

RV is pre-Harappan.

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0. Argument This paper presents the evidences and arguments for a *R̥gveda* composed in its bulk in the 4th millennium BCE. A basic consideration (but not the only one) is that the *RV* has no knowledge at all of many features that characterise the Harappan culture which began to emerge solidly c3000. Since the bulk of the *RV* must be assigned to a period before 3000 and since this is by general consensus stated to have been composed in Saptasindhu, then the Indoaryans or Vedic people were present in that location before 3000 and must therefore be regarded as indigenous by 1500, when, they are alleged to move in by the Aryan Invasion/Immigration Theory.

1. Horses and chariots arriving c1500 BCE in Saptasindhu, the land of the seven rivers in what is today N-W India and Pakistan, constitute the main argument/evidence whereby many scholars hold the AIT (=Aryan Invasion/Immigration/Ingress Theory).¹ The AIT has been the mainstream doctrine regarding Indian proto-history since the latter part of the 19th cent. It teaches that the IAs (=Indo-Aryans) came to Saptasindhu from the Pontic Steppes or the Urals c1700-1500 and, although non-literate, they composed the *RV* (=R̥gveda) c1200-1000, the other Saṃhitās down to 800, the Brāhmaṇas and (early) Upanishads c800-600, then the Sūtra literature after 600 and then c 300BCE-300CE the two Epics, *Rāmāyaṇa* and *Mahābhārata*: all dates are approximate. The map shows the location of languages broadly, not peoples or races: it is a modification of the map used by J. V. Day, 2001, pxiii..

Several linguistic arguments have been adduced to prop up this fanciful scenario one of them being the (loan-)words in the *RV* language which were allegedly borrowed from other languages met by the IAs on their way to and at Saptasindhu. A closely related argument is the alleged common Indo-Iranian period during this journey to Saptasindhu.² Good

¹ I take the name Saptasindhu simply as a *bahuvrīhi* adjective. The 7 rivers are frequently mentioned in the *RV* – 1.32.12; 34.8; 35.8; etc, etc.

² A common Indo-Iranian period there definitely was but this is to be found in Saptasindhu whence later the Iranians left (see n6 and §13).

examples of a combination of these two arguments are found in M. Witzel 2005 and F. Kuiper 1991. But that 4% of the Rigvedic vocabulary might consist of loanwords, or even 6% or more, surely should not be surprising since the IAs did not live in a vacuum and there must have been peoples with different languages around them. However, this pet linguistic subject of Witzel's has been attacked by R.P. Das (1995 general critique), by Krishnamurti (2003: 37-8 mainly against Dravidian cognations) and Kazanas (2002: paper 1). In any case, no amount of arguing along these lines gives of itself any actual dates even approximately and the direction of movement can more reasonably be the reverse. There is B. Sergent who, although not at all an indigenist, argued in favour of a movement from Central Asia north-westward (1997). Also, Jooanna Nichols, an eminent Indo-European linguist, found on purely linguistic grounds that "the locus of the IE spread was ... somewhere in the vicinity of ancient Bactria" (1997: 113) – which is only a stone's throw away from Saptasindhu. Linguists will continue to disagree violently among themselves about the original locus, about the direction of the movement and about the date: some give a late period somewhere c 3000, others an early one, in the 7th millennium (Misra 1992). I ignore all such arguments and conclusions since they are so contradictory. The situation is in no way improved by claims that "I am right" and allegations that "the others are wrong". We must bear in mind also that all such arguments involve "reconstructed" proto-languages which are sheer conjectural affairs and therefore inadmissible in any impartial court of law. (See further §16, start.)

2. One of the best known comparative linguists of our times, Hans Hock, pointed out (1999) that several dialects spoken in N-W India travelled north-westward at different times in the Common Era, the most notable one being that of the Gypsies in the early centuries CE (see also Fraser 1995). Hock stated that Indoaryan indigenism and even the Out of India Theory could theoretically be possible, provided the distribution of the IE isoglosses was accepted and the Vedic language was seen to be a devolved form of Proto-Indo-European. But he opted for the mainstream doctrine (=the AIT out of the Pontic Steppe) because of the archaeological evidence of horses and chariots arriving in Saptasidhu in bulk after 1700 BCE (1999:13).

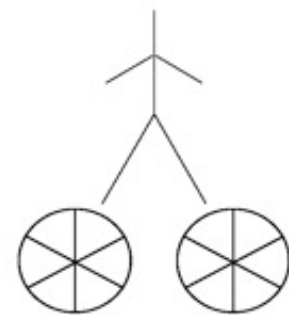
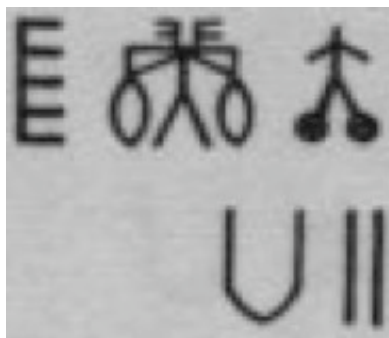
Hock was misinformed, I like to think. The evidence of horses and chariots proves the very opposite if examined with a modicum of attention. As one authority put it, "the horse was widely domesticated and used in India during the third millennium BCE over most of the areas covered by the Indus-Sarasvati [or Harappan] Civilization" (Pande 1999: 344; the square brackets original). I myself collected much evidence for horse-finds in different ISC (=Indus-Sarasvati Civilization/Culture) sites in two papers in 2003, §10 (pp 196-7) and 2002 (p 305): thus one may further consult Kochhar 2000 (pp 186, 192), Chakrabarti 1999, Lal 1997, Sharma 1996 (p 17), Thomas et al 1995, Dhavalikar 1995 (pp 116-7), Allchin & Joshi 1995 (p 95), Rao 1991 and, necessarily, Sharma 1980 (p 110ff). These publications show abundantly that the true horse, *Equus ferus* and *Equus caballus*, was present in its wild state in India from c 17000 and there is much evidence now for the domesticated horse in the Mature Harappan period. Moreover there are several terracota figurines of this animal from different ISC sites as reported by Lal 2002 and Tharpar & Mughal 1994.

As for the chariot, S. Piggott established the presence of a sophisticated type of vehicle with "one or two pairs of wheels with their axles... from the Rhine to the Indus by around 3000" (1992: 18).

Archaeological evidence does not consist only of the actual remains of buildings, weapons, tools, chariots etc. Pictures, reliefs, toys and figurines of these things are also

evidence. Many years ago H. K. Sankalia had pointed out that the six-spoked wheel appears on seals and signs of the alphabet (1974: 363). S. R. Rao found at Lothal “terracotta wheels ... with diagonal lines suggesting spokes” (1973: 124). This representational practice seems to have been widespread, for S. Piggott mentions similarly marked wheels found in the Karpathian Basin from the Earlier Bronze Age (1983: 91-92). In his recent study, Lal presents four terracotta wheels (from Mature Harappan sites Banawali, Kalibangan, Rakhigarhi) with spokes painted on (2002:74, Figs 3.28ff). The Harappans had the technology for making spoke-wheels (Kazanas 1999:33; Basham 1954:21).

Finally, it was A. Parpola, an inveterate adherent of the AIT, who identified the figure on Harappan seal No 3357 as representing simplistically a man with outstretched arms standing on two six-spoked wheels (of a chariot) realizing that this was “a later invention of the Aryans’ (1969: 24). The later notion that it is a potter on two wheels is obviously far-fetched and, in any case, the wheel is spoked (Sethna 1992)!



3. The question of course is whether there were spoked wheels before 3000 since the *RV* uses the word *ara* which is usually translated as 'spoke' (1.32.15; 5.58.5; etc). We don't know. Some Indian scholars approach the issue strategically and say that Rigvedic hymns with *ara* are later intrusions from the second millennium when the spoked wheel was quite common. This is possible of course, since we know that some hymns are later interpolations. There could have been spoked wheels as we know them even at c3200 and before. But then again, *ara* need not mean 'spoke'. It could mean a section of the (solid) wheel. After all, different IE branches have a different stem for spoke (Gk *aktis*, *knēmē*; L *radius*; Gmc *speca/speihha*, etc) which suggests that spokes were developed after the dispersal (in the 6th or 8th millennium, or whichever). So *ara* would have meant something other than spoke and only later acquired the meaning of 'spoke', as we know it now. The spoked wheel poses, in fact, no problem for dating the *RV*. There are other more clearcut types of evidence.

The usual objection is that there are no chariot remains from that period. Here, there is the double assumption that *RV* chariots are necessarily like near-eastern ones of, say, 1500 and that there should be remains. But why assume that the *RV* chariots are like the near-eastern ones? The only real-life vehicle in a race that we know is in 10.102 and this is pulled by oxen not horses (Kazanas 2002) while 1.131.1 alludes to a 'broad chariot' *prthū rathaḥ* ! Then again, there are no remains of chariots in India from 1500 or 1000 or 700. So we shall say no chariots were brought in by the alleged IE entrants either.

4. Harappan features absent in the RV. The Harappan or Indus-Sarasvati Culture has certain characteristics which help to define its uniqueness. A number of these features are absent from the *RV* and this absence indicates that the *RV* is pre-Harappan. Arguments *e silentio* are not decisive since absence of evidence is not always evidence of real absence. But in this case the features are far too many. (Some of these have been noted by Sethna 1992.)

a) *iṣṭakā* ‘brick’. The *RV* mentions as building materials metal, stone, mud and wood but not ‘brick’, which was the basic material in Harappan constructions. This is found in post-Rigvedic texts.

b) Urbanization is wholly absent in the *RV*. There certainly was “nomad pastoralism” as mainstreamers emphasize repeatedly but there were also agricultural settlements (a fact which mainstreamers underplay or do not mention). The hymn to Kṣetrapati ‘Lord of the Field/Soil’ (4.57) alone should suffice but also the girl Apālā refers to her father’s *urvarā* ‘fertile field’ (8.91.5); then there are many cultivation implements *khanitra* ‘shovel’, *lāṅgala/sīra* ‘plough’, *srñī* ‘sickle’, etc. Moreover, there is weaving with loom, shuttle, warp and woof (*RV* 1.134.4; 1.3.6; etc, etc) and metallurgy with smithies of sorts (4.2.17; 5.9.5; etc). Such activities imply settlement.

Some writers think the Rigvedic and Harappan cultures converge (Gupta 2005, Bisht 1999, Lal 1998, Singh 1995). As evidence is cited the word *pur-* which denotes ‘city, citadel, fort, town’ as its Greek and Baltic cognates ‘*polis*’ and ‘*pil(i)s*’ do. This is a very general misconception. In the *RV* *pur* never means anything other than an occult, magical, esoteric defense or stronghold which is not created nor ever destroyed by humans (Kazanas 2003: 224-5 and 2002 *passim*).³ The ISC cities had regular blocks, large buildings, also domestic and urban water-supply (McIntosh 2001: 100-101); the *RV* knows nothing of all these.

The words for ‘council’ *sabhā* and *samiti* are also cited but, surely, any community can have a council of elders without urbanization. Allusions in the *RV* to chiefs/kings *rājā* and overlords/emperors *samrāt* also do not show urbanization since such offices can just as easily exist in rural communities. (The Red Indians in North America, nomadic and rural tribes, had local chiefs and overlords.)

³ Bisht, for example, cites the numerous occurrences of *pur* as evidence that the *RV* knew of towns and fortifications (p 410ff). So does D. Frawley (2002: 13). This is wrong, of course: *pur* in the *RV* never means ‘fort’ or ‘town’ but a magical, esoteric defence. Merely citing verses in the *RV* but not analysing and exploring their meaning is not very sound scholarship. Here are some examples merely cited by both writers. In II, 35 the Offspring-of-Waters *Apām Nápāt* is protected in *āmāsu pūrṣu* (usually translated as ‘forts of unbaked bricks’ even though bricks are nowhere mentioned!); the phrase means ‘non-artificial natural defences’ (in this case obviously ‘divine’). In I 166, 8 Agastya prays to the Maruts to protect (*rakṣ-*) from evil *agha* and injury *abhihruti* the man they favour (*av-*) with ‘hundredfold defences’ *śatābhujibhiḥ pūrbhiḥ*: no such many-walled structure existed allowing for the hyperbole) and, moreover, it is difficult to see how people can be protected from evil by 100fold fort/towns! VI 48, 8 is a similar prayer to Agni to protect (*pā-*) from anxiety *aṃhas* the fire-kindler with ‘100 purs’: clearly one cannot be protected from anxiety with 100 forts/cities (again allowing for a hyperbole) but only with internal occult defences. A final example: X 101, 8 is a prayer to Viśvedevās “to fashion inviolable metal purs” to protect the rite of soma-pouring; obviously no forts or towns are meant to be built around the sacrificial locus but magical other-wordly defences against demons. Not one *pur* is built and not one is destroyed by human beings! See Kazanas 2003: 224-5 and n 12; also <http://www.omilosmeleton.gr/english/en_index.html> ‘Rgvedic pur’; also Kazanas 2006.

c) Fixed altars or hearths are unknown in the RV but common in the ISC cities. The Rigvedic altar is a shallow bed dug in the ground and covered with grass (e.g. RV 5.11.2, 7.43.2-3; Parpola 1988: 225). Fixed brick-altars are very common in post-Rigvedic texts.

d) Many cities were abandoned and fell to ruination after 1900 BC when the Harappans began to move eastward because of the drying up of the Sarasvatī and of the more general desiccation due to tectonic disturbances and climatic changes. The RV knows nothing of such ruins even though, according to the AIT, the IAs moved through these regions c 1700-1500 (in small waves, settled there, in the midst of deserts, and wrote the hymns which praise the mighty Sarasvatī!). Some attempts have been made to read hymn 1.133 with its *arma-ka* (= of unknown meaning, really) as a description of a ruined city (e.g. Burrow 1963, Rao 1991: 32) but, in fact, the hymn mentions no ruined buildings, no fallen walls and no materials such as wood, stone or bricks! It is a ghostly scene of frightful desolation, peopled only with unfriendly she-fiends and demons (*yātumati*, *piśāci* and *rakṣas*). In sharp contrast the Old English poem *The Ruin* contains such persuasive details of the ancient remains (from Roman Times?) that some scholars think it refers to the town of Bath (Mitchell & Robinson 1996: 252-5).

e) No cotton *Karpāsa* appears in the RV although this plant was extensively cultivated in the ISC and the fabric was exported as far as Egypt in the middle of the 3rd millennium while the Mesopotamians adopted the name as *kapazum* (? from *prākṛta kapāsa*). The RV has ‘skin’ *eta* (1.166.10; *ajina* in AV 5.21.7⁴ etc), ‘wool’ *avi* (RV 9.78.1) and *śāmulya* (10.85.29) and numerous terms for clothing and waving but no mention of cotton. Be it noted that *karpāsa* is the only word for cotton in Sanskrit.

f) Silver *rajata* also makes no appearance in the RV though gold and copper are well attested and silver is plentiful in the ISC. The word *rajata* occurs in RV 8.25.22 and it denotes a steed or a chariot ‘shining white’. Only in later texts is it used singly (AV 5.28.1) or with *hiranya* to denote ‘silver’ or ‘white gold’ = ‘silver’ (see *Vedic Index 2*: 196-7 and Lubotsky 2: 1169).

g) Rice *vṛīhi* too is absent from the RV although it appears in various sites of the ISC from at least 2300 (and in the Ganges Valley from the 6th millennium)⁵. The RV knows only *yava* ‘barley’. Rice becomes important in post-Rigvedic ritual and the more general diet.

h) Literacy is not known in the RV. D. Frawley thought that a passage in AV 19.72 may refer to writing: ‘From whichever receptacle *kośāt* we have taken the Veda, into that we put it down’. Books in ancient India consisted in collections palm-leaves or strips of birch-bark and were kept in boxes (1991: 249). Whether this is enough to establish knowledge of writing is doubtful. But in any event, writing was known in the ISC but not in the RV.

i) The RV has no allusions to artistic iconography – paintings, relief representations, statue(-tte)s or seals, all so common in the ISC. (The RV 4.24.10 asks “Who will buy this my Indra” and this is thought by some to refer to a statuette, but this could be a transfer of favour and it is the only reference in the whole RV without the use of any word for statue or icon.)

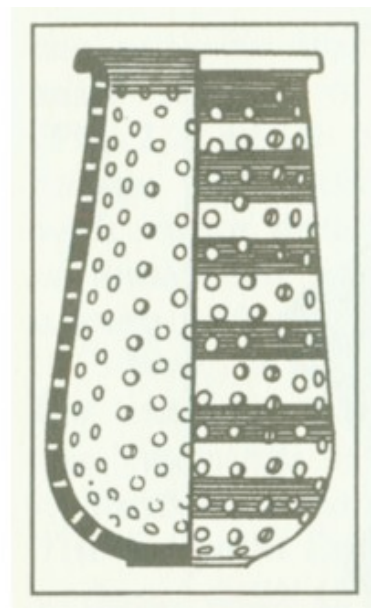
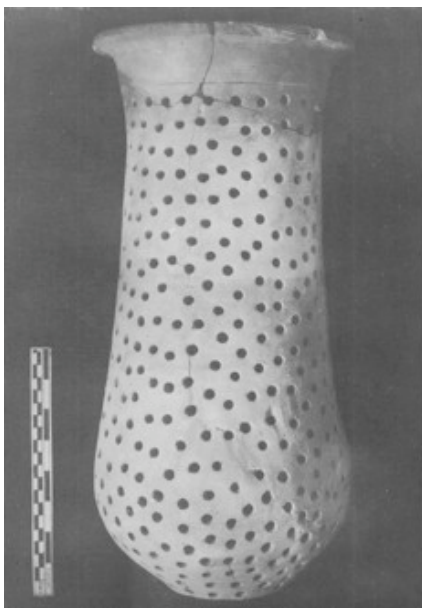
⁴ AV = *Atharva Veda*

⁵ Private communication from S.P. Gupta, Chairman of Indian Archaeological Society (June 2006). See also Sharma 1980 for rice in the Ganges basin.

5. Now all the fore-mentioned features are found in post Rigvedic texts – the Samhitās, the Brāhmaṇas and fully in the Sūtra literature. For instance, brick altars are mentioned in *Śatapatha Brāhmaṇa* 7.1.1.37, or 10.2.3.1 etc. Rice *vr̥hi* is found in AV 6.140.2; 7.1.20; etc. Cotton *karpāsa* appears first in Gautama’s (1.18) and in Bandhāyana’s (14.13.10) *Dharmasūtra*. The fact of the convergence of the post-Rigvedic texts and the Harappan culture was noted long ago by archaeologists. B. and R. Allchin stated unequivocally that these features are of the kind “described in detail in the later Vedic literature” (1982: 203).

If we had a case of 2 or 3 items we could bypass them saying indeed that absence of evidence is no evidence of absence; but the items are many and the absence of the building material *iṣṭakā* in the RV (against the presence of wood, stone, mud and metal) seems to me quite decisive.

We must also take into account that many iconographic motifs, Harappan artefacts, decorations or seals, show affinity with elements found in post-Rigvedic texts. Thus PK Agrawala (2005) draws attention to round-bottomed perforated pots from Harappan sites and a vessel (*kumbha*) with nine (*navavitṛṇṇa*) or 100 holes (*śatavitṛṇṇa*) mentioned in *Śatapatha Br* 5.5.4.27 and *śatavitṛṇṇā kumbhī*; a pitcher with 100 perforations’ of 12.7.2.13. These and other similar descriptions echo the White Yajurveda (*Vājasaneyī Samhitā*)verse 19: 87 ‘a pitcher with 100 streams’. Such vessels were used for ritual sprinkling. A second parallel is furnished by the two-horned bovine-like animal, duplicated and facing itself, on a Mohenjodaro seal with long necks and the pipal tree growing out of their juncture. This corresponds (writes Agrawala) to the two-headed cattle *dvāyā* in AV 5.19.7. Agrawala mentions other parallels of a two-headed tiger and a two-headed bird (2005: 10 - 13). Thus it is indeed the later Vedic texts that have parallels with the Harappan arts and crafts, not the RV.



pot with 100 perforations : *Śatapatha Br* 12.7.2.13.

dvāyā in *Atharvaveda* 5.19.7; symbol for OM?



N Rajaram follows a similar line of investigation (2005) and adduces iconographic motifs from Harappan seals but does not distinguish between Rigvedic (or early Vedic) and post-Rigvedic (or late Vedic) periods and cultures. Thus he cites the *āsvattha*-tree foliage and the horse and links them to the *RV* disregarding the fact that these are not exclusively Rigvedic and therefore could be simply from a post-Rigvedic period. Moreover he cites the *svastika* and the sign of sound OM, both of which are, as he states, from post-Rigvedic texts. It is also doubtful that the seal-sign which is horizontal, depicts the symbol for OM, which should be upright, anyway.

On this score, then, the bulk of the *RV*, is pre-Harappan, or 3000+.

6. Some Brāhmaṇas comment on or give explanations of incidents in the Rigvedic hymns. For example, the *Aitareya Br* 7.13.33 narrates extensively the story of Śunaḥśepa, alluded to briefly in *RV* 1.24.12-13 and 5.2.7, while the *Śatapatha Br* 11.5.1 comments on the the Pururavas and Urvaśī love story given elliptically in dialogue form in *RV* 10.95. Another point to note. Some legends in the *RV* remain unexplained. For instance, who was Bhujyu whom the *Āśvins* saved from a tempest (1.116.3-4; etc) and how did he find himself in that predicament? The later texts say nothing more. Or, take the birth of Indra; was he an unwelcome child to Aditi and did he commit parricide (4.18.1ff; etc)? Again, the Brāhmaṇas tell us nothing. Obviously such exegetical texts would not be composed until the understanding regarding the older texts has lapsed: this implies many centuries.

What is the date of the Brāhmaṇas? Well, S. Kak ascribes the *Śatapatha* to the early third millennium (1997, 1994) saying that the Pleiades/*Kṛttikas* not swerving from the east, as is stated in this *Brāhmaṇa* (2.1.2.3), could only occur c2950 BCE. Narahari Achar (Prof. Astrophysics, Memphis, USA) using computer and planetarium apparatus arrived at a date c3000 pointing out that S. B. Dikshit had arrived at similar conclusions 100 years earlier but was ignored by Western scholars (1999): these scholars really had no knowledge of astronomy. B. B. Lal too thought that “astronomical calculations (re *Aitareya Br*) would place the *RV* in the fourth millennium” but did not then adopt such a date only because he could not judge the evidence (1997: 286).

So we could again place the *RV* easily before 3000.

7. The *Brhadāranyaka Upaniṣat* has three *vaṁśas*, i.e. list of teachers, each comprising 65-70 names. The first 4 or 5 are names of gods in the normal Indic way which ascribes the beginning of every human activity to some deity. Let us take the mainstream date of early sixth century for this text (say 550) according to the AIT premises and let us take 60 teachers giving to each one an average of 15 years, though 20 and 30 would be more realistic. These calculations ($60 \times 15 = 900$ plus 550) give us a date c1450 for the inception of the doctrines in this Upaniṣat. The chief doctrine is that the self of man (*ātman*) is the same in all beings and the same as the Self of the universe (*brahman* ‘Mystic Spirit’ or ‘Absolute’). We should also bear in mind that the teachers’ names are quite different from those of the seers of the RV hymns as given by the native tradition. Following others M. Witzel thinks these lists “rest on typically weak foundations” (2001, §19) but this is a typically weak subterfuge because the results of calculating the number of years prove how unrealistic the AIT chronologies are! Let us see, then.

The Upanishadic doctrine of the identity of the individual self and the universal self should be known, then, c1500 or 1300 or 1200, when, according to the AIT, the RV was composed. Yet, for undetermined reasons, quite surprisingly, this doctrine is totally unknown in the RV and begins hesitantly to appear in the AV (eg 10.2.32-3; 11.4.23; etc). Consequently, the AV should be placed at least c 1600 and the RV c 1800, always following the AIT assumptions. But the RV is composed, even according to Witzel (2005: 90), in Saptasindhu, yet the IAs do not appear in this area before, at the very earliest, 1700, and the RV gets composed after several centuries!

This is one of the comical paradoxes that the mainstream chronology refuses obdurately to resolve. Yet, on the grounds given in §§4-6 above, we saw that the RV should be assigned to the 4th millennium, say around 3500. Now subtracting 900 or 1000 years (for the teachers) we should place the early Upaniṣads at the start of the period of the Mature Harappan, i.e. 2600-2500 and the Sūtra texts immediately after. These dates satisfy yet another requirement. The word for cotton *karpāsa* is first used in the Sūtra texts as we saw in §5, above and the cultivation of the plant (although seeds of it were found in much earlier periods) gets well established c 2500.

8. Astrophysicist Achar pursued his **palaeoastronomical research** into the *Mahābhārata* epic also, examining astronomical references in Books 3, 5 and 18. His sky map showed that all these converge in the year 3067. (For full details see Kazanas 2002: V, 3: pp 295-7). Achar acknowledged that some 30 years earlier, in 1969, S. Raghavan had arrived at the same date. Now, it is obvious that the *Mbh* had acquired many accretions over many centuries and that it was streamlined stylistically at about the start of the Common Era. It is obvious that it contains much late material like 2.28.48-9, which mentions Rome and Antiochia (*romā* and *antakhī*): this could not be earlier than 300 BCE since Antioch was founded in 301. On the other hand, the frequent use of the bow, while the sword is virtually unknown and, moreso, the use by Bhīma of a (tree trunk as a) club show much more primitive conditions.

Thus the war took place in 3067 and the core of the *Mbh* in poems and songs was laid down in that year. This and the native traditional view that the Kali Yuga came at 3102 are both correct, according to Achar. He pointed out that the Kali Yuga had no full force until the death of Kṛṣṇa which occurred 35 years after 3067, at 3032 (private communication June 2006); but immorality had set in already, as is shown by the unjust behaviour of the Kauravas

and some reprehensible acts during the war itself. Surely no bards (compilers or redactors) in the 3rd cent CE or the 3rd cent BCE could possibly know the star and planet positions relative to the *nakṣatras* or the zodiac signs of the year 3067. The astronomical references examined by Achar (and Raghavan) are so numerous that chance coincidence has to be discarded (Achar 2003). However, that the war took place in 3137 and bards began to sing of these events two generations later should not be precluded.

9. The Sarasvatī river furnishes useful literary and archaeological evidence for dating the RV. It is a mighty river extolled in all Books of the RV except the fourth. It is *nadītamā*, *ambitamā*, *devitamā* ‘best river, best mother, best goddess’ (2.41.16); it is swollen and fed by three or more rivers *pinvamānā sindhubhiḥ* (6.52.6); it is endless, swift moving, roaring, most dear among her sister rivers; together with her divine aspect, it nourishes the Indoaryan tribes (6.61.8-13). In 7.95.2 the river is said to flow pure in her course “from the mountains to the ocean” *giribhyaḥ ā samudrāt*. Then 7.96.2 and 10.177 pray to the rivergoddess for sustenance and good fortune while 10.64.9 calls upon her (and Sarayu and Indus) as “great” and “nourishing”. Clearly then, we have here, even in the late Bk 10, a great river flowing from the Himalayas to the ocean in the south, fed and swollen by other rivers and sustaining the tribes of the IAs on its banks – not a river known in the past or in some other region, or a river now considerably shrunk (Witzel 2001)⁶.

Some scholars claim that here *samudra* does not mean ‘ocean’ but confluence and especially the place where a tributary flowed into the Indus. The last point can be discarded since there is not the slightest hint elsewhere that the Saraswati flowed into the Indus – in which case the Indus and not Saraswati would have been lauded as the best river (2.41.16). The meaning ‘terminal lake(s)’ adopted by Witzel is entirely fanciful. In his Dictionary M. Mayrhofer gives for *samudra* only ‘confluence’ and ‘ocean/sea’ (1996 EWA). And the Vedic poet would certainly have used (not *ā samudrāt* but) *ā sarobhyaḥ* ‘to the terminal lakes’ maintaining his – ॐ – – cadence. This phrase would then have indicated clearly the alleged fanciful etymological connection of the name *Saras-vatī* ‘she who has (terminal) lakes’. The name means rather ‘she who has swirls and currents’, since the primary sense of $\sqrt{sṛ}$ (>*saras*) is ‘movement’ (*gatau*) or ‘flowing, leaping, rushing’.

The river is thought to have dried up almost completely by 1900 (Allchins 1997: 117; Rao 1991: 77-79). In previous years it had lost tributaries to the Indus in the West and the Ganges in the East. Is there any evidence that it flowed down to the Indian (or Arabian) ocean at any earlier period?

G. Possehl examined (1998) all the palaeoenvironmental and geological data relevant to the Sarasvatī river and concluded that the river could have flowed down to the ocean only before 3200 at the very latest and, more probably, before 3800! He re-stated his finds in his study of 2002 (pp 8-9). P-H. Francfort has been just as certain of a date 3600-3800 in his survey of 1992.

All this helps us place the passages ascribing the grandure of river Sarasvatī at a date before 3200 at least. (For a detailed examination of this entire issue see Kazanas 2005 and 2004a).

⁶ The mainstream view (Witzel's really) that the Vedic river is merely a memory of the Iranian Haraxvaiti which belongs to the common Indo-Iranian period, when the Iranoaryans lived together in Iran before the IAs moved further southeast (according to the AIT), is no more than modern myth-making.

10. In a recent publication **Dr S. Levitt** (of New York), who is by no means an indigenist, examined the development of the “early Indic tradition” and the development of religion in ancient Mesopotamia.

After comparing several elements in the Vedic and Mesopotamian religions, Levitt concluded: “We can date the early Indic tradition in the basis of comparable points in ancient Mesopotamia. By this, the *Rgveda* would date back to the beginning of the third millennium BC, with some of the earliest hymns perhaps even dating to the end of the fourth millennium BC” (2003: 356).

However, unaware of Levitt’s paper, I myself made at about that time a very detailed comparative study of Vedic and Mesopotamian religious (mythological) motifs, published in *Migration and Diffusion* vol 24, 2005⁷. In this I showed that since more than 20 motifs in the Vedic texts had close parallels in other IE branches (e.g. the horse mythology, the skyboat of the Sungod, the Flood, the elixir from heaven, the creation of cosmic parts from the dismemberment of a divine being, etc) and were therefore of Proto-Indo-European provenance, they could not have been borrowed by the Vedics from the Mesopotamians as is usually alleged (McEvelley 2002; Dalley 1998) but must be inherited and therefore older than the Near-eastern parallels. Since the Mesopotamian culture (starting with old Sumerian) surfaces c 3000, the Vedic motifs must be earlier.

Thus again we arrive at a date before 3000 for the bulk of the *RV*.

11. Since, according to the preceding discussion we must now assign the (bulk of the) *RV* to c 3200 at the latest and since the *RV* by general consent was composed in Saptasindhu, then it follows that the IAs were ensconced in Saptasindhu by 3200 and that the ISC was a material manifestation of the early oral Vedic tradition expressed in the *RV*. This issue was treated extensively in the preceding papers and no more need be said now. I should only add that, in fact, more and more scholars in the West have re-examined the issue and rejected the mainstream view advocating a movement Out of India into Europe: Schildmann 1998; Klostermaier 1998, 2000; Friedrich 2004. Thus the mainstream strident cries of warning about “fundamentalists, nationalists, revisionists” in India and their colleagues in the West (Witzel 2003; Huld 2002; Kuzmina 2002) are seen to be either hollow slogans or unthinking echoes of those slogans; for neither the indigenist scholars mentioned above nor the archaeologists specializing in the ISC and insisting on its unbroken continuity down to the 6th century belong to this (non-existent) band of bogies.

⁷ This was badly printed and the Sanskrit transliterations are unreadable! A revised version will be published in *Adyar Library Bulletin* 2006. See also
<http://www.omilosmeleton.gr/english/en_index.html>