On Nouns with Numerical Value in Sanskrit WILLEM BOLLÉE

There are many studies on so-called lucky or typical numbers in India, as, e.g., 16, 18 or 108 in place of which the latest one known to me, that of Lienhard,¹ may be mentioned here. These deal with numbers expressed by numerals. Apparently, numerals cannot be used as nouns as, e.g. in English "the eleven" for a soccer team; in German "4711" for eau de Cologne, or in French "soixante-neuf" for a particular kind of sexual activity. In India, however, as with the Pythagoreans in Greece,² there are many nouns with a numerical value because associated with a certain number as agni 'fire' which can alsopertain to the number three for there are three fires. Others, as kāva, tanu or deha 'body', do not stand for 25 though the body is twenty-fivefold³ nor does karna 'ear' or kumbha 'frontal globe on the forehead of an elephant' denote the number two. In this paper the former category will be the subject on the basis of the references of the word 'number' in Monier-Williams⁴

The first to draw the attention to this phenomenon was the astrologer Abu-al-Rayhān al Bīrunī (973-1048) who studied Sanskrit in India in 1017 C.E. Writing on the metrical handbooks on astronomy of the Hindus he says: "For each number they have quite a great quantity of words. Hence, if one word does not suit the metre, you may easily exchange it for a synonym which suits. Brahmagupta says: "If you want to write *one*, express it by everything which is unique, as the earth, the moon; *two* by everything which is double, as, e.g., *black* and *white* ...; *twelve* by the names of the sun."⁵

Both Filliozat and the polymath Kane put up a nonexhaustive list of synonyms up to 49 to be employed to indicate a certain number.⁶ The practice is especially used by astronomists such as the author of the Sūryasiddhānta⁷ and Varāhamihira (first half of the 6th century C.E.), and to write years, as did Guṇabhadra (9th century) in his Uttarapuraṇa 73,76 *kha-catuṣka-dvi-varṣânte* 'after twenty-thousand' (two with a tetrad of zeros) years, or Manoharlāl Śastri (20st century) in his preface,⁸ p. 8 vs 5, to Vādirāja's *Pārśvanāthacarita* composed in Śaka 947 that is naga(7)-vārdhi(4)-randhra(9)-gamana-saṃvatsare 'in the year that consists of mountain, ocean & opening in the body' read from right to left.

Below a list of Sanskrit nouns attested in Monier Williams as used instead of numbers is given. Items omitted in MW have been incorporated from Filliozat's list with a superior plus sign (⁺), from Kane's list with an asterisk (*). As a rule, there seems to be no relationship between non-synonyms associated with the same number, as, e.g., the earth, the hook and the *kali* die which all denote the number one.

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aksa (die) 5
aksi (eye) 2
anka (hook) 1 or 9
aga()7
agni (fire) 2
atidhrti* (metre of 4x19 syllables) 19
atvasti (metre of 4x17 syllables) 17
Atridrg-ja, Atri-netra-prabhava, Atri-netra-(pra)sūta
(moon) 1
adri (mountain) 7
an-anta+ (heaven, space) 0
an-antā (earth) 1
anala (fire) 3
anila (wind) 49
anustubh (metre of 4x8 syllables) 8
antariksa+ (heaven, space) 0
antya ('last') 1.000 billions
abja+(moon) 1
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abdhi*+ (ocean) 4 $abhra^{*+}$ (heaven, space) 0 amara (deity) 33 amrta ('nectar; water') 4 ambara*+ (heaven, space) 0ambu(dhi) (ocean) 4 ambu-vāha (cloud) 17 ambhas (water) 4 ava, āva (die of good fortune) 4 arāti (inner enemy) 6 ari 6 (of the 6th astrological mansion) arka (ray > sun) 12 arnava (sea) 4 artha (five things of the Pāśupatas) 5. - See also s.v. sense object avatāra* ('descent, incarnation of a deity') 10 aśva (horse of the sun) 7 Asvin 2 asti (metre of 4 x16 syllables) 16 ahar+(day) 15 ahi (snake) 8 $\bar{a}k\bar{a}sa^*$ + (space) 0 ākrti (metre of 4x22 syllables) 22 ādi* (beginning) 1 āva (die) 4 $\bar{a}\dot{s}\bar{a}^*$ (direction, quarter) 10 indu (moon) 1 Indra 14 indriva (sense) 5 ibha (elephant ?) 8 isu (arrow) 5 *Īśu, Īśvara* (Rudra) 11

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utkrti (metre of 4x26 syllables) 26
urvar\bar{a}+(earth) 1
\bar{u}rmi (wave) 6 (waves of existence: cold, heat, etc.)
rtu (season) 6
rsi (seer) 7
kara (hand) 2
karanvia+ (with Jains: major observance) 5
karman+, see: action
kalā (moon digit) 16
kali (losing die) 1
ku (earth) 1
kuñjara (elephant) 8 (cf. kumbhin)
ku-dhara (mountain) 7
kunda (treasure of Kubera) 9
ku-bhrt (mountain) 7
Kumāra-vadana (six faces of Kumara/ Skanda) 6
kumbhin (with prominences on its forehead: elephant) 8
(elephants of the quarters and intermediate quarters)
krta (winning die with four dots) 4
krti (metre of 4x20 syllables) 20
kona (corner) 4
krama* (step) 3 (steps of Visnu)
ksamā (earth) 1
ksamā-dhara (mountain) 7
ksiti (earth) 1
kha^{*+} (sky) 0
khe-cara (planet) 9
gagana^{*+}(sky) 0
gaja (elephant) 8 (cf. kumbhin)
g\bar{a}yatr\bar{i}+ (metre of 3 pādas of 8 syllables) 24<sup>9</sup>
giri, girindra (mountain) 8
guna (quality) 3
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gulpha (ancle) 2 guhaka, guha-vaktra (Skandha's heads) 6 guhvaka 11 (class of divinities) go (planet earth) 9 graha (planet) 9 grāma* (scale, gamut) 3 cakra (sign of zodiac) 6 candra (moon) 1 chidra (opening of the body) 9 jagat 48 *jagati*+ (metre of 4x12 syllables) 48^{10} jala+ (water) 4 and 7 *jala-dhara-patha*+(sky, space)0 $j\bar{a}ti^{*+}$ (metre of 4x22 syllables) 22 Jina 24 *jvalana* (fire) 3 tattva (true principle in Sāmkhya philosophy) 24 or 25 $tan\overline{u}+(body)$ 1 tarka (logical category : dravya, samaya, etc.) 6 $t\bar{a}na^{*+}$ (note in music) 49 tigma-kara (sun) 12 (cf. arka) tithi (lunar days) 15 tura(n)ga (horse) 7 (horses of the sun) Trinetra (Śiva with three eyes) 3 danta (tooth) 32 darsana (system of philosophy) 6 Dasra (Aśvin) 2 Dānava *dis* (quarter and intermediate quarter) 8 diśā* (direction) 10 deva (deity) 33 deva-susi ('divine tube or vital air') 5

dos*, dosan* (arm) 2 dvipa (elephant) 8 $dhar\bar{a}^{*+}$ (earth) 1 *dhātu** (element of the body such as skin and blood) 7 *dhrti**+ (metre of 4x18 syllables) 18 naksatra* (lunar mansion) 27 nakha* (nail) 20 naga (mountain) 7 Nanda (ancient dynasty) 9 nabhaś-cara* (planet) 9 nayana (eye) 2 nāga 7 or 8 (Nāgas), cf. snake Nāsatva* (Aśvin) 2 nidāna (with Buddhists: cause of existence) 12 nidhi* (treasure) 9 nrpa* (king) 16 netra+ (eye) 2 paksa(ka) (side) 2 pankti (row) 5 pankti (metre of 4 x 10 syllables) 10 payo-rāśi (milk ocean) 4 para (top, maximum) ten billions parvata (mountain) 7 pavana (vital air) 5 Pāndava* 5 Pāndu-suta* 5 pāvaka (fire) 3 pitā-maha+ (grandfather) 1 Pināka-navana (Śiva) 3 pura* (city burnt by śiva) 3 pūrņa (zero) 0 prthivi + (earth) 1

phana-bhrt ('snake') 8 or 9 prakrti* ('natural condition'?) 21 *bāna* (arrow) 5 (*Kāma* has five arrows) $b\bar{a}hu+(arm) 2$ bindu (dot) 0 bha-samūha (aggregate of lunar asterism) 27 bhava+ (fear) 27 bhuja* (arm) 2 bhujaga(ma) (snake) 8 bhuvana+ (earth, world) 3 and 14 $bh\overline{u}$ (earth) 1 bhūta (element) 5 bhū-dhara (mountain) 7 bhū-pa (king) 16 (cf. nrpa; rājan) bhūmi* (eartth) 1 bhūmi-dhara (mountain) 7 *brhatī* (metre of 8 + 8 + 12 + 8 syllables) 36 makarâlaya (sea) 4 mangala+ (good omen) 8 Madana-dahana (Śiva-Rudra) 11 Manu+14mahi (earth) 1 mahi-dhra (mountain) 7 Mahêśa(-netra) (Śiva's three eyes) 3 Mahêśvara (Rudra) 11 mandākrānta 17 (metre with 4 x 17 syllables as, e.g. of Meghadūta) *mārgana* (arrow) 5 (cf. *bāna*) Mārtanda (Āditya) 12 māsa (month) 12 muni (seven celestial munis: 7 stars of Ursa Maior) 7; --cf. rsi, seer)

mūrchanā* (melody) 21 mrgānka+ (moon) 1 vama(la) (twin) 2 vuga (age of the world) 4 or (as a moon position ?) 12 vuj (couple, pair) 2 ratna (jewel) 3+, 5+, 9 or 12 rada (tooth) 32 randhra (hole+; opening) 0 or 9 ravi (sun) 12 rasa (taste, flavour) 6 $r\bar{a}ga+$ ('colour, melody') 6 *rājan** (king) 16 (cf. *nṛpa*, *bhūpa*) *Rāma* 3; — (there are three Ramas) $R\bar{a}vana-siras^{*+}$ (ten heads of R.) 10 $r\bar{a}\dot{s}i$ + (sign of zodiac) 12 Rudra (Bharga, Madana-dahana) 11 (there are eleven R.) $r\overline{u}pa$ (single specimen) 1 linga (twelve Śiva-lingas) 12 loka*+ (world) 3 and 7 locana* (eve) 2 varna* (social class) 4 Vasu (deva) 8 vahni (fire) 3 (cf. agni) vājin (horse) 7 (cf. aśva) vāri-dhi (ocean) 4 vikrti+ (metre of 23 syllables in a quarter) 23 *viyant*+ (sky) 0 *virāj* (metre of 4x10) 10 *virāj* (metre of 4x10) 10 vivara (aperture of the body) 9 viśva (for: Viśvedevāh) 13 Visve(-devāh) 13 visava (sense object) 5

Visnu* 1 Visnu-pada+ (sky) 0 veda 4 vvāla (elephant or snake) 8 vvoman+ (sky) 0 śakti of Śiva (mahā-vidvā) 10 Śakra (Indra) 14 śaśânka, śaśin (moon) 1 \dot{sastra} + (manual, treatise) 6 śikhin (fire) 3 (cf. agni) $\dot{s}\bar{u}nya^*$ (emptiness, vacuum) 0 *śaila* (mountain) 7 samkhyā* (number) 1 to 9 samirana (body wind) 5 samudra (ocean) 4 sarit (stream) 4 sarpa* (snake) 8 sāyaka (arrow) 5 (cf. ??? Siddha (Jina) 24 siddhi* (supernatural faculty in yoga) 8 sindhu (ocean) 4 sindhura (elephant) 8 sura (deity) 33 $s\overline{u}rya$ (sun) 12 (sun in 12 signs of zodiac) soma+ (moon) 1 *smrti* (sacred tradition) 18 (after the 18 law-givers) svara (musical note) 7 svarga+ (prakrti metre of 4 x 21 syllables) 21 haya (horse) 7 (cf. a.va) Hara-netra (Śiva's third eye) 3 hutása (fire) 3 (cf. agni)

FOOT-NOTES

- 1. Lienhard 1996: 523-36.
- 2. For one they say Apollo; for two: strife; for three: Athena, justice, etc. (Plutarch, De Iside et Osiride 381F).
- 3. ŚpBr IX 1,1,44 and 3,3,19, cf. XII 3,2,2.
- 4. I sincerely thank Dr Thomas Malten, of Cologne, who was kind enough to have his computer collect the material for this paper for me.
- 5. Sachau 1910: I 177. For this purpose Filliozat's Appendix I in Renou & Filliozat 1953, p. 708f. and Kane's list 1974: 701ff. can be used as they were drawn up after numbers.
- Kane, loc. cit. His statement "Any number of synonyms may be employed to indicate the same number" (p. 701) is not (always) covered by MW, e.g. 9 or 14 for ratna is not mentioned as such for mani.
- Lāța mentioned as such by Alberuni probably was actually its commentator (Winternitz III,2 1967: 683). On the practice see Gangooly 1935: Introductory note, p. lv, and Renou & Filliozat 1953, § 1722.
- 8. Translated from Nāthurām Premī's Marathi.
- 9. Shouldn't this be 8?
- 10. Shouldn't this be 12?

BIBLIOGRAPHY

Balbir & Pinault 1996	Balbir, Nalini & Pinault, Georges, <i>Langue, style et structure dans le monde indien</i> . Paris: PUF.
Burgess 1860	Burgess, Ebenezer, see Gangooly.
Gangooly 1935	Gangooly, Phanindralal (ed.), <i>Translation</i> of the Sūrya-siddhânta by Ebenezer Burgess. Calcutta: University of Calcutta (repr. from JAOS 1860).
Glasenapp 1999	Glasenapp, Helmuth von, <i>Jainism</i> . An Indian Religion of Salvation. Delhi: Motilal Banarsidass.

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Ifrah 1994	Ifrah, Georges, <i>Histoire universelle des chiffres</i> . Paris: Laffont.
Kane 1974	Kane, Pandurang V., <i>History of Dharma-</i> <i>śāstra</i> V,1. Poona: BORI (Government Oriental Series Clease P. Na C)
Lienhard 1996	Oriental Series Class B, No 6). Lienhard, Siegfried, Lucky numbers in ancient Indian literature, in: Balbir & Pinault 1996: 523-36.
Renou & Filiozat 1953	Renou, Louis & Filliozat, Jean, <i>L'Inde classique</i> . Manuel des Etudes Indiennes II. Paris: Imprimerie nationale.
Sachau 1910	Sachau, Edward C., <i>Alberuni's India</i> . London : Routledge & Kegan Paul.
Winternitz 1963-67	Winternitz, Maurice, <i>History of Indian</i> <i>Literature</i> III, 1 and 2. Delhi: Motilal Banarsidass.

Don-Bosco-str-2 D-96047, Bamberg Germany