Vedic and Avestan.

N Kazanas July 2011

0. Abstract. In this essay I examine independent linguistic evidence, often provided by iranianists like R. Beekes, and arrive at the conclusion that the *Avesta*, even its older parts (the $g\bar{a}\theta\bar{a}s$), is much later than the *Rgveda*. Also, of course, that Vedic is more archaic than Avestan and that it was not the Indoaryans who moved away from the common Indo-Iranian habitat into the Region of the Seven Rivers, but the Iranians broke off and eventually settled and spread in ancient Iran.

Avestan alleged to be older than Vedic.

1. R. Schmitt published a paper in which he shows that Vedic (or Old Indo-Aryan) has innovations against Avestan (or Iranian) archaisms, that it is "not identical with Proto-Indo-Iranian and is not so close to PIE (=Proto-Indo-European) as many people maintain" (2009:21). He examines and contrasts analytically more than thirty pairs of cognates in the two languages and, of course, finds that the Avestan forms are more archaic than the corresponding Vedic ones, which are for the most part "of secondary character" (pp 15, 16). He does admit that often it is "quite difficult to decide whether we have to do with an inherited form, with an archaism or an innovation" and adds that the Avestan script "is more obscuring than inspiring" and so increases the difficulties (20). Nonetheless, he presents some cases where, he claims, the Vedic innovations are "irreversible" (6). On the basis of his analytical comparisons he concludes not only that Vedic is not the most archaic of the IE branches but also that "the Indo-Aryan language and culture must have immigrated into India and do not originate there" (6-7).

I am sure we are all very grateful for Schmitt's presentation but his last conclusion does not follow from his analyses and it is certainly wrong. Even in the 19th century, despite his blunders in giving such late dates for the Vedic literature as 1200 and 800 BCE (blunders which he later repudiated assigning the Rgveda to 3000 and even 5000 BCE), Max Müller spotted that "the Zoroastrians [=Iranians] were a colony from Northern India ... [who] migrated westward to Arachosia and Persia" (1875: 248; brackets added). Now, Schmitt's contention is in conformity with the mainstream linguistic Doctrine, against all archaeological, anthropological, genetic, and literary evidences, but like the "invasion" of old this is utterly wrong. Many other IE (=Indo-European) branches are said to have archaisms and this is surely true; but this ipso facto does not on the whole make them more faithful or close to the PIE and thus more archaic than Vedic. It is also true that Vedic displays changes, attritions and innovations even as we move from the older family Books (3, 6, 7) of the RV (=Rgveda-samhitā) to the later ones (8.9.10), and, of course, from the RV to the Upanishads. But these mutations do not detract from the general archaic character of the language and most assuredly do not prove that it came from Iran into Saptasindhu (=the land of Seven Rivers in N-W India and Pakistan) c1700-1500 BCE. Schmitt mentions no dates, sidestepping this issue, which is the one serious cause for the "Indo-Aryan controversy", as it is generally called.

2. In recent years others have also made similar claims as Schmitt and this is natural since the general AIT (=Aryan Invasion/Immigration Theory) holds that the IAs (=IndoAryans) moved away from an hypothetical, unified, original IIr (=Indo-Iranian) community somewhere in ancient Iran/Persia and entered Saptasindhu.

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One such interesting claim was made by R. Beekes, a well-known comparativist (see his 1995 publication), who wrote that Avestan "is even more archaic than Sanskrit in that it preserves systematically the PIE laryngeals" (1988: xv). This is a most extraordinary assertion, since Avestan has no attested laryngeals whatever, but Beekes willfully inserts them wherever it suits his speculative "historical" approach.

R. Beekes's counter evidence!

That Beekes' assertion is highly arbitrary is shown by his own presentation of facts and comments thereon. Hereafter I shall mark (e1), (e2) and so on, contrary evidence that shows the anteriority of Sanskrit. On page 1 (ch.1) Beekes writes: "ara was monosyllabic." Sometimes it appears as $\bar{o}ra$: $m\bar{o}randat$ – and this is my (e1). This "it", which is monosyllabic even though it appears as $ara/\bar{o}ra$, represents the sonorant |r| which disappeared entirely from Avestan but remained alive and kicking in Sanskrit. Since the exigencies of the metre in Avestan texts require that this $ara/\bar{o}ra$ morpheme be counted as monosyllabic, surely the implication is that the poetic texts, even as they were being composed, did have the |r|; but due to dialectal pronunciation and other factors this changed. Moreover, since we have two alternatives (in fact there are also ar, ara, ra etc), we must suppose that the Iranian unity itself broke up into different dialects and pronunciations. Sanskrit retains a steady |r|: e.g. Av/S aršti-/rsti 'spear', var- 3 sa-/vr/vssa' 'tree, wood', ratu-/rtu 'point of time, season' etc.

Beekes writes that a set of words "must have had a more archaic form" and gives as archaic forms the Sanskrit! Thus in this set we find (e2) Av/S divamna/dyumná 'celestial light/splendour', jva/jīvá 'life' etc. Now since dyumná and jīvá are perfectly common Sanskrit lexemes, surely common sense bellows out that Sanskrit is more archaic. Even Beekes says the Vedic forms are more archaic!

Then jumping over a few pages dealing with metrical details and entering into ch 2 'The Phonetic system', we find many more examples. (e3) On p16 we note $uh\delta a$ 'word' (=S¹ $ukth\acute{a}$) and $vax^2\delta ra$ - < * $va\chi\theta ra$ 'speech' < vaktra- (=S $vaktr\acute{a}$)! Beekes writes here that 'the development $x\theta>x\delta$ is problematic". Of course, the problem is only in his (and other iranianists') notion that Avestan is more archaic than Sanskrit. (e4) Immediately following, we find $fa\delta r\bar{o}i$ which is the Ds¹ of 'father' $pt\bar{a}$ -. This Dative is found also as $f\theta rai$ and $pi\theta r\bar{e}$ - a fact which indicates clearly that even OAv was divided into different dialects. Now, OAv $pi\theta r\bar{e}$ and YAv $pi\theta re = S$ pitre, Ds. On the very next page we read the phoneme $|\vec{s}|$ arose from rt as in ama $\bar{s}a$ - 'immortal' (=S $am\acute{r}ta$); hr from |r| before |k| or |p| as in vahrka- 'wolf' (=S $v\acute{r}ka$) or kahrpam-'body' (=S $k\acute{r}p$ -).

Thus we have already five very clear counter-evidences from Beekes' own writing to his assertion that Avestan is older than Vedic. The rest of his book teems with similar cases and we shall examine some later on.

Why Beekes does not follow his own common sense displayed in the above examples and in numerous others and elects to introduce non-existent laryngeals and then use these hypothetical concoctions as actualities is beyond understanding. But then, that Avestan should be shown to be more archaic than Sanskrit seems to be an integral aspect of the mainstream linguistic Doctrine, which is the AIT, namely that the Indoaryans left the Iranians from their supposed common habitat in southeastern Iran and moved into Saptasindhu.

¹ Ds = Dative singular. So also with other cases: Acp=Accusative plural; Abd=Ablative dual; and so on. Also S=Sanskrit and Av=Avestan; OAv=Old Avestan, YAv=Young Avestan.

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Methodological difficulties in Scmitt.

3. One basic difficulty here is deciding what is archaic and what is new, as Schmitt himself points out. (See also Di Giovine 2009 and paper in this issue). It is generally claimed that Hittite is archaic or that it has archaisms. How do we know this? Well, comes the answer, it was the first to split away from the unified PIE community. And how do we know this? Here, nobody says plainly "Well, Hittite is ostensibly the first IE language to appear in writing c1650", because this is not much of an explanation. So they say, "Well, it has archaic features like laryngeals, only two genders, a simple verbal system" and so on – which now becomes a circuitous mode of arguing, no better than the first explanation. So this matter of archaism vs innovation is (attempted to be) sorted out by reference to the speculative and unverifiable PIE "reconstructions" which are themselves based on this circularity!

This is the second problem with Schmitt's effort: the use, almost invariably, as premises and/or criteria, of the "reconstructed" PIE which is entirely conjectural and exists (in incomplete form) only in modern books. Schmitt's presentation is one of many examples where this fictional entity is treated as real fact! How a hypothesis that can in no way be verified – and in this case **we need PIE itself**, as we have Vedic, Hittite etc – is used so brazenly as fact, then premise and decisive criterion is beyond understanding. But comparativists have different values and so, without hesitancy, move year by year further away from linguistic actualities into nebulous speculations. Personally, I cannot take seriously such "reconstructions" and will not pay much attention to them.

A third difficulty is selectivity. However, unlike the second aspect, i.e. the non-attested proto-language, this aspect cannot be sidestepped. By the very nature of the exercise one has to be selective. I too shall be selective in gathering and presenting cases which prove that Vedic is more archaic than Avestan and is indigenous to N-W India. But selectivity is of two kinds: one type of selectively chooses some representative samples from a large array; the other – disingenuous – chooses only what suits a particular line of thought and ignores all contrary evidences. I'll show that Schmitt does indulge in the second kind as well.

What then? Will the issue be decided democratically by counting which side has more and apparently irreversible cases? It is one way but, naturally, not conclusive since cases vary in significance and weight. We must look for other types of evidence that have neither unverifiable speculations nor doubtful subjective judgements. Are there such criteria?

Well, yes, there are types of evidence that are not ambivalent, hypothetical and objectionable. And here follows the first sample.

Independent counter-evidence.

4. (e5) Sanskrit has a periphrastic perfect². So does Hittite where it is formed with the finite forms of the verb 'to have' *har-, har-ak* as auxiliary and the nom/acc sing neuter participle of the verb: e.g. *mar-kán har-teni* 'you have cut': this is the only perfect Hittite has. Avestan too has the periphrastic perfect. No other IE branch has this – except as a very late innovation in historical times (Drinka 2001).

In Vedic this perfect is formed with the accusative of a feminine noun made from

² T. Burrow (1973) and some other sanskritists ignore this, but not MacDonell (1916/1927), Whitney (1888/1962) and others.

the verbal stem and with the perfect of kr- 'to do' ($cak\bar{a}ra/cakre$) as auxiliary: this is found first in the *Atharva Veda* (18.2.27: $gamay\acute{a}m\ cak\bar{a}ra$), continues with frequency in the Brāhmaṇas, then gives precedence to a new construction with the perfect of as- 'to be' as auxiliary as in $mantray\bar{a}m\ \bar{a}sa$, and then, in addition, with the perfect of bhu- 'to become, be'. Avestan has a similar construction with the acc sing of the feminine participle of the main verb and the perfect of ah- 'to be' (=S as-) as auxiliary: e.g. $\bar{a}stara\ yeint\bar{t}m\ ah$ - 'must have corrupted'.

Now, if Indo-Aryan had indeed moved away from the unified Indo-Iranian community in Iran, then how does it have the auxiliary kr- first and for a long period, and only afterwards the auxiliary as-, which is ah- in Avestan? In other words, if Old Indic had separated from Indo-Iranian it should have had the equivalent of the ah-construction, that is as-, and only later that of kr-. We must conclude, on the contrary, that Avestan moved away from the Indo-Iranian unity, and it did this when the use of as- as auxiliary in the periphrastic perfect was well-established in the Brāhmana texts.

Of course mainstream thinking will soon come up with some explanation, such as – that the two constructions developed independently and that in any case, the periphrastic (e.g. $vid\bar{a}m\ kr$ -) is not so commonly used as the reduplicated (S dadar sa, Av dadar sa) or the simple perfect (S veda, Av $va\bar{e}\delta a$), and so on. Well, yes, perhaps. But we are used to these tactics and know they are hollow. Why would either Vedic or Avestan develop a third type of perfect? ... Hittite had no other means of expressing the perfective aspect with its implicit present meaning. But when you already have two types to do this, why would you invent a third long-winded and more complicated one?

There is no reason, other than that it was inherited and, in prehistoric times, when it was conceived, signified a nuance we cannot fully fathom. The fact that this construction is not in the *RV* does not mean it was not in existence. We do know now that several elements of Proto-Indo-Aryan did not make it into the *RV* but appeared in much later texts (see Schmitt 2009:21; Fortson 2004:196; Jamison 2004a, 2004b).

Surely it cannot be coincidence that both languages have the accusative case singular of a feminine.

Let us now take a second example of independent evidence.

Earlier, in §1, I used the term Saptasindhu as the name of the ancient region of the Seven Rivers in N-W India and Pakistan - countries which did not exist at that period. I use it as a bahuvrīhi, as many others have done before me, although in the RV we find references only to the Seven Rivers saptá síndhavah (and different oblique cases of the plural). Now (e6) Avestan has the name Haptahəndu as a place, like Aryana Vaējah, Raŋhā, Haetumant, etc, from which the Iranians had passed before settling down in eastern Iran, then spreading west and north. But what is this name? Yes, hapta- is the numeral 'seven' but what of həndhu? It is a fairly obvious Avestan correspondence to the Sanskrit síndhu.

Now *həndu* is an isolated occurrence. The stem does not otherwise exist in Avestan. Hi^ndu appears in Old Persian indicating the Indian province under the Achaemenids, and that is all. The interpretation 'seven rivers' comes from the Sanskrit collocation. But the Avestan for river is usually $\theta raotah$ - (=S srotas) and raodah-.

In Sanskrit síndhu 'river, sea' comes either from \sqrt{syand} 'flowing' or from \sqrt{sidh}

³ B. Drinka does not deal at all with this issue in her examination of the perfect in her two papers of 2003 and 2001.

'reaching, succeeding', both of which generate several derivatives, while *síndhu* itself appears in compounds like *sindhuja*, *sindhupati* 'riverborn, riverlord' etc, and has cognates like *saindhava* 'marine, salt, horse' etc.

Surely nobody would be so foolhardy as to suggest that the IAs took this otherwise unattested stem from Iranian and used it so commonly and productively. Schmitt certainly makes no such suggestion. But how are we to resolve this situation?

Clearly, the Avestan and Vedic names are connected. Since the Vedic name cannot reasonably be said to come from the Avestan, then the Avestan must come from the Vedic. Moreover, the Vedic collocation *saptá síndhu*- does not occur at all in the very early Books of the *RV* (i.e. 3, 6, 7) but once only in Bk2 (12.3,12) and Bk4 (28.1), then twice in Bk1 (32.12; 35.8), Bk8 (54.4; 69.12) and Bk10 (43.3; 67.12) and once in Bk9 (66.6). Now in the earliest Maṇḍalas 3,6,7 (as well as later ones) we find collocations like *saptá srótas*-, *srávat*-, *yahvī*- or *nadí*- but not *síndhu*-. This then suggests that the Iranians left the Saptasindhu only after the collocation *saptá síndhu*- had been established by the late Maṇḍalas. The chronology of the Maṇḍalas will be discussed in the next section.

Please note (a) that the two cases I have mentioned do not involve the doubt-ridden contrast of archaism and innovation nor hypothetical Proto-languages and (b) that I have not referred at all to the equation of original *s in the unknown PIE with S / s/ and Av h/.

Further down we shall examine several more similar cases which do not require conjectural reconstructions but only a little reasoning and courage to face facts. Before proceeding with such cases I would like to clarify the division between the early Books of the RV and the late ones.

Chronological sequence of the RV mandalas.

5. There is common agreement among all vedists that the Family Maṇḍalas 2-7, are earlier than the others (1,8-10). Some from the 19th century to the late 20th (e.g. Oldenberg 1888, Hopkins 1896, Witzel 1995b, 1997) have delved deeper and made even finer distinctions.

Some years ago, S. Talageri examined the relevant evidence in order to date more accurately the 10 Maṇḍalas (Talageri 2000). Utilizing earlier studies from Oldenberg to Witzel, who used mainly linguistic criteria, but examining also the names in the Anukramanis of the ṛṣis who composed the hymns and the incidence of names of kings or heroes playing an important role in the events of the era (e.g. Sudās, son of Divodāsa), he arrived at the following sequence:

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6,3,7,4,2,5,1,8,9,10

Earliest – 6,3,7;

Middle – 4,2 (and few hymns of Bk1);

Medial – 5 (and few hymns of Bk1);

Late – most of Bk1, 8,9;

Latest – 10.
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Frankly, none of these criteria can secure an indubitable, utterly reliable chronology. Linguistic criteria are useful, of course; but a writer can easily imitate an archaic style: I am thinking of the orphic Hymns in Greece which were composed in the

first two centuries of the Common Era but their language is extremely archaic. E.W. Hopkins gave examples in the *RV* Books themselves (1896). Then, a poet of a later era may well decide to give prominence to a figure of a much earlier period ignoring figures closer to his own era. As for the names of the poets themselves, here too there are difficulties and uncertainties: for example, hymn 10.186 is addressed to Vāta, the Windgod, by one named Vātāyana (=Vāta-āyana 'descendant of Vāta') while 10.158 is addressed to Sūrya the Sungod, by one Cakṣus Sūrya, and stanza four prays for "sight in our eye" (cákṣus); then, 10.14 is by one Yama referring to god Yama and the hounds of heaven; 9.107 is by the Seven Sages, 8.27-8 are by Manu Vaivasvata, which fact assigns them to very ancient prehistory; and so on! True names like Bharadvāja or Viśvāmitra are not of such nature, nonetheless the doubt has entered regarding the reliability of the names of the ṛṣis. as valid evidence. More reliable evidence comes from *Aitareya Brāhmaṇa* which states (6.18) that six hymns in *RV* Book 3 (30,31,34,36,38,48) were inserted into this book at a late date.

However, all in all I accept Talageri's scheme but not his view that it took about 2000 years to complete the RV^4 . Although there are some serious linguistic differences between the early and late hymns, two millennia constitute a very long period and one would expect many more changes in the language – more or less like those observable in the poetic Upanishads. Be that as it may, the RV was complete by c3300 BCE⁵ except for the interpolations.

Moreover, for my purposes, I shall make the following simple division:

Early books 3,6 and 7;

Middle 2,4;

Late: 5, 1, 8, 9 and 10;

Probably Talageri on his part, Witzel on his own part and others with different preferences, will disagree. So be it.

I trust that no one will disagree that Bks 2, 3, 4, 6, 7 are earlier, that the RV is

⁴ As usual Oldenberg, Arnold, Hopkins and others do not agree fully, and Witzel in later studies prevaricates with increased intensity contradicting his own statements before 2000 regarding late and early hymns. We can safely ignore Witzel's contradictory remarks. The ineluctable facts are that the early Books 3,6,7 mention not one rishi or his descendants who composed later hymns (Bks 1,2,4,5,8-10). In sharp contrast, hymns in Book 4 are composed by Ajamīlha Sauhotra in common with Purumīlha Sauhotra who are obviously descendants of Suhotra Bhāradvāja, composer of 6.31-32. Furthermore, in the early Books we meet kings Divodāsa and Sudās as more or less contemporaneous (with king Bharata, an ancient figure) whereas in the later books Divodāsa and Sudās are ancestral figures while their descendants are contemporaneous – e.g. Sahadeva and Somaka.

Unfortunately we have no other, more secure data to rely upon. And, what is more, this conclusion does not violate Oldenberg's criteria or the views of older vedists.

However, see N. Achar's paper herein where a new approach is given. Unfortunately, this paper came to my notice much too late and so I was unable to give it full consideration.

⁵ The *RV* knows nothing of writing, baked-brick building, cotton, iconography, urbanization, ruins and several other features of the mature Indus-Sarasvati culture which began to manifest at about 3000, yet are known in post rigvedic texts, AtharvaVeda, YajurVeda etc. (See Kazanas 2009.)

earlier than the remaining Vedic corpus and that the entire Vedic corpus from the RV to and including the ten-twelve early Upanishads, is earlier than the Sūtra and Epic and subsequent literature.

6. This division is important because it has an independent, decisive bearing on the relation between Vedic and Avestan. (The evidence is so abundant that I shall not refer to disputed and doubtful hymns.) And here we meet a curious but not unsurmountable difficulty. Some scholars find such differences between the two tongues that they believe the two developed independently from two distinct dialects of PIE (e.g. Meillet 1967 and, of course, several Italians like Bonfante 1931 and Pisani 1971, who postulate dialects and not a PIE unitary language). Others insist that Vedic and Avestan are so (misleadingly) similar that they come from a common dialect, Proto-Indo-Iranian, and stand in the relation of sisters (Fortson 2004:180; et al); and it is well known that "whole sentences ... may be transposed from one language to the other" (Sims-Williams 2006: 126).

However, Meillet is not entirely wrong since Avestan, in common with all the other branches, lost the original voiced aspirates (e.g. *dh as in S dhāman 'domain' vs Av dāman); also the original *r (e.g. as in S bhṛti 'maintenance' vs Av bər³ti-). Then, in Avestan (as in Armenian, Phrygian and Greek) original *s in pre- or inter-vocalic position became h: e.g. S soma vs Av haoma, S asura vs Av ahura-. This immediately suggests that Avestan broke away from Old Indic. In any event, surely it is most odd since Indo-Iranian is supposed to have separated, albeit late, from the other branches, and even from Armenian and Greek (which are thought by many to be so close to IIr as to form a small sub-group) and moved, always according to the AIT of the IE linguistic Doctrine, south-east into Persia whence IAn later broke away into Saptasindhu. Of course, this isogloss *s>h could have developed independently (as perhaps the loss of the voiced aspirates and the retroflex r). But it is a bit of a mystery that IA did not suffer these losses and mutations despite its additional trek (in contrast to Tocharian which made a correspondingly long journey and, indeed, suffered many such changes).

Here, we must note that many scholars observed that it is the late Books of the *RV* and particularly Bk8 that are closely linked with the Avesta and its language. In fact Hopkins stressed this view in no uncertain terms:

Book 8, he wrote, with the General Books [i.e. 1, 9, 10] and post-Rik literature agrees with Avestan as against the early family books (1896:73, my bracket). And adds: We must, I think, suppose that the Avesta and RV. viii are younger than RV. ii-vii; or else that the poets of viii were geographically nearer to the Avestan people and so took from them certain words (ibid, 81).

Yes, it is always possible that the Vedics borrowed from the Iranians but this view assumes the IIr unified advance southward and the AIT as premises which had been established by the 1880's. We saw that all scholars agree on the antiquity of RV ii-vii vs the lateness of viii-x. We saw two examples (and will see many more) which indicate rather decisively that Iranian moved out of the larger Saptasindhu. But, be that as it may for now, what actually concerns us is the relation of the different Books of the RV to the Avesta. And here Hopkins states that the late Maṇḍalas agree with the Iranian text. Why?

Many other scholars after Hopkins noted the synchrony between the *Avesta* and the later Vedic literature. Thus J. Tavadia, expert in Indo-Iranian studies, wrote: "It is the eighth Mandala [of the *RV*] which bears the most striking similarity to the Avesta. There ... (and of course partly in the related first Mandala) do some common words like

uṣṭra and the strophic structure called pragātha occur" (1950; my square brackets). We shall examine further down the common lexemes and the strophic structures in the two traditions.

Iranianist H. Humbach, too, emphasises the same similarity pointing out (e7) the polarisation of relations between the Ahuras and the Daevas in the Gathic Avesta and the reverse polarisation between Devas and Asuras which only begins to occur in the later books of the RV; he concludes: "All this suggests a synchrony between the later Vedic period and Zarathustra's reform in Iran" (1991:23). It is a very clear statement, allocating the Avesta towards the later Vedic period.

Hopkins not only had a general feeling about this synchrony but also noted the common vocabulary in the *Avesta* and the later Maṇḍalas. Some of these stems like *udarō-/udará* 'belly' or *zāmātar-/jāmatar* 'son-in-law' have IE cognates (Mayrhofer, *KEWA/EWA*) and cannot therefore be regarded as items for comparison. Two other words *maēša-/meṣá* 'ram, sheep' and *mīz-/bīza* 'seed' have cognates but only in the Balto-Slavic families (Lith *maisas/Sl měchħ* 'large sack' and Lith *miežus* 'grain' respectively): these could be considered developments or loans within the *satəm* group (Vedic/Avestan/Slavic/Baltic) and should not be used in comparison tests. Both words occur in the late Maṇḍalas and thus corroborate the close relation with the *Avesta*. But I leave them out. There are many more lexemes for this purpose.

Key non-IE words are, otherwise, S \acute{u} stra 'camel', ks $\bar{\imath}$ ra 'milk', $g\acute{a}th\check{a}$ 'song' and several more, soon to be examined.

M. Witzel (2001, 2005) and A. Lubotsky (2001) think that these and some more, like <code>kaśyápa/kasiiapa-</code> 'tortoise' and <code>bhaṅgá/banha-</code> 'hemp', were borrowed by the common IIr on its way south from an unknown BMAC language (Bactria-Margiana Archaeological Complex). But surely the IAs did not live in a vacuum and, as they expanded north and west of the region of the Seven Rivers (<code>RV 6.61.9, 12</code>), they obviously came into contact – if this did not happen earlier through trade – with other nations and languages. That they should then borrow some vocabulary (e.g. <code>úṣṭra</code> 'camel', <code>kaśyápa</code> 'tortoise', <code>bhaṅgá</code> 'hemp' etc) is not unnatural and they most certainly did not need to have travelled from the Pontic Steppe to have picked up these and similar loan words.

Lexemes in late-Vedic and post-Vedic texts.

7. The point about the preceding discussion is that all these non-IE words are found in the RV and the Avesta and most occur only in the late Maṇḍalas, i.e. 1, 5, 8, 9, 10 – not in the middle and early ones, i.e. 2, 4 and 3, 6, 7. There are some exceptions and Hopkins argued that these are either in late hymns or late intrusions in the early hymns as happens with some verses. This fact would indicate that Avestan moved away from wider Saptasindhu, or that the early Avestan parts, i.e. the $g\bar{a}\theta\bar{a}s$ were being produced at the same time as, or shortly after, these late rigvedic hymns were composed. It is difficult to see why these words were used only in the late but not the five earlier RV books. True, absence of evidence is no sure evidence of absence. But this would apply for one, two, five items not 50 or more. One would not expect words like $\hat{a}s\bar{a}$ 'space', $ks\bar{\imath}r\dot{a}$ 'milk', or $str\bar{\imath}$ 'woman' to be used immediately since the language had synonyms; but one would expect $istak\bar{a}$ 'brick' (YajurVeda), gandha 'smell' (1.162.10b only), sanais 'softly, slowly' (thrice in Bk8), or $sac\bar{\imath}$ 'needle' (sanais in EWA, III491, 363).

Below I present a list of 100 such words from Hopkins, Lubotsky and Witzel leaving out doubtful and well-attested IE cases like *udára/udarō/húderos* etc. I obtained

several more myself from Dictionaries (e.g. $takm\acute{a}n$ 'fever' in AV, pravaha 'current' in $\acute{S}Br$ etc: EWA) and several collocations of near exact correspondence. I do not distinguish between Gathic and Late Avestan because the material from the former would be negligible and, in any case, the different forms of the words do not affect the issue; a word appearing in Younger Avestan was most probably available in the older language but probably not in the same form and not used. On the other hand words appearing in O Persian and subsequent dialects have been left out. The words are arranged in the Sanskrit alphabetical order: first is the Sanskrit form, then its meaning, then in brackets the Avestan form and finally the Indic source: numerical indications refer to the RV as also early (Bks 3, 6, 7), middle (2, 4) and late (1, 5, 8-10), or initials of sources; words with a cross before are post-rigvedic and thought by Lubotsky (2001) and Witzel (2005, etc) to be loans (from the BMAC or whatever); the letter 'c' indicates collocation, the cross at the end indicates continued use in later texts.

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+ áka 'pain' (aka-): TS+6
ańguṣṭha 'finger, thumb' (anguštō): Ś Br +.
apamá 'most distant' (apamō): 10.39.3, +.
avasāná 'stop, rest' (avahāna-): 10.14.9, +.
ámavattara 'more impetuous' (əmavastara-): 10.76.5, +.
arhána- 'claiming, deserving' (arəjan-): 1.87.1; Su +.
ávitti 'non-obtaining' (āvisti): AV +.
ávithura 'non lurching' (\alpha'viθūra-): 1.87.1: Su +.
aśvasthāna 'horse-stable' (aspō.stānō): Su +.
ākṛti 'form, existence' (ākərəti 'formation'): 10.85.5, +.
āmanas 'of friendly mind' (ā.mananha-): AV +.
āśā 'space' (asah-): 4.37.7; 6 in late.
+ ístākā '(baked) brick' (ištiia-): VS +.
(sam-)īha- 'striving for' īhate 'endeavours' (iziia-, iziie ti): VS +.
ústra 'camel' (uštra-): 1.138.2: 4 in 8.
c ṛtásya...dhāma 'abode of ṛta' (aša...dāmam): 4.7.7; 2 in 1 & 1 in 10.
eváthā 'so, exactly' (aēuuaθα): 8.24.15.
ojodattama 'most strength-giving' (aogozdastama-): 8.92.17.
ójasvant 'powerful' (aojahvant-): 8.76.5.
odaná 'brew (doubtfully of rice)' (aoδa-): 8.58.14; twice in 8.66. See also
      ódatī 'shimmering', epithet for Usas in 1 and 8 and ódman 'flood,
      wetness' in VS +. Definitely late formations.
c aícchat..avindat 'one wanted [and] found' (isəmnō...vindāte): Maitrāyanī S:
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 $^{^{6}}$ O=Old; AV=Atharva Veda; Br = Brāhmaṇa; P = Paipalāda; pr.n = proper name; Pur = Purāṇa; Ś = Śatapatha; S = Samhitā; Su = Sūtra texts; TS = Taittirīya S (Black YajurVeda); Up = Upanishads; VS = Vājasaneyī S (White Yajur Veda);

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collocation (under vinda- in EWA).
+ kádru 'reddish-brown' (kadruua-aspa 'reddish-brown horse' name of
       mountain): TS + .kádru 'wooden vessel' in 8.45.26; tríkadruka- in 2, 1,
       8, 10. Only the colour is common to the two cultures (late in
       Sanskrit).
+ kapha 'mucus, phlegm' (kafa-): Up, Suśruta, +.
+ kaśyápa 'tortoise, pr.n' (kasiiapa-): AV +; name of rsi for 1.99 & in 9.114.2.
késa 'hair' (gaesa): post-rigvedic, but késavant 10.105.5 (& késin 3.6.6, 3.41.9;
       otherwise 17 late: 6 in 1, 3 in 8, 8 in 10).
c krátvā mánasā 'with strong mind' (xrateuš mananhasčā): 4.33.9.
c krátvā sacate 'accompanies, unites with strength' (hacaite...xratuš):
       1.145.2.
c vardhayanti .. kṣatrám 'they increase rulership' (hšaþrəm...varðda ti): 1.54.8.
c kṣiprāśva- 'swift-horse' (xšuuiβraspa- pr.n): Jaiminīya Br.
+ khára 'donkey' (harō/xara-) AV P +.
gadā 'club' (ga\deltaā-): Up, Su +.
gandhá 'smel' (gainti-): 1.162.10 only; +
gandharvá 'heavenly being' (gandar<sup>3</sup>wō): 3.38.6 (late hymn); 21 late- 2 in 1,
       2 in 8, 4 in 9, 11 in 10; +.
q\bar{a}th\bar{a} 'song' (q\bar{a}\theta\bar{a}): 5.44.5; then 1, 8-10.
+ grd\bar{a} 'penis' (gere\delta-a/o-): TS +.
+ cāt-vala 'pit, dughole' (cāt- 'well'): Kāthaka S.
+ jáhakā 'hedgehod' (dužaka-): VS +.
takmán 'fever' (tafnah-): AV +.
tanū-kṛt/kṛtha 'attenuating' (tanukərəta-): 1.31.9; 2 in 8.
c sváyā tanvā 'by one-self' (hunam tanūm): AV.
támasvant 'having gloom' (təmahvant): AV.
tiṣyá/tiṣiya- 'archer, lunar mansion' (tištriia): 5.54.13; 10.64.8.
tókman 'sprout, fresh blade' (taoxman): 10.62.8, +.
tritá āptyá a deity (θrita aθβiia): 1.105.9; 2 in 8, 1 in 10.
traítanā a deity (þraētaona) 1.158.5.
c na...trātā vidyate 'no protector is seen' (nāþrātā ristō): Epic.
c ásum...dadātu 'let one give life' (ahūm dadāt) 10.59.7.
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dīrghabāhu 'longarnaed' (darəgō.bāzu): Epic.

dīrghayajña 'long sacrifice' (daraγ-yasn-): Epic.

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dīrghāyu 'long-life' (daragāciu): 1.96.8; 8.70.7; +.
c devanām devatama- 'most godly of gods' (daēuuanam daēuuo. təmo): 2.24.3.
devayáj-/devayajñá 'god sacrifice' (daēuua-iiaz/iiasna): VS + (EWA).
durāpa 'hard to attain' (duz.āpiia): Ś Br +.
dúristi 'bad offering, defect in sacrifice' (duž.iiasti) AV +.
duruktá 'bad, harsh speech' (duž.uxta-): Br +.
dur-dhā- 'plant confusion' (duž.dā-) 1.40.11; 10.109.4; +.
durmanas 'bad disposition' (dužmanah): Epic +.
durmánman 'evil-minded' (duš.mainiiu-): 8.49.7.
durvacas 'abuse/abusive' (duž.vačah): Epic.
+ niks-, néksana 'piercing instrument' (naēza-): AV +.
parikara 'preparing' etc (parikara-): Epic.
parikarşa 'dragging round' (parikarša-): Epic.
parivāra 'covering; retinue' (pairi.vāre-): Epic.
púccha "tail' (pusa-): AV +.
putrada- 'child giver' (pubrō.da-): post-vedic.
putravant 'having child(ren)' (pubra.vant): VS +.
puro-găm- 'going first' (frō.gā-): 1.118.11; 3 in 10; Epic +.
prátipraśna 'counterquestion' (paiti.parasn-, frasa-): AV +.
prábhartr 'procurer' (frabarətar-): 1.178.3; 8.2.35.
pramánas 'careful' (framanah-): AV +.
pravā-c/k- 'declare/declaration' (fra.vač/k-): Br +.
pravāra 'covering' (fravāra-): Br Up +.
pratisthāna 'establishment, fixed stand' (paiti.štāna): Br +.
prativacana 'answer' (paiti.vača-): Epic.
pratīpa 'adverse' (paitipa-): Epic.
prārtha 'eager; equipment' (fraibya-) AV +.
buddhi 'discrimination, reason' (-busti-): Su +.
bhangá 'hemp' (banha-): AV +.
marká 'death' (mahrka-): 10.27.20; +.
c devā utá mártyāso 'gods and mortals' (daēvāišča mašyāišča): 8.48.1. Here, of
       course, the Avestan is 'devils and mortals', since the meaning of
       daēva changed from deva 'deity'.
manasyá- 'have in mind' (manahya): Br +.
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c maná hiranyáyā 'with a golden ornament' (zar<sup>3</sup>mu-...ma<sup>1</sup>ni): 8.78.2.
malhā 'belly, udder' (mərəzana-): TS +.
mithyāvāc- 'false speech' (miθah.vac-): Ś Br +.
mūja- (vat-) name of a people (muža-): AV +. (Also, name of a mountain).
varāhá 'wild bear' (varāza-): in 1, 8-10.
vărtraghna 'victorious' (vēr<sup>ə</sup>þrazna-): VS, TS. (From vrtrahán- 'slayer of
       demon Vrtra' epithet of Indra.
valka 'bark' (var<sup>2</sup>ka-): TS +. (Appears in Bulgarian & Russian only: late
       loan?)
v\bar{a}s\bar{i} 'axe, cutter' (v\bar{a}s\bar{i}-): 3 in 1, then 2 in 5, 8,10.
c vástrā...vásāna 'wearing clothes' (vastrāº ...vanhatu); 9.97.2.
vijīvitā 'dead, lifeless' (vījua-): Ep
vitasti 'span' (length) (vītasti-): Ś Br +.
vídeva 'godless' (vīdaēva): AV +.
vidyā 'knowledge' (vaēdya-): 10.71.11; +.
vídvesa 'enmity, hate' (vidvaiša-): 8.1.2; 22.2; +.
c (ichán...) avi(n)dat 'desiring..(s)he found' (isəmnō...vindāˈte): 10.46.2; 67.4.
viśvatanu 'having all forms' (vīspō.tanū-): Pur (EWA under viśva-).
visvapati 'all-lord' (vīspō.pa'tiš-): Epic +.
víśvavāsu 'all-riches' (vīspā.vohū): 10.85.2; and 2 more in 10.
viśvavidvaṃs- 'having known all' (vīspō.vīduah-): post vedic
c viśve amrtās(as) 'all immortals' (vīspasča amašai-): 1.59.1; 4.1.10; 42.1
vrkká 'kidney' (νərəδka): 1.187.10; AV +.
vṛtratára 'more than Vṛtra' (vərəˈþramtar-): 1.32.5.
vrsní 'male, vigorous' (varšni-) 1.102.2; 8.6.6; TS.
védistha 'most-procuring' (vaēdišta-): 8.2.24.
véśman 'abode' (vaēsman-) 1.46.3; 10.107.4; +.
+ śarva a demon (saurva-): AV.
śūka 'sting' (sūkā 'awn of grain'): Epic +.
       [sūcī́(-kā) 'needle' (sūčan): 2.32.4; 1.191.7: Variant of the above]
śépa 'tail' (xšuuaēpa-): 5.2.7; 1 in 9; 2 in 10.
sucitrá 'varied, beautiful' (hučiþra-): AV.
sudhāman 'moon (good abode)' (huδāman-): Pur.
sumāyá 'noble counsel' pr.n. (humāya): 1.88.1; 167.2; +.
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susambhŕt 'well-bringing-together' (huš.hambər<sup>3</sup>t-): TS
susakhā 'good friend' (huš.hahā-): 1.173.9; 1 in 8; 2 in 10.
suṣána 'easily obtained' (hu.šāna-): 1.42.6.
susthú 'rightly' (huštu): 8.22.18 +.
c soma ... vrtraha 'O Soma, vrtra-slayer' (haomō.. vərəbrajā): 9.89.7; 2 more in
       9.
c bhesajānām...sómaḥ 'soma ... of cure(r)s' (haomō...baēšazyō): AV.
c (máde) sómasya 'in the exhibitantion of soma' (haomahe ma\delta \bar{o}): 2.17.1;
       4.26.5; and 5 late
rúhat sómo na párvatasya prsté 'may soma ascend as if up a mountain-
       slope' (pa<sup>u</sup>rvatāhva... viraoδahe haomō): 5.36.2.
c sóma-...sukrátuh 'soma all-/powerful/wise' (haomō...huhsatuš): 9.12.4;
       10.25.8.
sómavant 'having soma' (haomavant-): 10.97.7; 113.8.
sthū́nā 'column, post' (stūnā-): 1.59.1; 2 in 5, 1 in 8, 1 in 10.
snāván 'sinew' (snāvar<sup>∂</sup>): AV +
híranyapeśas 'gold-bedecked' (zaranyō.paēsa-): 8.8.2; 31.8.
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8. The list has just over 120 items. Apart from simple words, there are compounds like $tan\bar{u}-k\hat{r}t$ and collocations like $s\acute{o}ma\rlap/h...sukr\acute{a}tu\rlap/h$.

Of these only *gandharvá* occurs once in the apparently early 3.86.6 against 21 occurrences in Bks 1, 8-10. This 3.86 is a late hymn inserted in Bk 3 at a much later date together with hymns 30, 31, 34, 36 and 48 according to *Aitareya Brāhmaṇa* 6.18. (Note: I don't regard even this report as fool-proof. In any case, we could leave out this word and 20 more. We would still have over (e8) 100 items. But, really, a reasonable mind would accept even 50.)

Of these, again, only 6 occur in the middle Bks 2 and 4.

Of the remainder, 59 (i.e. about half) occur in post-rigvedic texts and 15 in post-vedic ones. Thus (e9) we have more than 100 lexemes occurring only in the late Books and in post-rigvedic texts. Now, certainly, absence of evidence is not evidence of absence. However, here we have not 1, 2, 5, or 10 items but 100. The words probably did exist in the language (or dialects, to be precise) but they were not used in the early Books; 59 of them (half the total) not at all in the RV! This surely has great significance.

Moreover, (e10) 14 of these did not perhaps belong to Sanskrit, according to Lubotsky (2001), but were loans. All 14, marked with + before the word, are found in post-rigvedic texts. This signifies that the *Avesta* may be much later than the *RV*.

(e11) To these I would add the Vedic yuṣmá- and Av yūšma- (against OAv xšma-<*ušma-?). F Kuiper thinks Avestan borrowed yūšma- from Vedic (1991:40). And I take this as a separate case because Kuiper promulgates a direct borrowing.

Here again, as with the periphrastic perfect of the auxiliary as/ah, if the Avesta

was contemporaneous with the RV, the 59 post-rigvedic words would not have appeared for the first time in the later texts; or, at least they would not be quite so many. The number is far too big to ascribe it to chance or accident.

Synchrony of Proper names.

9. Another reason Hopkins connected Books 1, 8-10 with *Avesta* is the use of *priyá* as first member of compounds denoting proper names (1896:66).

(e12) Indeed, in the *Avesta* are found such names as *Friia, Friiana, Friiāspa*. With Lubotsky's *Concordance* and Mayrhofer's 1979 publication and *EWA* we find several names in the *RV* too with *priya*- as first member and some of them repeating in Bks 1, 8-10: *Príyakṣatra* (8.27.19); *Priyajāta* (8.71.1); *Priyádhāma* (1.140.1); *Priyámedha* (1.45.4; etc; 8.5.25; etc; 10.73.11); *Priyáratha* (1.122.7); *Priyávrata* (10.150.3); *Priyasás* (9.97.3). As there are many more occurrences, the list is selective.

Mayrhofer gives in addition (*KEWA* III, 174) some compound names with *vásul vohu*- (vaŋhu) as first member (**e13**): e.g. *Vásumanas* (poet of 10.179.3) and *Vohu.manah*-; *Vásurocis* (8.34.16) and *Vohu.raocah*- etc. In Avestan the *vaŋhu/vohu*- as prefix is very common: e.g. *Vohu.asti* (also in Mayrhofer corresponding to V *vásuátithi*-), *Vohuštra*, *Vaŋhuðāta* etc. In the *RV* the corresponding stem is seen in *Vásuáruta* (poet, 5.3.6), *Vasuyu* (poet 5.35), *Vásu* (poet, 9.80-82), *Vásukra* (9.28.30 & poet of 10.27) etc.

The word átithi (=Av asti-), on the other hand, as seen in Av Vahuasti, occurs in the RV in many compound names as second member: Devātithi (poet, 8.4 etc); Nīpātithi (8.34); Brahmātithi (8.5); Medhātithi (poet, 1.12 etc; 8.1 etc; 9.2 etc); The word vásu too occurs as second member (e14): Prabhu-vasu (9.35.6); Viśvā-vasu (poet 10.139) etc; also in Avestan Api.vohu, Fradat.vaŋhu etc, etc.

Yet another case of naming is the Sanskrit suffix -āyana denoting 'descendant of' and usually demanding vrddhi in the stem (e15). MacDonell gives (1916: 261) as example the patronymic Kāṇvāyana (RV 8.55.4). Avestan has several names with this suffix - Dāṇaiiana, Friiana, Jištaiiana etc (in Mayrhofer 1979). In the late Books of the RV and in later texts we find several names in this category: Gaupāyana, Nārāyana, Yāmāyana, Vātāyana (RV 1.24; 160 etc; 10.56; 90 etc; Tāṇḍya Br) etc.

All these names, compounds and patronymics, as Hopkins observed long ago, occur only in the late Maṇḍalas. Obviously then, if the IAs had left the ancient unitary IIr community, as is commonly promulgated by the mainstream Doctrine (and Schmitt), they would have carried with them such names and used them in the early Maṇḍalas as well. Therefore these names also, like so much else, constitute irrefutable evidence against the Doctrine, independent of conjectural reproductions and ambivalent data. The names are far too many and their incidence very frequent to invoke here coincidence or the convenient maxim "absence of evidence is no evidence of absence". So, we must conclude that the Iranians distanced themselves from the IAs after it became fashionable to use *priyá* and *vásu* either as first or second members in compounds of proper names; this implies estrangement at the very earliest during the composition of hymns in Maṇḍala 8.

Some of Schmitt's 'irreversible' cases.

10. Before presenting more cases, let us examine some few examples from those given by Schmitt and see if we can discover different interpretations. But I say at the outset that, indeed some Avestan forms may be more archaic but this fact alone does not make the Avestan language as a whole more archaic than Vedic.

First, I agree fully with some of his examples in that they show an archaism lost in Sanskrit. For instance, $huuar^3$ 'sun' has Gs (=Gen Sing)⁷ $h^v \bar{\partial} ng$ (p19) showing its heteroclitic class; Sanskrit has $sv \bar{\alpha} r$, Gs $s \bar{\alpha} ras$ (cf $a \bar{\alpha} ras$) but, unusually Ls $sv \bar{\alpha} ras$ (unlike $p \bar{\alpha} r > pur - i$) like stems in -an (as with $a \bar{\alpha} ras$) but, unusually Ls a ras (unlike a ras) like stems in -an (as with $a \bar{\alpha} ras$) but, unusually Ls a ras (unlike a ras) like stems in -an (as with $a \bar{\alpha} ras$) or a ras (unlike a ras) like stems in -an (as with $a \bar{\alpha} ras$) or a ras) like stems in -an (as with a ras) of ten: so Beekes 1988:19) crops up frequently where it should not normally be, as in Ls a ras) of a ras (=So a ras). So a ras could be another red herring.

The first example has to do with laryngeals which in fact do not exist in Vedic or Avestan. So we bypass it. In any case, we meet them in the next example. The second example also touches on laryngeals (the * h_2 one) and is concerned with the "irregular paradigm", as Schmitt calls it, of 'father'. He deals with various speculations about Proto-IIr, admits uncertainty but thinks "more genuine" the "irregular Avestan paradigm" with its many variant stems (OAv/Yav⁸ Ns $t\bar{a}/pt\bar{a}$; Acs $p^atar\bar{a}m/ptar/pitaram$; Ds $f\delta r\bar{o}i$, $f\theta rai$, $pi\theta re/pi\theta re$; Np Yav only, $p^atar\bar{o}$; Dp $ptar^abiio$). He points out that several good manuscripts favour the stem pt- for Acs and Np, which is found also in YAv in Ns $pt\bar{a}$ and Dp $ptar^abii\bar{o}$ (Schmitt, 12-13). In fact, in the end, we don't know what the PIIr stem was. (See also Hale 2004:748; Kazanas 2009a:19-20).

However, two aspects are not mentioned by Schmitt.

a) The * h_2 performance in Vedic as conceived by comparativists. First, we should note that Latin too has the monotonous pit- stem (not only pat- as the G⁸ pat-) in Ju[s]-pitar and Mars- pitar; so it is strange that Vedic, with its strong tendency to level vowels down to a/\bar{a} , has, as Schmitt says p.20) "repeated pit-". Second, the laryngeal h_2 is supposed to give a vowel but also aspiration to the preceding morpheme: thus alleged IE * $dhugh_2tr$ (Fortson 2004: 204) gives Gmc $thugat\bar{e}r$ and V duhitr while alleged IE * $sth_2to > S$ sthita and * $pleth_2 > S$ prathiman. However, alleged PIE * $ph_2ter > S$ pitr without aspiration! What happened to the IE phonological "law"? Why is it not working here?... No explanation is given. But perhaps things are not quite as IE linguistics imagines them to be?

In any event, it is best to deal with actualities rather than conjectural reconstructions. Schmitt's discussion is based on imaginary constructs not realities.

b) (e16) The termination -tar. In Sanskrit the word is not pitār but pit \hat{r} (like duhit \hat{r} , bhr $\hat{a}tr$, d $\hat{a}tr$, nétr etc). Schmitt does not give the Acp which, by analogy with dataro, would end in -taro (or -taro as is its attested Np po. taro). Vedic has pi-taron. If the aro is not original, then it is extremely difficult to see how Av dataro (eV d(h)ataro) 'giving' gives Gs dato0, or, to take another attested example, atar 'fire' gives Ins ato10 (cf S dato17). These formations can have resulted only from a stem ending in -tr1/tr-. But since we have Acp -taro1aro2, the original form stares us in the face. It is a well-known sandhi

⁷ Hereafter the cases are in capital and the numbers in small letters: Ac = Accusative; Ab = Ablative; etc; s = singular; etc. (see also n 1.)

⁸ Old Avestan and Young(er) Av; G=Greek; S=Sanskrit; L=Latin; Gmc=Germanic (Gothic, Old High German, Old Norse, Old English).

(=combination) phenomenon in Sanskrit that $\tilde{r} + V^0$ (other than \tilde{r}) = rV (other than \tilde{r}). So, $d\bar{a}tr$ - or pitr- + \bar{a} /e (for Ins and Dp) give $datr\hat{a}$ or $pitr\hat{a}$ and $d\bar{a}tr\hat{e}$ or $pitr\hat{e}$ respectively - as happens more or less in Avestan.

Now, r is very unstable and requires great attention in its pronouncement; otherwise it very easily gets distorted into $\frac{\partial r}{\partial r'} \frac{\partial r}{\partial r'$

This, indeed, is an irreversible movement – and not unverifiable reconstructions upon which nobody would seriously bet his/her life. This is not to deny, as said earlier (§1), that Avestan has, like other branches, archaisms lost in Vedic; but these certainly do not indicate that the IAs migrated c1700 from Iran to Saptasindhu.

c) I shall return to r but before that, let us examine example no 6 in Schmitt (p 10). This is the contrast S $v\bar{a}c$ - and Av $v\bar{a}x\bar{s}/v\bar{a}h\bar{s}$. Schmitt connects the Avestan form with Latin vox, as well. First, he rightly points out that whereas Vedic inflects $v\bar{a}k$, $v\bar{a}cam$, $v\bar{a}c\bar{a}$, $v\bar{a}ce$ etc, Avestan correspondingly has $v\bar{a}x\bar{s}$, $v\bar{a}cem/v\bar{a}cim$ (YAv), vaca, $vac\bar{o}$. He explains that Vedic retains the long - \bar{a} - throughout, innovating in not showing ablaut, i.e. strengthening in strong cases Sing. nom, acc and weakening in the others (sing/pl Ins, Dat, etc) as Avestan does.

Yes certainly, Avestan does show this differentiation in this case but it does not do so in many other cases like $spa\check{s}$ 'spy' $druh\check{s}$ 'fiend', $v\bar{\imath}\check{s}$ - 'settlement' and YAv has Pl nom/acc $v\bar{a}ca$ strong, but also vaca weak! Neither does Vedic with $j\bar{a}s$ 'child' druh, vi-/ sam- $r\bar{a}j$ (Av - $r\bar{a}z$ -), $vi\check{s}$ and many others.

What is quite revealing, however, is that while Av $v\bar{a}xs$ - is masculine, Av nominal compound $pa^itivah\check{s}$ - is feminine like Vedic $v\bar{a}c$ -! So the question becomes now "Is the Avestan declension here, a genuine archaism?" Why have two genders here? To me it seems that Avestan here, as often elsewhere, shows innovation in having a masculine noun.

The nom. $v\bar{a}h\check{s}$ certainly connects nicely with L $v\bar{o}x$ but differs from Gk $\acute{o}p$ -a $\acute{o}\pi$ - α ($\acute{e}p$ -os $\acute{e}\pi$ - $o\varsigma$) and contrasts with Toch A wak and B wek. So, some branches decided to keep the ending -s which then coalesced with the final consonant and others dropped it. But unless we have PIE itself we may conjecture to our heart's delight but never really know.

d) In among Schmitt's later examples is the Av *taršu* 'dry', cognate with Gmc *burzu* 'dry' and, of course, S *tṛṣū* 'thirsty' (p18). It is quite probable that, as Schmitt writes (also EWA 1991, 9), this meaning 'dry' is original and 'thirsty' secondary. But who shall bet his/her life on this?

Here we have many additional interconnected facts. Vedic has *dhánu*, *dhánva* also for 'dry land' and $\dot{s}\dot{u}\dot{s}ka$ 'dry': the former are not found in Iranian, the latter appears as AV $hu\dot{s}ka$. Sanskrit has the verb $\sqrt{\dot{s}u\dot{s}} > \dot{s}u\dot{s}yati$ 'becomes/is dry' also 'languishes' and Avestan the verbal stem $hao\dot{s}$ - 'being dry'.

But Sanskrit has also the verb *tṛṣyati* 'thirsts' (causative *tarṣayati*, etc etc). This is present in several IE branches, with the same meaning (e.g. L *torrēre* 'thirst', Gothic

paúrsjan 'thirst') but is not found in Iranian at all. Thus taršu stands isolated by itself! Schmitt does not mention this simple fact. But he does, after many more examples, bring in the Av verb par³t- 'to fight' saying it is absent in Vedic (p19). This is prejudiced selectivity again because Vedic has prt 'fight' and prtanā 'striving'. This appears in Avestan as pəšanā-: but how does this derive from par³t-? How does par³t- produce pəšanā-? Must we not suppose that here we witness (e17) two lines of development later (not earlier) than Vedic? I certainly thing so. Furthermore, Vedic has the verbs prtan-yáti and (denominative) prtanā-yati. And in all these Avestan lexemes the retroflex/sonorant r has been lost – something grossly ignored by mainstreamers like Beekes and Schmitt.

- e) This kind of selectivity is shown in many more cases. E.g. the Av mar²ti 'death' is derived by Schmitt from PIE *mr-ti and equated with L mors and set against S mrtyú (p19). But S does have mrti 'death' as well; this is found in post-Vedic texts. However, to take an analogous case, praśná appears in Vedic texts only with the meaning 'question'; but it appears later in the sense 'turban' which links up with G plekō, L plect- and Gmc flehtan, all 'knit, plait'! Consider also that kéśa 'hair' (as an independent stem) does not appear in RV but késín appears in the early 3.6.6 etc. while -keśa itself does appear as second member in a compound. Nobody could claim that praśna and kéśa were not in Vedic: thanks to other evidences all we can say is that they were not used in the RV. The same holds for mrti. Consequently Schmitt's example is utterly pointless, based on biased selectivity.
- 11. We could examine many more examples from Schmitt but I shall take up only two for different reasons. (a) The cognates S $m\bar{\iota}dha$ 'reward' Av $m\bar{\iota}zda$ (=G misthos $\mu\sigma\theta\delta\varsigma$) (p6) and (b) S $sn\bar{a}van$ 'sinew' and Av $sn\bar{a}uuar^{3}$ (p16).
- a) This cognation $m\bar{t}dh\acute{a}/m\bar{t}\acute{z}da$ is important for Schmitt because he thinks that is shows an irreversible movement from archaic Av $m\bar{t}\acute{z}da$ to S innovative $m\bar{t}dh\acute{a}$ (p23, note 13). As usual, in his presentation he drags in PIE, IIr and PIr, none of which are attested anywhere, and thus "proves" that the morpheme \acute{z} in Avestan is original and therefore Sanskrit $d\dot{h}$ was, according to the mainstream Doctrine, borrowed from Dravidian. (It never occurs to mainstream theorists that this method is utterly unscientific, not to say ludicrous or dishonest since PIE etc are sheer conjectures of modern scholars.)

And if we go a little further, we find more incongruous facts. (1) S \sqrt{lih} (or \sqrt{rih}) 'licking' has ppp $l\bar{\iota}dha$ (as with \sqrt{mih} 'shedding water' $>m\bar{\iota}dha$). But Av has preserved little beyond $ra\bar{e}za^ite$ '(s)he licks' (with N Persian $li\check{s}$ -). Greek has leichei $\lambda\epsilon i\chi\epsilon\iota$ '(s)he licks' and many derivatives but no *lisch/leisch- (as in mi-s-thos). (2) Then $\sqrt{i}h$ 'striving for' > ppp $\bar{\iota}hita$; Av iziia-/iziieiti has -z- for S -h- and G $\bar{\iota}cha$ - $/\bar{\iota}chai$ - $n\bar{o}$ $\bar{\iota}\chi\alpha$ - $/\bar{\iota}\chi\alpha\iota\nu\omega$ (but, again no * $\bar{\iota}sch$ -) and turning the verb into one of the -n- classes! (3) \sqrt{snih} 'becoming oily, loving, attached' has ppp snigdha 'sticky'. Avestan has $sna\bar{e}za$ - but little else; in

fact, it does not appear in Beekes' Av root-list (1988) but Kellens (1995) gives it as *snij* 'neiger' French for to 'snow'.. Greek has *neiphei* νείφει (and *niph*-) 'snows' but, again, little other than *nipha*- 'snow-flake'. In fact all IE branches have very little other than some basic forms meaning 'snow' or 'rain'. No G **nei/ni-s*- (as in *mi-s-thos*).

Consider another case: S $n\bar{\iota}d\acute{a}$ 'nest', Arm nist, L $n\bar{\iota}dus$, Gmc nest, Middle Irish net etc. Here it is thought that the origin was PIE *ni-sed- 'sit, rest down'. The nouncognation is not attested in Avestan despite the verbs (had-) $ni\check{s}hida$ -, in $hazdya\underline{\iota}$ - (note the sprouting of -z- from nowhere!), or $ni\check{s}a\eth{a}y$ -. Sanskrit has many derivatives from $ni\check{s}ad$ - and $ni\check{s}id$ - (e.g. $ni\check{s}ad$ (-ana) 'sitting (down)', $ni\check{s}ed$ -ivas 'who has sat down' etc), but linguists think that $n\bar{\iota}d\acute{a}$ came from IE * $nizd\acute{a}$ - (> $nizd\acute{a}$ -), from a hypothetical "zerograde *-sd-" of the root *(ni-)sed- (Fortson 2004: 73). Sanskrit has no trace of such a zero-grade – nor any other one of the ancient IE tongues (except Gmc ne-st and Arm ni-st)! Thus we are asked to believe that although Sanskrit almost everywhere displays an unparalleled retentive power, here it has lost the verb-stem and has preserved only the prefix ni- and the end of the stem -d turned into retroflex -d- under the influence of Dravidian, since IE had no retroflex consonants according to the Theory.

Now we know from attested forms that in Sanskrit, final -h in noun-stems mutates into velar k/g (while initial consonant is aspirated – as in duh 'milking' > dhugbhis); or into retroflex t/d as in lih 'licking' > -lit and -lidbhis for madhulih 'bee'.

Thus Sanskrit is quite consistent regarding $\sqrt{lih} > l\bar{\iota}dha$ and other derivatives, from the available evidence, which is more than can be said of Avestan and Greek. Root-noun *snih* 'dampness, moisture' has Ns *snik*; so this too is consistent ($\sqrt{snih} > snig-dha$). Root-noun *mih* 'mist' has no decisive attestations but the root \sqrt{mih} has both velar k/gh and retroflex $dh : megham\bar{a}na$ and $m\bar{\iota}dhvams$ - but all root nouns in -h have -d- before the middle endings with -bh-. And the only dental -t-su in Lp is thought to have been -t (Macdonell 1916: 56, §81).

Of course, the presence of -z- in Av $m\bar{\imath}zda$ is supported by G $misth\acute{o}s$, Gmc $mizd\bar{o}$ and Sl $m\bar{b}zda$. However, this does not indicate a movement out of Iran into Saptasindhu nor an irreversible process. Sanskrit has $l\dot{h}$ as alternative to $d\dot{h}$ so that $m\bar{\imath}d\dot{h}\acute{a}$ is found as $m\bar{\imath}l\dot{h}\acute{a}$ also. Now, an original, say, *-o- which would give $d\dot{h}a/l\dot{h}a$ could well have given - $z\dot{a}d$ - and with mispronouncement and simplification -sth- or any other similar conjunct.¹⁰

One more point. The stem $mi\xi d$ -/misth- etc in all the other branches have no primary cognates nor roots. Greek has $misthó\bar{o}$ 'I engage one for payment' but this comes from misthó-s rather than the other way round. The other branches have neither verb nor nouns related. Only Sanskrit has $\sqrt{mih} > m\acute{e}hati$, fut $meksy\acute{a}ti$ and ppp $m\bar{t}dha$ which is the same form as that of 'reward'. On the one hand it is very difficult to see how the two meanings ($m\bar{t}dha$ 'contest, prize, striving' and $m\acute{e}hati$ 'urinates, sheds water') relate. On the other, five other branches have the cognate verb for 'urinating' with a sibilant or affricate or velar: Av $ma\bar{e}za^iti$, Arm mizem, G $omiche\bar{t}n$, L meieze/mingere, Gmn $m\bar{t}gan$ Lth $m\bar{t}sti$, Sl mistati and Toch miso. The Sanskrit verb has the G-ch- in $m\acute{e}$ -h-ati and the Gmc and L -g- in the Middle ptc me-gh- $am\bar{t}na$ or in the Sigmatic aor $\acute{a}mi$ -k-sat and of course its $m\bar{t}$ -dh-a but not a sibilant 11. Furthermore Greek

¹⁰ It is of humorous interest that Shakespeare has Kent in *King Lear* (2.2.35) call a nefarious character "thou zed, unnecessary letter"!

¹¹ Note the inconsistency, not to say mess, with regard to the "law" of palatalisation and the division into *satəm* and *centum* groups. Latin (*centum*) has the affricate -z- as well as velar -g-; Toch (*centum*) has palatal -ś-; Av, Lith and Sl (*satəm*) have velars as well! Sanskrit (*satəm*) has no palatal!

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has $omichl\bar{e}$ ομίχλη 'cloud mist' (< omich-) and Sanskrit has mih- (root-noun) and $mihik\bar{a}$ 'mist' and megha 'cloud'. But all others lose the /h/ of the verb-stem: Av $ma\bar{e}\gamma\alpha$ (=S $megh\acute{a}$ -), Arm $m\bar{e}g$, Lith $migl\acute{a}$, Sl $m\ddot{b}gla$.¹¹ So we have quite a mixed salad of stemendings. There is no reason or consistency in all this. They are all related, obviously, but how?...

From the available actual evidence it is highly doubtful that Av $m\bar{\imath} \not z da$ is the prior or closer to the original form and, whatever be the case, it does not show a movement of IAs from Iran to India.

A final point. It is taken for granted that PIE had no retroflex (= 'cerebral' in the Indic tradition) consonants. But it is accepted that it had \check{r} and ra. If PIE had these two retroflex sounds why should it not have the others, i.e. the five consonants found in Sanskrit?... It is only the highly defective reconstructions that forbid it because of the now discredited Aryan Invasion Theory which was the unacknowledged basis of the reconstructions. The AI Theory has been abandoned ('Immigration' replacing now 'Invasion') but the linguistic superstructure remains intact and dominant. Yet, H. Hock stated succinctly that "retroflexion is found in many European forms of speech" (1991: 78). And no linguist disagrees. So there is nothing very exotic or Dravidian about this phonological phenomenon in Europe¹².

b) Schmitt rightly points out that Avestan retains the heteroclitic *snāuuar* 'sinew' (-*r/n*- stems like S *áha-r/n* 'day') against the S *snāvan* which is declined like other neuter nouns in -*an*. True, few traces of heteroclitic stems remain in Sanskrit compared to Hittite, which has many, but few with cognates in the other branches, and it does not have this particular stem. However, a -*snāvi-rá* 'without sinews' (*Iśā Up. 86*) is probably not one of them; this is most probably an adjective with the suffix -*ra* like *áva-ra*, *ug-rá*, *kru-rá* etc. Sanskrit has also *smāyus* and (later) *smasā* for 'sinew, tendon', so it should not be surprising that **snāvar* (or whatever) did not make it into the Vedic texts. (The word *kéśa* 'hair' also is not found in the *RV* but the adjectives *késin* (early 3.6.6 etc) and *kéśavant* (10.105.5) do appear there). That Sanskrit did have it is indicated by the presence of cognates in other Indoaryan branches: Pali *nhāru* (as Schmitt notes); Prākrit *nhāru*; Nepali *nahar*; also, most telling, Marathi *sāvar* 'muscle, sinew'.

Obviously this situation can hardly mean that Avestan is more archaic or, much more, that the IAs came to Saptasindhu from Iran.

Vedic n_r and nara and PIE* $h_2ner(?)$.

- **12.** On the contrary, apart from the evidence presented so far here, the examination of the phonology of the Vedic and Avestan would confirm in numerous instances the posteriority of Iranian and the *Avesta* itself. Having examined the nominal stem *pitṛ*, let us now look at the sonorant *ṛ* and the stems *nṛ* and *nara*.
- (e18). The PIE reconstruction of this stem for 'man' is $*h_2ner$. This is given to explain the a- in G a- $n\acute{e}r$ and anar in Phrygian, while Oscan has ner-um (Roman name of Ner-o), Welsh ner, Albanian njer, Armenian air and Avestan nar- $/n\bar{a}$ -. Vedic has both
- ¹² MacDonell, precursor of many adherents to the mainstream linguistic Doctrine wrote: "The cerebrals [= retroflexes] are entirely secondary, being a specifically Indian product and unknown in the Indo-Iranian period. They are probably due to aboriginal, especially Dravidian influences" (1916: 8). Nobody knows what Indo-Iranian was like. No aboriginal or Dravidian influences are observable in the retroflexion of "many European forms of speech".

nṛ and *nára*. In other words no other IE branch western or eastern has a stem with *an*-(Arm *air* is close).

Let us know look at the incidence of nr and nara in the RV. IE linguists comment profusely on nara and hardly ever on the declension of nr as if nara is primary and nr an anomaly to be consigned to non-existence. It is yet another paradox that IE linguists refuse to face squarely. The paradox consists in the simple fact that while the incidence of nara and nr is spread across all the Maṇḍalas, the RV has only two compounds with nara+ and more than 15 with nr+.

If, as the received doctrine has it, nara (< *IE h_2ner !) is older than nr and nr is an IA innovation, or whatever, but, in no way, the origin of nara, then we should find in the RV more compounds with nara+ as first member. BUt the opposite is true, as shown by Lubotsky's Concordance... There are only two nara- compounds: $nar\bar{a}$ -śáṃsa 'men's desire/praise' (it is an epithet of Agni, occurring twice in Bk 2, once in Bk 3, once in Bk 7: i.e. only 4 times in early and middle) and seven times in the late Books); nareṣtha-'sought/worshipped by men' (only once in 4.33.8a) – a total of 12. As a list of all the nr-compounds would be too long, I give a selection: nrcákṣas 'watching men' (more than 10 times spread in all Maṇḍalas); nrjit 'conquering men' (2.21.1b); nrtama 'most manly' (17 in early and middle Bks and 10 in late); nrpáti 'men's lord' (9 in early Bks, 8 in late ones); $nrpátn\bar{t}$ (1.22.11b); nrpésas 'man's beauty/form' (3.45); nrvát 'having men' (16 in early and middle Bks, 6 in late ones); nrsádana 'men's assembly/ residence' (3 early, 3 late); nrhán 'man-slayer' (4.3.6d; 7.56.17c); to these should be added nrbāhú, nrmádana, nrváhana, etc: a total of over 90.

Thus we have a total of 12 occurrences for *nara*-compounds and more than 90 for *nṛ*-compounds.

Here, one might argue that the older stem *nara* is falling in desuetude while the younger *nr* ascends in frequency. But what we find is that in post-rigvedic texts the *nr*-compounds decrease and the *nara* ones increase dramatically: e.g. *nara-kāka*, 'crow-like man', *nara-tā/-tva* 'manhood', *naradeva* 'king, men's god', *naranātha* and *narapati* 'king, men's lord', *narayāna* 'man-drawn cart', *narādhi-pa/pati* 'king', *narottama* 'best of men' etc etc.

Then OAv has nərəbiias-ca (YAv $nərəbii\bar{o}$). Here the $-ər\bar{o}$ - seems to reflect -r-. Sanskrit has no narebhyas for Dp but only $nr\bar{r}bhyas$ in early and late Maṇḍalas; in fact all oblique cases have the stem nr- (Ac $n\bar{r}n$, Ins $nr\bar{r}bhis$, Ab $nr\bar{r}bhyas$, G $nrn\bar{a}m$, L $nr\bar{r}su$ – all p); in post-rigvedic texts $nar\bar{a}m$ is also found.

Moreover, the forms nar-a, nar-ya, 'heroic, human' $n\bar{a}r-a$ 'human', $n\bar{a}r-\bar{\imath}$ 'woman' etc, can be seen as quite normal derivatives, primary or secondary $(r --> guṇa ar \text{ and vṛddhi } \bar{a}r)$. Consequently, nr is the prior form and $*h_2ner$ is utterly irrelevant. This Av nar- would seem to correspond to the derivative nar-a. Although S r does sometimes appear as $ar(^{\circ})$ - in Avestan, the usual correspondence is ar e.g drk-/s, dar - s-; prt, par t-; mrta, mar t-a- etc.

Phonological changes favouring Vedic anteriority.

13. As we saw earlier in $\S2$, the sonorant r in Sanskrit and its mutations in Avestan is the first example of phonological change used by comparativist Beekes in the early pages of his Avestan Grammar (1988) to show that many words in this language had "more archaic forms." He then took on the poetic metres and subsequently dealt more extensively with other phonological changes. Indeed, if one looks at any Avestan Grammar (Jackson 1892, Geiger & Kuhn 1903, Spuler, ed, 1958, Hoffmann 1987, etc),

one will discover very soon numerous similar mutations showing, like the aspects we have so far examined, that Sanskrit, generally, is indeed more archaic. I shall present only a few cases because after a while the exercise becomes tedious.

(e18) Ns ending for masculine in Avestan is $-\bar{\partial}$ and $-\bar{\partial}$: e.g. OAv $vas\bar{\partial}/vas\bar{\partial}$ 'willingly' (= S vas- 'wanting'), $haz\bar{\partial}/haz\bar{\partial}$ 'might (= S sahas), $sar\bar{\partial}/sar\bar{\partial}$ 'head' (= S sahas) etc. So also pronouns: e.g. $k\bar{\partial}/k\bar{\partial}$ 'who?' (= S sah), $y\bar{\partial}/y\bar{\partial}$ 'who' (S yas). However Avestan has kas-ca/cit 'who-ever'; yas-ca 'he who'; even has -cit (= S sah > sa/so) 'he'. Surely this indicates that the -as ending is original in IIr and was mostly lost in Avestan ...

And if original here, why not original elsewhere? There is no trace of -os in Sanskrit or IIr. On the contrary, Sanskrit -a often turns into -o in Romani or Gypsy (as well as in Avestan): e.g. S $\pm sansan$ Supply $\pm sansan$ Supply Supp

- (e20) Beeks accepts that Sanskrit retains the more archaic form in many more cases, He writes, for instance, that Avestan has long \bar{u} for short "but precise rules cannot be established" (1988: 42): e.g. $dr\bar{u}j\bar{o}$, drujam (S $dru\hat{u}h$ -), $y\bar{u}jan$ -yuxta (S $yu\hat{j}$ -) etc. So also \bar{t} for short: e.g. $\bar{t}\tilde{s}ti$ (S $i\tilde{s}t\hat{t}$), $v\bar{t}s$ (S $v(\hat{s})$, $v\bar{t}spa$ (S $v(\hat{s}va)$) etc. All these examples are in Old Avetan, as are several cases of shortening internal $-\bar{a}$ -: e.g. $nan\bar{a}$ (S $n(\hat{a}n\bar{a})$), yavat (S $y(\hat{a}vat)$) etc.
 - (e21) S -a- often appears as $\bar{\partial}/i$: e.g. $yam = OAv \ y\bar{\partial}m/yim$, etc. Then
- (e22) S -e- appears not as \bar{e} or $\bar{e}i/\bar{a}i$ but -oi-: e.g. S $y\acute{e} = y\bar{o}i$ ($ya\bar{e}ca$), $g\acute{a}ve = gavoi$, $h\acute{a}stebhyas = zast\bar{a}bya$ etc.
- (e23) We find an epenthetic nasal and clusters ng, ngr, $\bar{\rho}ng$, $\bar{\rho}ngh$, nghu (LAv ηh): e.g. janghati (S = gam-/gant-), $ma\eta h\bar{a}$ (= S $manas\bar{a}$), $m\bar{\rho}ngh\bar{\iota}/ne\eta hi$ (S man-), Gs of masc. pronoun $ye\eta he$ besides yehe (= S $y\acute{a}sya$), also Abs fem. $ye\eta h\bar{a}t$ and loc $ye\eta he$ (S $y\acute{a}sy\bar{a}s$, $y\acute{a}sy\bar{a}m$), vanhah- besides vahyah- (=S $v\acute{a}s\bar{\iota}yas$), and so on and so on.
- (e24) There are many more like $abhi = \text{Av } a^i\beta i$ 'unto, to'; $s\acute{a}rva = ha^urva$ 'whole'; $ty\acute{a}ja$ 'relinquishing' = Av ibyejo (and a = e) 'destruction'; vaktra = vahadra 'word'; $yahv\bar{\imath} = yez^iv\bar{\imath}$ 'young one' (fem), etc, etc. Or $-ya = \bar{\imath}$ and $-va = \bar{\imath}$ as in S manyamāna-'thinking' = ma^inimna ; $t\acute{a}masvantam = tamanhuntam$; etc, etc.

Parallels in poetic metres.

14. It is difficult to see, after examining all these phonological devolutions in Avestan, how comparativists like Beekes and Schmitt can claim that Avestan is more Archaic than Sanskrit¹³. However, there is another type of evidence demonstrating the posteriority of Avestan.

On pages 5-8 Beekes (mostly following Monna 1978) analyses the structure of the five $G\bar{a}\theta\bar{a}s$, ascribed by tradition to Zara θ uštra himself and constituting the oldest part of the *Avesta*. The five $G\bar{a}\theta\bar{a}s$ comprise altogether Yasnas 28-34 and 43-53, excepting 52. This becomes the basis of the division of the language into Old or Gathic Avestan and Late or Young Avestan. (See also Watkins 2001: ch 21.)

Y(asnas) 28-34 constitute the 1st $G\bar{a}\theta\bar{a}$ Ahunavvaiti and have stanzas of 3 lines,

¹³ But not all make this claim. Iranianists Humbach and Hoffmann do not, as far as I have seen.

the norm line being 7+9 syllables with some (deliberate) deviations (i.e. 6/7 + 8/9/10) in all Yasnas. The stanza structure is thus 3 X 16. (This resembles the rigvedic Mahāpankti which is 6 X 8.)

- Y 43-46, 2nd $G\bar{a}\theta\bar{a}$ *Uštavaiti*, have stanzas of 5 lines, the norm being 4+7 syllables. Here too are some deviations of 3/4 + 7/8. (The structure of 5 X 11 resembles the rigvedic Atijagatī or Śakvarī.)
- Y 47-50, 3rd $G\bar{a}\theta\bar{a}$ *Spəntā.Mainyu*, have stanzas of 4 lines, the norm being 4+7 with some deviations of 3/4/5 + 6/7/8. This structure (4 X 11) resembles the rigvedic Tṛṣṭubh, which, however has the caesura after the 7th syllable.
- Y 51, 4th Gā θ ā *Vohu xša\thetara*, has stanzas of 3 lines the norm being 7+7 with only two deviations of 6+7. This structure (3 X 14 or 6 X 7) has really no strict equivalent in the *RV* but resembles a catalectic Mahāpankti.
- Y 53 "presents more difficulties than the others' (Beekes, p 7) because it has a mixed, rather complex metre. It has sequences of 7 syllables interspersed with lines of 5 syllables or lines of 7+5 and 7+7+5 with negligible deviations (Beekes, 7-8). The structure can be 12, 12, 19, 19, or 12, 12, 7, 12, 7, 12. There is nothing exactly equivalent in the *RV* but obviously it approaches the Atiśakvarī or Atyaṣṭi or Atidhṛti mixed stanzas.
- A. MacDonell examines the Vedic metre in his *Vedic Grammar* (1916: 436-447) and points out that there are similarities in the structure of the two traditions without analyzing them too thoroughly. It is his text that I consulted in detail. Now, it is obvious that the third $G\bar{a}\theta\bar{a}$ Yasnas 47-50 use the Tṛṣṭubh stanza which has 4 lines of 11 syllables. The Gathic stanza has the caesura after the 4th syllable while the Vedic one has the caesura after the 7th. The Tṛṣṭubh is the commonest and one of the very oldest stanzas, found in about two fifths of the *RV*. This and the Gāyatrī stanza (3 lines X 8 syllables), which is just as old and the second commonest one, and forms one quarter of the *RV* Saṃhitā. This is found in some post-Gā θ ic parts of the *Avesta*.
- (e25) However, of interest to us are the other stanzas, starting with the 1st $G\bar{a}\theta\bar{a}$ and the structure of 3 X 16. This corresponds to the rigvedic Mahāpankti (strictly 6 X 8). The importance of this lies in the incidence of the rigvedic stanza in Maṇḍalas 1 (only the last hymn, 191), 8 and 10.
- Y 43-46 have the structure 5 X 11 which corresponds to 5 Tṛṣṭubh lines, all with the caesura after the 4th syllable as in the first verse; but this is, in fact, the structure of the Atijagatī or Śakvarī stanza, as termed by the ancient metricians. This stanza occurs in both early Maṇḍalas (6.2.11; 4.6 etc; 7.50.4) and late (5.2.12; 10.115.9).
- Y 47-50 have, as was said already, the Tṛṣṭubh stanza which occurs with great frequency in all the Maṇḍalas.
- Y 51, the 4th $G\bar{a}\theta\bar{a}$, with its 3 X 7+7 has no exact equivalent in the RV but does resemble the catalectic Mahāpankti.
- Finally, Y 52, the 5th $G\bar{a}\theta\bar{a}$, with its longest and slightly complex stanzas of 12, 12, 19, 19, or 12, 12, 7, 12, 7, 12 approaches the rigvedic mixed, complex stanza of Atiśakvarī (5 X 8, 12, 8) or Atyaṣṭi (2 X 12, 3 X 8, 12, 8) or Atidhṛti (11, 16, 2 X 8, 7, 11, 7). These too occur only in the late Maṇḍalas 1, 8, 9, 10.

Thus, again, if the IAs had separated from the common IIr community, the early rigvedic hymns should have all the corresponding stanzas from the old Gaθic yasnas, i.e. the Mahāpankti and the mixed ones; but, these are absent from the early Maṇḍalas.

On the contrary they are found in the later hymns. This means that the *Avesta*, the older parts of it, were composed after the corresponding metres had been developed in the *RV*. In other words, this evidence adds to the indications that the Iranians branched off from the Saptasindhu – after the Kanva hymns in Bk 8.

Sarasvatī and Haraxvaitī

15. There are many more interesting aspects we could look at but enough has been adduced. If one is not convinced by the evidence presented thus far, then nothing short of a miracle would produce conviction. Here I shall deal with one final case, that of the much discussed *Sarasyatī* /*Hara**vaitī.

First, let me recount the details of Vedic Sarasvatī which even vedicists disregard and sidestep with the deliberate, active ignorance that characterizes many mainstreamers when their dearmost and unquestioned ideas are doubted by non-mainstreamers. Sarasvatī is the name of a large river, a goddess and a celestial stream. The river is mentioned in all books except the fourth and almost everytime it is a very large river that nourishes the people (usually the tribe of the Pūrus but not exclusively) inhabiting the regions adjacent to its course: *RV* 6.61, an early hymn, stresses this; as (6.52.6) it is fed by three or more other rivers 2.41.16, a middle hymn, calls Sarasvatī 'best river, best mother, best goddess'; late hymns 10.64.9 and 10.177 call upon her as great and nourishing, providing sustenance and prosperity. Then, the White Yajur Veda (34.11) states that it is augmented by five tributaries!

An important point is that the river is said to flow "pure from the mountains to the ocean" (7.95.2). Various doubts have been raised regarding this version but now many archaeologists say that the river flowed down to the ocean before 3600 BCE (Possehl 1998; Lal 2002; Allchin B 1999) and scientists have traced the full course with satellite photographs (Sharma et al 2006). Danino gives the full story and adduces the examinations of the underground water-deposits (2010)¹⁴.

But archaeologists tell us also that the river dried up completely c 1900 BCE due to tectonic adjustments, shifts of river courses and other climatic changes (Rao 1991; Allchins 1997; *et al*). Due to the subsequent desiccation of the region, the inhabitants moved eastward.

Yet, the mainstream Doctrine would have us believe that the Indoaryans arrived from Iran in this deserted region c 1700-1500, settled here and composed hymns praying to and praising a dried-up river as the "best river" – while the natives had left! This is not merely unreasonable but utterly absurd. But the Doctrine has even subtler aspects. Some linguists claim that the name Sarasvatī was given to this river (its desiccation notwithstanding) in memory of the Arachosian river Haraxvaiti (in Iran) which the Indoaryans had left behind. Here now we have, beyond absurdity, both inanity and dishonesty. For how could the IAs give the name of their cherished river to one which had dried up?

Please, consider another fact. The Sarasvatī is fed, as was said, by at least three (possibly more) rivers and is 'swollen' *pinvamānā* (6.52.6); moreover, it is endless, swift-moving, roaring, most dear among her sister-rivers and, together with her divine aspect, nourishes the Indoaryan tribes (6.61.8-13). How could such attributes be given to a dried-up river?...

Thus we must take it that in all the books of the RV, early and late (10.64, 177),

¹⁴ I ignore Lawler's article in *Science* 2011 (332:23) 'In Indus times the river did not run through it' since it is now disputed by several geologists and hydrologists in India.

the Sarasvatī is a mighty river and even in the third millennium, according to Archaeology, hundreds of communities and some cities flourished along its banks – until the eventual drying up c 1900. Consequently it is totally impossible that tribes of immigrants could come and settle in the arid area and write poetry praising a river that no longer flowed.

16. But what of the Iranian name *Hara*^x*vaiti*?

This name appears in the first chapter of the Vidēvdād along with placenames Haetumant (=Helmand), Māuru or Margu (= Margiana), Bāx $\delta \bar{\imath}$ or dhri (=Bactria) etc and, of course, Haptahəndu.

Haraxvaiti means simply 'one who has harah-'. But Harah- or $Hara^x$ - is a stem entirely isolated in Avestan: it has no cognates, no other related lexemes.

This fact is extraordinary when contrasted with Sanskrit *sáras* and *Saras-vati*! Because the Sanskrit word *sáras* has a host of relatives and can be derived directly and very lawfully from a root ($dh\bar{a}tu$). The root is \sqrt{sr} and in the ancient $Dh\bar{a}tup\bar{a}thas$ (=lists of root-forms and their meanings), it is given as class 1 (sr > sar-a-ti) and class 3 (sr > si-sar-ti) both meaning 'movement' gatau. The latter one is found only in Vedic texts. Modern philological studies suggest movement of water, 'flowing, rushing, leaping'.

But the wonder of wonders is that this has many derivatives in Sanskrit and many cognates in other IE branches. In Sanskrit the verb is found conjugated in both classes. Its cognates appear in G hallomai, L saliō, Toch B salate – all 'leap'. The dhātu has also many nouns like srt, srta, srti, srtvan and sara, sarana, saras, sarit, sāra etc, etc. There are also cognates in Greek, like hélos 'swamp' and héleios ($S = sarasy\acute{a}$) 'of/from swamp'.

But nothing, not one cognate, in Avestan other than the lonely and pitiful *harah-!

Observe now two absurdities implicit in the Doctrine. The Iranians who stayed put in Iran lost their own root $*har/*har^{\partial}$ or whatever and all derivatives, while the IAs who moved further away retained this thoroughbred IE root and all its ramifications. And then they gave the name Sarasvatī (with the change of ha > sa) not to a large river like the Indus but to a dried-up stream in memory of the Haraxvaiti in Arachosia! Or, an even more incredible scenario, the IAs on arrival at Saptasindhu proceeded to generate out of the PIIr *harah stem, verb-conjugations, numerous nouns and adjectives and what else, which are by a most happy coincidence cognates with lexemes in other IE branches!

The only reasonable explanations for this situation is that the Iranians had been with the Indoaryans and at some unknown date moved out of larger Saptasindhu west and north into Iran.

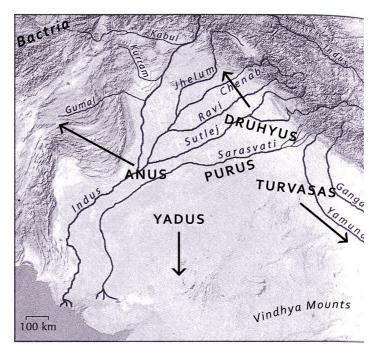
Expansion and migration of Vedic tribes.

17. As we saw in §4 (e6), Saptasindhu is the land of the Seven Rivers with Sarasvatī as its axis: in this region, according to all vedicists from Max Muller to Keith and to Witzel, were composed the hymns of the RV. However, we should bear in mind that the number 'seven' has magical, occult connotations as well and the rivers were more than seven. In fact, the region inhabited by the IAs even at the earlier stage of the composition of the hymns was much larger expanding into all directions but always having as its axis the Sarasvatī RV 6.61.9:

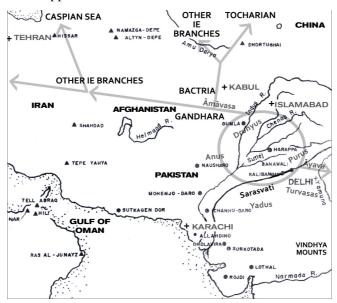
sā no vísvā áti dvíṣaḥ svásṛ anyā rtāvarī átann áheva sūryaḥ.

'[Sarasvati] who follows Cosmic Order has spread us [the five Tribes] beyond enmities, and her sister rivers as the Sungod the days.'

And in st 12 are mentioned the five tribes.



Eventually the expansion moved well out of the larger Saptasindhu – especially west and northwest. In Baudhāyana's Śrautasūtra 18.14 we read of two migrations: the eastern one Āyava into the Gangetic plains and further; the western one Āmāvasa comprising the Gāndhāris, Parśus (= Persians) and Arāttas (= Ararat, Urartu?). The Persians or Iranians record in their texts that they had passed from Haptahəndu and Haraxvaiti. This is the approximate situation.



Concluding remarks.

18. The conclusion from the evidences discussed in the preceding sections is an easy one. The *Avesta* is post-rigvedic and the Avestan language full of losses, attritions and mutations.

The relative earliest possible date for the Gathic *Avesta* is the period of the composition of the late books of the *RV* as many sensible scholars have pointed out (Hopkins 1896, Tovadia 1950, Humbach 1991, etc). This is confirmed by the correspondence of the proper names (§8) and poetic metres (§13). But all this is an approximate, rather general estimate. We can be much more specific thanks to several linguistic studies after 1980.

There are 59 common Sanskrit-Avestan words examined in §§6-7 which occur in post-rigvedic texts. Of these 59, 14 are, according to Lubotsky (2001), loanwords into Indo-Iranian. All these 14 are found in post-rigvedic texts. This means that either they were borrowed independently by Iranians and Indians after the Iranians split off, or that they were borrowed after the *RV* composition, during the common IIr period in larger Saptasindhu, and the Iranians took them along when they moved away northwestward. This is supported by the use of the periphrastic perfect which has as auxiliary the verb as-/ah- 'to be' (see §4).

However, we found at least 15 common lexical items that occur in post-Vedic texts. This would mean that the *Avesta* was composed after the Vedic period – which makes it very late. Or it could mean that the words were in Sanskrit even during the Vedic period but did not make it into any Vedic texts.

For the *Avesta* as we have it, I would settle for a post-rigvedic date. This would apply even for its oldest parts, the $ga\theta as$ and the date would be within the late Vedic period.

Finally, not only was there no Invasion or Immigration into Saptasindhu but, on the contrary, after the Vedic expansion to the West including Gandhara and Bactria, the Indoaryans moved even farther west in small numbers of wise men (5.10.6, 10.65.11) to spread the Aryan laws; or larger numbers of "heretics" distanced themselves from their "orthodox" brethren; or others left to explore and seek new opportunities. This northwestward migration would have progressed from Bactria rather than Saptasindhu proper. The date for these westward movements would be much older than is thought and naturally after the melting of the ices.

So I am inclined to agree with Misra (2005) who put the Old Iranian languages on the same level as Middle Indo-Aryan – even though Schmitt does not think this serious.

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