣṇuPur. Derivatives indicating other plants: *śālmali-patṛaka* = *saptacchada*, Śabd.; *śālmali-phala* = *tejahphala* Śabd. Finally, according to Śabdakalpadruma, *śālmali* can also indicate the well-known tree *Andersonia Rohitaka* Roxb. (*rohitaka* MS+).

¹⁵ *śālmali* Varāh. BrS 571.11 (v.l.).

¹⁶ KauśS 8.16, however, lists *śimbala* as a well-known tree among many other trees; Keśava’s comm. on this Sūtra includes it among other *śāntavṛkṣa*, which are, according to his localizations, restricted to Northern India down to the Narmadā. – Cf. also GGS 1.5.17 on the use ritual woods, with the exception of forest trees such as *vibhīdaka*, *tilvaka*, *bādhaka*, *nīva*, *nimba*, *rājavṛkṣa*, *śālmali*, *aralu*, *daduttha*, *kovidāra*, *śleṣmātaka*.

¹⁷ CDIAL 12351: Pali *simbali*, Pkt. *simbali*, *simbhali*, Panjabi *simbal*, *simmal*, W. Pahari *śimoi*, Kumauni, Nepali *simal*, Assamese *ximalu*, Bengali *simul*, Oriya *simuḷi*, *simiḷi*, Maithili, Hindi *śimar*, Gujarati *simḷo*, Sinhala *simbili*, *hiṃbul*, *iṃbul*.

¹⁸ CDIAL 12351: OIA **śaimbala*, Bhojpuri *sēmar*, Hindi *sēbal*, *semal*, Marathi *śēvrī*.

¹⁹ With various forms such as *śimba* ‘pod, leguminous plant’ Suśr.; *śimbā* lex., cf. *tuvarī-ś.*, *prthu-ś.*; *śimbi* lex., -*yūṣa* Suśr., -*dhānya* Car. (~ *śamidhānya* v.l.!; cf. below on Śamī tree); *śimbī* Phaseolus trilobus (also = *śimbiparṇikā*, *śimbiparṇī* lex.), and *Mucuna pruritus* Hook, Śabd.; *śaimbya* in Comm. to KŚS 176.4 = *śimbī-dhānya* (= *sasya*). Note also: *śimī* ‘leguminous plant’, *śimi* lex.; *śamī* ‘pod, legume’ (Vārah.), Assamese *sēi*, Oriya *saī chuī*.

Turner (CDIAL 12445) connects *śimba* and **chimba* ‘pod, legume’ with diverse forms as *śimbala* and *śālmali* and deliberates: “*śimbala* originally ‘having pods’ from *śimba*?” He also points to *śamī* (CDIAL 12308–12309), the famous Śamī tree (which has pod-like fruits) and also to *śamī* ‘pod, legume’ (Vārahāmihira), and finally, also to *śambaṭī* (CDIAL 12314) in *māṣa-śambaṭyaḥ* (Patañjali) ‘some sort of pod’, Pkt. *śambali* ‘bean’, Sinhala *aṃbala*, *aṃbala*; however, see Kuiper 1991, no. 352: *śimbāta* RV 10.106.5 ‘well nourished?’. The word seems derived by the common substrate suffix -*āṭa/āta*, as in *Kīra/Kirāta*; cf. Kuiper 1991: 45–46 – Should we also take into account CDIAL 12316 *śambu* ‘shell’, etc.?

The NIA meanings of *śimba*, etc. are closely related to each other and vary between ‘pod’, ‘bean’ and ‘husks’: Pkt. *simbā*, Kashmiri *hem* (and in its Kashtawari dial. *śima*, Poguli dial., pl. *hīma*), Kumauni *śimī*, Nepali *sībi*, *simi*, *sibhi*, Bengali *sim*, *simī*, Oriya *śimba*, *sima*, *simbi*, *simi*, Bihari *śim*; Kumauni *chimi*, Nepali *chimi*, Bengali *chim*, Bihari *chīmī*, *chīmī*, Maithili *chīmī*, Hindi *chīmī*.

It must also be noted that similar words for trees with leguminous pods exist: *śamī* ‘tree *Prosopis spicigera*’²¹ which belongs to the Leguminosae that all have pod-like fruits. This well known tree is used in kindling fire.²²

In sum, the point of importance here is that both words may be ultimately related, as pointed out by Kuiper and Turner.²³ They may go back to the very similar forms **śim(b) :: *śam(b)*, or as reconstructed by Kuiper (1991: 65), *śimm- :: śamm-*. As an interesting postscript, it may be added that subsequent the variations in the initial consonant point to an Indus phoneme *k’* (or perhaps *k’ś*) that is also seen in other, especially northwestern representations, such as *Karkoṭa/ Śarkoṭa, kīsta/śīṣṭa*, and the like (Kuiper 1991; Witzel 1999).²⁴ In later times,²⁵ this sound even interchanges with *ch* and *ṭ*, as in *Śakya ~ Ṭakki-buddha*.²⁶

The origin of the words discussed here seems to be in a general term for ‘pod’ and, secondarily, for trees or other plants with pods; *śam(b)* seems to have been more specialized in referring to the *Salmalia* tree.

As has been mentioned above, Kuiper (1991) regards both *śimbala* and *śalmali* as substitutions for a local word, as one of the cases where a geminata has been substituted in Vedic by two dissimilar consonants, such as clearly seen in AV *gulgulu/guggulu* ‘bdellium’.²⁷ In the present case, *-lm-* and *-mb-* are substitutions

20 *śaimbiya, śaimbya*: CDIAL 12615 *śaimbya* ‘pertaining to legumes’ (KŚS comm.), Panjabi *sem*, Nepali **mās sem > masem*, Bihari *sem, semā*, Hindi *sem*; – OIA **śaimbiya*: W. Pahari *śēmī*, Bhojpuri *sēmī*, Awadhi *sēmī*; **ch-*: Bihari *chemī*, Awadhi *chēmī*.

21 CDIAL 12308 *śamī* ‘tree, *Prosopis spicigera*’, see D. Brandis 1906: 260, 708, 720 (also identified as *Mimosa suma* [Brandis 1906: 268], both belong to the Leguminosae).

22 CDIAL 12308 *śamī* AV+, Pkt. *sami, chami*, Gujarati *samṛī, samṛ*; **śāmika*: Pkt. *sāmīa* ‘burnt’, Bengali *sāī*, Oriya *sāī*.

23 Followed by Mayrhofer (EWA II, p. 622): “wohl nicht zu trennen von RV 3.53.22 *śimbala*.” One may add that Tib.-Burm. **sīn* ‘tree’ does not seem related.

24 This may still be reflected in the Kuru time Yajurveda Saṃhitās, MS and KS, versus TS. As is well known, MS/KS have preserved older *kś* where the Taittirīyas have substituted *khy*, see EWA I, p. 420; Witzel 1989: 163ff.; this points to a pronunciation of *kś*, in the Kuru-Pañcāla area, similar to the one assumed above, [k’ś].

25 Note that the representations of *ch-* for Vedic *ś-* are from later sources, indication a change in the local or substrate pronunciation of [k’ś] > [ch]. Note also the similar change from RV, MS *-ch-* [šch?], KS *śch* > later, common, *-cch-*, as in *gacchati*, see summary in Witzel 1989: 161ff.

26 First noticed by Wüst, see KEWA III, Appendix.

27 Last year, A. Griffiths drew my attention to this word and its western connections. It occurs first in AV (Śaunaka and Paippalāda). *Bdellium* (*Balsamodendron mukul*) though found in India – it is called *gūgal* in Sindh and Rajasthan (see Brandis 1906: 133) – is also mentioned in AV as coming from Sindh and as imported by sea (AV 19.38.2 = PS 19.24.3 *gulgulu saindhavaṃ ... vā ... samudriyam*). Even if also imported from Arabia (also mentioned in the Bible, Genesis 2.12, as *belolakh*), *guggulu/gulgulu* is of Indian origin; it is found in Vedic both with *-gg-* (AV+) and *-lg-* (AVŚ, PS, KS); cf. CDIAL 4215.

for local *-mm-*, two “different dissimilations of **šammal/šimmal*”, as Kuiper (1991: 65) puts it.

This development is not unusual; Kuiper has shown a number of cases in Vedic and in later texts where various substitutions occur. It seems that during the Vedic period, one had an aversion against most geminates, especially *-mm-* (Witzel 1999); they can be traced in the whole area stretching from the Punjab eastwards to Bihar, and in such substrate languages as visible in modern Tharu NIA dialects.

If Kuiper is correct, and, taking into account the cases from various substrate languages (Witzel 1999), I believe he is, we have to regard the reconstructed forms **šimmal* or **šammal* as the local name of the *Salmalia* tree.

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4. Fortunately, the name of this tree is closely paralleled by that given to a type of wood that has been imported into Mesopotamia from Dilmun (Bahrain, or from beyond, Meluhha), the *GIŠ**gišimmar* wood.

Specific trees or wood are not infrequently called after their area of origin. From Magan, we have the *GIŠ**mes-makan* ‘*mêsu* wood of Magan’, and from Meluhha itself, *GIŠ**ab-ba-me-luḥ-ḥa* ‘*abba* wood of Meluhha’ (a thorn tree), and the *mêsu* wood “of the plains”.²⁸ Other trees are not introduced as such, e.g. the *GIŠ**ḥa-lu-ub* ‘*ḥaluppu* wood’ from Dilmun.

GIŠ is the usual Sumerian determinative written before tree names to indicate that the syllables following refer to wood or trees. The question remains, however, how to interpret and parse the Mesopotamian word *gišimmar*. Do we have to read *gi-šimmar* or *giš-immar*, or even **giš-šimmar*? The two latter possibilities would be a descriptive Sumerian designation somewhat similar to the wood designations indicated above, such as *GIŠ**ab-ba-me-luḥ-ḥa* ‘*abba* wood of Meluhha’. In the present case, however, the word *giš* ‘tree’ would be part of the Sumerian designation itself, and not a scribal aid, the determinative *GIŠ*. What could the word *gišimmar* stand for then? Is *gi(š)-* a prefix, or even a prefix of RV substrate type? (Kuiper 1991; Witzel 1999).

This is something that must be addressed by specialists of Sumerian and Akkadian. The word is supposed to mean, not ‘cotton tree’ as its Indian counterpart, but ‘date palm’ (for this meaning, see further below; it must also be investigated by Sumerologists whether it always refers to palm trees, as has been held since the late 19th century). It is believed to be a loan word in Sumerian, perhaps

²⁸ Interestingly, *GIŠ**mes-makan* ‘*mêsu* wood of Magan’ is opposed to the *mêsu* wood “from the plains” that comes from Meluhha itself. Possehl (1996) stresses that products from Meluhha may be imported via Dilmun (Bahrain).

even from Semitic. On the other hand, it was from Meluhha that even fresh dates were imported into Mesopotamia (Possehl 1996: 144, no. 69), most probably via Bahrain (Dilmun). The word *gišimmar* therefore could as easily refer to the dates (*šimmar) as well as to the wood *GIŠgišimmar* of the date palm tree.

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5. However, I regard the phonetic similarity of the Mesopotamian *gišimmar* wood and of the Panjab words *šimmar/šammal²⁹ to be close enough as to allow for an investigation, and even to allow for a Mesopotamian loan word. The loan-word from Dilmun, *gi-šimmar*, may presuppose a Meluhhan word *gi-šimmar*, reinterpreted locally in Sumerian as *giš-immar* ‘immar wood’ and written as *GIŠgišimmar*. The Meluhhan word *gi-šimmar* would ultimately be closely related to Harappan *šimmar, preserved in RV *śimbala* and *śalmali*; (for the meaning of the words, see below).

On the other hand, if indeed based on a RV substrate word *šimmar, the Meluhhan word presupposed by Dilmun *gi-šimmar* should have been *šimmar*, with *-r* instead of *-l*. As has been pointed out above, there are a number of dialect differences between the substrata of the Panjab and of Sindh, for example, in Northern Indus dialect *śaṇa* ‘cannabis’, *lāṅgala* ‘plough’, *vrīhi* ‘rice’, *godhūma* ‘wheat’, *kaṅgu* ‘millet’, and in the southern dialect *gōnu*, *nāñcil*, *variñci*, *godī*, *kañku/kampu*. The Harappan forms *šimmar/*šammal correspond to the RV words *śimbal-a/śalmal-a*. It is interesting to note that, just as in other loans in the RV, *-l* is quite prominent (Kuiper 1991; Witzel 1991; 1999), especially in popular words and loan words, while generally R̥gvedic, just as Mitanni OIA, Old Persian and Avestan, belongs to the extreme *r* dialects of Indo-Iranian. It may be that the preference of *l* was typical for the Panjab even at this time, that the later OIA *l/r* split was a distinctive feature of the early Panjab/Sindh dialects, and that the prominence of *l* words in some “popular” RV words may be due precisely to this feature; in fact, the distribution of *r/l* in Middle and Late Vedic is quite variegated (Witzel 1991).

Further, when taking into account the two different dialects in the Panjab and in Sindh as outlined above, it is quite possible that the *Salmalia* tree was called *gi-šimmar* in Sindh and simply *šammal/šimmar* in the Panjab. However, even then, the question remains open, that is, how to explain the “prefix” *gi-* of *gišimmar*.

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²⁹ On the question of the pronunciation of *ś/š* in the RV, note the interchange of *k' : ś* (*karkoṭa* : *śarkoṭa*), which indicates a palatalized *ś* for the Panjab pronunciation (Witzel 1999). However, the pronunciation of sibilants in Indus time Sindh is altogether unclear.

6. Such prefixes are, as has been shown elsewhere (Kuiper 1991; Witzel 1999), typical of the substrate found in the Panjab, and by extension also for Sindh. One could, therefore, seek to explain the difference between the appellation found in Sindh and Panjab as a regular difference in word formation of the Indus substrate. This feature is most easily visible in the designations for sesame, found in the Vedic substrate as *tila* 'sesame' next to *jar-tila* 'wild sesame'.³⁰

However, the *Para-Munda* prefix *gi-* or *g+voc-* is rare. In all of the RV loan words, we find only a few beginning with *g-*³¹, none of which, perhaps with the exception of *gu-ṣ-pita* 'twisted mess', can be claimed with any degree of likelihood to have a prefix *g+voc*.

One may, however, again think of a dialect difference between north and south. The northern Indus language seems to prefer tenues where the southern dialect has mediae, e.g. in the following three examples. Based on the northwestern interchange of *k/ś* in Vedic,³² we may note the interchange *k/g* in the word for 'hemp', Ved. *śaṇa* AV 2.4.5, PS 2.11.5 *śaṇa*, Gāndhārī/Niya Pkt. *ṣaṃṇa*, M. Pers., N. Pers. *šan*, but: Khotanese Saka *kaṃḥa*, Osset. *gæṇ*, *gæṇæ*, Greek *kánnabis*, Engl. *hemp* < *k-* (EWA II, p. 605) :: Drav., with popular etymology, Tel. *gōṇu*, *gō:gu* 'cannabis', Kan. *gōgi*, 'Hibiscus cannabinus' (DEDR 2183). Or, northwestern *-j-* : southern *-k/c-* in the word for 'rice': Ved. *vrihi* < Indus **vərijihi* :: Drav. **vari*, (*v*)*ariki*, *variñci*. This is also seen in the interchange of NW *-ñg-* : S. *-ñc-* in the word for 'plough': RV *lāṅgala* 'plow' (late hymn, 4.57.4) :: Tam. *nāñcil*, *nāñcil*.³³ We can therefore assume a Panjab form **lāṅgal*, and a Southern (Meluhhan) form **nāñkal* resulting in Dravidian **nāñkal*, *nāñkel*, thus:

N. **lāṅgal*, **vərijihi*, **kaṇa* :: S. **nañkal*, **variñci/variki*, **gōn(g)-*.

If this is correct, the hypothetical prefix found in Dilmun/Meluhhan *gi-* would be the most common one found in the Indus Panjab dialect, the one in *k-*. Words

³⁰ Actually, the Sumerian *ili* 'sesame', Akkad. *elluūlu* 'sesame oil' and its S. Dravidian counterpart, *eḷ*, *eḷlu* 'Sesamum indicum', point to an original form(?) without a prefix *t-*; see Witzel 1999.

³¹ Note: *gaṅgā* 'Ganges' RV 10.75.5; derivative: *gāṅgya-* 'belonging to the Ganges' RV 6.45.31; *gaṇa* 'group, following, horde'; (a-) *gada* 'free from disease'; *Gandhāri* (name of a tribe in NW Pakistan); *gargara* 'lute' (onomatopoetic?); *garta* 'seat [of a war chariot], throne'; *galdā* '? , stream, sounding?'; *guṅgu* (name of a clan or tribe); *guṅgū* (a female deity); *guṣpita* 'twisted mess, entangled, tangle'.

³² Seen in *Karkoṭa/Śarkoṭa* (a snake demon), *Kimīdin/śimidā-* (name of a demon / a demoness); *Kirāta/ Kilāta/Cilāda* (a mountain tribe), *kambala/Śambara* 'blanket' / name of a demon, *kabara/śabara*, *kīsta/śiṣṭa*, etc. (Witzel 1999); Vedic loan words with the interchange of *ś/k* may thus go back to an N. Indus phoneme *K'*, [k'], [kś] or [ś].

³³ But note Kan. *nēgal*, Gadba *nāngal* (DEDR 2907), Santali *nahel*, Khasi *lynkor* [lənkor] < **lēnkol*, cf. also the Sino-Tibetan Kanauri *hāloñ*, etc.

beginning with *ka-*, *ki*, *kī-*, *ku-*, *ke-* etc. are frequent as designations of persons³⁴ and animals,³⁵ as well as of plants and plant products.³⁶

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7. So far, the difference in meaning between Mesopotamian *gišimmar* ‘palm tree’ and RV *śalmali* ‘cotton tree, *Bombax malabaricum*’ and *śimbala* ‘[a small pod or flower of the] Śalmali tree’ has been neglected. Nevertheless, the missing link is supplied by the local, non-IA word **śimba* ‘pod’, from which both words derive: **śimba* ‘pod’ is the source of a number of NIA words for ‘pod, legume, pea’ (see above) and for the word *śimbala/śalmala* ‘cotton tree’: this tree produces pod-like fruits that can be eaten.³⁷ On the other hand, the date palm would also have been called after its pod-like fruits, the dates.

It would then be distinguished from the cotton tree (**śimball/*śimmar*) by a prefix **ki/gi-*. The distinguishing use of such prefixes is actually attested in Vedic in the pair *tila* ‘sesame’ (AV) and *jar-tila* ‘wild sesame’ (KS). It can also be seen in cases such as the pair *u-ḍumbara* AV, *u-dumbara* MS ‘fig tree, *Ficus glomerata*’ :: *ka-dumbarī* Class. Skt. ‘fig tree, *Ficus oppositifolia*’.³⁸

As has been pointed out above, we know that dates (*[u₄-hi-]in-me-luḥ-ḥa*, Possehl 1996: 144, no. 68) were actually imported from Meluhha into Oman and beyond and that the date tree was known as *gi-šimmar* in Mesopotamia. Should it then be a surprise that exactly the same tree, in its *wild* variety, the wild date palm (*Phoenix sylvestris*) is called *salma*³⁹ in Hindustani? This form is close to RV

³⁴ Persons in *k-*, *kər-/ ś/sər-* include: *kimīd-in/śimida*, *kikaṭa*, *kīnāra*, *kīnāśa*, *kīsta/śīṣṭā*, *kumāra*, *kuruṅga*, *kuśika*, *karañja*, *kṛkadāśu*, *śaryāta*, *sṛñjaya*; connected with humans are: *kapard-in*; *kabandh-in?*, *kavandha?*, *kilāsa*, *kilbiṣa*, *kīkasa*, *kuṅāru*, *kurīra*, *kulīśa*; for details, see Witzel 1999.

³⁵ Designations of animals and animal products include: *kuluṅga*, *khargala*; *kilāla*, *kulāya*, *kuṣumbhaka*, *kṛśana*.

³⁶ Note *kākambīra*, *-kiṃśu-ka*, *kiyāmbu*, *karañja*, *karkandhu*, *kakardu*, *kṛpīṭa*, *khṛgala*. (More are found in post-RV texts.)

³⁷ Cf. also the *aśvattha* fig tree (*Ficus religiosa*) with such fruits.

³⁸ Note that both *ka-* and *u-* are common prefixes in RV loan words; for details, see Kuiper 1991: 41, 91, no. 47; *kadumbarī* is designated as “*laukika*” word by a commentary on Sūruta (Kuiper 1955: 183, cf. Kuiper 1948: 25). For *u-dumbala* ‘fig tree, *Ficus glomerata*’, see Brandis 1906: 606. Detailed discussion in Minkowski 1989.

³⁹ According to Brandis (1906: 645), also: *khajūri*, *kaji*, *thakil*; the cultivated date palm, *Phoenix dactylifera*, growing in Sindh and S. Panjab, is similarly called *khajūr*, *khaji*, *khūrma*.

*śalmali*⁴⁰ and could – perhaps – indicate an old distinction between *śimbala* ‘cotton tree and its fruit’ and *śalmali* ‘*date palm’, if both words indeed go back, with Kuiper (1991), to **śimmal/śammal*.

It is here then, that the southern prefix **ki/gi* may acquire its true meaning: it would distinguish ‘date palm’ from ‘cotton tree’, The nature of the fruits of both trees involved would have resulted in two different designations based on **śimb-* ‘pod’: **śimmal* ‘cotton tree’ (Hind. *simal*, *śembal*) and its fruit, and **ki-śimmal* ‘date palm’ (Hind. *salma* ‘wild date palm’).

In short, we have as a series of converging elements:

- The Sumerian word *gišimmar* is a loan from a Meluhha word **gi-šimmar* that seems to be related to the Harappan word **śimmal*, **śammal* > RV *śimbala*, *śalmali*.
- The two forms differ slightly from each other: Meluhhan *gi-šimmar* : Harappan (Ø-)*śimmal*.
- The differences between *š/ś/k/’ch-* (and *t-*) as well as those between *r/l* seem to be due to dialect forms of the Indus language, of which the typical *ś*, *l* of the RV substrate is directly available.
- The same is true for the (lack of) appearance of the typical RV substrate prefix *ki-*, dialectal as Mel. *gi-* / Har. *ki-*, in *gi-šimmar* :: **śimmal* > RV *śimbala*.
- The difference in meaning is mediated by **śimb-* ‘pod, pod-like fruit’, resulting in Meluhhan *gi-šimmar* ‘date palm’ and Harappan **śimmal* ‘seemul tree, *Bombax malabaricum*’.

* * *

8. In sum, the case of RV *śimbala/śalmali* and Sumerian/Dilmun *gi-šimmar* provides a first correspondence between one of the c. 300 Panjab substrate words in the RV and the “eastern” words known from Sumerian and Akkadian. It should

⁴⁰ This tree is called *Dher-Umbar* in Marathi (Brandis 1906: 606), apparently derived from CDIAL 5599 **dhera* ‘lump, heap’, thus the ‘heap-fig tree’, perhaps because its fruits are “clustered on long leafless panicles hanging from the old wood of trunk and branches” (Brandis). The common *Ficus glomerata* (Brandis 1906: 609) is simply called Skt. *udumbara/udumbara*, Hindustani *umar*, and has been highly praised since RV times for its reddish (*udumbara*, *audumbara* [Einoo 1983: 11ff.] and *udumbala* [Witzel 1983: 239]) and eatable fruits that represent *ūrj* ‘strength,’ see discussion by Kuiper 1948: 23ff. – Note that one would expect a development RV *śalmali* > Pkt. *śammali*, etc. Thus, Hindi *salma* may be a reintroduction from some local language, or perhaps more likely (?) a more direct loan from Skt. For *qumb-* cf. also Pkt. *lumbī* ‘cluster’ (Kuiper 1948: 27).

open the way to investigate further cases of Indus words that are attested both in the RV and in Mesopotamia (see the list in Possehl 1996).⁴¹

Even then, our ultimate aim, that is establishing a link between RV loan words and Indus signs, remains elusive for the time being: it will be hard to identify a sign for a tree such as *the* seemul tree, or even the date palm, or dates in the Indus script.

However, we may try other likely candidates, such as the multi-colored or red “dog of Meluhha”, the “cat of Meluhha”, the *zaza* bovines – none of which unfortunately appears in the list of RV substrate words. Or, one may also further investigate the names of Mesopotamian men such as *Urkal*, *Ur-dlama* called ‘the son of Meluhha’ (Possehl 1996, nos. 36, 42–44), or *Nin-ana* coming from a ‘village of Meluhha’ (Possehl 1996, nos. 45, 46), or ‘the translator from Meluhha’ (Possehl 1996, no. 2), *Šu-ilišu* (Parpola 1994: 132), and take note, finally, also of those persons simply called *Meluhha* ‘the Meluhhan’.

In short, another close look at Possehl’s list and its original Mesopotamian sources is necessary, in comparison with the list of RV (and post-RV) substrate words.⁴² Such work may aid the effort of *beginning to crack* the Indus code. Hopefully, some progress in this great endeavor can be made, but only by close cooperation between a Sumerologist/Assyriologist and a Sanskritist, such as Simo and Asko Parpola.

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⁴¹ Imports from Dilmun include: *giš-ḥa-lu-ub* ‘ḥaluppu wood’, cf. RV *ulap-ana* ‘bush, herbs’?; *giš-mes-makan* = *mēsu* wood of Magan, cf. RV *mus-ala* ‘pestle’?; from Meluhha: *giš-ab-ba-me-luḥ-ḥa* = *abba* wood, a thorn tree.

⁴² Which is in need of further study and amplification with more materials from the AV and later Vedic texts.

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