Diffusion of Indo-European Theonyms: what they show us. June 2005.

- **1. Argument.** In presenting this collection of Vedic and Indo-European theonyms I discuss the derivation of some and argue that, since the *Rgveda* alone contains all these names, the *RV*¹ must be older than other IE¹ texts and more clearly indicative of the Proto-Indo-European culture, while Vedic is both older and closer to PIE than any other branch. Moreover, since the *RV* is richer in cultural and linguistic elements than other early IE traditions (Kazanas 2004, 2005) we can conclude that the Vedic speakers moved very little or not at all from the PIE homeland. These ideas have been published elsewhere and attracted some criticism mainly from J. P. Mallory; this is now being refuted.
- **2.** In presenting his overview of G. Dumézil's work on IE comparative mythology, C.S. Littleton wrote that in Dumézil's view Roman religion can be understood only in relation to other IE religious systems and that "the most fruitful source of comparative materials is the ancient Indic literature" (1973: 118). This paper confirms this view but in a context much broader than just Roman religion. The Table of IE deities that follows was presented (but not so full) in various papers from 1999 onward. The most recent one was my 'Indigenous Indo-Aryans and the *Rigveda*' (Kazanas 2002). In the present version I have made several corrections and additions.

In the Table I put the 20 Vedic names on the left and the others on the right for the simple and almost incredible reason that while the Vedic Tradition has all these names and cognates with one or other IE branches, **no two other traditions have a common theonym to the exclusion of the RV**. The only exception is the highly dubious one of the Roman goddess 'Iuventas' and the Irish 'Oeagus' (according to Dumézil from PIE* *yuwnko*: Littleton 1973: 61, 93)². On the right, on the top line are the cognate names. On the line(s) below are cogn nouns in branches that do not have the corresponding deity. This shows that the particular branch(es) suffered a loss in their religion. E.g. the IE theonym for a Horse-deity (S Aśvin, Mcn Iqe-ja, C Epo-na) does not appear in most branches yet these do have the IE stem for 'horse': Gk hippo/ikko-, L equus, C ech, Gmc eoh, B ešva (and Sl kon-ji which is not IE but, though unrelated, does indicate a further loss).

With the theonyms I follow the English alphabetic sequence since this is common. Only Apāṃ Napāt is placed in apparently wrong place, but only because the cognates are in connexion with Napāt not Apāṃ. The S r is given as E r. With the branches themselves, I start with India and move westward: S, Ht, Ks, Mt, Gk, L, Sl, B, Gmc, C. Tocharian, Arm and Alb contain negligible material.

Abbreviations: AIT = Aryan Invasion/Immigration Theory; Alb = Albanian; Arm = Armenian; Av = Avestan; Av = Avesta; AV = Atharvaveda; B = Baltic (=Lth, Ltt, OPr); Br = Brāhmaṇa(s); C = Celtic (=OIr, Gallic, Welsh, etc); cf = compare; cogn = cognate (s); cpd = compound; dial = dialect; E = English; exc = except; f = feminine; gen = genitive; Gk = Greek; Gmc = Germanic (=Gth, OE, OHG etc); Gth = Gothic; HG = High German; Ht = Hittite; IA = Indo-Aryan; IE = Indoeuropean; Ir = Irish; Ks = Kassite; L = Latin; Lth = Lithuanian; Ltt = Lettish (=Latvian); m = masculine; M = Middle; Mcn = Mycenaean; Md = Modern; Mt = Mitanni; N = Norse; O = Old (before other designations, like OIr = Old Irish); PIE = Proto-Indoeuropean; R = Roman; Rs = Russian; RV = Rgveda; S = Sanskrit (and Vedic); Sc = Scandinavian; Sl = Slavic (= O Bulgarian, Serbo-Croatian, Russian, etc); T = Tocharian A or B. or both: V = Vedic.

² This is so tenuous that I do not include it. Beyond the dubious reconstruction (one can prove many things with untestable reconstructions) it must be noted that the supposed cognates occur in Italic and Celtic only, which are generally thought to have had a common Italo-Celtic past so that cognations limited only to these two prove nothing. Precisely because IEL thinks there was a common Indo-Iranian period I have disregarded common Indo-Iranian names. Long ago, L. Bloomfield showed that correspondences in closely contiguous languages like Italic-Celtic or Celtic-Germanic, etc, may well be intra-familial borrowings, no more (1933: 350-60).

The Table.

Agni: Ht Agnis; Sl Ogon.

L *ignis*, Lth *ugnis*, Ltt *uguns* (Note: even the Iranians who had Fire-worship did not preserve this name, not even as a demon like Indra, Sauru etc, though the stem appears in the name *daštaγni*).

Ht 'fire' pahhur.

Aryaman: Mcn Are-mene; Gk A re-s; C Ariomanus (Gaul) / Eremon (Ir); Sc Irmin.

The ar-stem in most IE languages – 'move, rise, stir'.

Aśvin: Mcn Iqeja (horse-deity); C Epona (Gaul);

Gk hippos, (Mcn igo, dialect ikkos), L equus, OE and Ir eoh, B ešva, all 'horse'.

Bhaga: Ks Bugas; Phrygian Bagaios (Zeus, Gk); Gk Phoibos; Sl Bogu.

Bṛhaddivā: C Briganti(a), later St Brighid (Ir).

Dyaus: Hittite ^D *Siu-s*; Gk *Zeus/Dia-*; L *Ju[s]piter*; Gmc Tîwaz; Rs *Divu(?)*.

Lth dievas (usually 'god' cognate with S deva, dīv).

Indra: Ht Inar(a); Mt Indara; Ks Indaš; C Andrasta/Andarta.

Gk anēr/andr-; Av indra (a demon).

Marut-as: Ks Maruttaš; L Mars; C Morrighan (Ir).

The stem mar/mor/mer- 'shine' etc is common in all IE branches.

Manu: Gmc Mannus (in Tacitus Germania 2), father of the Gmc people, like the V semi-divine figure who

was regarded as the father of mankind.

Mitra: Av Mi θ ra; Mt Mitrasil.

Gk mitra 'band for chest or, mainly, hair' (> E mitre 'bishop's pointed head-gear').

Apām-Napāt: Roman Neptunus; C Nech-tan (Ir); Gmc (ON) sævar niðr 'kin of water (=fire)!!

Gk a-nep-sios, L-nep-; OHG nevo, OE nefa, OLth nep- etc 'nephew, cousin'.

Parjanya: Sl Perunŭ; B Perkunas (and variants); Sc Fjörgyn (-n, Thor's mother).

L spargo 'throw about, besprinkle', C eira 'snow'.

Rbhu: Gk Orpheus; Gmc Elf (and variants).

Gth arb-aibs; Sl rabu, Rs rabota 'work'; L orbu (S arbha, Gk ὀρφανός) 'deprived' etc.

Saranyu: Mcn & Gk Erinus, Helenē.

L salio 'leap', salax 'fond of leaping'; TB salate 'leaps'.

Sūrya: Ks Śuriaś; Gk Hēlios; L Sol; B Saule.

Gth savil, ON sol, W haul, Sl slunice, Rs solnce.

Tvaṣṭṛ: Gmc Twisto (Sc).

Uṣas: $Gk \bar{E}os$; L Au[s]rora; Gmc Eostre.

Lth auśra, Ltt ausma, C gwawr, etc.

Varuna: Mt Uruwna; Gk Ouranos; B Vēlinas (-and cf jur- = sea).

L ūrina, ON ver (=sea).

Vāstoṣ-pati : Gk Hestia ; L Vesta.

Gth wisan 'to stay'; OHG wist 'inhabiting'; T A/B wast/ost 'house'.

Yama: Sc Ymir.

L gemi-nus 'twin'; Gk zēmia 'damage', Av yam, Yima .

3. Now follows a brief description of the deities. For more details and full references see Kazanas 2001. Note that all Vedic deities come from the RV.

Agni is the Firegod born of Sky and Earth (or the Greater-god Tvaṣṭṛ and the Waters) – though at times he is the progenitor of all gods. God of inspiration and consciousness in man (RV II, 9, 4; VIII, 91, 8; etc) he has three births and abodes in heaven, midspace and earth and thus can mediate between the terrestrial world (and man) and the celestials; he is a major divinity in the Vedic Tradition. Among the Hittites only the name Agnis survives without any significant mythologems beyond the Fire-cult. Among the Slavs Ogon/Ogǔn is the god of fire and heat, known as Svarogich, i.e. the son of high god Svarog (see under **Sūrya** below); he helps his brother Dazhbogǔ 'who grants plenty', an aspect of the Sungod, to win Lada, the Ocean's daughter but little else remains about him except his fire-cult.

Aryaman in the *RV* is the third member of the triad with Mitra and Varuṇa, a god of harmony and reconciliation (marriage-hymn, X, 85, 23 & 36; V, 3, 2 and of the unbroken course/path. We don't know anything much of the Mcn and C deities – except that Eremon (Ir) was a warrior-king. In the *Av Airyaman* is connected with wedding and healing (I, 228-235). In Scandinavia there was reverence of Irmin's *Sūl* the cultic 'World-pillar', and talk of Irmin's *theod* 'people' (=mankind). In classical Greece, *Ares* is taken as the Wargod, but, in fact, no mythologem supports this and he never wins a battle. He is vanquished by his sister Athena (who never loses a battle); he is imprisoned by some giants and Hermes rescues him; he is derided and scolded by his father Zeus as being utterly incompetent (in the *Iliad*). The Gk name is obviously a relic of Mcn *Are-mene* (= S *Aryaman*).

The **Aśvins** were twins, Horse-gods, called also *Nāsatya-*. They were physicians and rescued people from storms or fires etc; they may have been separate originally, but in the VT they are born as twins of *Saraṇyū* (see the name and RV X, 17, 2) – but elsewhere Heaven is their father (I, 182, 1 etc) and the Oceanwaters their mother (I, 184, 4). They escorted the Sun's daughter Sūryā to her wedding. The Mcn *Iqeja* is only a name. The Greeks later had the demigod twins, Kastor and Poludeukes (=L *Pollux*), the *Dioskouroi* 'lads of Zeus', brothers of beautiful Helen (of Sparta and Troy); like the V gods, they rescued ships, escorted once their sister to safety and were expert horse-men. The Balts too had similar heroes (more than two), *Dievo Sūnelai* 'god's lads' (Lth) who saved the Sunmaiden *Saules Dukteryus* from drowning. The C *Epona* is also only a name. Cognate with V *Nāsatya-* is the Av *Nānhaiþya* and the Mt *Nāšatia*(nna) – absent in all other branches.

Bhaga is the Bountiful Provider, brother of Uṣās, the Dawn-goddess (RVI, 123, 5); he is invoked in the wedding ceremony (X, 85) but also increase of progeny (AVXIV, 2, 13) and deepening the plough (AVIII, 12, 4). In later times appears the adj bhagava(n)t the blessed one'. The name becomes the generic name for 'god' in the Iranian and Slavonic branches. In Phrygia in Anatolia (modern Turkey), the stem appears as adj bagaios for Zeus. The Gk phoibos (S bh = Gk ph and S q often = Gk b), is another name for the Sungod.

Bṛhaddivā is the name of one of the divine mothers in the RV (e.g. II, 31,4, etc) but nothing else is said of her. The stem $b_{r}ha(n)t(\bar{\imath})$ appears as C Brigantia (in Britain), who was Sulevia in Gaul and then St. Brighid in (Christian) Ireland.

Dyaus is, as a m stem, the bright Skygod and Father invariably coupled with mother *Pṛhivī* 'Earth'. As a f stem dyaus is the Sky as matrix, the source of manifest phenomena. The Av daeva and Sl divu denote devils, not gods and are cognates with S deva rather than dyaus though both ultimately come from div/dyu-. The Hittites venerated ^DSiu while in two sub-branches we find the Sun as *Tiwat* (Luwian) and *Tivaz* (Palaic). In Greece, this appears as Zeus/Dia, the Thunderer, King of gods on Olympus. The Romans had Jūpiter (< Jus-/Jup-pitar = Gk Zeus-patēr). Among the Gmc people the Skyfather appeared early as *Tiwaz* much as in Luwian and Palaic. See that Lth dievas is usually 'god' and only in some Ltt songs means 'skygod'. The name appears as *Div*ǔ among the south-eastern Russians, a watching, protecting god.

Indra is the beloved god of the IAS - the Thunderer *vajrin*, 'who holds the bolt' victorious in battles, generous *maghava(n)t*, the Soma-drinker, performer of many miracles and *vṛtrahan* the slayer of *Vṛtra*, whereby he released the waters. In the *Avesta* he is a demon *daeva*. But among the Mitannis he is *Indara* and among the Kassites *Indaš*. The name may appear as goddess *Inar-a* in the Ht tale where she helps vanquish the dragon Illuyanka. (Some

translate *Inar-a* as m: Ht has no masculine and feminine, only animate and inanimate. But as Inara has an affair with a man, it is most likely that the name denotes a goddess.) The Iceni tribe of the Celts in Britain had a Wargoddess *Andra-sta* (=*Andar-ta* in Gaul). This stem *andra/andar* and, of course, *indra* sound very much like the Gk stem for 'vigorous man' *andr-* (< in oblique cases of Gk a- $n\bar{e}r$ = S nr/nar-).

Manu is the revered "Father" (RV, II, 33, 13) and survivor of the Flood Śatapatha Br I, 8, 1, 1ff) who generates a new race of men through sacrifice. In post Vedic texts he is the lawgiver, the guardian of a kalpa, etc. He was the son of Vivasvat (=sungod) and Saraṇyū, daughter of Creator-god Tvaṣṭṛ. The Roman historian Tacitus reports (Germania, ch 2) that the Gmc people worshipped Mannus, the son of earth-born god Twisto. Mannus had three (or more) sons from whose names are known the tribes of the Germans (=mankind).

Marut-as are storm- and war-gods assisting Indra (RV VIII 8, 24): they are said to be as many as 7×7 (V, 52, 7) and more. Riding on their golden cars with bright javelins and arrows and a golden axe they disperse darkness (I, 37, 9) and dispatch demonic foes (VII, 57, etc). The plural name appears in the singular Maruttas in the Kassite list of gods. The stem appears as $M\bar{a}$ rs in Rome – the husband of Rhea Silvia and father of Romulus and Remus, founders of Rome; apart from his martial aspect he must have had a fertility side too as he was called *silvanus* 'offorest'. The Celts had many war-deities and the Irish Mor-righan contains the stem mar-: she was known as the 'war/phantom queen'.

Mitra, men's 'Friend', has only one hymn to himself (RV III, 59) elsewhere being in company with Varuṇa and sometimes Aryaman. He is a great āditya 'deity of light and freedom' – like Bhāga, Sūrya the Sungod, and others – and brings men together; later he is associated with day and Varuṇa with night (AV IX, 3, 18; XIII, 3, 13). In Iran he is Miḥra, the guardian of fidelity and high god Ahura Mazda's power of light; later Miḥra becomes a Sungod whose cult spreads in the Near East and the Roman Empire. In the Ks/Mt documents we find only the name Mitra-sil.

Apāṃ Napāt is the bright 'Offspring of Waters', an aspect of fire, a "swift horsed" self-luminous spirit among the Water-divinities (*RV* II 35; I, 65; X, 51). In the *Avesta* Apām Napāt is again 'swift-horsed... the shining lord ... of females [i.e. Waters]', and the 'luminous glory' of kings *X*°*arənah*, the most desired object in the struggle between Good and Evil. Lying at the bottom of the ocean or rivers, it can be approached only by the most worthy. A Gk early tale has Theseus dive into the sea to retrieve a golden ring, thereby proving he is the worthy son of Poseidon, and there meets "a brilliance shining like fire [from the Nereids = semi-divine Water-nymphs]"; but here the cogn name is missing. This appears in the name of the Roman sea-god *Nept-unus*. It also appears in the Irish name *Necht-an*, the lord of the Tuatha De Dannan, who has a secret well; only he and his three cup-bearers could approach it with impunity because of the powerful luminous energy residing in its depths. The Offspring of Waters appears in Nordic lore too as *Szevar Niðr*, again an aspect of fire.

Parjanya is the god of rain and storm – a quickener of vegetation, father of Soma (RV IX, 82, 3) and producer of fertility in cows, mares and women (VII, 102, 2); he is connected with Indra (VIII, 6, 1, etc). He appears as *Perenu/Perun* among the Slavs, the great War-god, Lord of the World and regulator of wind and rain, thunder and lightning etc; like Indra and Zeus he too slew a serpent and released waters and cattle. In the Baltic tradition appears *Perkunas* (and variants) but little else is known about him, except that a perpetual fire burnt before him, attended by Vestal females (see under **Vāstos-pati**). In the Scandinavian tradition we find Fjorgyn (m) and Fjorgynn (f: Thor's mother) but nothing beyond the names: mighty Thor overshadows them.

The **Rbhus** are three brothers, skilled artificers, poet-artists (RV 1, 161, 6). Their deeds were performed through unusual power of mind (I, 20, 2; IV, 33, 2; etc) providing not only material artefacts but also prosperity, vision, longevity, fame, and the like. They attained immortality and divinity in the Mansion of the Sungod having served as priests there. The name appears as *Orpheus* in Greece, a poet and musician, who descended into Hades to bring out his wife Eurudikē but didn't quite succeed. He too had served as a priest of the Sungod Apollo neglecting his worship of Dionusos – and so the Mænad-Bassarids tore him apart; but his severed head floated down to the sea, still singing, and became a well-guarded oracle in Ionia. The same stem appears as *Elf* (and variants) in the Germanic branch. There were dark elves living underground but also fair ones in Alfheim: associated with the sun, they could heal, but otherwise played no important role.

Saraṇyū, 'the Nimble One', is a mysterious lady. Daughter of Tvaṣṭṛ she gets wedded to (the Sungod) Vivasva (n)t and bears twins but then disappears leaving in her place her Double or Shadow Savaṇā (RVX, 17, 1-2). In Yāska's Nirukta (XII, 10) Vivasvat finds Saraṇyū in the form of a mare, becomes a stallion and from their union are born the Aśvins. This links with a Gk tale (Pausanias VII, 25, 3-7) where, in Arcadia, goddess Demeter erinus (= V saraṇyū) was found as a mare by Poseidon, god of the sea; he became a stallion and from their union were born a splendid horse Areion, and a girl, Despoina 'Lady-mistress'. The same name erinus was that of a deity earlier in Mycenaean times. (In Homer and Hesiod the name appears in the plural as 'avenging powers').

Sūrya is the theonym par excellence of the Sungod. Both this (and svar) and the allonym Savitr derive from $\sqrt{s\bar{u}}$ 'begetting, enlivening'. Sūrya like Bhaga and others, is an $\bar{a}ditya$ (RVI, 35, 1; etc). In Old Iranian the sun is Hvare (=Vsvar): he has swift horses like Sūrya and is the eye of Ahura Mazda (AvI, 225; II 85 ff) as Sūrya is the eye of Varuṇa (RVVII, 63, 1). The Ks list includes god $\check{s}uria\check{s}$ (=Vsurya). In Greece he is $H\bar{e}lios$: at first he is quite distinct from Apollo phoibos, but later both appear as one deity. As Sol he was worshipped also in Rome; the Romans then borrowed Apollo (like many other deities and elements) from the Greeks. But the name appears also among the Slavs as Svarog (and variants) being probably a conflation of two IE cognates, like Ssvar 'sun' and Svarga 'heaven'; he was the Skygod. The Balts have tales only of the sun's daughter Saules dukteryus (Solvet Savar Sava

Tvaṣṭṛ is a minor creator god who is responsible for the birth of men (RV X, 10, 5) and "begets mankind in varied manner" (III, 55, 19). He is Saraṇyū's father and, therefore, grandfather of Manu, borne of Saraṇyu's Double (and called sāvarṇa). Among the Germans he seems to appear as Twisto, a chthonic god, who begets Mannus whose sons are the progenitors of the Teutonic Tribes.

Uṣās is the Dawn-goddess who never infringes rta, the cosmic order. The hymns addressed to her are among the loveliest in the RV. She is connected with the Sungod and the Aśvins. In Greece the cogn name is $\bar{E}\bar{o}s$, the rosyfingered Dawn (of Homer). The Romans worshipped her as Au[s]rora and, among the Germans and the Anglo-Saxons as $E\bar{o}stre$ (>Easter), the goddess of spring. Among the Balts, the Lettonians had the worship of the sun in the spring as ushing (= $Vuṣ\bar{a}s$).

Yama is a curious figure. He and his twin-sister Yamī were the first pair born of Saraṇyū and Vivasvat. Yamī wanted to have sex with her brother but he strongly refused (RV X, 10) showing that incest was not permissible. Yama's birth was unattended by death (X, 83, 5) and he looks after the abode of the dead in heaven (IX, 113, 7; X, 18, 13): all go to him by the same path (X, 14, 1; see also AV XV, iii, 3, 13). The Irn Yima is also son of Vivanhant (Av I, 10ff; II, 59ff), has in later literature a sister Yimeh and does copulate with her. With high god Ahura's guidance he gathers creatures together in an underground shelter against an oncoming severe winter that ends all life outside. In the Sc myth Ymir (=V Yama) rose out of the melting ice in the form of a giant and was nourished by the milk of the primeval cow Audhumla. Gods Odin, Vili and Ve slew Ymir and from different parts of his body were created different parts of the world: the sky from his skull; mountains from his bones; the sea from his blood, etc. (Here we see affinities with the Puruṣa sūkta, RV X, 90, where again the different parts of the world, including the gods, come from Puruṣa's being).

Varuṇa is the great ethical god in the *RV* who strangely recedes into the background later as a minor deity of waters. He is the King ($samr\bar{a}j$ -) Skygod who encompasses all ($\sqrt{vr} > vrnoti/vrn\bar{u}te$), lays down laws $dh\bar{a}man$ and creates and rules through $m\bar{a}y\bar{a}$ unfathomable 'power of knowledge of measure'. He watches everything and has spies (spaśa) everywhere; he binds the sinner with fetters $p\bar{a}śa$, but can also accept repentance. He is frequently lauded with Mitra and sometimes with Aryaman forming a triad. The name appears as varana in the *Avesta* denoting the sky and the mythical region where Thraetona smote the dragon Aži Dahāka. Both V Varuṇa and Av varana are described as 'four-cornered'. The stem appears also as the Mt uru-wna-asil preserved in the list of gods, where appear also Mitra-sil (=V varana) and varana are described as 'four-cornered'. The stem appears also as the Mt varana-varana preserved in the list of gods, where appear also varana and varana are described as 'four-cornered'. The stem appears also as the Mt varana-varana preserved in the list of gods, where appear also varana are described as 'four-cornered'. The stem appears also as the Mt varana-varana preserved in the list of gods, where appear also varana are described as 'four-cornered'. The stem appears also as the Mt varana-varana preserved in the list of gods, varana are described as 'four-cornered'. The stem appears also as the Mt varana-varana preserved in the list of gods, varana are described as 'four-cornered'. The stem appears also as the Mt varana-varana preserved in the list of gods, varana are described as 'four-cornered'. The stem appears also as the Mt varana-varana preserved in the list of gods, varana are described as 'four-cornered'. The stem appears also as the Mt varana-varana preserved in the varana-varana preserved in the varana-varana-varana-varana-varana-varana-varana-varana-varana-varana-varana-

Finally, **Vāstos-pati**, the divine spirit of dwellings. This deity has one whole hymn, RV VII, 55 but no deeds like those of Indra or Varuṇa. In Greece this appears as *Hestia* the virgin goddess of (house and) hearth, which, when lit, in those days gathered round it the family. The stem appears in Rome as *Vesta*, also a female deity, served in her temples by (Vestal) virgins.

4. In 2002 I presented this material encapsulated in a Table of Theonyms and used it as one of several arguments to show that the IAs were by 1700-1500 indigenous to Saptasindhu (and India generally). Prof Mallory, editor of the *Journal of Indo-European Studies* thought this unscientific and, in the same issue 2002, presented various counter-arguments serious and facetious. I dealt with some of them in a paper published by the *JIES* in 2003. As we had some friendly exchanges subsequently and he reproduced his (counter-)arguments without taking stock of what I had actually said in every case, I shall deal with them afresh.

J. P. Mallory's criticism.

5. It is astonishing that the RV alone from the whole of Indic literature contains so many theonyms that have correspondences in one or other IE tradition. Thus V has all 20 names; Gk has 9; Gmc 8; L and C 6; Mcn, B and Sl 3; Ht 2. (I do not count the Kassites and Mitannis because apart from names, they have little else).

Just as astonishing is the absence of a name common to any two IE branches to the exclusion of the RV. Some branches, like the Celtic, the Germanic and the Baltic certainly borrow from the Romans (or Greeks) deities like Mars, Mercury, etc, but no two have in common a truly inherited name.³

I called this phenomenon the P(reservation) P(rinciple) and used it as a major argument for the antiquity of the RV, for its close proximity to the PIE culture and for the probability not only that the IAs are indigenous by 1700 BC but also that the Saptasindhu and its larger neighbourhood was the homeland of the IEs – without excluding the possibility that the homeland extended loosely from Saptasindhu to the eastern Pontic Steppe (2002). Mallory criticised this as 'unscientific'. He argued that this is only a partial view, that some of the other branches do not have the rich Indic literature, that with the years they suffered cultural and linguistic impoverishment, intensified by the advent of Christianity and that some of the theonyms like those of the Firegod or the Horse-deity are not inherited but were created *ad hoc* by, say the Hittites or the Celts, because these people naturally felt that they should have the respective deities (2002).

6. I replied to some of these charges (2003). Here I shall briefly recapitulate and start by asking, what is 'scientific'? Everybody loves to use the term. But what does it really mean? Telepathy is a well established phenomenon that occurs frequently between twins and sometimes between a mother and her child(ren) or, less so, between other persons. Yet, at present, there are no 'scientific' means to verify it, other than ordinary observation and common sense.

A modern scientist, J. M. Schwartz, an American neurophysiologist at UCLA, wrote of "the cult of scientism" as "the fallacy of believing that the method of science must be used on all forms of experience and, given time, will settle every issue" (2002: 6). Five decades earlier another American scientist had written: "expressions such as 'scientific truth' should only be taken in a very limited sense... There is no scientific truth in the absolute sense. The phrase *Ad veritatem per scientiam* [= 'To truth by means of science'] is an absurdity" (Du Noüy 1949: 23).

But if we regard extant theonyms (or vocabulary) in every IE branch as partial or fragmentary evidence and therefore not scientific, what should we say about the archaeological statements regarding very fragmentary evidences of past cultures? What is so "scientific" about these? How can we be certain of dates and identifications with this or that people? Nobody knows what language(s) the people of the so-called Kurgan culture spoke and, in his voluminous work examining all anthropological evidence on the subject of the IE dispersal, J. Dean expresses grave doubts about this putative locus of original dispersal saying "the ancient cranioskeletal evidence in Europe for expansions by the Kurgan groups is surprisingly meagre in places (2001: 317). Thus adherents of the AIT, including Mallory, have one standard (apparently loose and 'unscientific') for their own theories yet demand high exactitude in other areas which is, in any case, impossible.

³ See again §2 and n 2.

In any event, the 'scientific' method, like every successful method in any human investigation or, indeed, any activity, requires three ingredients: passionate interest, clear observation and bright reasoning. Passionate interest directs attention to the particular field and keeps it there against all difficulties until the work is completed. Observation, setting aside wishful thinking and all bias, collects data related to the enquiry. Reasoning discriminates between relevant and irrelevant, accurate and inaccurate data and also premises and so arrives at (correct) conclusion(s). All this holds for every discipline in the sciences (Beveridge 1968) but also for the humanities. The fact that a science like biochemistry uses much highly complex technology does not alter the need for the three basic aspects that are common to all human endeavour. Because of faulty reasoning and/or inadequate observation scientists make as many and big mistakes despite their technical instruments as researchers in any other field (ibid, p 115ff). Furthermore, insight or inspiration and lucky circumstances, all of which are out of one's control, play important part in the sciences no less than in other areas (ibid, p 27ff).

Finally, Thomas Kuhn angered many when he stressed with much evidence that a personal factor intervenes (bias, prejucide, self-interest) so that many scientists promote the mainstream paradigm within which they operate and ignore, dismiss or cover up anomalous data that don't fit in (1970). A classic example is, of course, the violent reaction of scholars in the late 16th and early 17th centuries to the new heliocentric model of our solar system, presented first by Copernicus, then advanced by Brache, Kepler and Galileo, despite official prohibition and persecution (Koestler 1964). Prof C. B. Pert of Georgetown University medical Center, Washington, gives several recent examples in the biochemical sciences (2002: 19; 161-2; 223).

So we can bypass this and move on.

Early and large literatures.

7. It is simply not true that the RV is larger than the early literatures of the other branches, even Celtic, Germanic and Slavic, all having mostly but not exclusively the New Testament and other ecclesiastical texts, but not Baltic which is non-existent until late times. Otherwise, the RV is very much shorter and highly repetitive!

Now Hittite extant literature is both early (c1600) and quite voluminous yet poorer in IE theonyms than the 'poor relatives', C, B, and Sl. To write (as Mallory wrote to me: 2004) that "Anatolian [=Ht] documents are so riddled with Sumerian, Akkadian, Hurrian and Hattic forms that it is reasonably obvious that it is not comparable" does not explain anything. The statement describes the situation; it does not explain it. The question is: Why do the Hittites, despite their early and rich literature and their dominance in all the neighbouring area, have so few elements of PIE? Why are their documents "so riddled" with non-IE material – to the extent that they have none of the 8 IE stems denoting the closest relations (husband-wife, father-mother, son-daughter, brother-sister) almost all common to all other branches?

The Hittites are mentioned in documents of the Near East by 1900 BC. So they had come to Anatolia earlier and soon established a kingdom which by 1600 expanded to form an Empire that would threaten other peoples, including the Egyptians, and would last down to the 12th century.⁴ Obviously, they had not been coerced into abandoning their IE heritage and absorbing the cultural features of their neighbours. They did this because they found the new cultures just as good as, if not better than, the one they had brought. They were too far from their homeland, obviously, and not numerous enough to influence culturally the local peoples. I would add that probably they brought no families (i.e. women and children) or not many, with them and so adopted the corresponding words of the local languages. They adopted also the gods (and their names) that prevailed in that region.

Very obviously, here literacy played no part whatever in preservation because the loss of inherited cultural elements had happened much earlier. But if early literacy and substantial literature did not help preserve inherited PIE elements in this case, then the two may well prove irrelevant in other cases too, while losses are due to causes other than late literacy and a small volume of literature.

8. Greek has 9 names – perhaps due to its voluminous literature. But note some facts. The theonym 'Ouranos' does not appear in Homer, where *ouranós* denotes only the sky-vault; it appears in Hesiod's *Theogony*, first as the

⁴ See Bryce 2002; Dunstan 1998; Puhvel 1994. For the view that they are indigenous and that Anatolia is the IE urheimat, see Renfrew 1999.

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son of Earth (*l* 127) then as her consort (*l* 133). 'Orpheus' again does not appear in Homer nor Hesiod, but first in some fragments of Ibycus (6th cent BC) then Pindar (5th cent BC) and in some iconographic material (relief and pottery) from c 580. 'Hestia' too is not in Homer but is in Hesiod (*l* 454), in two Hymns to Hestia (White: 448, 454) and one hymn to Aphrodite (White: lines 406-9). 'Demeter Erinus' is also unknown to Homer and Hesiod. Goddess Demeter is, of course attested; so are the *Erinues* (pl), Fate's avenging spirits (f). The first mention of Demeter Erinus of Arcadia (south Greece) is in Callimachos, 3rd cent BC – but only a name. The story itself which links this deity with Vedic Saraṇyū is found only in Pausanias, 2nd cent CE! Thus if we took Homer and Hesiod only as Gk sources we would not have Orpheus (and perhaps would not make the connection with V Saraṇyū). And if we took only Homer, then we would miss Ouranos and Hestia too. Thus the 9 retentions would decrease to 6 – which is less than Gmc and only as many as L and C. So, Gk seems, indeed, to be saved by its large literature, starting early and spreading over several centuries.

But there is another side to this issue. Homer writes in Ionia, i.e. the isles and shores of eastern Aegean. Hesiod writes in Boeotia, which falls west of Athens and Attica. Arcadia is in the Peloponnese, well to the south of Attica. Orpheus, again, came down from north Greece. Thus we have, simplifying matters considerably, five areas with partly different traditions. Ouranos as a god is unknown in early Ionia and Orpheus, whose cult came from the north, seems to be unknown in the early period in all the other regions. Now, to take an obvious example, the name *Erinues* (pl) was known to Homer, Hesiod and others; Hesiod has them arise from the blood-drops that fell on earth after the castration of Ouranos by Kronos (*Theogony* 185). But the tale of Demeter Erinus was preserved only in Arcadia in, presumably, an unbroken oral tradition, as the cult of Orpheus was similarly preserved in northern Greece. On the other hand, in Homer and Hesiod, who recorded the oral traditions in Ionia and Boeotia respectively, we find many theonyms of non-IE provenance: Aphrodite, Apollo, Artemis, Demeter, Dionusos, Hephaistos, Kronos, Persephone, Pluto, Poseidon, etc. Not one of these names has cognates in other IE traditions. Even earlier, in Mycenaean times, we find many non-IE theonyms like *Drimios*, son of Zeus, *Emaa*, *Ipemedeja*, *Manasa*⁵, etc.

We must therefore conclude that the different Greek tribes adopted alien deities even as they forgot, or threw off, many that belonged to their inherited religion. It is possible they disliked the cults of the IE Firegod, or Wargod or Raingod and did not even take them along when they left the homeland. Thus the names, say for convenience's sake, corresponding to Agni, Indra and Parjanya were jettisoned quite early (including the cogn stems in other lexical forms, except perhaps andr-) and new deities were adopted instead. Surely it can't be insignificant that there is no trace in Gk of the IE stem agni/igni/ogni-, of manu , nor of parjan/perun/perkun- etc. If the Greeks (in Arcadia) could preserve for all these centuries the name Dēmētra Erinus and the tale of her union with Poseidon (both in horse-form: see § 3, under Saraṇyū), surely they (in any region) could have preserved these IE theonyms as well; but, instead, they preserved the non-IE ones like Aphrodite, Apollo, etc. Thus the decays and losses the Greeks suffered with their theonyms had little to do with literacy and literature: as with the Hittites (§7), these occurred despite early literacy and voluminous literature because they occurred long before these two phenomena. The Greeks either disliked some cults or their oral tradition was not effective enough to maintain those cults, or both. And their system of oral transmission was ineffective because they were on the move for a fairly long period far from homeland.

§ 9. A similar situation prevailed in the other branches – and Christianity played no part.

A striking fact is that although L has an early and large written literature, it has only as many IE theonyms as C and less than Gmc, which acquired a literature many centuries later. (Thus, here again early literacy and a large literature do not play a significant part in preservation – as we noted in § 7, above, though they may help at times,

⁵ C. Davaras conjectures that this is cognate with Hindu snake goddess Manasā(devī) who is "possibly originating in Harappan times" (2005: 138). This may be so but it is a very long shot. Davaras follows S. Bhattacharji (1993: 4ff) who deals only with medieval Bengali poems. Manasā is the name of a snake in *Mahābhārata* 1 52.5 and later is the sister of Vāsuki, lord of snakes. In later texts other legends are told about her (see Dimock & Ramanujan 1964). There is no evidence whatever that the Harappans had a snakegoddess called Manasā since their writing has not been deciphered, nor that the Mycenean *manasa* was a snakegoddess since nothing else is said about this theonym. There are several more similar unclear cases (e.g. S śrī L ceres; S budhna Gk puthon; etc) but they require a separate study.

as with Gk in §8.)

Then, L has many theonyms that have no cognates in the other branches – Angerona, goddess of coming spring, Bacchus (= Gk Dionusos), Dis (= Gk god of Hades), Janus, 'god of passages', Mercury (= Gk Hermes), Minerva (= Gk Athena), Quirinus, patron of producers, Saturnus (= Gk Kronos), etc. All these names can hardly be of PIE origin since they are not found in the other IE branches. The name of $J\bar{u}no$, consort of Jupiter, is thought to come from the stem found in S yuvan/yun- 'young'; of Venus, goddess of beauty and love, from the root in S $\sqrt{van} > vanas$ 'desiring, obtaining': both names are innovations, not found anywhere else as theonyms. The old Italic people lost much of their heritage and acquired much non-IE material (some borrowed directly from the Greeks – Apollo, Hercules, Proserpina etc) long before literacy.

Neither did the "poorer" branches lose the IE theonyms because they had no early literacy or because they were christianized. They lost them long before Christianity and perhaps before they settled in their historical seats. This is well demonstrated by the references to Celtic, Germanic, Baltic and Slavic deities found in epigraphic material and in Roman and Byzantine records and, particularly for the Balts, in Latin, German and Russian chronicles (Puhvel 1989: passim). We find very few IE theonyms in all these documents but many from the Graeco-Roman culture and many more from unknown sources: – e.g. C Dea Artio, Belenos, Cernunnos, (A-)Esus, Lugus (cf Lugu-dunum = Lyons, in France), Maponas, Ogm-a/ius (= Gk Hercules), Taranis, Teu/Tou/Tu-tates, etc (in Gaul) and Mother Danu (cf S dān-u/avas) and her brother Dagda 'the Good God', the Ollathair 'Allfather', death-god Donn, etc (Ir); also Gmc Aegīr, Idmun, Loki, Nerthus, Njord, Skadi, Thor, Ullr, etc; then B Andaj, Autrimpus 'sea god', Diviriks, Occopirmus 'Very-first (=sky-god)', Potrimpus 'rivergod', Puschkaytus 'earthgod', Suaixtix 'sungod', Teljavel 'divine smith', etc; finally, Sl Dažibogŭ 'Sungod', Khursu (< Persian Xoršīd 'sun'), goddess Mokoši an allonym for Mati Syra Zemlja (= S kṣam-) 'Mother Earth', Simaroghŭ, Stribogŭ, Svantovit 'god of light', Svjatogar 'mountain-god', Triglav 'god of darkness' (?), Vele/Volŏ-sŭ 'god of cattle, riches', etc. Note that not one of all these names has a correspondence in another IE branch or link with Christianity; so they must be pre-Christian. (For Celtic and Germanic names MacCulloch 1949; for Balitc, Blažek 2001; for Slavic, Simonov 1997; for all Puhvel 1989.)

Undoubtedly late literacy and Christianity are responsible for many losses in all these branches. But, as the names above testify, there is no dearth of pre-Christian theonyms. Except Vedic, every other branch has only few IE theonyms but many non-IE names. What is lacking is information about them and, more important, **IE** theonyms which were replaced by others much much earlier. These "others" have no cognates in the IE branches, so they must have come from the cultures that prevailed in Europe before the arrival of the IE-speaking peoples.

These people lost their IE gods (at least these that are identified as such by their incidence in Vedic and one or other branch) because they could not maintain them in an oral tradition that had weakened through long, constant movement, because they did not care for them and because, far from the homeland, they found the deities in other cultures just as good. It must be realised that the IE deities had dropped out of all these oral traditions before Christianity had even began – because the people had moved away from home. That people on the move tend to lose more cultural elements than sedentary folk is stated by several comparative linguists (Hock 1991: 467-9; Burrow 1973: 10; Lockwood 1969: 43).

The Firegod.

10. The case of the Firegod is quite instructive in many ways. A.A. Macdonell, an eminent Sanskritist at the turn of the 19th to the 20th cent, wrote: "Though *agni* is an Indo-European word (Lat *ignis*, Slavonic *ogni*), the worship of fire under this name is purely Indian. In the Indo-Iranian period the sacrificial fire is already found at the

centre of a developed ritual" (1898: 99)⁶. This is a typical invasionist statement, but Macdonell can be excused since in his days many data (e.g. knowledge of Hittite) were missing and the AIT was gaining strength. Yet even in those days it should have been known that among the Slavs there had been *Ogon/Ogǔn*, the Firedeity, son of Skygod *Svarogǔ*. So the worship of Agni was not a purely Indian affair. Even among the Balts there was a strong fire-cult connected with god Perkunas (see under **Parjanya**) and the word for 'fire' was *ugnis/uguns*, cogn with *Agni*. We know now that the Hittites too worshipped firegod *Agnis* and so we are sure that **there was a PIE cult of Agni**. It was not just Indian or Indo-Iranian! (For the IE nature of this deity see also Polomé 1991: 74.)

The Greeks, Romans, Celts, Germans and Balts used fire in some of their rituals but there was no specific fire-cult. At least the Romans and Balts (and Slavs) retained some IE stem for fire. The other languages (Gk, C, Gmc) lost that as well as the theonym. The Iranians did not preserve the cognate of Agni, despite their intense worship of fire (Av atar); the stem survived in the name Dašt-ayni nonetheless. What is the explanation?

In the case of the Iranians, Zarathustra's religious reform must have been responsible for the loss of the theonym, cogn of *Agni*, but it would not as a matter of course expunge the ordinary stem for fire also. The loss of the ordinary noun must have had other causes. Elsewhere we must assume that the different peoples moved for long away from the homeland and could not, or did not want to, maintain the fire-cult finding it perhaps difficult or bothersome as they moved on. The Balts retained it but transferred it to Perkunas and lost the fire-theonym. The Slavs and the Hittites retained something of it together with the theonym, but none of the rich lore that we find in the *RV*.

Firedeity and Horsedeity.

11. It is possible, of course, that in their dispersal some IE tribes decided that it would be nice to have a Firegode or Horsegod or whatever. And (as per Mallory, 2002) they did so. Indeed, it would be quite natural that, say, the Slavs and the Hittites before them would have created a Firegod while the Celts set up a Horse god. But I can't help wondering why other peoples did not feel a similar need, people like the Greeks, close to the Hittites, or the Balts, Germans and Celts, close to the Slavs: all these did not have a specific fire-cult. Then, again, apart from the ancient Mycenaeans in Greece and the Celts in Gaul, the others did not feel the need for a specific Horse-deity.

The Slavs had the IE stem for fire in *ogni* so it is not strange that they should call their Firegod 'Ogon' (and variants). But the Hittite stem for 'fire' was *paḫḫur* (cogn with Gk *pur*, Gmc *fȳr*, etc). So if they had created independently a Firegod they would have given him a name related to this and not the name *Agnis* which has no other cognates in the Ht language, but rather miraculously coincides with the S and Sl theonyms. So we must conclude that Ht *Agnis* and Sl *Ogun* are names cognate with the PIE inherited name for the Firegod. So these Firegods are inherited not invented.

Similarly, the Mycenaeans had the IE stem for 'horse', *iqo/iqe-*. Their Horsedeity was accordingly named *Iqeja*. But the Celts had, in their different dialects, different names for 'horse': *capall, cullach, ech, marc(h)*, etc. Of these *ech* (OIr) is IE (cf Gmc *eoh*, S *aśva*, L *equus* etc). So we would expect the name of their Horsedeity to be related to one of these names – even *ech-*whatever. But the name is *Epo-na* and the deity is female. I should add that both ancient Greece and Ireland have a very rich mythology related to the horse and also various kinds of horse-sacrifice (Anderson 1999). So 'Epona' is inherited, not a chancy innovation.

The inevitable conclusion from this discussion is that the names of these deities are inherited, not independently invented, and therefore form valid evidence for the Preservation Principle, showing that Vedic has many more retentions than any other IE branch.

Writing in India

⁶ See also other similar comments of his, e.g. on Aryaman: "The name goes back to the Indo-Iranian period, as it occurs in the Avesta" (p 45). But he should have known that it occurred in Gaul as *Arionamus*, in Ireland as *Eremon* and in Scandinavia as *Irmin*. So the name is not Indo-Iranian but PIE. This is confirmed, of course, by the Mcn deity *Areimene* found in the Mcn documents which were deciphered in mid-twentieth century (Ventris & Chadwick 1973). But Macdonell and others at the time were thoroughly enthralled by this "common Indo-Iranian period", which is entirely hypothetical and not supported by any solid evidence (other than conjectural linguistic reconstructions). See further \$17 and n7.

12. There is also the vexed issue of literacy and oral tradition. During some exchanges, in a message to me, Nov 2004, in the context of general lexical retentions, Mallory wrote that Italic "was not seriously attested for about 1000 years later (or more by your [i.e. Kazanas] reckoning) than Vedic." This number of years is very curious. My own reckoning for the RV date is the 4th millennium BC. The AIT reckoning is 1200 BC. Now Italic (Latin, Oscan, Umbrian) is "seriously" attested in epigraphies by 500 BC and more "seriously" c300. Greek again appears epigraphically from c700 and more "seriously", say, 550 BC, when Peisistratos arranged the "edition" of the Homeric poems. (Some classicists now hold that Homer himself might have made use of writing in the 8th cent, after the development of the Gk alphabet from the Phoenician one: Lesky 1971: 73ff.)

But what are we talking about actually? In Italy we have ample writing after 300 while in Greece we have after, say, 550 a strong literary tradition. In India the first serious testimony for writing is Aśoka's Rock Edicts, 260-250 BC. So no arithmetic will give us 1000 years. It is from this fact that AIT-adherents (with Max Müller at the head) worked out backwards the other dates for Vedic literature. But, in any event, the Edicts are written in Prākṛta vernacular, not Sanskrit let alone Vedic.

However, here we must distinguish between the Vedic sacred texts on the one hand and on the other secular writings – legal, literacy and commercial. There is no evidence of any kind for writing down the Vedas. On the contrary, since their study was prohibited for certain low castes in most severe terms and since the brahmins would want to keep to themselves this knowledge in order to preserve its purity and to maintain the power it gave them, I can think of no reason why the families transmitting it would infringe their sacred tradition and put the Vedas into writing. Otherwise, manuscripts (palm-leaves and strips of birch-bark) and perhaps collections of them of secular texts may have appeared "seriously" from the 6th cent CE onward. The writer Bāṇa c 620 maintained his own reader, but this can be interpreted in many ways and certainly does not mean that Bāṇa had manuscripts of the Vedas. Very few pieces survive now from before the 14th cent. Inscriptions in few wooden planks have been found near Khotan (west of the desert Takla-Makan) dating from the 4th cent and on copper and silver (one golden) discs going back to the 1st cent CE. Nonetheless the Chinese visitor I-Tsing mentions in the 7th cent CE that the Vedas were being transmitted orally (Winterwitz 1981: 31). And it is a well established fact that they were transmitted orally even in the 20th century.

The first known commentary on the RV is that of Sāyana in the 14th cent CE. This is the only evidence for the possible writing down of the RV. By this time, the strict tradition may have loosened up. Since all the Indic theonyms are from the RV it is this text alone that we consider.

Thus on the Greek side we know that Homer and Hesiod (and others) were put into writing by 500 BC. On the Indic side we know that the RV was passed on orally and a commentary on it was composed in the 14th cent. So, I should think that, regarding written texts, the advantage lies with Italic and Greek and it is about 1800 years.

Oral tradition, literacy and Christianity.

§ 13. An oral tradition existed in all IE branches for millennia before the advent of literacy, else we would not have any information about them and their language and culture. Oral transmission was used in Greece for centuries after the Mycenean collapse into illiteracy (c 1100 BC) and even after the renaissance of literacy c 800 onward, well into Roman times, particularly by esoteric movements like the Orphics and Pythagoreans (Kingsley 1995: 322 ff; Murray 1993:100). Obviously, the other branches had some sort of an oral tradition that preserved various elements of their inherited culture. We have Caesar's testimony in the first cent BC that the Celts used writing borrowed from Greeks for secular purposes but the Druid-schools in Gaul would not commit to writing their sacred texts which they transmitted to students over a period of 20 years of apprenticeship (*De Bello Gallico*, VI, 14). Thus the Celts had writing early on (at least 100 BC and probably much earlier), but they used a system of oral transmission for their sacred lore. This sounds very similar to the Indic tradition where it was the sacred duty of certain Brahmin families to pass on their knowledge with a complex but very safe system of transmission from generation (Winterwitz 29-32, 51-2).

Writing in Ireland, in what is known as the Ogam script, appears on inscriptions in the 4th cent CE and manuscripts survive from the 7th cent – but, as was said, writing was certainly used in the 1st century BC in Gaul and probably much earlier, borrowed from the Greeks. Patrick died in 461, so Ireland was christianized in the 5th cent CE. The Italic people themselves had writing from at least the 6th cent BC and did not distinguish between

secular and sacred. The Visigoths of the Germanic branch had literacy from the 4th cent CE at least, when Bishop Wulfila translated large portions of the Christian *New* and some parts of the *Old Testament*; other sub-branches like OE and OHG evince writing c 700; but the Scandinavian group has inscriptions in the Runic alphabet from c 300; in fact there are few scattered inscriptions from the century before Christ. The Scandinavians were christianized in the 11th cent CE. Although very little is known about it, an oral tradition must have been in existence among the Slavs too, since writing and Christianity came to them rather late, in mid-ninth cent CE, from Byzantium: the earliest recorded writing is Old Church Slavonic (=Old Bulgarian) and consists of ecclesiastical texts; be it noted that Md Bulgarian began to produce its own literature only in the 18th cent. Old Russian is documented from the 11th cent. Other Slavic languages are attested from the 13th cent and afterwards. Baltic is attested only in the 14th cent CE, even though the Balts are thought to have settled in their historical habitat by c 2000 BC. The first Christians there are recorded from the 13th cent. CE. Thus, as noted in §9, Christianity had little to do with the loss of IE theonyms.

§ 14. The Baltic culture presents something of a paradox, as appears at first sight. It has preserved only 3 of the theonyms examined above, but, on the other hand, Lithuanian (and, to a lesser degree, Lettish) is one of the most conservative of IE languages. As a comparativist puts it, "Lithuanian is generally held to be the most archaic living Indo-European language... [and] some demonstrably older forms are often referred to as Old Lithuanian" (Baldi 1983: 97). This conservatism is not evident in the Lth pre-Christian religion. In this case, we must accept that Christianity may have played a significant part in the loss of IE theonyms and their cult. On the other hand the three names are the only ones that were in use long before Christianity. One would have expected that the preservation of IE theonyms would have been comparable to that of the general linguistic features.

But the case seems to be that people on the move far from the homeland, will, more easily than people settled at home, lose much of their religion and many social customs long before they lose linguistic features. If they have literacy, as the Greeks that set up colonies on the shores of the Black Sea, at South Italy and Sicily and on the north-western shores of the Mediterranean, or the Jews in Diaspora after their dispersal in the second cent CE, then they retain their religion and many social customs, so long as these do not create problems with the indigenous population or so long as the immigrants are not coerced. But when, as was the case with the IE peoples, they are non-literate, then it is difficult, when trekking with carts and horses or (more likely) bulls and donkeys, to maintain an effective oral tradition that will preserve most of their inherited culture, other than the part of language which is a daily necessity. In these circumstances, even the language will suffer break-downs and losses accordingly, as some old customs and cultural features fall into desuetude. And as the people come into contact with alien cultures and acquire new customs, even new deities, some or much of their language will change (see §9, end). The changes will be even more precipitous and pervasive if the indigenous population have literacy and a rich culture with long history.

- **15.** It is certain that the Balts and the West and Scandinavian Germans did not come into such a cultured environment. But the Hittites did in the Near East and were swamped. So, also the Mitannis and the Kassites who retained some theonyms only and only very few IE stems of Indic provenance. But we see clearly similar cases with the Viking invasions. One contingent under Accold, an officer of chief Riurick, conquered Kiev in the Ukraine in 860 CE setting up their own kingdom, but within two or three generations they got absorbed by the natives and were christianized under Igor (912-45). Under Rollon, another contingent invaded Normandy (N-W France) in 911 and set up a mighty kingdom that was respected by the French kings. But in 2 or 3 generations, they too were absorbed by the French culture that surrounded them. The same story with the Norsemen was repeated in Scotland and eastern Yorkshire (Britain) and in the Dublin area (Ireland).
- 16. If the IAs had immigrated into Saptasindhu in (small) waves c1700-1500 and met there the natives who had literacy and a civilization going back many centuries, as the AIT claims, they too would have been subsumed by the indigenous culture. Instead we find that the natives learnt the difficult language of the immigrants and, all of a sudden, the names of mountains, rivers etc became Indoaryan! This might happen in a fairy tale only, not in hard history. It could have happened only if there had been a thorough and fierce conquest. This was believed to be true until the 1960s, but thereafter it was shown that there had been not even the mildest conquest, and so the "invasion" became "immigration". But the new term still begs the question: How did the Aryanization of so vast an area (today's Punjab, Gujarat and Haryana in N-W India) was effected so completely? There is no answer, so

the AIT must be discarded (Kazanas 2003.)

Conclusions

17. The Indic branch differs considerably. As their own preservation of the numerous theonyms indicates, and as is corroborated by the absence of a common inherited theonym in any two IE branches to the exclusion of the RV, the IAs do not appear to have suffered any comparable losses. Losses they too must have suffered since some of the names like Indra or Parjanya do not have obvious cognates in Vedic/Sanskrit. Moereover, many tales in the RV are sketchy or elliptical like the rescue of Bhujyu by the Aśvins, which is not given in a fuller version in later literature, or the affair of Yama and Yamī, or Indra's fight with the Sun, etc. But such decays and losses come naturally in the ordinary history of all non-literate peoples until they acquire literacy or they establish clearly the body of their sacred lore (e.g. the RV) and then create a systematic oral tradition for its effective transmission. Even then decays and losses happen gradually, imperceptibly over the centuries.

Here we should note some absurd peculiarities in the AIT. This theory claims that the IAs and the Iranians were originally one people – after leaving the homeland in the Steppes – and they went through the common "Indo-Iranian period" (see §10). Linguists of this persuasion (i.e. all mainstream comparativists) have even reconstructed this original common 'Indo-Iranian' language. The AIT says that this people passed from the Urals and stayed in the area long enough to have linguistic exchanges with the Finno-Ugrians who lived there. However there are some problems. The Finno-Ugrian loanwords are all thought to be of Indo-Iranian descent (Burrow 1973: 25), yet they can also be explained as derivatives of plain Indoaryan (eg: S śata '100', FU sata/ śado / śāt/ cuotte etc; Sudhar 'udder', FU utar/odar/vodar; etc). Then, if the Indo-Iranians moved on and eventually the Iranians settled in Iran while the IAs moved onto Saptasindhu, a word like chāga 'he-goat' which is supposed to have come into Sanskrit from Finno-Ugrian should be present also in Avestan; but Av has būza- instead and no other word for goat (like S aja or eda – cogn of course with Gk aix, Lts ozys and Arm aic, and also Av iz-aēna 'leathery'); also kūpa 'hole, well' is in Av xān-/čat- (and in any case S kūpa is cogn with Gk kupē 'hole', L cūpa 'cask', Gmc hūf-r '(ship's) hull')⁷. Then the IAs entered Saptasindhu but found that the natives were moving eastward because of the drying up of the river Sarasvatī and the general desiccation of the region. Naturally they too moved eastward to the Gangetic basin; for it is not likely that they would have remained behind in the desiccated area and compose hymns that say nothing about any immigration (so recent in their experience), mention constantly "seven rivers" and their own settlement there of old and praise the river Sarasvatī ("running pure from the mountains to the ocean": RV VII 95,2) as a goddess and source of nourishment but do not refer to any desiccation or cities with deserted and ruined buildings made of bricks, as then were the towns of the Indus-Sarasvati Civilization.

18. Obviously the IAs did not develop their incomparable oral tradition before arriving at Saptasindhu, otherwise they would have preserved memories of the long journey and the adventures therein⁸. Nor did they develop it after they moved east of Saptasindhu; for it is universally agreed from the times of A. B. Keith (1923: 79) to even M. Witzel (2001: §3) that the RV hymns were composed in Saptasindhu or, more precisely, an area which had as its axis the river Sarasvatī. So they developed their system in the short time they stayed in Saptasindhu before moving eastward.

But if so, if they had no elaborate system of oral transmission, how did the IAs preserve during their trekking

⁷ It is possible that the Iranians were together with the Indoaryans for a period sharing a common language and culture. But this happened in Saptasindhu and it is from there that the Iranians moved to their historical seat as I have argued elsewhere (2003, 2005). This movement can account for all facts and those that appear as anomalies in the AIT.

⁸ Mallory mentioned the Jews who, he claims, developed an oral tradition even as they moved . This is most unlikely (see §9, end). When the Jews first surface in historical times in 11th cent BC, they are literate (Dunstan 1998). They had literacy in Moses' time (hence the 10 commandments on tablets!) and they came from Mesopotamian Ur (c 1800 BC) where there had been literacy more than 1000 years earlier. In any case, if we accept all their tradition (and many do not), they mention their journeys, the places and the peoples they met. In the early Vedic documents there is no mention of travels through other places and of encounters with other people on the way. A more suitable example would be the Gypsies who left India in the early centuries CE and, through Iran, dispersed into the Near East and as far as Britain (Fraser 1995): wandering through many lands over many centuries, they retained very little of their original language and culture.

so much of the PIE heritage evidenced in the theonyms discussed?... Then, we know that there are many different chronological strata in the *RV*: we can see this both in the changes of linguistic idiom, grammar and orthography and in the references in early hymns to "ancient ṛṣis" who composed invocations – IV.50.1; V.42.6; VI.21.1-5 and 22.2; VII.29.4 and 53.1 and 76.4. The implication of many generations, long out of memory (especially IV, 50, 1; VI, 22, 2; VII, 29, 4), could not possibly fit within the short time that the IAs stayed in Saptasindhu before moving on.

The only reasonable conclusion is that the IAs did not move from Saptasindhu, or not much. The corollary to this is that the other branches moved away from Saptasindhu; the Iranians certainly seem to have done so since they say in the *Avesta* that they had lived in the 'Land of the Seven rivers' *Haptahəndu* (§17, n7). It may be counterargued (and Mallory did so in 2002: see §5) that people closer to the putative urheimat should have more preservations. For instance since, say, the Hittites are closer to Saptasindhu than the Celts or the Scandinavians the former should have more retentions, which is manifestly not true: in other words, "more distance from the putative urheimat, fewer preservations". This would be too simplistic because after moving away, a people may have many and various experiences which have little to do with distance travelled: one branch may start with a dislike of their native culture and abandon it easily; another may encounter a more developed culture with literacy and succumb to it; a third may be subjugated by a stronger people; a fourth may wander here and there absorbing different elements from alien cultures; and so on. The formula "more distance, fewer preservations" won't do.

However, another alternative is that there was a continuum of IE-speaking peoples extending from Saptasindhu up to the Pontic Steppes and from here the different branches moved off to their historical habitats. In any event, the preservation in Vedic of so many IE elements of religion and language shows that the IAs had an incomparably secure and effective system of oral transmission, which means that the IAs moved very little or not at all

Finally, Sanskrit proves to be much closer to PIE than any other branch – since it preserves so many more theonyms than any other branch and in several cases bridges gaps and links items which otherwise might have remained unconnected.