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New Series, Vol. 33

ARTICLES

RESULTS OF THE WORK OF THE KHORESMIAN ARCHAEOLOGICAL AND ETHNOGRAPHIC EXPEDITION OF THE USSR ACADEMY OF SCIENCES—1951-1956*

Ву

Prof. S. P. TOLSTOV, Corresponding member, Academy of Sciences, USSR.

The year of 1951 was the turning point in the work of our expedition, which started, as is known, back in 1937.

The central scientific problem of the pre-war and partially post-war periods, facing our expedition, as well as other large archaeological expeditions, which were in other parts of Central Asia, was the problem of the social structure of pre-Moslem Central Asia.¹

We faced that problem in the middle of the 1930's in connection with the task of writing the history of the peoples of the USSR, and particularly that of the young Central Asian republics. These peoples created highly developed and very peculiar civilizations, the history of which, especially during the ancient period, was very poorly illuminated by written sources. The character of the social and economic set-up of these civilizations in the pre-Moslem epoch was not clear, and some scientists thought that there had been no considerable changes in their social set-up, beginning at least with the Akhaemenids. The rich material, accumulated by our expedition, has enabled us to consider this problem solved by the

^{*} Abbreviations used in this work: VDI—Vestnik drevnei Istorii; IAN—Izvestia Akademii Nauk SSSR, history and philosophy series; KSIIMK—Kratkiye Soobshcheniya Instituta Istorii Materialnoi Kultury AN SSSR. (Brief Communications of the Institute on Material culture history, Academy of Sciences, USSR); KSIE—Kratkiye soobshcheniya instituta etnografii AN SSSR (Brief Communications of the Ethnographical Institute, Academy of Sciences, USSR); MIA—Materialy Issledovaniya po Arkheologii SSSR (Matericals and research on archaeology of the USSR); SE—Sovetskaya Etnografia (Soviet Ethnography); SV—Sovetskoye Vostokovedenie (Soviet Orientalistics); SA—Sovetskaya Arkheologia (Soviet Archaeology); TKhE—Trudy Khorezmskoy arkheologo-ethnograficheskoi Ekspeditsii (Proceedings of Khwarizm Archaeological- ethnographic expedition).

¹ See our works: "Drevnii Khorezm. Opyt istoriko-archaeologicheskogo issledovaniya." Moscow, 1948, "Po sledam drevne-Khorezmiiskoy tsiyilizatsii" Moscow-Leningrad, 1948.

end of the 40's, and it was reflected in a number of monographs and summarizing records, published during the last few years in Uzbekistan, Tajikistan and Turkmenia, as well as in Moscow and Leningrad.² It has been established now that the ancient history of the peoples of Central Asia, as well as other countries of the West and East is a long way of progressive development from the primitive commune through the ancient epoch of the slave system, which lasted from VII century B.C. upto V century A.D. when in the conditions of a deep political crisis the medieval feudal system started its growth; the latter one prevailed in Central Asia upto the recent time upto the end of the XIX century, and particularly upto the Great October Socialist Revolution.

In 1945-1950 we concentrated our work on the remarkable monument of the late Khwarizm antiquity—the dead city of Toprak-kala, and mainly on the majestic building of the Khwarizm Shah's palace of the XII century A.D. (figure 1). In 1950 the excavations of the palace were completed.³

The excavations of this stately building of 80 × 80m. with three massive towers coming up at the height of 25m. over the surrounding plains have yielded very rich material to look into the late ancient Khwarizm culture. We should particularly mention the discovery of a number of halls richly adorned with marvellous clay sculptures and rich wall painting, having features of influence of the Gandhara school of art, —"the hall of kings", "the hall of victories", "the hall of deer", "the hall of dancing masks", "the hall with circles", "the hall of brown-skinned guardsmen", "the harem complex", and others; a store of armaments—very well perserved bows and arrows—and, at last, the remains of the palace archives, unfortunately, very much fragmentary,—of about a hundred documents on leather and wood (figure 2), written in good hand by professional scribes in the alphabet of Aramaic origin which is close to the script of the Avroman parchments and documents on pot-sherds from Nisa.

Here is the preliminary reading of the documents illustrated.

R (1) BW/ZM' T/SRK (2) T/SRK (3) B/P (?) W/ZG (?) RD/(?) KY 'ZT/M (4) B/P (?) W/ZG (?) 'ZT/M (5) ' (or a partitive mark) (6) D/KBRN' (7) M'MK (8) RWM'ZTK (9) D'DNSK (10) 'BRM/TZK — K (11) 'W (?) BNW (?) SM/TK (12) 'RT/SW — K (13) GZ/WRNK (14) M (?) W/Z (?) R/DR (?) — R/ZK V (15) M'MK

^{2 &}quot;Istoriya Uzbekskoi SSR". Vol. I, book I, Tashkent, 1950, second edition 1952, B. G. Gafurov, "Istoriya tadjikskogo naroda", vol. I, Moscow, 1952 and other works.

³ See our publications. IAN, 1956, No. 1; 1957, No. 2; 1948, No. 2; 1949, No. 3; 1950, No. 6; T. Kh. E., v. I, Moscow, 1952, p. 7-46; T. Kh. E., v. II, p. 195-216, Moscow, 1957; S.A. XXVIII, Moscow, 1953, p. 306-313.

(16) R'SR/DKW/ZK (17) ' (or a partitive mark) (18) D/KBRN' ZK 'W/ZR/D --- H/Q (19) RKM (?) W (?) W (?) 'NK (20) MRSBK.

The text, like the majority of tablets written on wood, is an enumeration of proper names of persons and inhabited localities ending in the Iranian suffix of names "-k". Some of the names are of the clear Iranian etymology, for instance: (8) RWM'ZTK—the middle Khwarizmian 'Rumashdak'--'Ormuzd'; (12) 'RTMW . . . - a typical Iranian name beginning with Arta . . .; (9) —Dadanshak (13) —Gurnak; (20) —Marshabak, and others.

The majority of the tablets repeat in the beginning of the text the first word of the line (1), and likewise very often the last word of lines (3) and (4) (which is found as well in the end of the subsequent words in number of tablet inscriptions), also line (6) and the first and the second words of line (18), the latter being, no doubt, the Aramaic ideogram ZKa demonstrative pronoun. The terminal sign of the third word, line (18) is also recurrent, it is H or Q (the latter can be found only in an Aramaic ideogram, and this is not likely for the case). The whole line (18) can recur in some inscriptions with the exception of the third word where only its, already mentioned, terminal sign is repeated. Evidently, these recurring passages are introductory and transitional formulas of the enumerations.

The first word BZM' or BWM' is likely in the first case to have the stem BZ-"assessment", "tax", in the second case-BWM-"land", "country" (perhaps, "region"), the second variant seems to me a more probable one. The "B" may be supposed not to belong to the stem but to be a preposition-ideogram "in", "on". Then the stem is -ZM, perhaps with the same meaning of "land", "country". I. M. Dyakonov suggests that the second word of line (1) and the only one of line (2) HRK should be read as "tax" (kharadzh); however, it is contradicted by the fact that the word does not recur in any other texts. I think this is a proper name as in most of the cases. The last word of lines (3) and (4) (recurring at the second place in various lines of other inscriptions) seems obscure if the terminal sign is regarded as M (unless the initial alef /'/ is considered a prefix, and Z "land", "country"). To my mind, it is possible in this case to see a "T" at the end of the word (compare: the terminal "T" of the first word BSNT of the published text on leather) and then word is the well-known "azat"—"free". The only word of line (6) and the first in line (18) is either an Aramic ideogram KBR—"syndic", "oldest". or the Iranian "debir"-"scribe", "official". It may be also that here we have the well known RBk (from the Sogdian ideogram RB-suffix of names "-k"), with the meaning of "great"-resp. also "syndic", "chief". I. M. Dvakonov and V. A. Livshitz do not mind regarding the word as "debir", but they find here another probable variant—DWR—"dvar" in the meaning of "courtyard". However, the second symbol is almost indisputably the "B". I am inclined to regard the "N"s at the end of the words as suffixes of plurality known in the Middle Khwarizmian language, though I realize the probability of serious objections. On the whole at present stage I should restore the general structure of the inscription in the following way (hypothetically, of course): The region (land, country) A; A, B free, C free; scribes (syndics, generally and officials): D.E.F., G.H.I. J.K.L.M.; scribes (syndics), those (who) N — suffix H; O, P.

If this attempt to comprehend the text is right, then this is a list of names of some officials (or inhabited localities headed by these officials) of a territorial unit, perhaps connected with labour service of a community named after persons, found in the first and second lines of the list. But it is as likely that these are assessment lists if we read the stem of the first word as BZ, and the DBRN' interpret as the formation from the verbal stem "dabar"—"to give", well-known from Sogdian. It should be noted, however, that in Middle Khwarizmian in this meaning we have the verb "hibr" (present tense stem).

Of great interest are the dates found in some documents on leather.⁴ The dates are evidently presented in the Indian system of chronology called "The Shaka Sra" which in the opinion of the majority of the scientists was established by the Kushan king Kanishka, in whose reign, according to our data, Khwarizm was conquered by the Central Asian-Indian Kushan empire.⁶

The work performed in 1950 completed the first course of field investigations on Toprak-kala. It was necessary first of all to complete the scienti-

In this connection we cannot agree with the revision of the traditional identification of "the Shaka Era" and "the Kanishka era", which was suggested by R. Ghirshman and J. Marshall. See R. Ghirshman: "Bégram; Récherches archeologiques et historiques sur les Kouchans." Caire, 1946, p. 99 and following: Idem, Le problème de la chronologie des Kouchans, "Cahiers de l'histoire mondiale", vol. III, No. 3, Neuchâtel, passim; conclusions—pp. 714-717; J. Marshall, "Taxila" I, Cambridge, 1951, p. 71, 85 and others.

⁴ The published fragment of the document on leather reads as follows: (1) BSNT IIC XX I (2) RS (?) NY BRZDT' TN (3) MN—...' (?) R (?) Z—... (4) SX (?) —... (5) —... — and can be translated in its preserved part as: "(1) In year 231 (2) reveived (? compare Osteian 'raisyn'—recieve, 'raisoen'—receipt) Barazdat (a typical Iranian name, known also in the form of Varasdat, especially among the dynastic names of the Armenian Arshakids, Comp. F. Justi, Iranisches Namensbuch, Marburg, 1895 S. 63, 348-349) (3) from — (4) — (5) —".

⁵ The three dated documents give the dates between 207 and 231, i.g., if we adopt our identification of the epoch of the documents with "The Shaka Era",—between 285 and 309 A.D. Our dating of the documents to the Shaka Era will hardly arouse any doubt if one takes into consideration that judging by the whole complex of archaeological and historical data we came to a conclusion that the desolation of Toprak-kala palace dates from the region of Aphrig, the founder of a new Khwarizm era who began his governing in 305 A.D., according to Biruni.

fic interpretation of very abundant material and to prepare them for publication before continuing the excavations of this monument. But our field investigations were not interrupted by the years of chamber work on the description of the expedition finds of architecture, engineering art, various handicrafts, dresses, decorations, ornaments, monumental sculpture and paintings, numismatics, and, especially, on the exemplars of the ancient Khwarizm script; we only changed the objects of work. One must take into account that we trained a considerable number of scientific personnel during the Toprak-kala excavations. These people have marched the whole way from practising students up to the heads of large-scale excavations and independent research workers. It is sufficient to mention that during the years of the work of the expedition eleven research students submitted their theses and three of them got the doctor's degree. The appearance of new scientific personnel has enabled us now to perform our field work at many objectives simultaneously.

The technical equipment of the expedition has been greatly improved. The camel traffic was substituted by cars. Mechanization of earth-work is being installed (belt conveyers set in motion by mobile power stations, bull-dozers). Aviation methods are widely used—visual reconnaissance of monuments in the desert, air survey of the monuments found, aerophotogrammetry, archaeological air-landing near the remote monuments (figures 3 and 4).

In 1952 we worked simultaneously in six excavating archaeological groups; besides that there were also three reconnaissance archaeological groups, archaeological-topographic and enthnographic groups. During the succeeding several years the structure of the expedition was almost the same.

The central problem of our work of the last seven years was that of the history of ancient Khwarizm irrigation and the closely associated problem of ancient Amu-Darya beds, which as it is known was the subject of strong discussions in geological-geographical and historical-orientalistic literature for many decades.

The work was carried out by teams of archaeologists, ethnographers and geomorphologists,0 and as a result of this, now we are already able to restore the last stage of the history of the great Central Asian river, as well as that of the irrigation system based on this river. The modern scientific conception of the Amu-Darya history basically coincides with that splendid, though rather schematic, conception which already back in XIth century was formulated by Abu-Raihan al-Biruni, the great Khwa-

⁶ Geomorphological group of the Geographical Institute of the Academy of Science, headed by Q. S. Kes.

rizm scholar, in his geodetic treatise.7 The initial flow of the river reconstructed by Biruni, from the region of Chardzhou upto the Balkhan mountains coincides with the Pra-Amu-Darya of the upper quaternary and early quaternary periods. The activities of Pra-Amudarya brought about the formation of the low-lying Kara-Kum desert to the north of the Kopet-dag mountains. Biruni brought a correct solution to the problem of the causes of frequent changes in the flow of the great desert rivers, having explained it by filling-up of the beds with the alluvial deposits. Starting from the mountains, where the rivers and their numerous tributaries performed intensive erosion activities, which led to a great degree of saturation of their waters with solid deposits, they, entering the plain, formed those deposits and swells which ran along their beds. They formed also convex deltas, dominating the surrounding plains, in their lower reaches. All this resulted in the river flowing down to the neighbouring lower-lying places and forming new beds and new deltas, often situated at a long distance from the previous ones.

Following this law, the Amu-Darya of the beginning of the upper quaternary period abruptly changed its flow and went to the north, to the Aral Sea.

Biruni describes this turn and foretells with exceptional sagacity the history of the formation of the three latest flows of the Amu-Darya resulting in the formation of three large deltas whose deposits formed the vast stretches of loess-like loams, on which then the Khwarizmian irrigational culture was established—Akcha-Darya ("the Fahmi bed"—'the bed of stagnant waters'—Biruni), Sarykamysh (Vadi Mazdubast—Biruni) and the modern Aral delta.

Akcha-Darya is the most ancient and extreme eastern of all these northern directions, of Amu-Daria (figure 5) and its history is very complicated; unfortunately, we cannot dwell upon this history. We should only point out the fact that initially it formed the southern delta to the south of Sultan-Uis-Dag mountains; that delta flowed down to the north-west, to the Khwarizm lake, located in the region of the South-Khwarizm lowland. Then the river broke through the Kyzyl-Kum, turning around the Sultan-Uis-Dag mountains from the east and formed here the so-called Akcha-Darya corridor, and then it again divided into a number of channels of the northern Akcha-Darya delta. These channels partially emptied into the

⁷ See the passage about the Amu-Darya, translated by S. Volin, VDI, 1941, No. 1.

⁸ S. P. Tolstov and A. S. Kes. Istoriya pervobytnikh poselenii na protokakh drevnikh delt Amu-Darii i Syr-Darii. Voprosy Geografii. Sbornik statei dlya VIII Mezhdunarodnogo Geograficheskogo Kongressa", 1954, p. 321-336; see also S. P. Tolstov, Raboty Khoresmskoi archeologo-ethnograficheskoi expeditsii A. N. SSSR v. 1954 godu, S. V., 1955, No. 6, p. 93-96.

northern part of the Khwarizm lake, while the rest of them into the southeastern angle of the Aral hollow, thus having launched the formation of the Aral Sea. We time the Amu-Darva waters break (to the west to the Sarykamysh hollow and its filling up with the Amu-Darya waters and the beginning of the formation of the Uzboy bed along the line of the southern precipice of the Usturt) from the end of the quaternary and probably also from the beginning of the modern geological period. But this had not resulted in complete stop of feeding the Akcha-Darya delta channels, both southern and northern. During the neolithic epoch IV-III millennium B.C.—the Uzboy banks, as well as those of the Akcha-Darya delta, were densely populated, which fact testifies to the long-lasting process of the Akcha-Darya fading-out. The Akcha-Darya delta region and that of the upper and middle Uzboy is the region of prevalence of the socalled Kelteminar culture of Khwarizmian neolithic and early chalcolithic age (figure 6) discovered in 1939.9

Later on it spread to the north-to western Kazakhstan and Priuralve and showed close relationship with cultures of the forest regions of the Kama and Trans-Urals regions of that time.10 This culture of fishermen and hunters is best of all represented by the unique monument -Dzhanbas-4 site, which is situated on the foot-hills of the intra-delta plateau on the outskirts of the Akcha-Darya southern delta. The Dzhanbas—4. the burned-down and then flooded large dwelling of the Kelteminariens, egg-shaped if looked from above, was then fully reconstructed and yielded the material for the formation of the idea about the way of life

⁹ On Kelteminar monuments of Khwarizm see S. P. Tolstov, Drevnosti Verknego Khorezma (Osnovnye itogi rabot Khomrezmskoy expeditsii IIMK, 1939), V.D.I., 1941, No. 1, p. 156; idem. Drevnii Khorezm. Opyt istoriko-archeologicheskogo issledovaniya. Moscow, 1948, p. 55-56: idem. Po sledam drevnekhorezmiyskoi tsivilizatsii. Moscow-Leningrad, 1948, p. 65-74. idem. Arkheologichskiye raboty Khorezmskoy arkheologo-etnograficheskoy expeditsii A. N. SSSR v. 1951 godu., SA, XIX, 1954; idem. Arkheologicheskiya raboty Khorezmskov expeditsii A. N. SSSR v 1952, m VDI, 1953, No. 2, p. 154-155; idem. Itogi rabot Khorezmskoi arkheologo-tehnograficheskoi expeditsii A. N. SSSR v. 1953 godu, VDI, 1955, No. 2, p. 154-155; idem. Itogi rabot Khorezmskoi arkheologo-tehnograficheskoi expeditsii A. N. SSSR v. 1953 godu, VDI, 1955, No. 2, p. 154-155; idem. Robot VDI, 1955, No. 2, p. 154-No. 3, p. 192 idem, Raboty Khorezmskoi arkheologo-etnograficheskoi expeditsii A. N. SSSR v. 1954 godu, S. V., 1955, No. 6, p. 96; A. V. Vinogradov, Neoliticheskiye ukrasheniya iz stvorok rakovin Didacna (po materialam raskopok v severenoy Turkmenii, KSIIMK, 59, 1955; idem. K voprosu o yuzhnykh svyazyakh kelteminarskoi kultury, S. E., 1957, No. 1; M. A. Itina, Raboty Uzboyskogo otryada v 1954 godu, KSIE, XXVI, 1957; idem. Pamyatniki pervobytnoi kultury Verknego Uzboya, T. Kh. E., v. II, Moscow, 1957.

¹⁰ A. A. Formozov, Ob otkrytii Kelteminarskoi kultury v. Kazakhstane. "Vestnik Kazakhstanskogo filiala A. N. SSSR" 1945, No. 2; idem, Novye tochki kelteminarskoy kultury v Kazakhstane, ibidem, 1946, No. 5; idem, Kelteminarskaya kultura v Zapadnom Kazakhstane, KS IIMK, XXV, 1949; idem, Novye matedialy o stoyankakh a Mikroliticheskim inventarem v Kazakhstane, KSIIMK, XXXI, 1950; A. V. Zbrueva, Drevniye kulturniye svyazi Srednei Aziyii i Priuralya, VDI, 1946, No. 3, p. 183-186; V. N. Chernetsov, Drevnyaya istoriya Nizhnego Priobiya, MIA, 35, 1953, p. 30-31.

and social set-up of a primitive and, evidently, matriarchal-tribal commune of the Kelteminarians who lived in this large building $(26 \times 17 \text{m})$. Very interesting is the neolithic lower-Uzboy culture which was discovered in 1951 and very much differs from that of Kelteminar, though dated to the same time; this culture is characterized by bigger and ruder stone implements among which we should mention the small lances on subtriangular flakes slightly reminiscent of Mousterian picks. The lower-Uzboy pottery has analogies in the early Anau culture, an obsidian blade, found at one of the sites, testifies to the remote south-western relations of this culture. Later on in the epoch of aeneolithic, the lower-Uzboy and Kelteminar culture were mixed up. 11

The bronze-age monuments (figures 7, 8, 9) are less numerous on the river-bed than in the Akcha-Darya delta. This testifies to the fact that as far back as in the beginning of the II millennium B.C., the Amu-Darya made a new turn aside of its modern bed. That turn finished in the antique epoch, in the second half of the 1 millennium B.C. As we shall see later. the further changes in the flow of rivers were to a great extent determined by socio-historical factors. The man-irrigator was gradually establishing his control of the river flow, and new alterations of its flow inevitably coincide with the epochs of paramount socio-political catastrophes.

In 1954 and 1955 we discovered in the southern Akcha-Darya delta numerous monuments of the most ancient Khwarizm irrigation, dating from the second half of the II millennium B.C. and related to the so-called Tazabagyab and late Suyargan cultures of the Khwarizm bronze age and Amirabad culture of the early iron age (IX-VII century B.C.). The first of these cultures is close to the Andronovo culture of the Kazakhstan steppes and to the Srubnaya culture of the lower Volga region. These features are exceptionally manifested in the materials of the late Tazabagyab culture burial ground (about XIII century B.C.), discovered and excavated in 1954-1955. Its name is Kokcha-3, it is located to the south of the Kokcha mountain—extreme eastern offspur of the Sultan-Uis-dag. (fig. 8).

We have the right to suppose that the Tazabagyab culture is connected with the first considerable wave to the Indo-European, Indo-Iranian or Iranian tribes who came to Khwarizm from the north-west.—The early

¹¹ S. P. Tolstov: Arkheologicheskiye raboty Khorezmskoi arkheologo-etnograficheskoy expeditsii A. N. SSSR v. 1951, SA, XIX; idem. Raboty Khorezmskoy arkheologo-etnograficheskoi expeditsii A. N. SSSR v. 1949-1953 g., T. Kh. E., v. II.

¹² S. P. Tolstoy, i B. V. Andrianov, Noviye materialy po istorii razvitiya irrigatsii v. Khorezme, KSIE, XXVI, Moscow, 1957. p. 5-7.

¹³ S. P. Tolstov, Raboty Khorezmskoi arkheologo-etnograficheskoi expeditsii v. 1954 godu, SV, 1955, No. 6, p. 99-102.

Suyargan or Kamyshly culture, which is characteristic of the bronze-age of the Akcha-Darya northern delta and whose first monuments date back to the beginning of the II millennium B.C., yield some common features with the Anau culture¹⁴, bronze age culture of Trans-Caucasian regions and more ancient monuments of Northern Mesopotamia and North-Western Iran.¹⁶ These common features are in very bright pottery, the surface of which is very well polished, and that polishing is made of fine red and brown slip. These cultures undoubtedly continued the southern relations, which has already been seen in the lower-Uzboy culture. The sources of these relations can evidently be explained by the anthropological peculiarities of the skeletons buried in the Kokcha-3 (figure 9); the skulls bring a strong admixture of the prognathous type, which has the closest analogies in Georgian and Mazenderan neolithic, almost with the orthognathous type which is close to the types of the Srubnaya and Andronovo cultures; the prognathic type was within the South-Indian, so-called Dravidian type of the equatorial race, which can be sporadically encountered in the bronze age monuments of Iran, Iraq and Northern India (Tepe-Hissar, Kish, Mohenio-daro).16

The late Suyargan culture, dating back to the XI-IX centuries B. C., is characterized by mixing up of both—Suyargan and Tazabagyab with the admixture of some elements of the so-called Karasuk culture (the Karasuk knives are particularly characteristic), the centre of which, as is known, is in the Minusinsky territory, and in the Altai, and which yields close genetic bonds with the bronze age culture of the northern lands of China 17

Thus, in the bronze age, preceding the formation of the modern Amu-Darya bed, Khwarizm—this very densely populated and watered region of "The Great Lakes" of Central Asia, in the region of the Avesta "Vurukash Sea"—witnessed the process of mixing up of northern, southern and eastern and ethnic-cultural elements, which served as the basis for the formation of this ancient Iranian-language-speaking Khwarizm nationality. creators of the grand irrigation system in the Amu-Darya delta.

The newly discovered monuments of the primitive irrigation of XII-VII centuries B. C. are numerous and varied (figure 10) and enable us

¹⁴ R. Pumpelly, Explorations in Turkestan, v. I, Washington, 1908, p. 138, fig. 143,

¹⁵ B. A. Kuftin, Archeologicheskiyi raskopki v Trialeti, Tbilisi, 1941, tables LXXV. a LXXVII. R. Campbell-Thomson and M. E. L. Mallowan: Excavations at Nineveh, 1931-32, "Annals of Archaeology and Anthropology", XX, 1933, tab. LII, 13; tab. LIII, 6, 7; A. E. Speiser: Excavations at Tepe Gawra, I, Philadelphia, 1935, tab. LXVIII, 109, T. J. Arne: Excavations at Chan Tepe, Stockholm, 1945, p. 173, fig. 302; tab. LI, 404 a.

¹⁷ S. V. Kiselev: Drevnyaya istoriya Yuzhnoi Sibirii, MIA, 9, 1949, p. 68-75. ASJ 2

to trace the development of the Khwarizm irrigation from the primitive "basin system" of small square-shaped kitchen-gardens, based directly on dammed lateral fading-out channel of the delta (sites Kokcha—1 and 3) to the late-Suyargan period fields, watered by a narrow distribution canal, taken from the same dammed channel-like river-bed (sites Bazar 1 and 2).

In the beginning of the Amirabad period, the dammed beds served for the construction of a number of canals,—small, but with branching ends. In the district of the Bazar 8 site such a system irrigated the area of 200 hectares, which is 200 times as large as irrigated areas of the bronze age. Finally, by the end of the Amirabad period, already on the border-line of the antiquity, we recorded large artificial canals, upto 10 m. wide, running for several kilometers and originating from one of the main Akcha-Darya beds.

In 1951-1955 we excavated a number of monuments on the "ancient irrigation lands" on the western and eastern outskirts of the Khwarizm oasis; the monuments date from different periods of Khwarizm antiquity. We excavated the ruins of towns and fortified settlements of Kiuzeli-gyr (VII-V centuries B.C.), 18 Kanga-kala (IV century B.C.—II century A.D.) 19, Kalaly-gyr (border-line between V-IV centuries B.C.—beginning of A.D.), 20 Kalaly-gyr-2 (border-line between IV-III centuries B.C.) Koy-Krylgan-kala (same period), 21 Gyaur-kala near Sultan-Uis-dag (II century A.D.), 22 and multi-strata monuments, having both antique and medieval strata—Kunya-Uaz²³ and Shakh-Senem. 24

It was simultaneously with the excavations that the special groups studied the excellently preserved irrigation network which fed these towns and settlements.²⁵ We found numerous very well preserved layouts of ancient fields of the classical ancient Kang-Kü epoch dating back

¹⁸ S. P. Tolstov, Raboty Khorezmskoi arkheologo-etnograficheskoi expeditsii A. N. SSSR v 1949-1953 godakh, T. Kh. E. v. II, p. 143-153.

¹⁹ Ibidem, p. 70-74; 92-94.

²⁰ Ibidem, p. 153-167.

²¹ Ibidem, p. 168-192.

²² Ibidem, p. 192-195; see also Yu. A. Rapoport i S. A. Trudnovskaya, Gorodishche Gyaur-kala, T. Kh. E., v. II, p. 347-366.

²³ E. E. Nerazik, Arkheologicheskoye obsledovaniye gorodishcha Kunya Uaz, T. Kh. E., v. II, p. 367-396.

²⁴ Yu. A. Rapoport, Raskopki gorodishcha Shakh-Senem v. 1952 godu, T. Kh. E., v. II, p. 397-420.

²⁵ S. P. Tolstov i. B. V. Andrianov, Novye materialy po istorii razvitiya irrigatsii v. Khorezme, K.S.I.E. XXVI, p. 5-11; S. P. Tolstov, Raboty Khorezmskoi arkheologo-etnografichestoi expeditsii v. 1949-1953 godakh, T. Kh. E., v. II, p. 100-115; B. V. Andrianov, Arkheologo-topograficheskiye issledovaniya drevny irrigatsionnoi seti kanala Chermen-yab v. 1952 godu, T. Kh. E., v. II, p. 311-328.

to the IV-III centuries B.C. (figure 11). They were found around the ruins of the Koy-Krylgan-kala on the ancient canal, continuing the modern Kelteminar canal—a large branch of the right-bank main canal Shurakhan-yab or Pakhta-arna. The field discovered on other—later—branches of the ancient Kelteminar date from the late Kushan epoch—III-IV centuries A.D. Their lay-out is of another, more complicated and varied character, testifying to the progressive development of the tillage system.

The same features of the progressive development are even more convincing if we analyze the changes of the irrigation system during the whole ancient period—between the middle of the I millennium B.C. and I millennium A.D. The canals of the archaic period (VII-IV centuries B.C.) are characterized by large dimensions upto 30-40 m. wide between the embankments.

Large canals parallel to the fading out channels of Akcha-Darya delta of the Amu-Darya can be well traced in the region of the ancient Kelteminar. The main channels run along the edges of vast deposits of the taqyr-like delta loams surrounded by ancient channels and masses of heavy alluvial and subaeral sands. Therefore, as a rule, the archaic canals have only one-side distribution and irrigation net-work, the branch canals being made at right angles.

The irrigation system of the right-bank, beginning already in the early antiquity, is based entirely on the Amu-Darya. Such an unreliable source as the delta channels, fading out and constantly changing their flows, was absolutely insufficient at a new historical stage. Large channels of the Sarykamysh delta, fading out as well but younger, were still used in the archaic and Kang-Kü periods: they were used as the basis for a powerful irrigation net-work on the left bank. In fact, the early ancient irrigation system seems to imitate the ancient deltas, subjecting them to the control of the human society. The primitive communes could not create such a powerful net-work. The ethnographic material does not yield anything similar in the limits of the primitive-communal system. The creation of large canals, many dozens of kilometers in length required the state centralization on a large scale and great number of workers who were not engaged in other kinds of agriculture. Only slaves could supply that number of working hands under those historical conditions.

The late Kang-Kü and, particularly, the Kushan epoch—border-line of our era—II-IV centuries A.D.—were marked by a new, more developed irrigation, characterized by narrower (10-15 m. between the embankments) and deeper main canals which were not directly connected with the delta channels and were situated not on the edges but along the middle-line of the deposits of the taqyr-like delta loams; accordingly, the distribution

and irrigation net-work lies not only on one side of the main canal but on both sides, and not at right but at acute angles to it. This irrigation system, based on deeper knowledge of the law of water motion, which is cheaper and more improved, anticipates the medieval irrigation system, characterized only by ever greater economizing of water and labour. Thus, the material premises for the transition to the medieval feudal system were formed already by the end of the ancient slave-system in Central Asia, as well as in the West and in the Mediterranean regions.

The limits of the article deprive us of the possibility of characterizing in details the diverse results of the excavations of the above-mentioned eight monuments, reflecting more than a one-thousand year period (unless we take into account the medieval strata of the two last monuments in our list). I shall dwell only upon the most important findings and observations based on the newly discovered materials.

First of all I would like to speak on the newly discovered historicalarchitectural facts. Very important is the discovery of two construction horizons of the most ancient of all studied towns-Kiuzeli-gyr, the civil engineering technique of the lower stratum, dating from VI-till the beginning of V century B.C., being characterized by a number of features, in which it differs very strongly from the civil engineering technique of the classical Khwarizm. Thus, the mud-brick standard of this town is entirely different; the majority of bricks are not square $(40\times40\times10$ cm.). but rectangular $(52 \times 26 \times 10 \text{ cm.})$; we find here the two-chamber oventype fire-place instead of the open fire-place characteristic for the classical period; flat ceilings prevail, no arches have been recorded. The archaic Khwarizm had a number of specific features, and this is proved by the archaic pottery, a great abundance of bronze Scythian arrows and the entire absence of sling stones, (which played a great role already in the beginning of the border-line of V and IV centuries B.C.) different composition of the herd: prevalence of big cattle, horses and camels, while from the IV century B.C. the small cattle played the leading role in the cattlebreeding of Khwarizm. According to the upper construction horizon of Kiuzeli-gyr, dating also from the V century B.C., but from its later portion, the transition to the square-shaped brick was completed already in the duration of this century. Generally, the architecture of the upper horizon of Kiuzeli-gyr has very much in common with the classical Kang-Kü architecture. This can be illustrated by triple embrasures suggesting the forms of the Dzhanbas-kala fortification.

The main object of our excavations on the left Amu-Darya bank in 1955 was the ancient fortress of Kanga-kala (figure 12), situated on the eastern slope of the Kanga-gyr hills, along which there ran the extreme southern bed of the Sarykamysh delta—Kanga-Darya. Simultaneously we studied the irrigation system based on this bed.

The Kanga-kala is the extreme south-western advance post of the ancient Khwarizm, situated in the neighbourhood of the Sarvkamysh lake. The study of the fortress has proved that it existed for almost a millennium, from the middle of the 1st millennium B.C. up to the IV century A.D. and though the 1955 excavations reached only the so-called early Kang-Kü stratum, dating from IV-III centuries B.C.,-finds discovered in the collapsed portions of the fortress, including numerous bronze Scythian arrows of VI-V centuries B.C., and pottery of the same time, found on the neighbouring fields, enable us to be absolutely certain as to the fact, that the fortress was built not later than in the V century B.C. and that the further excavations will lead to the stratum of archaic Khwarizm culture. The fortress was destroyed as a result of a great military catastrophe. The upper stratum contains many traces of strong fire, and there are traces of a very big hole in the wall near the eastern edge of the fortress on the side of the Kanga-Darya; the fortress was taken, evidently, as a result of the breach.

The Kanga-Kala irrigation is of profound interest. The analysis of its topography testifies to the fact, that the irrigated territory more than once changed its outlines in connection with the process of fading out of the northern Kanga-Darya channel, which fed that irrigation system. Those channels formed a group of small deltas, which did not reach the Sarykamysh, and were taken up for irrigation.

I should say a few words on the name of Kanga-Darya, which served as the basis for one of the most ancient irrigation system of Khwarizm. This name, which is, undoubtedly, the ancient one (compare with the same name of the upper reaches of the same river—Daudan), constitutes a serious proof of our identification of the Kang-Kü state, described by the Chinese chronicles, the land of Kanga in Avesta and Kangdiz of the late Zoroastrian literature and Iranian epos, with Khwarizm. The Kang river, described in the same epos, is nothing but our Kanga-Darya.

Rich material for the history of architecture was supplied by the excavations of the classical period monuments: palace building and town walls of Kalaly-gyr-1, dating from the border-line of V-IV centuries B.C. and Koy-Krylgan-kala, the latter dating from the border-line of IV-III centuries B.C. This monument (figure 13) is a tower-like cylindrical building, 42 m. in diameter and 8 m. of preserved height over the surrounding plain. It has an external circular wall (the diameter of its external ring = 87.5 m.) with 9 towers. The territory of the external ring is occupied by numerous rooms of different shape, though generally they are all subjected to the radial principle. The character of findings suggests that this complex was used primarily as living rooms for servants and slaves. The central tower-shaped building is of an entirely different character. It has two floors, the ground floor being almost completely preserved. The rooms

of this floor have a uniform plan; massive walls and majestic double arches are made of mud-brick. The rooms of the ground floor were entered from the external gallery for bowmen in the upper floor. The central arched hall divided by a transverse wall was situated in such a way that its axis coincided with the diameter of the whole building-in the direction from West to East. There were two two-flight stairs on both sides of the central arch. They led to the second floor and opened into the gallery for bowmen which surrounded the building. It should be mentioned that the upper exit from the stairs of the western end of the arch was closed with bricks during the actual process of construction. The six lateral arches opening into the central arch, are built along the chords of the circle on both sides of the central arch. Extremely interesting are the windows found here for the first time illuminating the ground floor rooms and cut in the side walls of all arches except that facing the North. The window niches located beneath the line of embrasures of the bowmen gallery sloped inside through the 6 m,-thick external wall of the tower-shaped building. From below one could see the sky through these windows, and this provided good lighting of the rooms.

The stratigraphic analysis of this splendid monument enables us to prove that while the life of the central building (with the exception of the bowmen gallery and central wall) is limited by the early Kang-Kü period—time close to the time of its erection—the rooms of the external ring existed for about four centuries—up to the end of the I century A.D., before Khwarizm entered the Kushan empire. Evidently, initially the central tower, presenting, as we suppose, a monument of the funeral or the astral cult, was surrounded only with a circular wall with embrasures of archaic type found in the monuments of VI-V centuries A.D. (very important factor for dating). Then the wall was entirely reconstructed, and various store houses were started in construction near the wall, the vast ring-shaped yard around the tower being left free. During the late Kang-Kü period the whole space of the external ring was occupied with new buildings, the distribution corridor was built around the tower while the numerous rooms—dwellings, store-houses and workshops of this large temple estate—were grouped in several radial sectors separated by blank walls.

We cannot give a detailed description of the findings discovered during the excavations. We shall dwell upon the most interesting ones. First of all I shall dwell upon a short inscription found in 1951 in one of the Koy-Krylgan-kala external ring rooms, occupied with huge pithoi for storage of wine; this is, evidently, the most ancient of all known inscriptions not only in Khwarizm but also in the whole of Central Asia. The inscription is carved on a pithos under the rim, and is written in clear, easily read script of the Aramaic origin. It sounds: "SPBR/DK—"Aspa-

barak" or "Aspabadak".²⁰ This word is, no doubt, of Iranian origin—both nominal and verbal stems of the word and its affix are Iranian. It can be translated as 'Riding a horse' or 'Sitting on horseback', in both cases it is a proper name—most likely that of the owner of the pithos and its contents. Apart from this inscription, which is already read, we found three more inscriptions on pithoi and one inscription incised on the back of a female figure. We are still working at the deciphering of these inscriptions. Along with the documents of the Khwarizm archive of III century A.D. and Parthian archive in Nisa of the I century B.C., these inscriptions of the III-II centuries B.C. constitute a contribution to the rapidly enriched history of writing of the ancient Central Asian peoples.

We have a rich collection of various specimens of applied art of classical Khwarizm. Big vessels for wine are especially numerous, their form is close to that of the pack flask, but they differ from the previously known finds of this type, because the flat side of the flask is adorned with a basrelief composition, either scenic or ornamental (figure 14, 1-4). Especially interesting are the two flasks found on the floor of the central arch of Koy-Krylgan-kala near the eastern entry. One of them is decorated with a relief composition, the centre of which is occupied by a bearded head in profile, to the left, and the ground (only the left-hand half of the flask is preserved)—by an image of gryphon with the body of a horse. The second flask has an ornamental composition, depicting various plants with a six-pointed star in the centre (fig. 14, 4). There are numerous fragments of such relief compositions. I should point out the fragment with the image of a male head in a richly adorned helmet, the crest of which is crowned with a prothom of a fantastic bird (fig. 14, 3), the back part of the helmet having the human mask. The other fragment has preserved only a part of its composition—a woman half-lying on a throne and giving suck to a baby. This theme is also represented in terracottas. One of the early finds of Koy-Krylgan-kala discovered already in 1950 during the reconnaissance is a relief with the image of a horseman with a spear atilt, in a Scythian head-dress. The monuments of the classical Khwarizmian art found in Koy-Krylgan-kala include also a fragment of a ceramic relief found in 1953 in the excavations of Kalaly-gyr-2. It depicts a hunting scene with the figure of a man sitting on camel-back in the centre. These compositions which by many centuries anticipated those of the "Sassanid silver" opened the curtain which hid the lost Khwarizmian epos and mythology.

We should also say a few words about the Jug—handles which are crowned with the lions' heads, and which are so characteristic of Koy-Krylgan-kala. We must add also the miniature vessel with the mouth

²⁶ See our publication in SV, 1955, No. 6, p. 92-93, fig. 3.

made in the form of a human head and the numerous fragments of polychromic ceramic rhythons with the prothoma of horses and griffons, found in 1952.²⁷ An intact rhython of this type decorated with the prothom of a horse was found in Kalaly-gyr-1 dating from the same time as Koy-Krylgan-kala. We should especially mention the numerous vessels (cups, pots, etc.) which differ very much from the usual Khwarizm pottery. They are made without a potter's wheel, but very thoroughly, out of fine gray clay, glazed with black slip with smooth polishing and fine-cut ornament of angle-shaped and wavy lines (fig. 14, 6). This pottery has close analogies with the earlier pottery of the northern Caucasus and the later one of Dzhety-Asar (the Tokhar Syr-Darya monuments). This pottery undoubtedly belonged to some steppe tribes, who had relations with Khwarizm.

Our collection of the ancient Khwarizm terra-cottas has been enriched with splendid samples from the Koy-Krylgan-kala (figure 15, 1-5). We found numerous figures of the goddess of fertility—the Khwarizmian Anahit, dressed in richly ornamented clothes. One hand of the goddess rests on her breast the other one is lowered along her body. I would also mention the figure of a goddess with a phial and a miniature amphora in her hands. We did not know these attributes before. They are absent from many Khwarizmian images of Anahit,—the goddess of fertility. It is very probable that this is the image of the goddess of wine-making—Mina; some vague information about her cult and myths connected with this goddess are found in the works by Biruni.

A terra-cotta head of an old woman made in a very realistic way, found in the vicinity of Koy-Krylgan-kala, is of profound interest. It is peculiar that a very analogous head, but made of alabaster, was found in 1952 in the site of Kunya-Uaz town. Evidently, this is the image of some Chthonic goddess connected with the cult of life beyond-the-grave.

The figures of horses are the most popular among all figures of animals. The horses are also encountered on very original supports for spits (fig. 14, 8). There is a very interesting flat dipper with a relief ornament and straight handle decorated with a head of a ram (fig. 14, 7), found in 1955. Separate handles of this type were found many times. This dipper, belonging to the upper stratum of the mounment, approximates to samples of Sarmatian art. I should mention an original figure of the monkey with a baby-monkey²⁸ made in a very realistic way and very peculiar one, unusual for the Khwarizm style. The green-gray fine clay for

²⁷ See our publications of a number of findings of Koy-Krylgan-kala in VDI, 1953, No. I, p. 160-174; VDI, 1955, No. 3, p. 201-204, fig. 12-15; TChE, v. II, p. 171-192.

²⁸ S. P. Tolstov. Itogi Rabot Khorezmskoi arkheologo-etnograficheskoi expeditsii A. N. SSSR v. 1953 g., VDI, 1955, No. 3, p. 204, fig. 14.

its making is also unusual. It is quite possible that this figure is an imported one. This figure belongs to the upper stratum of Koy-Krylgan-kala and may date from the II-I centuries B.C.

There are numerous finds of artistic monuments of the Zoroastrian burial ceremony. Already back in 1950 we found the first ossuary in Koy-Krylgan-kala, pertaining to the first centuries B.C. This is a ceramic square box for human bones, crowned with a female figure, half-natural size. Numerous finds of the fragments of such ossuaries ended in 1955 with finding an intact ceramic ossuary crowned with a male figure of natural size (figure 17). The ceramic mask found also in 1953 in the vicinity of Koy-Krylgan-kala is evidently connected with an analogous ossuary. A big cemetery of ossuaries of the Kalaly-gyr-1 district found already long ago (in 1939) but systematically excavated only in 1953, is of great interest. On the whole it dates from a later period than the Koy-Krylgan-kala ossuaries—from the Kushan time (I-III centuries A.D.).20 The ossuaries were buried in the ruins of an ancient incomplete town wall dating from the border-line of the V-IV centuries B.C. and as well uncompleted building of the palace type dating from the same time. We have the grounds to suppose that this fortress, close in time to the abovecharacterized Kiuzeli-gyr but differing very much from the architectural point of view was started in construction by the Akhaemenid Government and not completed because of the collapse of the Akhaemenid rule in Khwarizm.

I should like to take the opportunity to mention the fact that there is a well-preserved mould for making alabaster reliefs of a big gryphon's head. DEX Excavating the Kalaly-gyr in 1953, we found more than a hundred of various ossuaries made of sandstone, or raw clay or alabaster or of ceramics. Among the latter prevailing type there are barrel-shaped ossuaries with a hole in the back wall, sarcophagus-shaped ossuaries with four legs and a square hole in the lid, and almost square-shaped ones with pyramidal upper side, ending in a round lid with an image of a bird. This last type reminds very much of later ossuaries from Semirechye.

The very rich craniological material obtained during the excavations of Kalaly-gyr-1, as well as the less important but very interesting material from Kalaly-gyr-2, Kunia-Uaz and Kanga-kala, analyzed by T. A. Trofimova,³¹ brings light to the history of formation of the Khwarizm popula-

²⁹ S. P. Tolstov, Raboty Khorezmskoi arkheologo-etnograficheskoi expeditsii A. N. SSSR v 1949-1953 godakh, T. Kh. E. v. II, p. 153-167.

³⁰ Ibidem, p. 159 and fig. 61, 2.

³¹ T. A. Trofimova, Kraniologicheskiye materialy iz antichnykh krepostei Kalalygyr 1 i 2, T. Kh. E. v. II, p. 543-630; idem, Materialy i issledovaniya po paleoantropologii Khorezma i sopredelnykh oblastei. Ibidem, p. 639-504,

tion anthropological type and is of great historical interest. In the period under consideration the two europeoid types (sub-brachicraneous and longheaded, long-faced) were mixed in different proportions with the two non-europeoid ones. The skulls of the II-III centuries A.D. found in 1950 in Kalaly-gyr-I, are those of small-sized representatives of the Indodravidoid prognatic type, known for the Khwarizm of III century A.D. from 1948-1949 by the sculptures of "the hall of brownskinned guardsmen" of Toprak-kala.³² The 1953 excavations have demonstrated that separate skulls supplied by the Kalaly-gyr cemetery, can be related to the same type. Now it is difficult to say whether this anthropological type is a remnant of the ancient Indo-Khwarizm relations epoch traced to the IV-III millennia B.C. in the monuments of the Kelteminar neolithic culture, or it is the result of recruiting of Indian troops during the Kushan epoch when the major part of India and Central Asia composed but one political unit—Kushan Empire. One thing is doubtless—there were compact groups of the Indo-Dravidoid type in the Khwarizm population of the II-III centuries A. D.

Quite the different anthropological type—long-headed mongoloid similar to the neolithic population of Northern China—prevails among the skulls of the IV-V centuries A.D. in Kunya-Uaz and Kanga-kala. Evidently, the appearance of this type in Khwarizm was connected with migration of the Chionite-Hephtalite tribes. But the mongoloid admixture in Khwarizm appeared even earlier. A marvellous sculptural head in Scythian head-dress found in 1952 in Giaur-kala (the II century A.D. stratum), 33 testifies to a probable admixture of some mongoloid type. But in the IV-V centuries considerable compact groups of mongoloid population appeared on the outskirts of Khwarizm; later on they played a certain role in the formation of the modern europeoid groups of the Khwarizm population—Uzbeks and Turkmenians.

Khwarizm was in the state of deep decay on the border-line of antiquity and Middle Ages in the end of the IV-VI centuries. The irrigation system underwent an abrupt decrease. The two biggest main canals of the right-bank region fell out of the irrigation system, the zone of the third being considerably narrowed. The large irrigation net-work of the "lands of ancient left-bank irrigation" stops its existence. In the majority of cases all ancient towns known to us were destroyed by military catastrophes. The handicraft production was in the state of decay in those towns which survived the others. As we have already seen, the anthropological composition of its population, especially in the outer districts of Khwarizm, has radically changed. This testifies to the fact that the

³² See TKhE, I, p. 37-38, fig. 24.

³³ TKhE, II, fig. 88.

steppe barbarian tribes appeared among the population of the state, which was being ruined and suffered a very deep decay. All these indications are sufficient to solve the problem of the reasons of the observed changes. They are identical to those which are characteristic (this time not only in the archaeological material but also in the written sources) of the epoch of the ruin of the Roman Empire,—the slave-system empire of the West. The irrigational character of the Khwarizm agriculture makes these consequences of the slave-system crisis especially manifest. The formation of the material premises for the transition to the new progressive feudal system within the Kushan Empire (just like it was in Rome) did not cause a direct progressive development as it did also in the West. The process of stagnation of the slave-system, hindering that development, lasted for many centuries, as the society itself had no social class which could lead the progressive stratum of the society. And just the way it was in the West, this force appeared in the outskirts of Khwarizm and in other regions of Central Asia. These were barbarian tribes—the German and Slavonic in the West, and Turkish-language in the East. The decaying forms of the ancient material production were combined with the deeply archaic forms, introduced by the barbarians, the latter reminding of those which had been in the ancient Khwarizm. This explains that well-distinguished border-line which can be observed in all fields of material culture between the antiquity and Middle Ages in Khwarizm, as well as in other regions of Central Asia. The plates of the pottery forms which we demonstrate here (figures 18, 19) illustrate this border-line very well. A slow rise of Khwarizm began only in VI-VII centuries, the earliest stage of it being already the medieval culture—the Aphrigid one,—but not the ancient. The type of settlement of the population underwent a radical change—the two rising classes of the feudal society lived in strongly fortified castle-type dwellings, differing only in size. The new Aphrigid towns emerged on the ruins of the antique ones. The architectural prototypes of the castles are found not within the antique Khwarizm itself but among the barbarian Chionite tribes of its outer districts. The fortified head-quarters of the Chionite chiefs, called Barak-Tam, presents a magnificent sample of that architecture.34 We have found a sterile stratum connected with the period of desolation in the excavations of the Aphrigid town of Berkut-kala in 1955 between the late-Kushan and Aphrigid strata. The irrigation—the cornerstone of the leading branch of agriculture better than all other monuments of culture demonstrates very convincingly that even in the VII-VIII centuries, preceding the Arab invasion, the Khwarizm economy continued its progressive development which had started already at the time of the Kushans. The main producer of the slavesystem—the slave—was substituted by the main producer of the feudal system—the serf. The flourishing of the medieval Khwarizm culture.

³⁴ TkhE, I. p. 135, fig. 1-15.

climaxed already by the XII century, was interrupted twice by enormous political catastrophes—the Chinghiz-khan invasion in the end of the first quarter of the XIII century, and the Timur invasion in the beginning of the last quarter of the XIV century. New changes of the Amu-Darya flow were coeval with these bloody catastrophes.

The study of the Uzboy medieval monuments has yielded rich material for the solution of this problem which for many decades was the central one in the work of the scientists. As we already mentioned, the Uzboy bed stopped functioning in the ancient period and only the pottery of the barbarian tribes—scanty traces of the sites of nomads in the sands near the Uzboy and separate Scythian arrow-heads—testify to the fact that the bed was not completely abandoned by man.

The absence of handicraft pottery of ancient types proves that there were neither settled populations along the Uzboy, nor trade-routes, which appeared in X-X1 centuries A.D., in the epoch of prosperity of the medieval Khwarizm. The archaeological material proves that the controversial testimonies of the ancient sources on the "Caspian estuary" of the Amu-Darya reflect the struggle of the traditional conceptions of that "estuary", dating from the middle of the first millennium B.C. with the fragments of real information which penetrated the ancient geographic literature. The remains of a small fortress situated near the Igdy well on the rocky precipice of the Uzboy canyon,35 belonged to the very end of the antiquity to the IV-V centuries A.D. The fortress (figure 20) was made of limestone flags but coated with clay. This monument, which is likely to be connected with the Chionit-Sassanid wars, probably testifies to a short-time water-break into the Uzboy. The situation of the fortress gives ground for the supposition that it controlled not the land-but the waterway. The water-break could be caused by the decay of the ancient irrigation of that time.

The excavations of the caravanserais of Ak-yaila in 1951 (X-XIII centuries) and Talaikhan-ata in 1952 (X-XIV centuries) are exceptionally interesting.³⁶ Those caravanserais are round buildings of stone and burnt bricks with brick cisterns for water in the centre. The water supply of the caravanserais was based on the atmospheric moisture, collected from

³⁵ S. P. Tolstov, Raboty Khorezmskoi arkheologo-etnograficheskoi expeditsii A. N. SSSR v 1954 godu, SV, 1955, No. 6, p. 109-110.

³⁶ S. P. Tolstov, Khorezmskaya arkheologo-etnograficheskaya expeditsiya A. N. SSSR, 1950, SA, XVIII, 1953, p. 322-325; idem, Archeologicheskiyi Raboty Khorezmskoi arkheologo-etnograficheskoi expeditsii A. N. SSSR v. 1951 godu, SA, XIX 1954, p. 250-253; idem, Arkheologicheskii Raboty Khorezmskoi expeditsii A. N. SSS v. 1952 g., VDI, 1953, No. 2, p. 165-67; O. A. Vishnevskaya, Razvaliny Karavan-sarave Ak-Yaila i Talaikhan-Ata, T. Kh. E., v. II, p. 431-466.

the surrounding tagyrs by means of special water-collecting runnels. Especially important is the fact that these buildings are located near the Uzboy and that the caravanserai of Talaikhan-ata which functioned during the post-Mongol period of the XIII-XIV centuries had the same water-supply. This proves that after the Mongol invasion of the XIII-XIV centuries the Uzboy also did not exist as a river.

The results obtained by our expedition in the Sary-kamysh hollow are very important for the final solution of the problem of the chronology of the Uzboy river. The study of the late medieval irrigation net-work of the Sarykamysh started in 1952 and performed also in 1953-1954, by a special group of the expedition which included geomorphologists, facilitated the reconstruction of the history (in its principal aspects) of this original irrigation system.37 The clarifying of the early stage of its history was helped by the excavations of the early medieval fortress of Zengi-baba, located at the absolute mark of 50 m. in the south eastern part of the Sarykamysh hollow. The study of the stratigraphy of this fortress, built by the Khwarizm shahs on the border-line of the XII-XIII centuries and desolated after the Mongol invasion, has demonstrated that even if there had been a certain flooding of the Sarykamysh after the Mongols, it had not reached the level necessary for the fall of the waters into the Uzboy. The lower, post-Mongol, desolation stratum of Zengi-baba does not show any traces of flooding and is connected with the activities of the aeolic factor. A more considerable filling up of the Sarykamysh with water took place in the end of the XIV century, after Timur had destroyed the irrigation system of Khwarizm and the Amu-Darya waters which were no longer controlled by the man, rushed to the Sarykamysh not only along the Daryalyk but also along all ancient beds of the ancient Sarykamysh delta and elevated the level of the lake upto the absolute mark of 50-52 metres which on the border-line of the XIV-XV century could cause a short-time break of the waters into the Uzboy. In the end of that century Zengi-baba was destroyed for the second time and then populated again in the XIV century. In this case, the desolation stratum has the well-expressed traces of flooding with lake waters (lake pebbles, colonies of the fresh water shells—Dreissensia). The lake did not retain this level for a long time, and in the duration of the XV-XVI centuries it fluctuated between the absolute mark of 10-15 and 20-30 m. The construction and functioning of the irrigation facilities which utilized the Sarykamysh water can belong to the same time. The water was lifted to the bank terraces by means of a complicated and original system of clay aqueducts and water elevating devices. The discovery of the ancient delta of the Kanga-

³⁷ S. P. Tolstov, A. S. Kes, T. A. Zhdanko, Istoriya srednevekovogo Sarakamyshskogo ozera, "Voprosy geomorfologii i paleogeografii Azii", Moscow, 1955, p. 54-74.

Darya and late medieval Daudan canyon is very important for the history of the Sarykamysh hydrographic net-work.

The historical data enable us to suppose that the Sarykamysh irrigation was created by the Turkmenian tribes of Adakly-khyzyr who lived in this region according to the XVIII century historian—Abulgazi. The material collected by the Turkmenian ethnographic group of our expedition among the offsprings of this tribe—the modern Turkmenians of Khyzyr-ali in the Chardzhou region of Turkmenia, in the Bukhara region of Uzbekistan and Southern Khwarizm,—confirmed this.

The materials obtained by the expedition show that different sources of information pertaining to different time and differently interpreted by the medieval compilers as well as by modern students, collide during the development of the literature tradition of the Amu-Darya medieval Caspian estuary. Our materials enable us to establish that there was no "Amu-Darya turn to the Caspian Sea" in the XIII-XIV centuries. Many times there was a break of the Amu-Darya surplus waters into the Sary-kamysh depression caused by the destruction of the Khwarizm irrigation constructions and only once after the Timur invasion on the border-line of the XIV-XV centuries and for a very short period of time the water level in the Sarykamysh reached the marks letting the water flow into the Uzboy.

In the end we cannot but dwell briefly upon the results of the excavations of the biggest medieval Khwarizm monument—its capital Kunya-Urgench. These excavations were concentrated principally on the territory of Tash-kala—the Kunya-Urgench block, rehabilitated after a horrible destruction of the town by Timur. This block existed up to the XVII century, when the population of Old Urgench were moved by Abul-gazikhan, the historian, to New Urgench near Khiva—modern capital of Uzbekistan's Khwarizm region.³⁸ The excavations were made on the Tash-kala town-wall, near the southern gate (the so-called "Gate of Karavanserai") and near the supposed place of collapse of the minaret of the XI century which occurred on the border-line of the XIX-XX centuries.

The excavation results depict a dramatic history of the Khwarizm capital of the last seven centuries. We have discovered the foundation of the minaret, built in 1011 A.D., preserved upto the marble ring which surrounded it, and remains of the contemporary early medieval mosque, foundations of the walls, floors of burnt bricks, bases of columns made of

³⁸ S. P. Tolstov, Arkheologicheskiye Raboty Khorezmskoi expeditsii A. N. SSSR v 1952 g., VDI, 1953, No. 2, p. 167-178; N. N. Vakturskaya, Raskopi gorodishcha Urgench v 1952 g., T. Kh. E., v. II, p. 467-494.

pyramid-shaped stones. It was revealed that the supposition on the fact than an early medieval minaret existed up to the end of the XIX century was wrong. Chinghiz-khan destroyed also this building. The minaret was restored only in the XIV century, approximately simultaneously with the construction of a big Kunya-Urgench minaret—Kutlug-Timur, which has been preserved up to now. The minaret district bears the traces of an enormous massacre, which was the epilogue of the heroic defence of Urgench from the Chinghiz-khan hordes. A great number of human bones and skulls, fragments of arms—all this testifies to that fact. Not only the minaret, but a mosque as well were restored in the XIV century. But the architecture thereof was entirely different. The mosque yard was surrounded by arcades which rested on solid brick pillars. After the second destruction of the mosque connected with the Timur invasion, it was restored again but the pompous arcades gave way to wooden pillars which rested on rude stone bases.

A bright picture of the decay of the XV-XVII centuries Khwarizm culture is created also by the excavations of the two southern districts, where we found a number of town blocks (figur 21) with streets, markets and dwellings of rich merchants and poor handicraftsmen. It is very peculiar that the houses were built mainly of the bricks which were used before in the XIII-XIV centuries on a loose solution of clay. Wonderful carving on alabaster peculiar for the XII-XIII centuries and preserved in the XIV century was replaced by rude and poor ornaments made by stamp. The pottery also bears the traces of decay. Half-faience which was peculiar for the XIV century disappears.

But the whole late medieval history of Urgench was marked with wide international relations—especially with the China—which are expressed not only in spreading of the Chinese system of dwellingheating, but also in numerous finds of the imported Chinese pottery (figure 22) and local imitations of the Chinese standards. The Kunya-Urgench excavations as well as the study of the late medieval monuments of the Uzboy and Sarykamysh create a dull picture, resulting from the double invasion of the Chinghiz-khan and Timur hordes and with the new period of deep feudal disorganization—endless feudal wars and attacks of nomads, connected with those invasions. Along with that we saw how the common working people—agriculturists of the Sarykamysh and handicraftsmen of Old Urgench-under the hard conditions of endless feudal massacres repeatedly performed heroic feats of labour for the rehabilitation of old and construction of new irrigation systems, harnessing the powerful flow of the Amu-Darya, reviving the towns from their ashes. They managed to carry on through the centuries and millennia most of the best traditions of the antique Khwarizm. These traditions composed, as it is shown by the

works of our ethnographers,³⁹ the golden fund of the folk culture of the modern population of Khwarizm—Uzbeks, Turkmenians and Karakalpaks.

The peoples of the flourishing Soviet Khwarizm—Uzbeks, Turkmenians and Karakalpaks—are successfully cultivating "the lands of ancient irrigation"—with the help of the modern technique. "The lands of ancient irrigation", this enormous museum of the history of Khwarizm culture is also a serious reminder of what endless wars mean to the people,—the wars, inspired by the mercenary interests of the groups of the ruling classes who struggled for domination. All these splendid monuments created by human labour were turned into "dead towns", "dead settlements" and "dead oases" by the wars. On coming back from the fronts of World War II, I looked with a new attitude at the monuments which were so familiar to me. And I keenly felt that they reminded me of the ruins of our towns destroyed by the fascists.

And if the wars of the slave and feudal epochs could create such a grand but horrifying cemetery, what then should humanity expect of the war whose dreadful rehearsals were staged in Hiroshima and Nagasaki?

And that is why the builders of the new Socialist Khorezm, like the common people the world over, so highly appreciate the principles of Panch Shila, the principles of Bandung, the peaceful co-existence of states with different social and political systems, which for the peoples of the world, for their children and grandchildren, constitute a guarantee of peaceful labour to provide the progressive development of world culture and the creation of such great cultural values as will leave all that our forefathers created and what we possess now far behind.

³⁹ See T. Kh. E. v. I our article, p. 13-15, fig. 1, 2, 3, and the article by T. A. Sazonova p. 293-295. See also the article by T. A. Zhdanko "Izuchenie narodnogo orgamentalnogo iskusstva Karakalpakov", SE, 1955, No. 4, p. 62, 66-69.



 $Fig.\ 1.$ Palace of Toprak-kala (Aerial photograph).

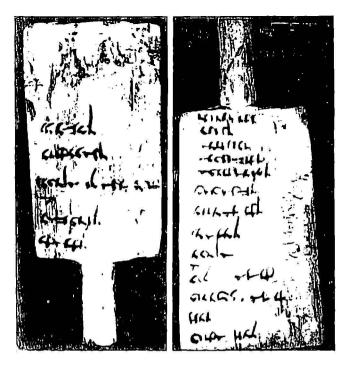


Fig. 2. a,b: Manuscripts found in Toprak-kala palace: on a wooden plank,



Fig. 2c: on leather.

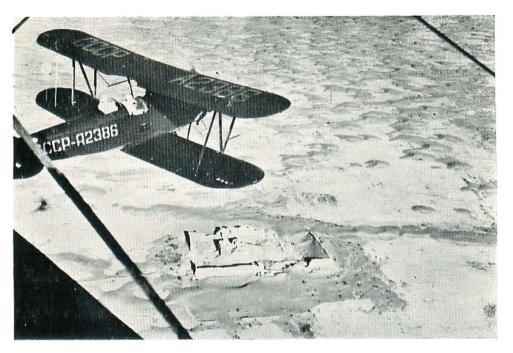


Fig. 3. The plane over the ruins of Adamli-kala (VII-VIII cent. B.C.).



Fig. 4. Meeting of the expedition; planes and cars in the desert.

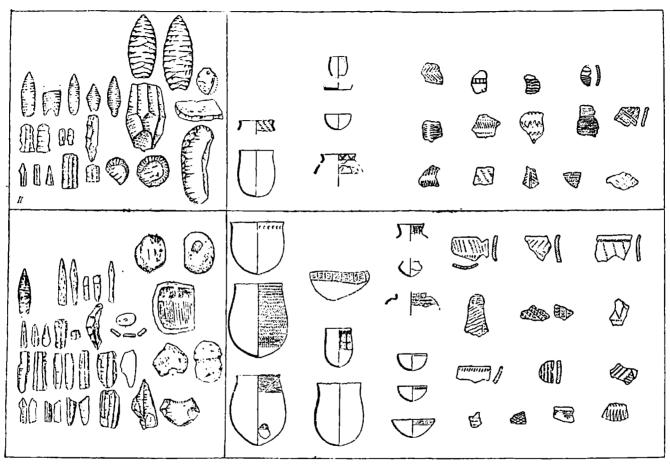


Рис. 7. Кельтеминарская культура (таблица керамини): 4— конец IV— первзя положина III тысячелетия до н. э.;

11— вторан половина III— начало II тысячелетия до н. э.

Составлено А. В. Винографосныя

Fig. 6. The Kelteminar culture: I— the end of the IV—the early III-rd millennium B.C.; II—the late III-rd the beginning of the II-nd millennium B.C. Drawn by A. V. Vinogradov.

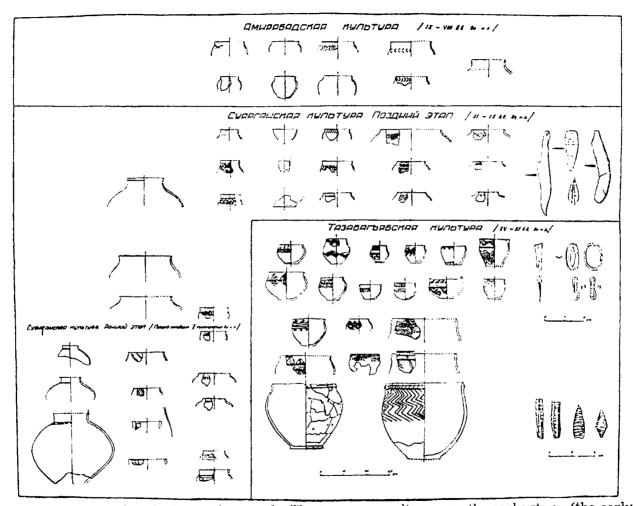
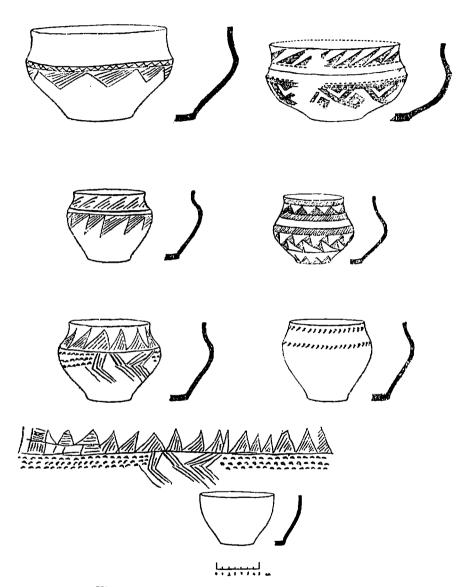


Fig. 7. Bronze and early iron cultures: 1—The Suyargan culture: a—the early stage (the early II millennium B.C.), b—the late stage (XV-XI centuries): III—the Amirabad culture (IX-VIII centuries). Drawn by M. A. Itina.



 $Fig. \ 3a:$ Pottery from the Kokcha 3 burial ground.

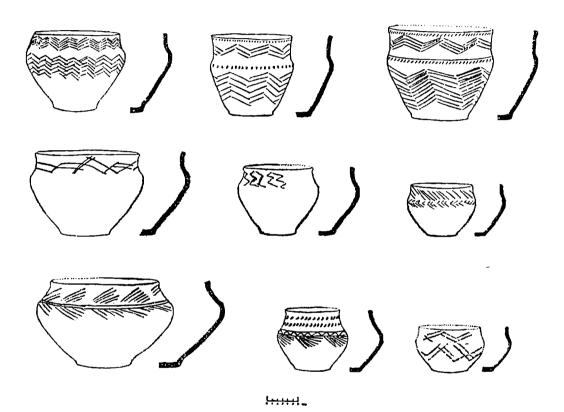


Fig. 8b: Pottery from the Kokcha 3 burial ground.

MOPUADHUK KOKUA-3 погребение Nº 57

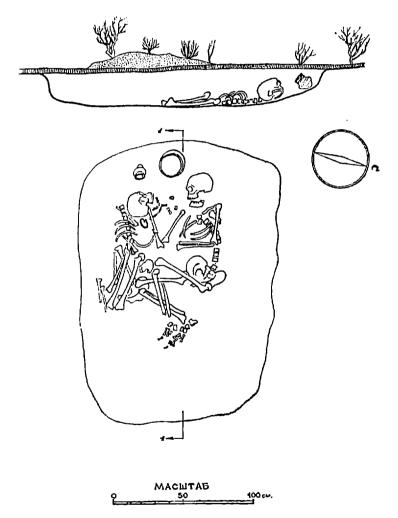
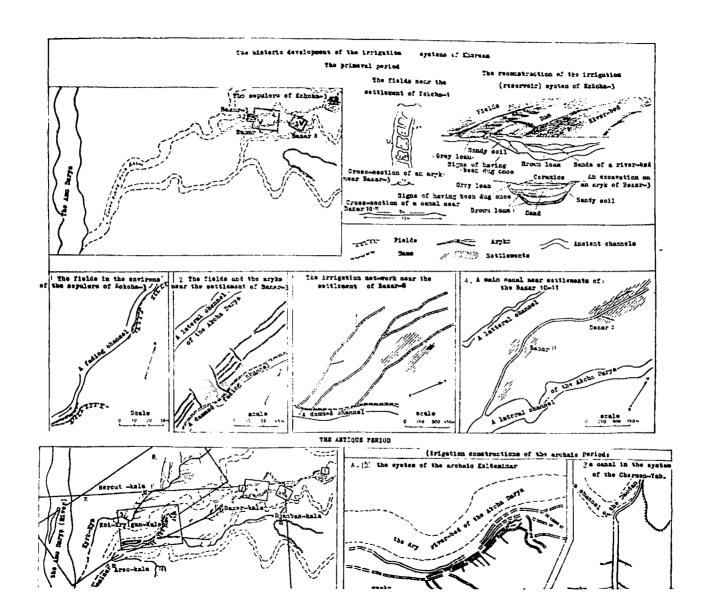


Fig. 9. The Kokcha 3 burial ground, burial 57.



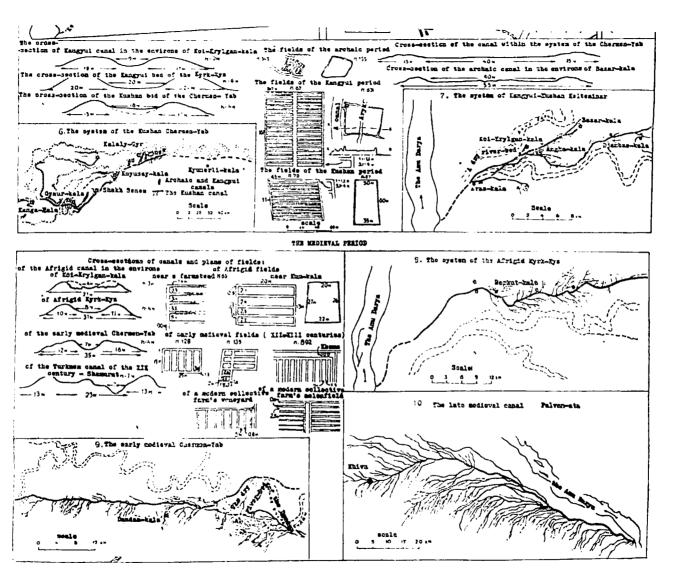


Fig. 10. The historical development of the Khwarizm irrigation systems.

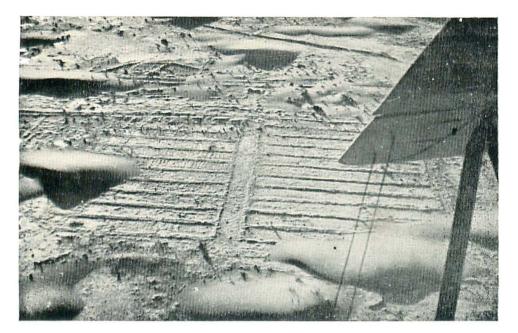


Fig. 11. The ancient irrigation fields in the vicinity of Koy-Krylgan-kala.

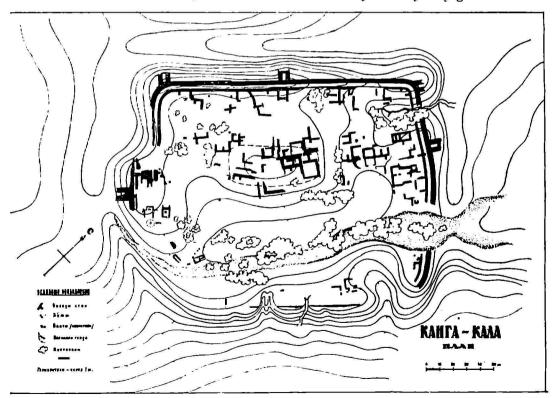


Fig. 12. Kanga-kala (the plan of the fortress): (1) outlets of the walls; (2) pithoi; (3) flags (limestone): (4) sand bank; (5) bushes. Measurements by I. S. Lapirov-Skoblo, architect.

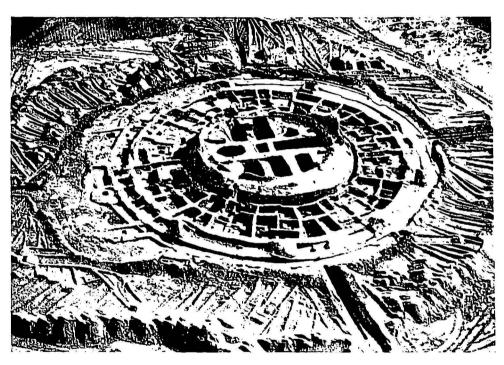


Fig. 13. Koy-Krylgan-kala (aerial photograph).



Fig. 14. Finds from Koy-Krylgan-kala: 1—3 basrelie on flasks: 4—flask with a relief ornament; 5—re clay goblet; 6—black-polished vessel with a scratch ornament; 7—dipper with a ram head on the handle 8—spit-stand adorned with horse heads.

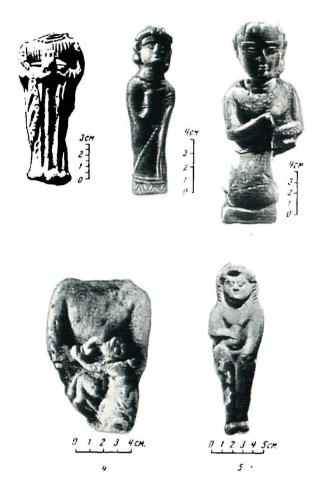


Fig. 15. Terra-cottas from Koy-Krylgan-kala: (1) the goddess with a bowl and an amphora; (2) a woman in gala dress, (3) a sitting woman; (4) "the mother goddess", (5) a naked female figure.



Fig. 16. Ceramic head from an ossuary, found in the vicinity of Koy-Krylgan-kala.

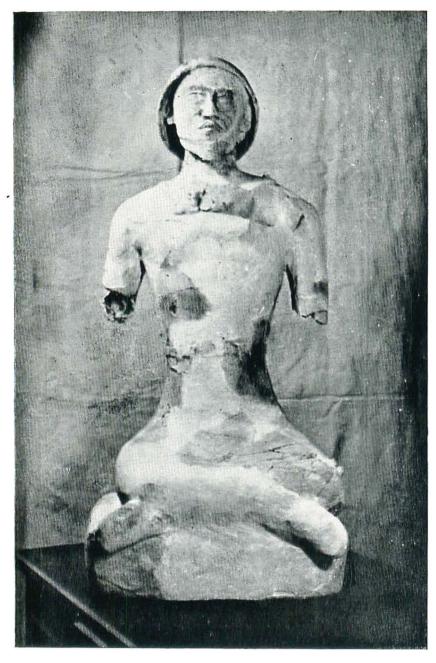


Fig. 17. A male figure, crowning a ceramic ossuary (Koy-Krylgan-kala).

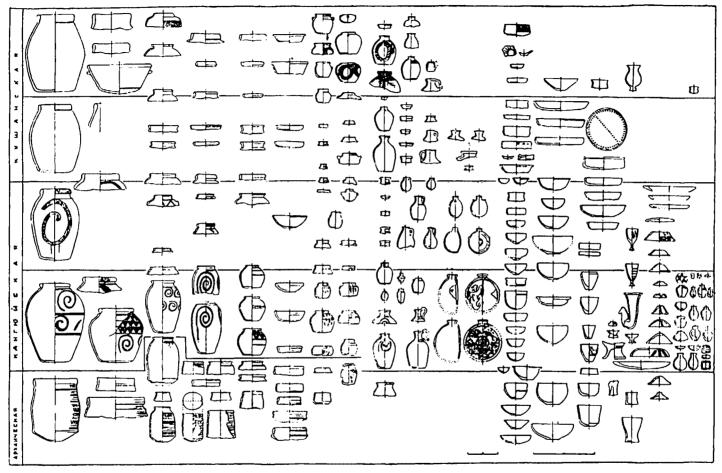


Рис. 19. Керамика античного Хорезма. Составаено М. Г. Воробневой

Fig. 18. The antique Khwarizmian pottery. Drawn by M. G. Vorobyeva.

I. Archaic period; II Kang—Kü period;III. Kushan period. (Reading upwards)

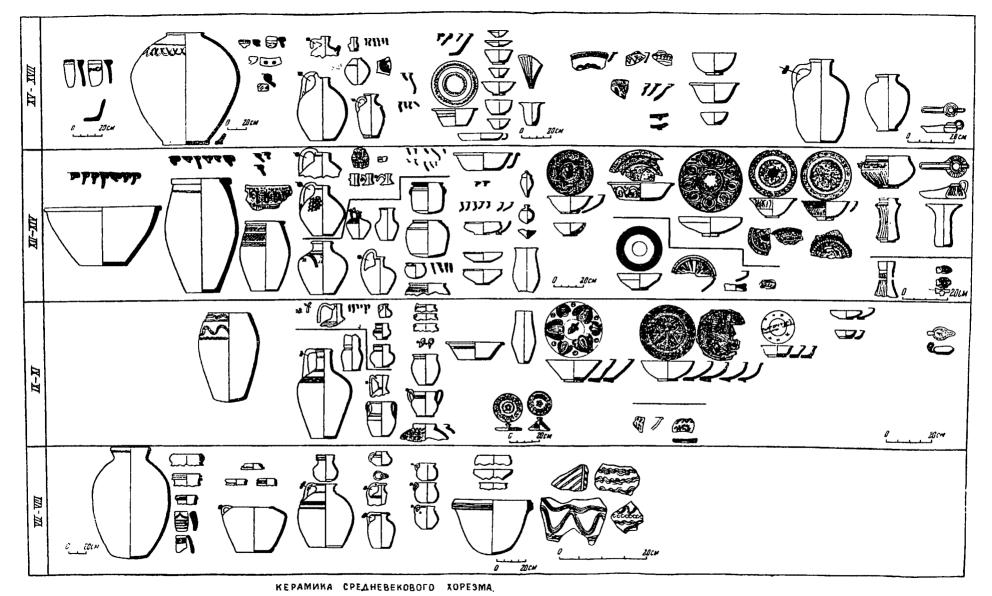


Fig. 19. The medieval Khwarizmian pottery. Drawn by N. N. Vakturskaya

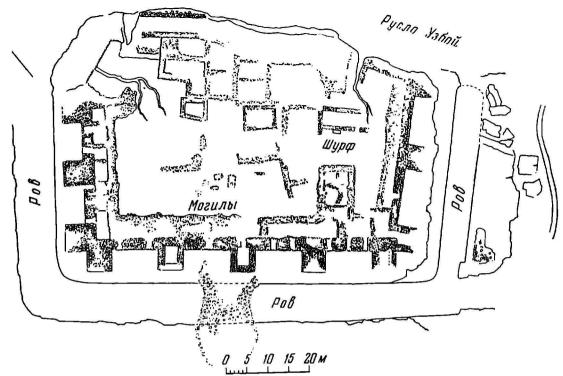


Fig. 20. Igdy-kala (the plan of the fortess).



Fig. 21. Kunya-Urgench. View of the excavations.

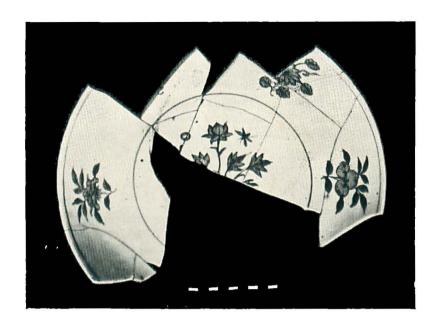


Fig. 22a, Chinese porcelain bowl, found during the Kunya-Urgench excavations.

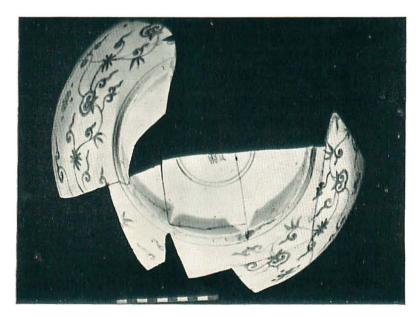


Fig. 22. b, reverse of bowl in Fig. 22. a.

VRTTARATNĀKARA-TĀTPARYA-TĪKĀ OF TRIVIKRAMA

By

H. D. VELANKAR

In my introduction to the edition of the Vrttaratnākara in the Jayadāman (Bombay, 1949), I have given some information about this Trivikrama, whom I have described as the earliest commentator of the Vrttaratnākara. Since then I have been able to get a photo-copy¹ of this commentary, the only palm-leaf manuscript of which is preserved at Ahnilvad Patan. This ms. is described by Peterson on p. 26 of his Vth Report. It has 127 folios out of which folios 6, 12, 16, 25, 37, 43, 61, 69, 88, 89, 93, 94, 95 and 96 were lost by the time I got its copy. Fol. 82A contains only a repetition of most of the matter written on fol. 81B. In the Prasasti² at the end of the commentary Trivikrama gives some information about himself. According to this he was a son of Raghusūri or Rāghavārva, son of Sārangasūri, son of Bhāisuri (Srīpatisüri?), son of Gadādhara of the Mādhyandina Sākhā and Āngirasa Gotra of a Gauda Brāhmana family, originally of Vrddha Valabhī, but afterwards migrated towards the south and settled at Elapura on the banks of the Godavari. Trivikrama calls himself an expert in the Kātantra Vyākaraņa and steeped in the knowledge of the difficult Durga-Vrtti on it. He also describes himself as well-versed in Chandas and Alamkāra as also a poet of great merit. He further tells us that he had composed an extensive commentary on the Sarasvata Vyākarana; but no ms. of it is available today.

There exists, however, in the same Bhandar where our commentary is found, a ms. of a commentary called Uddyota³, on the Pañjikā of Trilocanadāsa, which itself is a commentary on Durga's Vṛtti on the Kātantra Vyākaraṇa. This Uddyota is ascribed in the colophons to Trivikrama, pupil of Vardhamāna, a preceptor of Karṇa, i.e., King Karṇa of Ahnilvad Patan. Our Trivikrama's references to his proficiency in the

^{1.} This copy is now in the library of the University of Bombay.

Almost the same stanzas, i.e., 2 to 11, of this Prasasti are repeated by Trivikrama in his Pratisthāpaddhati, an extract from a ms. of which is given by H. P. Sastri on pp. 529-31 of Vol. III Smrti manuscripts) of his Desc. Cata. of Sk. Mss. Government Coll. under the care of the Asiatic Society of Bengal, Calcutta, 1925.

^{3.} See Dalal's Catalogue of Patan Mss., Vol. I, Baroda, 1937.

Kātantra Vyākarana and especially in Durga's commentary on it, together with the existence of the two works side by side in the same Bhandar, should leave no doubt about the identity of these two Trivikramas. It seems that Trivikrama had gone to stay at Patan, specially for the study of Grammar of the Kātantra and Sārasvata systems in particular, under the celebrated teacher Vardhamana, who was honoured at the court of King Karna and was retained there as the royal preceptor. In his later years Trivikrama must have studied Chandas and Alamkara by himself (and this is why he does not refer to any guru in particular and gives the history of his own family of distinguished scholars), while still at Ahnilvad. His close acquaintance with the Jain prosodial traditions represented by the Chandahśekhara, (perhaps even the illustration at II.13.2 which praises Mahāvīra is from this work), is then easily explained by his association with Ahnilvad Patan and the Jain Acaryas and authors in Gujarat and Saurāstra. The Chandahśekhara from which Trivikrama quotes stanzas in this commentary is a work on Sanskrit and Prākrit metres written in Sanskrit by a Jain author as is clear from the quotations from and other indirect references to it in our commentary. We have a palm-leaf ms. at Jesalmir' of only the Vth chapter of a Chandahśekhara, composed by a Jain author Rājaśekhara, which in all probability is the same as the work quoted by Trivikrama. Unfortunately the available chapter of the work treats only of the Präkrit and the Apabhramsa metres and so it is not possible to locate Trivikrama's quotations in it. But both the name Chandahsekhara and its being written in Sanskrit by a Jain author must be taken as a sound proof to show that our Chandahsekhara is the same as the one known to Trivikrama. The Jesalmir ms. of the Chandahśekhara is dated Sam 1179 and the Patan ms. of Trivikrama's Uddyota on the Kātantra is dated Sam. 1221. We may therefore conclude that Trivikrama lived in Gujarat for a long time, studied Kātantra and Sārasvata systems of grammar under Vardhamāna at Ahnilvad Patan, during the reign of King Karna (A.D. 1064-1094), and then in later years acquired proficiency in the Chandas and the Alamkara Sāstras⁵ by his own efforts, writing the present commentary on the Vrttaratnākara some time in the first half of the 12th century A.D. is earlier than Hemacandra, the great Jain scholar, and Sulhana who wrote his commentary of the Vrttaratnākara in 1190 A.D.; at II.17.1 it is very likely that Siddharāja Jayasimha is meant by Trivikrama. One

See Chandaḥśekhara of Rajaśekhara, published with introduction at JBBRAS., 1946, p. 1.

^{5.} It was probably at this time that he acquainted himself with the Chandaḥ-śekhara, which was composed in the first half of the 11th century A.D.; cf. JBBRAS., 1946, p. 1.

stanza is addressed to a sovereign who is honoured by his vassals. Trivikrama himself was a non-Jain; in the few stanzas which he seems to have composed by way of illustrations, his inclination to the worship of Viṣṇu (I.16.2; II.15.1; II.19.1-2; II.37.10; VI.9.2), of his Nṛṣiṁha incarnation in particular (1.15.1; II.20.1; II.37.9), is quite obvious, though he also praises Siva (II.15.2) and his son Gananātha (VI.9.1).

Chandahśekhara is quoted at four places, namely, II.2.1, II.12.3, III.108.1-12 and IV.11.1-6. But even the other references to 'some' on I.16, and quotations from 'some' at V.12.1, 3 and 4, to śāstrāntara on II.2; II.2.3; III.106; V.12, to granthantara on I.14, to Smrtyantara on II.17 and the words tad uktam on II.32 are all probably to the same work, as can be seen from a comparison of the word granthantara on I.14 with IV.11.4, of śāstrāntara on II.2.1 with II.2.2, of the same word on III.106 with III.108.1-12 and on II.12.1 with II.12.3. The reference to the Jain Siddhanta regarding the classification of the Vaktra group under Visama Vrttas must also be understood to the same work. That the Jain school of prosodists did so can be seen from the position of the Vakrta group among the Visama Vrttas both in the Svayambhūchandas, whom Rājaśekhara has mostly copied in his Chandahśekhara, and in the Chandonuśasanas of Hemacandra. We may also compare Jayakīrti's Chandonuśāsanas, where he begins his treatment of the Visama Vrttas with the Vaktra group in the fourth Adhikāra. Jayakīrti too is a Jain author.

Trivikrama does not refer to earlier commentators of his text and this is natural because he is probably its first commentator. The reference to 'some' interpreter in the case of the words sukhasantānasiddhyartham in I.1 and sadadhyāyanibaddhasya in I.3 is not to an earlier commentator, but to an erring pupil who may misconstrue the words. That his commentary was mainly intended for his pupils is seen also from the words siṣyānām jānākleśāya in his commentary on VI.2 and siṣya-vyutpādanāya on VI.4. He respectfully mentions Jayadeva as an authority on I.0.6, II.12.4, II.38.1 (with Bharata and Pingala) and V. 12 (with Pingala), and quotes him (IV.14) once on II.11. The point of the reference to him on the first two passages is not quite clear. The following points from this commentary deserve to be specially noted:—

(1) The commentator regards the compound word vṛttaratnākaram in I.3 as an avyaya and the word nāma in the same stanza as sambhāvanāyām.

^{6.} See Svayambhūchandas, III.14-23, at JBBRAS., 1935, pp. 56-57.

^{7.} See JBBRAS., 1946, p. 3.

^{8.} See Jayadāman, Bombay, 1949, Chandonuśāsana of Hemacandra, III.33-52 (pp. 105-106); Chandonuśāsana of Jayakīrti, IV.1 ff. (p. 53).

- (2) The quotation from Manu which he gives at I.3.1 is not traced in the present Manusmrti.
- (3) While commenting on I.4 he refers to a Jain tradition among the prosodists according to which the Vaktra group of the Varna Vrttas is classified under the Viṣama Vrttas. This is what is actually noticed in the works of Jayakīrti, Svayambhū and Hemacandra^o.
- (4) On I.9 while discussing the hrasvatva and dirghatva of the Aksaras, he mentions the peculiarities of Apabhramsa prosody in this behalf and gives a quotation probably from the Chandah-sekhara together with a couple of illustrations in the Apabhramsa language. The first of these two is found at Prākrta Paingalam II.151.
- (5) He adopts the reading 10 pādādau in I.10 and prescribes that the rule mentioned in it applies only to the Pādas of an Āryā; it is, however, difficult to see how he understood the Nivamana. Perhaps he looks back to the word aryadisu in I.8; but undoubtedly the rule refers to the 2nd and the 4th Padas of any metre and krama means 'the starting' samyoga or conjunct of these Pādas. It does not lend gurutva to its preceding Aksara, i.e., the last one in Padas 1 and 3, when it is expected to be metrically short. This rule, which does not occur in any other prosodial treatise, so far as I know, (though the technical term krama for such a conjunct suggests otherwise), suggests that according to it, the poets started their composition of the Pādas afresh and not necessarily in continuation of the earlier Padas, or in other words, Pāda was an independent constructional unit in the formation of a stanza, and not an ardha, though the latter was regarded as such in respect of the rules of Sandhi.
- (6) He treats I.10.1 as a traditional illustration of the rule given in I.10 and not as a stanza forming part of the text of the Vrttaratnākara. His introductory words idam asya udāharaņam are

^{9.} See above notes 6 and 8.

^{10.} Sulhana controverts this for unsound reasons and adopts padādau as the correct reading. His main argument is that there are no Pādas, but only Ardhas, in an Āryā, so that the definition with the reading pādādau will not apply to the illustration in the Āryā metre (II.10.1), which according to him is a part of Kedāra's text. For Sulhana see BUJ., Sep. 1951, p. 82. But both these reasons are not correct; see Jayadāman, Introduction, p. 40 and points Nos. 6 and 7 below.

- found also at the beginning of I.9.2 and I.19.7, which are very clearly external illustrations.
- (7) While explaining the term Pāda in I.11.1 he appears to consider Āryā as a metre of four Pādas against others, who think that the arrangement into Pādas does not apply to this metre. But the use of the word Pāda at II.3 and 4 clearly supports Trivikrama's stand
- (8) His memorial stanzas on the Yati (I.11.2, 4, 5, 6, 7) differ both from those given by Halāyudha on Pingala's Chandassūtra and also those given by Hemacandra in his Chandonuśāsana; they are very likely composed by Trivikrama himself. The illustrations, on the other hand, are mostly the same as those of either Halāyudha or Hemacandra.
- (9) He distinguishes between two different kinds of the Ardhasama Varna Vrttas of four lines: (a) those whose halves are made of two lines of same length, but different constitution, and (b) those whose halves consist of two lines differing from each other both in length and constitution. The Visama Vrttas also are classified on the same principle: (a) those that have four lines of the same length but different constitution, and (b) those whose lines are of different length and different constitution. Of these the former are neither mentioned nor illustrated by authors on prosody (except those who belong to the Jain tradition11 and accept the Vaktra group among Visama Vrttas). Trivikrama admits them and gives an illustration at I.15.1. On the other hand, the very similar stanza quoted by him at I.17.1 is only an illustration of the Gāthā as defined at V.12, since the first two Pādas of it are similar to each other. Of the latter only three groups are generally defined, viz., the Udgatā, the Padacaturūrdhva and the Upasthita-pracupita groups.
- (10) While defining the Daṇḍakas in I.17, Trivikrama gives a short quotation ā sahasrāt tu daṇḍakāḥ, which too may be from the Chandaḥśekhara¹²; it finds its corroboration in a prose passage at Hemacandra's Chandonuśāsana on II.388.7.
- (11) On I.17.1 in v.6 composed by himself, Trivikrama suggests that Ch. VI commences with the stanza pāde sarvagurāv etc., and that

^{11.} But compare Jayadāman, Introduction, pp. 21-23.

All these Dandakas given by Chandaḥśekhara have been defined at Svayambhūchandas, I.154-178 (JBBRAS., 1935, pp. 49-52).

- the stanza which recounts the six Pratyayas did not form part of the text on which he comments.¹³
- (12) The two divisions of Pathyā, viz., the Pūrva Pathyā and the Apara Pathyā given by others are mentioned by him on II.2 and a quotation in support of it is given from the *Chandaḥśekhara*, followed by an illustration, probably from the same work, of an Āryā which contains all long letters.
- (13) In consequence of this, Trivikrama does not accept the two corresponding divisions of Vipulā, basing this his view on the use of the word dvayoh in addition to śakalayoh (dual) in II.4 of the text. It is likely that Trivikrama has followed Chandah-śekhara in this respect, which in its turn has evidently followed Svayambhū, who adopts these divisions of the Pathyā, and not of Vipulā, at Svayambhūchandas, Pūrvabhāga, I.5.
- (14) Again on II. 12, probably following the lead of Chandaḥśekhara, which must have imitated Svayambhūchandas¹⁴ in this as in other cases, Trivikrama mentions the two divisions of Vaitālīya into Sama and Viṣama, otherwise known by the names of Dakṣiṇāntikā and Uttarāntikā, quoting for these latter from the Chandaḥśekhara. Hemacandra, at Chandonuśāsana III.59 alludes to these alternative names, but does not state the source of his information.
- (15) He obviously quotes from the works of some older poets, as seen from his remarks at II.12.4, for illustrating the two divisions of the Vaitālīya and the similar ones of the Aupacchandasaka and the Āpātalikā. Among these, one¹⁵ certainly (II.13.2) and two very likely (II.14.1 and 2) are from some Jain author, perhaps from Chandahśekhara itself.
- (16) The Yugmavipulā defined at II.25 is said to be only another name of Pathyā Vaktra, because it has the same characteristics, when a short letter is employed also at the 5th place and a long one at the 6th, in the even Pādas.
- (17) In the second chapter while explaining the Pādākulaka and the formation of its stanzas by a mixture of the different lines in the Mātrāsamaka and the others of its class, he makes use of what

^{13.} Compare Jayadāman, Bombay 1949, Introduction, p. 41.

^{14.} Unfortunately, the portion from this work dealing with this topic is not available.

The legend refers to the protection afforded by Lord Mahāvīra to a minor god called Camara against the wrath of Mahendra.

- he calls Catuşkikās or squares, to illustrate the different combinations of the lines.
- (18) He justifies the name Samkīrņa-Vṛttādhyāya of this Adhyāya (i.e., the IInd) by showing the inclusion of a few Varṇa Vṛttas under some one or the other of the Mātrā Vṛttas, belonging to the Vaitālīya and the Mātrāsamaka groups.
- (19) He defines and illustrates (by the defining stanza itself) 12 more Daṇḍakas in the IIIrd Adhyāya, quoting their definitions from the Chandaḥśekhara.
- (20) He suggests the formation of any number of the Ardhasama Varna Vrttas by putting together two halves consisting of two lines each of any two Varna Vrttas of different length on IV.12.
- (21) On IV.7 he suggests the use of the prefix viparīta to the names of any other metres which may be formed on the analogy of the Viparīta Ākhyānikī.
- (22) At the end of the IVth Adhyāya, he quotes from the Chandaḥ-śekhara the definitions of five additional Ardhasama Varṇa Vṛttas. In IV.12 he has a different reading according to which the name of the metre is Vāṅmatī instead of Yavamatī, the definition of which last he quotes again from the Chandaḥśekhara. In effect Vāṅmatī is only another name of Yavamatī according to him.
- (23) The order of the definitions adopted by Trivikrama in this i.e., the IVth chapter is slightly different from the one that is generally seen in the text of the *Vrttaratnākara*. Thus after Drutamadhyā, the 2nd metre, he gives Vānmatī (= Yavamatī), which is the 12th and then Puspitāgrā which is the 10th after it. This is followed by metres Nos. 3 to 9 and 11 in order.
- (24) In the fifth chapter (v.12) under the general name Gāthā Trivikrama includes the three kinds of prose, namely Cūrnikam, Utkalikā and Vrttagandhi mentioned in other works, probably meaning the Chandaḥśekhara¹ø, as well as those metres whose Pādas contain between 27 and 60 Akṣaras each and are known as the Mālā Vrttas. Here, too, the reference to and quotations from (V.12.1 and 2) are probably from the Chandaḥśekhara. He also includes here those Prākrit metres which have five, seven or nine Pādas, thus probably referring to the Mātrā, the Raḍḍā and other Dvibhaṅgīs which are so common in Apabhraṁśa prosody.

^{16.} See also Sähityadarpana of Visvanātha, VI.330-331.

- (25) While explaining the stanzas on the six Pratyayas in Ch. VI, Trivikrama says that he has depended upon traditional explanation of these Pratyayas (Sampradāya). In the very first stanza of his commentary (1.0.1) he says that he proceeds to explain the meaning of the Vrttaratnākara according to the Sampradāya.
- (26) In the sixth chapter, he composes his own stanzas to define and explain the six Pratyayas as applicable to both Varna and the Mātrā Vṛttas.
- (27) He also shows how, by a little manipulation, Kedāra's definitions of some of these Pratyayas, which are mainly intended for the Varna Vrttas, can be applicable even to the Mātrā Vrttas.
- (28) He uses the term Alapa for a full explanation intended to illustrate a particular point; see e.g., on VI.3.1; VI.3.8; VI.4; VI.4.2 and VI.6.1.
- (29) In two cases, I.7 and II.12, Trivikrama resorts to what he calls avrtti vyākhyā, wherein an additional interpretation is put on some words in the definition in order to prevent it from being either avyāpta or ativyāpta.
- (30) Trivikrama's commentary is often written in the conversational style, which at times tends to become tedious and is unnecessarily verbose. In many places he also composes a few memorial stanzas, briefly summarising the discussion of a metrical topic¹⁷.

In editing this earliest and exhaustive commentary, I am taking the text of the Vṛṭṭaraṭnākara as reconstructed by me in my edition of that work in the Jayadāman, Bombay 1949, as my basis. I have followed the numbering of the stanzas in this edition, making references to them only by thèir Pratīkas in all chapters except the second, where only their serial number in my edition is indicated.

I express my deep gratitude to the great Jain Muni and Acarya Shri Punyavijayaji of Ahmedabad who made the original palm-leaf manuscript available to me for being used through its photo-copy, which latter was procured for me by the University of Bombay.

^{17.} But see the introductory stanzas 4-9, where Trivikrama has promised (a) to expound only those portions of the text which are difficult, leaving others as easily understood; (b) to supplement Kedāra's information from texts like those of Jayadeva and others; (c) and to interpret Kedāra's words so as to to contain also the information given by others where possible by resorting to maxims like the Simhāvalokita, in order to avoid the defect of Avyāpti in his definitions.

श्रीत्रिविक्रमसूरिविरचिता वृत्तरत्नाकर-तात्पर्यटीका

केदारसरिविहितच्छन्दोलक्षणसूत्रगः। प्रणम्य गुरुपादाञ्जं संप्रदायो निगद्यते ॥ १ ॥ वर्णवृत्ते प्रत्ययाः षड न्याख्याता इह सुरिभिः। तेप्वाद्यावन्तिमं चात्र मात्रावृत्तेप्वपि स्फुटम् ॥ २ ॥ प्रायः प्रस्तारनियमे सूत्रं लक्ष्मैतदादिकम्। गुर्वादिसंख्यानयनपर्यन्तमधिदध्महे ॥ ३ ॥ युगलम् । सपूर्वपक्षसिद्धान्तं प्रायः सूत्रं विवृण्महे। क्रियाकारकसम्बन्धं विषमेषु विचक्ष्महे॥ ४॥ भापाते यत्प्रतीयेत न तद् न्याख्यास्यते यतः। साहारयं शर्कराभक्षे न कोऽपि समपेक्षते ॥ ५ ॥ अपूर्वमिव यत्किंचिट व्याख्यासिद्धं प्रदृश्यते। न भ्रमस्तत्र कर्तन्यो जयदेवाविदी(दि वी)क्ष्यताम् ॥ ६ ॥ शास्त्रान्तरप्रसिद्धोऽर्थः सूत्रैर्वकुं च शक्यते। यः सिद्धान्ताविरोधेन कथमस्माभिरुच्यते॥ ७॥ सिंहावलोकप्रमुखा न्यायाः शास्त्रान्तरस्थिताः। सुत्रेप्वव्यास्यतिव्याप्तिहानायेह समाश्रिताः ॥ ८ ॥ सर्वेच्यापिनमात्मानं कर्तुं पुज्येन यत्पथा। अपि नानाकुलोत्पन्नान् सचिवांदछ्यते नृपः॥ ९॥

सुखसंतान० ॥१ ॥ वेदार्थ० ॥२ ॥ तेनेदं क्रियते० ॥३ ॥

सुखसंतानेत्यादिभिस्त्रिभिः पथ्यावक्त्रैविंहितं द्यास्त्रे प्रयोजनादिप्रतिपादनपरं मध्येकुल्कमिदम् । अस्यान्वयः । क्रियते । किम् । इदम् । इदमिति किम् । छन्दः । छन्द इत्यार्यादिवृत्तलक्षणवाक्यम् । किमर्थे क्रियते । सुखसन्तानसिद्धचर्थम् । सुखस्य संतानः सुखसंतानः । संताने(नो)ऽनवच्छिन्नगमाहतं (१) तस्य सिद्धिर्निष्पत्तिः सुखसंतानसिद्धः । तस्यैव सुखसंतानसिद्धौ सुखसंतानसिद्धचर्थः । तादर्थ्यचतुर्थ्यन्तस्य अर्थशब्देन ने(नि)त्यस्मासः इति वाक्यं नास्ति । केचिद् व्याख्यातारो नमस्कारस्यैतत्प्रयोजनमाहः । तदसत् । प्रन्थारम्भे मा... कृत्य क्रियमाणनम[स्कारस्य अ] प्रस्तुतत्वात् । किविद्याद्यं छन्दः । लक्षलक्ष्रणसंयुतम् । लक्षमिह आर्याच्छन्दः । लक्षणमिह विवक्षिता गणादिपरिपाटयुच्यते । लक्षं च लक्षणं च लक्षलक्षण ताभ्यां संयुतं लक्ष्रलक्ष्रणसंयुतम् । अयमिससंधिः । यदेव लक्षवाक्यं तदेव लक्ष्रणवाक्यमिति । तत् [कि]मेवंविधं छन्दः क्रियते इति चेत् । सुखबुद्धये सुखेन बुद्धिर्ज्ञानं सुखबुद्धिस्तस्यै । केषां सुखबुद्धये । वालानाम् । महाकाव्यलक्षणादिशास्त्रेषु ल्युःपन्नाः प्रत्येकमिषकारिणामस्य(णोऽस्य) शास्त्रस्याप्रे वक्ष्यन्ते यतस्तस्माच्छन्दस्यव्युत्पन्ना वाला इवेह बालारतेषामिति ।

पुनः किंविशिष्टं क्रियते । वृत्तरत्नाकरम् । वृत्तान्येव रत्नानि वृत्तरत्नानि तेपामाकर इव यत् तद्वत्तरत्नाकरम् । अत्र वृत्तरत्नाकरः इति न्याय्यः पाठः । रत्नाकरशब्दस्याविशिष्टलिङ्गत्वात् । तर्हि कथं वृत्तरत्नाकरमिति परं युज्यते । क्रियाविशेषणत्वादिति ब्रमः । तथा हि । कथं क्रियते । नामेति संभावनायामव्ययम् । वृत्तरत्नानामाकर इव उत्पत्तिस्थानमिव यथा संभाव्यते तथा क्रियते इत्यर्थः। न तु नामशब्दोऽयमभिधानवचनः। कथं तर्हि वृत्तरत्नाकरमिदं छन्द इत्यभिधानमिति चेद् ग्रन्थान्तरे प्रविव(च)रितमिदं वृत्तरत्नाकराख्यमिति वचनादिति स्थितम् । केन क्रियते । तेन । तेनेति केन । योऽस्ति । किंविशिष्टः । स्तः । क । शिव-पाटार्चने । शिवश्व शिवा च शिवाविरयेकशेषः । शिवयोः पाटाः शिवपाटाः तेपामर्चनं शिवपाटार्चनं तत्रेति । पुनः किंविशिष्टोऽस्ति । पुत्र इति । पुत्राम्नो नरकात् त्रायते निजवंश्यान् पुनातीति वा पुत्रः । पुनः किंविशिष्टः पुत्रः । केदार इति केदारभट्टनामा । ननु तस्य व्यतीतत्वात् कथमधनाप्यस्तीति वाक्ये व्यवहारः । एतत्काव्य-शरीराभित्रायेणेत्येके । तदसत् । शास्त्रकरणप्रतिज्ञाकाले तस्यासत्त्वात् । तर्हि कथमिह सिद्धान्त इति चेदच्यते । तदा सतैव केटारेणात्मना अस्तीति यो वर्तमानव्यपदेशः प्रयोगेणोपितबद्धस्तच्छिष्योपशिष्यैः तद्वाक्यपरम-श्रद्धालुभिः शिष्यपरंपरायामुपनिक्षिप्य स न्यवहियत इति न दोषः । कस्य पुत्रः । तस्य । तस्येति कस्य । योऽभृत जातः। किंविशिष्टः। पत्र्वेक इति पत्र्वेकभट्टनामा। पुनः किंविशिष्टः। द्विजोत्तमः। द्विजश्रासावुत्तमश्र द्विजोत्तमः । उत्तमत्वमिह ब्राह्मणत्वाभिप्रायेण । न तु द्विजानामुत्तमो द्विजोत्तम इति निर्धारणे पृष्ठीसमासस्य प्रतिपेधात् । किंविशिष्टोऽभूत् । वेदार्थरीवशास्त्रज्ञः । वेदानामर्थो पूर्वमीमांसाप्रतिपादितो विधिः उत्तरमीमांसा-प्रतिपादितं ज्ञानं चेति । शैवानि च तानि शास्त्राणि च शैवशास्त्राणि नैयायिकादीनि तत्प्रतिबद्धा आत्मज्ञानोपाय-प्रतिपादका आगमाश्च । वेदार्थी च शैवशास्त्राणि च वेदार्थशैवशास्त्राणि तानि जानातीति वेदार्थशैवशास्त्रज्ञः । वेदार्थज्ञानपूर्वकं शैवशास्त्रवज्ज्ञानवर्णनं मुमुक्षोरस्य मानवधर्मशास्त्रोपदेशाभिप्रायेण। तथा हि।

भोत्मज्ञाननिर्मित्तं हि सिद्धान्तान् प्रविकोकयन् । केवकांश्च यदाधीते वेदबाह्यो भवेद द्विजः ॥ ३०१ ॥

किं कृत्वा क्रियते । नत्वा नमस्कृत्य । कम् । शंकरिमति शिवम् । किंविशिष्टम् । लोकशंकरं लोकानां शं सुखं करोतीति लोकशंकरः तिमिति । पुनः किंविशिष्टं शंकरम् । ब्रह्मान्युतार्चितम् । अनेनास्य ॥ ३ ॥ [fol. 6 is missing] पर् च ते अध्यायाश्च पडध्यायाः । तैर्निवद्धं पडध्यायिनवद्धं तस्येति किश्चिद् यह्णाति । तदसत् । संख्यापूर्वकस्य कर्मधारयस्य संज्ञायामेवेष्टत्वात् । तिर्हं कथमत्र विग्रह् इति चेदुच्यते । षडध्याया निवद्धा यस्मितत् पडध्यायिनवद्धं तस्येति । एवमेतत्सद्दशेष्वन्यत्रापि । अनेन वाक्येन ग्रन्थलाववं च प्रदर्श्यते तिद्दमिवकलं शास्त्रादी प्रवृत्तये प्रतिपाद्यं व्युत्पाद्य लोकस्य रुचिचित्रयात्वै ॥ ५ ॥ *

पिङ्गला०॥ ४॥

इति क्षोकेन प्रतिज्ञा। अत्र पिङ्गलग्रहणं ब्राह्मच्छन्दःशास्त्रसिद्धान्तपरिग्रहार्थम्। तेन जैनसिद्धान्ते 'वक्त्रादि विषमम्' इति यदुक्तं तदि(द्वि)हाय समवृत्तेन वक्त्रलक्षणमुदाहरिण्यते॥ ४॥

म्यरस्त०॥६॥

अक्षरमंशो गणो धर्मो विकल्प प्र(इ)ति पर्यायाः । ननु मात्रागणी द्विगुरुचतुर्लघू स्तः इति कुतो द्शैवेति नियमः । सत्यम् । 'सर्वगुर्म ' इत्यत्र समाधास्यत इति न दोषः । गुरुलध्वोर्गणसामानाधिकरण्येन उपदेशो

¹ Not found in the Manusmrti.

^{*} V. 5 seems to have preceded V. 4 in Trivikrama's text.

गणसंज्ञार्थः । आद्युपदेशयोग्ययोरनयोः किचद्वर्णगणमात्रागणान्तरोपन्यासः उभयोरुभयगणसंज्ञास्वीकारार्थः । तेन केवलयोरनयोः किचद्वर्णगणवृत्तमात्रागणवृत्तलक्षणोपदेशेन रीतिभेददोप इति स्थितम् । वश्यमाणग्रन्थे पद्यस्य प्रस्तुतत्वात् 'पद्यं समस्तकं व्यातं ' इति वाच्ये 'समस्तं वाड्ययं व्यातं ' इति वचनमपादिनयमस्य गद्यस्यापि एभिर्दशिभरक्षरेर्व्यात्तमस्तीति कथनार्थम् । इदं च व्यातिकथनं 'पादैरसमं दर्शधर्मवत् ' (५.१२) इ(ति) सूत्रे गद्यस्यापि गाथात्वेन व्याख्याने अपस्तुतस्वीकाराभिधानं नाम दूष्णमग्रे परिहरिष्यताति(त इति) संग्रदायविदः आहुः ॥ ६ ॥

सर्वगुर्मो०॥७॥

अथ व्यवहारसीकर्याय प्रस्तुतोचितसंज्ञिनां प्रत्येकमसाधारणं लक्षणमन्ह्य(द्य) तेषु पूर्वाचार्योपदिष्ट मादिसंज्ञाः विनियोक्तं स्त्रमाह [सर्वेति]। संज्ञिनामिह सर्वमुखान्तरादिविशेषणपदोपादानाद् वर्णसमुदायानां संज्ञित्वमवगन्तव्यम्। तत्र सर्वगुर्म इत्यत्र पूर्वसूत्राद् द्विधेत्यनुवर्तते। तेने[त्थ]मन्वयो भवति। कः। वर्णसमुदायः। किंविशिष्टो द्विधाभूत इति न्यायात् द्विवर्णस्त्रिवर्णो वा। पुनः किंविशिष्टो मः। सर्वगुः सर्विस्मिन् स्थाने गुरिति गुक्येस्मिन्त इत्थंभूतः। किंविशिष्टो भवति। म इति मगणसंज्ञो यथा—SS इत्येकः। SSS इति द्वितीयः। मुखान्तलीं वराविति। मुखे इत्यादौ, अन्तरिति मध्ये ल इति लघुर्ययोस्ताहज्ञो वर्णसमुदाये(यौ) ये (यर)गणसंज्ञो भवतः। यथा—ISS इति प्रथमः, SIS इति द्वितीयः। अन्तगली सताविति। गश्च लश्च गलौ। अन्ते गलौ ययोस्ताहज्ञौ वर्णसमुदायो सगणतगणसंज्ञौ भवतो यथा—IIS इति प्रथमः; SSI इति द्वितीयः। मध्याद्यौ ज्ञाविति ग् मध्याद्ययोः स्थानयोर्ययोस्तौ ताहज्ञौ वर्णसमुदायौ ज्ञाणभगणसंज्ञौ भवतः। यथा—ISI इत्याद्यः, SII इति द्वितीयः। त्रिलो नः इति। त्रिल इति न इति च बहुवचनान्ते पदे। त्रिधा समुदिता लक्ष्रिल इति मध्यमपदलोपी समासः। अस्यायमभिसंधिः। न्यायाद् द्विलघु-त्रिलघु-चतुर्लघवः समुदायाः न इति प्रत्येकं नगणसंज्ञा भवन्ति। यथा II इति प्रथमः, III इति द्वितीयः, IIII न इति तृतीयः। तेनेह द्विगुरोर्वश्यमाणस्य द्वित्म(क)योः संग्रहान्मनसंज्ञाभ्यां प्रावमितिज्ञा न हीयते । किं च सर्वेपामिप मादीनां शास्त्रान्तरप्रतिसिद्धमिप प्रयोजनमिभधीयते। तथा हि—

श्रीवृद्धिमृत्युश्रमवित्तनाश-व्याधियुतीरायुरतीव दीर्घम् । माद्याः क्रमात्ते तरिमुक्तकादी दद्द्युपश्लोकयता प्रयुक्ताः ॥

अष्टी भवन्त्यत्र गणास्त्रिकाः इति । त्रयो वर्णाः परिमाणं येषां ते त्रिकाः । अत्रेति सर्वगुर्वादिवाक्यलक्षितेष्वे-कादशसु गणेषु मध्येऽष्टी मादयस्त्रिका भवन्ति । ते च लोकप्रसिद्धा वर्णगणा इत्युच्यन्ते । शेषास्तु यथास्वरूपित्यर्थः । ननु मुखान्तर्लावित्यादिवाक्यत्रये पञ्चवर्णादिसमुदायेष्वितव्यासौ कथं नियमः स्यादिति चेद्रष्टावित्यादिवाक्यस्यावृत्तिव्याख्यानादिति ब्रूमः । तथाहि अन्वयः—व्यवहारे स्वीकर्तव्यतया भवन्ति । के । मादयः । कियद्वर्णे यावद्भवन्ति । त्रिका इति । त्रिवर्णे इत्यर्थः । क । अष्टी अशु व्यासौ । अशनमिष्टः । द्वित्रिचतुःप्रभृतिसंख्यया गणसमुदितवर्णानां व्याप्तिस्तस्याम् । क्षोक्तायाम् । अत्रेत्यिस्मन्नेव वाक्ये सर्वमुखान्त-रित्यादिविशेषेण पदोपादानवलदिति स्थितम् । व्यक्तिक्रमेण त्रिकाणां मादीनामुपदेशः प्रसङ्गेन मध्याजातिसमुद्रप्रस्तारोदाहरणार्थो, वश्यमाणलक्ष्यणानां स्वस्वजातिप्रस्तारोऽधिकरणमिति ज्ञापनार्थं च ।

ज्ञेयाः सर्चान्त० ॥८॥

चतुर्लवनेत्रेखः (r. चतुर्लघः) नलधुकौ नलध्वित च तत्पुरुपेतरेतरयोगसमाहारैर्व्यवहारो लक्षलक्षण-संयुत्तत्वनिर्वाहाय । वैतालीयादिपु गुरुलौ चेति द्विकलौ [fol. 12 is missing]

[सानुस्वारो०॥९॥]

-द्ययो जीवति जीवितः सः । इत्यादि । उपजातिरियम् । तथा— एदोदिंहिं पदान्ते ल्वा प्राकृते वचने मतः । उंहुंहं चेत्यपभ्रंशे मध्येऽप्येदौन्च कादिगम् ॥ ९०९ ॥

इदमस्योदाहरणम्---

जे तीऍ तिक्खचलचक्खुतिहायदिट्टा ते कामचंदमहुपंचममारणिज्जा । जेसं पुणो निवडिदा सयला वि दिट्टी वट्टंति ते तिलजलंजलिदाणजोग्गा ॥ ९०२ ॥

वसन्ततिलकासमृत्तनिदम्।

सिंह ताओं ताओं चित्ते तावं जणअंति तस्स लीलाओ । जिह दिट्ठेबहुवरवं तस्स रयी(गई ?) केरिसी होई ॥ ९०३ ॥

इत्यादि । आर्येयम् । पादान्त इति केवलमात्रिकार्थोऽयमारम्मः । असौ मात्रिकः पादान्तगुरुवेंत्यन्वयः । वात्र व्यवस्थावाची । तेन यत्र गुरुस्तत्र पक्षे लघुर्न स्थात् । यथा अत्रोपजातिस्त्रे (३.३१) चतुर्थे चरणे । तथा यत्र लघुस्तत्र पक्षे न गुरुः । यथात्रैव समानिकायाम् (३.१७) ॥

पादादाविह०॥१०॥

क्रचिदिति आर्याविषमपादान्ते परसंयोगापेक्षयैव लघ्वगुरुत्वस्येदं लक्षणानुपघाताय। आर्यायामेवेति नियमादन्यजात्यां नाङ्गीकुर्यात् ।

इदमस्योदाहरणम्---

तरुणं सर्षपशाकं नवोदनं पिच्छ(च्छि)लानि च द्यीनि । अल्पन्ययेन सुन्दरि ग्राम्यजनो मृष्टमभाति ॥ ३००१ ॥

अत्र रि इत्यस्य संयोगे परे गुरुत्वे पञ्चकलो गणः स्यादित्यार्यालक्षणविरोधः।

अब्धिभूत० ॥११॥

अन्धयः समुद्रपर्यायाः वेदाश्चत्वार इति चतुणीं संज्ञा । भूतानि इन्द्रियाणि वाणपर्यायाः पञ्चेति पञ्चानां संज्ञा । रसाः ऋतवः गुह्कानि गुह्वक्त्राणि षट् इति पण्णां संज्ञा । आदिग्रह्णान्मुनयः अश्वाः स्वराः अमाः सप्तेति सप्तानां संज्ञा । वसवः अष्टी इति अष्टानाम् । रन्ध्राणि ग्रहाः नवेति नवानाम् । दिक्पर्यायाः द्शेति द्शानाम् । रुद्रा एकाद्शेत्येकाद्शानाम् । अर्कपर्यायाः द्वादशोति द्वादशानाम् । विश्वे त्रयोदश इति त्रयोदशानाम् । गुणाः अग्निपर्यायाः त्रय इति त्रयाणाम् । एवमन्यद्पि लोकादृह्यम् । यथा—

छदमात्रं द्विखण्डेपु वृत्तेष्वर्धं निगद्यते । क्षव्यपेतं व्यपेतं वा पद्ये पादद्वयं बुधैः ॥ ११०१ ॥ इत्यादि । जेयः पादश्चतुर्थों ऽश इति पादों ऽहिः चरणचतुष्ट्वपूरको ऽवयवः । तत्तुच्यत्वेन चतुर्थः । आर्यादिषु तथा दर्शनात् । चतुर्थ इत्यि प्रायिक्षमेव । गाथासु (५.१२) तृतीयादेरि पाद्व्यवहाराङ्गीकरणात् । यतिर्विच्छेद्- संज्ञिकेति यतिर्विरितिर्विरामो ऽवसानमवसितिर्विच्छेद्श्चित् खं पद्नियम इति पर्यायाः । पादान्तयिर्भवतीति लोकादङ्गीक्रियते । पादमध्ये तु क्षचिदेवेति तत्तद्वाक्यविशेपविधानसामध्यात् । सा च यतिः कीदृशे प्रदेशे भवतीति चेतुच्यते ।

पदान्ते विरतिर्झेया यतिरर्धान्तगोचरा । पदान्तमात्रे पादान्ते पाद[म]ध्ये च योजिता ॥ ५१-२ ॥

विभक्तयन्तं हि पदं तस्यान्तः पदान्तः तत्र विरामविशिष्टे यतिः कर्तव्या यार्थान्ते प्राप्ता इति वाक्यार्थः। अर्थान्ते विरतौ यत्युदाहरणं प्रसिद्धम् । अस्य व्यतिरेकोदाहरणं यथा—

दूरीकृतासि वचसा हृदयस्थितेन किंपाकपक्रफलचारुतरेण कर्णे। जेषस्य किं तेन ज [fol: 16 is missing]

[पृ]ध्वीयं पादमध्ये वसुप्रतिः पादान्ते पुनर्प्रहयतिरिति । अथ पदान्तयतिविधानन्यतिरेकस्य कचिद् व्यभिचारः ।

पतचितद्वयं मध्ये पदस्याप्युररीकृतम् । यदि पूर्वापरी भागौ न स्यातामेकवर्णकौ ॥ ११-४ ॥

पादमध्ये पदमध्ये यत्युदाहरणं यथा-

पर्याप्तं तप्तचामीकरकटकतटे श्लिष्टशीतेतरांशौ।

इत्यादि। चामीकरमित्येकपदम्। पादमध्ये मुनियतिः सम्धरेयम्। अस्य व्यतिरेको यथा— एतासां राजति सुमनसां दाम कण्ठावलम्बि ॥ ११-४-१॥

तथा---

कुरङ्गाक्षीणां गण्डतलफलके स्वेद्विरसः(सरः) ॥ ११-४-२ ॥

पादमध्ये रसयतिः शिखरिणीयम् । तथा—

स्त्रीणां संगीतविधे (धि) मयमादित्यवस्यो नृपेन्द्रः ॥ ११-४-३ ॥

मन्दाक्रान्ता । अस्यापवादः ।

भपरस्यैकवर्णत्वे प्रत्ययान्ते तथा परैः ॥ ११-५ पू.॥

उररीकृतेत्यनुषङ्गः । उदाहरणम्---

स्कन्धे विनध्यादिबुद्ध्या निकपति महिषस्याहितोऽसूनहार्षीत् ॥ ११.५.१ ॥

इति । सम्परेयम् । महिषरान्दाद्यतिरिह । अथ पदयोः सन्धौ पदमध्ययतौ विरोषः प्रतिपाद्यते ।

पूर्वोन्तवत्स्वरः सन्धौ परस्यादिः स्वरात्परः ॥ १६-५ उ. ॥ परादिवर्णसंबद्धं ब्यञ्जनं तु परादिवत् । प्राक्पदान्तस्थितं साधु ब्यवहारेषु दश्यताम् ॥ ११-६ ॥ पूर्वान्तवत्स्वरस्योदाहरणं यथा---

जम्भारातीव(भ)कुभ्भोज्ञवमिव द्धतः सान्द्रसिन्द्ररेणुम् । ११-६-१॥

इत्यादि । स्रम्धरेयं पादमुनियतिः । परादिवर्णसंबद्धस्य न्यञ्जनस्योदाहरणं यथा—

सद्यः स्विचन्नयमविरतोत्कम्पलोलाङ्ग्लीकः । ११-६-२॥

तथा---

इत्यु(त्या)युक्तवोपकेतून्त्रकृतिमवयवान्प्रापयत्येव देवी । ११.६.३ ॥

इत्यादि । स्रग्धरेयम ।

कार्याकार्याण्ययमविकलान्यागमेनैव पश्यन् । ११-६-४॥

इत्यादि ।

नमस्करोम्यहं देवावग्नाविष्णू प्रगे प्रगे ॥ ११६.५॥

इत्यादि च । अथ पदान्तेऽपि प्राप्तायाः कचित् प्रतिषेधः कथ्यते । यथा---

तथा प्राक्पदसंबद्धाश्चादयः प्राक्पदान्तवत् । ये परेणैव संबद्धाः प्रादयस्ते परादिवत् ॥ ११०७ ॥

प्राक्पदसंबद्धाश्चादयो यथा—

स्वादु स्वच्छं च सलिलमिदं कस्य न प्रीतये स्यात् ॥ ११.७.१ ॥

इत्यादि । परपद्संत्रद्धाः प्रादयः परादिवद् यथा---

दु:खं मे प्रक्षिपति हृद्ये दुःसहस्तंद्वियोगः ॥ ११.७.२ ॥

इत्यादि । मन्दाकान्तेयम् । प्रादीनां परसंबद्धत्वव्यावृत्तिर्यथा---

प्रयाति तरुणीं प्रति प्रतिकलं मनः कामिनाम् ॥ ११-७-३ ॥

इत्यादि । पादमध्ये वसुयतिः ।

युक्समं०॥१२॥

सुगमम् । अथ सिंहावलोकादिहोक्तादयो वर्तन्ते । सममिति । सुगमम् ।

अंहयो० ॥ १३ ॥

उक्तादीनां मध्ये कस्याश्चिदेकस्या जातेः सर्वगुरुचरणं चतुर्गुणं संस्थाप्य समुद्रप्रस्तारे यस्य छन्दस एकलक्षणलक्षिताश्चत्वारः पादाः तत्समन्नुत्तम् ।

प्रथमांहि०॥ १४॥

द्विविधमर्धसमा(मम्) । तिसमन्निव प्रस्तारे यस्य प्रथमतृतीयचरणौ तुस्यौ द्वितीयचतुर्थचरणौ तुस्यौ तदेकमर्धसमं वृत्तम् । यथा वक्ष्यमाणमुपचित्रम् । तथा भिन्नजातिद्वयोत्पन्ने समुद्रे प्रस्तारे यदीदृशं तद् द्वितीयमर्धसमम् । यथा वक्ष्यमाणं द्वृतमध्यदि । तथा प्रन्थान्तरोक्तं विलसितलीलादि च ।

यस्य पाद० ॥१५॥

एतद् द्विविधम् । तत्रैकजातिसमुत्पन्नमत्युक्तादिष्वेव भवति नोक्तायाम् । असंभवात् । तत्रोदाहरणं । यथा—

> विषमवृत्तनखं नृहिं स्तुवे प्रहादभक्त्या परितुष्टमानसम् । सुरारिलोकोर्जितदुष्टदानवं हन्तुं लोके कल्पितमीमविग्रहम् ॥ १५-१ ॥

नानाजातिसमुत्पन्नं वक्ष्यमाणं पद्चतुरूर्ध्वमुद्गतादि च । तत् तु प्रादेशिकमेव । विषमाक्षरपादया चतुश्चरणया गाथया हन व्याप्तित्वात् (?) । यास्तु समन्नृत्तादीन्युत्पद्यन्ते ता वर्णनृत्तजातयः कथमुत्पद्यन्त इत्यपेक्षायामाह ।

आरभ्यैका० ॥ १६ ॥

प्रथमजातावेकाक्षरः पादो द्वितीयजातो द्वयक्षरः पादः इत्येकैकाक्षरवृद्धया कल्पनीयाः । इह छन्द इति जातिः । तच्छन्दः कियद्विधकं भवेदित्यपेक्षायामाह—यावत् पड्विंशतिमिति । गतिमिति शातम् । प्रसिद्धं भवेदित्यर्थः । अनेन सप्तविंशत्यक्षरात्पादादारभ्येकेकाक्षरविधितैः पादैः पृथक् पृथङ् मालावृत्तजातयोऽपि केषांचित् प्रसिद्धाः सन्तीत्युच्यते ॥

तदूर्घ्व ॥ १७ ॥

तत्र सप्तविंशत्यक्षराद् दण्डकादारभ्य प्रतिचरणमेकैकाक्षरवर्धितैरिति त्रिकैवंणगणैर्मादिभिरेव वृद्धिः कर्तव्या। 'प्रतिचरणविवृद्धरेफाः स्युर् 'इत्य[त्र] तथा दर्शितत्वात् । कियदविधकेति चेत् । एकोनसहस्रतमं वर्णं यावत् । तेनान्तिमदण्डकस्य चरणे त्रयस्त्रिशद्धकं शतत्रयं त्रिकं वर्णगणानां भवति । कुत इदिमिति चेत् । अविशेषोक्ती 'आसहस्रात्तु दण्डकाः' इति स्मृत्यन्तरात् । शेषं गाथा इति । स्वीकृतस्य मध्ये उपयुक्तादत्यच्छेणम् । अत्युक्ता-दीनामेकजातिसमुत्पन्ने चतुश्चरणे प्रस्तारे समार्धसमविषमोपजातिस्यो यदविश्वष्टं छन्दस्तच्छेषम् । यच्छेपं ता गाथा भवन्ति । इदमस्योदाहरणम् ।

शशधरद्यति कल्मपनाशनं, जयति पुण्यसहस्रविवर्धनम् । सुरासुराराधिततीर्थसंकुलं, योगीश्वरासेवितमस्त्र जाह्नवम् ॥ १७.१ ॥

त्रिभिः पड्भिश्चरणैश्चोपलक्षिता इति । इहोपलश्चितग्रहणं व्याप्त्यर्थम् । तेन उपजात्यां नानाजातिषु च त्रिचरण(णे) पर्चरणे वा प्रस्तारे वा यदुत्पद्यते वृत्तजातं ता गाथा भवन्ति । एकजात्यां त्रिचरणे यथा—

> प्रयाति तरुणीं प्रति प्रतिकलं मनः कामिनां यथैव विधताग्रहं हरिपदाम्बुजे चेत् तथा। सुरासुरदुरा[स]दं झटिति याति मोक्षं जनः॥ १७०२॥

पृथ्वीसंज्ञा गाथेयम् । एवं नानाजातिपु त्रिचरणे समभ्यूह्मम् । एकजात्यां पट्चरणप्रस्तारे यथा---

दश धर्मे न जानन्ति धतराष्ट्र निवोध तान्। सुप्तः प्रमत्त उन्मत्तः श्रान्तः कुद्धो बुभुक्षितः। त्वरमाणश्र भीरुश्च लुब्धः कामी च ते दश॥ १७.३॥ इत्यादि । पथ्यावक्त्रगाथेयम् । एवं नानाजातिषु षर्चरणे समभ्यूह्मम् । प्रसंगादत्र गाथानामभिषान-निर्णयोऽपि । यथा—

वर्णयृत्तेषु यन्नाम जातेर्न्यक्तेरिप स्पृतम्।
तल्लक्ष्मदर्शने गाथां तन्नामानं विनिर्दिशेत् ॥ १७-४ ॥
पादप्रस्तारसरिणः सर्वप्रस्तारपद्धतिः।
इति भेदभवं छन्दः सूत्रन्याख्यासु लौकिके ॥ १७-५ ॥
षष्ठे प्रस्तारस्त्रादौ पादे इत्यभिदर्शनात् ।
पादप्रस्तारमाश्रित्य लोके न्याख्या प्रवर्तते ॥ १७-६ ॥
प्रस्तारनष्टविज्ञाने सार्यादीनि समुज्ज्ञति ।
अल्पोपकारिकेत्येवमत्रास्माभिः समुस्य(च्य)ते ॥ १७-७ ॥
समाया(या)दिषु वृत्तेषु सर्ववृत्तस्य लक्षणात् ।
सर्वप्रस्तारसरिणं रहस्या लांप्रदायिका ॥ १७-८ ॥
समादिलक्ष्मस्त्राणां तामाश्रित्य कृता मया ।
न्याख्या सा साधुभिर्युक्ता न युक्ता वेति चिन्त्यताम् ॥ १७-९ ॥

समन्नतायुत्पत्तिस्थानभूतानामेकाक्षरादीनां षड्विंदातेर्जातीनां व्यवहारार्थं क्रमदाः कानि कानि नामानि भवन्तीत्यपेक्षायामाह—

उक्तात्युक्ता० ॥ १८ ॥ त्रिष्टुप् च० ॥ १९ ॥ धृतिश्चाति० ॥ २० ॥ इत्युक्ताः० ॥ २१ ॥

सर्ववृत्तानामिति मात्रावृत्तानां वर्णवृत्तानां च । मात्रावर्णविभेदेनेति प्रतिज्ञावचनादेव लक्षणकरणस्य मात्रा-वृत्तपूर्वकःवे सिद्धे मात्रावृत्तानुपूर्वकमिति वचनमितःपूर्वग्रन्थोक्तप्रतिज्ञावचनानां कचित् कचिद् व्यभिचारित्व-सूचनार्थम् । अत एव लक्ष्यलक्ष्रणसंयुतमित्यादौ प्रायिकमित्युक्तमेव । ननु कोऽत्राधिकारीति चेदुच्यते । कीर्त्यादि-कामः सर्गवन्धद्शरूपकादि चिकीर्धुमहाकविः, स्ववचनरचनाचातुर्ये प्रकटयन् विशिष्टच्छन्दसामुपन्यासेन जल्प-कथायां प्रवृत्तो वावद्कः, संगीतं कर्त्वकामो भारतिकः, तिद्वचारियतारः सम्यसभापतय इति स्थितम्।

इति श्रीरघुसूरिसूनुश्रीत्रिविकमसूरिविरचितायां वृत्तरत्नाकरच्छन्दःस्त्रतात्पर्यटीकायां प्रथमोऽध्यायः समाप्तः ॥

द्वितीयोऽध्यायः।

अथ मात्रावृत्तानि लक्ष्वितुं द्वितीयमध्यायमुपकामित । तत्र सप्तपञ्चाशन्मात्रिकमार्याख्यं छन्दः प्रथमम् । अल्पपिरमाणत्वात् । गीतिप्रभृतिकमतःपरम् । तदाश्रितत्वात् । ततो वर्णवृत्तमि वक्त्राख्यं यथात्र वर्ण्यते तथाग्रे समाधास्यते । ततः चतुःषष्टिमात्रिकं मात्रासमकम् । त [fol. 25 is missing]

लक्ष्मैतत्०॥१॥

प्रत्येकं चतुष्कलमात्रागणसंख्यानियमः क्रियते गोपेता इति । गेनैत्रोपेता गोपेता इत्यवधारणादार्यादल-द्वयमपि प्रत्येक गुर्वन्तमेव सदा भवतीति नियम्यते । दलद्वयेऽपि क्रमवद्भिः सर्वगुर्वाद्यैश्रतुष्कलैः पञ्चभिर्मात्रा- गणैः प्रत्येकं पूर्वपूर्वविकल्पहतेरधोऽधः प्रस्तारः कार्य इति किचिदितिच्यासौ नियमः क्रियते । नेह भविति विषमे जः इति । तेन विषमे गणस्थाने जगणं विना चत्वारो गणविकल्पाः स्युः । समे गणस्थाने पञ्चापि स्युरिति । पष्ठोऽयिमत्यादि । अयमिति जगणः । न[ल]षु वेति । वा व्यवस्थार्थः । आर्यादलद्वयप्रस्तारः प्रथमार्धे षष्ठजगणपक्षे यदा निष्ठां गतस्तदा जगणमपनीय प्रक्रियालाघवार्थे तत्र नलघु स्थापयेदिति वाक्यार्थः । षष्ठे न्ले किमपरं कार्यमित्याह—

षष्ठे द्वितीय०॥२॥

पष्ठे न्ले द्वितीयलात् पूर्वः पदिनयमः कार्य इति । परके इति सप्तमके न्ले इति । पदिनयमस्तिसम्नेव सुखलात्पूर्वः कर्तन्यः । यदीति नलघुसंभावनायाम् । चरम इत्यादि । चरमे अन्तिमे । इत्यन्तिमेऽधें पञ्चमके न्ले । तस्मादिति सुखात् पूर्वः पदिनयमो भवति । चरमेऽधें पष्ठे स्थाने विशेषवचनाज्जगणनलघुप्राप्तावितिन्याप्तिमाशङ्क्य नियमं कर्तुमाह इहेत्यादि । इहेत्यन्तिमेऽधें पष्ठो गणो लघुरेव स्यात् । अनया धिया कण्ठोत्तया नियमविशेषमिधाय स्वरूपेण विपुलापथ्ययोर्मिश्रणे जघनपथ्या नाम भेदः शाखान्तरप्रसिद्धो वक्ष्यमाणचपलाभेदन्यायेनेह निरूपितः सूच्यते । अर्थस्य सूचनात् सूत्रमित्यन्वर्थाश्रयणात् । तदुक्तम् ।

त्रिच भाद्यङ्घिर्द्रलयोः पथ्याचेऽर्धे तु पूर्वपथ्या सा । अपरार्धे परपथ्या विपुला स्यादन्यथाङ्घियुगे ॥ २०१ ॥

इति छन्दःशेखरः।

भार्याप्रस्तारसूत्राणि पदशो वर्णितानि मे । सुखज्ञानाय शिष्याणां ससुद्रवचनोच्यते ॥ २०२ ॥

तत्रेत्थं रचना । सर्वगुर्वार्याप्रस्तारे प्रथमार्धे प्रथमतो द्विगुरवः पञ्चगणाः षष्ठो जगणः सप्तमो द्विगुरुस्ततो गुरुः। एवंविधं ततोऽनन्तरमेव द्वितीयार्धं स्थाप्यते। अस्मिन् पष्ठे स्थाने छघुरेवेति विशेषः। ईदृशी सर्वगुर्वार्याः समुद्रे प्रथमा व्यक्तिः स्यात् । तथा चास्याः शास्त्रान्तरे दत्तमुदाहरणम् । यथा—

भङ्गुल्योपाङ्गुल्यः सर्वाः सम्यक् प्रतिष्ठिता भूमौ । प्रागावर्ता नाभिः कन्यानामादिरार्याणामः॥ २०३॥

इति । लघुं न्यस्य गुरोरधः इति वचनादेतस्याः प्रथमगुरोरधस्तादन्तगुर्वादयो लघूपलक्षिताः क्रमेण चत्वारोऽपि गणाः अधोऽधो न्यासं लभन्ते । तत्र विपमे जगणप्रतिपेधात् त्रय एवे । तद्रयेसरासु पङ्क्तिषु यथोपित तथा शेपिति प्रस्तार्यमा द्वितीयार्धात् । ततो गुरोः । ततो द्वितीयपङ्क्त्याद्यस्य सर्वगुरोरधस्तादन्तगुरुलघुगणन्यासः । तस्य पश्चाद्ने द्वाद्गुरूनेविति सर्वगुरुन्यासः । अग्रे यथोपित तथा शेपिति भूयः कुर्यादमुं विधिमिति वचनादाद्यसर्वगुरोरधस्तालघुगणत्रयन्यासः तिर्यक्ष्यङ्क्तित्रयेऽप्यग्रे यथोपित । ततो द्वितीयपङ्क्तावन्तगुरोरधस्ता ज्जगणन्यासः । लघुगणन्यासस्यासमात्रत्वात् । शेषं यथोपित । जगणात्प्रागृने द्विगुरुत्तसमाद्धः प्राग्वलघुगणन्त्रयम् । शेषं यथोपित । ततो द्वितीयपङ्क्तौ चतुर्थजगणाद्धरतादादिगुरः । ऊने प्राग्वद् यथोपित तथा शेषम् । तत आद्यपङ्क्तौ सर्वगुरोरधस्तालघुगणत्रयं यथोपित तथा शेपम् । ततश्वतुर्थादादिगुरोरधस्तालघुः । यथोपित तथा शेपम् । ततश्वतुर्थादादिगुरोरधस्तालचुः । यथोपित तथा शेपम् । ततस्तृतीयपङ्क्तौ सर्वगुरोरधस्ताज्जगणं विना यथाक्रमं यथावृत्ति लघुगणन्यासः । प्राग्वत् प्राग्यत्र यो गणो गुरुर्लघुर्वा यथा नियमितस्तत्र तत्र स एव न्यसनीयो यावत्सर्वलघ्वार्या भवति ।

SS SS SS SS SS ISI SS S अर्धम्। SS SS SS SS SS I SS S प्रमुद्रप्रस्तारार्थे सर्वेगुर्वार्यायाः प्रस्तारः । पष्टजगणपक्षे विकल्पानामुत्तरोत्तरघाते छन्धा आर्थाव्यक्तिसंख्या ४०९६००००। षष्टनलघुपक्षेऽपि तावत्येव। अनयोमेंलापके सर्वराशिसंख्या ८१९२००००। अस्योपसंहारः—

कोट्यष्टौ प्रयुतं चैकं लक्षाणि नव वारिधौ। अयुते चेति जनिताः पथ्याभेदा महर्षिणा ॥ २.४ ॥ तावन्तो विपुलाभेदा मिश्रपथ्याद्वयस्य च। प्रत्येकमेव तावन्तो जायन्ते पूय(ग?)संनिधौ ॥ २.५ ॥

त्रिप्वंदाकेषु० ॥३॥

अंशका इह गणाः । शेषं सुगमम् । पूर्वार्धे पथ्या उत्तरार्धे विपुला सुखपथ्या । पूर्वार्धे विपुला उत्तरार्धे पथ्या या सा जघनपथ्या ॥

संलङ्घ्य० ॥४॥

शकलयोरिति सिद्धे द्वयोरिति विशेषणं विशेषनियमार्थम् । तेन एकस्मिन् दले विपुलालक्ष्मदर्शने विपुलान्धिमानपूर्वकं मुखचपलादिवन्नाम न स्यात् । अत एव पूर्वत्र मुखपथ्येत्याशुक्तम् । शेषं मुगमम् । आर्यादलद्वये गणनियमेनान्तर्वर्तिनं जातिविशेषं नाम्ना निर्देष्टुमाह—

उभयार्घ०॥५॥

उभयीनामिति पथ्याव्यक्तीनां वार्षे उभयार्षे तयोरुभयोर्द्वयोः । सर्वनाम्नो वृत्तिमात्रे पुंवद्भावः । अस्यान्वयः । भवतः । कौ । जकारौ । किविशिष्टौ । द्वितीयतुर्यौ । द्वयोः पूरणो द्वितीयः । चतुर्णो पूरणस्तुर्यः । चतुरः पूरणे । यदीयौ च[प]ला पथ्या । पुनः किविशिष्टौ । गमध्यगौ । गयोर्मध्यगौ गमध्यगौ इति । शेषं सुगमम् । चपलो (ला) सर्वगुरुप्रस्तारः । ऽऽ ।ऽ। ऽऽ । अत्रानयनसंप्रदायः । चपलाप्रथमार्धमेदाः ३२० । पथ्याद्वितियार्धविकल्पान् गुणयेत् । तत्र जाता संख्या २०४८०० । अस्याः संख्यायाः ग्रुद्धचपलाभेदैःर्यून्तवे सति यन्छेषं सा संख्या लभ्यते । एवं पथ्यादिनिश्रजधनचपलाभेदाः कह्याः । यथा २०४२८८ । एवं विपुलामिश्रत्वेऽपि । अस्योपसंहारः ।

स्र्येषवस्तु ग्रुद्धाया भिदोऽष्टाष्टद्विचार्धयः । विश्वतिश्च तथा वक्त्रचपलादिभिदः स्मृताः ॥ ५-९ ॥

मुखचपलाप्रस्तारः—

รั่ร รั่ร รั่ร รั่ร รั่ร เริ่ม รั่ร รั่ง ลงจ์ทุก รั่ร เริ่ม รั่ร โร่ม รั่ร โร้ม รั่ร โร้ม

आद्यं दलं०॥६॥ प्राक्प्रति०॥७॥

इति सुगमम् । इति च सुगमम् । पथ्या १ सुखपथ्या १ जघनपथ्या १ विपुला चेति शुद्धाभेदाः ४ । एते चपलाभेदत्रयेण योजिताः १२ । सर्वसंकलनायां १६ ।

आर्याप्रथम० ॥८॥ आर्याद्वितीय० ॥९॥ आर्याशकळ० ॥१०॥ आर्यापूर्वार्धे० ॥११॥

इति चतुष्टयं सुगमम्। एतासां प्रस्तारे व्यक्तिभेदाः पथ्यादिभेदा यतिभेदाश्च पूर्ववद् व्याख्येयाः। अत एव उद्गीतावुपळक्षणार्थे 'तद्वद् यत्यंशभेदसंयुक्ता 'इत्युक्तम्। आर्यागीतावष्टमो गणः सर्वगुरुरेव इत्यस्य मतम्। गुर्वन्तो द्विकल्प इत्यन्ये। तदुक्तं जयदेवेन (४०१४)ः—

> गुर्वन्ताप्टमगणभागार्यापूर्वार्धसद्दशशकलद्वितया । भार्येरार्यागीतिर्गाता संगीतकीर्ति(गीति)भिर्गीतिविधौ ॥ ११-१ ॥

इति श्रीरष्ठसूरिस्नुश्रीत्रिविक्रमस्रिविरचितायां वृत्तरत्नाकरछन्दःसृत्रतात्पर्यटीकायाम् आर्यागीतिप्रकरणे समाप्ते ।

षड् विषमे० ॥१२॥

> षोडशाभ्यधिकान्याहुः शतान्यष्टौ तथायुतम् । वैतालीयव्यक्तयः स्युर्वक्ष्यमाण[त्र]यस्य च ॥ १२-१ ॥

औपच्छन्दसक-आपातिलक्षयोः प्रस्तारादि वैतालीयवत् । अथावृत्तिव्याख्या । पिडित्यादि- विषमे वैतालीये अष्टौ कलाः, ततो रलौ गुरुश्चेति चरणचतुष्टये नियम्यते । रोषोऽनियमः प्रकृतिवदिःस्यावृत्तिव्याख्यानाद् विषम-वैतालीयसमवैतालीयाभिधाने मात्रावृत्तजातीनामभेदेन शास्त्रान्तरसंमते इह व्याख्याय एकचरणलक्षणोत्पन्न-चरणचतुष्टयस्वरूपयोर्वक्ष्यमाणयोरपरान्तिका-चारुहासिन्योरिहापि तथोपलक्षित्वात् । तदुक्तं **छन्दःशेखरेण**—

> वैतालीयसमक्रमैः कृता, स्यादपरेयं दक्षिणान्तिका ॥ १२·२ ॥ विपमैस्तु मतोत्तरान्तिका ॥ १२·३ ॥ महाकविप्रयुक्तो यो जयदेवादिदर्शितः। उदाहरणमार्गोऽसौ मयात्र प्रतिदृश्यते ॥ १२·४ ॥

विषमवैतालीयोदाहरणं यथा---

बिम्बयुगं भानुचन्द्रयोर्, अस्तोदयभूधरानुगम् । गगनयुवत्या इवेक्ष्यते, कुङ्कमरक्तं स्तनद्वयम् ॥ १२०५ ॥

समवैतालीयोदाहरणं यथा—

उदयाग्रस्थितभानुरइमयो, रजनीध्वान्तविनाशकारिणः। सततं विक्रमभोगशोभिनो, भूयासुस्तव भूतिहैतवः॥ १२-६॥

पर्यन्ते० ॥१३॥

इति सुगमम् । इहातिदेशवलात् पूर्ववजातिद्वयं दर्शनीयम् । तत्र विषमीपच्छन्दसकस्योदाहरणं यथा— प्रमदाः परिवर्तिताब्जनेत्राः, सरुषः स्फुरितौष्टबन्धुजीवाः । परिवर्त्यं शिरो मनाग् जगन्ति, भ्रमिताङ्ग्लयश्चिरं जयन्ति ॥ १३.१ ॥

समीपच्छन्द्सकोदाहरणं यथा-

संत्रासग्लपितेक्षणोत्पलाभिर् , देवानां क्षणमीक्षितोऽङ्गनाभिः । योऽरक्षचमरं महेन्द्रभीतेः, श्रीवीरः स भवाद्मवन्तमन्यात् ॥ १३-२ ॥

आपात० ॥१४॥

इति सुगमम् । अत्राप्यतिदेशात् पूर्ववत् । विषमापातिलकोदाहरणं यथा—

यच्छत वित्तं तद्नित्यं, धर्मो मृतमप्यनुयाति ।

गुणितां भजतास्थिरमायुर्, न गुणाश्चलतासुपयान्ति ॥ १४-१ ॥

समापातलिकोदाहरणं यथा-

चन्द्राभास्याः पङ्कजनेत्र्यः, पीनपयोधरभारनताङ्ग्यः । कुर्युः पुरुषं कामपरीतं, लीलावत्यः कं न तरुण्यः ॥ १४٠२ ॥

तृतीययुग्० ॥१५॥

गोयूथनामा अत्र अधिकारः । वैतालीय-ओपच्छन्दसक आपातिलकानां सर्वचरणेषु द्वितीयतृतीयल्घ्वोर्गुरः क्रियते । प्रस्तारे शेषं पूर्ववत् । तेन वैतालीयदक्षिगान्तिका-औपच्छन्दसकद्क्षिगान्तिका-आपातिलकाद्क्षिणान्तिकां चिति जातित्रयमुत्पद्यते । अत्र द्वितीयतृतीयाभ्यां मध्यगुरुनिष्पत्तिभङ्ग्या लक्षलक्षणप्रतिज्ञां निर्द्यूद्य जगणं लक्षयति । उदीच्यवृत्त्यादिष्वप्येवम् । तत्र वैतालीयद्क्षिणान्तिकोदाहरणिमदं सूत्रमेव । औपच्छन्दसकद्क्षिणान्तिकोदाहरणं यथा—

स्तुवे हरिं लोकपूजिताङ्घ्रिं, रमामुखालोकैः प्रहृष्टचित्तम् । फणीदाशय्यानिवेशिताङ्गं, सिताब्जमालाभूषणेन युक्तम् ॥ १५-१ ॥ अपातलिकादक्षिणान्तिकोदाहरणं यथा---।

जयन्ति शंभोर्नयनानि, रवीन्दुवह्नी × × मयानि । हिमादिजादर्शनहर्षे, प्रफुछराजीवैः सदशानि ॥ १५.२ ॥

एतासां सर्वगुरुप्रस्तारः*—

[fol. 37 missing]

एतासां चरणविकल्पोत्तरवधे प्रत्येकं लब्धा व्यक्तयः ६७६।

पूर्वेण० ॥१७॥

तथा वैतालीयादीनां तिस्णामिष जातीनां युग्मचरणे चतुर्थलवुना पञ्चमः संयुज्य यदि गुरुमारभते, शेषं पूर्ववत्तदा पूर्ववत् प्राच्यवृत्तित्रयं भवति । वैतालीयप्राच्यवृत्तेरदाहरणं स्त्रमेव । औपच्छन्दसक्पाच्यवृत्तेरदाहरणं यथा—

प्रणतावनिपालमौलिमाला-, पूजिताङ्घिकमलद्वयावनीश । तव शशिकिरणावदातमेतत्, ग्रुक्कयत्यतितरां यशो दशाशाः ॥ १७-१ ॥

आपातलिकाप्राच्यवृत्तेरुदाहरणं यथा—

दिवसकरो लोहितबिम्बः, उद्यभूधरिशरोमणिरेषः। प्रविहतदोषो दिवि भाति, स्पृष्टपद्मिनीकः करजालैः॥ १७-२॥

एतासां जातीनां सर्वगुरुप्रस्तारः। यथा*—

एतासां चरणविकल्पोत्तरोत्तरविषे प्रत्येकं लब्धा व्यक्तयः १०२४ ॥

यदा समा० ॥ १८॥

पूर्वयोरिति उदीन्यवृत्तिप्रान्यवृत्त्योर्वेतालीयादीनां तिस्णामिष जातीनां विषमे चरणे उदीन्यवृत्तिलक्षणं समे चरणे प्रान्यवृत्तिलक्षणं यदा भवति तदा पूर्ववत् प्रवृत्तकं नाम जातित्रयं भवति। तत्र वैतालीयप्रवृत्तकस्योदा-हरणिमदं स्त्रमेव । औपच्छन्दसकप्रवृत्तकोदाहरणं यथा—

> प्रसीद सुतनु प्रभञ्जनोऽयं, कुटजकेतकशिलीन्ध्रगन्धवाही। प्रभातसमये प्रवाति मन्दं, गजमदेन सुरभीकृतः समन्तात्॥ १८०१॥

आपातलिकाप्रवृत्तकोदाहरणं यथा---

इमे प्रदीपा गतभासो, भूतिचापलमिवोपदिशन्ति। निहत्य तिमिरं करजालैर्, नो विभान्ति निधने क्षणदायाः॥ १८०२॥

एतासां जातीनां सर्वगुरुप्रस्तारः*---

एतासां चरणविकल्पोत्तरोत्तरवधे प्रत्येकं लब्धा व्यक्तयः ६४।

^{*} The representation is dropped by me as it is not very necessary.

अस्य युग्म० ॥१९॥

वैतालीयादिजातित्रयोत्पन्नस्य प्रवृत्तकस्य समचरणल्क्षणेन यस्याश्चरणचतुष्टयं क्रियते सा अपरान्तिका नाम त्रिविधा जातिर्भवति । तत्र वैतालीयप्रवृत्तकापरान्तिकोदाहरणिमदं सूत्रमेव । औपच्छन्द्सकप्रवृत्तकापरान्तिको-दाहरणं यथा—

> हरिपदाम्बुजं सिद्धसेन्यमानं, हृदि 'प्टतं जनयति सर्वदामुनीन्द्रैः । सुरनदीजवनपावितत्रिलोकं, पारिजातकुसुमार्चितं सुरेशैः ॥ १९-१ ॥

आपातिलिकाप्रवृत्तकापरान्तिकोदाहरणं यथा-

नौमि विष्णुमहमीप्सितसिद्धयै, यो जगत्सु निवसन्नहि रुक्ष्यम् । वेदवाक्यविदुषामधिगम्यः, सदसदादितनुहानिविद्यद्धः॥ १९०२ ॥

एतासां जातीनां सर्वगुरुपस्तारः *---

तत्र चरणविकल्पोत्तरोत्तरवये प्रत्येकं लब्धा व्यंक्तयः २५६ ।

अयुग्भवा० ॥२०॥

अस्येत्यनुषङ्गः । वैतालीयादिजातित्रयोत्पन्नस्य प्रवृत्तकस्य विषमन्वरणलक्षणेन यस्याश्चरणचतुष्टयं क्रियते सा पूर्ववचारुहासिनी नाम त्रिविधा जातिर्भवति । तत्र वैतालीयप्रवृत्तकन्वारुहासिन्युदाहरणमिदं सूत्रमेव । भौपच्छन्दसकप्रवृत्तकन्वारुहासिन्युदाहरणं यथा—

हिरण्यकशिपोरुरो विभिद्य, नखाङ्करैदींप्ततीक्ष्णवक्रैः। सुरेश्वरैः पूजितो महात्मा, ददात सौख्यं महीस्थितानाम् ॥ २०-१ ॥

आपातलिकाप्रवृत्तकचारहासिन्युदाहरणं यथा-

प्रशान्तचित्तः समदर्शी, रिपौ सुहृदि यो हरिभक्तः। न कामनासंयुतचेताः, स मोक्षमिप याति गृहस्थः॥ २००२॥

एतासां जातीनां सर्वगुरुप्रस्तारः*---

एतासां चरणविकल्पोत्तरोत्तरवर्षे प्रत्येकं लब्धा व्यक्तयः १६ ॥ वैतालीयोत्पन्नाः सर्वप्रसिद्धा जातयस्तेन सह संकलनायां २१ ॥ तद्यथा वैतालीयं १, औपच्छन्दसकं १, आपातलिका १ दक्षिणान्तिका ३, उदीच्य-वृत्ति ३, प्राच्यवृत्ति ३, प्रवृत्तक ३, अपरान्तिका ३, चारुहासिनी ३॥

> वैतालीयसमुत्पन्ना जातीनामेकविंशतिः। नोदाहृता प्रतिब्यक्ति प्रन्थगौरवभीतितः॥ २०•३॥

आवृत्तिव्याख्यापक्षे वैतालीयजाती २, औपच्छन्दसकजाती २, आपातिलकाजाती २, इति पट् । एतासां दक्षिगान्तिका ६, उदीच्यवृत्तयः ६, प्राच्यवृत्तयः ६, प्रवृत्तकानि ६, अपरान्तिका ६, चारहासिन्यः ६; एवं द्वाचत्वारिंशत् ४२ ॥ पूर्वसंख्यया मिश्रत्वे सर्वसंख्या ६३ ॥ इति श्रीरघुस्रिस्नुश्रीत्रिविक्रमस्रिविचितायां तात्पर्यटीकायां वैतालीयप्रकरणं समाप्तम् ।

^{*} The representation is dropped by me as it is not very necessary.

वक्त्रं नाद्या० ॥२१॥

इत्यनेनाष्टाक्षरोऽस्य चरणो लब्धः । तस्य स—[fol. 43 lost] अथ चरणविकल्पोत्तरोत्तरवधे प्रत्येकं लब्धा व्यक्तयः ३३१७७६ । अस्योपसंहारः—

> रसाश्वतुरगाश्चन्द्रविह्नहच्यभुजो भिदः । वक्त्रादीनां चतुर्णां स्युः पृथङ् मात्रासमस्य च ॥ २१-१ ॥

युजोर्जेन० ॥२२ ॥ ओजयोर्जेन० ॥२३ ॥ चपला० ॥२४ ॥

सुगमम् । विकल्पा व्यक्तयश्चास्य प्रत्येकं पूर्ववत् । अथ वक्त्रप्रसंगेन तदाश्रितं जात्यन्तरं सनामधेयमभिधातुकाम आह—

यस्यां लः० ॥२५॥

यस्यां वक्त्राश्रितायां जातौ समे पादे सप्तमे स्थाने लघुर्भवित सा युग्मिवपुलाभिधाना जातिः स्यात् । सप्तमो ल इत्युपल्श्वणमन्धेः परतः तगणादीनां चतुर्णा वर्णगणानाम् । तेनास्यां समे पादे अन्धेः परतश्चत्वारो विकल्पा भवन्ति । लक्ष्यलक्ष्वणसूत्रेऽस्मिन् समे पादे अन्धेः परतो जगणं दर्शयता जगणस्थितिपक्षे पथ्यावक्त्रेण सहास्यां नामिविकल्पश्चाङ्गीकृत इति । तत्र सर्वगुरुयुग्मिवपुला यथा*—

चरणविकल्पोत्तरोत्तरवधे लब्धा व्यक्तयः ३०८४१६।

सैतव०॥ २६॥

सैतवस्याचार्यस्य मतेन युग्मविपुलाया अखिलेषु चतुर्ष्विप चरणेषु सप्तमो लः स्यात् । सप्तमो ल इति जगणस्योपलक्षणम् । तभनानां विशेपलक्षणेनाघातत्वात् ।

मेनान्धि०॥२७॥

अखिलेषु चरणेषु अन्धेः परतो भेन युक्ता या सेत्यन्वयः । सहयोगे तृतीया । भाद्विपुलेति भविपुलेत्यर्थः । अनेन प्रकरणशेषमपि व्याख्यातम् ।

इत्थ० ॥२८॥ नोऽम्बुघे० ॥२९॥ तोऽब्घेः ॥३०॥

इति त्रयं व्याख्यातं स्थालीपुलाकन्यायेन । ननु वर्णवृत्तानि वक्त्राणि मात्रावृत्तप्रस्तावे किमिति लक्षिता-नीति न वाच्यम् । यतः संकीर्णवृत्ताध्यायोऽयं वक्त्राणि चानुष्टुप्-समवृत्तादौ संकीर्यन्त इति न विरोधः । तथाहि । समवृत्तं प्रमाणिका सैतवमते युग्मविपुलापि भवति । तथा काश्चिद् वक्त्रव्यक्तयोऽनुष्टुभः समवृत्तानि काश्चिद्धंसमवृत्तानि काश्चिद्राथाश्च भवन्ति । तद्यंतद्ध्यायान्ते वक्त्राण्युपदिश्यन्ताम्, किमिति वैतालीयप्रकरणा-नन्तरमित्यपि न वाच्यम् । यतो वैतालीयं प्रतिपादं पादमध्ये नियतित्रकवर्णगणव्यातम्, इदमपि तथैवेति साहश्यादनयोरानन्तर्यमेवोदितमिति स्थितम् । इति तात्पर्यटीकायां वक्त्रप्रकरणं समात्तम् ।

अथ वक्ष्यमाणप्रकरणेऽये नलघुव्यवहारादतः परमागुरुसंख्यानयनादार्यागणैः प्रस्तारोऽङ्गीकर्तव्यः ।

^{*} Representation is dropped.

द्विकगुणित० ॥ ३१॥

द्विकेन गुणिताः वसुलघवो यस्यां सा तथोक्ता । पोडशलघुचरणेत्यर्थः । द्विकगुणितवसुलघुत्वं च मात्रा-समकादौ प्रतिचरणं पोडशमात्रत्वनियमायाग्रेऽधिक्रियते ।

मात्रासम० ॥३२॥

मात्रासमकं नाम मात्रावृत्तजातिर्भवति यदि षोडशमात्रश्चरणो भवति । नवमी मात्रा लघुरूपेण तिष्ठेत् । अनेन प्रस्तारे तृतीयो गणोऽन्तगुरुरेव स्यादिति नियम्यते । पुनः किंविशिष्टं मात्रासमकं भवति । गन्तमिति गोऽन्ते यस्य तदित्थंभूतम् । अनेनास्य चरणान्ते द्विगुरुरन्तगुरुर्वा गणः प्रस्तार्य इति । इह मण्डूकप्छुत्या 'नेह भवति विपमे जः' (२-१) इत्यनुवर्तते । तच्च प्रतिचरणं प्रथमे गणस्थाने निविशते न तृतीये । वानवासिकायामत्रास्य स्वीकारात् । अनेन प्रथमो गणश्चतुर्विकस्य इष्टः । तदुक्तम् ।

मात्रासमकादिषु राजकला, वदने जगणः परिहरणीयः । गान्तगणस्थितिरेव पदान्ते, कथिता दक्षैरछन्दःशास्त्रे ॥ ३२.९ ॥

इति । प्रस्तारार्थे सर्वगुरुमात्रासमकं यथा*— एवमपरमपि चरणत्रयं कुर्यात् । मात्रासमकचरणविकल्पोत्तरोत्तरवधे लब्धा व्यक्तयः ३३१२७६ । जो न्छा० ॥३३॥

गन्तमित्याप्रकरणसमाप्तेरिधिकियते । नश्च लश्च न्लावितीतरेतरयोगः । मात्राम्बुधेः परस्ताद्यदि जगणो न्लौ वा स्यातां तदा विश्लोकः स्यात् । प्रस्तारः—SS ISI SS SS; ईदृगपरमि चरणत्रयं भवति । तत्र चरणे विकल्पोत्तरोत्तरवधे लब्धा व्यक्तयः ५३०८४१६ ।

[तद्युग**ः ॥ ३४**॥ dropped]

बाणाष्ट्र० ॥ ३५॥

सुगमम् । प्रस्तारः SS ISII SSS. एवमपरमपि चरणत्रयं भवति । चरणविकल्पपरस्परवधे लब्धा व्यक्तयः ५३०९४१६ ।

परस्परमसंकीर्णो मात्रासमकजातिषु । चतुष्कलैर्गणैद××प्रस्तारोऽत्र दर्शितः ॥ ३५.१ ॥

अप्राभ्यो० ॥३६॥ dropped]

यदतीत० ॥ ३७॥

प्रथितं प्रख्यातम् । किं तत् । पादाकुलकं नाम वृत्तम् । कथंभूतम् । कलितं संयुतम् । कैः । मात्रा-समादिपादैः । मात्रासमादिरादौ येपां ते यथोक्ताः । ते च पादाश्च तैः । कथंभूतैः पादैः । अतीतकृतविधि-(विविध)लक्ष्मयुतैः । अतीतैः कृतानि अतीतकृताि । अतीतािनीह सूत्राणि । तािने च तािन विविधलक्षमाणि च अतीतकृतिविधि(विविध)लक्ष्माणि । तेर्युतास्तैः । पुनः कथंभूतम् । यत्र अनियतवृत्तपिरमाणसहितम् । अनियतं च तद्वृत्तपिरमाणं च तेन सहितं तत्तथोक्तम् । वृत्तपिरमाणमिह पादे वर्णसंख्योच्यते । क प्रथितम् । जगत्स इत्यन्वयः । पादौ च र पादाश्च ३ पादाश्च ४ एकदोषेण ते पादाः । तेन मात्रासमकानां चतुर्णो पादानां द्विद्याः, त्रिद्याः, चतुःदाश्च योगेन पृथक् पृथक् पादाकुलकजातयो जायन्ते । तत्र द्विद्यः उत्पत्तौ—

Representation is dropped.

वृत्तरत्नाकर-तात्पर्यटीका

चतुष्किकेयं द्विपरिग्रहेण, चतुर्षु वर्णेष्यपि वेष्टितेषु । पुनस्तथैकान्तरितेषु बाह्ये, द्वितीयलेखावलयेन वार्षे ॥ ३७.१ ॥ पडेव युग्मान्यथ जातयस्तु, चतुर्दश स्युः प्रतियुग्ममेषु । भाद्येन हीनेन चतुर्थजातैः, प्रस्तारयन्त्रेण यथास्थितेन ॥ ३७.२ ॥ गलोस्तु मात्रासमकादिसंज्ञाः, प्रकल्प्य जानीहि गुरोः प्रस्तारान् ॥ ३७.३ ॥

इति चतुष्किकाप्रस्तारयन्त्रम् । मा वि चि वा ।

मामामामा	मामाविमा	मामामावि	मामाविवि
विमामामा	विमाविमा	विमामावि	विमाविवि
माविमामा	माविविमा	माविमावि	माविविवि
विविमामा	विविविमा	विविमावि	विविविवि

त्रिसंब्रहेण [ब्र]भिद्श्वतस्तः, ब्रत्येकमासामृतविश्वकाणि ।
तथाहि पूर्वापरमध्ययोगाद्, बाधादिमेन त्रितयं सहान्यत् ॥ ३७.४ ॥
तद्वैपरीत्ये त्रितयं पड(६-पडेव-), मैक्ये चतुर्विशतिका त्रिकाणाम् ।
चतुष्पदी[भेदन]कल्पसूत्रं, प्रत्येकमेषां गदतः शृणुध्वम् ॥ ३७.५ ॥
हिरादिवर्णा विहिते व्यपेत, XXX नीत्या सन्तु तिस्र एव ।
हित्तीयकेऽर्धे चरमे तथैका, पडेवमैक्ये चतुर्दिधचन्द्राः ॥ ३७.६ ॥

तत्र त्रिसंग्रहचनिष्क्रका यथा—मा वि चि वा।

चतुष्किकोत्पन्नाः त्रिकव्यक्तयः चतस्रो यथा—माविवा १ विवाचि २ वाचिमा ३ चिमावि ४ । आद्यत्रिकस्य षोढा कल्पना यथा—माविवा १ विमावा २ मावावि ३ वेपरीत्ये वाविमा १ वामावि २ विवामा ३ । एव- मन्येपामिप त्रिकाणाम् । सर्वसंख्या [२४] । आद्यत्रिकस्य चतुष्पदीभेदकल्पनोदाहरणं यथा—मामाविवा १ माविमावा २ माविवामा ३ माविविवा १ माविवावि २ माविवावा ३ इति पट् । सर्वेक्ये १४४ ।

चतुर्प्रहेण [प्र]भिदश्चतस्तः, प्रत्येकमासामृतवः प्रभेदाः । आसंभवादश्वरपोर्विवर्ताः, द्वितीयकान्त्याक्षरपोगवर्जम् ॥ ३७.७॥ भवन्ति पञ्च प्रकृतोऽत्र पष्टः, सर्वेक्यमुक्तं श्रुतयोऽश्विनौ च । अमुं प्रकारं चतु[र]र्धवृत्ते, वर्णाङ्कविन्यासवदोन कुर्यात् ॥ ३७.८॥

चतुष्किका यथा—मा वि चि वा। चतुष्किकोत्पन्नाश्चतुष्कव्यक्तयो यथा—

माविवाचि १ विवाचिमा २ वाचिमावि ३ चिमाविवा ४। आग्रचतुष्कस्य पोढा कल्पना कथा—माविवाचि १ विमावाचि २ मावाचिवि ३ माविचिवा ४ विचिवामा ५ वाचिमावि ६। द्वितीयचतुष्कस्य यथा—विवाचिमा १ वाविचिमा २ विचिवामा ३ चिमावावि ४ मावाविचि ५ चिवाविमा ६। तृतीयचतुष्कस्य यथा—वाचिमावि १ चिवामावि २ वामाविचि ३ वाचिविमा ४ चिविमावा ५ माविवाचि ६। चतुर्थचतुष्कस्य यथा—चिमाविवा १ माचिविवा २ चिविवामा ३ चिमावावि ४ मावाविचि ५ विवाचिमा ६। एवं चतुर्विदातिः। ASJ 7-8

अनया रीत्या चरणवर्णोङ्कविपर्ययविन्यासवरोन पदचतुरूथ्वेऽपि प्रस्तारार्थं चतुर्विरातिजातयः प्रकल्पनीयाः इति । तथैवाग्रे व्याख्यास्यते । तत्र द्विशो विश्ठोकचित्राभ्यां जातिभ्यां कल्पितं पादाकुलकं यथा—

> नखमुखविलिखितदितितनयोरः-, परिपतदस्मगरूगीकृतगात्रः । हिमधरगिरिरिव गैरिकरक्तो, नरहरिरहरहरवतु स युष्मान् ॥ ३७.९ ॥

जातित्रयोत्पन्नस्य पादाकुलस्येदं सूत्रमेवोदाहरणम् । जातिचतुष्ट्रयोत्पन्नस्य यथा-

देवो देयात् सुखमस्मभ्यं, निजशुजविद्गितदैत्यानीकः। लक्ष्मीकान्तः सरसिजनेत्रो, नीलाम्बुजसमरुचिरच्छायः॥ ३७-१०॥

> विकल्पा यत्र यावन्तो न्यायसिद्धाः स्वरूपतः। भार्योदीनां स्थानभेदात् तानत्राहं निद्देर्यये ॥ ३७-११ ॥

आर्याविषमस्थाने विकल्पप्रस्तारः SS, IIS, SII, IIII; समस्थानगणस्य SS, IIS, ISI, SII, IIII; चपलाप्रथमस्य SII, SS; तृतीयस्य SS; चतुर्थस्य SS, SII; शेपमार्यावत् । मुखचपलाजघनचपले अप्ये- [वमृ]ह्ये । अनेन गीतिप्रकरणमपि व्याख्यातम् । वैतालीयगणस्य S, II; अनेन दक्षिणान्तिकापूर्वप्रत्थो व्याख्यातः । दक्षिणान्तिकादिषु जगणादन्यत्रैवमेव । वक्त्रप्रथमगणस्य S, I; द्वितीयगणस्य SSS, ISS, SIS, SSI, ISI, SII; चतुर्थगणस्य S, I; एवं पथ्यावक्त्रादिषु युग्मविषुलायाः समपाद्योस्तृतीयस्य SSI, ISI, SSI, IIII, सैतवस्य मते सर्वत्रैवम् । शेपजातिषु वक्त्रवत् । मात्रासमकादीनां चतुर्णा प्रथमस्य SS, IIS, SII, IIII; मात्रासमके द्वितीयस्य SS, IIS, SII; चतुर्थस्य चतुर्ष्वपि SS, IIS; विश्लोकतृतीयस्य SS, SII; वानवासिकाद्वितीयस्य SS, IIS, SII; चित्राद्वितीयस्य ISI, IIII; चित्रातृतीयस्य IIS, ISI, IIII.

वृत्तस्य०॥३८॥

वृत्तमिह् वर्णराशेरुपलक्षगम् । तेन पादस्यार्धस्य पद्यस्य गद्यस्य वेत्यर्थः । ल इति मात्राः । वर्णाः स्वराः सस्वरव्यज्ञनानि वा । अयमत्र वाक्यार्थः । किंचिहृत्तमुद्दिश्य कश्चिद्यदा पृच्छति अस्मिन् मनिस् वर्तमाने वृत्ते कित गुरवः सन्तीत्युक्ते तं प्रति वाच्यं वृत्तस्य लघुराशिरिति मात्राराशः क्रियताम् । ततः तद्वर्णसंख्या अपनीय-ताम् । ततो यावत्यो मात्रा अविश्वाः तावन्तस्त्वहृत्ते गुरवः सन्तीत्युक्तरं दद्यात् । वर्णा गुरुभिस्तयेति । अथ ययेवं पृच्छिति अस्मद्वृत्ते किति वर्णाः सन्तीति तद्दैवं वाच्यम् । वृत्तमात्राराशेर्गुरवोऽपनीयन्ताम् । ततो यावत्यो मात्रा अविश्वाः मवन्ति तावन्तो वर्णाः सन्तीति उत्तरं दद्यात् । गुरुसंख्यानयनार्थे प्रकारान्तरं वक्त्रमाह गुरव इत्यादि । पूर्ववदुरुसंख्यापश्चे सित वृत्तमात्राराशेर्म्ललघुसंख्यापनयने सत्यविश्वाःसंख्यां दलयेत् । तत्रैकदल-संख्याखुल्या गुरवः सन्तीत्युक्तरं वाच्यं स्थात् । द्विगुणगुरुसंख्यापनयने लघवोऽप्यागच्छन्तीति पूर्ववत् स्त्रविपर्ययाद् व्याख्येयम् ।

अक्षरिपण्डं द्विगुणं मात्रागणशोधितं तु यच्छेपम् । तल्जिवित निर्दिष्टं पिङ्गलजयदेवभरताद्यैः ॥ ३८०३ ॥

इह गुरुवर्गलघुसंख्यानयनोपदेशः आर्यादीनां छन्दोजातीनासुपदेशाघाटविज्ञानार्थः । अतएव अतःपरं पदचतु-रूर्ध्वीपदेशादिषकं यदुपदेक्ष्यते तद्यक्तिरूपं तत्र ससुद्रप्रस्तारोपदेशः इति सिद्धान्तः ।

शिखिगुणित०॥३९॥

अस्यान्वयः । भवति । का । शिला । कि भवति । शकलयुगलकम् । कथंभूतम् । सुपरीत्यादि । सुष्ठु परिघटिता लिलता पद्निचितिर्यक्षिन् तदित्थंभूतम् । पुनः किंविशिष्टम् । सगुरु गुर्वन्तमित्यर्थः । पुनः किंविशिष्टम् । शिलिनस्त्रयः शिलिगुणिता दश लघचो रचिता यस्मिन् तदित्थंभूतम् । पुनः किंविशिष्टम् । अपगतेत्यादि । अपगतं लघुयुगलं यस्मात् तदित्थंभूतम् । तयोर्मध्ये अपरे शकले इदं पूर्वोक्तं लक्ष्मणं शकलं भवतीत्यन्वयः ।

विनिमय०॥ ४०॥

विनिमयो व्यत्ययः । विनिमयेन विहितं बिनिमयविहितं तच्च तत् शकलयुगं च तस्य लघवः तैर्ललिता पद्वितितः । तया विरिचतो गणिनचयो यस्यां सा तथैवोक्ता । का भवित । शिखा (खज्जा) । किस्मिन् सित । जि इति अकारे । कथंभूते । जिशिर उपगतवित । जस्य शिरः तदुपगतवान् तिस्मिन् । एतेन खज्जेत्यभिधान-मुक्तं भवित । श्रुतेः सुखकृत् श्रुतिसुखकृत् । ईदृशी का भवित । इयिमिति खज्जा । अपि शब्दात् शिखा । का । जगित इति लोके इत्यन्वयः । प्रस्तुतत्वात् शिखादलयुगलद्वयं यस्या भवित विपर्ययेण सा खज्जा भवित । इइ शेपपदिनचयो लक्ष्यलक्ष्मणसंयुतत्वप्रतिज्ञानिर्वाहार्यः । एवमन्यत्रापि ।

अप्रावर्धे० ॥ ४१ ॥

द्वाभ्यामभ्यस्ताः इति गुणिताः यस्मात् छन्दोन्यक्तेरष्टौ गुरवो द्विगुणिताः सन्तः प्रथमार्ध भवतीति होपः। दलमेवंविधमपरमपि भवति। कथंभूतम्। वसुगुणितेत्यादि। वसुमिर्गुणिताः सलिलनिधिमिर्मितास्ते च ते लघुकाश्च तैर्विरचिता पद्वितिर्विसम् तदित्थंभृतम्। ईदृशं दलद्वयं यस्या भवति सा अनङ्गक्रीडा नाम उक्ता कथिता।

त्रिगुणनव०॥ ४२॥

त्रिगुणा नव लघनो यस्यां सा तथोक्ता । अवसितिरवसानं तस्यां गुरुर्यस्याः सा तथोक्ता । इति ईंदरां तच तद्दलयुगं च तेन कृता तनुः दारीरं यस्याः सा तथोका अतिरुचिरा नाम मात्रावृत्तव्यिक्तर्भवति । इति मात्रावृत्तप्रकरणम् ।

संकीर्णवृत्ताध्याय इति । संकीर्यन्ते प्रकरणान्तरोक्तवृत्तलक्षणमाश्रित्य संज्ञान्तरसंकरं भजन्त इति संकीर्णानि । तानि च तानि वृत्तानि च संकीर्णवृत्तानि तेपामध्याय इति । संकीर्णत्वं तु संज्ञानां वैतालीयादारभ्य अर्धसम-प्रकरणमभिन्याप्य द्रष्टव्यम् । यतोऽर्धसमाध्यायान्ते 'वदन्त्य॰' (४·११) इति वश्यति ।

अधुना संप्रदर्शते यानि मात्रासमकादीनि समाक्षरत्वे समलक्षणचरणानि तानि समृत्रत्तानि, अर्धसम-लक्षणानि अर्धसमृत्रत्तानि । वक्ष्यमाणसमृत्रत्तेपु संकरः प्रदर्शते । पङ्कतौ गुद्धविराद् सम्वैतालीयमिष । पणवो मात्रासमकमिष वानवासिका च । चम्पकमाला समापातिलकाषि । त्रिष्टुमि दोधकं समापातिलकाषि । भ्रमर-विलिसता वानवासिका च । स्वागता आपातिलका अपरान्तिकाषि । सुभिद्रका विपमवैतालीयमिष । मौक्तिक-माला वानवासिकाषि । जगत्यां तोटकं मात्रासमकमिष । कुमुमिविचत्रा वानवासिकाषि । प्रमिताक्षरा चित्राषि । मालती समवैतालीयमिष । तामरसं समापातिलकाषि । शक्कर्यो प्रहरणकिता वानवासिकाषि । अतिशक्कर्यां शिक्तला चित्राषि । एवमन्यत्राषि समृत्रतेषु संकरोऽभ्यूह्यः । अथार्धसमेषु द्वतमध्या समापातिलका वा ।

वेगवती आपातलिका वा । मद्रविराडीपच्छन्दसकं वा । अपरवस्त्रं वैतालीयं वा । पुष्पिताग्रा औपच्छन्दसकं वेत्युक्तमेवेति स्थितम् ।

इति श्रीरबुस्रिनुश्रीत्रिविकमस्रिविरचितायां वृत्तरत्नाकरलैकिकछन्दःस्त्रतात्पर्यटीकायां द्वितीयोऽध्यायः ।

तृतीयोऽध्यायः।

अङ्घयो यस्येति लक्षितानामुक्ताद्युत्पन्नानां समन्नुत्तानां मध्ये कानिन्विद् गणपरिपाट्या कानिन्वित्तया यतिविशिष्टया लक्षितान्यन्द्र अधिकारिणां व्यवहारसौकर्याय लक्षलक्षणसंयुतैश्वरणस्त्रैर्नामभिनिदेष्ट्रमाह ।

॥ गृश्रीः ॥ १ ॥

गुरुगणोपलक्षिता श्रीनीम व्यक्तिर्भवति। अनेनापरमपि चरणत्रयं व्याख्यातं समृहक्तवात्। उक्ता। इयमुक्ताप्यभिषीयते। गोत्वमेवं व्यक्तिर्जातिं न जहातीति प्रसिद्धिः। एवमत्युक्तादीनामुत्कृत्यन्तानामपि व्याख्या कार्याः वक्ष्यमाणं प्रायः सुगमम्।

॥ २-९: १२.२:॥

मधुमच्छन्दः तस्मिन् इति ।

॥ १२, १०, ११, १४, १३, १५, १६, १७, १८, १९ ॥

आभ्यां समानिका[प्रमाणिका]भ्यां यद्यद्नुष्टुभि समदृत्तं तद्वितानसंज्ञमिति । आदौ एव वर्जनान् मूर्धोक्तानां चित्रपदाविद्यन्मालादीनां [अ]भिधानविकल्पः । शे णो नित्यं विताभिधानमिविदः (पाणिनि ५.४.१५४) १ ।

॥ २०-२५॥ [fol. 61 is missing]

[३१] इतींह पक्षोऽङ्गीकियते। अथान्वयः। भवन्ति। काः। ताः। ताः इति काः। यदीयौ भवतः। कौ। पादाविति। प्राचीनव्याख्याविशेषात् पादा......। किंविद्यिष्टौ पादौ भवतः। अनन्तरोदीरितलक्ष्मभाजौ। अनन्तरमुदीरिते इति अनन्तरोदीरितलक्ष्मभाजौ। अनन्तरोदीरितलक्ष्मभाजौ। अनन्तरोदीरितलक्ष्मभाजौ। चतुश्चरणस्यास्य वृत्तस्य अनन्तरोदीरितलक्ष्मभात्तवं व्यक्तिद्वयस्य विन्यासिवशेषादनेकप्रकारं संभवति। तस्य च विन्यासस्य सुखावगमार्थे ततुत्पन्नवर्णवृत्तव्यक्तिविशेष-संख्यावगमार्थे वेदयं (१) सूत्रम्—

उक्ताचतुश्चरणवारिनिधौ समार्ध-तुल्यैर्विना गुरुलघुप्रतिकल्पितेन। न्यक्त्योरभीष्टधतयोरुपलक्षणेन विद्धि प्रभेद्मुपजातिषु सूर्यसंख्यम् ॥ ३१-१॥

SSSS, ISSS, SISS, IISS, SSIS, ISIS, SIIS, IIIS, SSSI, ISSI, SISI, IIII, SSII, ISII, SIII, IIII.

गुरुस्थाने अत्र इन्द्रवज्ञा, लघुस्थाने उपेन्द्रवज्ञा कल्पनीया। याः यन्त्रप्रदर्शिताः वृत्तव्यक्तयः ताः किं भवन्ति। उपजातयो भवन्ति इति उपजातिसंज्ञा भवन्तीत्यर्थः। ननु उपजातिलक्षणस्त्रस्यानया विशेषव्याख्यया यस्य वृत्तस्य यथा कथंचिदेकव्यक्तिजनितं चरणत्रयमपरव्यक्तिजनितं चरणत्रयमपरव्यक्तिसमुत्पन्नश्र्षकचरणो भवतीत्यंभूतं यचतुश्चरणं वृत्तं तदेवोपजातिसंज्ञामासादयति यस्य पुनर्यथाकथंचित् एकव्यक्तिजनितं चरणद्वयं तस्य कथं स्यादिति चेदुन्यते। अस्य चतुश्चरणस्य लक्ष्यलक्षणवाक्यस्य स्वरूपेण तथा स्चनात्। अर्थस्य स्चनात् स्त्रमित्युक्तमेवेति स्थितम्। इत्यमनेन प्रकारेण अन्याखण्युक्तादिपु समुत्थितासु व्यक्तिपु युगलीकृत्य मिश्रितासु सतीिव्यद्मेवेति उपजातयः इति नाम स्मरन्ति चिन्तयन्तीत्यर्थः। अर्थोक्तादिपु प्रतिजात्युपजातिप्रस्तारमूलभूतानि कति कति व्यक्तियुगलानि भवन्तिति चेन्छिण्याणां सुखावगमार्थे तदानयनस्य स्वस्यन्यते।

पादवारांनिधिः संख्या तयैवेकोनया हता । स्यादर्धतुख्यसंख्याथ त[द्व]र्गो मूलवर्जितः । तहुलं युगसंख्या स्यात् प्रतिजात्युपजातिषु ॥ ३१-२ ॥

अस्योदाहरणं यथा—प्रतिष्ठायां समुद्रे जातिसंख्या १६ । सा एकन्यूना गुणकः तत्र जातं २४०, तद्दलं १२०। एवमन्यासामपि । उपजातिस्त्रव्याख्यानस्यायमभिसंधिः । उक्तादीनां जातीनां चतुश्चरणवारिधौ तत्समार्धसम-विषमगाथाभ्योऽन्यत्र याश्चतुश्चरणव्यक्तयोऽविशिष्यन्ते, [त]तो (त) एव प्रस्तारकष्टभीरूणां प्रकारान्तरेणोत्पाद्य नामतो निर्दिष्टा इति ।

॥ ३२; ३३॥

मश्च मश्च भभ्न भभममिति समाहारत्वादेकवचनम् । तस्माद् भभभात् । अत्रैकरोपाट् भेभ्य इति प्राप्तमपि नाङ्गीकृतमसंशयार्थे लक्ष्यलक्षणसंयुतत्वनिर्वाहाय च । एवमन्यत्रापि ।

॥ ३४ ॥

अब्धिरोकैर्यतिर्भवर्ताति रोपः। एवं यत्र यत्र संख्यापदं गणादिसंबन्धपरिवर्जितं दृश्यते तत्र तत्र यतिस्थाननिरूपकं ज्ञातव्यम्।

॥ ३५ : ३७ : ३६ : ३८ : ३९ : ४०-४३ : ४३.१०: ४४.५६॥

छिन्नेति कृतयतिरित्यर्थः । गुहवक्त्रैरिति । गुहः कार्तिकेयः तस्य वक्त्राणि पर् तन्मिता वर्णा अपि गौष्या कृत्या गुहवक्त्राण्युच्यन्ते । तैरिति करणे तृतीया । इह गौण्यपि वृत्तिराश्रिता लक्ष्यलक्षणिनर्वाहाय । एवमन्यत्रापि ।

॥५७-६२; ६४.९; ६३; ६४-६८; ६८.१; ७०-७५॥

इयिमिति वसन्तितिल्कैव । अनेन [अने]काभिधानानां व्यक्तीनां शास्त्रान्तरोक्ताभिधानरवीकारेणापि वावदूकस्य न प्रतिज्ञाहानिः स्यादिति द्शितम् ।

11 56-9011

द्वाभ्यां हत इति गुणितो द्विहतः। हयैरिति सप्तिभिर्मितो गणितो लघुः हयलघुः। द्विहतश्चासौ हयलघुश्च द्विहतहयलघुः। अथ गिति गुरूरिति शशिकला नाम वृत्तं भवति।

11 59-60 11

इयमित्यनुवर्तते । इयं राशिकलैव यतिविशेषात् स्रग्नामा मणिगुणनिकरनामा च ॥

11 ८१-८५ 11

त्रिभिर्मिताः नः त्रिनः । ननु त्रयश्च ते नाश्च त्रिनाः इति कर्मधारयः । तस्य संख्यापूर्व-[fol. 69 is missing]

॥९५-९८॥

त्रीन् वारान् त्रिः। रश्च जश्च रजौ । सन्धौ रलोपे पूर्वस्य दीघोंऽणः (पा. ६ २ १११) इति दीर्घप्रकृतिः।

॥ १००; १००.४ (सतता नः सश्च रौ गः करितुरगयतिः स्यात्महास्रग्धराख्या)॥

॥ १०१-१०३॥

इनैरिति सूर्येर्यदि भवति यतिरित्यर्थः ।

॥ १०४-१०५॥

नयोर्युगं नयुगम्। मश्च मश्च तश्च नयुगं च नश्च रश्च सश्च लश्च गश्च ते तथोक्ताः। तैर्युक्तमित्यर्थः॥

॥ १०६॥

इति श्रीरघुस्रिस्नुश्रीत्रिविकमस्रिविरचितायां वृत्तरत्नाकरछन्दःस्त्रतात्पर्यटीकायां उक्ताद्युत्पन्नसमवृत्तः व्यक्तयभिधानोपदेशप्रकरणं समाप्तम् ।

अथोद्देशपासा दण्डकजातिः शास्त्रान्तराह्यक्ष्यते । तथाहि---

यदेकेन गणेनोक्तं कृत्सनमादित्रिकेष्यथ । किंचिद्धिभद्यते पादस्यान्ते यदिष पूर्वकम् ॥ १०६०१ ॥ आचतुर्थगणादंशभेदवद्वापि तन्मुखम् । अनिबद्धलगाभ्यां य[चल्]गाभ्यां वापि निर्मितम् ॥ षड्विंशादक्षरादृर्ध्वं समवृत्तं तु दण्डकः ॥ १०६०२ ॥

्इमां जातिमधिकृत्य स्वलक्षणेन निःकृष्य काश्चिद् व्यक्तीनीमभिनिदेंष्टुमाह ।

11 200 11

चण्डवृष्टिरित्यस्य नाम । प्रयातः प्रज्ञातः प्रसिद्धः इत्यर्थः ।

॥ १०९; १०८॥

सुगमम्। नद्रयादुपर्यष्टभी रगणैः अर्णः। नवभिरर्णवः। दशभिर्व्यालः। एकादशभिर्जामूतः। द्वादशभि-र्लीलाकरः। त्रयोदशभिरुद्दामः। चतुर्दशभिः शङ्खः। आदिग्रहणात् पञ्चदशभिः समुद्रः। पोडशभिर्भुजंगः इति । इदमादिग्रहणं व्यवस्थात्रलाद् गणान्तरनिर्मितदण्डकस्वीकारार्थमपि। तत्र एकगणविनिर्मितो यथा। **छन्दःशेखरात्**।

वृत्तरत्नाकर-तात्पर्यटीका

प्रभूता यकारा यथेष्टं निविष्टा यदि स्युस्तदा जायते दण्डकः सिंहविक्रीडनामा ॥ १०८-१ ॥ मत्तमातंगलीलाकरो नामतः सुप्रसिद्धो भवेद् दण्डकः स्वेच्छया रेः कृतैः ॥ १०८-२ ॥ कुसुमास्तरणाभिध एप भवेचरणे सगणैस्तु यथेष्टकृतैः कृतिभिः ॥ १०८-३ ॥

' आचतुर्थगणादंशमेद्वत् (१०६०२) इत्यस्य वृत्तरत्नाकरोक्तदण्डकस्त्र[त्र]यमेवोदाहरणम् । तथा— यदि नकारात् परस्माद्गुरुस्तत्परत्रापि रम्याः क्रियन्ते मन्नां प्रमाणेन रेफास्तदानीं स लीलाविलासामिधानो भवेदण्डकः ॥ १०८०४ ॥

विषयलघुतः परे यत्र रेफा यथेष्टं कृताश्चण्डकालः स नाम्ना भवेद् दण्डकः ॥ १०८-५ ॥ यदि ननगगुरुभ्यो यकारा यथेष्टं कृताः स्युस्तदा सिंहविक्रीडनामा [भ]वेदण्डकोऽन्यः ॥ १०८-६ ॥ नयुगमथ मकारः स्यात्ततो या यथेष्टं कृता दण्डके मेघमालाभिधाने ॥ १०८-७ ॥ यदि तु नयुगलतः स्वेच्छयापि क्रिय[न्ते] यकारास्तदा क्रीर्तितो दण्डकश्चण्डवेगः ॥ १०८-८ ॥ अन्ते विभेदतः पूर्वस्य यथा—

पादे समस्तैस्तकारैः कृतः कामबाणाभिधानो भवेदण्डकोऽन्ते गयुग्मं यदि स्यात् ॥ १०८०९ ॥ यस्तु भकारगकारगणैः क्रियते सकलो निधने च गुरुद्वितयं स भुजंगविलासः ॥ १०८०१० ॥ लगाभ्यां निर्मितो यथा—

लगा निरन्तरा यदा निजेच्छया कृतास्तदा स दण्डको भवेदनङ्गरोखरः ॥ १०८-११ ॥ गलाम्यां यथा—

द्दयते निजेच्छया निरन्तरो गुरुर्लघुश्च यत्र सा भवेद्द्योकपुष्पमञ्जरी ॥ १०८-१२ ॥ इत्यादि । इति दण्डकप्रकरणम् । इति श्रीरघुसूरिविरचितायां वृत्तरत्नाकरछन्दःसूत्रतात्पर्यटीकायां समवृत्ताध्यायः समाप्तः ।

चतुर्थोऽध्यायः।

उद्देशसूत्रक्रमप्राप्तानां प्रथमाङ्घिसम इत्यादिना लक्षितानामर्धसमानां गणपरिपाट्या केषांचिल्रक्षणमन्द्या-धिकारिणां व्यवहारसौकर्याय नामानि निर्देष्टुं त्रिष्टुचादिजातीरधिकृत्याह—

विषमे० ॥ १ ॥

विषमे इति प्रथमचरणतृतीयचरणनिर्मिते । दले इत्यर्धे । चतुश्चरणमिदं वृत्तमतश्चरणद्वयस्य दलत्विमिति । एवं युजि इति समे दले इत्यपि व्याख्येयम् । उपचित्रमित्यस्याभिधानम् । एकजातिसमुत्पन्नमेतदर्धसमम् । एवमभेतनेष्वपि व्याख्येयम् ।

भत्रय० ॥ २ ॥

भिन्नजातिसमुत्पन्नं त्रिष्टुब्जगतीव्यक्तिभ्यां निष्पन्नं द्रुतमध्यानाम अर्धसमम् ।

स्याद्युग्मके ।। १२ ॥ (-गुरुर्यदा च वाङातीयम् ॥)

सुगमम् । तथा जगती-अतिजगतीव्यक्तिभ्यां वाङ्मतीमर्थसमं दर्शयन् त्रिष्टुमः परासां जातीनामुःकृत्यन्तानां मध्ये जातिद्वयस्य व्यक्तिद्वयमादाय अर्धसमानि स्वेच्छ्या ग्रथनीयानीति स्च्यति । तथा—

अयुजि नयुग० ॥ १० ॥

पुष्पिताया नाम जगत्यतिजगत्योरर्धसमम्।

सयुगात्सगुरू०॥३॥

पङ्क्तित्रष्टुभोर्विशेषव्यक्तिभ्यां वेगवती नामार्धसमं भवति । अस्या उपदेशः त्रिष्टुभोऽधस्तनीनाम् उक्तादिधकानां मध्ये जातिद्वयोत्पन्नं व्यक्तिद्वयमादाय स्वेन्छया अर्धसमान्युत्पाद्य दर्शयेदिति । अथ नामानि निर्देष्टुं जातिक्रमानियमेन यदृन्छया सुत्रयन्नाह ।

ओजे तपरौ०॥४॥ असमे०॥५॥

भद्रविराण् नाम । केतुमती नाम । पङ्कितिष्टुभोरर्धसमं(मे) ।

आख्यानिकी० ॥ ६॥

आख्यानिकीति नाम ।

जतौ० ॥ ७ ॥

विपरीताख्यानिकीति नाम । त्रिष्टुभोरर्धसमे । इह आख्यानिक्या लक्षणवैपरोत्येन विपरीताख्यानिक्युप-देशः स्थालीपुलाकन्यायेन उपिचत्रादीनामपि तथा दलवैपरीत्यदर्शने विपरीतपूर्व-स्रमिधानप्रकल्पनार्थः।

सयुगात्०॥८॥ अयुजि०॥९॥

हरिणप्छता नाम । अपरवक्त्रमिति नाम । त्रिष्ट्रव्जगत्योरर्घसमे ।

वदन्त्यपर० ॥ ११ ॥

इदं वैतालीयादारभ्य एतत्पद्यपर्यन्तं पूर्वप्रकारेणोक्तनानावृत्तत्वक्षणदर्शनम् एकस्यामेव व्यक्तौ नामसंकर-स्वीकारदर्शनार्थमिति स्थितम् । अथ व्याप्तिपदर्शनार्थे **छन्दःशेखरात्** ।

> जौँ रजावयुज्यसौ यवाद् मतीह । जकारतः परौ रजौ रगौ तु युग्मे ॥ ११०१ ॥ व्रजिं षट्पदावली भवेदयुग्मे । जौँ रजौ यदीययुग्मपादयोस्तु ॥ ११०२॥ ससजा गयुजोः प्रबोधिता । सभरल्गा यदि युग्मपादयोः ॥ ११०३ ॥ भौ तलगा विषमेऽङ्घिद्वितये । नजनसगा युजि विलसितलीला ॥ ११०४ ॥

वृत्तरत्नाकर-तात्पर्यटीका

स्यादियमोजयोर्दशयतौ भरनभनलगैः । यदि युजि मानिनी दृखतौ न्जभजनसगणैः ॥ ११५५ ॥

इति श्रीरघुस्रिस् नुत्रिविकमस्रिविरचितायां वृत्तरत्नाकरछन्दःस्त्रतात्पर्यटीकायाम् अर्धसमाध्यायश्चतुर्थः।

पञ्चमोऽध्यायः।

पूर्वेवत्क्रमोपदेशसिद्धानामुक्तादिषु भिन्नजातिसमुःपन्नानां केपांचिद् विषमवृत्तानां नामानि निर्देष्टु स्त्रयन्नाह्—

मुखपादो० ॥१॥

अस्याग्वयः । अभिहितं कथितम् । किम् । तत् । तदिति किम् । वृत्तम् । कथंभूतमभिहितम् । पद्चतुरूर्ध्वभिष्मम् । पद्चतुरूर्ध्वमित्यभिधा नाम यस्य तत्तथोक्तम् । कैरमिहितम् । अमलधीभिः अमलधिविद्वर्थियां ते तथोक्तास्तैरिति । कथंभूतां यत् । यस्य भवति । कः । मुखपादः प्रथमचरणः । कैर्भवति । वर्णैः । कितिभः । अप्टभिः । ततः परं किमित्यपेक्षायामाह । भवन्ति । के । पादाः इति अध्याहारः । कथंभूताः ये । परे इत्युक्तरे । कस्मात् । प्रथमचरणात् । कथंभूताः भवन्ति । वृद्धाः अभ्यिषकाः । कैः । वर्णेरित्यध्याहारः । कितिभः । मकरालवैरिति चतुर्भिः । ते च कथं वृद्धा भवन्ति । कमात् । पूर्वपूर्वापेक्षया उत्तरोक्तरम् । अयमर्थः । प्रथमाद् द्वितीयश्चतुर्भिर्वद्धो द्वितीयात् तृतीयः तृतीयाच्चत्र्थः । इत्यर्थः पुनः कथंभूतं यत् । संपन्नं सौन्दर्यं यस्य तदित्यंभूतम् । कैः । पादैरिति चरणेः । कथंभूतेः । विचित्रैः । परस्परं भिन्नसंख्यत्वं वैचित्र्यमेपाम् । कथमभिहितम् । सततम् । अथमर्थः । तननं ततं तनोतेर्भावे निष्ठा । प्रस्तार इत्यर्थः । सह तेन वर्तते सततं सप्रस्तारम् । अयमभिसिन्धः । एत्रह्यक्षणिनयतं सर्वगुरूचरणचतुष्टयं प्रस्तार्थं सर्वल्युव्यक्तयविकः समुद्रो दर्शनीय इति । अथमा अस्याष्टाक्षरार्दानां चरणानां स्थाने विनिमयविन्यासेन चतुर्विश्वतिज्ञात्युत्पादनप्रकारप्रदर्शनं प्रस्तारः ततमुच्यते । तेन सहितं सततमिति । ततः चतुःष्ट्कोत्पत्तये चतुष्किक्षयम् ।

तदुभयार्थसमुच्चयोऽत्र संमत इति निदर्शयन् पद्चतुरूर्ध्वसमुद्रोत्पन्नायाः कस्याश्चिद्व्यक्तेः पाद्यस्तारे प्रथमपट्कस्थां प्रथमव्यक्तिं स्वलक्षणेन निर्धार्य नाम्ना निर्देष्टुमाह ।

प्रथममुद्तित ॥ २ ॥

अस्यान्वयः । भवति स्थितिं लभते । कः । पीड इति पीड्शब्दः । किंविशिष्टः । किंति इति युक्तः । कः । प्रथमित्यादौ । केन किंतिः । आडा इत्याकारेण उपसर्गेण । एतावता वाक्येन प्रस्तुतप्रस्ताराविरुद्धपद्कद्भकेन आपीड इति नाम निगांदेतम् । कुत्रोत्पद्यत इति चेत् । [इह्]। इहेति कः । उदित्तृत्ते । उदित-मित्युक्तम् । तच तद् वृत्तं च उदितृतृत्तम् । वृत्तमिह् पद्चतुरूर्ध्विशिष्ट्व्यक्तिः तस्यामित्यर्थः । पुनः किंविशिष्टे उदितृतृत्ते । विरचित्तविषमचरणभाजि विरचिताश्च ते विषमचरणाश्च विषमविरचितचरणाः । संख्यापेश्वमिह चरणानां वैषम्यम् । तान्भजति [इति] विरचि—[from एतावता वाक्येन to विरचि is repeated by mistake on the next page by the photographer; so corresponding matter on p. 82 A of the ms. is lost] [प्रथमपट्के द्विती]य व्यक्ति स्वल्क्षणेन निःकृष्याभिधानं प्रति-पिषदियपुराह ।

प्रथमसितर० ॥ ३ ॥

अस्यान्वयः । भवति । का । सा इत्यापीडव्यक्तिः । किं भवति । किल्का भवति । किल्काभिधानं प्रतिपद्यते । किं यदि स्यात् । यदि अयति । किमधिकरणम् । प्रथममित्याद्यचरणस्थानम् । किं कर्तृ । लक्ष्म । किंविशिष्टम् । इतरचरणसमुत्थम् । इतरश्चासौ चरणश्च इतरचरणः । सान्निध्याद् इतरोऽत्र द्वितीयः । इतरचरणात् समुक्तिष्ठति इतरचरणसमुत्थम् । किंविशिष्टम् । चतुर्ये लक्ष्म । चतुरशब्दात्साधावर्थे यः तद्धितः । कुशलो योग्यो हितश्च साधुरिति चतुराणां योग्यमित्यर्थः । अपि संभावने । पुनः किं यदि भवति । यदि अयति । किम् । इतरदिति । प्रथमप्रतियोगि द्वितीयं स्थानम् । किं कर्तृ । लक्ष्म । किंविशिष्टम् । इतरावित् । प्रथमप्रतियोगी प्रथमचरणः । तेन जिनतिमितरजनितमिति । नन्वत्र द्वितीयप्रतियोगी तृतीयचरणः इति कस्मान्नोच्यते इति न वाच्यम् । लक्ष्यलक्षणसंयुतत्यत्त्रस्वरूपोपदेशिवरोधात् । पुनः किं यदि स्यात् । यदि अयति । किमधिकरणम् । चरणयुगलकम् । किंविशिष्टम् । अपरं द्वितीयार्धसंत्रन्धि । किं कर्तृ । लक्ष्म । किंविशिष्टम् । अविकृतम् । प्रकृतमापीडस्येवेत्यर्थः । ननु कर्मणोऽधिकरणत्वेन कथं टीकायामाक्षेप इति केचित् । सत्यम् । अधिकरणमेवात्र अयतिच्याप्यत्वेन कर्मतां प्राप्तिति निद्शियितुमित्यलम् । क किलक्रामिधान-मापद्यते । जगति लोके । यावान् लोकस्तत्रेति व्याप्यर्थं जगतीति प्रहणम् ।

अथ तत्रैव द्वितीयपट्के चतुर्थव्यक्ति स्वलक्षणेन निःकृष्य नाम्ना निर्देष्टुमाह—

द्विगुरुयुत्त०॥४॥

भवति । का । सा । सेति का । आपीडव्यक्तिः । किंविशिष्टा भवति । ठवळी इति लवळीसंशा । क इह पद्चतुरूर्ध्वजातो । किंविशिष्टा या । अस्या अनुभवति । कः । चरणः । किंविशिष्टः । तृतीयः । किमनुभवति । लक्ष्म । किं विशिष्टं लक्ष्म । मुख्वचरणरचितम् । आपीडस्य प्रथमचरणे रचितम् । पुनः किंविशिष्टा या । द्विगुरुयुत्तसकळचरणान्ता । द्वाभ्यां गुरुभ्यां युता द्विगुरुयुता । सकलाश्च ते चरणाश्च सकळचरणाः । तेषामन्ताः सकळचरणान्ताः । द्विगुरुयुताः सकळचरणान्ता यस्याः सा द्विगुरुयुत्तसकळचरणान्ता । पुनः किंविशिष्टा । यस्या यदि भवति । किम् । अपरमिति शेषस्य पादत्रयस्य लक्ष्म । किंविशिष्टम् । अखिलम् अखण्डितम् । तस्य किंदशे लक्ष्मेति चेत् । इति ईदृशमिति । यथात्र तिष्ठति तथेत्वर्थः ।

अथ तत्रैवोत्पन्नां प्रथमव्यक्ति स्वलक्षणेन निःकृप्य नाम्ना निर्देष्ट्रमाह—

प्रथममधि० ॥ ५ ॥

अस्यान्वयः । पूर्वस्मादिह् सेत्यनुपज्यते । भवति । का । सा इति आपीडव्यक्तिः । किं भवति । अमृतधारा भवित इति अमृतधाराष्ट्यां लभते । यदि किं स्यात् । यद्यिवसति । किं तत् । इह लक्ष्मेत्यनुपज्यते । किंविशिष्टं लक्ष्म । नुर्वे चतुर्णो पूरणमित्यर्थः । पूर्णेऽर्थं चतुरे यदीयो चलोपश्च । पुनः किंविशिष्टम् । प्रथममिति । प्रथमचरणस्यं तस्य लक्ष्म । कथं चतुर्थमिति चेत् तदुच्यते । आपीडस्थानां द्वितीयादीनां चरणानां प्रोक्तवर्ण-समाश्रिताः परस्परसंकीर्णाः तित्वः संख्याः त्रीणि लक्षणानि, प्रथमचरणस्था तु संख्या चतुर्थिति तस्याः नुर्यत्वम् । किमधिकरणमिवसति चरमचरणपदम् । चरमोऽन्तिमः स चासी चरणश्च चरमचरणः तस्य पदं स्थानं चरमचरणपदम् । यदि पुनः किं स्थात् । वयपरं त्रितयमिति शेषचरणत्रयमुपरितनं स्थात् । उपरितनः आपीडः । तेन सममुपरितनसमम् । किंविशिष्टम् । निखिलमिति समग्रम् । किंविशिष्टा अमृतधारा भवति । अवसितिरवसानं पर्यन्तः तत्र गुरुयुग्मं यस्याः सा अवसितिगुरुयुग्मा । पुनः किंविशिष्टा । लिलतपादा । लिलताः विलसिताः पादाः यस्याः सा लिलतपादा । क भवति । इहेति पदचतुरूध्वीजातौ । इति पदचतुरूध्वी-प्रकरणम् ।

अथ पङ्क्तयाश्चरणद्रयं, त्रिष्टुभः एकः, अतिजगत्याश्चतुर्थश्चरणः इत्थंभृतं विपमवृत्तं पूर्वलक्षणप्रसिद्धं नामनिर्देशाय प्रतिचरणगणपरिपाट्या अनुबद्नाह—

सजमादिमे०॥६॥

सश्च नश्च सजमिति समाहारः । तृतीयोऽङ्घिरिति न्यङ्धिरिति । वृत्तौ तीयप्रत्ययलोपः । एकस्मिन् एकतः इत्याद्यादित्वात् सप्तम्यर्थे तसः । देवदत्तोऽद्य ग्रामं गन्छेदितिवत् पठेदित्यत्र संभावने लिङ् । तदेवं वाक्यार्थः । एवंविधेन लक्षणेन उद्गताभिधानं विषमवृत्तं पठ्यते इति संभावयेदित्यर्थः । शेषं सगमम् ।

चरणत्रयं । । । [foll. 88, 89 are missing]

[विषमाक्षर०॥१२॥]

तत् सूरिभिः छन्दःपण्डितैः पिङ्गलनागजयदेवाद्यैः । किंविशिष्टं तत् । दश्धमंवत् । दश्धमं मादयो प(ग)णाः विद्यन्ते यिस्मस्तद्दश्धमंवत् । भूमि वतुः । बहुलं मादिभिद्शिभंगोः व्याप्तमित्वर्थः । पुनः किंविशिष्टम् । असमम् असिहतम् । कैः पादैः । किं तद्भवति । यस्य शास्त्रान्तरे चूर्णिकम्, उत्कलिका, वृत्तगन्धि वा त्रिविधं गद्यमिति प्रसिद्धिः । अथवा पादैरसममिति । इति पूर्वेण लक्षणप्रन्थेन मात्रावृत्तानां वर्णवृत्तानां स्वलक्षणेन पादाः व्याख्याताः । ये पादा व्याख्याताः तैरसिहतं यत् । तिकं भवतीति चेन्माला-वृत्तमित्वर्थः । मालावृत्तस्य किं लक्षणं भवतीत्वपेक्षया कैश्चिदुक्तमिह तत् प्रदर्यते । यथा—

पट्त्रिंशद्क्षरादृष्वंमेकैकाक्षरवर्धितैः । षष्टिं यावत् पृथक्पदिर्मालावृत्तमदण्डकम् ॥ १२-१ ॥

तैरेवोक्तम् अभिधानविशेषप्रतिपादनपरं सलक्ष्यलक्षणमिदमस्योदाहरणम् ।

मालावृत्तं जलधिमुनियति मभगुहकनसतनु विकसितकुषुमम् ॥ १२.२ ॥

इदं त्रिविधमिष वृत्तरत्नाकरमते गाथेत्युच्यते । अथवा पादैरसमिमिति प्राकृतादिषु भाषासु पञ्चपादं सप्तपादं नवपादं वा यत् किंचिदुच्यते मात्रावृत्तं तदस्य मते गाथेत्युच्यते । पुनः किंविशिष्टम् । विषमाक्षर-पादमिति । विषमािण विसदृशानि मात्रावृत्तारम्भकाणि वर्णवृत्तारम्भकणि अक्षराणि गणा येषु ते विषमाक्षराः। विषमािक्षराः पादाः यस्य तद् विषमािक्षरपादम् । यथाह किश्चिद् आर्थामिष्ठकृत्य—

रगणोऽथ तृतीयांशको गणविन्यासेन दृत्रयते यस्याः। लिलेतेति सा प्रकीर्तिता श्रुतिसुखदा च भुवि विबुधजनैः॥ १२०३॥

तथा गीतिमधिकृत्य--

स्याद्गीतिका रिपुच्छन्दः सप्तमको यदा र एव नान्यः । इति सैतवादिमुनिभिनिगदाते छन्द्रसि निपुणैर्नितान्तम् ॥ १२०४ ॥

इत्यादि । अथवा विषमाक्षरपाद्मिति विषमाणि परस्परिवसदृशसंख्यानि अक्षराणि वर्णा येपु ते विषमाक्षराः । विषमाक्षराः पादाः यस्य तिद्विषमाक्षरपादम् । किं तिदिति चेदुच्यते । विषमृत्वत्तिमिव चतुश्चरणं भिन्नजातिसमुत्पन्नं यद्वृत्त तद् गाथिति । एवं च सित पद्चतुरूर्ध्वीद्भतादिष्वतिप्रसङ्गः स्यादिति चेन्न । यच्छन्दो नोक्तमत्रेति विशेषणात् । अस्य च पश्चस्य लक्ष्यलक्षणसंयुतं विषमाक्षरपाद्मित्यत्र द्वौ व्याख्यापक्षौ—[foll. 93-96 are missing]

षष्ठोऽध्यायः ।

[पादे सर्व०॥१॥]

—वाक्येन एकाक्षरादिः पड्विंशत्यक्षरं यावदेकैकाक्षरवृद्धया यः पूर्वमुपिद्दृष्टः स इह पादो गृह्यते । किंविशिष्टे पादे । सर्वपुरो । सर्वपक्षरं गुरु यिसंम्तित् सर्वगुरुस्तिस्मिन् । पूर्वापेक्षया आद्यादुरोरधो लघोन्यांसे सत्यग्रेतनेभ्यो गुरुभ्योऽधः किं विद्ध्यादित्यत आह । कुर्यात् । किम् । होपं वर्णजातिमित्यध्याहारः । कथं कुर्यात् । यथोपिर यथोपिरिष्टाद्दित वर्णजातं तथेत्यर्थः । पूर्येदुरुभिः होपिमिति वाच्ये यथोपिरीत व्यास्यर्थम् । तेनाग्रे-तनामु व्यक्तिषु यदोपिरिष्टाल्लघ्रयो दृश्यन्ते तदा होपं लघुरूपमि कुर्यात् । गुर्वपेक्षया प्रथमादुरोरधो लघौ कृते सित यदि पश्चिमं शून्यं स्यात् तदा किं विद्ध्यादित्याह—

ऊने दद्यात्०॥२॥

द्यात् । कान् । गुरून् । गुरुश्च गुरवश्च एकशेपे ते गुरवस्तान् । अयमभिसन्धः । यदैकेन पादः पूर्यते तदैकं द्याद्यदा द्वाभ्यां तदा द्वी यदा बहुभिस्तदा बहूनिति । क द्यात् । ऊने इति पश्चिमे भागे शून्ये इत्यर्थः । अमुं विधि किं सऋत् कुर्यादित्याह—भूय इति पुनपुनः । अमुमसऋदिधि कियद्वधिकं कुर्यादित्यपेक्षायामाह—यावद्भवेत् । कः । पाद इति प्रस्तावाद् गृह्यते । किंविशिष्टः । सर्वलघुः । सर्विस्मिन् स्थाने लघुर्यस्मिन् स सर्वलघुरिति । शिष्याणां ज्ञानाक्षेशाय सामर्थ्यल्य्यस्यानुवादोऽयम् ।

प्रस्तारसूत्रविष्टतिः प्रसिद्धा प्रतिदर्शिता । सुखज्ञानाय मन्दानां मध्यायां प्रक्रियोच्यते ॥ २०१ ॥

मध्यां समुद्रेण प्रस्तारयन् पादे सर्व[गु]रावित्यादौ गुरुत्रयं तियंव (?) स्थापयेद्यथा—SSS; आद्याल्लघुं न्यस्य गुरोरध इत्याद्याद्गुरोरधस्ताल्लघुं न्यस्येत् । यथा—I; यथोपिर तथा रोषमिति वचनात् तस्मात्परस्ताद् गुरुद्वयं क्रियते । यथा—ISS; भूयः कुर्यादमुं विधिमिति वचनाद् द्वितीयव्यक्तेर्गुर्वपेक्षया आद्यगुरोरधस्तादाद्याः लघुं न्यस्य गुरोरधः इति लघुन्यासः । ततः परस्माद् यथोपिर तथा रोषमिति गुरुश्च । यथा—SSS; ISS;

IS; ऊने दद्याद्गुरूनिति वचनात् तस्मात्पश्चिमे गुहन्यासो तथा—SSS; SIS; SIS. अनया रीत्या यावत्सर्वेलवुर्भवेत् तावत् प्रस्तारः कार्यः इति ।

अस्योदाहतये मध्या समग्रा समुदाहता । मादीं खिकां छक्षयता सख्याद् व्यासेऽत्र स्रिणा ॥ २.२ ॥ एको गुरुर्लघुश्चेक इत्यधो [ऽधो] विनिक्षिपेत् । द्विगुणान् द्विगुणान् पूर्वपूर्वेश्यः परपङ्क्तिषु ॥ २.३ ॥ यस्मात् सर्वलघुस्तत्र पङ्क्तयो ऽक्षरसंख्यया । सुखावबोधसरणिः समुद्धरचनेऽत्र मा ॥ २.४ ॥ अत्र सर्वलघुस्थानं कल्पयेद्व्यक्तिसंख्यया । अस्य बाल्मलिरित्येके नामधेयं प्रचक्षते ॥ २.५ ॥

अस्योदाहरणं प्रतिष्ठायां यथा—SSSS, ISSS, SISS, IISS; SSIS; ISIS, SIIS, IIIS. SSSI, ISSI, SISI, IISI, SSII, ISII, SIII, IIII. इत्युक्तादीनां पाद्यस्तारः। अथ मात्रावृत्ताना-मेकेनैव न्यायेन समद्रप्रस्तारार्थं परिभाषाबळेन सांप्रदायिकः सर्वप्रस्तारपक्षे अस्य सत्रस्य यो व्याख्याप्रकारोऽस्ति सोऽपीहोन्मुद्यते । तेनायमन्वयः । दद्यात् । कान् । गुरून् । गुरुश्च गुरू च गुरवश्च ते एकहोषेण गुरवः तान गुरून इति सर्वगुरून गणान् । क । ऊने । आद्यालवं न्यस्य गुरोरधः इति कृते यत्पश्चाच्छन्यमवशिष्यते तद्निमिति । किं कृत्वा । न्यस्य संस्थाप्य । कम् । ल्युमिति परिभाषोक्तप्रकारेण लघुपलक्षितान् गणानित्यर्थः । क न्यस्य । अधः । करमात् । गरोः इति सर्वगरोर्गणात् । किंविशिष्टात् । आद्यात् । करिमन् स्थापिते सति । पादे । समग्रवृत्तं पादोक्ताविति परिभाषाश्रयणात् समग्रवृत्ते । अवमभिसन्धिः । यत् त्रिचरणं वृत्तं तत्र तस्मिन समद्रेण प्रस्तार्थमाणे सति चरणत्रयं प्रथमं स्थाप्यते । यचतुश्चरणवृत्तं तत्र चरणचतुष्ट्यं यत् पट्चरणं वृत्तं तत्र चरणपट्कम् । तरिमन्निति कथंभूते पादे । सर्वगुरौ । सर्वगुरव इति गुरुणा यत्सर्वगुरुस्तरिमन्निति । ततः किं विदःवादित्यत आहु । कुर्यात् । किम् । शेपं वृत्तम् । कथम् । यथा अस्ति । क । उपरि इत्युर्ध्वस्थिते प्रस्तारे । कथं कर्यात् । भूय इति पुनः पुनः । किम् । विधिम् । विधानं विधिः क्रियेत्यर्थः । किविशिष्टम् । अम्मिति आद्याल्लघं न्यस्येत्यारभ्य सर्वलघुचरणोपदेशावधिकम् । किं यावत् कुर्यात् । यावद्भवेत् । कः । पारः । किंविशिष्टः । सर्वलवः स्वलक्षणाविरोधिना सर्वलघवो यस्मिन्स इत्थंभूतः । प्रस्तारोऽयमित्यादि सगमम् । इह छन्दोविचितिवेदिग्रहणं वृत्तद्रयप्रस्तारप्रतिपादनपरःवायास्येति रिथतम् । यथात्र प्रस्तारो व्याख्यातः तथा आर्याप्रकरणादाबुदाहृतम् । अथ प्रस्तारादिसूत्रपरिभापा ।

> चतुर्मात्रः पञ्चभेदो मात्रावृत्ते गणः स्मृतः । द्विमात्रो द्विविकल्पोऽयं वैतालीयादिजातिषु ॥ २.६ ॥ एकमात्रो द्विविकल्पो वर्णवृत्ते त्वदण्डके । वक्त्रादिषु गलावादौ ततो मादिः सनौ विना ॥ २.७ ॥ प्रस्तारनप्टोह्पिषु व्यवहारप्रसिद्धये । समप्रवृत्तं पादोक्ती स्वलक्षणनियन्त्रितम् ॥ २.८ ॥ गुरुप्राप्तां सर्वगुरुन्यंस्यते स्वो विना गणाः । पूर्वकल्पनाः सर्वेऽघोऽघः स्थाप्य यथाक्रमम् । मूलसूत्राविरोचेन सर्वजात्यव्यिसिद्धये ॥ २.९ ॥

इति प्रस्तारः । यदानेन पादप्रस्तारपक्षे समुद्रे प्रस्तारिते सित कचित् कितपयथी व्यक्तिर्विनष्टा स्वात् समुद्रमनपेक्ष्यैव केवला कथं ज्ञायते इत्यपेक्षायां नष्टव्यक्तिज्ञानोपायप्रदर्शकं सृत्रमाह ।

नप्रस्य यो० ॥ ३ ॥

अस्यान्वयः । भवेत् भवितुमईति । कः । तः इति लघुः । कस्य । तस्य । तस्येति कस्य । योऽस्ति । कः । अङ्कः नष्टस्य । किस्मन् सित । अर्षे इति छेदे । क । राशौ । कथंभूते । द्वितीयात् ससम्यन्ताद् अर्धप्रहणादेवमन्वयः । द्वयोर्मध्ये एकमधं समुङ्य एकस्मिन्नेवार्षे भ्यः कुर्यादमुं विधिमिति वचनादेवं पुनः पुनः कुर्वन् व्यक्तिरोषं पूर्येत् । अथ विषमश्चेद्राशिः स्यात् तदा विषमे चैकमाधायेत्येकं श्रुवकरूपं प्रक्षिप्यार्थे सिति गुरुः क्रियते । क्रिया इत्येककर्तृकत्वप्रतिपादनाद् व्याह्रियते । अत्रापि पूर्ववत् शेपं व्याख्येयमिति । तेन वाक्यार्धद्रयेन कि भवेत् । तद्भवेत् । तदिति किम् । नष्टव्यक्तिस्वरूपमित्यर्थः ।

न्याख्येयं नष्टसूत्रस्य न्याख्यान्तरिचकीर्पुणा । कृत्यानुकृत्ये पूर्वेषामन्तरं वा निवेदितुम् ॥ ३०१ ॥

अथेदमेव सूत्रं विशेषलाभायान्यथा व्याख्यायते। यथा। भवेत भवितुमहिति। कः। ल इति लघः। कस्य। तस्य। तस्येति कस्य। योऽस्ति। कः। अङ्क इति राशिः। कस्य। नष्टस्य। कस्मिन् सति। अर्धे इति छेदे सति। के यदि भवतः अर्धे इति शकले । किविशिष्टे । समे इति तुल्यपरिमाणे । चशब्दः शकलवचनस्वार्धशब्दस्य सप्तम्यन्तस्य अग्रेतनवर्णानयनाय समुचयार्थः । तत एवमन्वयः । कि विदध्यात् । कुर्यात् । कम् । अम् विधिम् । कथम् । भूयः । क । अर्धे इत्येकिस्मिन् शकले । यावत्संभवस्तावद्विधिरिति न्यायाद् आव्यक्तिस्वरूपलाभात् । अथ द्वितीयार्धे व्याख्यायते । भवेत् । कः । गुरुः । कश्मिन् सति । अर्धे । किंविशिष्टे । विषमे इति परस्परं विसदृशे । न्युनाधिकपरिमाणे इत्यर्थः । कस्य । तस्य । तस्येति कस्य । यो भवेत् । कः । अङ्कः । कस्य । नष्टस्य । अत्र पूर्वसूत्राद्ने इत्यनुषज्यते । ततोऽयमन्वयः । ततः किंविशिष्टे । ऊने । किं कृत्वा । आधाय । कं कम् । एकमिति । रोपपदव्यास्यानं पूर्ववत् । अथैकमात्रे अर्धवर्जिते राशौ स्थिते सत्यानयनं क्रियते तावद् व्यक्तिरोषं कथं विद्यादिति चेदुच्यते । तमेकमपहाय यथोपरि तथा शेषमित्यधिकाराद् व्यक्तिशेषं सर्वगुरुव्यक्तिवत् पूरयेदिति स्थितम् । अस्योदाहरणार्थमालापो विरन्यते । यथा उक्तादिषु अष्टम्यां जाती समुद्रप्रस्तारे अष्टीत्तरशततमी व्यक्तिः कथंचित्रष्टा सा एकाकिन्येव आनयनप्रकारेण प्रस्तार्य दर्श्यतामित्यक्ते नष्टस्य यो भवेदङ्क इति वाक्या-दृष्टोत्तरराताङ्को गृह्यते । तस्यार्धे समे च लः इति वचनादृध्यमाने अध्मिन् राशौ चतुःपञ्चाशदृद्वयी जाता । छेग्रो राशिः समः इति एको लघुर्लन्धः । स भूमौ स्थाप्यते । स्वीकृतमर्थे चतुःपञ्चाशद्राशिः पुनर्स्थर्ते । राशेः समत्यात पुनर्लबुर्लभ्यते । स्वीकृतमर्धे सप्तविंशतिः । तस्या विपमत्वात् एकमाधाय अप्टाविंशतिं कृत्वा अर्धे कृते सति गुरुर्लभ्यते । इत्याद्यपक्षे । अत्रव द्वितीयव्याख्यापक्षे विपमेऽर्धे जाते इति गुरुर्लभ्यते । ऊनेऽर्धे एकमाधाय चतुर्दश क्रियन्ते इति विशेषः। एवमन्यत्र। ततः संगृहीतेऽधं चतुर्दशानामधीकियते। समत्वाछवर्रुभयते। संग्रहीतेऽर्धे चर्तुदशानामर्धे क्रियते। समत्वालवर्लभ्यते। संग्रहीतेऽर्धे सप्तानां विषमत्वादेकं प्रक्षिप्याष्टी क्रियन्ते । तद्धें गुर्रूकभ्यते । द्वितीयपक्षेऽत्र पूर्ववत् । द्वितीयपक्षे एकस्य छेदरहितत्वाद्यथोपरि तथा रोपमिति । ततः संगृहीतेऽर्धे चतुर्णाम्धे कृते समत्वाह्यप्रक्रियते । पुनः संगृहीतेऽर्धे द्वयोः समत्वाद्धें लघुर्लभ्यते । एकस्य विपमत्वाद्गरुरिति । द्वितीयपक्षे एकस्य छेट्राहितत्वाद्यथोपरि तथा रोपमिति गुरुरिति । तदित्थं व्यक्तिरूपं लब्धम् । IISISIIS; एवमन्यत्रापि कुर्यात् इति पादप्रस्तारे नप्टब्यक्तयानयनप्रत्ययः ।

अथ मात्रावृत्तानां वर्णवृत्तानां वा समुद्रे एकेनैव न्यायेन नप्टव्यक्तिज्ञानाय संप्रदायादस्य स्त्रस्य व्याख्या-विशेष उच्यते । नष्टस्येत्यादि । इह द्वितीये व्याख्याने छेदवचनमर्धप्रहणं जातिस्थानोचितविकल्पसंख्याया

वृत्तरत्नाकर-तात्पर्यटीका

भागहारस्योपलक्षणम् । विषमग्रहणं तथा भागहरणे कृते राशिशेषे सित लब्धस्योपलक्षणम् । अथास्यान्वयः । भवेत् । कः । लः इति जातिस्थानोचितप्रस्तारे लघूपलक्षितोऽन्त्यो गणः । किस्मिन् सित । अर्धे इति विकल्पसंख्याया भागहरणे । किविशिष्टे । समे इति निरवशेषे । कः भवेत् । कः । अङ्क इति राशिः । कस्य । नष्टस्य । अथ द्वितीयार्थो व्याख्यायते । भवेत् । कः । गुरुः इति गुरूपलक्षितः गुरुर्गणः । किस्मिन् सित । पृववदर्थे सित । किविशिष्टे । विषमे इति सशेषे । यदा सशेषः छेदे दृष्टस्तदा लब्धे एकमाधाय पुनः पुनर्गुरु-लाभव्यवहारः प्रवर्तयितव्यः आव्यक्तिस्वरूपलाभात् ।

नष्टाङ्कस्याधिवच्छेदे वर्णवृत्तेषु युक्तितः ।
विकल्पोर्हणस्याय(?)मार्यादावुपलक्षकः ॥ ३-२ ॥
तन्नैकमधमात्रं यद् भूयो भूयोऽधंक्लसये ।
हते विकल्पेर्लब्धं तद् विपमे न्यूनमेव तत् ॥ ३-३ ॥
एकोऽधिकं दले रोषं तुलाभावोऽत्र संख्यया ।
शेषस्य तुल्यं गदति गणमेवं मितमम ॥ ३-४ ॥
वृत्तद्वयीमुपक्षम्य कथमेकत्र दर्शयेत् ।
नष्टानयनिज्ञानमिति तत्साध्यमुच्यते ॥ ३-५ ॥
विकल्पहृतनष्टाङ्के संग्रुढ्रेऽन्त्यगणो भवेत् ।
लब्धेऽप्येवं पुनः कुर्याच्छेपे तावतिथस्तदा ॥ ३-६ ॥
सैकं लब्धं विधायैवं भूयोभूयः प्रयोजयेत् ।
भा लाभान्नष्टरूपस्य कृत्सनस्याखिलजातिषु ॥ ३-० ॥
अधिके भागहारेऽस्मान्मूलराशिस्तु रोषवत् ।
लब्धाभावे व्यक्तिरोषमाद्यव्यक्तिसमं सृजेत् ॥ ३-८ ॥

अयोभयरूपवृत्तस्यापिनानेन यथा मात्रावृत्तानामपि नष्टरूपकेवलव्यक्तिविज्ञानार्थमालापः आर्थासमद्भप्रस्तारे विंशत्युत्तरसहस्रतमी पथ्याव्यक्तिनष्टा । सा समुद्रमन्पेक्ष्यैव कथं व्यक्तीभवतीत्युक्ते तन्निदर्शनाय पूर्वविद्विंशत्युक्तरसहस्राङ्को भूमौ स्थाप्यते । तत्र 'विकल्पहृतनष्टाङ्के' इति वचनात् प्रथमगणस्थानविकल्पैश्चतुर्भिर्मक्तं नष्टराशौ लब्धं भूमौ संस्थाप्यते, अग्रेसरगणानयिनायो । यथा । २५५ । निःशेषो राशिर्गतः इति 'संशुद्धिन्त्यगणो भवेत् ' इति वचनाच विकल्पप्रस्तारिक्यतोऽन्त्यगणो नलघुर्लन्धः । सः व्यक्तिस्वरूपनिदर्शनाय भूमौ स्थाप्यते । यथा IIII; 'लब्धेप्येवं पुनः कुर्यात् ' इति वचनाद् द्वितीयगणविकल्पैः पञ्चिमिर्छब्धं मज्यते । ततो यह्नब्धं तत् स्थाप्यते । यथा ५१ ॥ तत्रापि निःशेषगतत्वाद् अन्त्यो नलघुरेव लब्धः। पूर्ववद्धरायां निधीयते। यथा IIII; 'लब्धेऽप्येवं पुनः कुर्यात् ' इति तृतीयगणविकल्पै-श्चतुर्भिः पूर्ववछन्धे भक्ते सति पुनरप्रेतनगणोत्पादनाय लब्धं क्षितौ निक्षित्यते । यथा १२ ॥ भागहरणे च सत्यत्र त्रितयमवशिष्टं तेन 'शेषे तावतिथो गणः' इति वचनाद्विपमगणस्थानप्रस्तारोचिततृतीयः आदिगुरुः पूर्वविद्लानिलीनः क्रियते । यथा SII; सरोषत्वान्मूलरारोः तदा 'सैकं लब्धं विधाय' इति वचनाद् द्वाद्शे एकस्य ध्रुवकरूपस्य निक्षेपात् त्रयोदश । एवं 'सूयोसूयः प्रयोजयेत्' इति वचनाचतुर्थगणविकल्पैः पञ्चभिर्विभज्यते । लब्धौ द्यौ । पूर्ववत् स्थाप्येते यथा २ ॥ रोपास्त्रय इति पूर्वसमस्थानतृतीयगणः स्थिरायां स्थितिं लभते । यथा ISI; सरोपत्वात् पूर्ववछन्धं सैकं क्रियते यथा ३॥ ततोऽग्रेतनगणानयनाय पञ्चमगणविकल्पैश्रतुर्मिर्लञ्घस्य भागहारे कल्पयितव्ये इह लन्धाद्वागहारोऽधिकः इति 'अधिके भागहारे स्यान्मूलराशिस्तु शेषवत् ' इत्यतिदेशात् स्वस्थानोचिततृतीयगणं वसुमतीमासाद्यति यथा SII; ततो

लञ्धस्याभावाद्गणानयनाभाव इत्यप्ने कथं व्यक्तिं पूरयेदित्याकाङ्क्षायामाह 'लञ्धाभावे व्यक्तिशेषमाद्यव्यक्तिसमं मृजेत्' इति वचनाच्छेपं सर्वगुरुव्यक्तिवत् पूरयेदिति स्थितम् । तदेवं लञ्धरूपं IIII, IIII, SII, ISI, SII, SS, SS, S. इति पूर्वार्धो द्वितीयार्धं तु सर्वगुर्वेवेति न विशेषः । एवं वैतालीयवत् मात्रासमकोक्तादिसमुद्रेषु नष्टन्यक्त्यानयनार्थे छन्दोविचितिवेदिना व्यवहर्तव्यमिति स्थितम् । इति सर्वव्यापी नष्टन्यक्त्यानयनप्रत्ययः ।

अथ पादप्रस्तारपक्षे उक्तदिसंविधन्यामभीष्टायां व्यक्ती दृष्टायां स्वजातिसमुद्रे कतिथी व्यक्तिरियिमिति पृष्टे कथं नाम एतावितिथीमिति जानीयादित्यपेक्षायामाह ।

उद्दिष्टं द्विगुणा० ॥ ४ ॥

> स लघ्वंशाद् विधेः कल्पैः स्वाधःस्थांशविशोधितैः। पाश्चात्यानेवमभ्यस्येत् प्रतिलोमं मुहुर्मुहुः॥ ४०१॥ प्रत्येकं साधयेदाद्यमभिन्याप्यांशसंचयम्। जातिद्वयेऽप्यन्त्यराशिः स्यादुद्दिष्टं न संशयः॥ ४०२॥

अत्रालापो यथा आर्यासमुद्रप्रस्तारे—IIII, IIII, ISI, SII, ISI, SS, S इति पूर्वार्धम् । SS, SS, SS, SS, I, SS, S, इत्युत्तरार्धम् । इयं कितथी व्यक्तिरिति पृष्टे 'सलव्वंशाद्विधेः' इति वचनात् समुद्रप्रस्तारे स्त्रेण योऽस्त्यत्रादिगुरुः पञ्चमो गणस्तस्मादारभ्य विकल्पैः 'स्वाधःस्थांश-विशोधितैः पाश्चात्यानेवमभ्यस्येत्' इति वचनात् तिस्मन् सल्यो पञ्चमे गणे ये सन्ति विकल्पाश्चत्यारस्ते स्वाधःस्थांशविशोधिताः क्रियन्ते । ततस्तत्र त्रयोऽविशिष्टा भवन्ति तैः पाश्चात्यगणस्थिताः पञ्च विकल्पा गुण्यन्ते । तत्र लन्धं यथा १५ । एवं 'प्रतिलोमं मुहुर्मुहुः प्रत्येकं साधयेदाद्यमिनव्याप्यांशसंच्यं' इति वचनात् ते पञ्चर्श जगणस्य स्वाधःस्तनांशाभ्यां शोधितास्त्रयोदशावशिष्यन्ते । तैस्त्रयोदशिमः पाश्चात्यादि-गुरुगणस्थिताश्चत्वारो गुण्यन्ते । तत्र जाते यथा ५२ । तेषु स्वाधस्तनांशविशोधितेषु जाते यथा ५१ । तैः

वृत्तरत्नाकर-तात्पर्यटीका

पाश्चात्यगणिस्थताः पञ्च गुण्यन्ते । तत्र लब्धं यथा २५५ । तत्राधस्तनगणा न सन्तिति विशोधनमि नास्तिति तैरादिगणिस्थताः पञ्च (चत्वारः) गुण्यन्ते । तत्र लब्धं यथा १०२० । तत्रापि विशोधनाभावः 'जातिद्वयेऽप्यन्त्यराशिः स्यादुिह्ष्यमसंशयम्' इति वचनाद् विंशत्युत्तरसहस्रतमीयं व्यक्तिरिति वृयात् । अथ वक्ताम्बुधौ— I SSI ISS I प्रथमपादः । ISII ISSS इति द्वितीयः । शेपं द्वयं यथालक्षणं सर्वगुरु । इयं व्यक्तिः कितिथीत्युक्ते प्रस्तारलब्धो द्वितीयपादस्थः सलघुरिह् भगणः, तस्मादारम्य प्रतिलोमं विधिः क्रियते । भगणादधो गणो नास्तिति तत्रस्थाः पट् गुद्धा एव । तैः पाश्चात्यौ द्वौ गुण्येते १२ । इहाप्यधःस्थगणो नास्तिति विशोधनाभावः । तैः पाश्चात्यौ द्वौ गुण्येते जाताः २४ । स्वाधस्तनग्रद्धाः २३ । पुनरेकेन गुणितं तदेवेति न विशेषः । तैस्रयोविंशत्या षड् गुण्यन्ते जाताः १३८ । अधो विशुद्धाः १३६ । तैर्ह्वौ गुण्येते जाताः २७२ । इहाधोविशुद्धिनास्ति तेन द्वासतत्युत्तरशतद्वयपूरणी वक्त्राम्बुधौ व्यक्तिरियमुद्दिष्टित वृयात् । एवमन्यत्रापि । इति सर्वव्याम्युद्दिष्टव्यक्तयानयनप्रत्ययः ।

उक्तादीनां जातीनां मध्ये ×्रष्टाया जातेः समुद्रप्रस्तारे यथासंभवमेकलघुद्विलघुत्रिलघुप्रभृतयः प्रत्येकं संकलिता न्यक्तयः कथं ज्ञायन्ते इत्यपेक्षायामाह—

वर्णान् वृत्त० ॥ ५ ॥ उपान्ततो० ॥ ६ ॥

अस्यान्वयः । निक्षिपेत् निद्ध्यात् । एतानिति कान् । वर्णान् । प्रतिवर्गे स्थितमेकत्विमह वर्णशब्दे-नोच्यते । मञ्जाः क्रोशन्तीतिवत् । किंविशिष्टान् वर्णान् । वृत्तमवान् । वृत्ते सन्ति वृत्तभवा वर्णाः । वृत्तिमह वर्णवृत्तेषु प्रस्तारसूत्रोक्तपादो गृह्यते । पुनः किविशिष्टान् वर्णान् । सैकान् । ध्रवकरूपेणैकेन संयुक्तान् । पुनः किंविशिष्टान् । स्थितान् । कथम् । औत्तर्याधर्यतः । उत्तरे च अधरे उत्तराधरवर्णाः । उत्तराधराणां भावः औत्तराधर्यम् । तेन औत्तराधर्येण औत्तराधर्यतः । सार्वविभक्तिकस्तसिः । कथं निश्चिपेत् । एकादिक्रमशः । एक आदिर्पेपां ते एकादयः एको द्वौ त्रय इत्यादयः । एक।दीनां क्रमः एकादिक्रमः । तेन एकादिक्रमेण एकादिक्रमशः। एकार्थाद् वीप्सायां शस्तद्भितः । क निक्षिपेत् । उपर्युपरि इति उपरिस्थिते उपरिस्थिते राशौ । ततः कि कुर्यात् । निवर्तेत व्यावर्तेत । कः कर्तर्यर्थः । करमात् । उपान्ततः अन्तस्य समीपम् उपान्तं तस्मादुपान्ततः । पञ्चम्यास्तिसः । अन्त्याङ्कसमीपादित्यर्थः । कि कुर्वन् । त्यजन् । कम् । एकैकम् । क । ऊर्ध्वतः पूर्वेतेतः(१) । का भवेत् । एकद्वयादिलविक्रया भवेत् । एको द्वौ आदौ येषां ते एकद्वयादयः । ते च ते लघवश्च एकद्वयादिलघवः । इह लघुशब्देन लघुपलक्षिता व्यक्तयो गृह्यन्ते । तेषां क्रिया समद्रादयः एकद्रचादिलघुक्रिया। एकलघु-द्विलघु-त्रिल्घप्रभृतयः समुदाया जायन्ते यस्मिस्तलघुक्रिया नाम यन्त्रमित्यर्थः । अनेन एकलघुप्रभृतिसमुदायज्ञाने जाते सति प्रत्ययार्थे समद्भपस्तारे कस्माद्वयक्तिविशेषाचरणैकलयु द्विलयुप्रभृतीनां गणनं कर्तव्यमित्यपेक्षायामाह— आद्यादिति सर्वगरोर्व्यक्तिविशेषादधोऽधः इत्यर्थः । नन्वनेन यन्त्रेण लघुकियाज्ञाने जाते पद्मगुरुकियाज्ञानं कथं स्यादित्यपेक्षायामाह--एवमनेन यन्त्रेण गुरारिप क्रियेत्यध्याहारः । एवमेकगुरुप्रभृति समुदायज्ञाने सति समद्रे करमादारभ्य गणनं कर्तव्यिमत्यपेक्षायां संप्रदायादन्त्यादिति वाच्यम् । कथं चात्र गणनं कुर्यादित्यत्राह—उपरीति उपरिष्टादित्यर्थः ।

यावद्गणेन गणितिसिद्धावादे निरूपणम् । यत्राश्रितो ध्वजोऽप्यस्ति तत्रेदमुपयुज्यते ॥ ६.१ ॥

इति सूचयित सूचनार्थमिति स्थितम् । अस्योदाहरगार्थमालापः । गायत्रीपादप्रस्तारे एकलघु-द्विलघुप्रभृतयो व्यक्तिसमुदायाः प्रत्येकं कतिप्रमाणाः सर्वे कित सन्तीत्युक्ते 'वर्णान् वृत्तभवान् सैकानोत्तराधर्यतः स्थितान् ' इति सूत्रादेकाङ्काः सप्त औत्तराधर्येण स्थापयेद्यथा—११११११। 'एकादिक्रमराश्चेतानुपर्युपरि निक्षिपेत् इति ASJ 9

बचनादायमेकाङ्कं संप्रदायाद्विलुप्तमेवोपरिस्थिते एकाङ्के निक्षिपेत् ततस्तत्र ह्रौ कुर्यात् । तद्वत् तौ द्वावुपरिष्टान्निक्षिपेत् ततस्तत्र त्रीन् कुर्यात् । तद्वत् त्रीनुपरि निक्षिपेत् तत्र चतुरः कुर्यात् तद्वत् तानुपरि क्षिपेत् तद्वत्यञ्च कुर्यात्। तद्वत् तानुपरि निक्षिपेत्। तद्वत् पर् कुर्यात् तत 'उपान्ततो निवर्तेत त्यजन्नेकैकमृध्वतः' इति वचनाद् अन्त्यादेकाङ्काद्धस्तात् त्यागज्ञानाय तिर्वग् रेपां द्यात् । तत्र जातं स्वरूपं यथा १२३४५६१। भृयः कुर्यादम् विधिमिति बचनात् पुनः पुनरेवं कुर्यात् । तत्र द्वितीयावृत्तौ जातं रूपं यथा १३६१०१५६१। तृतीयावृत्तौ जातं रूपं यथा १४१०२०१५६१। तृतीयावृत्तौ जातं रूपं यथा १४१०२०१५६१। पञ्चमावृत्तौ जातं रूपं यथा १५१५२०१५६१। पञ्चमावृत्तौ जातं रूपं यथा १६१५२०१५६१। पञ्चमावृत्तौ जातं रूपं यथा १६१५२०१५६१। अनेनैव कथयेद् गायत्रीप्रस्तारे आद्यात्सर्वगुरोरधस्तात् पञ्चकष्ठिया व्यक्तिया यथास्थानं जायन्ते। पञ्चद्द्य द्विल्यवः विद्यतिस्त्रिल्यवः पञ्चद्र चतुर्लप्रवः पट् पञ्चल्यवः एकः षळ्लघुरिति । गुरुकियाप्रश्लेष्यन्त्याद् व्यक्तिविशेषादारम्योध्वं षडेकगुरव इत्यादि पूर्ववद्र्पात्। अथ लघुकियाज्ञाने लघुपायो मेर्स्दर्श्वते।

सप्तविंशतिकोष्ठादिमेकहान्योत्तरोत्तरम् । कोष्ठ × गीमदा मेरं द्विकोष्ठान्तं समालिखेत् ॥ ६.२ ॥ एकैकं प्रान्तकोष्ठेषु द्वात्सर्वासु वीथिषु । ऊर्ध्वकोष्टद्वयाङ्केन पूर्येत्तद्रधस्तनम् ॥ ६.३ ॥ कपाटसन्धियोगेन बिभृयाद्रप्रपङ्क्तिजान् । एवं कृते त्वनायासात् प्रतिपङ्क्ति लघुक्रिया ॥ ६.४ ॥ अधोऽधो मस्तकादुक्ताप्रभृतीनां विनिदिंशेत् । क्रियाज्ञानाय शिष्याणां गायत्र्यादिर्निदृश्यते ॥ ६.५ ॥

इति मेरप्रस्तारसूत्रम् । मेर्र्यथा--

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१ ६	१५	२० १५	[६	१

भभीष्टायां जातावेकलयुव्यक्तीनां प्रतिव्यक्तिस्थानज्ञानाय ध्वजाख्यं प्रस्तारयन्त्रमुच्यते ।

लघुक्रियाङ्कामितकोष्टकराजिसिखं (?)
ध्वजं यत्वलु तिर्यगमुप्य मृले। (?)
उिहष्टतदृद्धिगुणितैः प्रतिपूर्य कोष्ठानङ्कैः पृथक् पृथगथादिममिश्रितैस्तैः ॥ ६-६ ॥ उपजाितः।
द्वयङ्काद्रयोव्धिमृहि कोष्टकपङ्क्तिमेभिराज्येण तैः शबलितैस्तद्धस्तनस्थाम्।
तस्मात् पराद्धिकतां यदि याित भिश्रं
श्रोष्ट्रस्य (?) तत्परतरेण विमिश्रयेत् तत ॥ ६-७ ॥

वृत्तरत्नाकर-तात्पर्यटीका

भापङ्क्तिपर्यवसितैरिति सर्वपङ्की-रापूर्य लोष्ठयुगवालतयोपदेशात् । विद्यैतमेकलघुकादिपदं तदङ्कै— ×गात्रजध्वजनिदर्शनमत्र पश्य ॥ ६.८॥

इत्युद्दिपृलवुश्रितो ध्वजप्रस्तारः । अथ वर्णवृत्तेष्वभीष्टजातेः प्रस्तारन्यक्तिसंख्याज्ञानायोपायं सूचयन्नाह ।

लघुक्रिया०॥

इत्येकः उपायः ।

उद्दिष्टा० ॥७॥

इति संख्यानयने पाठप्रस्तारपक्षे द्वितीयः उपायः । सूत्रद्वयं सुगमम् । इह संख्यानयने प्रकारद्वयदर्शनिमतः पूर्वेषां प्रत्ययानां स्थालीपुलाकन्यायेन प्रायः प्रकारद्वयमस्तीति ज्ञापनार्थम् । तथैवास्माभिः पूर्वग्रन्थे व्याख्यातिमिति स्थितम् । अथ संख्यानयने सर्वन्यापी प्रकारः पद्येन प्रतिपाद्यते । यथा—

> उत्तरोत्तरघातेन चरमांशगतोचितिः। विकल्पानां जातिसंख्या जायते सर्वजातिषु ॥ ७-९ ॥

अनेनैव प्रकारेण मात्रावृत्तेषु व्यक्तिसंख्यानयनमुपद्रितमेवेति इह नोदाह्रियते । अभीष्टा जातिः प्रस्तार्यमाणा कियदायामे कियद्विस्तारे च क्षेत्रे संमातीत्यपेक्षायां तज्ज्ञानाय सूत्रयन्नाह ।

संख्यैव०॥८॥

अवमर्थः । जातेर्या व्यक्तिसंख्या संभवति सा द्विगुणीकृता सती एकहीना यावती भवति तावदङ्गुलाया-मविति क्षेत्रे ऊर्ष्विस्थिता संमाति । वर्णसंख्या द्विगुणा एकन्यूना सती यावदवशिष्यते तावदङ्गुलिविस्तारे क्षेत्रे तिर्यक् संमातीति विज्ञानीयात् । वद्यङ्गुलायामविस्ताराः पृथक् पृथग् गुरवो लघवश्च घ्रियन्ते तिर्यगृष्वे वान्तरमङ्गुलप्रमाणं च कुर्यादिति अध्वज्ञानोपायः ।

> इति पद्प्रत्ययी न्[न] मस्माभिरुपवर्णिता । संप्रदायमुपाश्रित्य विद्वद्भिः सा विचार्यताम् ॥ ८०१ ॥

प्रस्तारो नष्टमुद्दिष्टमित्यादिना उपसंहारः ।

वंशेऽभूत्०॥९॥

सुगमम् ॥

जय जय गणनाथ प्रार्थये त्वामजसं हर दुरितसमूहं छन्दसां ज्ञानदानात् । त्यमलपदपद्मप्रान्तभृत्कान्तियारि-व्यतिकरपरिधौतो मोहपङ्कोऽप्यपेयात् ॥ ९.१ ॥ जितेन्द्रनीलद्युति तन्ममास्तु, मुखं मुरारेः ग्रुभदं सदैव । रमामुखाम्भोरुह्विम्बितं यद्, सृङ्गभ्रमं संततमातनोति ॥ ९.२ ॥ **आसीदिहाङ्गिरसवंशसरोजसूर्यः** श्रीसात्यसुप्रियसुनिः प्रथितः पृथिव्याम् । गौडेपु वृद्धवलभीस्थिररम्यमूर्तिः ब्रह्मान्वयोऽर्क इव कस्य न सुप्रसिद्धः ॥ ९ ३ ॥ वाक् स्वस्त्यध्ययने श्रुतिः श्रुतिसदाध्याने श्रयत्यच्युतं चेतश्रारुविचारमध्वरविधौ बुद्धिः शरीरं तपः। यस्मिन् जातवतां स्वतस्तद्ददिताः सन्त्यागता दक्षिणां गोदास्नानविधि(धेः) क यात्यधुरथोिते वासमेलापुरे ॥ ९ ४ ॥ तद्वंशभूषणमणिनेनु नायकोऽभूत् तस्माद् गदाधरसुधीः सुधियामधीकः। तस्याङ्गजो [हरिरिव] द्विजवर्यनन्धः भाई प्रति(श्रीश्रीपति)[र्निगम]मानसराजहंसः॥ ९.५॥ तस्य सुनुः सदाचारसंपन्नः सजनाप्रणीः । सारङ्गस्रिनामाभूनमाध्यन्दिनविभूषणम् ॥ ९ ६॥ सस्ताहित्यमहोद्धिर्निरवधिर्वेदग्ध्यदुग्धाम्बुधे(धि)ः श्रीमाध्यन्दिनधर्मदुर्धरधुरोद्धारैकधुर्यस्ततः । सनावष्णपदाम्बजार्चनरतः श्रीराघवार्योऽभवत् सूरि[र्भृरि] यशाः प्रशान्तबल[व]त्पुत्रैषणादित्रयः ॥ ९.७ ॥ अस्त्येतस्य जगत्प्रशस्यचरितः कारुण्यप्रण्याणयः तारुण्यादिमदान् गदानिव सदा यो मन्यते दुःखदान् । सौजन्यावसतिस्त्रिविक्रम इति प्रज्ञादिजन्मक्षिति-र्बह्मण्येकमतिः कृतातिथिजनप्रीतिश्चिरायुः सुतः ॥ ९ ७ ॥ यः कातन्त्रविचित्रसूत्ररचनापाथोधिमन्थाचलः श्रीमदुर्गमदुर्गवृत्तितिटनीकछोलनको महान्। छन्द:कन्टलपालनप्रविलसद्गीवीरिदो वारिदो-ऽलंकारार्णवकुम्भसम्भवमुनिः काव्याव्धिचन्द्रोदयः ॥ ९.९ ॥ सारस्वतन्याकरणस्य सूत्रे रम्या वृहद्वत्तिरकारि येन । श्रीवृत्तरत्नाकरस्रव्रटीका विनिर्गता तेन चिराय नन्द्यात् ॥ ९-१० ॥

इति श्रीरघुमुरिस्तुश्रीत्रिविकमसूरिविरचितायां वृत्तरत्नाकरछन्दःसूत्र[तात्पर्य]टीकायां पष्टोऽध्यायः समाप्तः।

[vv 9. 2-9 are almost wholly repeated by the author in his Pratisthapaddhati; I have corrected our stanzas with the help of these latter. The concluding stanza of Pratisthapaddhati is:—

तेनेयं विहिता सर्वदेवस्थापनपद्धतिः । शिष्यानाचार्यतां लोके नयन्ती नन्दतां चिरम् ॥

See above foot-note No. 2 on p. 25 in the Introduction.]

BOMBAY AND SHIVAJI

(1668-80)

Вy

B. G. GOKHALE

From 1656, when he captured Javli, until 1680, the year of his demise, Shivaji had to contend against two formidable foes. One was Aurangzeb whose imperial ambition had turned the Deccan into a battlefield for over a quarter of a century. The other was the power of the Siddis infesting the western sea-board and the sea-lanes. The Siddis had nominally accepted the suzerainty of the Great Mughal but often played for their own land and in this the growth of another power, namely, that of the English at Bombay, considerably helped them. As subsequent history proved this new power was to prove fatal to the Maratha empire and the revolution that was sweeping the Arabian Sea was to shake the foundations of empires and principalities thousands of miles away from the Western coast. From Captain Hawkins in 1608 to Gerald Aungier in 1672 the English had made slow but certain progress and it was this that led to intervention on their part in the politics of continental India. The island of Bombay provided the English as if with a ringside seat to watch, when necessary, and interfere, when possible, into the affairs of the indigenous powers. The pattern of Anglo-Maratha relations was first formulated even during the life-time of the great Shivaji. The present paper attempts to analyse this emerging pattern during the period 1668 to 1680.

The first historical notice of the island of Bombay occurs in the context of its capture in 1429 by the Bahamani general Malik-ul-Tujar. This was in the course of a war against the Sultan of Gujarat who eventually counter-attacked and re-occupied the Island.¹ Over a century later, in 1534, the Sultan Bahadur of Gujarat ceded the Island to the Portuguese along with some other places like Bassein.² The first English visit to the Island came about on the 8th of October 1626 in the company of some Dutch ships visiting the harbour.³ The Island, as is well-known, was ceded by Portugal to King Charles II of England as part of the

^{1.} See Kincaid and Parasnis, History of the Maratha People, vol. I, pp. 70-71.

^{2.} Edwards, Rise of Bombay, p. 68.

^{3.} Shafaat Ahmad Khan, Anglo Portuguese Negotiations Relating to Bombay (1660-1677), p. 421.

dower of Catherine of Braganza in 1661. Article XI of the Treaty concluded on the 23rd of June 1661 stated that the 'King of Portugal with the assent and advice of his council gives, transfers and, by these presents grants and confirms unto the King of Great Britain, his heirs and successors for ever the port of Island of Bombay in the East Indies with all its rights, profits, territories and appurtenances whatsoever thereunto belonging and together with all income and revenue, as also the direct and absolute Dominion and Sovereignty of the said Port and Island of Bombay and premises, with all their royalties, fully, freely and absolutely'. This grant of absolute sovereignty which the Portuguese had acquired by right of conquest and transferred to the English with the ceding of the Island by way of gift made Bombay the first territorial possession of the English in India. The article quoted above is quite clear about the rights of the English on the Island though it is rather vague about the appurtenances which proved to be a matter of dispute between them and Shivaji at the time of the operations against the Henry-Kenry Islands later. In 1664 the Island produced a great quantity of coco-nuts and rice and a year later it is described as with 'five churches, nine towers and villages and upwards of 20,000 soules'. The people were very poor and the English had reason to complain that they found the Island 'much more sickly than other places, the rather (as wee conceive) for that the water hereupon is very bad; wherefore that which wee commonly drinke is fetched from Salsette there being noe spring upon this Island'. However, the English did not fail to observe the obvious dangers of the place when they said 'the bay and the harbour being very commodious and faire, that there is noe need of pillotts, but shipps of any burden may go out and in at midnight'.7

Though the Island was ceded in 1661 it did not actually come into the English hands until March 1668 when Mr. Humphrey Cooke formally took possession of it. Within a few years of taking over the Island the East India Company began to consolidate its position there. The work on the fort was begun early in 1669 and by December of the same year it had progressed so well that Gifford, the Deputy Governor, could say, 'Thanks be to God wee are in soe good a position of defence that wee feare not any Indian enemy whatsoever'.' In 1671 Gerald Aungier, who

^{4.} Da Cunha, Origin of Bombay, p. 241.

^{5.} Foster, English Factories in India, (1665-1667), p. 45 (hereinafter abbreviated as EFI).

^{6.} Ibid., (1668-69), pp. 71-72.

^{7.} Ibid., (1665-67), p. 43.

^{.8.} Fawcett, English Factories in India (New Series), vol. I, p. 7 (hereinafter abbreviated as EFI-NS).

lived in Bombay as its Governor from 1672 to 1675, asserted that the Bombay fort was 'the most impregnable work of all these parts'." Sufficient attention was also paid to the manning of the defences of the fort for these were augmented, in September 1671, with the arrival of a new company of troops from England.10 The reason for such anxiety was the rise of Shivaji and fear of Dutch aggression. On the 22nd of June 1672 there was an order that 'Mayhim. Siam and Moheum be forthwith fortified the present necessity requiring the same by reason of Sevagees taking the cooley (Sic. Koli?) country and attempting Ghorbunder soe near Bombay' 11 This anxiety was understandable in view of Shivaji's vigorous offensive against the Siddis of Janjira from May to October 1669 and the grand effort in Maharashtra resulting in the reconquest of important forts like Purandar, Kalyan, Lohgadh, Mahuli, Karnala and Rohira during March-June 1670. The English were apprehensive not only of overt attacks by the Marathas from the mainland but also feared subversion on the island itself. The local population, and especially the Bhandaris, were viewed with suspicion as being of Shivaii's country for, as Aungier put it, 'if he shall have any designe against us, they would be snakes in our bosome'.12 As a precaution against surprise no visitor to the Island was allowed to enter armed in any way, no private meetings except for religious purposes were allowed, a regular poll was taken, strict guard was maintained at places of ingress and 'recalcitrants were to be dealt with as an example for the terror of others'.13

Nor was all this excitement groundless. In 1672 the Dutch had threatened an attack on Bombay and the danger persisted into the next year. Both Bombay and Surat were very much perturbed at the prospect of a rumoured alliance between the Dutch and Shivaji and this created a somewhat conciliatory attitude towards the Marathas on the part of the English. In February 1673 a Dutch fleet under Rickloff Van Goens, the Governor-General of Netherlands Indies, appeared before Bombay but sailed away without any action. But with the Dutch menace disappearing the English resumed their previous attitude of suspicious hostility for in May 1673 when a ship of a Rajapur merchant was driven into Bombay

^{9.} Ibid., p. 26.

^{10.} Ibid., p. 289.

^{11.} English Records on Shivaji, (1659-1682), Poona, 1931, vol. I, p. 309.

^{12.} Frawcett, op. cit., vol. I, p. 15

^{13.} Ibid., p. 13.

^{14.} Ibid., pp. 69-70.

¹⁵ See Nihar Ranjan Ray—Danvers, Dutch Activities in the East, p. 42. Bom. letter to Co., 18th March 1673.

in a storm it was seized by Aungier as a reprisal against Shivaji's attack on Hubli for which compensation was being demanded. As a normal course of prudence the English pretended to observe neutrality in their relations with indigenous powers engaged in hostilities against each other. But such neutrality was neither intended to be nor ever could be genuine in the circumstances of the day. This is clearly brought out in their relations with the Siddis.

The Siddis were appointed Mughal admirals in 1660. In 1672 Sidi Sambhal became the admiral and was succeeded by Sidi Yakut Khan in the same year. Shivaji suspected, and not without reason, duplicity on the part of the English who constantly pleaded their inability to prevent the Sidi from making use of Bombay as a base for his depradations against the mainland. His ships regularly used Mazagaon as a safe anchorage during the rainy season and as a convenient base from which to harass Shivaji's territory on the mainland. Shivaji resented the action of the English¹⁷ in conniving at the presence of the Siddi. The English excuse was they were helpless against the unwelcome visitor who was the titular admiral of the Mughal empire to which, in view of their interests at Surat and elsewhere, they could not be unaccommodating. This placed them in a somewhat awkward position when confronted with the fact of the unceasing hostility between Shivaji and the Siddi. The former, as Aungier had stated, 'hath proved and that for his own interest's sake, our fairest friend, and noblest enemy'.18 As for the Siddi and his overlord, the Mughal emperor, the English found, as remarked by William Foster, that treaty making and implementation of such treaties made by his subordinates was either 'alien to the political system of the Moguls'01 or was inexpedient in many situations. Thus the English were forced to make the best of an uncomfortable circumstance by prevaricating and occasional threats towards the party most concerned if it could be done with impunity. In December 1672 when Siddi Sambhal arrived in Bombay with a fleet of 35 vessels, on his way to Danda Rajapuri, a proposal was mooted that he be allowed 'freedom to enter the harbour and from our shores infest Sevagee's country' which was, however, turned down by Aungier.20 On other occasions, when it was both politic and businesslike. the English did not hesitate to give help to the Siddi at Danda Rajapuri for payment and give him protection in Bombay protesting, at the same

^{16.} Fawcett, op. cit., vol. I, p. 68.

^{17.} Ibid., p. 66.

^{18.} Surat Letter dated 28-9-1675. See English Records on Shivaji, vol. II, p. 71.

^{19.} EFI, 1618-21, p. IV.

^{20.} Fawcett, EFI-NS, I, p. 55.

time, friendship with Shivaji.21 Shivaji carried on a somewhat vigorous correspondence with the English in Bombay concerning the Siddi menace²² but possibly understood that in the politics of the day negotiations and treaty making were as much 'alien to the political system of the Moguls' as it was inconvenient to the constitutional system of the East India Company whether in Surat or in Bombay and proceeded to deal with the menace in his own way. In 1678 when the Siddi had inflicted indignities on Brahmins Shivaji ordered his two admirals, Daulat Khan and Darya Sarang, to try and burn the Siddi's fleet then hauled ashore at Mazagaon. The Maratha naval force arrived at Panvel in July and the news of its arrival caused great anxiety in Bombay where 'the out-guards at Mazagaon, Mahim and Sion were reinforced by garrison soldiers under commissioned officers; the troops of horse were dispatched to Mahim under Capt. Keigwin, who had orders to send scouts daily to Sion Munchum (probably in the neighbourhood of Matunga) to be on the watch for any approach of the enemy; two manchuas (single-masted vessels), with guns in their prows and manned by soldiers, were ordered to cruise between Mahim and Mazagaon to prevent any landing by the enemy in that vicinity; the remainder of the garrison were divided into two parts, to mount guard alternately at the Fort; and the guns of the Revenge, the Hunter and the Phoenix which had been hauled ashore at Mazagaon, were placed · for firing where they could best annoy the enemy if it attempted to land there'.23 The anxiety was relieved only when the news came that Daulat Khan had proceeded to Kalyan where the Portuguese intransigence caused the cancellation of the proposed invasion of the Island.

But the incident referred to above was exceptional. Shivaji was too deeply embroiled with his struggle against the Mughal empire to spare much attention or any substantial resources to checkmate the English in Bombay. His ships occasionally called at the port. Thus on the 16th of October 1669 there was a report of the arrival of a 'juncke of Sevagee's' with 'little or noughte in her' coming from Aden.²⁴ In October 1670 a Maratha fleet of some 160 vessels had arrived in the neighbourhood of Bombay and of this some 3 ships 'actually entered the port' to secure a supply of salt. The arrival of this fleet led to the calling out of the militia and similar precautionary measures. The fleet, however, passed by Bombay by the 10th of November 1670.²⁵ Similarly there is a report

^{21.} See Banaji, Bombay and the Siddis, pp. 22, 28.

^{22.} See Fawcett, EFI-NS, I, pp. 66-68.

^{23.} Ibid., vol. III, p. 7.

^{24.} English Records on Shivaji, vol. I, 170.

^{25.} Fawcett, EFI-NS, vol. I, pp. 7-8.

of the arrival of Shivaji's fleet from Dabhul in October 1671,²⁰ without causing any alarm. But he had well appreciated the challenge posed by Bombay and this is borne out by the fact that he made efforts to keep himself informed of the state of affairs and preparedness of the Island from time to time. Thus in June 1673 he is reported to have sent his spies to the Island, an act which frightened the Bombay authorities to the extent of making them fortify Sion and stop the ferries running at Sion and the plying of manchuas 'except for the passage of provisions'.²⁷ This fear was natural in view of the fact that this was the year when the English mind was much exercised over the Dutch threat.

Commercially, too, Bombay was assuming significance. The disturbed conditions of the Deccan and the Western coast had effectively hampered trade. Shivaji's operations against Surat in 1664 and 1670 had dislocated the normal commercial life of the city and had led the English gradually to shift their base to Bombay after its occupation by them in 1668. The constant warfare in Western India and the difficulties created by the Mughal port authorities also induced the English to start their own industries in Bombay by attracting weavers and artizans from the mainland. Bombay's location, too, was very convenient for trade with Maharashtra and territories farther inland and this, to an extent, determined the pattern of changing relationships between Bombay and Shivaji. Among the commodities from the mainland in great demand at the new emporium we find mention of silk and cotton products from Kalyan and timber from Thana.²⁸ In fact Bombay was so completely dependent for the supply of timber, a vital commodity for the ship-building trade, from the mainland that Shivaji could easily exercise a blockade and make the English feel its pinch with disconcerting effect. And Shivaji certainly used this expedient on some occasions. Thus in October 1670 when the English sent some men in boats to the 'maine' in search of wood to use it for preparing chunam Shivaji's men stopped them from so doing obviously under his instructions.²⁹ Besides Bombay was also in constant need of supply of provisions for the Island could hardly grow sufficient food for its increasing population. A letter from Surat dated 28th September 1675 fairly summarizes the English attitude on trade relations with Shivaji when it observes inter alia 'As to Savajee (sic) you are sensible that our correspondence with him hitherto is very faire and acceptable to both sides and hope it will so continue; I pray you to

^{26.} Ibid., p. 29.

^{27.} Ibid., p. 70.

^{28.} Foster, op. cit., 1668-69 pp. 73, 83.

^{29.} See English Records on Shivaji, vol. I, pp. 182, 187, 223.

encourage it so much as lies in your power, for I expect noe mean emolument to our Honourable Master from our trade into his country, which you know hath been the subject of many debates in councell, and I have the lesse to advise you because you are already fully acquainted with all our transactions with him'. 30 But the degree of 'faire correspondence' approximated to the state of Shivaji's fortunes in the war against the Mughals and, with the Mughals, the English invariably strove to remain on terms of goodwill and friendship. The English had, at this time, to play their hand very adroitly with four separate powers. From the Mughals they expected all kinds of trade concessions; with the Portuguese they were on terms of cautious benevolence though we do find letters of the time expressing feelings of exasperation and execration about their high-handed ways; with the Siddis the English tried a policy of abetment in their depradations against Shivaji's territory and show of annoyance and anger when the threat of reprisals by Shivaji against Bombay loomed large; and, finally with Shivaji, and the rising Maratha power. the English were frankly at a loss to define their relationship precisely. The English interest began with mild curiosity, with the sack of Surat it was changed to alarm and with the expansion and consolidation of his power Bombay tried to come to terms with him in matters of trade but either openly supported his enemy, the Siddi, or connived at his harassment of Maratha territory whenever this was safe to do. The traffic of goods and the crystallization of political relations were processes quite separate from each other though they often impinged on English interests at several points.

In the traffic of goods Kalyan and Thana proved to be points of decisive interest. Kalyan and Bhivandi were held by the Mughals while Thana was held by the Portuguese. Goods from the mainland had, therefore, been subjected to taxes and duties both by the Mughals and the Portuguese while the English charged their own dues on goods coming into Mahim. The Kalyan-Bhivandi area was taken by Shivaji in March 1670 which affected the timber trade. A communication of the year notes: 'Wee are in very great want of timber of largest sorte as well for the making of carriages as other uses, for those carriages which they send with the guns from England are improper to mount the guns on the bastions. This sorte of timber wee must procure from Cullian or Buindee, now in Shivaji's possession'. This had given a rude shock to their earlier dream unfolded by Gary to Arlington that 'There are severall places upon the Maine belonging unto Sevagee not farr from us to which wee may freely

^{30.} Ibid., vol. II, p. 123.

^{31.} Foster, op. cit., 1670, p. 5.

goe and where the caravans might also come out of Hyndostan and Deccan without coming near the Portuguezes jurisdiction, with paying but a small custume unto him; but he is soe greate a robber that it is to be doubted that merchants will scare runn the hazard of having theyr goods brought or carreyed through his country; some are of opinion that, giving his oath, he will religiously keepe it. The Greate Mogull, Orangzeb, hath sent a great army against him, consisting of above 100,000 horse. If hee prevaile and take his country from him, which lyeth between him and Chaul, it will be very happy for the Island; for then all manner of merchandize will be brought down to us in great quantitys and then not doubt but this will be the most flourishing port of the orient'.32 It looked as if Gary's wish would come true for three months later, in June 1665, the Treaty of Purandhar was signed followed by Shivaji's visit to Agra and his brief captivity there. However, by 1667-68 Shivaji had cleared his difficulties and two years later carried out the second sack of Surat. In the month of October 1670, the same month he plundered Surat, as stated earlier, a fleet of Shivaji consisting of some 160 vessels arrived in the neighbourhood of Bombay and three of this group of ships actually entered the port purportedly for securing a supply of salt.33 The renewal of hostilities between the Marathas and the Mughals on the arterial road of trade in the neighbourhood of Kalyan compelled the English to carry out a reappraisal of their policy towards Shivaji and the climax came with the presence of English envoys at Shivaji's coronation at Raigadh in 1674. Shivaji, too, had need of dealings with Bombay especially in the matter of obtaining ordnance for which he made some unsuccessful efforts. Thus, in October 1671 he tried to obtain armament from Bombay for use against the Siddi but this was refused though when Shivaji stopped the English from taking timber from his territory for purposes not very far from war-like English hands were thrown up in holy horror! The English purpose in refusing to sell guns to Shivaji was twofold; one was to ensure that he did not become unduly strong and the other was that by their refusal the English could maintain a balance of power between Shivaji and the Siddis.34 Shivaji himself wanted to set up a warehouse of his own in Bombay to enable merchants from his territory carry on their business there with ease.³⁵ That was in 1673. An accident which occurred some five years later throws an interesting light on the tangled skein of Bombay-Maratha relations in this period. The Subhadar of Chaul had demanded payment of Rs. 12,000 which.

^{32.} Ibid., 1665-1667, p. 52.

^{33.} Bombay Letter 3, 21st November 1670.

^{34.} Fawcett, EFI-NS, vol. I, p. 29.

^{35.} See Balkrishna, op. cit., vol. I, 2, p. 446.

according to him, was due from Petit (then on leave at Surat) for supplies of betel and coco-nuts. The bargain was made through a Surat merchant, Vallabhdas Mehta, and the Subhadar demanded payment from Oxenden. Oxenden, however, blamed Petit whereupon the Subhadar seized 22 boats belonging to the Island. Oxenden retaliated by sending Captain Nicoll with a company of 60 soldiers and had the boats released by force.³⁶

Under the stress of the rapidly changing political situation in Western India the relations between Bombay and Shivaji could scarcely comply with the accepted conditions of international relations then in vogue in The English began with calling Shivaji a rebellious vassal of the Great Mughal though their relations with Aurangzeb did not preclude their coming to an understanding with Shivaji when such an understanding facilitated their trade and the prosperity of their Island stronghold. By sending envoys to attend the coronation ceremony of the erstwhile rebel the English had come to accept his independent status and the treaty between him and them was concluded in this spirit. This treaty of 1674 contained four main clauses. One related to the payment of compensation by Shivaji for English losses at Rajapur. Another clause permitted a duty of $2\frac{1}{2}$ per cent on goods carried by the English through Shivaji's territory; a third permitted the circulation of English and Maratha coinage in the respective territories of the two powers while the fourth clause related to the restitution of captured goods.³⁷ The Treaty, however, could not be very satisfactory to either party though it marks the largest common ground on which the two sides could meet. But the Treaty did not prevent the English to play for their own hand in the involved politics of the times and their reactions to Shivaji ranged from short-tempered abuse like 'perfidious enemy' to occasional praise like 'noble friend'.38 Negotiations, when necessary, and force, when possible, were used by both sides; for, the normal attitude of the one towards the other was one of suspicion. This suspicion on Shivaji's side was more than justified as shown by occasions when the English scarcely tried to conceal their abetment of the Siddi, the sworn enemy of the Marathas. The English frequently raised alarms about Shivaji's spies on the Island while making assiduous efforts at ferreting out information from the mainland.39

The episode of Khanderi-Underi brought the relations between Bombay and Shivaji almost to a breaking point. Shivaji's attack on Khanderi

^{36.} Fawcett, op. cit., vol. III, pp. 8-9.

^{37.} See Balkrishna, op. cit., vol. I, 2, pp. 434 ff.

^{38.} English Records on Shivaji, vol. I, p. 283.

^{39.} Fawcett, op. cit., vol. II, p. 41.

was motivated by a desire to check the depradations of the Siddi and the English abetment of such activities. Khanderi was occupied by the Marathas in August 1679 and it represented a major feat of naval and military manoeuvring. The English protested against this act by referring to the Anglo-Portuguese Treaty relating to Bombay. The islands lay 12½ land-miles south of Kolaba Point and 12 miles from 'Hendri' (Underi). The English claimed Khanderi and Underi as an 'appurtenance of Bombay', a claim patently sinister in its implications. 10 The islands were uninhabited and from Shivaji's point of view were of great strategic value as their possession would enable him to keep a check on the whole trade of Bombay and keep track of English activities along the coast. The monsoon was far advanced and the English were caught by surprise. In October they tried to oust the Marathas from the island occupied by them by sending a force under Keigwin and an indecisive battle was fought with the Maratha force led by Daulat Khan. The English attempt at blockading Khanderi failed and the strain of operations against the island was such that there was a 'complain that in that month they had hardly enough cash to 'pay the rolls that month . . .'. 11 On the other hand the English action so provoked the Marathas that they got ready a body of 4,000 men to proceed by way of Thana to land on the Island of Bombay. 42 The Marathas continued to occupy Khanderi but in 1680 tried to include a clause asking for a refund of the cost of keeping the fleet off the islands which was, naturally, not acceptable to Shivaji.43 Finally, a dispatch of April 28, 1680 refers to a report received by Sir John Child that he had 'certain news' that Shivaji had died twenty-three days ago, 'its saide of a bloody flux, being sick 12 days' which would put the date of Shivaji's passing away on the 4th of April 1680.

The foregoing survey brings out the pattern of diplomacy conducted by the English from their first sovereign possession in India. This diplomacy was informed by an acute concern for the preservation of the integrity of this territorial possession and its extension in the form of commercial influence over a wide arc of area then under the control of a nascent independent power. The playing off of one Indian power against another, usually dated around the middle of the 18th century, actually began little less than a century before that as is evident from the English relations with the Marathas and the Siddis. And finally it was from Bombay, claimed as a fortress 'the most impregnable works of all these

^{40.} Ibid., vol. II, p. 35.

^{41.} Ibid., vol. II, p. 54.

^{42.} English Records on Shivaji, vol. II, p. 123.

^{43.} Fawcett, op. cit., vol. II, pp. 61-62.

parts' by Gerald Aungier, that the work of empire-building commenced three quarters of a century before Plassey. In this work of empire-building the earliest obstruction to the English came from the Marathas and history showed that it was only with the complete liquidation of the Maratha power that the British empire in India could feel secure in 1818. The English demand for cotton, silk and timber from the mainland and the Maratha demand for guns from Bombay were symptomatic of the impending economic and political revolution in Indian history, a revolution that was to sweep the Marathas off the political map of India and make Bombay the gateway of the West.

THE MOON IN THE RGVEDA

(A Neglected Luminary)

By

H. S. URSEKAR

The Vedic Gods are in general personifications of natural phenomena.¹

The friendly forces became gods and the hostile forces demons.²

Dr. Griswold

Introduction

These observations of Dr. Griswold are likely to raise a presumption that the Vedic Aryans were only blind nature-worshippers who classified all elements of nature into two camps: viz., gods and devils. This presumption may be rebutted in two ways. In the first place, all the Vedic gods cannot be said to be the creation of the pristine spirit of animism, e.g. Varuṇa, the Supreme upholder of law in the moral as well as the physical world, Viśvākarman or Prajāpati. Secondly it is difficult to maintain that all the elements of nature were deified by the Aryans, e.g. the Moon is not found to be raised to a godhead in the Vedic quartette. Why not? It is with this humble spirit of inquiry that I propose to examine the position of the Moon in the Rgveda.

Historical Review

In the Tempest the aboriginal Caliban speaks thus:—

". . . and teach me how to name the bigger light, and how the less that burn by day and night".

(Act I, Scene 2)

Obviously the two heavenly luminaries must have been an object of wonder to mankind even in its Caliban-stage.

Indo-European Period

Historically speaking it is well recognized that the Sun was universally worshipped even by the Indo-Europeans. Equally popular was the Moon

^{1.} Griswold, Religion of the Rgveda, p. 88.

^{2.} Ibid., p. 81.

cult among the primitive people, as well as with the Persians, the Germans, the Greeks and the Romans. The spots, the phases and the eclipse of the moon must have excited the imagination of the people. In fact in those early times the spots on the moon were more exciting to human curiosity than are spots on the Sun to the modern scientists. Indeed the marks on the moon have been a veritable peg to hang on human fancy. According to an old Norse fable there is a man in the moon as represented by the spots thereon; he is a bearer of children. The Scandinavians believed that the man in the moon is a Wood-stealer. The English also shared this tradition of the notional man in the moon.

The impressions on the moon-face have not only been likened to a human being but also to mountains or to several species from the animal world, e.g. hare or toad. Some regarded it as a 'foot-print of a Stead'. Like these biological Super-impositions the botanical images are not slow to come. The Malays for example fancied that there was a banyan tree over there.

Like the man in the moon, the phases also were thought of as influencing man's fortunes and actions. The eclipse of the moon must have been regarded as a remarkably awful phenomenon. Besides, the moon was looked upon as a convenient measure of time from the primitive ages.

It is interesting to note the relative positions of the moon and the sun *inter se*. The Indo-Europeans believed that the two heavenly bodies belonged to different sexes. In German, Anglo-Saxon and Lithuanian the word for the sun is in the feminine gender, while the moon is masculine. In Greek and Latin it is the other way round. In view of the natural phenomena of their occasional juxta-position, pursuit, appearance or disappearance the two orbs of light were imagined to be husband and wife and hence we find references to the mythical marriages between them. Not only this, but the moon is an unfaithful spouse of the two. Some people considered them not as a couple but as a pair of brother and sister.

This paradoxical phenomenon, viz. the potent bright sun being looked upon as a 'She' while the pale, feeble moon being deemed as a 'He' is explained by Grimm in terms of their relationship with the day and the night. Says Grimm 'We find the masculine day being accompanied by the feminine sun, the feminine night by the masculine moon'.

On the whole it seems that during the Indo-European period the moon was an object of wonder and worship but it was never a special object of worship. We may believe with Dr. Keith that the 'Indo-European reliass II

gion, owing perhaps to the place of its development, was less than some others inclined to make much of the moon."3

Indo-Iranian Period.

The Indo-European period is followed by the Indo-Iranian epoch. The Indians and the Iranians, it is almost established beyond doubt, lived together in Northern Iran prior to the Vedic era, after they were separated from their original Indo-European kinsmen. It is true that both the Indians and the Iranians were worshippers of the sun. However as to the exact position of the moon and its status during the Indo-Iranian period, the information available is not worth the name. In the Avestā, the moon was called māh (e.g. Sanskrit: mās). At any rate it may be presumed that the moon must have enjoyed no higher prestige than in the Indo-European period.

References in the Rgveda

The next stage in the history is the Indo-Aryan period during which the Rgveda was composed.

In the Rgveda not a single hymn is addressed to the moon. The moon is no doubt mentioned as mās or Chandramas. The word mās is akin to the Avestic word māh. See Gothic Mêna; Lithuanian menû; Old Latin losna; Latin lûna; Armenian lunsin; and French lune. The Sanskrit mās is likely to have been derived from the root mā to measure, moon being a measure of time.

Apart from Hillebrandt's theory that in the Rgveda the word Soma necessarily denotes the moon, there are actually very few unquestionable references to the moon. They are few indeed.

The moon is denoted either by the word Candra, Candramas or mās. The word Candra is used 34 times; but once only it is used in the sense of the moon. The rest of the time Candra is used as an adjective meaning bright, radiant, shining or splendid, e.g. the Dawn is described to have a Candra-rath, a bright car.

The favourite word is Candramas which is used nine times.6

^{3.} Keith, The Religion and the Philosophy of the Veda, etc., Vol. I, p. 123.

^{4.} II 2.4.

⁵ VI 65.2.

^{6.} I 24.10; I 84.15, I 102.2; I 105.1; VIII 82.8; X 85.19; X 90.13; X 190.3.

The word mās is used in the sense of moon four times only.⁷ The word is used also to denote a month.⁸

The moon was created along with the sun by the creator.⁰ In the famous Puruṣa Sukta it is mentioned that the moon was created from the mind; the sun from the eyes.¹⁰ According to Griffith there is a reference to the New Moon and the Full Moon.¹¹ But this reference does not speak about the beauty of the moon in either of its stages. In one hymn of the First Mandala Griffith comments that we find that men recognized the fact that the moonlight comes from the sun (The Bill of Tvastr). We have an allusion to the mansion of the moon.¹²

As to the movement of the moon we find that the moon shining brightly moves at night by the orders of Varuna.¹³ The moon does not only move Bust it runs within the waters in the heavens with its beauteous wings.¹⁴ In a Varuṇa hymn we find that Varuṇa knows twelve moons (months) with their progeny (days).¹⁵ In an Indra hymn the moon is mentioned in conjunction with the sun¹⁰ and also in a hymn addressed to Bṛhaspati,¹⁷

The function of the moon is described as the distributor of years.¹⁸ This is clearly a reference to the utility of the moon as a measure of time. Probably we have a veiled reference to this function of the moon in the stanza mentioning the two wheels occurring in the wedding hymn of Surya.¹⁹

The ambrosial quality of the moon is referred to in the following line:

"The moon prolongs the years of our existence..20

We find the moon used as an upamān.

'The Soma seen within the bowls

As in the flood the moon is seen.²¹

14. I 105.1.

Herein the Soma juice is compared to the moon.

7. I 25.8; X 64.3; X 85.5; X 68.10.	15. I 25.8.
8. VIII 91.2.	16. I 102.2
9. X 190.3.	17. X 68.10.
10. X 90.13.	18. X 85.5.
11. X 64.3.	19. 85.16.
12. I 84,15.	20. X 85.19.
13. I 24.10.	21. X 82.8 (X 71.8 Griffith).

In the following lines we find Agni compared to the moon:

'His have they set in his own dwelling, in the vault like the moon waxing fulgent in the realm of air.'22

These are some of the indisputable references to the moon. No doubt there may be a few veiled references as in X 106.8. But that stanza is dubbed as a riddle by Griffith who has refused to translate it.

From these scanty references one thing is clear that the moon was regarded merely as a physical phenomenon and not as god to be glorified. There is not a single hymn addressed to the moon, either simply or as a dual divinity like Mitrā-Varuṇa, Indra-Agni. It is not probably considered as worthy of such divided honours. Nor is this luminary celebrated even as a member of one of the god-groups like the Maruts or the Rudrās.

The Rgveda itself gives a traditional complement of gods and their classification. There are 33 gods.²³ They are divided into three categories according to their locations.

- (1) The celestial gods.
- (2) The atmospheric gods.
- (3) The terrestrial gods.

We are also told that a team of eleven gods each dwells in each of the three regions.²⁴ But the moon is missing.

In the Śānti Sukta²⁵ we find the gods and pseudo-gods like the gleaming rivers, the much praised mountains and the shining sun being invoked—in the Ṣvā, Yuvā, Maghavā fashion—to bestow peace on the reciters but the moon is not considered potent enough to give peace. It is well-known that we have a couple of hymns addressed to rain,²⁰ and even to its precursor, the frog.²⁷ The moon not being a sacrificial god is absent from the span of the Apri hymns too.

Dyaus is the concrete sky. Its offsprings are Ushas, Agni, Parjanya, Surya, the Ādityās, the Maruts and the Āngirases, but the moon having an obvious place in the sky is not included in the multi-progeny of the sky.

^{22.} II 2.4.

^{23.} I 45.2; VIII 28.1.

^{24.} I 139.11.

^{25.} V 46.

^{26.} VII 101, 102.

^{27.} VII 103.

The case of a bright brother eclipsing a less luminous one is not unusual, but the effacement of the moon in the Rgveda is startling indeed. The sun and the moon were created by the creator. The big brother is glorified with such glowing epithets like 'the eye of the world,' 'bird traversing space' and so on. The sun is even imagined to be the head of Vishņu, but the moon is not worthy of a tale! We find an unmistakable allusion to the solar eclipse²⁸ but there is no reference to the eclipse of the moon. How did this happen?

Some theories regarding identification of Moon

Now while the power and the glory of the sun is sung in its manifold manifestations, we find that its counterpart of the night is left unhonoured and unsung. Therefore feeling the impossibility of such a position attempts were made by great scholars to 'discover' the moon in the various deities invoked in the Rgveda.

Varuna

According to Oldenberg, whose view is shared by Hillebrandt, Varuna, primiarily represented the moon and the dual divinities Mitrā-Varuna stood for the sun and the moon respectively. The two main reasons for this hypothesis are; description of Varuna as 'the Lord of the night', and the belief that he is a constant companion of Mitra i.e. the Sun. We may not take this theory seriously and ask with Macdonell as to how far is it possible for a distinctly lunar deity to outshine Mitra, the sun in the Indo-Iranian period, or to have attained the pre-eminent position as a moral governor, as Ahura-Mazdah in the Avesta or as Varuna in the Vedas. Bloom-field has refuted this theory completely.

$ar{A}$ dityas

A cognate part of Oldenberg's above hypothesis is his contention that the moon is part of the seven Ādityas. According to him the group of Ādtiyas was composed of the sun, the moon and five planets. The theory is apparently grounded on the similarity of the seven Ādityas suggested by the Iranian Amesa Spenta which also consisted of an equal number of stellar units. This suggestion is also not accepted by scholars as the two groups have little in common, not even a single name.

Visnu

Hardy and Kunike felt the presence of the moon in the Vedic Viṣṇu. But Schradar, Monier Williams, Hillebrandt, Hopkins, Bloomfield, Dr. Dandekar and other eminent scholars have accepted that Viṣṇu is essentially a sun-god. The solar hypothesis about Viṣṇu failed to appeal to Oldenberg who is admittedly an anti-solar mythologist. It is suggested that the sun is the head of Viṣṇu. The theory that Viṣṇu was originally a sun-god is more plausible as it alone helps us in interpreting cogently the out-standing aspect of the sun viz. 'his three strides'. The three steps of Viṣṇu mentioned in I.154.2 have been identified with the march of the sun through the sky-face. Hence Macdonell observes that "Viṣṇu's three strides undoubtedly refer to the course of the sun as it passes through divisions of the world."²⁰

Thus in view of the consensus of opinion of the scholars it is difficult to sustain this theory.

The moon is considered as one of the twin-gods of the Rgveda by Ludwig, Miller, Hillebrandt and Hardy. Now it is well-recognized that the Asvins are twins and that their inseparable nature has been one of their salient characteristics. The sun and the moon can hardly be deemed to answer this description having regard to their relative positions. Secondly, the morning is generally taken to the time of the appearance of the Asvins. This trait also fails to fit in with the sun-moon suggestion. It may well be that it is difficult to post positively the Asvins in the scheme of natural world, but it is now considered as almost certain that the Asvins do not cover the moon.

Brhaspati

Hillebrandt believes that Bṛhaspati is a lord of plants and a personification of the moon. Hardy agrees. Now Bṛhaspati is called the Brahmaṇaspati and a purohit and is celebrated for his wisdom. He is called a lord of prayer. He is also cherished as a hero and a fighter. It is hardly reasonable to impute either wisdom or valour to the moon and hence this hypothesis too fails to hold water.

Apām-Napāt

Apām-Napāt is the next moon hypothesis advanced by the same pair of scholars. Apām-Napāt is an Indo-Iranian deity. It is described as the Son of Waters. Macdonell definitely identifies this atmospheric god with Agni. Possibly it is the Agni in its celestial form, born in water clouds, i.e. the lightning. Max Müller also regards Apām-Napāt either as lightning or the sun but not the moon positively.

^{29.} Vedic Mythology, p. 53.

^{30.} Rg. II 39.

Trit-Aptya

Another god of the atmosphere which according to Hardy represents the moon is Trit-Āptya. But even a single salient epithet of this deity viz. 'his abode is secret' is sufficient to dispel any misunderstanding in this behalf. It is interesting to note that Hillebrandt regards Trit-Āptya only as a deity of the bright sky but not the moon, at least this time.

Ahi-Budhnya—Aja-Ekpād

Hardy even holds that Ahi-Budhnya, the serpent of the sea, is a name of the moon. It is well-known that Ahi-Budhnya is associated with Aja-Ekpād. This theory is untenable, as Hardy himself thinks that Aja-Ekpād 'the goat who goes alone' is also the moon. It may be asked how two things associated together could be identical and hence we have to brush aside both these suggestions, which seek to identify the moon either with the serpent or the goat, irrespective of the number of legs.

The rest

Hillebrandt further tries to maintain that Narāśańsa, Tvaṣṭṛ or Viśvarupa are forms of the moon. While according to Bloomfield the four-eyed, broad nosed canine twins belonging to Yama are none other than the sun and the moon.

It will be seen that Hillebrandt has struggled hard to identify or to locate the moon almost in the major part of the gamut of the Vedic gods viz. Varuṇa, Ādityā, Bṛhaspati, the Aśvins, Apāṁ-Napāt, Narā-śansa, Tvaṣṭṛ or Viśvarūpa. Indeed this scholar and Hardy have spared no pains, much less imagination to put the moon on the map of the Rgvedic pantheon. However the most irresistible of Hillebrandt's hypothesis is that in the Rgveda the Soma throughout means the moon.

Hillebrandt's Soma theory

The Soma theory may be stated thus: it is not true that the identification of the Soma with the moon holds good for the post-Rgvedic literature only but even in the Rgveda wherever the word Soma occurs it stands for the moon. The Soma-god was one of the most prominent gods in the Rgveda and ranked above Indra and the host of Sun-gods. Thus the moonnature of the Soma prevails out and out in the Rgveda.

In this theory the French savant Bengaigue also concurs, though with caution. According to him Agni represents the sun and Soma the moon.

Judging solely by the statistical standards the Soma does hold a remarkable rank among the Vedic deities. Out of 1028 hymns, as many as

120 hymns sing of the Soma. In fact the Soma is only next to Indra (250 hymns) and Agni (200 hymns). The Soma has the matchless distinction of being the only deity which has a whole Mandala to its credit viz. IX Mandala (114 hymns). Besides, half a dozen hymns are spread over rest of the Books. The Soma is also referred to in Soma hymns either singly or in conjunction with other gods like Indra, Agni, Rudra and Pūṣan.

However the question is what is the real nature of this much adored Soma? Does he represent the moon as contended by Hillebrandt or something else? For this it is necessary to examine the nature of the Soma as unfolded through the hymns themselves.

What are the genesis of the Soma? According to the mythical account as given in hymns 26 and 27 of the IV Mandala we find that Soma was brought down by the fleet-winged Falcon from the 'Yon loftiest heaven', despite the obstacles of a hundred iron castles. The Falcon delivered the Soma to Manu. That Soma is sweet, it is the draught that gladdens and is a god-loved oblation³¹.

In appearance the Soma plant is reddish (aruṇa), brown (babhru) or mostly tawny (hāri). The stalks of the Soma plant are pressed by stones and there oozes out Soma juice. The juice is made to pass through a strainer of a sheep's wool. Such Soma is called Pavamāna (flowing clear). While flowing into the wooden vats, the Soma makes loud thunderous noise. The juice is then mixed with water, milk, curds or honey. The mixture is described as a bright robe, and Soma is thus 'decked with beauty'. It is for this reason that Indu (bright drop) is one of the favourite epithets of the Soma juice. Hence we find the refrain 'Flow, Indu flow for Indra's sake'32.

The Soma juice thue prepared is offered as an oblation to the gods in the sacrifice. Gods like Indra relish it most. Vāyu also likes to drink it immensely. In fact the Soma sacrifice in which the Soma was offered to gods was the pivot of the Rgvedic Sacrificial ritual.

The Soma juice has an exhilarating effect on the partakers. Soma gives power. It is so powerful that when drunk by Indra, Soma causes the sun to rise.

The Soma juice cures diseases and conduces to immortality. It is thus (Amṛta) the nectar, a divine drink. It is invoked to bestow fame, glory, intelligence and wealth³³.

^{31.} Rg. IV 26.4.

The Soma is the leader (pati) of the plants as it is the most important among the plants. It is the leader of poets. The Soma has a two-fold aspect; worldly and celestial. In the former form its abode is on the mountains or near river-waters. The finest Soma plant is found on the mountain Muñjavant³¹. In the latter form it resides in the sky, the heaven. Hence it is called the 'child of the heaven'35. It is also the lord of the Mind³⁶.

This is in brief the overall picture which emerges from the Soma hymns of the Rgveda.

Now from the above, it is reasonable to deduce that the word Soma denotes either the Soma plant or the Soma juice. There is no clear-cut identification of the Soma with the moon and if at all, it is left to our imagination. In the case of other gods such a thing rarely happens. There may be differences of opinion as to the exact corresponding natural phenomena which answers the description of a Vedic god like Indra or Varuṇa, but hardly do we come across any metaphorical or allegorical reference to a god intended to be invoked. Hence it may be asked why should the Vedic poets leave the interpretation of the Soma to our imagination. No satisfactory answer is forthcoming.

Further, if we assume that the Vedic poets intentionally used the word Soma in lieu of moon (mas, candramas), then we will have to go to the extent of assuming further that the Vedic poets as a body entered into a sort of a conspiracy to keep the name of the moon veiled in mystery. Can we justifiably impute such a conspiracy to the poets whose lyrical exuberances are certainly incompatible with any tendency to conspire?

The theory may have commended itself to us had the moon been referred to as the Soma only and by no other appellation like the Candramas³⁷ or Mas³⁸. What then is the difference between the moon referred to as Candramas and as Soma?

Etymologically considered the word Soma is derived from $\sqrt{\text{Su}}=\text{to}$ press (Avesta: $\sqrt{\text{hu}}=\text{to}$ press). Thus the etymological meaning of the Soma is pressed juice. Its Iranian parallel is Haoma (Avesta) also means pressed juice. How can one accept the theory that this pressed juice stands for the suppressed moon.

In the Indo-Iranian literature we find Haoma to be definitely identified with a mountain plant which yielded an intoxicating juice like the Soma. Haoma is not connected with the moon.

^{34.} Rg. IX 38.5.

^{36.} Rg. IX 28.1.

^{38.} Rg. X 85.5.

^{35.} Rg. X 34.1.

^{37.} Rg. I 105.1.

It is significant to note that the Soma is classified as a terrestrial god according to the traditional division of gods. If the Soma were to mean the moon we would have found the Soma in the category of the celestial gods; for the location of the moon in the firmament is unquestionable indeed!

Perhaps it is fo rthis reason that the commentators on the Rgveda, though familiar with the moontheory of the Soma, do not identify the Soma with the moon.

If it is correct to urge that the whole o IX Book is a Moon Mandala, we should have expected some allusions at least either to the digits of the moon or the lunar spots. They are unquestionably the most remarkable ocular phenomena about this luminary. But hardly there is any express reference to these in the Rgveda. Around the sun-rise a labyrinth of myth has been developed. Poets have gone into raptures over the arrival of the sun but as to the moonrise references are almost nil. In the classical literature we get hosts of references to the moonrise or the beauty of the new moon par excellence. It is common knowledge that the moon is eclipsed more frequently than the sun. A solar eclipse is clearly alluded to in V 40.5 to 9, but no where in the Rgveda do we find the reference to the lunar eclipse.

Now turning to the text proper we find that in the over-whelming majority of passages, the word Soma stands either for the Soma plant or the Soma juice. The beneficial effects of drinking the Soma are described elaborately in VIII. 48. The Soma, guardian of our bodies is said to have settled in our joints³⁰. This means that the Soma was a physical drink, and did not mean the moon, unless we go to the extent of holding that the Soma plant was none other than the moon; and this is difficult to sustain.

Further we find that the Soma was the soul of sacrifice and it is well accepted that the moon has little to do with the Vedic sacrificial institution.

But perhaps the blow fatal to the theory comes from Rg. VIII 82.8:

"The Soma seen within the vats, as in the flood the Moon is seen, Drink thou (O Indra) for thou art Lord thereof."

From his passage it is more than clear that the Rgvedic poets far from unifying the Soma and the moon looked upon them as distinctly

^{39.} Rg. VIII 48.9.

^{40.} Rg. IX 2.10.

separate entities. Hence we find the Soma used as Upameya here, while the Moon (mentioned clearly as Candramas) is used as Upmana. Generally the object of comparison and the object compared to are distinct and never identical objects, except in case of the Ananvaya Alankāra, and that is nobody's case.

The mainstay of the moon theory is the hymn which describes the wedding of the Surya, the daughter of the Sun with the Soma (X 85).

Stanzas 1 to 5 and 19 from this hymn are principally relied upon. Therein the Soma is described as holding his place in heaven; the Soma has his place in the midst of the constellations; ¹² and that Vayu is Soma's guardian god and finally the moon is that 'which shapes the years'.

These are no doubt references to the moon. The moon is described as the distributor or shaper of years, ¹³ clearly a reference to the moon's function as a measure of time.

Further in X. 85.19 the moon is said to prolong the days of our existence.

Here it must be remembered that these passages occur in the Mandala which is admittedly a later Book. It i snot in IX Mandala. In these passages we find the beginning of the process of the integration of the Soma with the moon which we find well-developed in the Brāhmaṇas.

In the said wedding hymn we find a difference drawn between the Soma which the priests know and the Soma which they crush for obtaining the juice.

One thinks, when they have brayed the plant, that he hath drunk the Soma's juice;

Of him whom Brāhmaṇas truly know as Soma no one ever tastes (X 85.3).

It appears from this that the connexion between the two-fold pattern of the Soma, viz. the earthly and the heavenly, was kept a closely guarded secret; a mystery surrounds it; a mystery known only to the priests. The fact that a need for the unification of the Soma and the moon arose later on, itself establishes the early dualism between the two.

^{41.} Rg. VIII 82.8 = VIII 71.8 (Griffith).

^{42.} Rg. X 85.2.

^{43.} Rg. X 85.5.

Possibly there may be cryptic references to the moon as in passage like X. 123.8 where it is described:

'When as a spark he (Vena) cometh near the ocean, still looking with a vulture's eye to the heaven.'

According to Mahidhara and Ludwig, Vena is the moon. It is possible to multiply such allegorical references but they are not free from obscurity. Hence Macdonell observes:

'It is possible that amid the chaotic details of the imagery of the Soma hymns there may be occasionally lurking a veiled identification of the ambrosia and the moon.'44

At any rate it is difficult to accept Hillebrandt's theory with due respect to that savant, as it cannot be shown that the Soma plant or the Soma juice is the moon itself. It seems the moon was not sufficiently individualized during the Rgvedic period. The consequential absence of hymns addressed to the moon explains the absence of development of any myths around the moon like Indra or Varuṇa. We may, in fine, conclude with Oldenberg:

'There is in the whole of the Rgveda no clear identification of Soma with the moon, no clear reference to the conception that the moon is the food of the gods.'

In this verdict Macdonell also concurs.

Post-Rgvedic Identification of the Soma with the Moon

It may not be possible for us to agree with Hillebrandt's premature identification of the Soma with the moon. However it is perfectly clear that in the later literature we have this unification.

In the Atharvayeda we find:

'Let god Soma free me, whom they call the moon.'45

In the Brahmanic literature this identification becomes a commonplace. The Nakṣatras are described as the wives of Kinga Soma who likes to be in the constant company of Rohiṇī alone. The jealouslystricken co-wives of Rohiṇī approach their father the Prajapāti. The Soma is seized with a malady. However in the end he agreed to be faithful to each of his star-wives in turn.

^{44.} Vedic mythology, p. 53.

^{45.} AV XI 6, 7.

The digits of the moon are said to occur as the gods and the manes eat the Soma in the moon which is the nectar; the body of the moon is ambrosial. In Aitareya Brāhmaṇa the divine Soma is the Moon.¹⁶

It is in the Satapatha Brāhmaņa that we find a clear reference:

'The King Soma, food of the gods, is itself the moon.'47

In the said passage we find the etymology of the word Amāvasyā the new-moon day. On the new-moon day the moon is not seen either in the East or the West; he then visits the world and here he enters the waters and plants. As on that night the Soma dwells together (amāvas) or is at home, hence the new moon night is called Amāvasyā.

The mystical identification of the Soma and the moon is explained in Kauṣītaki Brāhmaṇa, thus:

'The visible moon is King Soma.

He enters into this (plant) when brought." 18

In the Chandogya Upanisad it is stated:

"The Soma is the moon and is the food of the Gods and is drunk by them."

Reasons for the Identification

It is interesting to see how this transformation took place.

As already observed the veiled beginning is found in a later Book of the Rgveda (X 85). The passages cited from the Brāhmaṇas point the way to this process of unification. In the Rgveda itself the Soma is the food of the gods, which they drink in the hope of immortality.⁴⁹

Obviously one of the principal reasons for the merger of the Soma with the moon, as deducible from the above passages, appears to be the belief that the Soma juice bestows immortality and further the belief that the said Soma juice was found in the moon.

It is interesting to note that the moon was regarded as an edible thing according to the folk-lores of diverse nations. The English say 'The moon is made of green cheese'. The German folk-lore looks upon the moon as a 'lump of butter'. Hence Dr. Griswold has rightly remarked

^{46.} AB VII. II.

^{48.} K. B. VII 10.

^{47.} S.B. I 6.4/5.

^{49.} Rg. IX 106.8.

that "The sayings of folk-lore, which among various people represent the moon as something edible doubtless contributed also to the final synthesis of Soma and moon." ⁵⁰

According to Macdonell possibly the belief of an intoxicating divine beverage the home of which was in the heaven, goes back to the Indo-European era and it must have been regarded as a kind of honey mead (Sk. Madhu. Anglo-Saxon: Medu).

Then take the whole modus operandi of the pressing of the Soma juice. The process of pressing the Soma plant by means of the adri or grāvan, i.e. the pressing stones, the strainer of sheep's wool resembling the sky, the noise accompanying the crushing ceremony, the shining liquid dropping down in the wooden vats (Droṇani). All these manufacturing details might have evoked sympathetic association with the natural phenomena of the sky, thunder, lightning and rain. The theatre of this natural occurrence being the sky, attempts were possibly made to locate the resulting Soma juice in the sky, in the moon.

The mixture of the juice with water, honey or milk is described as being decked with beauty. Eventually the juice came to be identified with the beautiful in the sky, viz. the moon.

The Soma plant being most useful to man as yielding the immortal drink, it was naturally raised to royalty. Soma is thus the king of the plants.⁵¹ Later on the moon also is found to be the Lord of the plants, as moon is considered to influence the growth of vegetation.

The Soma juice, having a kick had an effect on the mind. So also we find later on the moon exercising influence on the minds of men.

The Soma juice was leader of the poets, 52 the moon also became the leading inspiration of the poets later on.

The Soma is the 'Child of heaven'. So is the moon. In fact the myth of the Soma plant being transported from the high heaven to the earth as described in (IV. 26, 27), possibly provided the important link in this process of identification. There could have been hardly a more appropriate repository of the nectar other than the spacious, soothing moon.

^{50.} Griswold, Religion of the Rgveda, p. 231.

^{51.} Rg. IX 12.7.

^{52.} Rg. IX 96.6.

^{53.} Rg. IX 38.5.

These are the principal reasons which account for the final merger of the Soma, the deified drink with the moon. The bright drop (Indu) also came to be identified with the moon. Peterson states that the identification was suggested by the circumstance that Indu the 'drop, spark' applies to both the Soma and the Moon.

We may conclude with Dr. Deshmukh:

'For although Hillebrandt has repeatedly sought to prove that the moon was as important an object of worship as the sun, it remains a significant fact that the moon never attained to the position of a great god in early times.'54

Possible Reasons for absence from Rgveda

Apart from the later identification of the Soma with the moon, it is reasonable now to maintain that the moon is more or less conspicuously absent from the panel of Rgveda gods. What may be the possible reasons for passing over this luminary by the Rgvedic poets, a luminary which has been the guide, friend and inspiration of the lovers, lunatics and poets who are of imagination all compact?

According to Dr. Griswold the Vedic Aryans were nature-worshippers. The deified and lyricised the natural elements. Schrader adds two more motifs to the growth and development of Indian mythology. The worship of the unseen as illustrated by Brahmā and that of the worldly deities like Siva. But the moon is not regarded as worthy of god-head from either of these points of views. Nor is the moon found to be worshipped either as a special god like the Agni or a personal god like Indra, according to the classification envisaged by the German scholar Usener.

The Vedic Aryans were no doubt poetic, yet they were a practical race. They adored either the powerful or the useful. Indra and Varuṇa were deified as they were powerful. The river and the cow were invoked as they were useful. Thus, we find them worshipping and invoking the blessings of the sun gods, the rain gods, the wind gods, the rivers, Soma the divine drink, the mountains and the herbs, and the dawn as seen in the hymn VII 35 addressed to Viśve Devās. But the moon is not there. Perhaps it was though that the moon did not wield enough power either to help or to hamper them.

They were practical to the core. Theirs was mainly an agricultural

54. Deshmukh, Religion in Vedic Literature, p. 243.

civilization. Hence they raised the rain and the river,⁵⁶ the sun and the serpent,⁵⁶ the dawn and the dog⁵⁷ to the god-head.

Theirs was essentially a Day-Civilization and hence they celebrated the sun-god in its many-splendoured glory as Savitr before rising, Vivasvant while rising and Surya after rising. They also went into ecstacies over the ushers of the sun like the Dawn or the Aśvins. The institute of the sacrifice kept them busy since early hours, but by the evening everything was over. It is pointed out by Macdonell that even the sunset failed to appeal to the Vedic lyricists. It is for the same reason that they could afford to neglect the moon. For what had it to offer them? No blessings. Light of course was there. But it was light in the night and then who cares! Thus it was that the moon, being innocent of both power and utility, came to be neglected like the Urmila of the Rāmāyaṇa.

However, though belated, justice was done to the moon in the later literature, and hence we may close with the words of the Rgvedic poet: 'Pay reverence to the King Soma' (IX. 114.2), where we mean by Soma the moon and not the Soma juice, the cup that cheered our ancestors.

^{55.} Sarasvati.

^{56.} Ahi Budhnya.

^{57.} Sarmá.

IDENTIFICATION OF MUSIKANAGARA

By

M. K. DHAVALIKAR

The famous Hastigumphā inscription in the Udayagiri Hills in Orissa contains a graphic description of the conquests of the emperor Khāravela of Kalinga. Due to the mutilated character of the inscription the scholars differ in its reading and interpretation. Most of the places described in the inscription have so far been satisfactorily identified while there looms much controversy over the identification of Musikanagara. Even K. P. Jayaswal and R. D. Banerji who jointly edited the inscription differed from one another in the identification of this place. Several other scholars have tried to identify it, yet none of the identifications so far put forth is satisfactory or reasonable.

It is generally agreed that the inscription does not mention either Asakanagara¹ or Sakanagara² as is read by some scholars. Jayaswal and Banerji have correctly read it as Muśikanagara.³ Jayaswal locates it somewhere on the river Musi in the former Hyderabad State (now in Andhra Pradesh) while Banerji identifies it with the modern Muziris on the Western Coast. According to Rapson and Barua the city was the capital of the Assikas in the Godavary Valley.⁴

Before identifying this place it is necessary to consider the clues provided by the inscription itself for it is only with the help of this Praśasti that the place should be identified. The following are the tests to be applied in examining the correctness of the identification of Muśikanagara:

- 1. It should be a place of considerable importance at the time of Khāravela who would not have invaded it otherwise.
- 2. The place should have formed a part of the kingdom of Śātakarni I.
- 3. Geographically it should lie in proximity to the river Krishṇā in the South.
- 1. Sarkar, Select Inscriptions, p. 207 ff.
- 2. Cunningham, Corpus Inscriptionum Indicarum, vol. I, 98.
- 3. El, vol. XX, p. 71 ff.
- Sastri, Comprehensive History of India, vol. II—The Mauryas and the Satavahanas, p. 113.

The only place which, I feel, fulfils all the conditions detailed above is MASKI (15° 57′ 30″ N. Lat. and 76° 39′ 15″E. Long.), now a tiny village on the river of the same name in the Lingsugur Taluq, Raichur District (Mysore State). I shall apply the tests laid down above seriatim in examining the correctness of the identification of Maski with Muśikanagara in preference to other places.

It is a proven fact that Maski was a place of immense importance in the Early Historic period. The Asokan Edict, with the name of Asoka in the body of the edict, indicates that the place was of considerable political and social importance during the Mauryan period. It is also not unlikely that the importance of Maski continued even after Asoka under the Satavahanas who succeeded in dominating the political horizon of the Deccan after the disintegration of the Mauryan empire. Here the archaeological evidence collected from the site comes to our rescue. The excavations at Maski in 1935-37 by the Archaeological Department of the former Hyderabad State⁵ and in 1953-54 by B. K. Thapar of the Department of Archaeology of the Government of India amply demonstrate that this place was humming with activity during the Early Satavahana period as evidenced by the profuse yield of pottery characteristic of that period. A large number of megalithic monuments containing rich burial furniture also points to the same. Besides, innumerable minor antiquities such as terracotta figurines and beads of semi-precious stones (housed in the site museum of the place) ascribable to the Satavahana period on stratigraphical evidence, bespeak of a prosperous culture flourishing at Maski.

Another important feature of Maski is the gold-workings which have been discovered in large numbers in the course of archaeological excavations conducted here. It clearly proves that the surrounding country was being systematically mined for gold in ancient days. Their occurrence is certainly not without significance as it affords a clue to the location of Suvaṇṇagirī (Sanskrit Suvarṇagirī—'Gold Mount'), the head-quarters of Asoka's viceroy in the South.8

This land of gold must have proved to be a coveted prize for Khāravela who therefore camped on the banks of the Krishṇā and caused terror to the

^{5.} Annual Reports of the Archaeological Department of H. E. H. the Nizam's Dominions for the year 1935-36 and 1936-37, pp. 19-31 and 14-16 respectively.

^{6.} B. K. Thapar, Maski—a Chalcolithic site of the Southern Deccan, Ancient India, No. 13, 1957, pp. 4-143.

^{7.} Ancient India, No. 13, pp. 10-11.

^{8.} Hultzsch, Corpus Inscriptionum Indicarum, vol. I, p. 175.

inhabitants of the city of Muśikanagara with a view to capturing it. But the Hastigumphā inscription does not record the conquest of the city.

Secondly, though no Śātavāhana coins are reported from Maski proper, it can safely be included in the Śātavāhana empire as the Śātavāhana coins have been collected from the region surrounding Maskiⁿ attesting to the Śātavāhana rule over this region.

Thirdly, the geographical location of Maski also favours its identification with Musikanagara for it is only about 15 miles as the crow flies to the east of river Krishnā. Khāravela did not destroy Muśikanagara but, as the inscription describes, only camped on the banks of Krishnā and caused terror to the inhabitants of Musikanagara. Here it must also be taken into consideration that the river Kanhabenha of the inscription is Krishnā and not Wainagangā10 for the epigraphical records of later period show that the Krishna was also known as Kanhabenha.11 It is interesting to note that even the literary evidence supports the proposed identification. The Muśikas, that is the inhabitants of Muśikanagara, are undoubtedly the people of South India as in the Mahābhārata12 they are mentioned along with the Vanavāsis, i.e., the inhabitants of Vanavāsi which is identified with modern Banavasi in the North Kanara District (Mysore State). A cursory glance at the map of India is sufficient to show that these two regions are adjacent to each other and therefore the Vanavāsis and the Musikas must have been neighbours in ancient times.

In the Nāṭyaśāstra of Bharata they are probably coupled with the Tośalas and the Kośalas under the name Mośalas. The Kośala is the Southern area of Madhya Pradesh while Tośala is probably South Orissa. Thus it is not without reason that the Nāṭyaśāstra groups together the Tośalas, Kośalas and the Mośalas or the Musikas.

The foregoing account amply demonstrates that the evidence—archaeological, numismatic, literary and epigraphical—collected favours the identification of Maski with Muśikanagara while no other place suggested so far by the scholars fulfils all the conditions laid down in the inscription. Moreover, there is a strong epigraphical evi-

^{9.} Śātavāhana coins have been found in Karwar in the West, Chitaldrug in the South, East and West Godavari Districts in the North and Coromandel Coast in the East. See Rapson, B. M. Catalogue, Andhra Dynasty etc.

^{10.} Comprehensive History of India, vol. II, p. 113.

^{11.} El, vol. XX, p. 83.

^{12.} Bhismaparvan, Ch. IX, 4. XIII, 27.

dence which provides the missing links between the ancient name Muśikanagara and its present form Maski. It is identified with Mosāngi where the Chalukyan king Jayasimha II was defeated by Rājendra Chola I and is referred to as Priya Mosāngi or Rājadhāni Priya Mosāngi in one of the inscriptions of the later Western Chalukyas.¹³ Again an inscription of Sadāśivarāya of Vijayanagara mentions the name of this place as Mosage-simha or the province of Mosage.¹⁴ It is needless to mention that the present name Maski is derived from Mosage which was current in the mediaeval period.

^{13.} P. B. Desai, Corpus of the Inscriptions of the Kannada Districts of Hyderabad (in Press)—quoted by B. K. Thapar, Ancient India, No. 13, p. 17.

^{14.} Ibid.

DETERMINATION OF SEASONS AND EQUINOXES IN OLD INDIA AND RELATED FESTIVALS

 $\mathbf{B}\mathbf{y}$

S. L. MALURKAR

When primitive man in the tropics and in the sub-tropical region was in a nomadic stage, he would observe the stars, the moon in its various phases and in different positions or constellations night after night. would begin to count by the number of full moons or by the appearance of the first crescent after the new moon. His concept would essentially be based on the phases of the moon. His day would commence with the sunset. At a later stage he may evolve a type of lunar year by observing that the full moon recurred very nearly, though not quite, in the same lunar constellation after twelve lunations. But when he settled down and began cultivating his crops: he would find that unless he sowed at the proper time, he would waste his seeds and unless he prepared the ground in time he would have missed, perhaps for a whole year, his crop. The operations like ploughing or preparing the field, sowing, reaping etc. would have assumed great importance. The agriculturist would need advance knowledge of the setting in of the rains, which are seasonal in the tropics and in the sub-tropical regions. The seasons could only be known if the sun's position was determined. Unlike the moon's position which could be followed by many, the sun's position among the stars involved some observation, interpolation and subsequent deduction which to an early mind would have presented formidable difficulties. Those that could solve this main problem which concerned the whole life of the community would have been very useful and highly esteemed members of the society

In ancient Egypt, as until recently, the agriculturist depended on the floods of the Nile river overflowing his fields and irrigating them, as the rainfall in Egypt itself was scanty. At the time of the floods, the sky over Egypt was practically cloudless, giving scope for extra-human dispensation. The Nile river floods depended on rainfall in the uplands of more southern regions of tropical and sub-tropical Africa. The old Egyptian priest may not have known that the floods were due to rainfall over those then unexplored regions; but he had noticed that they were seasonal, i.e. depended on the position of the sun. His maintaining his own importance and the country's safety demanded all his ingenuity so as to be able to determine the seasons and the time of floods.

The visual observation of the sun in relation to the stars would only be possible for a short time either at sun-set, the beginning of nomad's day, or at sun-rise. Only the bright stars would be visible along with the sun. The brightest star Sirius (a Canis Majoris) could be observed a little after sunset in the early summer months. The interval between the sunset and the setting of the star would decrease with each successive day until the star would not be seen at all due to sun's rays (heliacal setting). After a few days, if the sky was seen at dawn, the star would just be visible before sunrise and with each successive day the interval between the star rising and sunrising would increase. The first day when the star could just be seen before sunrise was the heliacal rising of the star. The Egyptian priest had noted that the heliacal rising of Sirius was followed by the Nile floods. He observed that once the heliacal setting of sirius was observed, the heliacal rising was only a few days off and he warned his countrymen of the impending Nile floods. By noting the heliacal rising of Sirius in successive years, the priests—the intelligentsia of the period could get an idea of the tropical year and of the epochs of the equinoxes.

Two thousand years ago the Indians particularly those living near the coasts and having trade relations with the then known countries could learn and have imbibed the current knowledge among the foreigners assimilated it into their own culture. But the heliacal setting and rising of Sirius cannot be easily observed in S. India and in N. E. India as it would be just time for the setting in of the S. W. monsoon.

In Kerala (Malabar), Tamilnad and higher up along the east coast of India in Bengal, the purely solar year has had a long vogue. Over the rest of India, the calendar has been luni-solar, i.e., based on twelve lunar months with an intercalary month added every few years and very occasionally subtracted to bring the lunar year into line with a solar year.

The lunar months have been named after the lunar constellations occupied by the moon on the corresponding full moon day on an average, in the march of luni-solar years. There are only twelve-months with distinct names of their own named lunar months and twenty-seven lunar constellations and every year the full moon does not fall exactly at the same lunar constellation for a given month. The intercalary months prevent the wandering away of the lunar months and the corresponding constellations on the full moon day. If the time of the full moon and the corresponding lunar constellation be known, the position of the sun is determined. While there is evidence of the determination of the sun's position almost directly, the intermediary of the full moon's position has apparently been resorted to in India for getting at a tropical year.

In the Ghats bordering the plateau of Mysore, fairs are held at intervals of years in the dry season when the sun could be seen setting or rising through some particular valley. The place would otherwise be mostly unpopulated and would be over-run by thick shrubs. The place having been got tidied up would serve as a mart, for a few days, and the worship of a local deity would be given great prominence. There may be similar events elsewhere in India.

In many of the old Indian temples, dedicated to Siva in his various eponyms, the construction is such that the sun's rays fall on a particular day of the year at a selected spot in the temple. The day when such rays fall are mostly in the dry season between the winter solstice and vernal equinox (when little rain is expected) and has been associated with some local festival. The epoch, some months later, when the sun may be in a corresponding position would probably be in the rainy season with little attached significance. Such observations give the direction of sun's rays at a particular time of day and on a particular day of the year would serve visually (or as denoted by Indian calendar makers as Drikh as) to correct any creep in the calculation of the seasons.

A lunar constellation (i.e. series of 27 constellations where the moon could be found on successive days) near Sirius with the bright star Betelgeuse (a Orionis) is Ardra. The full moon occurs near this constellation in December corresponding to Indian Dhanus (Tamil month of Marghali and luni-solar months of Margashira or Pushya). Within a day of the epoch of the full month—a day later if Margashira and a day earlier if Pushya—the moon would actually be in the lunar constellation of Ardra. On that day at dawn, a ceremonial of Ardra Darshanam (viewing of Ardra) is observed at the famous Nataraja temple at Chidambaram with the concurrent important festival of Tiruvadurai. Tiru is an honorific term added to many Tamil words. Sirius is known in India as Vyadha. The period of the festival is almost exactly six months away from the ancient Egyptian one because of the intermediary of the full moon's observation instead of the sun itself. The importance attached to the festival must have had a bearing on the community's life i.e. food. These suggest that the Tiruvadurai might be a corruption of Vyadha itself and that Ardra Darshanam is analogous to that of the ancient Egyptians of the heliacal rising of Sirius but had been so assimilated into local tradition that it fitted to the possible observations in S. India. This interpretation (however distant) explains the role in an agricultural community in getting at the seasons and the point of vernal equinox. Such an important observation and deduction would be followed by the populace by an elaborate festival and consequent ritual as in the ancient countries of Middle East.

portrayed sculpture is a representation of the joy and emotional release, the mood of festive offerings.

The knowledge of celestial viewing and the deductions, the feeling that there was a 'cosmical' ordering, was, perhaps, part of the well known "Chidambara Rahasya or secret" which could be comprehended by a select few only.

Another important festival based on the luni-solar calendar and observed by the brahmins almost all over India is the full-moon that occurs in the lunar constellation of Sravana (α , β , γ Lyrae) in August. In most of S. India and the west coast, the almost daily rain would have been replaced by that of 'monsoon breaks' extending to a week or more. The sky would often be visible and the position of full moon could be noted. The full moon day in Sravana is a day of re-dedication (for a good harvest!) and always occurs before the autumnal equinox of which it appears as a nearer indicator than the observation in the dry season.

The intermediary use of lunar observations would show that preponderantly the calendar in use even in S. E. India in the early days was a lunar one corrected for the tropical year at intervals. In old works there is evidence of this deduction. It might be difficult to account for the fact that even after having had a knowledge of the sun's position, the modified lunar calendar continued apart from conservatism. (The early man would not have such inhibitions.)

With the growth of various astronomical works (siddhantas) which allowed the calculation of the positions of the sun and moon gradually the observational aspect of the festivals would give way to ritual only. But the construction of places of worship would often follow the set examples or patterns of earlier days. The Jyoti-linga temples continued to be built. The other groups of temples which had no set pattern to follow as for example those in the post-puranic period or Bhagavata period do not have such special associations. Even in later days, the direct observations must have been made at long intervals as can be seen by different siddhantas.

In a festival based on luni-solar calendar, either the phase of the moon (thithi) or the lunar constellation (nakshatra) or both at sun-rise or afternoon would be used. As in each case, the criterion for the observance of a festival might be as on the eve of, as during or as after either phase or nakshatra, with the same calendar calculation. Different days for the same festival may be in practice among different groups of people or tracts of the country leading to confusion at first sight. More confusion might be observed if a particular solar month gets superposed on either the

phase of nakshatra. The confusion is due to the criteria. The Śravaṇi festival in relation with the full moon in the luni-solar month of Śrāvaṇa has got changed into the moon being in Śrāvaṇa nakshtra during the solar month of Simha (Tamil Avani) into "Onam" of Kerala.

The old Indian calendar computers were seriously interested in the position of the sun. It would be one of the chief reasons for the development of the various siddhantas in this country. The position of the sun corresponding to the 27 lunar constellations is meticulously given in panchangs often named "nakshatras for rain" or Maha Nakshatra. first appellation definitely shows the association with rains which were seasonal or depended on the tropical year. The rainfall amounts for these Nakshatra periods of 13 to 15 days were the usual tabulations in the Mysore Agricultural Department some years ago. The ordinary man has imbibed some of the terms in his daily usage. The layman talks of Hathi rain; the older Bombay Civilian spoke of Elephant rains at about the end of the monsoon in Bombay State and connects it with large drops of rain that are seasonal at the time. What is really indicated is that the showers belong to the period when the sun is actually in Hasta (Sanskrit of Elephant) extending over the last ten days of September and a few days of October. In Mysore the people talk of blind Chitta rains corresponding to the fortnight after the Hasta i.e. when the sun is in Chitra constellation. The continuous rains for two or three days are due to depressions or cyclonic storms in the Bay of Bengal when about the latitude of many places in the older Mysore State. In the villages of Mysore, it is common to hear that first rains in Rohini and Ardra do not indicate a well distributed monsoon while Punarvasu and Pushya ones are. It is not necessary to attach here any significance to the forecasting expressions. But the main point is that while adopting a luni-solar calendar as in Mysore and Bombay, the prime recognition continued about the sun's position. At the villages in Mysore and probably elsewhere, people gather even now on the New Year day of the Luni-Solar year round the local jotisha for Panchang Śrāvana (listening to the Calendar) to know the days of various rain-stars or when the sun enters different lunar constellations in terms of the luni-solar year. With the intercalary months wedged in and occasionally taken out, this knowledge is quite beyond an ordinary worker in the fields. Of course the jyotisha tries to forecast rains in that particular year in different star periods which is really an attempt, in early days, to increase his own importance and living by helping the cultivator. The astronomer astrologer got mixed up as in many older periods. One group took up the responsibility for computations while the other implicitly followed the instructions and as the arrangements continued for a long time, it must have been mutually beneficial.

SUBANDHU AND ASAMĀTI

By

N. G. CHAPEKAR

There is a legend concerning Subandhu related in the *Bṛhaddevatā*. According to the author there were four brothers named Subandhu, Viprabandhu, Bandhu and Sṛutabandhu. They were family priests of a king called Asamāti who dismissed them and appointed other priests for the performance of sacrifices. The new priests killed Subandhu. Thereupon the other brothers prayed for the restoration of his life. Four sūktas namely 57th to 60th of the 10th maṇḍala of the *Rgveda* refer to this episode. Such is the tradition.

It may be observed that there is no other reference to the aforesaid

Bandhu, Srutabandhu and Viprabandhu are said to be the authors of the four sūktas referred to above. Subandhu was dead and it is surmised that the surviving brothers prayed for his resuscitation. The tradition assigns these four brothers to the Gopayana class. The same tradition ascribes the small 24th sūkta of the 5th maṇḍala to Bandhu, Subandhu, Srutabandhu and Viprabandhu. By this sūkta, prayers are offered to Agni. It may be asked why this sūkta was not incorporated in the 10th maṇḍala along with the four sūktas beginning with the 57th. The 5th book is supposed to be the compilation of Atri and his descendants whereas Gopayana, said to be the ancestor of Bandhu and his brothers, belongs to the family of the Vasiṣṭhas.

In order to ascertain whether the above legend derives any fundamental support from the Rgvedic text, it is necessary to know the contents of the four suktas mentioned above.

Sūkta 57:—

- 1. Oh Indra, we won't go back from (our) path; we would not go back from the Soma sacrifice; let no obstacles stand in our way.
- 2. Let us reach him (Agni) who is invoked; who adorns the sacrifice. (Compare 10-91-8: Vidathasya prasādhanum Agnim). It is a sacrifice (Tantuḥ) enlarged among gods.

- 3. Indeed, we ask for mind by (means of) the sacrificial Soma and by prayers addressed to Pitrs (ancestors).
- 4. Let your mind come again for sacrificial rites, Valour, active life and to see the Sun for ever (to live long).
- 5. Let the god-like people (देंत्यो जन:) (namely) our ancestors give back mind, we shall have sacrificial life (जीव कर्त).
- 6. Oh Soma, we confide (our) mind in your ordinance (वर्त) and in your parts (तनुष) endowed with progeny.

Sūkta 58:-

- 1. Since your mind has gone far away to Vaivasvata Yama I call it back for residence and to live long.
- 2. That mind of yours which has gone far away to the heaven and to the earth, I call it back etc. (The 2nd stanza is repeated.)
 - 3. Since yours has gone far away to the all pervading ground चर्तुभृष्टिं भूमिं
 - 4. to the four quarters.
 - 5. to the watery ocean.
 - 6. to the dashing rays.
 - 7. to the water and to the herbs.
 - 8. to the sun, to the dawn.
 - 9. to the mighty mountains.
 - 10. to this universe.
 - 11. to the most distant land.
 - 12. to whatever has been and whatsoever will be. (भूतं च भव्यं च)

Sükta 59:—

- 1. Let life be extended long and youthful, just as a skilful carpenter does in the case of the occupant of the chariot; one who moves (च्यवान:) reaches goal (अर्थ उत् तवीति). Let the evil spirit get away.
- 2. We make stock of food (निधियत् अन्नं) (we make) many (मुरुध) oblations (श्रवांसि) for Sāman (सामन्) and for enrichment (राये). Let all our prayers (जरिता) bring exhilaration (समनु) (to them). Let the evil spirit go away.

- 3. Let us overpower our enemies by our Valour as the sun vanquishes the earth or as the thunderbolt strikes the clouds. Let all our prayers take cognizance of this (司充司). Let the evil spirit go far away.
- 4. Oh Soma, do not deliver us to the god of death (मृत्यवे) (so that) we may see Sun ever treading on and on (उद्यक्त). Let oldness be good to us. Let the Goddess of evil go far away (from here).
- 5. Oh Goddess of life, direct your attention to us. Give us long life so that we may live, make us to see the Sun, embellish our body with Ghee.
- 6. Oh god of life, give us (चेहि) sight, again give us vitality (प्राणं) give us (means of) enjoyment. Let us see the Sun travelling (in the sky). Oh, Anumati make us happy.
- 7. Let the earth, the sky, the antarikṣa (intermediate region) give us again energy (असुं). Let Soma give us body again. Let Pūṣā give us what is pathyāsvasti (speech).
- 8. Let the great heaven and the earth the origins of sacrifice do good to Subandhu. Let the heaven and great earth drive away disease (रा:) Let no disease harm you. (Rapah probably means more than a disease.)
- 9. Water (भेपजा) falls from the sky in doublets and triplets on earth (as also singly). Let disease be driven out. Let heaven and earth drive out the disease. Let no disease harm you.
- 10. Oh Indra, goad the bullock yoked to the chariot—bullock that brought the chariot made of usinara wood. Let the heaven and the great earth drive out the disease. Let no disease harm you.

Sükta 60:--

- 1. We have come kneeling to this person who has a bright appearance and who is praised by the great.
- 2. (That person) is Asamāti who is a donor (नितोशनं) of brilliant wealth loaded in a moving chariot (निययिनं रथम्) and who is the virtuous king of Bhajeratha.
- N.B. Following Rajavade, I have translated (नितोशन) as a gift or a donor, निय्यिनं means starting from the place of the donor to that of the donee. The Chariot containing wealth was not stationary. I understand मंत्रिय as a name of a country differing from Sāyana.
- 3. Who in a fight overpowered enemies (जनान्) whether with spears or without spears (पवीरनान् उत अपनीरवान्) just as (so many) buffaloes (महिषान्).

- 4. Under whose ordinance the wealthy and valorous (म्रायी) Ikṣvāku prospers and whose subjects (पञ्चकृष्ट्य: live as in the heaven.
- 5. Oh Indra, when Asamāti (Sāyana says plural here is honorific) rides his chariot, marshall his army like the sun in the sky so that all may see.
- 6. Yoke red horses (सती) for the sake of Agastya's near relatives and conquer, oh king, all the non-sacrificing Paṇis.
- 7. Here comes oh Subandhu, your mother, your father, your very existence (जीवानु:). It is the very object you have to go to (प्रसर्गगम् come out and go.
- N.B. Whether this refers to Agni as Sāyana surmises or to the king Asamāti is doubtful. Sāyana interprets the verse in the light of the anecdote current in later literature concerning Subandhu and his brothers. As I have confined myself to Rgvedic text only I am bound to differ from the learned commentator.
- 8. As yoke is tied by a strap to support (the chariot) similarly your mind is held not for death or for ill luck but for long life.
- 9. In the manner of this vast earth sustaining trees, your mind is held not for death or ill luck but for enjoyment of life.
- 10. I have brought the mind of Subandhu from Vaivasvata Yama, not for death or for ill luck but for life.
- 11. Wind blows below, the Sun shines (on earth) below. The sacred cow ejects milk below. In like manner let your disease come down.
- 12. This hand of mine is lucky, this one is luckier. This one of mine is all medicine itself (or cure). Its touch is auspicious.

There is nothing in the Rgveda, it may be observed, to confirm the statements that Subandhu and his brothers were the family priests of king Asamāti or that they were displaced by other priests who were skilled in black magic. Similarly, the Rgveda knows Subandhu only and none else. It will be appropriate to examine the rks that expressly mention Subandhu.

There is no doubt that Subandhu was a person of that name as 10-60-7 has been addressed to him. The word 'Subandhu' is in the vocative case. The speaker calls on him to come out and to meet one who is as a father, mother or a life spirit to him. Next, a person sings "I have brought the 'mind' or Subandhu from Vaivasvata Yama (10-60-10)." It is worth while to note the singular form of the verb.

It seems very likely that 10-58-1 refers to the mind of Subandhu. Here the author says "since your mind has gone far away to Vaivasvata Yama, I call it back". The following verses of this hymn point to the expansion of this idea. The mind went not only to Vaivasvata Yama but also to the sky, to the earth, to the waters, to the Sun, to the universe etc. Probably the poet imagines that the mind had been absorbed by the elements. The mind is claimed back from all these. Can mind mean soul here? The word mind has been persistently used. Elsewhere words 'asu' and 'prāṇa' are used (10-59-6, 7). It is arguable, therefore, as far as the author of these hymns is concerned, that he had no idea of soul. His conception of life was derived from mind, a breath and body which he could vividly discern. As Subandhu, it was imagined, was consigned the earth and the sky, the poet naturally desires that these should prove auspicious to him (10-59-8).

Here, the point arises whether Subandhu was dead. In my opinion Subandhu had not died. My opinion is based upon the fact that the poet makes the positive statement that Subandhu regained consciousness. The credit of this, the poet takes to himself (10-60-10). Here of course we must refuse to accept the superstitious view that life was restored through the favours of gods, after it was extinguished. The most rational view seems to be that Subandhu was on the point of death; perhaps delirious and raving. It is better to read all these verses in the light of this supposition. I think this inference can derive considerable support from 10-60-8, 9. The analogies set out therein are not suggestive of total extinction. It may reasonably be surmised that Subandhu was talking wildly in his delirium about sacrifices and other worldly matters. This would explain away references to the Soma sacrifices etc. The allusions to the exorcism evil spirits would rather be inappropriate had it been a case of undoubted demise of Subandhu.

The main theme of these suktas is admittedly the recovery of Subandhu. The homogeneity of this theme is marred by the introduction of the story of the king Asamāti. The latter was a great donor. He has been singularly eulogized or his beneficences. He was the king of Bhajeratha. He was brave, he routed all his enemies. One Ikṣvāku did his behest. He was a virtuous king, his subjects were happy. A request has been made to Indra to be the charioteer of Asamāti.

The names of Asamāti and Ikṣvāku are not to be found elsewhere in the Rgveda. I understand Ikṣvāku unlike Sāyana to be a different man from Asamāti. Rgveda does not warrant his identity with Asamāti. Ikṣvāku might have been a feudatory chief or Asamāti's subdued rival.

Obviously, this story is a misfit here for like reasons. The reference to Agastya is also out of place here. Indra has been exhorted to punish the Panis and favour the relatives of Agastya. All this has nothing to do with the recovery of Subandhu. I think verses 1 to 6 should be expunged from the 60th sukta and form an independent one.

The subject matter of sūktas under consideration is the anxiety felt for the life of Subandhu. It is perfectly in order that those interested in Subandhu should pray for his speedy recovery as well as long and vigorous life. With this background I consider the whole sūkta (59) with the exception of stanza viii rather dissonant. It destroys the harmony of the subject. The authors of this sūkta pray for their own life. Here the plural form may be particularly noted. The authorship of a rk in more than one person is inconceivable. It must therefore be supposed that author is speaking on behalf of himself and others. This plural form distinguishes these rks from others. The Devatā too is unique. Asunīti is not the Devatā of any other rks or hymns.

The other distinguishing feature is the marked difference in the contents of the two sets of prayers. The perusal of the rks under consideration leaves a definite impression on our mind that they do not ask for the revival of life. The sages pray against the possible loss of life. It appears in Rgvedic times people suffered from many a disease not rarely incurable. The rsis here ask for long and healthy life plus worldly enjoyments. What is still more significant is that in one place they express their desire to be able to overcome their enemies. That is quite out of tune with the lamentations expressed over the supposed death of Subandhu. I therefore suggest that these rks should be taken out and arranged separately.

It is needful to add that both the words Subandhu and Asamāti have been used in their primitive significance. For instance, Subandhu means one who has virtuous brothers in 6-58-4. Here Pūsā is said to be Subandhu; similarly 6-29-6 may be referred to for the natural meaning of Asamāti. The word is asamātyojaḥ that is one whose prowess is unparalleled.

NOTE ON MELPADI INSCRIPTION OF KRISHNADEVARAYA

Вy

K. H. V. SARMA

It is indeed very interesting to see the article on the Melpadi inscription of Kṛishṇadevarāya by Mr. K. D. Swaminathan in the June 1955 issue of this Journal. The inscription is no doubt very important as it mentions the name of the great Telugu poet Allasāni Peddana who flourished at the court of Kṛishṇadevarāya. It seems that this is the only Tamil record so far found mentioning this great poet and this roused the curiosity of my friend to contribute the article. The author has unfortunately committed many serious mistakes and made a number of inconsistent statements which have compelled me to add this note.

Firstly he states that Peddana was born in the village Nandāpuri as he understood the expression 'Nandāpuri-Allasāni-Chokkarājāvin' etc., and thus claims to support the late Viresalingam Pantulu. But Sri Viresalingam Pantulu wrote that the village Dorāla in Dūpādu-paragana of the Bellārypranta was the birth place of the poet. Mr. Swaminathan has not understood correctly Sri Viresalingam Pantulu's statement and has relied upon Dr. Mahalingam's English version which too, unfortunately, has not borne out the exact import of Sri Pantulu's statement. It is by no means correct to understand that Dorāla in the Dūpādu-paragana of the Bellary-pranta as Doranāla in the Dupad taluk of the Bellary District. There is neither a Dupad Taluka in the present Bellary District nor a village by name Dorāla in any of the taluks of this district. Neither Dr. Mahalingam nor Mr. Swaminathan has noted this fact. There are however two villages by name Doranāla and Dūpādu respectively in the Markapur Taluk of the Kurnool District. These villages are so far distant from the border of the present Bellary District that it is difficult to identify Doranala of the Markapur Taluk with Dorāla and suppose that the then Bellary-prānta in which this village lay extended as far as the present Markapur Taluk.

Again, according to Sri Viresalingam Pantulu Dorāla was the Janma-sthāna of Peddana.² Mr. Swaminathan has misunderstood Janma-sthāna as the "original home" of the poet. This is obviously wrong. Among the

^{1.} The Telugu Poets (Ananda Steam Press edition), Part II, p. 189.

^{2.} Ibid.

Niyogi Brāhmaṇas there are several branches such the Nandavarīkis, the $\bar{A}ruvela-niyogis$ etc., and the qualifying epithet by which each branch is characterised may be either a place name or an expression indicating a number probably of the families that colonised or settled in any particular place. The Nandavarīkis probably hailed from or were in some way connected with Nandavaram. All the six $\bar{a}\dot{s}v\bar{a}sas$ of the poet's work Manucharitra end with a statement Nandavarapura-vainsottainsa i.e. the ornament to the family of Nandavarapura. It is obvious from this that Peddana's family was connected with the village Nandavaram and the epigraph in question confirms this statement. We may also identify the village Nandavaram with the one of that name in Adoni Taluk of the Bellary District.

Secondly Mr. Swaminathan states that from the four known epigraphs available for Peddana, the poet may be assigned to A. C. 1518-20. This statement is rather ambiguous. Probably he means that the known epigraphs mentioning Peddana range between these dates. But he has added a footnote that Sri Viresalingam Pantulu definitely fixed the date of A. C. 1535 for the poet and that it was not known on what basis he had fixed the above date. It is a pity that our friend has not gone through Sri Pantulu's statement on the point to its conclusion. Sri Pantulu's date for Peddana viz. A. C. 1535 was only approximate and not definite. The *chāṭu* verse of Peddana on the death of his patron Kṛishṇadevarāya quoted below and also cited by Sri Pantulu proves that Peddana lived even after the king's death i.e. in A. C. 1530.

"edura-inacho-dana mada-karīndramu diggi kel-ūta yosagi yekkimchu-koniye Manucharitramb-amdu-konu-veļa buram-ega-ballaki tana-kela-baṭṭi-yette birud-aina kavi-gamḍa-pemḍeramunak-īve tagun-amchu tāne pādamuna-doḍige-Gokaṭa-grām-ādy-ānek-āgrahāramul-aḍigina sīmalayamdun-ichchen-Andhra-kavitā-pitāmaha-Yallasāni-Peddana-kavīndra yani nannu-biluchun-aṭṭi Kṛishṇarāyalato divek-ega-leka bratiki-yumditi jīvach-chavamban-aguchu"

From the epigraphs which record grants in Karivāchī-sīma³ (South Arcot District), Ghaṇḍikoṭa-sīma⁴ (Cuddapah District) and Taṇaīppūnḍi⁵

^{3.} ARSIE, No. 623 of 1915.

^{4.} Ibid., Nos. 715 and 716 of 1926.

^{5.} Lines 10 and 11 of the present record.

(Chittur District) in the different parts of the kingdom to Peddana, the authenticity of the above *chāṭu* verse is proved beyond doubt.

The Tippalūru inscription⁶ dated Saka 1430 a mistake for 1449 Sarvajit, Srāvaņa ba. 30, Monday, (26 Monday, August 1527 A.C.) mentioning the "ashṭadiggaja-kavīśvaras" of the Court of Kṛishṇdevarāya corroborates to some extent the above fact. The author has cited the inscription but not cared to look into the details of its date. It is unanimously agreed by all the scholars that Peddana lived even after the death of Kṛishṇadevarāya. It is unfortunate that the author has not studied the question carefully.

In order to confirm the Vaishnava creed of the poet Mr. Swaminathan cites a certain Sathagopayati mentioned by Peddana in his works Manucharitra and Harikathāsāramu and identifies the Vaishnava pontiff with the one figuring in inscriptions ranging between A.C. 1554 and A.C. 1558, i.e., 34 and 38 years later than the period to which the author "assigns" Peddana. He has obviously overlooked the two epigraphs of Saka 1438 Dhātri, (A.C. 1517)⁸ from little Kānchīpuram, Kanchipuram Taluk, Chingleput District, which also mention a Sathagopa-Jīyyar who was contemporaneous with Peddana. Moreover it is needless to bring Sathagopayati here to prove Peddana's leanings towards the Vaishnava creed. The Aṇṇiyūr inscription¹o cited by the author himself records the construction of a Vishnu temple by the poet, which is enough to prove the above fact. The mention of Sathagopayati by the poet in his works only indicates the regard the poet had towards the pontiff who was his guru.

Finally in enumerating the names of the eight poet laureates, ashtadiggajas, according to tradition, Mr. Swaminathan has reckoned "Ayyala

- 6. A.R.S.I.E., No. 282 of 1937-38.
- 7. See (1) Further Sources of Vijayanagara History by Prof. K. A. Nilakanta Sastri and Dr. N. Venkataramanayya, p. 232 ff. (ii) Kavijīvitamulu (Biographies of the Telugu Poets) by Shri Gurajada Sriramamurthy, p. 175. (iii) The Telugu Poets, Part II (Ananda Steam Press edition) by Shri Virasalingam Pantulu. (iv) Introduction to Manucharitra by Shri Veturn Prabhakara Sastri, p. xiii.
- 8. A.R.S.I.E., Nos. 474 and 533 of 1919.
- 9. See also in this connection the succession Tables Nos. 87 and 88, pages 57 and 58 of Vol. VI, Part II, Epigraphical Glossary on Tirupati Devasthanam Inscriptions; wherein it is clear that the Pontiff identified by Shri Swaminathan belongs to the fifth generation from Adican-śathakopajiyyar, the preceptor of Peddana.
- 10. A.R.S.I.E., No. 623 of 1915.

Rāju" and "Rāmabhadrayya", as separate individuals, while in fact Ayyala-rāju is only a surname of the poet Rāmabhadrayya.¹¹

The text¹² lines in the plate accompanying the article have not been properly numbered. In the second line after the name of the month is found a letter 'ti' which is a symbol for tivadi, i.e., day. Mr. Swaminathan has omitted the reading of this symbol. His system of transliteration also seems to be inconsistent. In several places in the text he has suggested emendations in the readings in round brackets. Even in this he is not consistent. He has corrected 'inta' (line 4) into inda but not matam (line 2). Such instances can be multiplied but this will suffice for our purpose. It seems the author has failed to understand that in the Tamil alphabet there is no provision for sonants and that the surds like ka, cha, ta, etc., are pronounced as sonants, unless they are duplicated. The sonants are recognised in the speech form and not in the written form. This is one of the fundamental features of the Tamil language. The author has corrected venśāy in line 14 into (ncāy). Here both the transliteration and the emendation are wrong. It should be only (sa). Samaram or Chamaram is the correct word and not caumaram as the author would suggest. Regarding the objects of gift, the expression vensamaram-porkambum evidently means a flywhisk with a golden handle and not a golden handle for a fly whisk.

Mr. Swaminathan has not apparently understood the passages in Telugu pertaining to the subject nor has he transliterated accurately the Tamil text of the record he took up, with the result that all the inconsistencies and discrepancies have crept into the article, which, but for them, would have proved a real contribution to our knowledge.

^{11.} The Telugu Poets, Part II, p. 213. Besides, the poet himself gives his surname as Ayyalarāju in the colophones at the end of each chapter in his work Rāmābhyudayamu while referring to the Ashṭa-diggajas the eight poets of the court of Krishṇadevarāya. Dr. T. V. Mahalingam too has made the same mistake in his book Administration and Social Life under Vijayanagara, p. 376.

I am thankful to my colleague Shri K. G. Krishnan for helping me to check the text.

VOWS AND FESTIVALS IN EARLY MEDIEVAL INSCRIPTIONS OF NORTHERN INDIA

 $\mathbf{B}\mathbf{y}$

V. S. PATHAK

The observance of *vratas* (vows) and the celebration of *utsavas* (festivals) are primarily communal functions. They express major trends and strands in popular religious culture. Their evolution may indicate rise and fall of various socio-religious tendencies whereas their analysis may unfold different elements of socio-religious complex.

The vital urge to the development of Brahmanical religious culture of early medieval period was chiefly derived from Vedic traditions and Āgamic cults. Their contacts, conflicts and rapprochement may be traced back to very early times. From the Gupta period, the āgamas vigorously asserted themselves. After the destruction of the Gupta empire, the Vedic tradition both of recitation (svādhyāya) and of rituals considerably declined in Northern India. The Smārtas continued the modified Vedic tradition. The Paurāṇikas tried to effect a synthesis of these two major strands.

In this general context of religious conditions, an analysis and evolution of vows and festivals may indicate the particular popular trends.

These vows and festivals are mentioned and described, in scriptures, inscriptions and classical literature. Scriptures generally present an ideal picture and literature gives at best the modified portrayal. Inscriptions, on the other hand, give us a real picture though as a silhouette yet in the reliable frame of time and space.

A survey of *vratas* and *utsavas* as known from inscriptions may be of some sociological interest.

VRATAS (VOWS OR AUSPICIOUS OCCASIONS)

The Vedic *vratas* associated with the rituals and recitations of the Vedas are not mentioned in inscriptions.¹ They seem to have receded

^{1.} The phrase ārya-vrata occurs in Rg. X, 65, 11. It, however, means 'a sum-total of social and religious duties of Aryans or ethical pattern of aryan culture,'

into background. The smārta *vratas* in the beginning consisted mainly in the observance of certain religious practices on occasions of astronomical significance—the planetary transits, eclipses, equinoxes, full- and new-moon days, etc. Later on, however, the *vratas* of devotional significance and āgamic origin were also introduced in the smārta fold.²

In the Gupta epigraphs, some of these smarta and agamic vratas have been mentioned.

- A. THE PĀLA-PRATIHĀRA PERIOD:—The Pāla and the Pratihāra epigraphs do not show any great predilection for smārta occasions. Besides a general reference to the rahasya-vrata (mysterious rites) and Piśācha-chaturdasī³ (which are definitely outside the category of the smārta-vratas), we find mention of the transits of sun in Kumbha¹ and lunar eclipses.⁵
 - (a) PIŚĀCHI-CHATURDAŚĪ:—The Pehoa Inscription of the time of Mahendrapāla contains a reference to it which as the context indicates was celebrated on the fourteenth day of the dark fortnight either in Chaitra or Phālguna⁶. It is not mentioned in the Smritis and the Purāṇas. But the Vishṇu-dharmottara contains a general injunction that yakshas and devils may be propitiated on the fourteenth day of any month.⁷ The name indicates that the day was consecrated to "female-goblin".
 - (b) RAHASYA-VRATA:—The Gwalior Ins. of Mihirabhoja records that the Pratihāra king Rāmabhadra worshipped Sūrya through mysterious vows and consequently obtained a son who was named

See, Bulletin of Deccan College Research Institute, II, 478. Veda-vratas are mentioned in the sūtras (Gautama, VIII, 15). According to Aśvalāyana-smṛiti these vratas are (i) Mahānāmni, (ii) Mahāvrata, (iii) Upanishad and (iv) Godāna. For Indra-maha see infra, p. 13.

^{2.} Some of the later smritis which clearly betray agamic influences in other spheres also, have included some agamic vratas. For example, Vriddha-harita VI describes in detail the ratha-yatra ceremony of the Vaishnavas. While describing the Ekadaśi-vrata it concludes:—

एकाददयुपवासदच रांखचकादिधारणम्। तुलस्या:पूजनं विष्णोस्त्रितयं वेष्णवं स्मृतम्॥

^{3.} See Kane, History of Dharmaśāstra, vol. V, I, p. 42-Ed.

^{4.} IA, vol. XV, pp. 105-13, 1.12.

^{5.} EI, vol. XIX, p. 1.10.

^{6.} EI, vol. I, pp. 186.

^{7.} यक्षाणाञ्च राक्षसानाञ्च चतुर्दश्यान्तु पूजनम् । ऋत्वा क्षेममवाप्नोति क्रियासाफल्यमेव च ॥

Vishņu-dharmottara, as quoted by Hemādri, Vrata, p. 154.

as Mihira-(bhoja).^S The fire-altar motif on coins, the name Mihira and the sun worship will naturally associate this rahasya-vrata with the fire-sun worshipping Persian Magi whose influence during this period is well attested by inscriptions, seals and coins.⁹

Thus the Gupta tradition of the smārta *vratas* was not continued in the Pāla-Pratihāra period. The Rāshṭrakūṭa epigraphs, however, clearly evince the popularity of these smārta *vratas*.¹⁰

B. FROM A.D. 950 to A.D. 1200:—This period, however, is marked by the great popularity of smarta and agamic-smarta *vratas*.

Chedi-Kalachurī epigraphs do not show the smārta influence to any marked degree. They contain a reference to *Uttarāyaṇa-saṅkrānti*. Besides it, the only important occasion mentioned in them is the *ratha yātrā*¹¹ which is definitely of the āgamic association¹². The Chedi area at this time was under the sway of the Pāśupata and the Śaiva-siddhānta schools and therefore the smārta influence was naturally meagre. Solar¹³ and lunar¹⁴ eclipses and the mahā-vaiśākhi¹⁵ are mentioned side by side with Śiva-rātri¹⁶ and Pavitraka-parva¹⁷ in the Paramāra documents. Solar eclipse¹⁸ and Devotthāpinī-ekādaśī¹⁰ and Śiva-rātri²⁰ are important occasions of the issue of the Chāhamāna records. Likewise the Solaṅkī and the

^{8.} सुतं रहस्यत्रतसुप्रसन्नात्सूर्यादवापनिमहिराभिधानम् । EI, vol. XVIII, p. 101, v. 15.

^{9.} There are clear traces of fire-altar motif below the legend Ādi-varāha on obverse of coins struck by Mihira-bhoja. See *Indian Museum Catalogue of Coins*, p. 241. Note that the epithet Ādi-varāha adopted by the king has also got the Magian association. Varāha was one of the eight Brāhmaṇas reported to have been brought by Sāmba from Maga-dvīpa. Varāha-Mihira, the celebrated astrologer was also a maga Brāhmaṇa.

^{10.} Altekar, The Rashtrakūtas and Their Times, p. 286.

^{11.} See Kane-History of Dharmaśāstra, vol. V, I, p. 388.

^{12.} These yātrās are described in Vaikhānasāgama, LIV, Virddha-hārita, VI. Ratha-yātrā mentioned in the Chedi epigraph—the Tewar Ins. of Gayakarņa, K. S. 902 = A.D. 1151, however, is the Pāsupata-Siva-yātrā.

^{13.} Journal of American Oriental Society, vol. VII, pp. 32-34.

^{14.} EI, vol. IX, pp. 103-07.

^{15.} IA, vol. XVI, p. 254.

^{16.} The Abu Stone Ins. of Dhūrāvarsha Paramāra, V. S. 1279.

^{17.} El. vol. XIX, p. 72.

^{18.} EI, vol. IX, p. 62.

^{19.} EI, vol. XIII, p. 211.

^{20.} Bhavanugar Inscriptions, p. 172-73.

Guhila inscriptions refer to smārta as well as āgamic-smārta *vratas*.²¹ The smārta tendency is definitely predominant in the Chandella epigraphs.²² The āgamic vratas are almost absent in them. The smārta trend reaches its culmination in the Gahaḍavāla documents. They mention solar and lunar eclipses²³, akshaya-tritīya²⁴, uttarāyaṇa-saṃkrānti²⁵, Kārtikī-pūrṇimā²⁶, Vaiśākhi²⁷, Māghi²⁸ and Manvādi. The āgamic ratha-saptamī²⁹ and Krishṇa-janmāshṭamī³⁰ also figure in them.

Thus, after a set-back in the Pāla-Pratihāra period the smārta-vratas became popular again from tenth century A.D. in Northern India. Side by side, the āgamic-smārta vratas were also prevalent. The Kalachurīchedi area shows a marked predilection for the āgamic vratas whereas the Gahadavāla records evidence a preference for the smārta vratas.

- C. VRATAS IN INSCRIPTIONS:—Following vratas were prevalent during this period:—
 - (i) PŪRŅIMĀ:—Māghī³¹, Kārtikī³², Vaišākhī³³ and Mahāvaišākhī³⁴.
- 21. Archaeology of Gujarat, p. 240.
- 22. The Chandella Inscriptions mention (i) lunar eclipse (EI, vol. XVI, p. 203), (ii) solar eclipse (EI, vol. IV, p. 158), (iii) Samkrānti (EI, XVI, p. 13), (iv) Māghī Pūrņimā, (IA, XVI, p. 205), (v) Pushyārka-yoga (EI, XX, p. 136).
- 23. EI, IV, Grant A, pp. 97 ff.
- 24. EI, vol. IV, p. 103; VII, p. 96.
- 25. EI, vol. VIII, p. 159; XVIII, pp. 135-43.
- 26. EI. vol. IV, p. 116; XVIII, pp. 135-43.
- 27. EI, vol. IV, G, I and J, Grants.
- 28. IA, vol. XV, p. 6 ff.
- 29. EI, vol. IV, p. 97 ff.
- 30. EI, vol. IV, Grant I, p. 97 ff.
- 31. Chandella (IA, XVI, p. 208); Gahaḍavāla (IA, XV, p. 6 ff) and Paramāra (EI, XXIII, p. 167). It may be noted that the Gahaḍavāla grant was issued from Vārāṇasī. Hemādri, Vrata, p. 169 quoting from Bhavishyottara states:—
 वार्तिक्यां पृष्करं श्रेण्ठं माध्यां वाराणसी स्प्रता।
- 32. Gahadavāla (EI, vol. IV, p. 116); Solamkī (BI, 194).
- 33. Gahadavāla (G. I. and J. EI, vol. XVIII, pp. 135-143).
- 34. The Bhopal CP. of Udayavarmman Paramāra V. S. 1226 = A.D. 1200 (El, XVI, pp. 254 ff.) mentions Mahāvaiśākhī parva as follows:—

पौर्णामास्यान्तिथौ विशाखानक्षत्रे परिघयोगे रविदिने महावैशाख्यां पर्वाणे.

I failed to trace this *vrata* in literature. The three full-moon days are regarded as specially sacred:—

वैशाखी कार्त्तिकी माघी तिथयोऽतीव पूजिताः।

- (ii) SAMKRĀNTI:—Mesha³⁵, Kumbha³⁶, Makara³⁷, Kanyā, Dhanusha³⁸, Uttarāyaṇa³⁰, Vishṇupadī⁴⁰, and Dakshinayana⁴¹.
- (iii) ECLIPSES: -Solar and Lunar.
- (iv) Akshaya-tritīyā12.
- (v) Ratha-saptamī¹³.
- (vi) Ekādaśī⁴¹.
- 35. IA, vol. XVIII, p. 109.
- 36. IA, vol. XV, p. 105.
- 37. EI, vol. XVI, p. 13.
- 38. EI, vol. XXIII, p. 71.
- 39. EI, vol. II, pp. 1-7; VIII, p. 159.
- 40. El. vol. II.
- 41. IA, vol. XVIII, p. 35.
- 42. It is mentioned in the inscriptions of the Chāhamānas, the Gahadavālas, the Solamkīs and others:—
 - (a) Gahadavāla:-
 - (a) Chandrāvati CP. of Chandradeva V. S. 1156 (EI, vol. XIV, pp. 197 ff.).
 - (b) Kamauli CP. of Govindachandra V. S. 1172 (EI, vol. IV, p. 103).
 - (c) Lar CP. of Govindachandra V. S. 1202 (EI, vol. VII, p. 96 ff.).
 - (d) Kamauli CP, of Jayachandra V. S. 1223.
 - (b) Chāhamāna:—The Sundha hill Ins. of Chāchigadeva VS. 1319 = 1248 A,D. (EI, vol. IX, p. 74).
 - (c) Solamkis:-
 - (a) Udaypur (Gwaliar) Ins. of Chahada V. S. 1222 (IA, XVIII, p. 343).
 - (b) Udaypur (Gwaliar) Ins. of Ajayapāla V. S. 1229 (IA, XVIII, 344).
 - (d) The Shergadh-Kola (Somanatha Temple) Ins. V. S. 1074 = 1028 A.D. (EI, vol. XIII, p. 40).

The earliest reference to this *vrata* occurs in 1028 A.D. It has been described in *Matsya*, LXV where it has been stated that it was consecrated to *Vishnu* and *Sarasvatī*. These inscriptions however indicate that it was not particularly associated to any god. Hazra (p. 39) regards the *Matsya* chapter as very late.

- 43. In Gahadavāla records (EI, IV, p. 97, grant No. Q) it is mentioned as Mahā-Saptamī. It is dedicated to Sūrya and we find that the inscription records the visit of Jayachandra to the temple of Gaṅgāditya at Prayāga on this occasion. It may further be mentioned that the Rāshṭrakūṭa king Dantidurga had performed the Mahādāna ceremony at Ujjain on this day. The vrata is mentioned in the Skanda-purāna (Kāshī-Khaṇḍa) and Bhavishya as quoted in Nirṇaya-sindhu (p. 162) and in the Vratarāja (p. 116).
- 44. EI, XVIII, p. 211. It has been mentioned as devotthāpinī ekādasī.

2. UTSAVAS (CELEBRATION OF FESTIVALS)

Following festivals are mentioned in inscriptions:-

- A. Chaitra-parva,
- B. Pavitraka-parva,
- C. Damanaka-parva,
- D. Ratha-yātrā,
- E. Janmāshtamī
- F. Śiva-rātri,
- G. Dipotsava and
- H. Festivals on the occasions of conquest and occupation of Konkana country.

Most of the festivals are of the agamic origin but later on accepted in the smarta fold also

A. CHAITRA-PARVA

Several land-grants to temples specify the purposes for which the donations were made and, therefore, they incidentally mention the several festivals celebrated in temples. Thus, for example, the Kalāvan Copper Plate of Yaśovarmman records a grant for meeting the expenditure of worship, abhisheka, naivedya and the celebration of the Chaitra-pavitra festivals. The phrase 'chaitra-pavitra' occurs in several South Indian inscriptions. Fleet and Hultzsch have translated it as "purificatory rites of (the month of) chaitra. But now the meaning has been rendered very clear by a reference to a pavitraka festival in the Ujjain Grant of Vākpatirāja. The phrase really means the festivals of Chaitra and Pavitra.

The Chaitra festival is differently performed in different schools of Saivism, Vaishnavism and smärta. In Saivägama it is performed as a damanaka festival. Later treatises like $Hem\bar{a}dri^{48}$ differentiate damanaka festival from the chaitra festival but a close study of this festival as given in Saivägamas will disclose its identity with the Vasantotsava.

^{45.} पूजाभिषेक-नैवेद्य-चैत्र-पवित्रक-मासच्छेदनेषु त्ररि(ऋ)पीणामुपयोगाय। EI, vol. XIX, p. 72.

^{46.} EI, vol. V, p. 22; p. 259; VII, 128.

^{47.} See, IA, vol. XXXVIII, p. 52.

^{48.} चैत्र-सुदि (शुद्ध) चतुर्द्दशं दमनक-पर्वाण स्नात्वा । EI, vol. XXIII, p. 135, 1, 10. ASJ 16

(i) DAMANAKA:—This festival primarily belongs to Saiva school although Smārta and Vaishṇava digests on festivals included it in their own lists of vratas. The Sheragadha Ins. of Udayavarmman V.S. 11(..) mentions its celebration on the fourteenth of the bright fortnight in the month of Chaitra in a śaiva temple known as Somanatha. The Svacchanda Tantra and Iśāna-śiva-guru-paddhati narrate the story and the ritual associated with the damanaka festival.

At Siva's behest, Bhairava burnt the god of love and was consequently rewarded with the title of damanaka (from the root dam =control) by Siva. But Bhairava thereby incurred the displeasure of Pārvatī whose plans were foiled because of the burning of Kāmadeva. She, therefore, cursed him to be born as a tree on earth. Siva, however, again favoured him with a blessing that a person who will worship Siva, Umā and Kāmadeva with the leaves of damanaka tree will have all his desires fulfilled.⁵⁰

Damanaka is sculptured as terrific figure placed by the side of Śāstā.⁵¹ The invocation and mantra of damanaka are given in the *Iśāna-śiva-guru-paddhati*.

The Vaishṇava form of this festival is given in the *Hari-bhakti-vilāsa* and other Vaishṇava digests.⁵² The smārta way of celebrating this festival is given in the *Hemādri* which quotes *Devī-purāṇa*.⁵³ It consists in the worship of Siva, Umā, Agni, Gaṇapati, Kāmadeva, Brahmā and other gods with damanaka leaves from the first to the fourteenth of the bright fortnight of Chaitra.

(ii) OTHER FEATURES OF CHAITRA FESTIVAL:—The *Pārijāta-mañjarī*, a drama written by the royal preceptor Madana (whose other name was Bālasarasvatī) is found inscribed on a slab at Dhārā.⁵⁴ The drama was enacted for the first time on this Chaitra festival in the shrine of Sarasvatī. It furnishes very interesting information on its celebration.

^{49.} ISG, III, p. 293.

^{50.} वसन्तकाले सवसन्तमन्यथं यजन्ति येऽद्य प्रभृतीह मां जनाः। त्वदङ्गभूतैर्दमनच्छदाभिर्भजन्तु कामानभिवाञ्छिताश्च ते॥ 16. ISG, III, p. 294 f.

^{51.} वामे दमनकं न्यस्त्वा तद्वेपं विकृतं स्मृतम्। Suprabhedāgama as quoted in EHI,

II, II, App. B, p. 239.

^{52.} ISG, III, p. 293.

^{53.} Hemādri, p. 455.

^{54.} EI, VIII, p. 98.

The festival was called Chaitra-parva, Madhūtsava, Vasantotsava or Chaitrotsava. ⁵⁵ Singing of hindola ⁵⁶, drinking and dancing ⁵⁷, throwing of colour and scent ⁵⁸ and wearing of spring attire ⁵⁹ were some of the interesting features of this parva. The festival is described by Alberuni and Hemādri. According to latter, a lady on that day should worship her husband and Kāmadeva, the god of love. ⁶⁰

B. PAVITRA-PARVA

The Ujjain Copper Plate of Vākpatirāja V. S. 1051 describes the celebration of the Pavitraka festival of Saiva cult on the fourteenth day of the dark fortnight in the month of Bhādrapada. A reference to this festival is made in the Kalāvan Copper Plate of Yaśovarmman⁶¹ and several South Indian inscriptions.⁶²

The festival is of Vedic origin although it has been accepted both in Saiva and Vaishnava schools. Pavitra was a Vedic sacrifice performed in spring season and pavitra was a ring-like loop of *darbha* grass to be borne in finger while performing ceremonies.

This festival is described in the works of the Pāncharātric as well as Saivāgamic sects. *Īśvarasamhitā*⁰³, *Pādma-tantra*⁰⁴, *Vishņu-tilaka* and

- 55. op. cit. Vasantotsava, V, 8; L. 27; Chaitrotsava V. 9; Madhūtsava L. 15 and Chaitra-parvan L. 3.
- तमयसुहावयं हिन्दोलयं ।

..... हिन्दोलाख्यः सुखयति दधन्मध्यमं तारदेशे कम्पं विश्वत्किमपि रुचिरं पड्जके पंचमे वा॥ 22.

- 57. नृत्यन्त्याः मदविह्नलं लयविसम्वादेषु पौराङ्गनाः। V. 21.
- 58. LL. 23-24; V. 20.
- 59. वसन्तवेषरमणीयो राजा L. 15.
- 60. रवपति पूजयन्नारी वस्त्रमाल्यविभूपणै:। क्षामोऽयभिति संचिन्त्य प्रहृष्टेनान्तरात्मना॥ मन्मथाय महापूजाय etc. p. 23.
- 61. भाद्रपदशुक्रचतुर्देश्यां पवित्रकपन्वेणि. L. 14. IA, vol. VI, p. 51.
- 62. See supra, p. 6.
- 63. Iśvara-samhitā, Ch. XIV.
- 64. प्रतिसम्बत्सरं मासि श्रावणे तन्तुनिर्मितम् ।
 पित्रत्रं भूषणं विष्णोरारोप्यं बहुमाल्यवत् ॥
 आराध्यविधिवत् भाद्रपदे वाऽद्यवयुजेऽपि वा ।
 मन्त्रलोपादिना कर्मपतितं विहितम्पुनः ॥
 तत्पवित्रस्य फर्लेभूयो रोहत्येव समाहितः ।
 इति निर्वचनात् तर्ज्यैः पवित्रारोपणं मतम् ॥ Pādma, charyā, XIV.

Iśāna-śivaguru-paddhati⁶⁵ contain elaborate descriptions. The celebration of this festival is meant for rectifying and compensating the mistakes of commission and omission in the course of worship throughout the year.

The festival for Siva was celebrated according to *Iśāna-śiva-guru-paddhati* on the eighth or the fourteenth of either dark or bright fortnight in one of the three months of Āsāḍha, Srāvaṇa and Bhādrapada. The Ujjain grant confirms it as it describes the celebration on the bright fortnight of the month of Bhādrapada. The ceremony consists in the presenting of the cotton or metallic sūtra to the god installed in the sanctum.⁶⁶

The idea of pavitraka is of course Vedic in origin and might have been borrowed by the adherents of the āgamic schools from this source. In the Vedic tradition the darbha grass is collected in the month of Śrāvaṇa and the āgamic ceremony of the Pavitra festival is celebrated in Āshāḍha, Śrāvaṇa or Bhādrapada. The Vedic ceremony of pavitraka is a purificatory rite; so also the āgamic ceremony of the Pavitra festival is intended for the purification of the image and the worshipper.⁰⁷

The pavitraka as a ring-like loop is generally sculptured on the finger of $V\bar{a}$ mana images.

C. RATHA-YATRA

It is mentioned in the Chedi and the Chāhamāna records. We gather from the Chedi inscription that a special platform called as gāhuṇḍa-jagatī was constructed for the celebration of this utsava. The Sāḍāḍi and Nāḍol inscriptions contain a royal order that courtesans attached to temples should necessarily attend the celebration of the Yātrā festival and perform dances to the accompaniment of music. O

^{65.} ISG., III, pp. 202-203.

^{66.} It is interesting to note that the Paushkara-samhitā as quoted in the Iśānaśiva-guru-paddhati says that according to Vedic tradition the Pavitra sacrifice should be performed in spring season and therefore this is also the
appropriate time for celebrating the pavitrāropaņa ceremony.

^{67.} Compare Śātātapa as quoted in the Smītit-chandrikā, I, p. 108.

जपे होने तथा दाने स्वाध्याये पितृतर्पणे । अशून्ये तु करं कुर्यात्सुवर्णरजतै: कुरी: ॥ and the Mahāśūra-tantra as quoted in the Iśāna-śivu-guru-paddhati:— पवित्रेण विना पूजा तामसी परिकीर्तिता ।

^{68.} रथयात्रीत्सवाधिभिगाहुण्डजगतीमिमाम् । IA, LXIII, 210 ff.

^{69.} यत्र दिने यत्र देवे यात्रा भवति तत्रापरसमस्तदेवानां सत्कप्रमदाकुलैः सवैः साकल्पैःसुवस्तैः.... वाद्यनृत्यगानादि विधिना यात्रा कर्त्तेच्या। EI, X, p. 29 ff.

The procedure and rituals of the festival are described in the āgamic works. The *Vriddha*⁷⁰ *Hārīta Smṛti*, Hemādri and Alberuni give accounts of this festival. This festival of the āgamic origin was recognised in the smārta fold and was very popularly celebrated.

D. PATTABANDHA

The festival was celebrated by Rāshṭrakuṭa kings.⁷¹ The Māndhātā Temple Halāyudha Stone Inscription mentions it in a figurative sense.⁷² The Kāravaṇa Māhātmya describes the Paṭṭabandha ceremony of Lakulīša on the full-moon day of Āśvina month.

E. JANAMĀSHTAMĪ

Although the utsava of Janmāshṭamī is not specifically mentioned, the Kamauli Copper Plate Inscription of Jayachandra⁷³ is recorded to have been issued on the eighth day of dark bright fortnight of the month of Bhādrapada when the festival of Krishṇa's birth is celebrated.

F. ŚIVA-RĀTRI

The Abu Stone Ins. of Dhārāvarsha Paramāra V.S. 1279 mentions the vow of some persons to observe certain religious practices on Mahā-rātri (Siva-rātri). The Kirāḍu Ins. of the time of Kumārapāla Solanki⁷¹ V.S. 1209 = A.D. 1153 announces a royal order prohibiting the slaughter of animals on Siva-rātri and similar other auspicious occasions.

G. DĪPOTSAVA

It is mentioned in Solanki⁷³ and Chāhamāna⁷⁶ kings towards the conclusion of twelfth century A.D. Alberuni (1030 A.D.) mentions it as one of the popular festivals of the country.

^{70.} रथमारोप्य देवेशं छत्रचामरसंयुतम् । पठन् वे शाकुनान्मंत्रान् यशशालां प्रवेशयत् ॥ 243. Vriddha-hārīta, VII.

^{71.} EI, vol. IX, 24; VII, 26.

^{72.} स्वात्मन्थेव स्वयमि कृतो भृष्टतापद्द (ह) बन्धः । 5. El. vol. XXV, p. 117.

^{73.} IA, vol. LVI, p. 51.

^{74.} BI, pp. 172-73.

^{75.} Timana CP. of Bhīma II, S. 1264.

^{76.} Jalor Ins. of Samarasinhadeva.

H. AGAMIC FESTIVALS CONDEMNED BY SMARTAS

An inscription of the fourteenth century A.D. makes a pointed reference to the Great Festival of Sāktas in which the Kumārī form of Sakti is worshipped with wine and blood in the tāntric fashion.⁷⁷ There is literary evidence to show that such festivals were celebrated in Early Medieval Period although they were severely condemned in the Smārta tradition.⁷⁸

I. VEDIC FESTIVAL SUBSTITUTED BY AGAMICAS

The Mandsor Ins. of Naravarmman which belongs to fifth century A.D. and therefore a little earlier than the period under discussion contains an allusion to Indra-Mahotsava, an ancient Vedic festival celebrated in honour of the Vedic god Indra. It runs as follows:—

On the approach of the rainy season which delights the minds of men, the festival of Sakra having commenced as then allowed by Krishṇa, the earth garlanded by corn, shines with lustre as adorned by kāśa flowers, on the fifth day of the waning moon, in the month of Aśvin, etc.⁷⁹

Phrases 'allowed by Krishṇa' and 'the shining of the earth with the commencement of Sakra's festival' evidently allude to the story narrated in the Purāṇas that Krishṇa substituted this festival by Govardhana, but eventually permitted it to continue in a modified form at the request of Indra. Arguments advanced by Krishṇa for the cessation of Indra

^{77,} कन्या मान्यतमा महोत्सवविधावित्येकमंत्रोक्तितो यामानाथ्य यदच्चेनाय गिरिजा विन्ध्याल्यात्सावतात ॥ ३. BI., p. 96.

पैशाचिकानां यक्षाणां शाक्तांनां लिंगधारिणाम् ।
 द्वादशी-विमुखानाञ्च सुलापादि विवर्जयेत् ॥ १४२

^{79.} प्रावृक्का(क्का) हुने प्राप्ते मनस्तुष्टिकरे नृणाम् । मधे(हे) प्रवृत्ते शक्रस्य कृष्णस्यानुमते तदा ॥ ३ निष्पन्नन्नीहियवसा काशपुष्पैरलङ्कृता । भाभिरभ्यधिकं भाति मेदिनी सस्यमालिनी ॥ ४ EI, vol. XII, p. 320.

Dr. D. C. Sircar (Select Inscriptions, vol. I, p. 377) reads मधे प्रतृत्ते while Sten Konow (EI, vol. XII, p. 320, n. 5) as मेथे प्रतृत्ते in V. 3 quoted above. But in the context N. M. Hara Prasad Shastri's reading महे प्रतृत्ते suits best. Indra-maha is mentioned in Silappadikāram (see infra, p. 14). Maha means a festival (Monnier Williams, sub voce Maha). Dr. H. D. Sankalia (Archaeology of Gujarat, p. 242) remarks that the inscription places the festival in rainy season, while according to Hemachandra it was celebrated in Aśvina. But l. 5 of this inscription which reads दिने आइवोज शुक्करय पञ्चस्थामथ सङ्ग्रेत suggests that the festival was held on the fifth day of the month of Asvina.

festival and the celebration of Govardhana worship in its place bring out very clearly the differences between the old Vedic cult and the new āgamic code of worship. The sacrifices with the accompaniment of the recitation of the mantras and the agricultural sacrifices are celebrated by the Brāhmaṇas and the cultivators, but we the dwellers of the mountains and forests perform the worship of cows and mountains."⁵⁰

Although Indra-maha is not mentioned in inscriptions of Northern India, an epigraph of Parāntaka Chola contains some details about the celebrating of this festival. The *Silappadikāram* narrates the story of Indra's festival at the capital of the Cholas.⁸¹

J. SECULAR FESTIVALS

Bānswāra⁸² and Betmā⁸³ grants were issued by Bhojadeva Paramāra respectively on the "festival day of Koňkaṇa conquest" (Koňkaṇa-vijaya-parvaṇi) and on the "festival of the victorious occupation of Koňkaṇa" (Koňkaṇa-grahaṇa-parvaṇi). Festivals were celebrated on such secular occasions also. Alberuni mentions that the second day of Chaitra was a great festival in Kashmir in honour of victory scored over the invading Turks.

CONCLUSION

1. Thus, a study of *vratas* indicates that the tradition of the smārta-*vratas*, after the age of the Guptas, became sluggish in Northern India,
although it was popularly current under the Rāshtrakūtas. From tenth
century A.D. however it again asserted itself. It was quite forceful in
the Chandella kingdom and reached a very great height under the
Gahadavālas. The āgamic *vratas* were prevalent during the Pāla-Pratihāra
period also though they were not very popular.

- 80. मन्त्रयशपरा विप्रा: सीर्यशाश्च कर्पकाः ।
 गीरगीयग्रशीलाश्च वयमद्भिवनाश्रयाः ॥ ३७.
 Further, it is emphasised that
 कर्पकाणां कृषिवृत्तिः पण्यं विपणिजीविनाम् ।
 अस्माक्षं गोपरावात्ति .. २९ Vishnu Purāṇa, Ch. V.
- 81. Rao, Elements of Hindu Iconography, vol. II, p. 518.
- 82. EI, XI, vol. 181-83.
- 83. EI, vol. XVIII, pp. 320-25.

There were two belts in Northern India during the period under discussion. The Gahaḍavāla kingdom was the area of concentration and culmination of the smārta-vrata trends whereas the Dāhala maṇḍala of the Chedi-Kalachurī kings was the region where the trend of the āgamic vratas held its sway.

Paramāra, Guhila, Solamkī and Chāhamāna kingdoms show both influences with varying shades of differences. The Chandella region evinces a marked preference for the smārta *vratas*.

This fact can be explained in the context of religious history of the time. From the tenth century A.D. there had been brisk smārta activities in the country. Four great smārta writers flourished during this period. Lakshmīdhara (c. 1110), the minister of Govindachandra Gahadavāla is as prominent among the digest writers as Vijnāneśvara (c. A.D. 1120), the minister of Vikramāditya VI of the Chālukya dynasty amidst the commentators. Vallālasena of the Sena dynasty and Aparārka of the Silāhāra royal family made notable contributions. This new movement in Northern India centred round the Gahadavāla kingdom.

Likewise the focal area for the āgamic trends in Northern India was the Dāhala-maṇḍala of Kalachurī-Chedi kings. After the Gupta empire, Saivism received considerable royal patronage. Toramāṇa, Mihiragula, Yaśodharman and Harsha—the successors of the Imperial Guptas were all Saiva. Again after the Pāla-Pratihāra period Saivism gained ascendancy. Guhāvāsi in Mālava initiated a very powerful and vigorous movement of Saiva-siddhānta which spread over to the Punjab, Vārāṇasī, Central India, Rajputana, Deccan, Tamil region and Āndhra area. The whole Chedi kingdom was presented to an ascetic of this line and Kalachurī kings at least from Lakshmī-Karṇa to the last ruler of the dynasty carried on the administration on behalf of the ascetic. Thus, this region had become a very powerful area of concentration for the āgamic trends.

2. An analysis of utsavas on the other hand indicates the various interactions of the major strands of the religious culture. The substitution of Sakra's festival with the worship of Govardhana and ultimate continuation of both the festivals, the adoption of the pavitraka ceremony as the Pavitra festival by the āgamicas, the different modes of celebrating the Chaitra festival in various schools of the Smārtas and the āgamicas, the condemnation of the Śākta's festival by the smārtas indicate the different processes of conflict, reconciliation, adoption and amalgamation between the two major elements—the Vedic tradition and the āgamic cults, of the Brahmanical religious culture.

COMMERCIAL RIVALRY IN THE INDIAN OCEAN IN ANCIENT TIMES

By

S. L. MALHOTRA

INTRODUCTION

Indian goods had always been in great demand in west-Asian and European countries from time immemorial and so trade with India was very lucrative. Commerce with India by way of Indian Ocean dates back to very ancient times and may be traced to first Millennium B.C. if identification of Ophir with Aberia of Periplus¹ of the Erythraean Sea and of Ptolemy, the district bordering on the mouths of the Indus, to which the famous expedition of Solomon was made, is correct.² This intercourse may be carried back even to the times of the Rig Veda if 'paṇis' of the Vedic Literature have any relation with the Phoenicians.³ But even if it were so, commercial intercourse of foreigners with India must have been sporadic in those remote times.

The first attempt to explore the possibilities of regular commercial intercourse with India by way of the Persian Gulf was made by Achaemenian king Darius I (522-486 B.C.). We learn that a fleet under Scylax of Caryanda was sent down the Indus and thence round Arabia to Egypt which took thirty months to reach its destination. This ambitious project would have changed the history of commerce and navigation in the Indian Ocean, had not the Achaemenians been called upon to throw all the resources of their vast empire in their attempt to subdue the tiny states of Greece. But after the fall of his empire in the latter half of the fourth century B.C. Alexander, whose conquests united Asia with Europe, following in the footsteps of Darius, sent Nearchus to reconnoitre the

^{1.} Schoc, Wilfred, Periplus of the Erythraean Sea, 41 (Longmans Green & Co., New York, 1912), hereinafter cited as Periplus.

^{2.} JRAS, 1898, p. 253.

^{3.} In the Vedic literature the 'paṇis' are described as a non-Aryan community. The 'paṇi' is opposed to the pious sacrificer as a niggard (RV I, 124, 10). They are also called Dasyus, the term denoting non-Aryans. In this connection also see Macdonell and Keith, Vedic Index of Names and Subjects, vol. I, p. 471 (Moti Lal Banarsi Dass, Delhi, 1958).

^{4.} Herodotus, History, Bk. IV, ch. 44.

Persian Gulf for establishing a permanent sea-route to India. But after Alexander's death his plans were not followed up by his successors and the Greeks of the Seleucid empire did not show much activity on the Persian Gulf

GRAECO-ARAB RIVALRY

The Position of the Arabs

But where the Greeks failed to derive commercial advantage from their new political gains, the Arabs fully exploited their geographically advantageous position in maintaining commercial contacts with India. A very long coast line bounds the peninsula of Arabia on three sides, stretching from the Gulf of Suez round to the head of the Persian Gulf. Thus the Arabs could carry on their commercial activities to the west by the long coast of north-east Africa and to the east by those of Iran and consequently could control the commercial traffic of both the Red Sea and the Persian Gulf. The Arab mariners could approach the Indian harbours by sailing along the coasts of Arabia and Persia. This advantage was of great service to them particularly because, in the beginning, their crafts were small and sewn with the stitches of cocoanut fibre and so not fit to stand the hazards of heavy seas.

The coast line of the peninsula was controlled by prosperous and powerful peoples. On the north-western coast, in the Suez Peninsula, were the Nabataean Arabs. They extended their influence down the Red Sea coast as far as Leuce Come and the north-east along the routes of Syria and Arabia. The Southern kingdom Hadramaut passed Oriental wares to them which were carried to the markets of Egypt and Syria and thence to the Western countries. Thus they became intermediaries in the trade between the East and the West and earned fabulous profits by these transactions. They jealously guarded their function as middlemen in this trade and prevented the Ptolemaic Greeks from making direct commercial contacts with the Indians. But later on when the Roman Emperors felt interested in the Indian trade of their subjects, the activities of the Nabataean Arabs were largely restrained.

Similarly the Sabaeans, on the south-western coast, were very flourishing and sea-faring people. They were the Phoenicians of the Southern

^{5.} Hourani, George Fadlo, Arab Sea Faring in the Indian Ocean, p. 21 (Princeton University Press, 1951), hereinafter Arab Sea Faring.

^{6.} Pliny, Natural History, VI, 159, translated by R. Rackham (Loeb Classical Library, Harvard University Press), hereinafter cited as Natural History.

sea. Agatharchides in the third century B.C. found them, along with the Gerrhaeans of the Persian Gulf, acting as the chief intermediaries in seatrade between the East and the West. He reports that 'no nation seems to be wealthier than the Sabaeans and the Gerrhaeans, who were agents for everything that fell under the name of transport from Asia and Europe. . . '5 Similarly Pliny in the first century A.D. was informed that they were the most wealthy people in Arabia.6 About 115 B.C. they became united with their kinsmen, the Himyarites of the extreme southwest, under one king. In this period some adventurous persons among them migrated to the opposite coast of north east Africa and laid the foundation of the Abyssinian kingdom and civilization, and both jointly controlled the entrance to the Red Sea and the Indian Ocean. For several centuries they established a monopoly of the Indian trade by preventing the Greeks and the Indians from having direct dealings with each other. In the time of the author of the Periplus their harbours like Muza were big commercial marts for oriental wares and were visited by merchants from north western coast of India and Egypt.7 The mart of Muza was always full of Arabian mariners who were engaged in the pursuit of commerce with coast of Somali and the north-western coast of India.8

Likewise on the southern coast of Arabia there were many ports that had commercial contacts with eastern and western coasts of Arabia and with Barygaza or Broach on the north-western coast of India.

Further the Gerrhaeans on the Persian Gulf engaged in brisk commercial activity with India as well as with southern and western Arabia and they, as already pointed out, acted as intermediaries in the trade between the East and the West. They also conducted trade with Saleucia on the Tigris both by land and sea. Antiochus III in about 205 B.C. led an expedition against Gerrha, but was bought off by a rich tribute of silver, Frankincense and myrrh. Later on the appearance at the head of the Persian Gulf of many commercial marts like Charax, Apologos, which were the strong-holds of the Parthians, eclipsed its prosperity.

The Arabs carried from India spices, finecloth, diamonds and minor articles like ghee, sesamum oil and sugar. These goods particularly Cinnamon, pepper and silken cloth were precious articles of trade and fetched fabulous prices. A pound of silk was esteemed not inferior in value to a pound of gold. So labour and risk of the voyage to the east were rewarded with incredible profits.

^{7.} Periplus, 24.

^{8.} Ibid, 21.

The Position of the Greeks

The Greek merchants did not want to stand as silent spectators of the incredible profit-making enterprise of the Arab merchants. But for centuries the jealous Arabs resisted and foiled all their attempts to establish direct commercial contacts with India as they controlled the entrance to the Indian Ocean by way of the Red Sea. On the side of the Persian Gulf, the rise of the Parthians and the fall of Babylon and Seleucia to them between 140 to 130 B.C. blocked their way to the Indian Ocean. The Parthians could draw fine revenue from land routes across their realm to India and China and so could not give facilities to their political adversaries, Greek or Roman, to establish a rival sea-route to India in their dominions. Thus the Greeks had no choice but to make efforts on the side of the Red Sea.

The position under Ptolemies

The Greek kings of Egypt made serious efforts to navigate and control the Red Sea to enable their merchants to make direct voyages to India. The hectic and heated activities to approach the Indian Ocean that characterised the reign of Ptolemies correspond to the attempts of the Europeans to reach India and the Far East in the fifteenth and sixteenth centuries of the Christian Era. But these attempts of the Ptolemies were vigorously resisted by the Arabs and consequently political hostility ensued between them. The endeavour of Ptolemy II to control the Red Sea provoked the hostility of the Nabataean Arabs and they retaliated by attacking the shipwrecked persons and plundering the merchantmen of the Greeks.⁹

Similarly we learn of Ptolemaic officers 'incharge of Red and Indian Seas'¹⁰. Very likely these officers took measures to facilitate navigation for merchants in the Red Sea and the Indian Ocean. This reveals that the Greek commercial enterprise in the Indian Ocean was not limited to the efforts of the individual merchants but was organized under the guidance and control of the political authority. Mariners like Eudoxus of Cyzicus duly supported by the state, made expeditions by sea from Egypt to India.¹¹

Suchlike efforts of the Greeks incited the Arabs to take measures to limit the Greek commercial traffic to the Indian Ocean. We learn from

^{9.} Geography of Strabo, bk. xvii, ch. i, sec. 44-45, translated by Jones, H. L. (London, 1910), hereinafter cited as Geography.

^{10.} Hourani, Arab Sea Faring, p. 24.

^{11.} Strabo, Geography, Bk. II, ch. 3, sec. 4; Hourani, Atab Sea Faring, p. 24.

Philostratus that 'there was an ancient ordinance concerning the Erythraean Sea, laid by king Erythrus when he was master of the sea. which forbade the Egyptians (Egyptian Greeks) to enter it in a ship of war and restricted them to a single merchantman. Accordingly the ingenious Egyptians designed a vessel which was intended to be a match for many ordinary crafts.'12

Philostratus has stated this in his work "Life of Apollonius of Tyana" which he wrote in the third century A.D. but he had before him the material of the earlier times. This he made use of in embellishing the biography of his patron saint Apollonius who travelled to India in the first century A.D. Philostratus himself states that the ordinance was of very ancient times when king Erythrus was master of the Erythraean Sea. To the Greeks the name Erythraean Sea signified the Red Sea, Indian Ocean and the Persian Gulf and they attributed the origin of this name to king Erythrus.13

A statement of Strabo (60 B.C.-A.D. 19) also indicates limited commercial activities of the Greeks in the Indian Ocean in the centuries before the Christian era. It tells us that 'in earlier times, at least, not so many as twenty vessels dare to traverse the Arabian Gulf far enough to get a peep outside the straits, but at the present time even large fleets are despatched as far as India and the extremities of Aethopia from which the most valuable cargoes are brought to Egypt and thence sent forth again to other regions.'14

The author of the Periplus in the first century A.D. also stresses that the Greek commercial activities in the times before him were limited only to the Arabian harbour Eudaimon (Aden) situated on the mouth of the Red Sea and the Egyptian Greek merchants did not venture to cross over to the marts further east. 15

It is wrong to suppose that the Greeks did not venture to push further to the Indian Ocean simply on account of the hazards of the journey. The

^{12.} Philostratus, Life of Apollonius of Tyana, Bk. III, ch. 35, translated by Phillimore (Oxford, 1912). Some writers believe that the ordinance was issued by an Indian king on the instigation of Arabs (Warmington, Commerce between Roman Empire and India, pp. 66-67 (Cambridge, 1928). But where was the necessity of reference to ship of war as there was no danger to India of an attack by way of Indian Ocean?

^{13.} McCrindle, Invasion of India by Alexander the Great, p. 185, F. N. (Westminster, 1896).

^{14.} Strabo, Geography, Vol. VIII, 17-1-13, pp. 53-54.

^{15.} Periplus, 26.

Greeks were well known among the ancients for their nautical activities. They started their sea-faring pursuits much earlier than the Arabs did and not only did they found colonies on the shores of the Mediterranean and the Black Seas but were also invited by the rulers of the distant countries to trade with their dominions. So the limitation upon their nautical activity in the Indian Ocean indicates that political power behind the Arab merchants put embargo on the Greek ships and did not allow them to go beyond their harbour on the mouth of the Red Sea. Moreover the prohibition to enter the Indian Ocean in a ship of war very well reveals the strained political relations between the Arabs and the Egyptians (Greeks) as a result of commercial rivalry between the two peoples.

Apart from that, the Arabs maintained strict secrecy about the sources of their valuable imports. Thus Cinnamon which was coming from India and Ceylon was always found by the Greeks and the Romans in the marts of Somali and Arabia. In the first century Malabatharum was available to the Greeks in the markets of south-western coast of India¹⁶ but in no place export of Cinnamon from India is mentioned although Malabathrum, at least in one case, was the leaf from the same tree that produced a variety of Cinnamon. This indicates that the Arabs had arrived at some understanding with the Indians that the latter would not offer Cinnamon to the Greeks and the Romans just as Persians, a few centuries later, made agreement with the Indians binding them not to sell silk to Byzantine or Ethiopian merchants.¹⁷

This arrangement brings to light the fact that Arab commercial enterprise was not only well-organized under the control and direction of the state but they had received full co-operation from the merchants of the north-eastern coast of Africa, otherwise this secrecy could not have been maintained.

The position under the Romans

But with the consolidation of Mediterranean and Egypt under the principate of Augustus, the position became favourable for the Greek

^{16.} Ibid., 65.

^{17.} On this point Schoffs remarks that 'so strong was the age-long understanding between the Arabs and the Hindus that Cinnamon which had made the fortune of traders to Egypt in earlier time was still found by the Romans only at Guardafui and was scrupulously kept from their knowledge in the markets of India where it was gathered and distributed; while the leaf of the same tree producing that precious bark was freely offered to the Roman merchants throughout the Malabar coast as malbathrum formed the basis of one of their most valuable ointments.' Schoff, Periplus of the Erythraean Sea, p. 6 (1912).

subjects of the Roman Empire. The extensive Roman conquests in the East led to the transmission of the riches of the East to Rome, the capital of the Empire, and thus created incredible demand for Indian luxuries. But the hostility of Parthia, the great length and difficulties of the land routes and the enormous expenses incurred in buying the goods from the Arab intermediaries impressed upon Augustus the necessity of establishing direct and regular trade with India by way of the Indian Ocean. he decided to take effective steps against the Nabataeans and Sabaeans who were the most substantial barrier to direct trade between the Roman Empire and India by the Sea. An expedition was sent under Gallus the Prefect of Egypt.¹⁸ Probably this expedition destroyed the Sabaeans' most important mart Eudaimon (Aden) to which thronged Greek and Indian merchants and which was the ultimate limit of Greek sea-faring activities before Augustus.¹⁰ Very likely the Roman Emperor wanted to punish the Sabaeans for blocking the way of the Greeks to the Indian Ocean. But this expedition failed to subdue them permanently.

It is also held by some writers that Augustus had planned the circumnavigation of Arabia by two fleets, one starting from the Persian Gulf and the other from Egypt but with the death of Gaius the scheme was abandoned 20

Apart from this, Augustus tried to promote trade with India by It is sometimes held that the Pandion embassy to diplomatic means. Augustus was inspired by the Greek merchants trading with India.21 Formerly these merchants might have received encouragement from the Greek kings of India and, if it is accepted that the Greek rule extended up to Barygaza or Broach, an important harbour for trade with the west, where the coins of Greek kings Apollodotus and Menander were current in the first century A.D.²², then the Greek merchants must have established a colony or factory there and enjoyed substantial privileges. But when the Greek rule passed over to the Sakas, they needed the good offices of their Emperor, whose influence was felt far beyond the frontiers of his empire, to facilitate their commerce with India. By this means they sought to impress upon the Indian king that they were citizens of no mean city but the subjects of a great emperor. The letter from the Pandion was written in Greek on a parchment. The embassy picked up a gymno-

^{18.} Strabo, Geography, II, 15.12; XVI, 4.22.

^{19.} Periplus, 26.

^{20.} Warmington, Commerce between the Roman Empire and India, p. 15.

^{21.} Priaulx, Osmond De Beauvoir, India and Rome, p. 78-79.

^{22.} Periplus, 47.

sophist at Barygaza. In the letter the Indian king assured the Roman Emperor that he 'set a high value on being Caesar's friend and was willing to grant him a passage wherever he wished through his dominions and assist him in any good enterprise.'23

A military expedition to India by Augustus was a remote possibility; so presumably the words meant a commercial enterprise. Very likely the Indian king wanted to assure the Roman Emperor that his subjects would find safety of their interests in his dominions. This reminds us of an embassy sent by the ruler of Ceylon Bhuvaneka Bāhū in the thirteenth century to Egypt inviting Egyptian subjects to trade with his dominions and assuring them full protection and amenities of life.²⁴

Similarly after the discovery of Monsoons by Hippalos, the Greeks could make direct voyages to the coast of India from the ports of Somali without touching the harbours of South Arabia. This discovery increased the Greek commercial traffic to India to an enormous extent and Strabo records that no less than one hundred and twenty ships sailed for India every year from the Egyptian ports. Thus by the first century A.D. the Greeks had broken the Arabian monopoly of Indian trade but had not been able to overshadow their activities. So when the author of the Periplus of the Erythraean Sea raised the curtain over the commercial activities of the Graeco-Roman and Arab merchants in the Indian Ocean the position was as follows:—

- (i) The Nabataean Arabs had been humbled and brought under the political control of the Romans.
- (ii) The Hymarites and the Sabaeans only entertained veiled hostility against the Graeco-Roman commercial enterprise. The Greek merchant ship bound for India had to offer costly presents to the rulers of the important Arabian ports, Muza and Kane, to win their favour.²⁵ Suchlike presents were again demanded at the Indian port in the realm of Sakas which was frequently visited by the Arab merchants.²⁶
- (iii) Further, the Greek vessels were not allowed to enter the harbour of Kalliena (modern Kalyan) which, in the time of elder Saraganes (probably Śātakarni I), was a lawful or privileged market-town for the Greek merchants but since it came into the possession of Sandanes or

^{23.} Strabo, Geography, 15.1.73; McCrindle, Ancient India as described in Classical Literature, p. 78.

^{24.} JRAS, Ceylon Branch, vol. XXVIII, 1919, no. 72.

^{25.} Periplus, 24, 28.

^{26.} Ibid., 49.

Sandares, the port was much obstructed and Greek ships landing there may chance to be taken to Barygaza under guard.27

It has been pointed out by some writers that the Sandanes was Sundara Satakarni of the Andrabhritaya dynasty. Then the question arises why did he divert the foreign commerce of his own dominions to the port of his political rivals Sakas? If we understand that the port was obstructed only by the strong navy of the Sakas, then the obvious action on the part of the Saka general would be to take possession of the ship and confiscate its property as those merchants were trading with the dominions of the enemies. But the author of the Periplus only says that the ship was taken to Barygaza. This indicates that Kalliena was not under Satakarnis at that time but was ruled by a Saka governor28 and the Greek commercial activities in their dominions were strictly limited to Barygaza. It was certainly a privileged port29 for the Greeks under elder Saraganes or Sātakarni I as Śātavāhanas must have endeavoured to attract the foreign commerce to their dominions and the best policy could be to encourage the Greeks by offering privileges to trade with their dominions as they (Greeks) were comparatively new-comers and were handicapped on account of the stout opposition of the Arabs.

The Arab trade at this time was concentrated on the North-western coast, particularly Broach. Periplus always speaks of the Arab merchants as trading with Broach and calls the Indian goods in the markets of northeast African and Arabian coasts as imports from Barygaza.30 The trade relations of the coast of Somali with Broach were so close that even in the time of Pliny it was confounded as an Ethiopian town 'on the Sea coast beyond'.31 Moreover Pliny had no other information of any commercial mart of the north-western coast of India while he refers to many markets of the Southern coasts on which the Roman commerce was mainly centered. It is significant to note here that Pliny's information was mostly based on what he gathered from merchants visiting India and the Graeco-

^{27.} Ibid., 52.

^{28.} It has been pointed out that the Ptolemy's Sadan and Periplus' Sandanes stand for Kshatrap or Sinha rulers of Gujerat. The word Sadan or Sandanes may correspond to Sanskrit word Sādhana, an agent or representative Bombay Gazetteer, vol. XIII, Thana, Part II, p. 416).

^{29.} Wheeler, Rome beyond the Imperial Frontiers, p. 151 (Pelican, 1955). Wheeler points out that the author of the Periplus uses the phrase Nomimon Emporion (Lawful Market-town) in the case of Adulis, Muza and Apologos but in respect of Kalliena he uses Enthesmon Emporion (privileged markettown).

^{30.} Periplus, 14, 21.

^{31.} Pliny, Natural History, Bk. VI, ch. xxxiv.

Roman merchants gave him information about Southern ports to which they usually resorted and so his knowledge of the north-western ports is scanty and faulty.

It appears that the Graeco-Roman merchants received better treatment from the rulers of the South than that extended to them by the potentates of the North. This is evident from the contemporary Tamil literature. The Tamil writers found pleasure in looking at the abodes of Yavana merchants at Puhār, in the dominions of the Chola king "whose prosperity was never on the Wane."32 An embassy was sent from the ruler of Ceylon to the Roman Emperor Claudius on the inspirations of the Graeco-Roman merchants.33 The discovery of Monsoons was of tremendous importance to them as it made possible for them to make direct voyages to Southern ports from the coast of Somali without touching the harbours of Arabia. So there developed many important commercial marts like Muzirus in the realm of Cheras Nelkunda in the dominions of Pandyas, on the South-western coast and Camara or Kaveripadinam in the realm of Cholas on the South-eastern coast. The Graeco-Roman contacts with these ports were quite recent as Pliny tells us that the names of these commercial marts were not found in any of the previous writers which seemed "to show that the local conditions are changing."34

These merchants also arrived at some understanding with the South Indian rulers and established commercial colonies or factories in their dominions. A temple of Augustus was built at Muziris in the realm of Chera king and two Roman cohorts were stationed there for the protection of Roman commerce. Similarly a colony was established on the Coromandel coast. The ruins excavated at Arikamedu on this coast give indication of such a colony established by the Graeco-Roman merchants in the first and second centuries of the Christian era.³⁵ Likewise there also appear certain indications of a Roman colony in Ceylon.³⁰

Thus it is due to the concentration of Roman commerce on the Southern coasts that we find large number of Roman coins in the South. Their paucity in the North is significant in this connection.³⁷

- 32. Dikshitar, Ramchandra, śilappadikaram, p. 110 (Madras, 1939).
- 33. Pliny, Natural History, Bk. VI, pp. 84-85.
- 34. Pliny, Natural History, Bk. VI, pp. 105-106.
- 35. Ancient India, Bulletin of the Archaeological Survey of India (July, 1946).
- 36. JRAS, Ceylon Branch, Vol. I, p. 77, F.N. 2.
- 37. The dearth of the Roman coins in the North has been explained by certain writers (Papson, Indian Coins, p. 35; Cunningham, Coins of Indo-Scythians, p. 22) due to the fact that they were re-coined by the Kushan kings. But this is too sweeping a generalization.

The Romans also tried to contact India by way of the Persian Gulf but the hostility of the Parthians thwarted all their efforts.³⁸ In fact the Parthians were impelled by commercial and political interests to obstruct the Roman commercial enterprise through their realm. They not only drew fine revenue from the land routes passing through their dominions and connecting Roman territory with India and China but also acted as intermediaries on the land routes for the trade of Oriental goods. Politically it meant allowing the subjects of their enemies, who could injure their interests in any conflict with Rome, to stay in their territory and found colonies. They must have had the experience of the Greeks of Seleucia, a commercial centre founded by Seleucus on the Tigris, before them who had always shown hostility to the Parthians whenever the successors of Seleucus attempted to wrest power from them and continued to show discontentment under their rule. Though under Trajan the Romans forced their way to the Persian Gulf yet that victory was short-lived as the Roman conqueror, who once entertained the idea of even conquering India by sending a fleet down the Persian Gulf, was compelled to return to quell the revolt of northern Mespotamia. Of course, the Romans maintained diplomatic relations with the Kushan kings of North-western India but the motive behind these activities was political. The Kushāns were expanding westwards at the cost of the Parthians and so the latter were the common enemies of both the Romans and the Kushāns and could be sandwiched at any time by their joint efforts. But the recovery of the Parthians from their discomfiture and the decline of the Kushāns, averted any such eventuality.

Thus the position of the Graeco-Roman and the Arab merchants remained the same till the close of the second century A.D., when Graeco-Roman trade with India started declining on account of political disturbance at home. The accession of Commodus (A.D. 180) inaugurated the period of Decline of the Roman Empire which was followed by a period of corruption, confusion and ignominious reverses of the Roman legions till the reign of Constantine (A.D. 323) that checked for a while the fast deterioration of the conditions. But the foundation of Constantinople as new capital of the Eastern Roman empire put under shade the importance of Rome and the scene of Roman enterprise shifted to the East.

It is quite likely that the Arabs, after the decline of the Roman trade. regained their monopoly of the Indian trade and completely controlled the foreign commerce of the ports of North-western and Southern coasts. Fa-hien in 414 A.D. found the Sabaean merchants in a flourishing condition

^{38.} The Han annals throw ample light on it.

in Ceylon.³⁰ The Arabs of the Persian Gulf also continued their commercial intercourse with India particularly with North-western coast as we learn from Latin Historian Ammianus Marcellinus of the fourth century A.D. that the Arabs of the Persian Gulf possessed several sheltered ports as well as anchorages and were capable of exploiting the riches of both land and sea.40 But after this the Arab intercourse with India also started dwindling. The Hymarites entered into political struggle with their kinsmen of the opposite coast with whom they had maintained amicable relations for centuries before and with whose co-operation they had controlled the entrance to the Red Sea and the Indian Ocean. The Himyaritae kingdom was attacked by the Abyssinians and it remained under their rule from A.D. 340 to A.D. 378 after which the former resumed their power but it never rose to the old heights of political glory. In fact the period between the fourth and sixth centuries was one of decline and deterioration for Southern Arabia. The loss of prosperity and the migration of the southern tribes to the North are telescoped by the Arab national tradition into the single striking episode of the breaking to the Ma'rib dam and the resulting desolation.41

Persian-Roman Rivalry

The Arabs were replaced by the Persians in the Indian Ocean. The latter under the Sassanids had become politically strong. The Sassanian kings also encouraged sea-faring activities of their subjects. The first emperor Ardashir I (225-241 A.D.) founded many sea and river ports. ¹² Ammianus Marcellinus, in describing the Sassanid realm, states that 'there is much navigation on the Persian Gulf. ¹⁴³ Sassanians' interest in the east is revealed by many stories told by Tabari and Hamza. We are told that adventurous Bahram Gur (420-438 A.D.) travelled incognito to India when he returned with an Indian wife and the rich dowry of Daibul, Makran and the adjacent parts of Sind. ¹⁴ We again hear that Naushrivan sent a successful expedition against Ceylon ⁴⁵ and that this expedition was made just after the conquest of Yemen which had established extensive commercial relations with India—before the rise of the Sassanians—and the Yemenite merchants were in flourishing condition in Ceylon in the

^{39.} Beal, Buddhist Records of the Western World, p. lxxiv (London 1906), James Legge, A Record of the Buddhist Kingdoms p. 104 (Oxford, 1886).

^{40.} Hourani, Arab Sea Faring, p. 38.

^{41.} Lewis, Bernard, The Arabs in History, p. 28 (1954).

^{42.} Hourani, Arab Sea Faring, p. 38.

^{43.} Ibid.

^{44.} Hadi Hasan, History History of Persian Navigation p. 65 (London, 1928).

^{45.} Ibid., p. 68; De Goje, Annals of Tabari I, 965.

early part of the 5th century A.D. Similarly Tabari has recorded an embassy sent by an Indian ruler (probably Pulekeśin II) to Khusraw Parviz in the year A.D. 625-626.46

The authenticity of all these stories is open to question but these indisputably demonstrate the active interest taken by the Sassanians in the east, very likely, for fostering trade with India. This is supported by the accounts of Alexandrian merchant Cosmos of the sixth century A.D. which reveal that the Persians were actively engaged in commercial intercourse with India and were the foremost competitors of the Romans (Byzantines) and the Ethiopians in the Indian markets. He narrates a story wherein captains of the Roman and the Persian ships vied with each other in extolling the greatness of their respective kings.¹⁷ We are also told that the Persians had established many colonies on the western coast of India and in Ceylon and had maintained regular contacts with their home land as their priests were appointed from Persia.48

The three competitors in the Indian Ocean in this period were in fact grouped into two rival parties. The Ethiopians were the allies of the Romans in political or commercial conflict between the Romans and the Persians. They also came into direct political clash with the Persians when the latter supported the Yemenites to drive them (Ethiopians) out of their country. Thus the political and commercial interests of both the parties were intermingled. Persians were acting as intermediaries between East and West for the trade of Oriental goods particularly silk. They purchased silk from India and Ceylon and also made direct voyages to China. The Sassanian kings needed continuous and abundant supply of raw silk as they had established a royal monopoly of silk in their dominions.

The Romans on the other hand were consumers of silk which had become a sort of necessity with them. But their own imports were not sufficient to meet their demand and a time came when the Persians completely monopolised the purchase of silk in the Indian markets. The Romans could not afford to buy it from them for it virtually meant strengthening their political rivals by continuous flow of Roman gold to Persia. Moreover, buying silk from the Persians meant depending on a precarious source of supply as it could be stopped whenever hostilities

^{46.} Ibid., I, 1052.

For comments on the embassy see JASB, xlxvii p. 68 by Rajendra Lal Mitra; JRAS, vol. xi by Fergusson; JBORS, vol. xxx, pt. II, by Ghosh.

⁴⁷ McCrindle, Ancient India as described in Classical Literature pp. 162-163.

^{48.} Ibid., 165.

flared up between them. Therefore, the Romans approached the Ethiopians to purchase silk for them in the Indian markets and thus to oust the Persians from their profitable trade. The true position is narrated by Procopius which is as follows:—

'When Hellestheans was reigning over the Aethiopians and Esimiphaeus over the Homeritae, the Emperor Justinian sent an ambassador, Julianu, demanding that both nations on account of their community of religion should make common cause with the Romans in the war against the Persians; for he proposed that the Aethiopians, by purchasing silk from India and selling it among the Romans, might themselves gain much money, while causing the Romans to profit in only one way, namely that they be no longer compelled to pay over their money to their enemy. As for their own people and of the Maddene Sarcens make an invasion into the land of Persians. So each king, promising to put his demand into effect dismissed the ambassador but neither one of them did the things agreed upon them. For it was impossible for Aethiopians to buy silk from the Indians, for the Persian merchants always locate themselves at the very harbours where the Indian ships first put in (since they inhabit the adjoining country) and are accustomed to by the whole cargo."

This brings to light two facts. First, the commercial enterprise of the Persians, like that of the Arabs, was well organised under the direction and control of the state. Otherwise it would not have been possible to make concerted countermove to thwart all the plans of the Romans and the Ethiopians. In this undertaking they must have received full help from their co-nationals who were residing in the coastal commercial marts of India and Ceylon. Secondly the Persians must have arrived at some understanding with the Indian kings to compel their subjects to sell silk only to the Persians. The latter must have had very cordial relations with the former as they were the importers of their (Indian kings) much-needed high-breed horses. We learn from Cosmos that the Ceylonese ruler was importing horses free of toll. 50 So could not the Persians enter into a treaty with the Ceylonese ruler, as well as with other Indian kings, to compel their subjects to sell silk to the Persians on the explicit understanding that the Ceylonese ruler would be offered the first choice in the horses the Persians imported? Such an arrangement would have been on the lines of the treaty between king Sadasiva of Vijayanagar and the governor of the Portuguese at Goa wherein the latter bound himself to allow all Persian and Arab horses landed at Goa

^{49.} Procopius, History of the Wars, translated by H. B. Dewing, lxx 9-12 (Doeb Classical Library).

^{50.} McCrindle, Ancient India as described in Classical Literature, pp. 164-165.

to be purchased by the former on the guarantee that the former would compel all his subjects to sell their goods to the latter.51

The Persians continued to control the Indian markets for another century when the Indian foreign trade again reverted to the Arabs. This time the Arabs conducted their commercial activities with unprecedented zeal and penetrated to the markets of south-east Asia and China also. There were many reasons for this revival of the activities of the Arabs in the Indian Ocean. First, the teachings of their religion were favourable to sea-faring and commercial pursuits. Secondly, they united in their empire the lands of western Asia (except Anatolia) and Egypt. Thus they controlled all the sea routes to India and achieved what the Achaemenians would have achieved, had their attention and resources been not employed and exhausted in their struggle against the Greeks. The Arabs, thus, completed the mission of the Achaemenians which was put in abeyance on account of conquest of western Asia by Alexander.

Sino-Arab Rivalry

This time their position was unique as they had no rival from the western side. But their efforts to monopolise all the foreign trade between the Arabian Sea and South China Sea incited the rivalry of the Chinese in this period. The latter carried on their commercial activities between India and China and sometimes even extended these as far as the Persian Gulf.⁵² They had been visiting the Indian markets by sea long before the beginning of the Christian era. But at that time they were using the foreign ships for passage to India. But by the time of the

The spread of Buddhism to China and Ceylon united the two countries in a religious bond and thus the merchants from China could feel homely in Ceylon. Moreover visits to Ceylon of the Chinese merchants on commercial errand also served the religious purpose as Ceylon was frequented by Buddhist pilgrims from various countries. Fa-hien was encouraged to see a Chinese merchant in Ceylon presenting in homage to the idol of Buddha a fan of white lute staring of the country of Tsin (pilgrimage of Fa-hein xxxviii). The various embassies that were sent from China to Ceylon in the fifth and the sixth centuries might have had underlying motive of fostering commercial relations with Ceylon (Yule, Cathay and the Way Thither, vol. I, p. lxviii).

^{51.} Heras, Henry, The Aravidu Dynasty of Vijayanagar, vol, I, pp. 62-63 (Madras, 1927).

^{52.} Pan Kou, a Chinese writer who lived not later than first century A.D. says in his Ts'ien Han Chou that the Chinese had been going to Huang Che which had been identified by Ferrand as Kanchi. He alluded to the fact that from the time of Emperor Wou (140-86 B.C.) all of them (people of Kanchi and others) had been sending tributes (presents) (Nilakanta Sastri, Foreign Notices of South India p. 44, Madras 1939).

revival of the Arab commercial activities in the Indian Ocean, the Chinese had their own ships in sufficient number to conduct traffic between China and India. They contended with the Arabs for the trade in this region. They must have put hurdles in their (Arabs') way by making alliances with Indian kings. There appear to be differential customs dues against Arab ships bound for China at Kaucamali (probably Quilon on Malabar Coast) in the 9th century A.D. as we learn from an Arab merchant that the China ships (Arab ships bound for China) had to pay one thousand darhams at Kaucamali for calling at it while others paid from one dinar to ten dinars only. It appears that there had been a Chinese settlement in Quilon. Al Kazwini (A.D. 1263) tells us, on the authority of Misarbin Muhalhil who travelled to India and China about 942 A.D., that when their 'king dies the people of the place choose another from China. In the latter period many embassies were exchanged between China and Quilon.

The commercial jealousy between these two parties continued even in the succeeding centuries. At one time the Chinese who drove a first rate trade at the city of Calicut, were treated badly by its ruler, very likely at the instigation of the Arabs, and they quitted the city after inflicting great slaughter on the people of Calicut as a measure of reprisal.

Conclusion

It is evident from the foregoing pages that the commercial intercourse of all the peoples that traded with India did not depend upon the efforts of the individual merchants. But it was strongly organised under the direction and control of their respective rulers. This fact not only brought dignity to their enterprise but also enabled them to make commercial bargains with Indian rulers and Indian commercial organisation on better footing. Such commercial arrangements on political levels

^{53.} Sung Shu shows the extent of Chinese commercial activities in the following words. As regards Ta-Ts'n (Syria) and Tien-Chu (India) far out on the Western Ocean, we have to say that, although the envoys of the two Han dynasties have experienced special difficulties of this route yet traffic in merchandise has been effected and goods have been sent to foreign tribes the force of the wind driving them far away across the waves of the sea—(JRAS, Great Britain, 1947, 3, 4).

^{54.} Renaudot, Ancient Account of India & China by two Mohammadan Travellers p. 9.

Sufun Siniyah when used by Arab geographers and historians means Moslems ships on the China run. Amarkab Sini in Kitabe Ajaib ul Hind by Buzurg ibn Sheryar is captained by a Persian (Hourani, Arab Sea Faring).

^{55.} Elliot, History of India by its own Historians, vol. I, pp. 94-95 (London, 1867.

induced the Indian rulers to exploit the commercial resources of their dominions to the maximum extent. Thus, we find the emergence of commercial marts like Puhār on south-eastern coast of India which had light houses for the guidance of foreign ships and residential quarters for foreign merchants.56 This explains the necessity of elaborate directions given by Kautilya to the Superintendent of Ships for regulating the foreign commerce of the country.57

The commercial rivalry of the foreigners in the Indian Ocean also had its effect on Indian shipping. It limited the extent of Indian shipping and often determined and directed its course.

Indians had been engaged in sea-faring activities in the Indian Ocean long before the beginning of the Christian era. Indian ships carried goods to east African and south Arabian markets. The origin of the name of the Island of Socotra is Indian. In Sanskrit it is dvīpa Sukhādāra, i.e., island abode of Bliss.⁵⁸ In the time of the author of the Periplus its population consisted of Arabs, Indians and Greeks who resorted thither for the purpose of trade.⁵⁹ Likewise the Indian mariners had been visiting the Arabian harbour of Eudaimon (Aden) on the mouth of the Red Sea.00 The Greek merchants from Egypt also resorted to this mart. But very likely the Indians were not allowed to have direct dealings with the Greeks and sold all their goods to the Arabs. Further the Indian merchants were not permitted to go beyond this place lest they should come in direct contact with the Greek merchants.

It has sometimes been pointed out that the rulers of Egypt instituted differential customs dues against the Arab and Indian vessels at the Egyptian ports of the Red Sea. Mommsen makes this deduction from the Periplus, where we read of reciprocal intercourse between non-Roman Africa and Arabia and India; between Persia and India; and between India and Arabia; yet there is nothing to show that the merchants of these regions, engaged in active trade, came to Berenice or Myos Hormos -not even the merchants of Muza, the most active of Arabian marts at this time. 61 But the absence of Indians at Egyptian harbours can be

^{56.} Dikshtar, Ramchandra, Silappadikaram, Canto VI, 128-144.

^{57.} Kauţilya's Arthaśāstra, translated by Shamasastry, II, xxviii (Mysore, 1951).

^{58.} McCrindle, Commerce and Navigation of the Erythraean Sea, p. 92 (London, 1879).

^{59.} Periplus, 30.

^{60.} Ibid., 26.

^{61.} Warmington, Commerce between the Roman Empire and India, p. 76.

attributed to exclusion by the Arabs. Of course, these restrictions must have been relaxed when the influence of the Romans was being felt by the Arabians. But this fact definitely demonstrates that the commercial rivalry in the Indian Ocean put restrictions on the Indian shipping.

Likewise the great demand and the fierce competition among foreigners for Indian goods and the concourse of foreign merchants in the Indian markets induced the Indians to stop making voyages to Arabian and east African markets for the disposal of their products. Thus the Indian mariners confined their activities to the Indian coasts, carrying goods from one port to another. The more adventurous mariners engaged themselves in traffic between India and China. They carried Indian goods to China and brought back silk in exchange to the Indian markets and thence it was carried by the western merchants to their respective countries. This made many Indian ports entrepots between East and West. Thus commercial rivalry of foreigners in the Indian Ocean had far-reaching effects on Indian trade.

NOTES AND QUERIES

DATE OF UTPALA

Commentator of Varāhamihira's Bṛhajjātaka and other works

Ву

P. V. KANE

In my paper on 'Varāhamihira and Utpala' (Journal of BBRAS., N.S. vol. 24-25 for 1948-49, p. 22), I stated that Utpala wrote in Sáka 888 (A.D. 966), following a verse¹ printed at the end of the commentary of Utpala on Brhajjātaka, in Harikrsna-nibandha Series, Banares, 1934. Since then two matters have come to my notice that make me doubtful about the authenticity of those verses at the end of Utpala's commentary. The first is that in a MS. of Utpala's commentary in the Bhandarkar Oriental Research Institute, Poona, (D.C. No. 177 of A 1882-83) that verse does not occur at all. The second fact is a paper of Prof. Otto Neugebauer² in the Bulletin of the Royal Academy of Belgium for 1957-4 (pp. 133-140) on "variants to the Greek translation of Abu Ma'shar's Version of the Paranatellonta of Varāhamihira and Teukros". Teukros (probably about 1st century B.C.) wrote 'Paranatellonta', i.e., the arrangement of constellations according to Zodiacal signs and decans (Sanskrit dreskāna) which rise simultaneously or set or culminate simultaneously. masterly work Sphaera demonstrated the spread of these doctrines from the Hellenistic world to the Far East and that then followed their return from India via Persia and Byzantium to the West. The main instrument of this transmission of Persian astrological representations to the West was Abu Ma'shar's Introductorium majus of which Book VI. Chapter I. contains the list of 'Paranatellonta' in three versions, according to the

The verse is चेत्रमासस्य पञ्चम्यां सितायां गुरुवासरे । वस्वष्टाष्टिभिते शाके कृतेयं विवृतिर्मया ॥

This is the fifth verse out of the seven verses at the end of the commentary. It gives Thursday, the bright half of Chaitra in Sake 888 as the date of composition (i.e. 1st of March 966).

I am thankful to Prof. Otto Neugebauer for kindly sending to me a copy of his learned and valuable Paper. He read my Paper in JBBRAS cited above, and though we had not met or corresponded before, he kindly bright to my notice his Paper.

Persians, according to the Indians and according to Ptolemy. The Arabic text of this chapter of Abu Ma'shar's work was edited by K. Dyroff, with a German translation as an appendix to Boll's Sphaera. The Indian sphere is attested in chap. 27 of the Brhajjātaka of Varāhamihira, a translation of which had been published by Colebrooke in 1807 (vide Misc. Essays, vol. II, pp. 320-325). A German translation by W. Printz, which also contains the additions by Bhatta Utpala, is published in W. Gundet's Dekane and Dekansternbilder (1936). In connection with this Prof. Neugebauer on p. 134, note 3 points out that Abu Ma'shar died in A.D. 886, that his translation contains a passage concerning the 3rd decan of Aries, which belongs to Utpala's commentary and that one must assume that the date (mentioned in note 1) about the composition of Utpala's commentary is incorrect or that Utpala used for this chapter an older commentary.

Chapter 27 (25th in one MS. D.C. No. 279 of Viśrāmbāg I) of the Bṛhajjātaka contains 36 verses on the 36 dreṣkāṇas of the twelve rāśis (zodiacal signs) from Meṣa (Aries) to Matsya (Pisces), three for each sign. Varāhamihira describes the appearance of dreṣkāṇas (some male, some female) and expressly states in verses 2, 19, and 21 that he describes the appearances as declared by the Yavanas (or by a Yavana author). The third dreṣkāṇa of Meṣa is described in the 3rd verse (quoted below) of Chapter 27 of the Bṛhajjātaka. It may be translated as follows: "The third dreṣkāṇa of Meṣa is declared to be ferocious (in appearance or by nature), conversant with the arts (singing, dancing, painting, etc.), yellowish brown (in colour), eager to act, disposed to break rules of conduct, having in his hand a raised cudgel, wearing red garments, and quick tempered'.3

क्र्र: कलाशः कियाथी भग्नव्रतोऽभ्युवतदण्डहस्तः ।
 रक्तानि वस्त्राणि विभित्ते चण्डो भेषे तृतीयः कथितस्त्रिभागः ॥
 Utpala's commentary on this adds: 'अयं भेषतृतीयस्त्रिभागी द्रेष्काणः कथितः उक्तः ।
 एष नरद्रेष्काणः सायुघो जीवसक्तश्च ।'

The words in bold type are an addition and not an explanation of anything contained in the verse commented upon. Similar additions are made in the commentary on all the verses at the end of the Chapter. The words in bold type mean 'this is a male dreskāṇa with a weapon and connected with Jupiter'. All dreśkāṇas are declared in Utpala's commentary as connected with someone of the planets. These additions by Utpala are in prose. The third chapter of the Yavana Jātaka of Sphujidhaja deals with 36 dreṣkāṇas, but these descriptions do not completely tally with Varāhamihira's descriptions. Utpala knew the Yavana Jātaka of Sphujidhvaja (as I have shown in the Journal of the Asiatic Society of Bombay, Vol. 30 Pt. II, 1956 pp. 1-5). The prose words added by Utpala are not found in the Yavana Jātaka of Sphujidhvaja. They are probably his own remarks based on his knowledge of Indian and foreign works on horāśāstra.

It appears to me that the date given at the end is not authentic and that Utpala is not quoting any previous commentator when he makes additions to the descriptions of the parts of dreskāṇas. Abu Ma'shar died in A.D. 886 and if he quotes Utpala on the 3rd decan of Meṣa, Utpala cannot be placed later than A.D. 850. This date would have an important bearing on the dates of several authors. As Utpala quotes Yavana Jātaka of Sphujidhvaja, that work would have to be placed long before A.D. 800. Utpala in his commentary in Yoga-yātrā of Varāhamihira (I.1 from a MS in the Bombay Asiatic Society's Library) quotes the definition of the figure of speech called 'Ananvaya' and its illustration from Bhaṭṭa Rudraṭa's Kāvyālaṅkāra. Therefore Rudraṭa will have to be assigned to the end of the 8th century A.D. at the latest. Similarly, the Sarāvalī of Kalyāṇavarman (on Astrology) would have to be placed between A.D. 575 and 800.

DER RGVEDA, von K. F. Geldner, Part IV: Index of Names and Subjects in the Translation. Harward University Press, U.S.A., 1957.

This is the Index Volume of the German translation of the Rgveda by Geldner published in Vols. 33-35 of the Harward Oriental Series. It was unfortunately never completed, nor even properly planned and arranged by the author before his sad demise. Geldner had himself prepared his material in a rough draft for his Index to his translation upto the end of the eighth Mandala; the remaining two Mandalas had to be handled by his successor to the chair of Indology at Marburg, Prof. Joh. Nobel. Some attempt has been made by Prof. Nobel to rearrange the whole material according to a plan, but by its very nature it did not wholly yield to the treatment, with the result that some overlapping, looseness, dispersion and repetition have crept in the work. The article on Soma, prepared by Prof. Nobel, is given at the end owing to the very large number of entries under it. This last is divided into two parts, namely, Soma as a deity and Soma as a plant, while the Index as a whole is divided into two parts, namely, Index of Proper Names and Index of Subjects. Additions and Corrections to the Translation are given at the end on pp. 251-271.

The Index is bound to be very useful and may render great help in knowing even the minute details about a deity or a topic, which is mentioned in the Translation. It must be remembered, however, that this is not an Index to the Text of the Rgveda, but to its Translation and brief notes in German done by Geldner. Hence the Index refers to the topics, as they appear in the Translation, that is, to the German equivalents of the original Sanskrit terms in the Rgveda, employed in the Translation and Notes. This makes the use of this part of the Index impossible for those who do not know the German language. In the case of the proper names of the deities and the sages, it is slightly different; without knowing the language one can use it for the references which are collected under each entry, though the separate headings under which they are collected would be unmeaning to him who does not know German.

A few things which seem to have been dropped through oversight from the Index may be pointed out here: Thus Agni's being punished by the gods to eat without teeth (10.79.6: Tr. and Note) is not recorded either

under Agni's Speise (p. 6b) or under his Zahne (p. 8b), where it is expected, though it is recorded, without any context, on p. 225 under Zahn in the Sachindex. Versatz or Verkauf of Indra in not mentioned under Indra or anywhere else (so far as I can see), though the Gotterbild, which is not accepted by Geldner at 4.24.10 A, is duly recorded in the Sachindex. The same may be said about an important trait of Indra, namely, Listen or Zauber-künsten, (his powers of assuming different forms to baffle the enemy in fighting), mentioned in the Trans. at i.32.12 etc. The Giftiges an Rede of the bards which is mentioned the Trans. at 10.87.13 is similarly omitted from entries both under Giftiges and Rede in the Sachindex. These are, however, minor omissions and the Index, together with the Translation of Geldner, must always be ready at hand for consultation to those who desire to study the hymns of the Rgveda.

H. D. Velankar

THE SUBHĀṢITA-RATNAKOṢA: Compiled by Vidyākara, edited by D. D. Gokhale; with an introduction by D. D. Kosambi, Harward Oriental Series, No. 42, U.S.A., 1957.

The work is an anthology of Sanskrit poetry compiled by a Buddhist writer, called Vidyākara, in Bengal, under the Pālas, about A.D. 1000 and revised about thirty years later, as is convincingly demonstrated by the editor in the introduction, secs., 3 and 4. It is the oldest known general anthology of Sanskrit verse, where in fifty sections called Vrajyās, Vidyākara has extracted stanzas on different topics. About one third of the work is devoted to Love in its various aspects, while Anyoktis under Anyāpadeśa Vrajyā (106), Svabhāvoktis under Jāti Vrajyā (45), Arthāntaranyāsas (48) and Court panegyrics under Cāṭu Vrajyā (80) also find a place in it. Even Nirveda and Śānti are not neglected; Vidyākara selects 57 under the former and 48 under the latter.

The editor's reflections on the absence of military literature or poetry of prowess in Sanskrit are thought-provoking (Introduc. sec. 6). Though poetry, capable of rousing martial spirit is not altogether wanting in Sanskrit, yet its main aim was to produce or rather evolve the Vīra Rasa, which must result in an unmixed delight in oneself. Poems do not seem to have been composed with the intention of inspiring the warriors fighting against an enemy or to fill them with enthusiasm or martial spirit. The reason is to be sought in the fact that during the Classical period Sanskrit was not the common man's language and could not have been followed by him without a certain amount of traditional education and training. Sanskrit in its Classical stage was essentially a language of the

learned and hence the language of the peaceful. Similarly the editor's remarks (on p. lxi) about the poetry of the Subhāṣitas before us that 'it carries with rank beauty of an orchid, the corresponding atmosphere of luxury, parasitism and decay' are a little harsh and unpalatable, but all the same quite accurate. Their poetry is at the best 'exquisite', rather than 'great'.

In sec. 9 of the Introduction, the editor has put together what little information could be available about the authors that figure in the anthology. As a matter of fact, 'to the anthologist' and his public, the stanza, alone was of 'interest' and not its author nor his date and life. And this is practically true of all our great works in Sanskrit in ancient India. The ancient India's sense of the historical essentially differed from that of ours. History to him consisted of acts and incidents in the past leading to certain definite results; they are there for the humanity to draw their lessons from for the use of their future and even present career, which may have a close resemblance with happenings in the past. The individual of a particular place or time was immaterial for the ancients; but what he did or said was of all consequence. Our ancient poets naturally shared this view and, therefore, described their national heroes with a grain of historical truth covered with several deep coats of myth and imagination. It is no wonder then, that they too shared the fate of their heroes and remained a mere name, often surrounded by absurd myths and legends, to the posterity.

The editing of the text is very carefully done, following the best standards of editorial integrity and vigilance. The next volume containing the translation and explanatory notes is eagerly awaited.

H. D. Velankar

CHĀNDOGYĀ-BRĀHMAŅAM: With the commentary of Guṇaviṣṇu and Sāyaṇa; edited by Durgamohan Bhattacarya, M.A. and published by the Sanskrit College, Calcutta, 1958.

Chāndogya-Brāhmaṇa is a name which is given to a work of the Sāma Veda, comprising ten Prapāṭhakas or chapters, of which the first two pass under the title of Mantra-Brāhmaṇa, while the last eight constitute what is generally known as the Chāndogya Upaniṣad. Here in the work under review, the first two Prapāṭhakas only are edited with two commentaries, one by Gunaviṣṇu who is earlier than Sāyaṇa, and the other by Sāyaṇa himself.

This Mantra-Brāhmaṇa portion of the Chāndogya-Brāhmaṇa is so to say the basis for the two Gṛhya Sūtras, namely, Gobhila and Khādira. The Brāhmaṇa puts together the Vedic Mantras which are meant to be employed in the Gṛhya or the domestic rites, while these latter themselves are described in detail in the two Gṛhya Sūtras, in the same order in which the Mantras are given in the Brāhmaṇa. But as the Brāhmaṇa forms part of a bigger work called the Chāndogya Brāhmaṇa as said above, it must be assumed that the Brāhmaṇa preceded the Gṛhya Sūtras, which then arranged their contents in accordance with those in the Brāhmaṇa.

The present edition is based upon a large number of manuscripts collected from different places and written in different scripts. Full use is also made of the printed material in the form of the earlier European and Indian editions of the Brāhmaṇa. One important aspect of this edition is that it clarifies the position of an old pre-Sāyaṇa commentator, Guṇaviṣṇu, in the field of Vedic exegesis and gives his commentary in full by the side of the well known commentary of Sāyaṇa. Important variants from the mss. are given in the foot notes, where brief critical and comparative notes are also added, which bear the stamp of the author's vast and careful reading, coupled with a selective judgment. Six different indices are given at the end, thus adding greatly to the utility of the publication.

Some twenty years back the editor had published Gunaviṣnu's commentary on the Chāndogya Mantras, which are, however, different from the present Brāhmaṇa, though many of the Mantras are common to the two collections, the Brāhmaṇa being of course the original or the earlier one. Prof. Bhattācārya deserves our gratitude for bringing to light the work of an old almost forgotten commentator of the ritualistic Vedic texts, namely, Guṇaviṣṇu.

The first Prapāthaka of the Brāhmana contains the Mantras for the Sanskāras beginning with Vivāha and ending with Samāvartana, while the second contains those that are required for the different compulsory or optional rites prescribed for a householder. References to other works where the Mantra occurs are given under each Mantra, important variants also being noted. In short, every effort is made by the editor to make the edition very useful and helpful to students of Vedic literature.

H. D. Velankar

KĀDAMBARĪ: A Cultural Study. By V. S. Agrawal; published by the Chowkhamba Vidya Bhavan Chowk, Banaras I, 1958.

This Cultural Study of Bāṇa's Kādambarī by the well known Indologist Prof. Dr. V. S. Agrawal is a successor of a similar study by him of Bāṇa's Harṣacarita. It is written in Hindi and is prepared from four different points of view. Firstly, it faithfully narrates the story in all its details, though it is not intended to be a literal translation of the original. Secondly, it tries to preserve in its rendering all the richness of expression and ideas in the original. Thirdly, it contains a brief exposition of the state of the social, political and religious conditions, as also of the Arts and Literature of the times of Bāṇa as reflected in the work. Finally, it gives a spiritual interpretation of the story and its characters. This last is given at the end as Pariśiṣṭa I, probably because it constitutes a new approach to the problem. A note on ancient architecture is given in the second Pariśiṣṭa and the volume ends with a glossary of select words in the Sanskrit text of the Kādambarī.

The study is a valuable contribution of the author to our knowledge of Bāṇa's times. The Hindi rendering is charmingly simple and the notes added at the end of the different sections (into which it is divided in accordance with the paragraph first given by Peterson and then by Dr. P. L. Vaidya in their editions), are very informative and instructive without interrupting the chain of the reader's thoughts, giving the information just where it is desired or likely to be desired. We hope that the author will soon be able to carry out his plan about a thorough study of Bāṇa and his works, as indicated in his Bhumikā to this work.

H. D. Velankar

DEVELOPMENT OF HINDU ICONOGRAPHY. By J. N. Banerjea. Second Edition (Revised and Enlarged). Published by the University of Calcutta. Roy. Oct. pp. xxxvii+653, XLVIII Plates and a Frontispiece. Price Rs. 30/- (1956)

Judging from the thorough revision, the incorporation of a large proportion of additional matter covering over 250 pages as also additional plates, and the general improved outlook of the book the volume under review appears to be almost a new publication rather than the second edition. That the first edition of the book was out of print within a short time after its publication necessitating the issue of a new edition is ample testimony of the utility of the work to the student, specialist, and general reader. By his expert knowledge of several branches of ancient Indian history and culture, especially numismatics, art, and original Sanskrit

texts on religion, philosophy, and iconography, Dr. J. N. Banerjea, Carmi chael Professor of Ancient Indian History and Culture in the University of Calcutta, was eminently suited to write on Hindu Iconography.

The importance of iconography to students of culture need not be emphasized. The close association between religion and art in ancient India being evident the study of images reveals the religious conceptions of the majority of people worshipping them. Iconography signifies the practical aspects of religious beliefs of the people and changes in the deities worshipped by them are influenced by corresponding changes in the religious ideas. It reflects also the political or general history, and to a certain extent the social life of the period. The author does not confine himself to the descriptive side of the problem but has dealt with its several aspects and has given the history of the origin and development of different Brahmanical cults while describing cult icons, indicating also some of the principal cult tenets.

After giving an idea about the nature and scope of the subject, the first chapter indicates the lines in which the study of Hindu iconography should be conducted and the variety of the material. The next two chapters elaborately discuss the antiquity and origin of image worship in India on the basis of literary and archaeological data after a careful appraisal of the views of previous scholars, followed by chapters IV and V which show how ancient Indian coins and seal impressions prove helpful in ascertaining the early iconographic types of several Hindu divinities and their emblems, many of which would otherwise have still baffled us evading an explanation. It may be observed in this connection that numismatic evidence alone shows definitely that Siva was worshipped simultaneously in both phallic and human forms in the Ujjain region in the early centuries before and after Christ, and also that though Siva used to be represented mostly in his bull form in the Gandhara region, by the time of the Kusānas bull came to be regarded as his mount and his human form became predominant. Some hitherto unstudied texts have been utilized in the elaborate discussion of the technique of iconoplastic art in chapter VI. The next chapter explains the various technical terms and terminologies generally employed in iconographic texts. In the next chapter are discussed the Indian canons of iconometry, followed by a comparison between these and the ancient Egyptian and Hellenic canons.

The next four chapters are entirely new. Folk divinities, which include the Yakṣas, Nāgas and Nāginīs, Gandharvas, Kinnaras, and Apsaras, Gaṇapati, Kārttikeya, Lakṣmī, and Sarasvatī are dealt with in chapter IX. In chapters X and XI the various groups of icons associated with major Brahmanical Hindu cults, Viṣṇu and Sūrya, Siva and Sakti, are discussed

with the delineation of their composite character, while the first section of the concluding chapter deals with the icons of Brahmā, Aṣṭa Dikpālas, as well as accessories to the major cult deities like Garuḍa, Nandin, and Āyudha Puruṣas. The final section covers the characteristic traits of various groups of syncretistic icons. Of these, it may be observed that while only Hari-Hara, Ardhanārīśvara, Viṣṇu-Lokeśvara, and Mārttaṇḍa-Bhairava have been incidentally noticed by previous scholars, Dr. Banerjea for the first time gives a full and systematic consideration of these groups of images: Pañcāyatana; Hari-Hara-Sūrya-Buddha; Siva-Lokeśvara; Sūrya-Nārāyaṇa, Brahmā-Sūrya, Brahmā-Viṣṇu-Sīva-Sūrya. There is also the consideration of the interrelation between Brahmanical Hindu iconography, Buddhist iconography, and Jain iconography.

At the end are three useful appendices, select bibliography, and general index. As against only ten plates in the first edition, this second edition contains as many as forty-eight plates besides the frontispiece.

According to Dr. Banerjea the famous (so-called) Trimūrti at Elephanta is not really Trimūrti, but the representation of three-faced Śiva, in which the Saumya and Ghora aspects of Śiva are combined with his Śakti Umā. He takes the banyan capital at Besnagar, which Cunningham regarded as representing a kalpavṛkṣa, to be associated with Śrī Lakṣmī, the presiding deity of Padminī-vidyā. With reference to the interpretation of Paryaṅkāsana and Bhadrāsana as given by Dr. Banerjea it may be stated that some texts give different explanations.

The book will be found eminently useful by all students of ancient Indian culture and will amply repay perusal. The printing and get-up are good, and the price is reasonable.

Dr. A. D. Pusalkar

THE EVOLUTION OF MAN: by Fr. M. HERMANNS, S.V.D., (Society of St. Paul, Allahabad), 15 illustrations, pp. 1-139.

Father Hermanns has written a very stimulating book. Reviewing all the latest (upto 1955) discoveries and theories on human origins,—human biogenetics, physical and cultural anthropology, and palaeontology—he maintains that "man is a special creation and the whole of mankind derived from one pair only". (p. 56). Now this is again a point of view. Father Hermanns, like a clever lawyer, has been able to show that the theory of the protagonists of evolution of man from an ape is based not only on insufficient and contradictory data, but on evidence which was

based and now proved to be vitiated by deliberate forgery in two important cases. The Piltdown forgery was only recently detected by flourine tests. The one committed by Dubois is not so well-known. He is alleged to have "tricked the whole scientific world" by manufacturing an ape-like man from his vast collections from Java, and concealing other important evidence.

This news does not find a place in the recent book by Dr. Le Gros Clark, the famous Oxford anatomist. If it is a fact, then such evolutionists stand condemned. But even if it is not, what Father Hermanns complains of is true. This subject has ceased to be a pure scientific pursuit of truth, almost from its very inception. Obsessed with the idea of proving man's descent from an ape, or with the idea of establishing this or that kind of Stone Age Culture or Industry many an early collection of human fossils or stone tools was not only biased but not thorough and exhaustive. These collectors discovered what they wanted, and thus a number of false theories were built up. These are now being gradually given up.

Father Hermanns' view viz. that a single pair of human beings was responsible for the several races all over the world—implies a wide spread diffusion from a single centre. This is not yet proved by actual evedence. But should we be so dogmatic in holding to this view if the evidence is to the contrary? One is glad to find that Father Hermanns, though against the evolution of man from an ape, is not against evolution itself. If through changes in climate and life a moderate man in the line of Homo Sapiens could devolve into a Neanderthal man (p. 47) or when "the change of environment gradually helped to form a new type of man" (p. 54), then is it not possible that man could have evolved, owing exactly to these causes, from an ape or ape-like man? No doubt, "the missing link" between these two is not yet found. But suppose it is found in the Siwaliks, where so many primate forms have been discovered or in Africa where every year startling discoveries are being made. So why prejudge the issue?

H. D. SANKALIA

A SOURCE BOOK IN INDIAN PHILOSOPHY. Edited by S. Radha-krishnan and C. A. Moore. Published by the Princeton University Press, New Jersey; Oxford University Press, London. 1957. Roy. Oct. pp. xxix + 684. Price Rs. 21/-.

Though mainly intended for western readers, this Source Book in Indian Philosophy will prove of great help also to Indian readers having

no knowledge of original texts. It covers an extensive range and a long period of over three thousand years, right from the origin of Indian philosophy in the Vedic period, passing through the epic period, the heterodox and the orthodox systems, down to contemporary thought represented by Sri Aurobindo and Dr. Radhakrishnan. The Enlish translations of the selected passages, most of which have already been published, have been revised with a view to making them more idiomatic and intelligible, and in the case of the texts of scholastic philosophy, are often followed by translations of relevant passages from standard commentaries. Besides the prefatory note attached to each section explainin the substance of the selections comprised in it, there is a general introduction dealing with the brief history of Indian thought. At the end appears a useful bibliography.

Of the five sections into which the book is divided, the first two deal with the Vedic period and the Epic period. The selections from the Rgveda graphically portray the evolution of Vedic thought from polythesism to monotheism and monism. The value of the section on the Epic period is enhanced by the inclusion of the entire translation of the Bhagavadgītā by Dr. Radhakrishnan. The selections from the Kauṭilīya Arthaśāstra and the Manusmṛti, also incorparated under the Epic period, show the social aspects of Indian philosophy. The Heterodox Systems constitute Section III, dealing with Cārvāka, Jainism, and Buddhism. It includes the translation of the Dhammapada by Dr. Radhakrishnan. Section IV on Orthodox Systems covers the Nyāya, Vaiśeṣika, Sāṅkhya, Yoga, Pūrva Mīmānsā and Vedānta, the last including the schools of Śaṅkara, Rāmānuja, and Madhava. The last section on Contemporary Thought, as already stated, gives selections from Sri Aurobindo and Dr. Radhakrishnan, whose philosophies seek to bridge the gap between the East and the West.

The book will stimulate interest in Indian philosophy and will serve as a valuable guide to the manifold aspects of the rich and varied Indian philosophic thought—orthodox, heterodox, historic and contemporary.

A. D. Pusalkar

ON THE MEANING OF THE MAHABHARATA: by Dr. V. S. Sukthankar (published by the Asiatic Society of Bombay, 1957, pp. i-x and 1-146).

During the last century and half Indologists in the West tried to interpret ancient Indian texts from the stand-point of a critical method, which

generally discarded views based on Indian tradition, especially when not supported by textual evidence, and the findings of comparative philology, mythology and so on. Indian Indologists also, trained in the same methods, and often deriving their inspiration from the West, made use of the same method in their own interpretation. But soon a reaction started and Indian scholars, in spite of their training and genuine appreciation of the critical method, tried to apply their own i.e. an Indian point of view to problems in that field. In certain respects some inspiration for this too came from Western savants, as in the case of the Rgyeda, about which Geldner insisted with great force that it should be interpreted on the basis of Indian tradition. An excellent example of a scholar applying the specially Indian point of view is that of Sri Aurobindo Ghosh. Himself well-versed in the European classics, he interpreted the Ramayana, the Mahabharata and the poems of Kalidasa, from his own point of view. His recently published book 'On the Vedas' embodies his theories of Vedic interpretation, wherein he discards the superficial meaning of the vedas arrived by 'Comparative Philology' and insists on finding their 'inner meaning', which could not be known by the uninitiated. The late Dr. V. S. Sukthankar does the same thing for the interpretation of the Mahabharata. His case is specially unique. As is well-known, he was a master of the critical method of the West; and he applied it very carefully to the text-criticism of the Mahabharata, of course, with some modifications of his own. The method, thus evolved by him was, for some time, not accepted by a few Western scholars, who strongly opposed him and argued that the method of 'classical philology' should have been applied to the Mahabharata textcriticism. Dr. Sukthankar very ably and convincingly demonstrated the fallacy of that criticism and declared in that now well-known sentence, 'the problem of the Mahābhārata textual criticism is a problem sui generis' (vide: 'Some aspects of the Mahabharata criticism', JBBRAS (NS), Vol. IV, p. 157) and not sui juris.

One who knew Dr. Sukthankar in the period before he assumed the 'general Editorship' of the Mahabharata-text generally carried the impression, perhaps superficial, that he was thoroughly 'Western' in both outlook and training and that he would be the first to discredit the Indian tradition. But soon after he began the arduous task of editing the 'Adiparvan', it became clear that along with a genuine appreciation of the 'critical methods' taught by his Western gurus like Lüders, he possessed a very deep grasp of the real Indian 'spirit', which not all Indians can claim. His views about the Mahabharata became more and more in favour of attaching the greatest spiritual and national importance to the Satasāhasrī-Samhitā (the text of one hundred thousand ślokas). In his foreword to fascicule I of the Adi-parvan published in 1927, while appealing

to both the 'people and princes' of India for financial help for the Mbh.-project, he expressed the view that the 'Mahābhārata . . . is . . . in more senses than one the greatest epic the world has produced' (Italics ours). This declaration from a scholar like Dr. Sukthankar who was a man of few words and was never given to exaggeration certainly has its value. His appreciation of the Mahābhārata reached its highest point when in another appeal for funds he declared that the Mahābhārata is "the content of our collective unconscious", and added further, "we are It, I mean, the real 'we'".

It is, therefore, really a good fortune of the students of Indian culture that a stalwart like Dr. Sukthankar came forward to offer an interpretation of the Mahabharata. In the present book which contains his four lectures on 'the Meaning of the Mahābhārata', one undelivered and three delivered under the auspices of the University of Bombay in 1942, he has interpreted the text in its three aspects, viz., the story of the epic on the mundane plane, on the ethical plane and on the metaphysical one. This is preceded by Chapter I which presents a critical review of the different attempts of Western scholars to determine the original form of the text, or those centred round the problem of determining the stages of its development from an original heroic poem into a stupendous work, containing a huge bulk of didactic and episodical material, which has for centuries served the Indian people both as a Dharmaśāstra (a religious and moral guide) and an epic. In doing this Dr. Sukthankar as usual has been very critical; at times he appears perhaps a little harsh (though deservedly so in a few cases) in his comments on the results arrived at by the Western scholars. His criticism of Holtzmann and Hopkins is specially noteworthy in this respect.

As is well-known, the problem of the original form of the Mbh. arises from the fact that the poem is so big and contains such heterogenous material as have led scholars like Oldenberg to remark that the simple epic narrative became 'the most monstrous chaos' (quoted by Sukthankar, p. 1). Besides, and this is more important, the moral professions of the Pāṇḍavas, the epic heroes, do not at all tally with their actual behaviour. They follow adharma in the war (pp. 12, 13) and kill great warriors like Bhīṣma, Droṇa, Karṇa and Duryodhana with questionable means, which are immoral as well as unchivalrous. This fact, which cannot escape the notice of even a casual reader, naturally requires an explanation. Holtzmann's 'Inversion Theory' arose out of this, though it was criticised even by many Western scholars in his own time. He and others who followed his theory, proposed that the original epic-poem was written for the glory of the Kurus and its second recast was a modification in order to

magnify the Pāndus which was conveniently done on the strength of their association with Krsna, the incarnation of the supreme deity. Such views characterised by Sukthankar as "wild aberrations Holtzmann" (p. 15) may naturally have some mistakes of interpretation, but one cannot fail to appreciate the observations on which his hypothesis was based. One really cannot get away from the fact that the Pandavas won the war by unscrupulous means. Sukthankar's justification that the Kauravas also returned the compliment by being equally crafty and designing (p. 17), that "they sin at heart, and present to the world a smiling and virtuous face", cannot exonerate the Pandayas. The Pandavas also commit sins, he admits, "but their sins are palpably overt and markedly evident" (p. 17). That this justification is a bit lame is obvious. For it ultimately comes to this that the Kauravas acted in an outrageous and the most unjustifiable manner, whereas the Pandayas were forced to do so to uphold righteousness, though they were 'guileless'. This would only mean that to protect Dharma, some type of justifiable Adharma is necessary, which obviously weakens the case of Dharma being finally victorious in the world. Put in different words the problem is that of determining how much adharma is justifiable in this world, which certainly is not a very flattering conclusion to be drawn by the reader of the Mbh. It must be stated that while offering this criticism of Sukthankar's views one feels a bit uneasy because unfortunately he is not in our midst to justify his views and especially because we can take it for certain that were he alive he could have most probably very ably and convincingly defended his position as he did against Dr. Ruben who had criticised his method of text-criticism. It is, however, felt that in the interest of a true interpretation of the Mbh. objections must be stated and also answered if possible.

In all this discussion in Chapter I, Dr. Sukthankar has not referred to the theory brought by the late Rao Bahadur C. V. Vaidya, a renowned Mahābhārata specialist in his own time, regarding the three stages of the Mbh.-text development. The original heroic poem called "Jaya" narrated by Sanjaya to Dhrtarastra, the further detailed account of the Bhārata war with some episodic matter related by Vaiśampāyana to Janamejaya and the third enlarged edition, viz., the stupendous Mbh. related by Sūta, the teller of holy stories to Saunaka—all these stages referred to by Vaidya are mentioned in the text of the Mbh. itself. Can it be an untenable piece of logic to say that the original account related by Sanjaya, who was a Kaurava courtier, was naturally partial to the Kauravas as the hearer was their father and the one related by Vaisampāyana was obviously partial to the Pāndavas, who were after all the pūrva-pitāmahas of Janamejaya, in whose presence the poem was recited? Is it not natural that the two redactors of the same story under different ΛSJ 21

environments could have modified their narratives so as to suit their personal position as well as the attitude of their Royal hearers?

All these considerations are obviously important for one who discusses the 'original story' of the Mbh. Dr. Sukthankar, however, does not argue his case to a final conclusion, for he appears to hold the view that this attempt at finding the 'Ur-Mahābhārata' has practically no value for determining the real significance of the epic because the Indian people, whose 'national Saga' it is, have long outgrown and discarded (p. 31) 'the primitive Kṣatriya tale of love and war, for which the Western savants have been vainly searching' (p. 31, Italics ours). In other words 'Higher criticism' is in no way going to help the task of interpreting India's national epic.

He justifies this attitude on the ground that a mere process of stripping of what we regard as spurious will not automatically leave us with the pure and unalloyed "original" (p. 31); moreover, attempts at analysis would show that the epic had not one source but many (p. 30). Naturally, we know nothing about the hypothetical "Nucleus" (p. 31) and hence we must look somewhere else to find the meaning of Mahābhārata, and not in a reconstructed original. As is clear, it is possible to have some difference of opinion on this point, because howsoever difficult the task of determining the original nucleus of the Mbh. may be, one need not give up the attempt as hopeless. It is better, however, to leave the matter at that and to see how Dr. Sukthankar sets about doing his important task.

This 'dateless and deathless poem' which forms the strongest link between India old and new (p. 32) has a tremendous appeal to the Indian mind, and we have not outlived that mighty book yet (p. 30). What is the secret of its appeal? Learned philologists, cannot help us here; but to the unsophisticated Indian, there is no difficulty about its understanding. for to him, it is a divine work and 'the illiterate Indian is right . . . as he far more often is than his educated brothers' (p. 32f.). Expression of such views on the part of the author makes the impression that according to him purely intellectual and logical considerations should have little or no value in this task. Apart from possible disagreement on this issue, one can grant that dispensing with all discussion regarding the genesis of the original story it is possible to understand its message by trying to search for just those causes which have made the great epic in its present textual condition, a 'pancama-veda', a book of unfailing authority and inspiration for the unsophisticated Indian, who understands the poem almost instinctively, according to Dr. Sukthankar. As a preliminary to find out its message, he first analyses the great story on its

mundane plane'. In so doing he shows a remarkable understanding of the poem. In pp. 34-42 he gives us a fine estimate of the descriptive charm, the engaging style and the wonderful metre of the Mbh. His views on its metrical excellences are indeed original, and deserve to be read in the original (pp. 41-44). On p. 41 he also notes how the creators of the Mbh. remoulded the Vedic Sanskrit so as to make it a really potent and readily adaptable instrument for a continuous narrative. The real interest of the story, however, according to him is not merely the vividly described war, but the characters, which the epic poets have so carefully presented to us. Here again Dr. Sukthankar, as usual, takes the opportunity to show the futility of the efforts of experts of great erudition commanding huge stacks of neatly classified index cards' (p. 46) in interpreting the Mbh.; instead a person like Sister Nivedita gifted with 'a spirit of imaginative sympathy' (p. 46) could possess a clearer vision of the real inner significance of the poem. He quotes her with approval. The different stories in the Mbh. 'embody the endeavour on the part of the epic poets "to understand every man's relation to a given situation and to see in conflicting lines of conduct that same irresistible necessity which, acting from within, hurls each one of us upon its fate" (p. 59). The epic story in a sense presents the history of souls (p. 59). In thus bringing out the value of the epic from the character point of view, the author has given us a very fine interpretation of the great personality of Bhīsma (pp. 46-48). According to him this great man following his asidhārāvrata in observing all the difficult vows most willingly undertaken by him, unmixed with motives of self-love, self-indulgence (p. 45) is indeed an ideal character, which, one can say, can hardly be found in any epic of the world. Regarding Bhīsma fighting on the side of the Kauravas, Sukthankar opines (p. 47) that even though he was convinced of the justice of the case of the Pāndavas, like a soldier, he obeys the call of the monarch to fight, and accepts the generalship of the Kauravas without any mental reservations. He behaves selflessly in what the author calls 'the Gītā spirit' of detachment. He similarly gives us a character-sketch of Karna but one may not exactly agree with him. According to him, Karna's proverbial generosity was but 'a pose' (p. 51). He had no true generosity at heart and when the Brahmin mendicant begs of him to give the coat of mail and the precious earrings, he disobeys his father (the Sun-God, who had exhorted him not to part with them). He hugs round himself the pretentious cloak of generosity (p. 52) but were he capable of analysing his motives, he would have realised that his vow of charity was but 'a sham pose' (p. 52). Further, admitting, perhaps a bit unwillingly, Karna's equality with Arjuna in technical skill, the author says that he lacked the spiritual strength which sustains men in the hour of trial (p. 52). A point of dispute arises where Sukthankar fully approves the fact that

even though Karna pleaded for time, when his chariot wheel was stuck in the earth, Srī Krsna urges Arjuna to kill him. Karna's protest against this procedure is criticised by him with the remark, 'how easy is it to pick faults in the behaviour of others, and how difficult to see the faults in one's own!' (p. 53). It is clear here that the author unconsciously subscribes to the view that Adharma can justifiably be resisted with the help of another, perhaps suitable and less immoral, Adharma. But does this not ultimately reduce the real value of dharma, as all powerful? Moreover, one cannot forget that the somewhat wicked and egoistic nature of Karna was due to the fact of his upbringing as an unwanted child, making him react, perhaps unconsciously, against the world, as the author himself has already hinted at. Sukthankar's estimate of Dhrtarastra is very searching. The old king is very much in the grip of that 'tantalising couple' (of good and evil) which has kept humanity on the whirl from the beginning of time (p. 55). He has good impulses but very weak at that: he always behaves partially towards his sons but when difficulties come, he indulges in the habit of lamenting over the mysterious working of Destiny, the last resort of the feeble mind (p. 56). He has thus made clear that the importance of the epic is for the character-studies undertaken by its authors not for poetic effect but with a conscious didactic purpose, in a spirit of deadly earnest (p. 58). Throughout the problem presented is the riddle of life; and the whole work is informed with 'the spirit of the conscious quest of the ideal life' (p. 58). This is the estimate of the epic on the mundane plane. Even this great achievement of the epic is, however, not enough to explain the sustained interest which it has evoked among the people of India continuously for nearly two millennia (p. 59), points out the author. There is something more in it than the magic of the heaven-sent language (i.e., Sanskrit) or the wonderful character-study in the modern sense (p. 60). The next, i.e., the third, lecture tries to answer this question. It attempts an interpretation of the Mbh. story 'on the ethical plane' as the author puts The mere story of war presented in such minute details and 'astonishing realism' (p. 88) naturally makes the impression that the events had actually taken place. All the same, one may regard the narration 'as a relatively late product' (p. 88). It is possible to hold that the poets obviously have idealised the past which 'never was a present' (p. 88), because the orthodox view that it is a contemporary account has not stood the test of criticism. But, according to Dr. Sukthankar, this is only a prima facie view of the story on the material plane. It has something deeper into it. Frankly admitting that the trivial story of petty jealousy and strife between rival claimants to a small kingdom (p. 62) is not very important by itself, the author points out that the story proiects itself to a cosmic background; because the Bhārata war by its own

interpretation of Pandavas and Kauravas being the incarnations of Gods and demons respectively as given in the Adi-parvan is only an incident in the ever recurring struggle between the Devas and the Asuras; in other words as a 'mere phase in cosmic evolution' (p. 62). This point is supported by ample textual evidence and should be considered as an original contribution of the author to the exegesis of the Mbh. His view is further strengthened by the cosmic character of Śrī Kṛṣṇa (p. 63) who is the Isvara (p. 63), the purusa of the samkhya, and the Brahman or the Paramatman of the Vedantists. Dr. Sukthankar confidently adds, 'there is to my knowledge not a single passage in the Mbh. which does not presuppose the divinity or the cosmic character of Śrī Kṛṣṇa' (p. 63), and he further warns that this aspect of the Mbh. is not in any sense an interpretation. Textual evidence quoted in detail (p. 63f, 65f) proves how seriously the epic poets took the aspect of the story . . . as an act of the cosmic drama (p. 66). This phase of the text may have been 'an after-thought' is admitted by him; but even this after-thought 'is sufficiently early and deeply ingrained in the texture of the epic in the form in which we have received it' (p. 66). It is further pointed out with a real understanding of the connection between the epic and the vedic literature that the conflict between the Devas and Asuras which was presented in the earlier vedic works and which was mainly for aiśvarya or 'the lordship of the worlds', a phase of power politics, as Dr. Sukthankar so aptly puts it (p. 69), is now continued in the Mbh, but on a cosmic background. The fight here is for dharma. And what is Dharma? The difficulty of defining this concept is demonstrated (pp. 79-81) and finally it is suggested (not as a conclusion to the discussion but in a general way) that Dharma is the guarding of moral values (p. 80). Its nature is beautifully illustrated in the dialogue between Draupadī, Bhīma and Yudhisthira (pp. 73, 74). The two former argue for wresting the power from the Kauravas, who had got it by tricky means, but Dharmarāja, who upholds Dharma not for any advantage (p. 73)-for he does not want to be a trader in Dharma (indulging in dharma vānijyaka)—but for its own sake, gives a fine answer which well explains the idea of dharma. 'My solemn promise can never be untrue. I regard dharma to be superior to life itself' (p. 74) and indeed to everything else. These few chapters of the Āranyaka-parvan (especially 13 ff.) contain the substance of the entire ethical teaching of the epic (p. 74) according to Dr. Sukthankar. Yudhişthira's life is, thus, a categorical insistence on the paramountcy of moral rectitude and a fixed belief in the conservation of value (p. 77). This ideal is thrown into sharp relief by the character of Duryodhana, who represents Adharma. "The epic poets show us Dharma and Adharma in action as it were, in the lives of the cousins" (p. 77). The Mbh. thus serves as a great interpreter and also a propagandist of

this principle of dharma, the details of which can also be known from the Dharma-sastras (p. 85). But that is only for the learned few. Through the medium of literature, the Mbh. makes it easy of understanding and acceptance by the ordinary humanity. This fact makes the didactic portions of the Mbh. full of purpose. They are no more interpolations (p. 89) but they serve the high ethical purpose of the Mbh., wherein they have a vital function to perform (p. 86). Here Dr. Sukthankar well succeeds in showing the unity between the narrative and didactic element of the epic, which has been a problem for many. Even from the artistic point of view, as Prof. Pisani has elsewhere pointed out, the long stories and didactic teachings are used to fill up what he calls 'temporal highures'. which are bound to occur in a long narrative covering the period of four full generations (p. 87). Prof. Pisani has noted in support that Homer also has similarly made use of dialogues and episodic matter to conceal the flowing of time without noteworthy events (p. 87). Dahlmann, the supporter of the 'synthetic' theory is, in the light of this, justified in considering the stupendous work as epic and law-book in one, because both of them are so well organised (p. 87). Incidentally, (p. 74) while commenting upon Yudhisthira's exposition of Dharma who expresses indifference to the result of following it. Dr. Sukthankar remarks that the discussion is an elaborate and illustrative commentary (p. 74) on the Gītā doctrine of (tyāga) the abandonment of the fruit of action taught in it (vide Gītā 12.12). With due reference to Dr. Sukthankar, it should be noted, that he too like many others has somewhat misunderstood Gītā 12.12. No doubt apparently tyāga or abandonment is there stated to be greater than meditation (dhyāna), knowledge (jñāna) and so on. But this must not be taken in a literal sense as Sankarācārya has well pointed out; there the context is more important. The stanzas preceding 12.12 abundantly make it clear that the topic is of prescribing successively easier means (sādhanas) for attaining to the final beatitude (i.e., śānti or moksa) and out of all this, tyaga is the easiest, but it certainly does not mean that it is superior to inana, to which indeed nothing can be superior as the Gītā has itself already pointed out (na hi jñānena sadrsam pavitram iha vidyate). This, of course, in no way reduces the value of the main thesis of Dr. Sukthankar. Indeed the almost heart-rending cry of the Mbh. for the upholding of dharma or the principle of unalloyed goodness at any cost is very well interpreted by the searching genius and the equally searching and effective phraseology of Dr. Sukthankar.

But the epic rises to yet greater heights (p. 90), confidently remarks Dr. Sukthankar and explains and illustrates this proposition in the last lecture, viz., 'The Story of the metaphysical plane' (pp. 91-124). The epic poets are not content by merely presenting the tremendous drama

of the war but they lead us 'behind the scenes', so to say. The conflict is not merely between Kaurayas and Pandayas, but as pointed out earlier. it is the eternal conflict between right and wrong, between good and evil. Even we ourselves without knowing it are actors in this drama (p. 92) —the epic poets let us guess that. And after reading the book we feel as if the Mbh. had in reality never ended (p. 92). And we are persuaded by them to take the side of Dharma. At this stage, however, Dr. Sukthankar remarks, there is a sudden change in the orientation (p. 92) and the epic leads us into deeper mysteries of life beyond the dichotomy of Dharma and Adharma, beyond good and evil, which according to Indian conception do not constitute an irreconcilable duality, but are only manifestations of one transcending reality. The good and evil or the Daivī and Asurī creations (p. 93) spring from one ultimate source and in the end both merge into it. The ultimate source of all is the transcendental reality, variously called Brahman, Atman or Paramatman (p. 73). In the Mbh, we see the crystallisation of the attempts of Indians to understand this elusive reality, 'to describe the indescribable', so to say (p. 94). This reality is also in the heart of everyone, it is the inner ruler (the Antaryamin), as the Upanisads had already taught, and the great merit of the Mbh. is that it boldly presents it to us in the figure of Bhagvan Srī Kṛṣṇa. This complex character has evidently been misunderstood by modern critics. But the Indians, who it appears have 'an untutored grasp of the essential unity of the universe' (p. 97), are not ruffled by the inconsistencies in Krsna's character, but 'by an automatic mental adjustment' (p. 97) they instantly reach the plane of thought on which the mind of the epic poets is working. They assert the identity of the individual soul with Krsna, the highest reality (cf. Gita 10.20). This metaphysical equation so to say serves as basis for Dr. Sukthankar'c view of the inner meaning of the Mbh. This conception of Śrī Krsna, according to him, places the story and all the characters of the Mbh. at once on a metaphysical plane and gives the poem 'a universal value' (p. 98). This symbol of Śrī Kṛṣṇa along with its subsidiaries so to say is explained by Dr. Sukthankar in detail in what follows (pp. 99-109). This interpretation, he has warned us, is not mere rationalisation of the story but, he points out modestly, has been already explained by commentators like Madhvacarya in the Mahābhārata-taātparya-nirnaya (p. 120), from whom one may differ in details. Now, granted that Kṛṣṇa is the Paramātman, and Arjuna the jīvātman (individual soul), then the battle on the Kurukstra is the battle of life, by which is not meant the 'miserable struggle for existence', but the battle with one's own self, i.e., the lower self, the empirical ego with its passions, desires and so on. This lower self is personified in the character Dhrtarastra with a pun on his name (Dhrtarāstra = one who has seized the kingdom by force). He seeks

advice from Vidura (= the Knower), who stands for Buddhi or conscience but characteristically never follows his advice (p. 106). What is most important is that to the epic poets these symbols are a reality. All the characters and scenes help to complete the symbolisation. The battle between Kauravas and Pandavas symbolises the battle within each man, in his own Kuruksetra so to say, with his lower self, the empirical ego, and the resulting triumphant self-conquest is a necessary element of moral grandeur (p. 101). In the light of this, Dr. Sukthankar's interpretation of some scenes in the Mbh, is indeed as convincing as original. The scene, in which Arjuna and Duryodhana go to Lord Kṛṣna for help in the battle is a fine tableau. Krsna gives a choice between himself unarmed, on one side, and his armies, on the other. Arjuna and Duryodhana, symbolising the divine and demonic aspects of man, choose according to their own nature from Krsna, the primeval source of both; he appears to be sleeping but he is not inert (p. 111). This sleeping Supreme is the witness of all that we do, which is the play of his māyā (p. 111) yet we are free to choose as all men are. The Mbh. wants to impress this on us. The Paramatman is within us as our own Self; we should consult this Self in case of difficulties; Arjuna behaving under Krsna's advice is characterized by Dr. Sukthankar as contact with the self (p. 113). The opinion of 'analytical criticism' that Arjuna at times acting wrongly was right because 'Visnu' had commanded it and therefore nobody could question it, is based on a sheer misunderstanding of the Mbh. Consulting Krsna is consulting one's true self. The story on the metaphysical plane thus teaches us 'to contact the self', the three ways to which, viz., the intellectual $(i\tilde{n}ana)$, the emotional (bhakti) and the reactive (karman), are taught by the Gītā, which is not an interpolation in the text but is 'the heart of heart of the Mbh.' (p. 119). The epic is not then a chaos as Oldenberg imagined but 'a perfect cosmos clothing in noble language and with pleasing imagery a profound and universal philosophy, a synthesis of life' (p. 124). This whole thesis deserves the highest consideration, because it is the fruit of Dr. Sukthankar's profound and singleminded study of the Mbh.-text for continuously over fifteen years. Moreover, as all who knew him would agree, he would never have said anything of which he was not convinced. One, however, may ask: does the Mbh. help to solve the dilemma in man's life, viz., that on the one hand he has to do his duty or to engage in karmans and on the other, to try to realise that he is not the doer but it is the Paramātman, the highest principle, that is doing everything. Would it be enough if his own self 'certifies' that he is right, as the author actually states (p. 116)? Above all, having read the Mbh. one does not still know the purpose of this great phenomenon of life, in which the innumerable invatmans have to fight this constant war against the Dhrtarastras and

Duryodhanas of 'the lower self'. Saying that this is a māyā or līlā, is at its best only a lame or escapist solution. Some such questions raised by Dr. Sukthankar's treatment probably lead us into the domain of technical philosophy, which he might have considered unrelated to his task. His earnest and exquisitely-worded discourses on the Mbh., indeed, should serve as 'prolegomena' to any future exegesis of the text in the same authoritative way as his 'prolegomena' to the textual criticism of Mbh. has served the problem of textual criticism of any Indian text. His style is highly eloquent and precise, the argument generally concise and the supporting evidence very judiciously brought forward, and except perhaps an over-harsh criticism of some modern analytical approaches to Mbh.text interpretation, the book should remain as a model for all Indologists. One feels like suggesting that a simpler edition of the book doing away with some of the technical Indological matter from Chapter 1 and with translation of more necessary passages from the Mbh. in modern Indian languages would highly serve the cause of Indian Culture, about which much noise is made without understanding it or without making the slightest attempt to bring it into practice or to show its application to the present context of our life. The Asiastic Society of Bombay and the generous donor Shri N. C. Parekh, who financed the expenses of the book, deserve highest gratitude not only of Indologists but of all students of culture and literature in general.

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THE INDO-GREEKS, by A. K. NARAIN, Reader in Ancient History and Culture, Banaras Hindu University, Oxford University Press, Amen House, London E.C.4, 1957; pp. xvi + 201 with Plates I-VI and 3 maps; Price Rs. 26.

This is a book in six chapters preceded by a List of Maps and an explanation of Abbreviations and followed by 4 Appendices, discussing some of the very controversial points involved in the Rise and Growth of the Greeco-Bactrian Power and the fall of the Indo-Greeks. A chart showing the Indo-Greek kings in their Genealogical and Chronological Setting, Bibliography, Index, the Plates, each of which is preceded by its Description on the page on the left and the Maps.

It is a slightly modified form of the thesis which the learned author had commenced to prepare at Banaras under the guidance of Prof. Dr. A. S. Altekar in 1947 and was given its final shape and submitted ASJ 22

for the degree of Ph.D. at the London University, where he had gone on obtaining the Holkar Fellowship from the Banaras University and placed himself under the guidance of Dr. A. L. Basham of the School of Oriental and African Studies, London, whom he gratefully calls "the godfather of this book". This change in the field of his active study brought in its wake other advantages also in the shape of close contact with two specialists in the study of the Indo-Greek coins, which constitute the main source of the knowledge of the history of the Greek Kingdom of Bactria and its extensions during the last three centuries preceding the commencement of the Christian Era, namely Dr. R. B. Whitehead and Dr. John Allan, and gave him access to many new materials not available in India. The book bears ample testimony of Dr. Narain having made the best possible use of the contacts he was able to secure and the materials placed at his disposal.

Its learned author has candidly admitted in his Preface that the history of the Greek kingdom of Bactria had become a subject-matter of investigation more than two centuries ago when only two coins of the Greco-Bactrians were discovered, that the first work on it to be published was the one entitled HISTORIA Regni GRAECORUM BACTRIANI of Theophilus Bayer published at St. Petersburg in 1738, that since then further investigations were made and their results were made known to the public by the writings of J. Princep, C. Lassen, H. H. Wilson, A. Cunningham, H. G. Rawlinson, E. J. Rapson, J. Marshall, R. B. Whitehead, J. Allan and many others, that one comprehensive attempt to re-construct the history of the Greek settlers in Asia minor that was made was that embodied in the work of Dr. (now Sir) W. W. Tarn entitled THE GREEKS IN BACTRIA AND INDIA, first published in 1938 and re-edited in 1951, and that therefore he (Dr. Narain) could claim originality not in respect of much new matter brought to light for the first time but in respect of the re-valuation of the old data in the light of the old and new sources tapped by him.

Those sources according to him are:—(1) a hoard of I-G. coins from Qundaz lying unnoticed in the Kabul Museum, (2) an account of a remarkable treasure of I-G. coins found at Mir Zakah in Afghanistan; (3) a new MS. of the YUGA PURĀŅA forming a Section of the GĀRGĪ SAMHITĀ, a work on astrology, which is universally acknowledged as "the earliest of the extant works of the Purāṇa type" and "has always been used as one of the sources of Indo-Greek history"; (4) a large number of coins of the Mitra kings and other local chiefs found from Northern India; (5) some coin-types recorded in the SALE CATALOGUES but ignored by the earlier writers; (6) a re-examination of certain passages in the Western

Classical Sources and (7) a fresh study of the relevant evidence contained in certain Chinese works. Dr. Tarn having already studied most of the above sources it is but natural that this author should have had frequent occasions to refer to the conclusions drawn from the same materials by the former and to express his disapproval of such of them as did not coincide with his, either because there were some new materials before him justifying a dissension or because the interpretation put upon the old ones did not seem to him to have been borne out by the relevant circumstantial evidence. This is quite natural because Dr. Tarn appears to be a pioneer in the field of the history of the Bactrian Greeks in India. However though compelled to do so in the interests of truth and justice Dr. Narain has done so politely and has not otherwise been slow to recognise the help which he had derived from the work of his predecessor in the field. His attitude towards the other scholars from whom he has occasions to differ, e.g. Cunningham, Jayaswal and Mankad, the last two, the editors of the YUGA PURANA on two different dates and from different materials, is also the same. Although thus the work is of a polemical nature its author leaves on the mind of his reader an impression of being a fair controversialist devoted to the propagation of truth as he honestly conceives it, and free from passion or prejudice. As the first Indian scholar to undertake the task of composing a monograph on the Indo-Greek kings, short references to whom were found in the standard works on the Early History of India, shortly after the publication of the second edition of the monograph by Dr. Tarn, based not only on the numismatic evidence but also on the literary evidence contained in Sanskrit and Pali and Chinese works, he could neither have ignored their previous evaluation nor tamely accepted it in the case of those points on which his knowledge suggested to him divergent readings or interpretations. By his having put them forward fearlessly he has on the contrary rendered a useful service of supplying food for a reconsideration of those points by those interested in the ascertainment of truth.

The title of the book raises an expectation that it purported to trace the history of the people of the Grecian stock who had immigrated into and settled down in India. What it actually contains however, is the probable history of the kingdom of Bactria founded by a Greek Satrap and adventurer named Diodotus I in about 256 B.C. He founded it by defeating Seleucus, a Macedonian who ruled over the territory of Persians and subsequently conquered by Alexander the Great. This kingdom passed after twenty years into the hands of another Greek adventurer named Euthydemus I. He and his two sons extended it and held it exclusively till 190 B.C. Then his son Demetrius I was required to share it with one Antimachus Theos, who was either a descendant of the founder or an

adventurer. The grandson Agathoclea, identified with Menander, continued to enjoy the heritage till Eucratides I, in 171 B.C., to share it too with them. of the line of Euthedemus I having an end with Theophilus in about 85 B.C. and of the come to line of Antimachus Theos founded in 190 B.C. and that of Eucratides founded in 171 B.C., which continued for several generations ending with Calliope, identified with Hermaeus, who amalgamated both of them and ruled till 55 B.C. The learned author says at the end of the last chapter at p. 164:—"Thus Hermaeus was the last Indo-Greek king. With the end of his reign ended the story of 200 years in which there reigned thirty-nine kings and two queens". However in the chronological table at p. 181 the total number of names is 36, out of whom again Meanander and Calliope of the third group are identified with Agathocleia and Hermaeus respectively of the fourth and Dionysius and Apollophanes in the third have been bracketted with Zoilus II, which indicates that they were only joint rulers with the said Zoilus during a period of 15 years (95-80 B.C.) assigned to the latter. Of the remaining 32 again there is reliable evidence as to their being the rulers of some portion or other of the north-western corner of the Mauryan empire from Antimachus Theos (190-80 B.C.), about whose lineage there is a divergence of opinion among scholars. There is however definiteness of the connection of Meanander (155-30 B.C.), identified with Milinda of the Pali work MILINDA PAHNA, with India and Buddhism. This connection seems to have lasted till about 55 B.C. when Hermaeus was dethroned by Azes I of the Yueh-chih tribe and deprived of the province of Gandhara including Takşaśila. Although Dr. Narain has not been able to adduce definite evidence of the fact that the ruling families of the Indo-Greeks "merged with the mingled racial stocks of north-west India, until all traces of them were lost" he is most probably right and that can be shown to be so if anthropological data are collected from that region. The historical events with which the said Greek families were connected thus fall between 256 and 55 B.C. and out of that period their connection with the north-western portion of the empire of Aśoka which included the eastern and southern portions of the modern Afghanistan, then divided into regions known by different names such as Paropamisadai, Gandhara, Udayana etc. The said families were known in Bharata as forming part of the tribe of YAVANAS, a term applied generally to the Greek settlers in the Ionian islands situated in the Mediterranean Sea off the western coast of Greece, who gave to the Western world its earliest group of philosophers commencing with Thales. Such acquaintance of the Indian with the Yavanas is discernible from references to them in Pānini's ASTĀDHYĀYĪ (IV.1.49), and the MAHĀBHĀRATA (XII.200), and the MANU SMRTI (X. 43-44) described them as degraded Ksatriyas. Dr. Narain has very thoroughly discussed the significance of the said

term and its Pali corruptions, YONA, YONAKA, etc., in Appendix I. Similarly he has in Appendix IV discussed at length and with erudition the reference in the YUGA PURANA above-referred to the Yavanas having once in historic times advanced as invaders as far as the mud fortifications of KUSUMADHVAJA (Pāṭaliputra) but retreated from there. The conclusion that he has there recorded is that they had gone there in alliance with the armies of the Pancalas and Māthuras and retreated because dissensions had arisen between the three Taking into consideration along with it the two illustrations in the MAHABHASYA of Patanjali referring to military attacks by a Yavana king on Sāketa and Madhyamikā he has concluded that the Yavana king so referred to must be Menander and that the attacks must have taken place about 150 B.C. (p. 83). He has taken note at p. 84 of the fact that Sircar has in THE AGE OF IMPERIAL UNITY advanced at p. 113 a theory of there having been two Greek invasions of Indian territory, one soon after Śāliśuka (c. 200 B.C.) and the other towards the end of the reign of Pusyamitra (c. 148 B.C.), the first by Demetrius I and the second by Menander, but rejects it as unworthy of credence, on grounds which seem to be convincing.

As for the events whose occurrence is inferred mainly or exclusively from the coins and inscriptions reproduced in the plates at the end, the learned author has discussed them very minutely and with a close acquaintance with the Greek numismatics and recorded his conclusions in definite terms.

The contents of the book are in almost all respects of a sufficiently high order to establish its claim to be a valuable addition to the literature on the subject of the adventures of the families of the Greeks of Bactria, the amounts of success they had met within them, the kind of spirit of rivalry that existed between them *inter se* and the animosity they bore towards the Parthian Greeks and the Macedonians led by Seleucus. The Index and Bibliography following them enhance their value. One cannot find fault with the author for not having tried to acquaint the reader with their system of administration and its effects on the indigenous population of the territory inside and outside Bactria, over which they had been ruling from time to time, because there is a total lack of the materials necessary for the reconstruction of history in that wider sense.

The work of the publisher deserves as much commendation as that of the author, for the paper and the types of different sizes used for the book are nice, the binding durable, the plates reproducing the coins and inscriptions bring out the portraits and signs in bold relief and the three

maps at the end are very clear and helpful in visualising the condition of mid-Asia at the time of the foundation of the kingdom of Bactria, its situation relatively to northern India when its north-western portion was included in the said kingdom and the routes followed by the foreigners, Yavanas, Sakas, Pāhlavas and Yueh-chihs, who came and conquered parts of northern India during the two centuries preceding the Christian era.

Such being the book under review I have no hesitation in saying that it will be found very useful by those for whom it has been meant.

P. C. DIVANJI

GRAMMAR OF THE MARATHI LANGUAGE, by Jagganathashastri Kramawant, Gangadharshastri Phadke, and Balshastri Ghagwe, 1824

This Grammar of the Marathi Language, written in 1824, was published for the first time, after a long, unconscionable interval of 129 years, in 1954. It is a unique book.

The history of its discovery makes fascinating reading. Professor Priolkar while glancing through the Catalogue of MS. in the India Office Library, published in 1950, noticed an entry of the MS. of this grammar written by three Sanskrit scholars—Jagganathshastri Kramawant, Gangadharshastri Phadke, and Balshastri Ghagwe.

With his profound and meticulous knowledge of the remote origins and the first, faint beginnings of Marathi grammar, Professor Priolkar realized at once that if he could look into the MS. of this Marathi grammar, so far unpublished, it would very likely turn out to be a pioneer effort at building up a systematic foundation for Marathi grammar. At the moment, Professor Priolkar is the Director of the Marathi Research Society of Bombay. He requested the India Office in London to forward to him a micro-film of the MS. mentioned in the catalogue of its manuscripts.

With indefatigable industry which is the hallmark of his research Professor Priolkar traced the events which led up to the composition of this grammar. He discovered that, originally, the grammar was planned by the Bombay Native School Book and School Society. The idea occurred to them in 1823. They had already published a Dictionary of the Marathi language, which was to be supplemented by the publication of a Grammar of the Marathi language. They asked the three Shastris in their service

—Jagannathshastri, Gangadharshastri and Balshastri—to write a grammar of the Marathi language which would be a companion to the Dictionary they had brought out earlier.

Primarily, such a grammar was intended to serve as a steppingstone to the study of English which was the language of the then rulers of India—The East India Company.

The three Shastris who were commissioned with the job were ready with the MS. of the grammar in 1824. Subsequently, the MS. was copied repeatedly, and these copies were used for the training of teachers and pupils. Later, Ramchandrashastri compiled an abbreviation of this grammar in question and answer form. This shorter, abbreviated edition of the grammar—so to speak—was in daily use for four years. After a time, however, copies of the original grammar disappeared. Not a single copy could be traced in private or public possession.

Nevertheless, Dr. Taylor—one of the Secretaries of the Society referred to above—had a copy of the original MS. in his collection. When, however, the Native Public Library was founded, Dr. Taylor's collection became part of the Native Public Library. Professor Priolkar surmises that Dr. Taylor's collection was, later, shifted to the India Office Library which contains many books and MSS., bearing on them the imprint of Dr. Taylor's ownership.

The upshot is, the MS. of the Marathi Grammar lay unheeded in the Indian Office Library for a hundred and twenty-five odd years till Professor Priolkar's keen, vigilant eye noted the entry of the MS. in the Catalogue of the India Office Library.

It was a singularly happy circumstance for all scholars interested in the evolution of Marathi grammar that the MS. fell into the competent hands of Professor Priolkar. He has edited and published it with all the loving care which one bestows on a long-lost orphan found at last by sheer, good luck.

In its published form, the grammar is a slim, little volume of 126 pages of text, apart from 15 pages of the editor's preface, 5 pages of the foreword, contributed by the well-known savant—Dr. Suniti Kumar Chatterji, and a couple of pages devoted to a brief account of the cultural traditions of the Madgaokar family, and a life-sketch of the donor—Sir Govind Dinanath Madgaokar. This last is a tribute paid to Sir Govind whose munificent gift enabled the editor to meet the expenses

of printing and binding the book. The type, the paper, the whole format of the book—within its limits—leave nothing desired. A fine, life-size photograph of the donor, clad in the imposing wig and robes of a High Court Judge's office greets the reader's eye as he opens the book. Finally, Professor Priolkar appends a list of Marathi grammars composed by early Portuguese and English scholars when they attempted to familiarize the natives of India with the structure of their own language with a view to facilitating their acquaintance with the language of their foreign rulers. This list is a complete bibliography of these pioneer efforts to formulate the basic principles of Marathi grammar.

One interesting feature of this grammar of Marathi written in the first quarter of the 19th century is that the authors who were entrusted with the job had no knowledge of English. Later grammars such as Dadoba's, R. B. Joshi's, Kher's were written by men who had before them the model of English grammar. Their books were based more or less on the structural principles of English grammar.

In his editorial preface, Professor Priolkar refers to some of the devices employed by the authors of this grammar to indicate the different pronunciation in Marathi of such letters as ব, ত, ব, হা. He points out, again, that the three Shastris who wrote this grammar knew no other punctuation mark, save the full stop.

The Bombay Native School and Social Book Society state in their Report for the year 1924-25 that they aimed at conveying "a knowledge of English to the natives on the best principles, and to enable them to acquire through the aid of the books now prepared and in preparation a more grammatical and thorough acquaintance with Maratha and Goojaratee." It is to its immense credit that this Society realized the vital necessity of grammar as the foundation of all scholarship and learning, worth the name. In the Report of the Society mentioned above. they observe that both Gujaratee and Maratha have hitherto been employed merely for the purposes of intercourse and business and have never been either fixed or refined by writers of prose. The rules of grammar, therefore, on analysed and definite principles and the capacities of these languages are unknown even to the natives themselves. In a word, the members of the Society perceived that a good dictionary and a good grammar are the props on which all profound knowledge of a language rests. They saw chaos around them and proceeded straightaway to introduce order into the chaos. They planned the preparation of a dictionary and a grammar, when the dictionary was out of hand, they asked the three Shastris-Jagannathshastri Kramawant. Gangadharshastri

Phadke and Balshastri Ghagwe to prepare a sketch of grammar in Marathi with at least correct paradigms of nouns and verbs.

When the three Shastris started on this job, they were aware that they could depend on their knowledge of Sanskrit to show them the way to the structural principles of Marathi grammar. After all, Marathi is closely akin to Sanskrit, being a degree or two removed from Sanskrit which is regarded as its grand-parent. It is, indeed, arguable that Marathi is, in its own right, an independent language. All the same, it cannot be denied that through successive ages it has been profoundly influenced in its development by Sanskrit.

The three Sanskrit scholars working on the Marathi grammar, had, therefore, no difficulty in discovering the points of contact between the two languages. They saw that in such matters as the declension of nouns the conjugation of verbs and other broad divisions of grammar, there was a close similarity of development in these two languages. It was this discovery which set them firmly on a straight path, and they completed the task assigned to them in 1823 by the end of the year 1824.

They begin right away with the alphabet in Marathi which is just a replica of the Sanskrit alphabet, and round off their labours with a brief consideration of exclamatory particles. The whole book consists of 22 chapters. Nouns and pronouns, their genders and numbers, adjectives and adverbs, verbs, transitive and intransitive, tenses of verbs, active and passive and impersonal constructions, verbal and other derivatives—all these aspects of grammar are treated and illustrated. In fact, every rule they lay down is followed by quite a few examples. From start to finish they never permit themselves to forget that they are writing a text-book for use in schools. At the outset, they state the object they have in view in composing their little book— अविक्रित्र परंपरागत बालबीघ लिपिशिक्षा लेक्ट्यवहार काहीं काहीं शास्त्रीय कल्पना आणि युक्ति यांतें अवलब्न सुखबोधार्थ महाराष्ट्र भाषेचें व्याकरण लिहितो They end up with a three-fold salutation to the God of Learning—
श्री गणाधिपतये नमः ॥ श्रीगणलंबोदराय नमः ॥ श्री विष्नहत्रेनमः ॥

Seeing that they were themselves Sanskrit scholars, and had only the model of Sanskrit grammar before them, it is not surprising that they lean heavily on Sanskrit. The Marathi in which they express themselves is weighted with Sanskrit words, and the terminology of Sanskrit grammar. अडाद्गण, आवादिगण, आधाराषेय—अंतदंत शब्दांस परनिपात होतो—संख्यावाचक पूर्वपद असता समाहाराथी अक विभक्तिक पूर्वोत्तरपदांचा समास होतो—बरें बरें इत्यादि शब्द बोल्ट्न पीठरपशीदिसुद्धां करतात—these will serve as a few specimens of the style in which the book is written.

To the reader of our time, such a style seems odd and unattractive. But it is unfair to judge it by modern standards. Much water has flowed under the bridges since this book was written. During the interval of 129 years between the composition of this book and its publication, Marathi has suffered a radical change—a "sea-change". The unattractive caterpillar of those days has been transformed into a lovely butterfly. If we bear in mind, however, the state of Marathi in 1823, and the training and up-bringing of the three authors of the book, we shall find a quaint and antique charm in their style.

It is not the style alone, but the subject-matter of Marathi grammar has, also, suffered a "sea-change". Modern Marathi envisages the consideration of such topics as Analysis, Punctuation, Parsing, Etymology, Prosody. Here, again, it is imperative that we should see things in their proper perspective. The grammar composed in 1824 is a child which has to be carried about in a go-cart. Modern grammar is a hefty young man, going, squaring his elbows where he wills, following his fancy.

Further, the disposition—the arrangement—of the subject-matter in a Modern Marathi grammar is miles in advance of the one adopted by the authors of this grammar written in the first quarter of the preceding century. But for all that, considered as a first attempt it reflects no end of credit on the authors who set their hand to the task and carried it to a successful conclusion. They had to forge their weapons and fought—if we may so put it—a battle almost single-handed. Our last word must be a word of warm gratitude towards Director, Professor Priolkar for unearthing the MS. of the grammar, editing it with superb ability, and presenting it to the world in an attractively bound little volume.

R. K. LAGU

THE PRE-HISTORIC BACKGROUND OF INDIAN CULTURE, by D. H. Gordon. Published by Bhulabhai Memorial Institute, 89, Bhulabhai Desai Road, Bombay-26. Royal pp. ix + 199 with 32 plates and 25 figures. 1958. Rs. 20.

Our knowledge of the pre-history in India is rapidly increasing since the last quarter of a century and the necessity of a book incorporating all the advances made by archæological research in pre-history was keenly felt. The object of the book under review "is to present the results of archæological research, both past and present, in a manner that will be comprehensible to the general reader, while at the same time giving the

student those important details which are the essential evidence from which this story of cultural progress has been constructed." Its scope, in the words of the author, "is to carry the reader forward through the ages to the point when dynasties such as the Mauryas and the Satavahanas make their appearance on the historical scene."

By his first-hand knowledge of several pre-historic sites in India, especially those in the Kashmir valley, caves with rock-paintings and microlithic flaking sites in the Madhya Pradesh, and megalithic sites in the South, Colonel D. H. Gordon was eminently fitted for writing The Pre-historic Background of Indian Culture, which contains the epitome of his study and research, giving, as it does, an up-to-date and critical appraisal of the entire material.

The first chapter takes a survey of the early stone industries in the Soan valley in Kashmir, at Kandivli near Bombay, and in several sites in the Andhra State, as also at Nevasa, Gangawadi, Induri and Bheraghat. In the next chapter entitled "The Recent Stone Culture" are reviewed the microlithic industries in India. According to the author, "It is doubtful whether any of the pottery found associated with microliths southeast of a line drawn from Delhi to the mouth of the Narmada can be dated earlier than 2000 B.C. at the very earliest and most of it is very much later, and in the case of recently discovered neolithic plain and painted wares, datable to some part of the 1st millennium B.C." In the third chapter are considered the early cultures of Indo Iranian borderlands, and there is a discussion about the mode of the life of the people whose remains lie buried. Indus Valley Civilization forms the topic of the next chapter. In this connection, it is interesting to note the views held by Colonel Gordon with regard to the Harappa statuettes at different times. He was among the first who refused to assign any antiquity to them. Next, in a personal communication in November 1950, Col. Gordon wrote to the present reviewer, "About the Harappa statuettes consensus of opinion is that they are of Harappa culture date. . . . The convincing arguments in favour of an Harappan date for the statuettes are the use of metal and shell attachments and inlays which are found in other definitely Harappa period items and the technical and artistic excellence of the bronze dancing girl figure from Mohenjo-daro." Finally, in the book under review he observes that the Harappa statuettes "are still a matter of debate". The find of a number of Buddhist period remains at Harappa "makes these sculptures extremely suspect, and an attribution to the Harappa culture without further evidence is both rash and premature." "The statuettes are quite clearly the product of a wholly different art tradition"; the bronze danc-

ing girl, though far from dull, "presents no evidence of that sensitive rendering of the body planes and contours as is shown in the Harappa torso."

The next chapter with the period of invasions (2100-1800 B.C.), which began as the Indus Valley Civilization was just starting to decline. It was a period of considerable unrest throughout the whole of Western Asia and adjoining countries, which was provoked partly by the appearance of the Aryans. Rock-paintings and engravings in the Mahadeo Hills, Mirzapur area, Manikpur, Rajgarh, Raichur District and in Orissa constitute chapter eight in the book, followed by the dark age (1500-326 B.C.) stone and copper culture, which takes us to Brahmagiri, Maheshwar and Navda Toli, Pilikal, Nasik, Jorwe, Nevasa, Hastinapur, Kurukshetra and Ahichchhatra. Finally, "the threshold of history and the coming of iron" discusses such important topics, besides that of the introduction of iron into India, as the painted grey ware, northern black polished ware, megalithic culture, red and black ware in South India and the Aryan, Asura and Dravidian problems.

Rightly a severe critic of "speculative literary antiquarianism", Col. Gordon is not prepared to give due credence to literary works of India. According to him, the major portion of the Mahabharata and the Puranas "provides little except fuel for the blaze of controversy". His datings run counter to the generally accepted dates of painted grey ware, etc., and in several other cases he seems to be in favour of late datings. He is sceptical about C14 tests and states: "There are, however, more possibilities of error than were at one time appreciated." The name "Girnar" on pp. 122 and 127 should be corrected to "Girna".

Text-flugres, diagrams, maps and chronological tables help a good deal in the clear understanding of the subject. There is a useful bibliography and index at the end, while the plates are finely produced. The printing, paper, and get-up are good. We have no hesitation in commending the book to all research libraries.

A. D. P.

PRACINA PHAGU SAMGRAHA—Compiled by B. J. Sandesara, M.A., Ph.D., and Somabhai Parekh, M.A., M.Ed., being No. 3 of the Pracina Gurjar Granthamālā, published by the M. S. University of Baroda; General Editor, Dr. B. J. Sandesara, 1955; pp. 362; Price Rs. 8.

When the question of the establishment of regional Universities in the Bombay State was being discussed about a decade ago, one of the important arguments adduced in favour of such Universities was that they would be able to serve the cause of the regional language and literature without let or hindrance. The M.S. University of Baroda, once it came into being, lost no time in setting up the Department of Gujarati under Dr. B. J. Sandesara who, for his part, did not allow the grass to grow under his feet. The Department has by now published eight volumes in the Prācīna Gurjar Granthamālā series and thereby rendered substantial service to the study of Old Gujarati language and literature.

Pracina Phagu-Samgraha is No. 3 of this series. It is a collection of thirty-eight Phagu poems some of which are published for the first time. Originally a Spring-poem meant to be sung in chorus, the Phagu appears to have attained a wide popularity in course of time; it was seized upon by Jain authors for the propagation of their faith, especially the doctrine of renunciation. In the Introduction, Dr. Sandesara briefly notices all available information regarding the author and the date of each one of the poems. He follows it up by another note in which he discusses the etymology of the word Phagu and traces the origin and development of this peculiar literary form. A very valuable part of some of the publications in this Series is the glossary of words in which Dr. Sandesara attempts the derivation of each word and traces its evolution and cites parallel passages of its occurrence. Dr. Sandesara's notes on पहत (p. 270) and दीबोड़ी (p. 264) are typical of the scholarship and care which he brings to bear upon the discussion of etymological and semantic evolution of words.

The Frontispiece reproduces the last page of 'Cupai Phāgu' (No. 22 in the text) which ends with a stanza numbered 59 while the printed text has 60 stanzas! On a query being made, Dr. Sandesara explained that the MS. numbering was wrong. On p. 182 विल्यान्थ is obviously a misprint for विल्यान्थ, The punctuation in कृष्ण कठिण, अस काल (19.92) should rather be corrected to कृष्ण,कठिण अस काल which in the context would yield a much better sense. Lastly, the initial musical tag अरे is employed very rarely and even so, not quite uniformly, in the Phāgus in this collection. Besides, the recitation of a दुहो even today is begun with the musical tag ए which is a contraction of अहे-अह . It is not improbable therefore that अरे found in the very few cases here is nothing more than a scribal mislection forwig.

VARŅAKA-SAMUCCAYA, Part II—No. 8 of the Prācīna Gurjar Granthamālā published by the M. S. University of Baroda, 1959, pp. 256; Price Rs. 8.25.

The present volume is a supplement to Varṇaka-Samuccaya Part I which was published in 1956 as No. 4 of the same series. Part I contained a collection of eleven Varṇaka compositions in prose along with two other works which share some of the characteristics of Varṇakas. This publication of eleven prose compositions was very valuable because it testified to the existence of literary prose in Gujarati, however stylized in form, as early as the middle of the second millennium of the Christian era. In the present volume which is appropriately sub-titled 'A Cultural Study', Dr. B. J. Sandesara and Dr. Ramanlal N. Mehta have collected all information provided by the eleven Varṇakas on various topics like menus for dinner, dress, decoration and ornaments, jewels, lores and sciences, musical instruments, etc., and described each one of them with etymological and descriptive details.

The use of the word नेत्र in the sense of a whitish fine piece of cloth is perhaps as old as Kālidāsa, Cf. (रेणु) नेत्र क्रमेणोपस्रोध सूर्धम् in Raghu 7.39. नारीकुंजर (p. 35) is simply explained as prints of a female and an elephant on silken cloth. The fact that this design has been used by the philosopher-poet Akho in his Anubhavabindu as an illustration of his conception of the relation of the One with the many would throw much light on the exact nature of this particular design.

These publications of the M. S. University of Baroda are very welcome indeed.

G. C. J.

A NEW APPROACH TO THE RĀMĀYAŅA, by N. R. NAVLEKAR, M.A., published by the author at 411, Wright Town, Jabalpur. Year of publication not mentioned; pp. xxviii + 272; Price Rs. 10.00.

Prof. Navlekar's book under review is provocative, though, I am afraid, not thought-provoking. It breathes the common modern tendency to reinterpret ancient texts and rationalise characters and events from the intellectual point of view. In this process, hallowed characters which have stood as symbols of certain fundamental values in life and have inspired countless generations to rise above mere considerations of the flesh are taken off the pedestal, cut to 'human' size and presented before

the people as individuals neither better nor worse than their own selves. One of the basic causes of the present-day malaise in our national life is the fact that old values and their symbols have been done away with and no new ones have been produced to take their place. Prof. Navlekar fancies Rāma as 'a saviour of the Aryan race in India' who bent all his energies to the task of laying Rāvaṇism by the heel. The author wields a good command over the English language and writes in a vigorous—sometimes passionate—style.

However, his approach to a rational interpretation of the Rāmāyana is scientifically unsound. In the first place, the author has not bothered about clarifying as to what, in his opinion, is authentic or otherwise in the five Kāndas (except the Bāla and the Uttara) which too have suffered inflation; of course, anything smacking of the divine or the miraculous would be ex hypothesi unauthentic. Secondly, the author goes about building up his thesis by citing evidence from Vālmīki, Adhyātma-rāmāyana, Tulsīdāsa, why even from Kālīdāsa, Bhāravi, Bhavabhūti and Magha as if they were all inherently equally acceptable as providing authoritative evidence in this regard. On crucial points in his thesis, e.g., the question of Chāyā-Sītā, his only evidence is provided by the Adhyātmarāmāyana and Tulasīdāsa's Rāmacaritamānasa! Even an untraced story popular in Mahārāstra (p. 143 ff) is grist to his rationalistic mill! Prof. Navlekar's entire thesis is vitiated by this lack of a sense of historical perspective in citing evidence and its attendant implications. The book provides interesting reading which will satisfy neither the pundit nor the critical scholar.

G. C. J.

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