JOURNAL

OF THE

BOMBAY BRANCH

OF THE

ROYAL ASIATIC SOCIETY

(New Series)

EDITED BY

P. V. KANE ASAF A. A. FYZEE H. D. VELANKAR GEORGE M. MORAES

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Published by the Society
June 1953

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VOLUME 28 PART I 1953

Published by the Society
June 1953

LONDON AGENTS
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THE GANGAS OF SKANDAPURA

By

M. Arokiaswami

The Gangās of Talakād have been made known to the historical world now for a long time by the indefatigable labours of scholars in the field like the well-known Lewis Rice of the Mysore Educational Service, Dr. John Faithfull-Fleet of the Indian Civil Service and a host of others. Sufficient prominence has not however been given to their early and fundamental connection with the Kongudēśa to which many of their own inscriptions bear unmistakable reference. The place known as Kangayam in the Dharapuram Taluk of the Coimbatore district once comprised in the ancient Kongudēša derives its name from Ganga connections in and around that place from very early times. From the very account of Roman writers like Pliny and Ptolemy it is clear that the place Kangayam was famous for its beryls or green stones and was an important trade centre between Rome and S. India as early as the I century A.D.1 On the side of the Gangas, an unmistakable evidence is to be had from the way in which Mysoreans for long chose to call Tamil, the language of the south, as Kangee, to which Mr. Wilks refers in his famous book, "History of Mysoor."

In this article an attempt is made to establish this thesis with reference to available historical materials. The Tamil Chronicle Kongudēśarājākkal of the XVII century first brought to light by Col. Mackenzie, later edited and commented by Wilson and Taylor,² and now recently published with a long

¹ Reference here is to the Padiyur mines a few miles from Kangayam, about which Ptolemy has the following passage:

[&]quot;The best beryls are those that.... come from India, seldom found elsewhere" (Nat. Hist., Bk. XXXVII, cap. V.)

² JRAS., VII; MJLS., XIV.

introduction by the Oriental Mss. section of the Madras Government actually mentions a list of the first Ganga rulers who ruled from "Skandapura in Kongudōśa." While we shall revert to this discussion later, we shall first study the available inscriptional evidence bearing on Ganga origins. The two stone inscriptions from Kallurgudda and Purale in the Shimoga Taluk of the Mysore State (assignable to the early part of the XII century) are the first records giving us a detailed account of the Ganga origin.3 From these we learn that King Kampā had a son named Padmanābhā and to him were born two sons, Rāmā and Lakshmanā. Sometime after their birth Mahibāla of Ujjain besieged his capital demanding from him the five ornaments which god Indra had given to Priyabhanda, an ancestor of Kampa. War ensuing, Padmanabha took counsel of his ministers and sent his two sons and sister with forty-eight Brahmans to the south of India. Coming down to Perur, the two princes now renamed Dadiga and Madhava, met Achariya Simhanandi of Kranurgana. "Propitiating the goddess Padmāvati" the said records continue, "he obtained a boon for them and presented them with a sword and a whole kingdom."

Such is our inscriptional evidence, late as it may be, bearing on the origin of the Gangas. Here there is clear mention of the connection with Kongu at the very beginning of the rise of Ganga power, since it is associated with the town of Pērūr now a suburb of the Headquarters of Coimbatore district. It is true that many writers have identified Perur of these inscriptions with Gangā-Pērūr in the district of Cuddapah. No shread of evidence either epigraphical or archaeological or even literary has been however shown in support of this identification and the only argument is based on the verbal similarity between the names of the two places. While such a similarity exists equally well if not better in the identification here sought to be made with the place in Kongudēśa, an inscription of the Gangā Madhāvavarman I implies. the importance of Pērūr in Coimbatore area in the times referred to here. The record is the Kudalūrū inscription of the King4 which records the grant of the village of "Pērūr to the west of the river Totla and east of Marukare Visaya"—obviously the place near Coimbatore since the boundaries set here are easily identifiable with the river of the name in the hills of the Nilgiris and the place known to-day as Madhukarai a few miles off Coimbatore.

More than this, the identification with Kongu-Pērūr satisfies the condition of the times as known to us from various sources much better than the one with Gangā-Pērūr. The reference here is to the Jain predominance mentioned in several Gangā inscriptions and the particular mention of the Gangā assumption to power over the wave of the Jain supremacy of the period. It is in this context that the records of Kallurgudda and Puralē, which speak of Madhava's installation as ruler, is to be read:

³ EC., VII, Sh. 4, 64.

⁴ MAR., 1930.

"On Mādhavā impressing him (Simhanandi) with his extra-ordinary energy when he broke into two a stone pillar with a single stroke of his sword, Simhanandi made a coronet of the petals of the Karnikārā flowers, bound it on Mādhavā's head, gave them (the two brothers) the dominion of all the earth, presented them with a flag made from the peacock-fan and furnished them with attendants, elephants, and horses. Along with these he gave them also the following advice: 'If you fail in what you have promised; if you do not approve of the Jaina sasana; if you seize the wives of others, if you indulge in wine and flesh; if you follow relationship with the low; if you give not your wealth to the needy; if you flee from the field of battle;—your race will go to ruin.' With the lofty Nandagiri as their fortress, Kuvalālā as their city, the 96,000 as their country, the blameless Jinā as their Lord, victory as their companion on the battle-field, the Jinā Mathā as their Faith Dadiga and Mādhavā ruled over the earth."

The nature of Ganga emergence to power is thus put beyond doubt. It is obvious from these records that the Jain Achariya Simhanandi was the promoter of the Gangās at their inception to power. The same fact is borne out by numerous other Gangā records as well, the Uadyendiram copper plates of Prithvipati II recording that "the Gangā Kingdom obtained increase from the great Simhanandi"; the Kudalūr Grant of Mārasimhā telling us that "the Gangā dynasty obtained strength of arm and valour by favour of Simhānandi āchariyā" etc.⁵ The Tamil Chronicle Kongudēšrājākkal refers in its account of Mādhavā (Konganivarman I) to his practice of "cutting a stone asunder with his sword"; and there can be no doubt that the reference here is to what the records of Kalļurgudda and Puralē mention about Mādhavā.

While there is no vestige of evidence pointing to Jain supremacy in or around the place known as Gangā-Pērūr at any time, the region round Kongu-Pērūr shows evidence of great Jain influences in early times.⁶ The numerous Jaina Āchariyās mentioned in the Tamil chronicle above referred to, Arichannā, Nāganandi, Pranyabhāchāriyā etc., and "three others" (mentioned without names) who were learned persons, "acquainted with the sacred books of the Jainas" is itself a clear proof pointing to this. Arichannā is referred to in this work as the donce in the grant of the Ratta, Govinda II, who ruled over Kongu; Pranyabhā is mentioned as his guru; and Nāganandi is said to have instructed kings "in the religious system of the Jainas." If, therefore, the foregoing facts referring to Jain influence and the part Jainism had unmistakably played in the emergence of the Gangas to power are accepted, the identification of Pērūr with the one in Kongu alone seems understandable.

⁵ SII., Vol. II; MAR., 1920-21.

⁶ See my article on "Jain Vestiges in Coimbatore district."-Tamil culture.

The last argument in favour of this identification is furnished by the Kongudēšarājākkal, which seems to give a further clue to the nature of the beginnings of Ganga rule in Kongu. The abruptness with which the chronicle ends the reign of Vikramā, the last Ratta ruler of the Kongudēśa, after his conversion from Jainism to Saivism and begins the rule of the first Ganga ruler needs close scrutiny. It is not wrong to surmise that the conversion of the Ratta was the cause of his downfall and the rise of the Ganga dynasty. This is only too clearly supported by the evidence of the records of Kallurgudda and Purale, which speak in detail of the injunctions issued by Simhanandi to Dadiga and Mādhavā. The narration of the chronicle would even make us believe that far from having any doubt with regard to what Pērūr is intended by the stone records above referred to, the first Gangas ruled from Kongudeśa and from Skandapurā, before they went over to Talakād.

This leads us to the crux of this discussion. Historians seem to have never bothered themselves to explore this important fact of Ganga history. It is true that no place with this name—Skandapurā—exists to-day within the confines of the Kongu country of ancient times. Still there is no impossibility that the place still exists with its name changed beyond recognition in this very area to this day. It is well that the chronicle says definitely that this place was in Kongu, "Scandapuram in Congudēśam." Possibly the place existed with the same name in this region at the time of the chronicler.

From purely administrative considerations some writers have located this capital of the Gangās in the region of the Ghuzzelhutty pass in the Talaimalai area, following Lassen; since this pass commands the entry from Mysore into Kongu. While this would remain only in the realm of a shrewd guess, the mention in the Chronicle of a grant of Tiruvikrama giving 500 candakams of paddy to the Brahman Narasimhabhatta "in the region round Skandapura" makes it clear that this place was situated not in a mountainous region, as is implied in placing it in or around the Ghuzzelhutty pass, but in the midst of fertile fields of paddy.

The town of Kangayam, to which reference was made at the beginning of this paper, seems to answer this description and the name seems to be even a literal translation of the name Skandapurā (Skanda-Subramanya or Kāngēyan). Its central position in Kongu seems to render the identification very likely. Some writers, of whom Mr. C. M. Ramachandran Chettiar of Coimbatore is one, choose to identify this place with Dharapuram, another place in Kongu region very close to Kangayam; the name Dharapuram is said to be a corruption of the old name Dharakannukkuanthakapuram, which refers again to Skanda.8 It is impossible to decide clearly between these two

⁷ MJLS., XIV, p. 4.8 Kongu Malar, II, 143.

Identifications, though the existence of ruined forts in Dhārāpuram and certain inscriptions found here mentioning the Mahratta title 'Bhosāla' reminding one of the Raṭṭa rule in Kongu, render the identification with Dhārāpuram all the more probable. Be that as it may, there is no doubt that the area round Kāngayam and Dhārāpuram in the Coimbatore District of to-day was once the central hearth of the Ganga glory. It was even the first spot of Ganga rule long before the Gangas changed their capital to Talakād. A closer study of early Ganga history must lead us to postulate a period—the period of the Gangās of Skandapurā—before we begin to speak of the Gangās of Talakād.

THE VIȘNUDHARMOTTARAPURĂŅA: ITS DHARMAŚĀSTRA CONTENTS AND THEIR UTILISATION IN MEDIÆVAL DIGESTS

By

BHABATOSH BHATTACHARYA

There are at least six Sanskrit works with the word visnu, prefixed to them, viz. Visnusmṛti, Visnusamhitā, Visnupurāna, Visnurahasya, Visnudharma and Visnudharmottara, the first, second, third and sixth of which have been published and the existence of the fourth and fifth is inferred from quotations in smrti digests of mediæval India. But we are here concerned with the Viṣṇudharmottara-(purāṇa)1 only and shall discuss its dharmaśāstra contents alone. Only two scholars, MM. Dr. P. V. Kane and Dr. R. C. Hazra, have utilised the above dharmasastra contents in their respective works, viz. History of Dharmaśāstra² and Studies in Puranic records on Hindu rites and customs.⁸ The former scholar is also perhaps the first and only one to study the poetics and dramaturgy contents of the Visnudharmottarapurana (V. D.) systematically in his History of Sanskrit Poetics. 1 Dr. Kane says on pp. 161-62 in section no. 33 of the 1st vol. of his former work, 'Visnudharmottara (Venkatesvara Press) in the 2nd khanda contains several chapters dealing with matters of dharma, e. g. chap. 24 gives the qualifications of state officers, chap. 65-72 speak of rājadharma, expedients of policy, punishments, 73-74 deal with prāyaścittas, 75 with impurity on death and birth, 79 with purification of dravyas, 80-81 with the four varnas and mixed castes, 60 (61?) with various purely legal matters.' He further says in the same vol. on p. 194 in sec. 35, 'The Visnudharmottara which is frequently quoted by Apararka and other later works cites verses that are borrowed from Parasara. For example, chap. 75.1 (II. 76. 2?) of the former is the same as a verse of Parāsara' The same scholar has utilised the V. D. in the 2nd vol. of his above work in eight places, of which three (on pp. 713, 715n and 725) contain direct quotations or references, while the remaining five (on pp. 112n, 266n, 842, 855 and 858-9) deal with quotations from the V. D. in mediæval digests. The direct references are to III. 44ff. (on the characteristics of the images of gods and goddesses), III. 46.3 (on image worship) and III. 48. 1 (on Siva being spoken as Pañcatunda). The utilisation of the V. D. in the 3rd vol. by the same scholar is for 41 times,

¹ Published by the Venkatesvara Press, Bombay, śaka 1834=1912-13 A.D.

² Published by the Bhandarkar Oriental Research Institute, Poona, vols. I—III in 1930, 1941 and 1940 respectively.

³ Published by the Dacca University, 1940.

⁴ Published from Bombay, July, 1951.

of which 39 times (38 times of the 2nd Khanda and once of the 1st Khanda) are in the Rajadharma portion, only once (3rd Khanda) in the Vyavahāra portion and also only once (1st Khanda) in the Sadācāra portion. Though the V. D. is a voluminous work, divided into three Khandas, and covers 942 pages, yet several chapters of its 3rd Khanda only contain about 1000 verses and prose matter, covering four printed pages, on topics of poetics and dramaturgy, while its dharmaśāstra contents are scattered throughout the whole work, as is apparent from the above description and utilisation of the same by Dr. Kane in his History of Dharmasāstra (vols. I-III) and from the same treatment, accorded to it by Dr. Hazra in his Studies in Puranic records etc. (to be detailed below). The inclusion of poetics and dramaturgy matter in the V. D. has, therefore, induced Dr. Kane to assign a full section (no. 6 in part I), consisting of 6 pages (pp. 64-70) in his History of Sanskrit Poetics, two of which are devoted to the identification of the V. D. quotations in the Hāralatā (one only of three such) of Aniruddha Bhatta, the Danasagara of Ballala Sena and the Caturvarga-cintāmaņi (vratakhanda) of Hemādri, for fixing from dharmaśāstra sources the lower limit of the date of composition of the V. D., viz. 1100 A. D. As the first⁵ and third⁶ of the above three works have been published in the Bibliotheca Indica and the second is being published by the present writer in the same series, so Dr. Kane was able to consult the printed editions of the former only but had to rely upon the identification by the present writer from his press copy of four sample groups of verses, among numerous such, in the latter i. e., the Dānasāgara, quoted from the V. D.

Though Dr. R. C. Hazra has utilised the V. D. on eight pages of his work viz. Studies in Puranic records etc., yet his treatment of the former is only casual and not systematic, as his main thesis is for fixing the chronology and discussing the contents of the eighteen Mahapuranas and the V. D. falls within the category of the Upapurāṇas. He says on p. 151, 'It is not that the early Nibandha-writers did not believe in the authoritativeness of the Upapuranas. The numerous verses, quoted by them from a good number of such works, show that they gave almost the same importance to the Upapuranas and the Mahāpurānas as sources of Dharma'. He then appends in the footnote a long list of the former class of works, quoted by the Nibandha-writers, and includes the V. D. within it. Dr. Hazra also takes notice of the fact of common contents of the V. D. and other Puranas or Dharmasastra works in the sollowing general statement on p. 21 (n), 'In numerous cases the individual Puranas are found to contain chapters or verses common to two or more of them, or to have retained extracts or isolated verses from their older prototypes or other Sanskrit works. In the Nibandhas also there are numerous extracts or verses which have been quoted with the mention of the names of

⁵ Edited by MM. Kamalakṛṣṇa Smṛtitirtha, 1909.

⁶ Edited by Bharatacandra Širomaņi, Yajneśvara Smṛtiratna and Kāmākhyānātha Tarkaratna, 1878-70.

two or more Puranic or non-Puranic works as common sources'. He then adduces just below on the same page several examples from the Caturvargacintāmaņi, vol. III. (Pariścsakhanda), Part I, two of which (on pp. 1079 and 1095) relate to the above phenomenon in relation to the V. D. He then proves on pp. 43 and 44 the fact of borrowing by the V. D. from the Matsyapurana on the strength of several grounds and ascribes the similarity of contents of the V. D. I. 146, 41b to the end and I. 148-154 (verses 1-7) and the Mat 207 (verse 24b to the end) and 115-120 respectively to the above borrowing. To draw attention of the scholars to the confusion between the Märkandeya Purana and the sage Märkandeya, the speaker in the V. D., he says on p. 266(n²) that the fact that in the great majority of cases, the verses, ascribed to Markandeya, are not found in the Markandeya Purana but in the V. D., proves that the word 'Markandeya', prefixed to those verses, refers to the speaker Mārkandeya in the V. D. and not to the Purāna of that name. He then adds just below, 'In those cases in which the verses, ascribed to Markandeya, are not found in the V. D., the changes in the text of the latter are to be held responsible'. The utilisation of the V. D. by the same scholar on p. 55 of his above work consists of a single sentence only, viz. "For instance, Vām (i.e. Vāmana-purāṇa) 85 and V. D. I. 194 deal with 'gajendra-mokṣaṇa'", while he has on pp. 250 and 258 translated into English the V. D. (II. 32. 2b-3) and (II. $32 \cdot 25b$ ff.) to expose the fallacy of the injunction of making gifts to the Brahmanas and of the omnipotence, ascribed to them, in the above two extracts respectively.

The object of the present paper is to supplement the above dharmaśāstra information, supplied by Drs. Kane and Hazra in the above three works and investigate the indebtedness to the V. D. of the following six digest-writers of Bengal, Mithilā and Mahārāṣṭra, viz. Aniruddha, Ballāla Sena, Caṇḍeśvara, Govindānanda, Raghunandana and Anantadeva, who flourished between the 12th and 17th centuries of the Christian era.

(1) Aniruddha Bhatta (1150-1175 a.d.)⁷

Of the two extant and published works of Aniruddha Bhatta, viz. the Hāralatā and Pitrdayitā, the V. D. is quoted in the former only in three groups of verses on pp. 19 and 29 (2 groups). But the index to the printed edition of the Hāralatā contains page and line references to two of them only, ignoring the third group on p. 29 and Dr. Kane says on p. 67 of his History of Sanskrit Poetics that 'the Hāralatā of Aniruddha quotes a verse from it (i.e. V. D.) which is found in the V. D. I. 142. 16-17'. The second group of quotations consists of 5 lines, of which the last two are found in V. D. II. 52.56, while the third group, consisting of one verse only, is identical with V. D. II. 52.57.

This and the following periods of literary activity of the six digest-writers are taken from Dr. Kane's History of Dharmašāstra, vols. I & III.

(2) BALLALA SENA (1150-1175 A.D.)

Of the two extant works of Ballāla Sena, viz. the Adbhutasāgara and Dānasāgara, the former has been published and the latter is in the course of publication, as stated above. The Adbhutasāgara quotes numerous verses of the V. D., some of which are found in II. 134 and II. 166 of the latter, which chapters deal specifically with portents. The Dānasāgara also quotes a good deal of verses of the same work but from its third khaṇḍa, the following chapters, which are concerned with dāna only, being fully or partly drawn upon:—287-88, 290-91, 297-303, 305-317, 319 and 341. Of these the chaps. 307-309 have been quoted in full, while the chaps. 299, 300, 302, 305-6, 310-12, 317 and 341 have been quoted almost in full. Ballāla Sena mentions another work of the name of Viṣṇudharma among his authorities in the Dānasāgara (introductory verse 15) and quotes verses from the former in the latter but none of these verses, being apparently from a different work, is traceable in the V. D.

(3) Candesvara (1290-1370 a.d.)

Of the four published works of Caṇḍeśvara, viz. Rājanītiratnākara, Kṛtyaratnākara, Gṛhastharatnākara and Vivādaratnākara, the V. D. has been quoted in the K. R. only. The identified collections of quotations which are 37 in number, are mostly from III. 309, III. 317, III. 319 and III. 341, the last identified collection of quotations only amounting to 69 verses and covering 12 pages. The three quotations from the Viṣṇudharma in the K. R., like the similar ones in the D. S., cannot be traced in the V. D.

(4) GOVINDANANDA (1500-1540 A.D.)

The four published works of Govindananda, viz. Varşakriyakaumudi, Dānakriyākaumudī, Śrāddhakriyākaumudī and Śuddhikaumudī, have also extensively utilised the V. D. The identified quotations from the V. D. in the first work are 13, of which 8 are from the first Khanda (chaps. 60, 72 and 142), one is from the second Khanda (chap. 52) and the remaining four are from the third Khanda (chaps. 317 and 319). The traced quotations in the second work are also 13 in number, of which 12 are from the third Khanda (chaps. 301, 305, 311-13 and 316) and only one is from the first Khanda (chap. 147). Of the 13 identified quotations in the third work, 12 are from the first Khanda (one from chap. 60, two others from chap. 72 and the remaining 9 from chap. 142) and only one is from II. 77. Of the 11 quotations in the fourth work, as many as 10 could be identified, 7 being from the first Khanda (chaps. 72 and 142) and the remaining three from II. 77. Unlike the quotations from the Visnudharma by Ballāla Sena, Candeśvara and Raghunandana (to be described below), Govindananda's quotations from the same are in most cases really from the V. D. and not from the Visnudharma — a fact which is due either to our author's confusion between the two works or to copyists' errors of the MSS, of his works,

(5) RAGHUNANDANA (1500-1575 A.D.)

Of the 28 works, comprised within the Smrtitattya of Raghunandana, as many as the following 16 contain quotations from the V.D., amounting to about 250 :—Tithitattva, Śrāddha°, Āhnika°, Prāyaścitta°, Jyotis°, Malamāsa°, Sanskāra°, Ekādaśī°, Udvāha°, Vyavahāra°, Śuddhi°, Kṛtya°, Devapratiṣṭhā°, Jalāśayotsarga°, Chandoga-vṛṣotsarga° and Matha-pratisthādi°. The quotations are almost fairly distributed throughout the three Khandas of the V. D. Those from the first khanda are from chaps. 4, 60, 72, 140-42 and 147, those from the second one are from chaps. 29, 34, 52, 73, 75-77, 79, 82, 85, 88, 89, 91, 92, 95, 116, 117, 124, 134, 140, 143 and 158 and those from the third one are from chaps. 301, 316, 317, 319 and 341 only. Six only of the above numerous quotations (3 from I., 1 from II. and 2 from III.) contain the specific number of the khanda of the V. D., which Raghunandana invariably calls Kāṇḍa and of these six the only quotation from the V. D. (II. 95. 28-29) in the Devapratisthatattva (p. 512) is prefixed with a wrong numbering of the Khanda of the former, as is evident from the phrase viz. 'Vișnudharmottare prathama (i.e. first)—Kāṇḍam.' The quotations from the Viṣṇudharma in the Smrtitattva are not found in the V. D.

(6) Anantadeva (1650-1680 a.d.)

The present writer, who completed in 1935 the editing of and appended an English introduction to, the Rājadharmakaustubha of Anantadeva after the death of his father, the late MM. Kamalakṛṣṇa Smṛtitīrtha, in 1934, said on p. VIII of the above introduction, 'The works which it (i.e. the Rājadharmakaustubha) immensely draws upon, sometimes quoting entire chapters, are the Matsyapurāṇa, the Bṛhat-saṇhitā and the Viṣṇudharmottara.' The above remark about the V. D. is now fully borne out by the fact that all of the 14 identified big extracts, out of the 16 quoted ones from the V. D. in the Rājadharmakaustubha, cover the entire or almost entire chapters, viz. 3-7, 14, 18-23, 26, 150 and 162 and three verses of chap. 152, all of the 2nd Khaṇḍa.

Before concluding the present paper, we wish to make several remarks on the text of the present edition of the V. D. First, the V. D. contains many verses, similar to those of the Manusmrti and Mahābhārata also and not only to those of the Parāśara-smṛti, as pointed out by Dr. Kane (vide supra) and so the following statement of Dr. Hazra (vide supra for the full statement) is perfectly justified, viz. 'In numerous cases the individual Purāṇas are found... to have retained extracts or isolated verses from...other Sanskrit works'. We do not propose to attempt here an identification of the verses of the V.D. with those of the Manusmṛti and Mahābhārata, as that will be a big study in itself. Secondly, the later digest-writers such as Govindānanda and Raghunandana often quote from almost all the Smṛtis and Purāṇas, both extant and extinct,

not primarily from the above works themselves but secondarily from the earlier digest-writers, quoting from the same, due to the supposed tampered character of the texts of the extant works and the utter loss of the extinct ones. But they never adopt this perverse procedure, while quoting from the Manusmṛti, Yājñavalkyasmṛti, Rāmāyaṇa and Mahābhārata, as the texts of these latter have neither been lost nor were ever supposed to have been tampered with. But the V. D., though less authoritative than the above four works of the topmost rank, has also shared their good fortune and it is interesting to find it quoted primarily not only in the earlier but also in the later digests—a fact which proves the untampered character of its text throughout the last millennium. Thirdly, in view of the profuse identified quotations from the varied dharmaśāstra portion of the V. D. by the above six digest-writers in their 25 works and probably similar ones by other digest-writers in their respective works, it is possible to reconstruct the text of the V.D., the only printed edition of which abounds with omissions, misprints and misreadings.

BIBLIOGRAPHY AND ABBREVIATIONS

Adbhutasāgara of Ballāla Sena, edited by Muralīdhar Jhā, Prabhākarī & Go., Banaras, 1905.

D. S. = Dānasāgara , , , being edited by the present writer

in the Bibliotheca Indica (B.I.)

Gṛhastharatnākara of Caṇdeśvara,

K. R. = Kṛtyaratnākara "
Vivādaratnākara "
Rājanītiratnākara "

Hāralatā of Aniruddha

Pitrdayitā ,

Dānakriyākaumudī of Govindānanda,

Suddhikaumudī Śr. K. K. =Śrāddhakriyākaumudī ,, V. K. K. =Varṣakriyākaumudī ,, Rājadharmakaustubha of Anantadeva,

Smṛtitattva (vols. I & II) of Raghunandana,

edited by MM. Kamalakṛṣṇa Smṛtitīrtha, B. I., 1928. edited by the same, B. I., 1925. edited by the same, B. I., 1931. edited by Dr. K. P. Jayaswal, J. B. O. R. S. (vol. XXII), 1936. edited by MM. Kamalakṛṣṇa Smṛtitīrtha, B. I., 1909. edited by Dakṣiṇācaraṇa Bhaṭṭācārya, Sanskrit Sāhitya Parishat, Calcutta, 1924.

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Appendix of the quotations

(N. B.—As the Dānasāgara of Ballāla Sena is now in the course of publication, its complete press-copy being deposited in the press and the Smrtitattva of Raghunandana abounds with quotations from the V. D., so detailed identification of V. D. quotations in these two works has been omitted from the following appendix. A summary of the above has, however, been included within the body of the paper.)

Aniruddha Bhaţţa—Hāralatā

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1. p. 19—तथाच विष्णधर्मोत्तरे मार्कण्डेयः—अच्छिन्ननाडघां . . . नराधिप ॥
                                                                 (II. 142. 16b-17a)
2. p. 29—विष्णुधर्मोत्तरे मार्कण्डेयः—सूतिकावासनिलया . . . तथा बलिः । (II. 52.56)
3. p. 29—तद्यथा—पुरुषा . . . . सूतिका: ।। (II. 52·57)
                       (2) Ballāla Sena—Adbhutasāgara
1. p. 5—मत्स्यपूराण-विष्णुधर्मोत्तरयो:—पूरुपापचारा . . . . . म्पसर्गः प्रवर्तते । (II. 134.5)
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— दिद्यान्तरिक्षं . . . भौमं तदिष कोर्तिम् । (II. 134 \cdot 6a)
2. p. 6— ,,
                      -भौमं चाल्पफलं .... शोघ्रकारि तथैव च।
3. p. 6—
                                           (II. 134 \cdot 9b - 10b)
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II. 166—prose matter.)
5. p. 71—विष्णुधर्मोत्तरेऽ प्युपरागमात्रवर्णेफल्लमुक्तम् । तद्यथा–उपरागे द्वेतरक्तः . . . . .
                          पौडाकरो भवति।
                          अय यस्मिन् नक्षत्रे मौमोदयं . . . . अग्रजीविनश्च पीडचन्ते ।
6. p. 98—
7. p. 98—अथाश्रुमुखं विष्णुघर्मोत्तरे—दशम्यैकादश . . . . मरककारकम् ।
                                —ऋयोदश . . . . पाचवृद्धिकरम ।
8. p. 99—अथ ब्यालं
                                  —पञ्चदश .... संग्रामकारकम् ।
9. p. 99—अथ लाहितम्खं
10. p. 100—अथासिमुभलं ,,
                                 —सप्तदशा . . . चीरप्रावत्यकरम् ।
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(3) Candeśvara—Krtyaratnākara

--जोवस्त्रयोदश . . . अन्यथा कष्टफलः।

11. p. 111—अय राभिकलं ,,

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1. p. 62— विष्णुधर्मोत्तरे—दूर्वाहोमः . . . . मन्त्रदेक्ताम् । (III. 287 ·8—12)
2. pp. 129-30-, -द्वादश्या चैत्रशुक्लस्य . . . . त्रेयमनन्तं द्विजसत्तमाः।
                                                                     (III. 319 \cdot 26 - 37)
                  ,, --सम्प्राप्य चैत्रपासस्य . . . . सीभाग्यं महदाप्नुयात्
3. p. 140—
                                                                     (III. 319 \cdot 2a - 3a)
                      ——मेवसंक्रमणे . . . . महाफलम् । (III. 319. 38a)
4. p. 145—
                      —अपूपानां . . . . . स्वर्गनश्तते । (III. 317·11a)
5. p. 149—
6. p. 154—
                      —वैशाखश्चलपक्षे . . . . महाफ रुम् । (III. 317. 31b-32b)
                       —वैशाखश्कलद्वादश्यां . . . तथैव च। (III. 319. 27a)
7. p. 161—
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-सोपवास \ldots सुखीभवेत् । (III. 319\cdot8)
  8. p. 193
                        —-दत्त्वा . . . . ध्रुवमश्नुते । (III. 317. 11c)
  9. p. 197—
                        —स्वास्तीर्णं . . . . महीयते । (III. 319. 28)
 10. p. 209—
 11. p. 213—
                       —आषाढ्यामन्नदानेन . . . . नरो वह । (III. 319.9a)
 12. p. 221—
                       --श्रात्रणे वस्त्रदानस्य\dots सुमहत् फ\piम्। (III. 317 \cdot 12a)
                    ,,
                        — जलघेनुप्रदानेन . . . . लोकहितं प्रशस्तम् ।
 13. pp. 248-9-
                    ,,
                                                 (III. 319.9b and III. 309.1-15)
                       —प्रौष्ठपदचे . . . . फाणितस्य च । (III. 317 \cdot 12b)
 14. p. 256—
                       —मासि भाद्रपदे . . . . पुण्यमवाप्नुयात् । (III. 317 · 34)
 15. p. 286—
                       —गोद: . . . . ज्ञेयमनन्तं द्विजसत्तमा: । (III. 319, 29b, 34b and 37)
16. pp. 291-2—
                   ,,
                       --गोदानञ्च प्रीष्ठादे.... महाफ\piम्। (III. 319.10a)
17. p. 301—
                   ,,
18. p. 308—
                       -आश्विन . . . रूपवानमिजायते । (III. 317. 13a)
                   ,,
19. p. 375
                       — प्रोणयेदश्व . . . . . . तथाश्विन । (III. 319. 30a)
20. p. 396—
                       —आश्वयुज्यां . . . . फलमक्षय्यमश्नुते ।
                                                    (III. 319, 10b-11a and 24b-25b)
                       —कात्तिके \ldots सर्वत्रीजस्यमाप्नुयात् । (III. 317. 12b)
21. p. 404—
                        —सरोमवस्त्र . . . . दिवमाप्नुयात् । (III. 319. 31a)
22. p. 425
23. pp. 437-8—
                       —कात्तिक्या . . . . . . रूपवानमिजायते । (III. 319. 11b-14a)
                                                    (V.D. omits the last two lines)
24. p. 444—
                       ---लवणं . . . . . . . सौभाग्यमश्नते । (III. 317. <math>14a)
25. p. 473—
                       —मार्गशीर्ष . . . . भवति मानवः । (III. 319. 14b-17a)
26. p. 474—तत्र
                       —पौषे . . . . . . महाफलम् । (III. 317. 14b-15b)
                   ,,
27. p. 482—
                       —धान्यानाञ्च . . . . तथा पौष इति । (III. 319 \cdot 32a)
                   "
28. pp. 485-6-
                       —गीरसर्षप . . . . . पुष्टिमाप्नोत्यनुत्तमाम् । (III. 319 \cdot 17b-21b)
                        —तिलप्रदानान्माघे तु याम्यं लोकं न गच्छति।
                                                                    (III. 317 \cdot 9b).
29. p. 487—
                   ,,
                                                     (V. D. reads प्राप्य लोकं स.)
                       —बहि: स्नानं (वन्हिदानं?) . . . भत्रुनाभञ्च विन्दति । (III. 317 ·6-7) ँ
30. p. 488—
31. p. 512—
                       -- माध्यां . . . . प्रमुच्यते । (III, 319. 22a)
                   ,,
32. p. 516—
                       प्रियङ्गुं . . . . भवति मृतले । (III. 317 · 10a)
33. p. 519—
                       —मार्घ . . . . . श्रवणेन तु। (III. 317·33)
34. p. 530—
                       —आस्तोणँ ..... विचारणा । (III. 319 \cdot 22b - 24a)
35. pp. 553-55—
                       --- कृति कास् . . . . रूपमाप्नोत्यन् तमम् । (III. 317 · 20a-27a)
                                                (V. D. omits the last two verses)
36. pp. 563-66— ,,
                       मस्त . . . . रिपुनाशमवाप्नुयात् ।
                                                (III. 306.62b, 64a; III. 311.10-11,
                                                23a-25a; III. 315. 8a; III. 316.
                                                12b-14b, 22; III. 341. 60a and
                                                79b-80a)
37. pp. 574-85— "
                         विष्णोरायतने दत्त्वा . . . सूखी भवेत ।
                                                (III. 306. 61a-62a; III. 312. 5b-
                                                6a and III. 341. 48-201a)
                                                (V. D. omits the last line only of
                                                this long collection of verses)
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(4) Govindānanda

(a) Varşakriyākaumudī

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1. p. 8—'उपोषितव्यं . . . . शिशना सह' इति विष्णुधर्मवचनात् । (I. 60.\ 26b-27a)
2. p. 16—'नक्षत्र . . . . . यस्यामस्तिमतो रिवः' इति विष्णुधर्मोत्तरे । (I. 60. 24a-26a)
                                                 (V. D. omits the fifth, sixth and
                                                 eighth lines)
3. \ \mathrm{p.}\ 259—विष्णुधर्में — वृषसंक्रमणे \ldots महाफलम् । (III. 319.\ 38b)
4. p. 289—विष्णुधर्मोत्तरे—आस्तीर्णशयनं . . . महीयते । (cf. III. 319 · 28)
5. p. 302—यथा ,, — उपोषितव्यं . . . . शशिना सह।
                                                 (1. 60 \cdot 26b - 27a)
                                                 (The same as the 1st quot. above)
6. p. 344 तथा ,, — उत्तरा . . . . ततोऽप्यति ।
                                                 (I. 142. 19-20)
7. p. 347—यथा विष्णुधर्मे—तिथिनैकेन . . . प्रकीर्तितः । . . . . अतएव—'सौर . . . भृगुनन्दन,
                                                 इत्यादयः प्रयोगाः। .. अतएव 'पञ्चम्यूर्द्धञ्च
                                                 ....ततोऽप्यति'इति विष्णुधर्मे . . . व्यव-
                                                 स्थोक्ता। (I. 72. 16b and 21 and I.
                                                 142. 20b)
8. p. 351—अतएव विष्णुधर्मे—'प्रौण्ठादचाः . . . . ततोऽप्यति' इत्युक्तम् । . . . . अतएव विष्णुधर्मे
                                                 ---'पञ्चम्य<u>ुर्</u>द्धञ्च .... ततोऽप्यति'इति ।
                                                 (I. 142 \cdot 20 and 20b).
9. p. 451-विष्णुधर्मोत्तरे-न्त्रोहिपाके च .... प्रजापतिः।
                                                 (I. 142 \cdot 26b - 27a and 2b - 3a)
                                                 (V. D. omits the last line)
10. p. 482—विष्णुवर्मे—लवणं . . . सीभाग्यमाप्नुयात् ।
                                                  (III. 317 \cdot 14a)
                                                 (The same as the quot. on p. 444)
                                                 of K. R.)
11. p. 488—तथा —पौषे . . . . लक्ष्मीकरं स्मृतम् ।
              (=विष्णुघर्मोत्तरे)
                                                  (III. 317. 14b-15a)
                                                 (Part of the quot. on p. 474 of K.R.)
12. p. 488—विष्णुधर्मे—आग्रहायण्या . . . . . नित्यशः ।
                                                 (I. 142. 3b)
                                                  (V. D. omits the second line of the
                                                 above verse)
13. p. 544 –तयाच विष्णुधर्मे – सूतिकावासनिलया . . . . विलः ।
                                                  (II. 52. 56)
                                                  (The same as the second quotation
                                                 in the Hāralatā, V. D. reading
                                                 the last two lines only and omitting
                                                 the first three ones)
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(b) Dānakriyākaumudī

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1. pp. 5-6—कपिलपञ्चरात्रे—अमयं . . . . . मौत्तानाङ्गिरसं स्मृतम् ।
              (=विष्ण्धर्मोत्तरे)
                                                 (III. 301. 14b-26a)
  2. p. 7—विष्णुधर्मोत्तरे—गृहन्तु . . . . विष्णुदैवतम् । (III. 301.\ 27b-28a)
  3. pp. 7-8—भूमेः . . . . दुर्गाण्यसौ द्विज : ।
                                                 (III. 301. 28b-36b, 11b, cf. 40b
                                                 and cf 44a)
                                                 (V. D. omits the tenth line)
  4. p. 12—द्रव्यस्य नाम . . . . विधिरयं स्मृत : ।
                                                 (III. 301. 10a)
                                                 (V. D. omits the first line of the
                                                 above verse)
  5. p. 46—'दत्त्वा . . . महीयते' इति विष्णधर्मवचनात
                                                 (III. 313. 4a)
  6. p. 47—विष्ण्धर्मे—ताम्बूलस्य प्रदानेन . . . . विन्दित ।
                                                 (III. 311. 23b)
  7. p. 47—विष्णुधर्मोत्तरे—नरस्त्वासनदानेन . . . . विन्दति ।
                                                (III. 311. 1a)
  8. p. 48— ,, — नरश्चन्दनदानेन . . . प्रमुच्यते ।
                                                 (III. 311. 19a)
  9. p. 49—विष्णुधर्में—फलं . . . . . लभेत् ।
                                                (III. 316. 22b)
10. p. 66—विष्णुधर्मोत्तरे—नृवाह्यं . . . . . द्विजसत्तमाः । . . . तत्रैव शिविकादाने—
                                                शिविकायाः . . . . लभेत् ।
                                                (III. 312. I and 2a)
11. p. 73—धनधान्ययतं . . . पार्थिवो भवेत ।
                                                (III. 305. 21b-23a)
12. p. 74 केवलगृहदाने विष्णुधर्मोत्तरे—ब्राह्मणाय गृहं . . . . लोकमश्तुते ।
                                                (III. 305. 20b)
13. p. 91—तथा च
                                    —अश्वयुक् . . . वाचरेत् ।
                                                 (I. 147. 1a-3a)
                            (c) Śrāddhakriyākaumudī
1. p. 256—अत्र 'आग्रहायण्या . . . स्तथा' इति विष्णुधर्मोत्तरवचनाद ॥
                                                (I. 142. 3b)
                                                (The same as the first half of the
                                                12th quotation in V. K. K.)
2. pp. 259-60—यथा विष्णुधर्मोत्तरे—त्रोहिपाके च . . . प्रजापति : ।
                                                (I. 142. 26b-27a and 2b-3a)
                                                (The same as the 9th quotation in
                                                V. K. K., V. D. omitting the last
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line)

13. p. 349—

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3. p. 262-केचिद् . . . . नास्त्येव 'न ताबादघो . . . . कथञ्चन' इति विष्णुधर्मवचनादिव्याहः ।
                                              (I. 142. 27a)
                                              (The same as the second line of the
                                               above quotation)
4. p. 272—न च विष्णुधर्मोत्तरे—'प्रौष्ठपदचा . . . प्रजापितः' इति . . . . वाच्यम् ।
                                               (I. 142. 3a)
                                               (The same as the last two lines of
                                               the 2nd quotation above)
5. pp. 277-8—यत्तु 'उत्तरा . . . . कारयेत्' इति विष्णुधर्मोत्तरवचनं ।
                                               (I. 142. 19a-21a and 22)
                                               (Partly the same as the 6th quota-
                                               tion in V. K. K.)
6. p. 281—तथाच विष्णुधर्मोत्तरे—'उत्तरा . . . ततोऽप्यति'।
                                               (I. 142. 19-20)
                                               (The same as the 6th quotation
                                               in V. K. K.)
                             —'तिथिनैकेन … स्मृतः' । … … 'सौर … मृगुनन्दन' ।
7. pp. 284-5—यथा ,,
                                              इत्यादयः प्रयोगाः । .... अतएव 'पञ्चम्य-
                                              र्द्धञ्च . . ततोऽप्यति' इति विष्णुधर्मोत्तरे . . . .
                                               व्यवस्योक्ता ।
                                               (I. 72. 16b-17a and 21 and I. 142.
                                               20b) (Partly the same as the 7th
                                               quotation in V. K. K.)
8. p. 287—अतएव
                               ---'प्रौष्ठगदचः . . . ततोऽप्यति' इत्युक्तम् ।
                                               (I. 142, 20)
                                               (Part of the 6th quotation above)
                               ----प्रकरणमेदेन 'पञ्चम्युर्द्धञ्च . . . . ततो s प्यतो'तिमध्ये . . . .
9. p. 287— "
                                               नोक्तम्। (I. 142. 20b)
                                               (Part of the 8th quotation above)
 10. p. 316—'नक्षत्रं . . . . यस्यामस्तमितो रविः' इति विष्णुधर्मोत्तरे । (I. 60. 24a—26a)
                                               (V. D. omits the fifth, sixth and
                                               eighth lines)
                                               (The same as the 2nd quotation
                                               in V. K. K.)
 11. p. 341—'तिथिनैकेन . . . . प्रकीर्तितः' इति विष्णुधर्मेवचनात् । (I. 72. 16b)
                                               (Part of the 7th quotation in V. K.
                                               K. and of the 7th quotation in
                                               Sr. K. K.)
 12. p. 343 — यथा विष्णुधर्में — 'तिथिनैकेन . . . . प्रकीर्तित :'। (I. 72. 16b)
                                               (The same as the above quotation)
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" -- 'मध्ये तत : '। (II. 77. 8b)

(d) Šuddhikaumudī

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1. p. 11—तथाच विष्णुधर्मोत्तरे—अञ्छिन्ननाड्यां . . . . नराधिप । (I. 142. 16b-17a)
                                               (The same as the first quotation in
                                               the Hāralatā)
2. p. 184—'ब्रीहिपाके च \dots कथञ्चन' इति विष्णुधर्मोत्तरिवहितस्य। (I. 142. 26b-27a)
                                               (The same as the first two lines
                                               of the 9th quotation in V. K. K.)
3. pp. 237-8—'सौरेणाद्वस्तु . . . . मृगुनन्दन' इत्यादि विष्णुधर्मोत्तरवचनाच्च ।
                                                (I. 72. 19b-20a and 21)
                                                (The second verse is the same as
                                                the same verse in the 7th quota-
                                                tion in V. K. K. and Sr. K. K.)
4. p. 241—तथा विष्णधर्मोत्तरे—अध्यायनञ्च . . . . व्यवहारकर्म । (I. 72.26)
5. p. 245—'संवत्सरस्य . . . . वार्षिकी' इति विष्णुधर्मोत्तरवचनात् (II. 77. 9b-10a)
                                                (V. D. reads the second line as
                                                ततो द्वादशके श्राद्धे कार्यं तदिधमासकम्)
6. p. 247—यथा विष्णुधर्मोत्तरे—नक्षत्रसत्रा . . . . भगणात्मकेन । (I. 72. 27b)
                           ----सन्निकर्ष . . . . मास उच्यते । (I. 72. 14a-16a)
7. pp. 251-2—,,
                            ----समाद्वये . . . . गहित: । (I. 72. 22a-23a)
8. p. 266—अतएव
                            — संवत्सरस्य . . . . वार्षिकी । (II. 77. 9b-10a)
9. p. 292—नन् . . . , ,
                                                (The same as the 5th quotation
                                                above)
                            —मध्ये . . . . . ततः। (II. 77. 8b)
10. p. 293—
                                                (The same as the 13th quotation
                                                in Sr. K. K.)
                    (6) Anantadeva—Rājadharmakaustubha
 1. pp. III—125—राजनिवासस्थानञ्चोक्तं  विष्णघर्मोत्तरे—राजा . . . . विषयमावसेत् । . . . . . .
                                                विष्णुधर्मोत्तरे-दुर्गञ्च .... सदैव। ....
                                                विष्णुधर्मोत्तरेऽपि-तत्र दूगं . . . . व्घः । . . . .
                                                एतस्य प्राशस्त्रमुक्तं विष्णुघर्मोत्तरे-सर्वेषामेव
                                                .... प्रशस्यते । .... विष्णुवर्मोत्तरे--वोष्यग्रे
                                                ..... विगहिता।
                                                (II. 26.1-8, 11a, 15a-20a, 27b-28b
                                                and 88)
 2. pp. 126-7—विष्णुघर्मोत्तरे—भद्रासनं . . . . मया। (II. 14. and II. 4. 19b-22)
 3. pp. 237-8—
                           —इति सम्भृतसम्भारो . . . कूलिकस्तथा । (II. 18)
                               अभिषेकप्रकरणे—कार्या . . . कुलोह्रह । (II. 19 \cdot 1a)
 4. pp. 239-40—तत्र ,,
                                                (V. D. omits the last 15 lines and
                                                reads the first only)
 5. pp. 243-5— "
                              पुष्कर उवाच—सर्वदर्शनलक्षण्यो . . . मदीनसत्त्वः।
                                                (II. 3 and II. 150)
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- 6. pp. 249-50—अत्र 'एवं गुणगणोपेता लक्षिता' इति विष्णुघर्मोत्तरादिवचनैः विष्णुघर्मोत्तरे पुष्कर उवाच—राज्ञा विचार्यमस्ति । (II. 7)
- 7. pp. 251-3—'स राज्ञः मृगुकुलोद्वह' इति वचनेन तल्लक्षणमिष्घीयते । विष्णुधर्मोत्तरे- सर्वलक्षणलक्षण्यो . . . भृवनत्रयेऽपि । (II. 6)
- 8. pp. 256-7—(विष्णुवर्मोत्तरे) पुष्कर उवाच-अव्यङ्ग पुरोधाः। (II. 5)
- 10. pp. 318-26—विष्णुधर्मोत्तरं ताविल्लिख्यते—प्राप्तेऽभिषेकदिवसे वन्यनम् । विष्णुधर्मोत्तरे ततः संबद्धमुकुठः . . . सुन्नत । विष्णुधर्मोत्तरे ऽ मिहितम् मङ्गलाल-म्भनं विद्यात् । (II. 19-21 and II. 14)
- 11. pp. 346-63— तथाच विष्णुघर्मोत्तरे श्रीराम उवाच—मन्त्रेण निघनाय च। (II. 22) (V. D. omits the last two of the above 179 coronation ceremony verses)
- 12. pp. 364-5—अथ विष्णुघर्मोत्तर उक्तः। पुष्कर उवाच-मन्त्रा ये सरितश्च राम। (II. 23)
- 13. p. 378—अय विष्णुधर्मोत्तरे पुष्कर उवाच-राजा तु . . . नराधिपै: । (II. $152 \cdot 1-3$) 14. p. 379—विष्णुधर्मोत्तरे राम उवाच-संवत्सराभिषेकञ्च राज्यविवद्धिदञ्च । (II.162)

Paper submitted to the 16th session of the All-India Oriental Conference, held at Lucknow in October 1951.

POSTSCRIPT

Since the present paper was sent to the press, the Dānasāgara of Ballāla Sena, which is being edited by the present writer in the B. I., has been printed up to 352 pages and its first fasciculus, comprising 224 pages has been published in January, 1953. Dr. Hazra's critical paper viz. 'The Vinu—dharmottara, an Encyclopedic Work of the Gapta Period has also, in the meantime, been published in the Journal of the University of Gault it, vol. III, 1952 (pp. 39-64). But Dr. Hazra does not discuss the utilisation of the V. D. in mediaval digests in that paper.

KURSI or THRONE: a Chinese word in the Koran

By

S. Mahdihassan

Those who have compiled foreign vocabularies of the Holy Koran, like A. Jeffries, have not found, so far, a single word of Chinese origin. However, I have shown that Tufan (J.B.B.R.A.S. 1946, 22:56) is a loan word from the Chinese; and Kursi appears to be another. The Urdu-English Dictionary by Platts, gives Kursi as an Arabic word, representing a class of objects rather than any particular one of them and means, among others, a Pedestal, a Chair and a Throne. It must have been introduced sufficiently early into Arabic for it to occur in the Holy Koran, Sura ii, verse 255. In Abdullah Yusuf Ali's translation of the Koran the sentence containing the word Kursi runs as follows: "His Throne doth extend over the heaven;" Kursi is here translated as Throne. The etymology of the word is not given in any of the dictionaries I could consult, hence the problem is being attacked now for the first time. Whether Kursi orginally meant a chair and the meaning was extended to include a Throne or vice versa can only be evident when the word is traced to its proper root.

Lobscheid's English-Chinese Dictionary, Vol. 1, p. 353, gives the term K'au-Tsz-I, for Easy-Chair, which, in the light of what follows, would appear to be a paraphrase rather than a translation. K'au, the first word, according to Wade's system of transliteration, is K'ao, character No. 5964 in Giles's Chinese Dictionary and means "to lean upon, as against the back of a chair." The last word of the term or "I" is found as character No. 5357 in Giles and means, a Chair, a Seat. The middle word, Tsz, given in Giles as Tzu, literally means a Son or Sir, which is commonly used in Chinese but is best omitted in an English translation. The literal rendering of the term K'au-Tsz-I, would therefore be Mr (Tsz)-Chair (I)-with a Back to lean against (K'au). Tsz or Tzu, in Chinese as K'au-Tsz compares with the suffix "Ji" as in Gangaji of Hindustani. An approach to it is found even in Greek where "Eu" means Good and thus Euphrates would literally signify "the good Phrat" or "Phrat the good" a personification of the river with an epithet otherwise befitting a person rather than a river. The Chinese term K'au-Tsz-I, can be best paraphrased, with Tsz meaning Grand, when it would mean, a Grand (Tsz)-Seat (I)—with a Back to lean against (Kau).

The Indian and Chinese representations of Lord Budha or of a royal personage depict him seated on what was evidently a throne to the artists. We

find a pedestal with a Grand-Back to lean against (K'au-Tsz). In Hindustani the word Gaddi etymologically means a pillow seat, a seat with a pillow to lean against. The court etiquette further enjoins that a recepient of an audience should sit erect and attentive without leaning against any support. To lean against a Seat is the privilege of the high personages. W. R. Moore (Nat. Geog. Mag. 1948; 94; 73) observes that likewise amongst the Yapese, of the Pacific Islands "Rockslabs once served as back rests for chieftains at ceremonies. In "Gaddi" therefore the support to the back is far more important than the pedestal. Gaddi is thus a perfect Indian synonym of the Chinese K'au-I. Now Gaddi in its secondary meaning signifies a throne as in the term "Gaddi-par-baithna" to ascend a throne. Just as Gaddi has two meanings, a Pillow-Seat and a Throne, the Chinese term K'au-Tsz means a Chair as well as a Throne. Even in English "Chair" has a secondary meaning of honour and position associated with its use, as in the sentence "He took the Chair at a meeting, or he occupied the Chair of philology in a University." Knowing the influence of Arab culture on medieval academic life in Europe there is every reason to expect that Kursi, was translated into Chair, retaining the primary and the secondary meanings of the word.

The term K'au-I exists in Chinese and is given in Mac Gillivray's Chinese Dictionary, p. 453, as "a chair with high back." The importance given to the back of such a chair is well brought out in this translation. Likewise the term I-Tsz is also found in Chinese, being the most common designation for a chair. Fenn's Pocket Dictionary, on p. 191, translates it as a Chair, a Seat, naturally omitting the word Tsz or Tzu altogether. Really I-Tsz should have been rendered as a Grand-Chair with Tsz receiving the real value attributed to it by these who coined the expression, I-Tzu.

In the light of the above analysis of the two terms K'au-Tsz and I—Tsz, the third or full term "Kau-Tsz-I" means a Grand (Tsz)-Chair (I)-with a high Back (K'au). It was no ordinary chair in China itself and must have been impressive enough to be accepted for a Throne in pre-Islamic Arabia.

In an article on Tusser, I have shown that the Chinese term T'u-Ssu, on Indianisation received a suffix "R" so as to become Tu-Ssu-R, or Tusser. Likewise the Chinese word Ssu, meaning silk, was giving the ending R, by the Greeks, who thus condensed Ssu-R into Sur or Ser. In the communication on Porcelain, I have also explained that the Chinese term Po-Tzu-Lan also received an R to make it Po-R-Tsu-Lan which finally gave rise to Porcelain. Likewise "K'au-Tsz-I" became in Arabic K'au-R-Tsz-I, which was simultaneously converted to K'au-R-Sz-I in Arabic. When we actually try to pronounce these four syllables we can realise how the Arabs acquired their Ku-R-S-I or Kursi, a clearer sound than the Chinese original. Just as we find in copies of drawings there is a tendency for the copyist to exaggerate the

delicate lines present in the original, the addition of the ending "R" seems to be a result of placing stress on the original syllable. Hindustani, Greek and Arabic have all resorted to the addition of such an "R" while borrowing loan words from the Chinese.

The term of classical or Mandarian Chinese, K'ao-Tzu-I as spoken in the Hukka dialect of South China would be transliterated according to Giles, as K'au-Tsz-I, and already given, as such, in Lobscheid. The Arabic modification is nearer the Hukka original than the Mandarin Chinese. K'ao-Tzu-I might have given rise to Ko-R-Z-I or Korzi, while K'au-Tsz-I would be later modified to Ku-R-S-I or Kursi; the presence of an "S" sound in the Hakka term and that of "Z" in the Madarin is a point to be noted.

SUMMARY

The Arabic word Kursi, a household word in India for Chair, has not been traced to any root. It occurs in the Holy Koran as signifying Throne. It is a loan word from the Chinese term K'au-Tsz-I, literally a Grand-Chair with a high Back, and corresponds to the Hindustani, Gaddi, which means a Seat with pillowed back as well as a Throne. K'au-Tsz-I, when spoken with emphasis by an Arab, sounds more like K'au-R-Tsz-I which became Ku-R-S-I or Kursi.

KHAZANA, a Chinese word in the Koran, and the associated word GODOWN

By

S. Mahdihassan

Platts, in his Urdu-English Dictionary, gives, on p. 489, the word Khazana, as meaning "a repository, a store-room, a treasury," which is stated to be a Persian word rather than an Arabic one. It has two variations in pronunciation, Khazana being a vulgar and Khizana the correct one, traceable, according to Platts, to the Arabic root Khizan, meaning to guard. That a word with an Arabic root was coined in Persia, rather than in Arabia, would make it a relatively recent one, which it is not, for it occurs in the holy Koran. In India, at any rate, the word Khazana is so commonly spoken as such that I was not aware of the other variant in pronunciation. It seems to me probable that Khizana is not at all found in any speech but that some scholar, trying to find its etymology, first established its origin from Khizan and then believed its proper pronunciation to be Khizana. In the Holy Koran the word is distinctly Khazana and occurs there in VI. 50;XI. 31; XV. 21. Abdullah Yusuf Ali, in his translation, Vol. 2, p. 640, as footnote No. 1958, adds that "Khazain (means) treasures, store-houses, places where valuable things are accumulated from which supplies are distributed from time to time as need arises." The last rendering seems to be the best, as the word originally meant a grain-store, somewhat like a ration-shop of today.

In tracing the origin of words where history is silent a "Synthetic Method" has been applied which aims at finding a *specific* connotative meaning of the word Khizan, the root meaning to guard, can as well give rise to derivatives meaning, a prison, hostage, etc.

Lobscheid, in his English-Chinese Dictionary, p. 1684, translates "a government store-house" as Ts'ang and "Store-house for goods" by the term Ho-Ts'ang. Store-house has been rendered by several words, one being Ngau in Chinese. The term of the three words mentioned above would be (Ho-Ts'ang)-(Ngau), and as translated by him would be (Store-house for goods)-(Store-house). Ho, the first word in the term Ho-Ts'ang-Ngau, according to Wade's system of transliteration, is Huo and occurs as character No. 5329 in the Chinese English Dictionary of Giles, translated as "goods, wares, merchandise." In Ssch'uan it is pronounced Hwo, in Annamese Hwa.

Ts'ang, the second word in the above term, is also Ts'ang in Giles, as character No. 11591, meaning "a granary." The term given by Lobscheid as Ho-Ts'ang is also found in Giles, who renders it as "a ware-house." In Ssch'uan, Huo-Ts'ang would be pronounced as Hwo-Ts'ang and in Annamese as Hwa-T'ang.

Character No. 86, in Giles, is Ao, meaning "a granary, a store-house for grain." Both in Ssch'uan and Annam, Ao is pronounced Ngau. Giles also gives the term Ts'ang-Ao, with characters No. 11591 and No. 86, translating the term as "a grain establishment." It does not mean the ordinary granary of a household, and Lobscheid is more informative when he renders it as "government store-house."

The Chinese are very fond of using duplicates instead of one word. Likewise the two designations, Huo-Ts'ang and Ts'ang-Ao, must have been used where either of them would have sufficed. In these two terms the word Ts'ang is common so that on combination the resulting term would be Huo-Ts'ang-Ao, meaning Godown-Granary establishment, or simply Godown-Granary. In Annamese this term would be pronounced Hwa-T'ang-Ngau, while Huo-Ts'ang would be heard as Hwa-T'ang. Yule and Burnell, in their article on Godown, in Hobson Jobson, mention that godown, the English word, is derived from the Malay, Ga-Dong. It seems probable that it is the Annamese term Hwa-T'ang that has become Ga-Dong in Malay and therefore the English word is finally traceable to the Chinese term Hua-Ts'ang, translated by Lobscheid as "Store-house for goods". Godown is nothing else.

The Annamese term Hwa-T'ang-Ngau, when changed into (Ga-Dong)-Ngau, containing Ng, at the end of Dong as well as at the beginning of Ngau, can be simplified into Ga-Dong-Au. Either this term or a similar one from Malay or Javanese has become in Tamil, Ki-Dang-U. Yule and Burnell render it as a "place where goods lie," to make it a derivative of the Tamil root Kidu, meaning merely to lie. Kidangu in this case, would be better suited for a store-house of unclaimed property which is hardly meant by the Tamil word for Godown. In a local dialect of Maharathi, current in the district of Parbhani, Hyderabad State, the word Gidangi means a store-house or reservoir of water. I am unable to comment further on the association of water with the word Gidangi.

In Ssch'uan, the term Hwo-Ts'ang-Ngau would have indicated a mobile "Granary establishment" when the silk caravans took their store of grain with them. From such a store, to quote Yusuf Ali, supplies must have been distributed, perhaps daily or, from time to time as necessity arose. The silk caravans halted finally in Syria from where Hwo-Ts'ang-Ngau was modified

into Arabic as Kha-Za-Na. The sound of Ts, in Ts'ang is a hissing one, while of Z, in "Zana", is a buzzing one, being the more vibrating and the more ephatic of the two.

It is well known that barter system was very common in the economics of the ancient world. Revenue was collected as grain and payment was made in kind. In such a stage of civilisation a government-treasury was nothing else than a regular "Grain Establishment", to use the words of Giles. It was only such a treasury that Arabs must have known before the advent of Islam.

SUMMARY

The Chinese term Huo-Ts'ang means Godown. In the Annamese dialect it is pronounced Hwa-T'ang. In Malay the latter was modified into Ga-Dong which represents the original of the English, Godown.

The Chinese full term Huo-Ts'ang-Ao means Godown-Granary. In Annamese it is Hwa-T'ang-Ngau and became in Tamil, Ki-Dang-U, meaning Storehouse. The loan word may have reached via Javanese or other intermediate language.

In Ssch'uan the term is pronounced Hwo-Ts'ang-Ngau which was taken over to Syria by the Silk caravans and there the Arabs acquired it and made it into Kha-Za-Na, originally meaning Storehouse-Granary, which represented the Treasury of those days but later extended to treasury in general.

AGASTYA

By

N. G. CHAPEKAR

Strict adherence to the Rgvedic text does not warrant the later version that Agastya was a priest of the king Khel. Was he a Rsi? I am not sure this question can be answered emphatically in the affirmative. True it is, that in 1-179-6 the word Rsi in all likelihood is the denomination of Agastya-But for this solitary instance there is nothing in Rgveda to indicate that Agastya composed hymns, kindled fire or did any other priestly act; no Stotras seem to have been chanted by him. This at once distinguishes him from other Rsis if he at all was a Rsi. In this very verse Agastya is said to have been Ugra (রয়). Now one of the meanings of this word as given in Apte's dictionary is industrious; or perhaps, zealous would be more appropriate. I think this sense suits the context well. By no stretch of imagination उप can be translated as wealthy as Rajwade would suggest. Agastva used to dig earth with appropriate implements. Possibly he carried on agricultural operations for which water was an essential factor. That he tried in that direction has been amply testified by 1-180-8 (रुद्रस्य प्रस्नवणस्य सातौ); likewise, because he was ambitious he coveted physical strength and progeny. We further learn from 8-5-26 that Agastya had been favoured by Aśvins with their beneficence concerning his animal wealth (गोष अगस्त्यं आवतम). this cumulatively considered suggests that agriculture taken in its widest sense was the target of Agastya's human activities. No wonder then he became renowned amongst men (नृषु प्रशस्त:) and that he could feed both the Varnas. Here can we understand Rsis and men by the word Varna? I have hazarded this guess as ऋषि and मन्ष्य were two distinct categories of people in the Rgvedic times. This conjecture gets some support from the fact that Agastya has been described as ऋषि as well as नृष प्रशस्त.

It may be noted in passing that this as well as other Rks concerning Agastya are purely secular.

Agastya as we have already noticed was ambitious and it is likely he might have been behaving rather disdainfully towards his near relations whose feelings find an expression in 1-170-3. "Oh brother Agastya you are our kinsman (सखा =समाना स्थाति:) why then thou deceivest us? We know your mind; you do not want to give" (our share). Not unnaturally

some one of these relations exhorts some king to come and help these who are near relations of Agastya (10-60-6). I think the second stanza of this verse is unrelated to the first. By the former the poet asks the same prince to destroy the miserly Panis.

I had hitherto intentionally postponed the consideration of the 1-117-11. Here the word Agastya is to be found in the locative case (अगस्त्ये). Grammatically it does not fit in with the context. The purport of the verse is easy enough to understand. The poet informs us that the Asvins being gratified by the incantations gave food to one and restored legs or shanks to Vispala. The relevant words are अगस्त्ये ब्रह्मणा वावधाना नासत्या विषपलां समिरिणीतम्. Omitting अगस्त्ये for the present the rest of the stanza can be rendered thus "the Nāsatyās being glorified by the hymns restored legs to Vispala. Hereafter, the apt question is who glorified the Nāsatyās? Sāyana says Agastya. Evidently Sāyana takes अगस्त्ये as an instrumental case. I am not disposed to agree with Sayana. The reason is that nowhere in the Rks which specifically mention Agastya is his name associated with the performance of a sacrifice. I would rather have अगस्त्ये to mean in the presence of Agastya. However it is not easy to fathom the poet's mind in introducing Agastya here. He does not seem to be in any way correlated to Vispala; at any rate as far as Rgyeda is concerned.

We are confronted with practically the same difficulty in 1-184-5 where the word अगस्त्ये is apparently unannexed to any other word in the stanza. The poet in a supplicatory tone says, 'I have forged a well-balanced hymn (सुवन्ति स्तोम: अकारि) Oh Aśvins for you; do come therefore exhilaratingly to the house (वित:) (to give us) a son (तनयाय) and to benefit mc (त्मेन). It may be asked to whose house the Asvins were to go? Obviously to the poet's house. According to Sarvanukramani the author of the hymn is Agastya. So Asvins were invited by Agastya to his own house. Why then the word Agastya is used in the locative case? It should have been Agastyasya (अगस्त्यस्य). We find this form in 10-60-6 (अगस्त्यस्य नद्भ्य:). The form अगस्त्ये therefore seems to be somewhat intriguing. The word however is there and it can not be ignored. In a sentence every word must needs have some relation to another word. In 1-117-11 Agastya can plausibly be subjoined to Brahmanā (ब्रह्मणा) and in 1-184-5 to Vartis (वित:) and then it will have to be confessed that Sayana is probably right in assuming that Agastya stands for Agastyasya-(genetive). Having conceded so much one is forced to agree that Agastya like any other Rsi was occupied in composing hymns, if not in actual sacrificial ritualistic performances.

There remains one more reference to be considered viz. 7-33-10. The poet addresses Vasistha and tells him that his one birth was when Mitra and Varuna saw him emitting his lustre as that of lightening. Here evidently the

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star Vasistha is alluded to. We do not know which second birth of Vasistha was. The concluding sentence is अगस्त्योयत्वा विश आजभार. This is translated in more than one way owing to the several meanings of विश: viz. (1) People (2) place of abode, and (3) riches as claimed by Rajwade. Accordingly it may mean when (यत्) Agastya gave you wealth (विश: त्वा आजभार). But this makes no sense. How can Agastya give riches to a star and for what? Can it be said that the wealth was in the form of lustre? This interpretation would not get any support from astronomy and moreover here we shall have to understand by Agastya not the Rsi but the star. The other rendering will be-when Agastya snatched you away from your abode. If Vasistha is understood to be a Rsi then the passage may yield some sense however unsatisfactory. But we have already seen that it is more reasonable here to take Vasistha as a star. The Sapta Rsis are practically motionless. Thus surely it is useless to pretend that we have satisfactorily explained away the verse. Sayana seems to say that Agastya did not allow Vasistha Rsi to come out into the world through human channel. This however is outside the Rgveda.

Rgveda mentions Agastya only eight times. The first Mandal contains five references while the rest are from the 7th, 8th and the 10th Mandal respectively. It is markworthy that Agastya knows no other Devatā than Asvins. Such Rks are four. The other four are not concerned with any Devatā. In this of course I am not following Sarvanukramani. Traditionally Indra is supposed to be the Devatā of 1-170-3. This Sukta is a dialogue between Indra and Agastya. Indra is addressing Agastya and vice versa. Logically therefore Indra cannot be the Devatā of the verse in which Indra himself is fancied to be speaking to Agastya. Indra's name is expressly mentioned in two out of the five Rks of this Sukta. As Maruts are named along with Indra here the latter must be taken to represent the rain-god. The first verse is highly mystic. Sāyana's is a traditional exposition. In a sacrifice Agastya offered an oblation to Indra which subsequently he proposed to give to Maruts. This tradition according to Sayana is embodied in this Sukta. But fire was yet to be kindled (vide verse 4). That shows sacrifice had not even commenced. The whole Sukta is unintelligible.

The word Agastya, it may be noted, is nowhere used in it's etymological sense. And, what is more, no attempt is made to show how the word is formed.

It is necessary to advert to the tradition to which Sayana has often made a reference viz., that अगस्य was a family priest of the King Khel, and that Vispalā was the wife of the latter. The Rgveda however affords no distinct and clear evidence to corroborate the aforesaid tradition. It seems the word Khel has only once occurred in 1-116-15, from which we learn that one night the legs of Khel were mutilated in a fight. It will however not be correct to

say that because Khel was rendered legless, therefore the Aśvins gave legs to Vispalā, for it appears from 1-112-10 that Vispalā herself had been disabled from walking. The word used in this Rk is अथर्थम which according to Sayana denotes disability to move. How this disability was occasioned we do not know. There is no doubt that there are many references in Rgveda to अधिवन 5 having enabled Vispalā to move or walk. In 10-39-8, it is said that अधिवन S gave strength to Vispalā to walk. (विश्पलामेतवे क्रथ:) Further details are provided by other Rks; for instance, in 1-118-8 Vispalā is reported to have been equipped by अश्विन s with a leg viz., the part from ankle to the This leg, we are further informed was of iron (आयसीं जड़घां विश्पलायें प्रत्यघत्तम) vide 1-116-15. We further know from this very Rk that there was a scramble for wealth, when Khel was rendered helpless by his leg being cut off like the wings of a bird; and by the favour of Aśvins, Viśpalā, who was herself unable to walk was freed from that disability, evidently for the purpose of getting the wealth (धने हिते). The reference to Vispalā in 1-117-11 is more significant. The Asvins the Rk. tells us, were gratified by the incantations of अगस्त्य (?) and the result was Vispalā could walk (ब्रह्मणा वावधाना नासत्या विश्पलां समरिणीतम्).

I have thus finished all the references to Vispalā, which it will be seen, fail to establish that Vispalā was in any way related to Khel; much less that she was his wife. Likewise there is no corroboration that Agastya was the family priest of Khel.

The word Vispalā is used in another sense in 1-182-1. Here the compound word is निश्पलावसू used as an adjective qualifying Asvins. According to Sāyana, निश्पलावसू means निशां प्रजानां पालियतृधनौ that is to say Asvins possessing wealth which protected the people. An analogous word is निश्पत which according to Rajwade means निश्तीण, extended or large etc. vide (मराठी निश्नत Page 488.) Is the word निश्न the corruption of Vispalā or निश्मित?

Finally it may be observed that the word विश्पला as a name of a woman occurs five times in Rgveda.

LAW AND RELIGION IN ISLAM

BY

ASAF A. A. FYZEE

Fowler once asked a middle-aged lady how she would spell the name of the Prophet of Allah, and she said firmly M-A-H-O-M-E-T.¹ And I suppose if one detained this brilliant creature in the middle of the road and asked her what she understood by law, she would reply: "Well, I should say, a body of rules which must be obeyed," adding archly that somehow a contract was a contract, and rather different from the wild and romantic things one said in love letters; you accepted an invitation to dinner and came late or could not go; it would not bring the same dire consequences as delay in paying rent, or income-tax, or premia on an insurance policy. "But really, it is getting late, and I can't be bothered with the complications introduced by lawyers for their own ends!"

In both her replies, she is right and she is wrong. "Mahomet" is, or at least was, quite good English. We must write Muhammad, with increased perception, and although "a body of rules demanding obedience" is not a bad definition to start with, it fails completely on further examination. In my student days Salmond's definition was popular: "The law is the body of principles recognized and applied by the State in the administration of justice." He put the definition with characteristic boldness at the head of Chapter II,2 and for something like twenty-five years it seemed to colour one's thoughts and sink deep into one's legal consciousness. An examination of the matter however now reveals that civilized life has become so complicated, and the human mind so sensitive to the various elements entering into the making of the law, that no definition can be completely satisfactory.

There is an ancient Indian legend telling how one and the same woman was variously described as mother, wife, sister and daughter, and so great was the variation in delineation of character that it took considerable time and ingenuity to establish the identity of the woman. The same is true of the law.

The rules of conduct which human beings have accepted as law have passed through three distinct stages: (a) Primitive, where custom existed but no tribunals, (b) Archaic, where there were courts but no lawyers, and

¹ H. W. Fowler, Modern English Usage, s. v. "Mahomet."

² Salmond on Jurisprudence (5th edition, 1916), p. 9.

(c) Mature, where we have both courts and lawyers.³ Paton's classification is also threefold: (a) Primitive period, (b) Middle period, and (c) Classical period.⁴ It is safe to accept this threefold classification and its implications.

When we come to definitions, we find that the jurists have agreed to differ, and modern authorities like Paton and Stone have clearly shown why differences have arisen, and why no particular definition can be accepted as entirely satisfactory. The law may be viewed as an abstract body of rules; but it is also a social machinery for securing order in the community. To Austin, the founder of the Imperative (or the Analytical) School, law was the command of the sovereign, and the chief tool of jurisprudence was analysis. According to Austin, jurisprudence, the science of law, must be distinguished from the theory of legislation. The first is without reference to the goodness or badness of the law; the second involves the principle of utility—that it should serve the greatest good of the greatest number.⁵

Kelsen looked at the majestic edifice of the law in another way. His Pure Science of the Law builds on the doctrine of Kant. Jurisprudence must be separated from natural science. The latter deals with cause and effect; the former introduces the study of the norms (or standards) which are set up by law. And the main criterion is: How is the norm created? The study of jurisprudence is a study of the nature of this hierarchy of norms, and Kelsen leaves aside both sociology and ethics.

The Historical School of Savigny considers that the source of the law is not the command of the sovereign, but the instinctive sense of right possessed by every race. The source of custom lies embedded in the minds of men, and the panorama of the historical evolution of law through the crystallization of custom into set norms is a moving and instructive drama.

Another authority on jurisprudence is Pound, the founder of the Functional School. He lays down that we cannot understand a thing unless we know what it does. The judge cannot ignore expediency; the social picture has to be continuously in his mind; the law cannot be laid down as being unrelated to the needs of humanity. The sociology of law is a subject which has grown out of the labours of this school.

Thus we see that the definitions differ on account of their approach to the subject; this is made absolutely clear by modern authors like Stone in his

³ W. Seagle, Quest For Law (1941), pp. xiv-xv.

⁴ Paton on Jurisprudence (Oxford, 1946), p. 36.

⁵ Paton, pp. 2-9.

⁰ ibid., Chap. I.

Province and Function of Law and Paton in his Jurisprudence. The analysis of the notion of law has led to the development of a number of side studies emanating from the law itself, and one is reminded of the picturesque classification of the science of law in Islam. The law (figh), according to Muslim doctors, is to be divided into two parts; the Roots $(u\bar{s}ull)$ and the Branches (furull).

The science of Roots (or First Principles) may be likened to Western jurisprudence. It deals with the true interpretation of the Koranic verses; the authenticity, force and validity of traditions relating to the Prophet; the circumstances in which consensus among the jurists may be accepted, and the altered face of society in a country where analogical deduction would be the only just course. A new interpretation of a difficult verse of the Koran would be an illustration dealing with the First "Root," Koranic interpretation; declaring interest on national loans as lawful for the State as giver and for the subject as taker, despite the usury laws, is an illustration of the Fourth "Root," Analogical Deduction. This was actually done by a fatwā of Shaykh Muḥammad 'Abduh in Egypt during the last century.

The science of Branches is similar to Western positive law. A modern state may have either codified law or case law; but in Islam the particular rules, such as those concerning the drinking of wine (absolutely forbidden) or the smoking of tobacco (not approved, but not forbidden), are laid down in the books written by jurists and are derived logically from an application of the principles prescribed in the sources or "Roots." It is the branches of modern Islamic jurisprudence that cause fascination and bewilderment to the student of law. We are reminded of the vision of Holmes J., "If your subject is law, the roads are plain to anthropology, the science of men, to political economy, the theory of legislation, ethics, and then by several paths to your final view of life."

For practical purposes, we may adopt Paton's definition of law and see how it differs from that of the Mislim jurists: "Law may shortly be described in terms of a legal order tacitly or formally accepted by a community, and it consists of the body of rules which that community considers essential to its welfare and which it is willing to enforce by the creation of a specific mechanism for securing compliance. A mature system of law normally sets up that type of legal order known as the State, but we cannot say a priori that without the State no law can exist."

An important fact to be noted is that in Islam, as in Hinduism, the law at rock-bottom is God-made; human requirements, political expediency,

⁷ Justice Holmes cited by Stone, Province and Function of Law (Sydney, 1946), p. 12.

⁸ Paton, p. 83.

the evolutionary movement in civilized life, the lessons of anthropology and even notions of human justice are secondary. The classical concept of the law is a body of commandments emanating, in the first instance, from the deity. Upon the foundation of the Word of God is built the edifice created by human intelligence. Figh is, therefore, founded both upon mangūl (that which is revealed), that is, Koran and Sunna and ma'qūl (that which is constructed by human reasoning), Ijmā' and Qiyās. Thus the source of law and its ultimate purpose are different; in modern European law, the source is the sovereign will of the people and the aim is justice within a community on the basis of orderliness in the affairs of life; in Islam, on the other hand, the only aim is to seek "nearness" (qurba) to the Divine Being by conforming to His Code. It is, in the words of Snouck Hurgronic, "a doctrine of duties," a code of obligations; there are strictly speaking no rights as against God. This attitude is further strengthened by the doctrine that, although without good actions the approval of Allah is not possible, yet for salvation Divine Grace is essential.

An examination of the definitions of law in Islam will demonstrate this essential difference. Abū Ḥanīfa's definition, "The law is the soul's cognizance of its rights and obligations," emphasizes the subjective element in the Muslim concept of the fiqh and the primacy of conscience. It is my conscience that is the final arbiter. Thus in each action, I have to ask myself. Is this "beautiful" or is it "ugly"? Not, Is it "right" or "wrong"? The terminology is significant and has a history. In order to answer this question, we must examine the dictates of sharī'a or fiqh, the names given by Muslim legists to their system of law. And on examination, we shall find that fiqh, or the science of Muslim law, is almost universally defined as the knowledge of one's rights and obligations derived from the Koran, or Sunna, or deduced from them or about which the learned have agreed.

It is necessary to add a word here on "rights" and "duties" in Islam, in order to explain the dictum of Snouck Hurgronje mentioned earlier that figh is a "doctrine of duties." Does this mean that, ordinarily, there are no civil or criminal rights? The answer is that "rights" are divided in Islamic jurisprudence into two classes: the Rights of God (huqūqu'l-lāh) and the Rights of Men (huqūqu'l-ibād). God in the Islamic conception has rights, but no obligations or duties; he lays down the law which in conscience must be obeyed by man, but God is not bound to be pleased with the actions of man or his worship; Divine Grace is necessary for salvation and it is a separate act of the Divine Will, independent of God's pleasure at man's good behaviour. The rights of God are distinct from the rights of men. If man acts in accordance

⁹ The literature on this subject is vast; it is sufficient to refer to my Outlines of Muhammadan Law (Oxford, 1949), pp. 14-21 and, particularly, p. 18, where the principal modern sources will be found. I shall hereafter refer to this work simply as Outlines.

with God's will, he must be good and kind and just to his fellowmen; "the best of men," said the Prophet, "is he who serves the people most." There are rights and obligations among men, but with regard to God, man has no rights, but only obligations.

As we have seen, the law (fiqh) is divided into two main parts, Roots (usul) and Branches $(furu)^{10}$. The "Roots" correspond to our jurisprudence; the science deals with the four classical sources of law—Koran, Sunna (Practice of the Prophet), fimu (consensus of opinion among the classical jurists), fimu (analogical deduction). But this does not exhaust our study for, in addition to these formal sources, there are (a) offshoots of analogical deduction (such as fimu is fimu is fimu and fimu is fimu and fimu in fimu and fimu is fimu and fimu in fimu and fimu in fim

Having understood that the law is divided into Roots and Branches, we must go to the particular branch, the particular rule or command (hukm) which applies in our case. And it will be found that, here, ethics and religion are inextricably mixed with the firm dictates of law. Muslim law is "totalitarian"; it governs every single action of man on this planet; no human act, however inconsequential and trivial, remains unclassified according to the precise and logically fool-proof classification of the Muslim jurists.

Human acts are divided into five classes: (1) Obligatory, the doing of which is an absolute command, such as prayer five times each day; (2) Recommended, but not compulsory, for example giving money in charity; (3) Permissible. Here the law is neutral; you may or may not do a thing, to wit, travelling by air; (4) Disapproved, for instance eating some kinds of fish; and finally (5) absolutely Forbidden, such as eating swine's flesh.¹²

Modern law is mainly concerned with establishing clearly those norms of obedience which a social community should follow and seeing that they are obeyed; in the analysis of Salmond, the body of principles applied by the State and recognized by the people. But not so in Islam: obedience is due to God alone; the King is only His shadow, the Caliph only a servant of God. The first and primary sanction of the law is conscience; for it is to be noted that both Ibn Khaldūn and Abū Ḥanīfa define the law as a kind of $ma^{\alpha}rifa$ —a cognizance, consciousness or perception, of what is right and what is

¹⁰ For Uş'il see Abdur Rahim, Muhammadan Jurisprudence (Madras, 1011) and M. P. Aghnides, Mohammedan Theories of Finance (Columbia, 1916), Introduction, esp., pp. 24-9.

¹¹ Fyzee, Outlines, p. 71; Mejelle, Art. 39.

¹² These are the ahkām al-khamsa, Ency. of Islam, Vol. IV, p. 322; Outlines, pp. 16-17,

wrong. Hence, in order to secure obedience to the law, Islamic jurisprudence creates two sanctions—a primary sanction and a secondary one. The primary sanction is the desire of the human conscience to win grace in the eyes of God; the secondary sanction is created by society, namely, the enforcement of legal commands by the state in the name of the king.

Stated in terms of modern law, God is introduced into the fabric of Islamic law as the ultimate sanction through the human conscience. Religion, ethics and law are therefore so intermixed in Islam that early authors never distinguished between their main elements. We are now in a position to understand the words of a great Muslim jurist, Mr. Justice Mahmood: "It is to be remembered that Hindu and Muhammadan Law are so intimately connected with religion that they cannot readily be dissevered from it."13 In some religions, such as Hinduism and Islam, there is the theory that law, in the ultimate analysis, is the word of God. The theory that law is Godmade is in the language of the law a legal fiction, the main object of which is to create a moral sanction of the highest efficacy for what in effect is nothing more than a legal norm. Older nations not imbued with sufficient discipline and social sense to obey the law for its own sake introduced the element of fear by retribution or of joy by promise of divine favours to secure implicit obcdience to the law. This is also mentioned by Maine, who makes a somewhat sweeping statement: "There is no system of recorded law, literally from China to Peru, which, when it first emerges into notice, is not seen to be entangled with religious observance and ritual."14 Recent researches into the laws of the Assyrians and the Code of Hammurabi demonstrate the fallacy of this statement, but it is largely true of the Code of Manu, the Hebrew Pentateuch, the Roman Twelve Tables and Islamic law.18

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In its broadest sense, religion is the relationship between the human self and some unseen non-human entity.10 There are in the modern world, generally speaking, three mental attitudes on certain ultimate questions: (a) there is a God or Gods (Deism); (b) there is no God or Gods (Atheism); (c) we do not know whether there is or is not a God or Gods (Agnosticism). The great religions of the world teach that there is a God, or that there is a supreme God among other minor deities; philosophical free thinkers occasionally come to the conclusion that it is not important to decide whether there is a God or not—these are the agnostics; and then there are the materia-

¹³ Gobind Dayal v. Inayatullah (1885) 7 Allahabad 775 at 781.

¹⁴ Early Law and Custom, p. 5.

¹⁶ Paton, pp. 43-4.

16 Paton, pp. 43-4.

10 A. C. Bouquet, Comparative Religion (Pelican Series, 3rd ed.), pp.15-17. The chapter on Islam in this work is interesting, but I do not share the views of the author. It is difficult for a Christian priest to understand Islam.

lists who hold positively that there is no God, but that we must proceed upon the belief that the universe is godless. In between there are infinite varieties of belief, disbelief and unbelief; but as we are considering Islam, a religion which teaches a pure type of monotheism, the definition of religion by Descartes is of great utility. He teaches that the scientific definition of religion can be summed up in five propositions:

- (1) there is a supreme Numen, possessing eleven attributes, that is, it is blessed, self-existent, first cause, the energy and purpose of all things, eternal, good, just, wise, infinite, omnipotent and free;
 - (2) it is man's duty to worship this supreme Being;
 - (3) virtue and piety form the vital part of such worship;
- (4) sin against this Numen must be repented of, and reparation made for it;
- (5) the world is morally governed; that is to say, in the future life man receives the due reward of his deeds.¹⁷

No better definition can be given of the essentials of Islam; and it is only in ritual, legal principles and some aspects of belief that the Islamic faith strikes on its own individual path.¹⁸ Islam in common with all semitic monotheistic faiths lays tremendous emphasis on the All-powerful, All-knowing and Just God, the one and only God. What Dr. Baeck says of Judaism is also true of Islam:

In its briefest form it is the idea and challenge of the One. This challenging idea is first the One thing, the One thing that alone is needful, that which has been com nanded, the Good, the Right. Secondly and mainly it means the One Being who has proclaimed this One Fining and demands it from men, the One God, beside whom there is none else. And finally it means the unity and totality of man. It means that through this One Fhing, and therefore with his whole heart and soul, man is to serve the One God and Him only. All that the prophets from Moses downward have taught, all the ways in which the religion has tried to express itself anew, are, however different the ways in which it has been expressed, just this: that there is only ONE reality—the One God. 19

Judaism lays stress on Justice and Right; Christinity on Love and Charity; Islam on Brotherhood and Peace. But in the main, the fundamental similarities between the three faiths must not be lost sight of in a meticulous examina-

¹⁷ Bouquet, pp. 21-2. Westermarck (Moral Ideas, Vol. II, p. 584) has the following definition, "belief in and a regardful attitude towards a supernatural being on whom man feels himself dependent and to whose Will he makes an appeal in his worship." This definition is cited with approval in Diamond, Evolution of Law and Order, p. 81.

¹⁸ The literature on religion is so enormous that no attempt is made here to refer to it. The writer however desires to refer to Rafael Karsten, The Origins of Religion (London, 1935), who discusses Tylor's definition of religion, "the belief in spiritual beings," and shows its relation to animism and other forms of belief. Karsten deals fully with primitive religion and beliefs. Diamond s recent Evolution of Law and Order (London, 1951) contains a chapter on 'Religion', pp. 81-7.

¹⁹ Bouquet, op. cit. p.212.

tion of unessentials. Listen for instance to this magnificent yearning of the soul:

Say: O Allah! Owner of sovereignty! Thou givest sovereignty unto whom Thou wilt, and Thou withdrawest sovereignty from whom Thou wilt. Thou exaltest whom Thou wilt, and Thou abasest whom Thou wilt. In Thy hand is the good. Lo! Thou art able to do all things.

Thou causest the night to pass into the day, and Thou causest the day to pass into the night. And Thou bringest forth the living from the dead, and Thou bringest forth the dead from the living. And Thou givest sustenance to whom Thou choosest, without stint. Koran, 3, 26-27.

On the day when every soul will find itself confronted with all that it hath done of good and all that it hath done of evil every soul) will long that there might be a mighty space of distance between it and that evil). Allah biddeth you beware of Him....

Say, 'O Muhammad, to mankin'): If ye love Allah, follow me; Allah will love you and forgive you your sins. Allah is Forgiving, Merciful. (Koran, 3, 30-31).

Allah tasketh not a soul beyond its scope. For it (is only) that which it hath earned and against (only) that which it hath deserved.

Our Lord! condemn us not if we forget, or miss the mark! Our Lord! Impose not on us that which we have not the strength to bear! Pardon us, absolve us and have mercy on us. Thou, our Protector, and give us victory over the disbelieving folk. (Koran, 2, 286).

The essential belief of the Muslim is expressed in the formula: (a) there is but one God, and (b) Muhammad is His Prophet. The Koran is the word of God and is, therefore, direct Revelation; the practice (sunna) of the Prophet is indirect Revelation and is, therefore, worthy of study and emulation. From these two sources (mangūl), which could not have been known to man but for Divine Grace, human intelligence creates the superstructure of law $(ma^{\prime}q\bar{u}l)$; when a new set of circumstances arises he asks whether the older principles cannot be applied to newer conditions. Occasionally in his efforts there is agreement among the jurists, and sometimes there is not (ijmā', qiyās), but, in any case, there is constant development, and newer demands require fresh solutions. "It is an accepted fact that the terms of law vary with the change in the times" (Mejelle, Art. 39). The sources of law and religion being the same, the fusion is complete; the lessons of history, the changing conditions of society, the ever-varying pattern of civilization and the evolutionary process in the economic structure of the modern world have, however, not been taken into consideration sufficiently by the shari 'a, and the result is that, by and large, Islamic law remains backward and undeveloped in many parts of the world.20

III

(a) The Prophet's Last Sermon

The fusion of law and religion in Islam can best be illustrated by examining some of the early documents of Islam. I propose to analyse the following: the Prophet's Last Sermon; Omar's Instructions to the Gadi, and Ali's Testa.

²⁰ On this question the following may be consulted, Joseph Schacht, 'Islamic Law,' Enc. of Social Laws, Vol. v III. pp. 344-3-9; G. E. von Grunebaum, Medieval Islam, Chicago, 1947): H. A. R. Gibb, Modern Trends in Islam, (Chicago, 1947); and the introduction in my Outlines of Muhammadan Law (Oxford, 1949).

ment, a comparatively unknown Shiite formulation of the faith mentioned in the Da'ā'inu'l-Islām of Cadi Nu'mān (died, Cairo, 363/974).

The Last Sermon is a convenient starting-point; it is well-known; it has often been translated and contains in short compass the spirit of Islam in its earliest phase.²¹ The occasion has been admirably described by Ameer Ali: "When the hosts of Arabia came flocking to join his faith, the Prophet felt that this work was accomplished, and under the impression of his approaching end, he determined to make a farewell pilgrimage to Mecca. On the 23rd February 632 (25 Dhu'1-Qa'da, 10) the Prophet left Medina with an immense concourse of Moslems. On his arrival at Mecca, and before completing all the rites of the Pilgrimage, he addressed the assembled multitude from the top of Jabal al-'arafāt (8 Dhu'l-Ḥijja = 7 March), in words which should ever live in hearts of all Moslems."²²

As Muir's and Ameer Ali's translations are somewhat loose and contain some extraneous elements, I propose to offer my own translation of Ibn Hishām's text, and number its paragraphs for convenience of reference:

- 1. O People, listen to my words for I know not whether I shall ever meet you in this place after this year.
- 2. O People, your lives and property are sacred and inviolable, until you stand before your Lord (on the Day of Judgement), even as this day and this year are sacred and inviolable. And, verily, you shall appear before your Lord Who will question you concerning your actions.
- 3. And verily I have delivered (this message). So let him who has been entrusted with a thing to be kept in safe keeping return it to him who trusted.
- 4. All usury is hereby declared unlawful (lit, cancelled); neverth less you are entitled to the return of the principal. Do no wrong to any one; and no wrong shall be done unto you. God has decreed that there shall be no usury, and verily the interest due to Abbās b. Abd al-Muttalib is hereby cancelled in its entirety.
- 5. And, verily, henceforth the vengeance of blood practised in pre-Islamic times 'a is forbidden, and the first blood-feud I declare unlawful lit surrender) is that of Ibn Rab, a b. al-Hārith b. Abd al-Muttalib. His is the first case, with which I begin [abrogating] the blood-feuds of Pre-Islamic times.

²¹ The most authentic text reaching us is given by Ibn Hishām, Sira, ed. Wüstenfeld, (Göttingen, 1858-59), 908-9. See also Cairo ed., by Muhyi' d-din 'Abdu'l- lam.d, V l. V. 2) 276-6. Accretions to the main text will be found in a number of rad th-texts, and they are reflected in the translations, such a those of Muir, Life of Mohammad, 4th ed., 1923, pp. 472-474, and Ameer Ali, Spirit of Islam, pp. 113-4. Reference may also be mule to Haykal Pasha, tay it Muannat, 4th el., Cairo,) 10 489-91; Sulaymān Nadw, Siratu'n-Nabi (Azamzadh, 1924), Vo. II. 2p. 118-32; Cadi Muhammad Sulaymān, Rajmatun li 'l-Ālamin (Lahore, no date), Vol. I. p. 319 sqq., and Levy, Sociology of Islam, Vol. I, pp. 87.

The Sermon of the Last Pilgrimage (Hijjatu'l-Wadā' or Hijjatu'l-Balāgh) is so commonly referred to that exhaustive references are unnecessary and indeed impossible. In the pages that follow I have tried to translate the text of Ibn Hishām as closely and literally as the Arabic idiom allows.

²² Ameer Ali, Spirit of Islam (London, 1922), 113.

²³ Literally the "Days of Jāhiliyya," meaning the "Period of Wildness" usually mistranslated as the "Days of Ignorance," R. A. Nicholson, Lit. His. Arabs, 30, citing Ignaz Goldziher.

²⁴ Here Ibn Hishām adds the explanatory words which are not part of the Prophet's Speech, "He was reared in the tribe of Bani Layth but was murdered by the Hudhayl."

6. And further, Satan has despaired of ever being worshipped in this your land; although if he is obeyed in other matters, he will be well-pleased even with inconsequential lapses on your part. So, take good care of your faith.

Then the Prophet speaks of the mistakes made in respect of the calendar and the intercalary year (see Koran, Egyptian Government Edition, 9, 36-7) and continues:

- 7. O People, you have rights over your women (that is, wives); and they have (reciprocal) rights over you. It is your right, as against them, that they shall not be unfaithful to you by having relations with those whom you dislike. Nor shall they commit an overt act of dissolutiness. But if they act sinfully God has permitted you to confine them to their bedrooms and to chastise them in moderation. And if they repent let them have their food and raime it with kindness.
- 8. Treat women gently, for verily they are your captives; they do not possess anything themselves. You have taken them solely on the guarantee given by you to God, and have made their persons lawful unto yourselves by the express commands of God.
- 9. So understand my words, O People, for verily I have delivered (the message) and left with you a clear thing to which, if you hold fast, you will never go astray, to wit, the Book of God and the Practice of His Prophet.
- 10. O People, hearken to my words and understand them. Verily, know that every Muslim is a brother to every other Muslim, and the Muslims are a fraternity.24 Nothing belonging to his brother is lawful to a man, unless it be given freely and with good grace. So, do no wrong unto yourselves,
- 11. And the Prophet said: O Lord, have I delivered (Thy message)? And it is reported to me (Ibn Hishām) that the people said: Yes O God. And the Prophet said: Bear Thou Witness O Lord.

After the text of the sermon, Ibn Hishām gives us some other sayings of the Prophet, two of which have been incorporated in the body of the law: (i) a bequest to an heir is unlawful; on and (ii) "The child belongs to the bed, and to the adulterer, a stone." This means that the adulterer could not claim the fruit of his immorality, nor could a natural son claim the lawful sonship of a putative father.

We shall now examine this document, and try to analyse its component parts. Paragraph 2 is both legal and religious. Life and property are made sacrosanct, and the doctrine of the Day of Judgment, taken from Judaism and Christianity is re-affirmed. Paragraph 3 is more moral than legal, but it emphasizes the sacred character of trusts. Paragraph 4 is the well-known prohibition of usury. In as much as it forbids usury it is legal; but it was brave and just of the Prophet to have commenced the application of this rule by nullifying the accrued rights of his uncle 'Abbās. Paragraph 5 is law tinged with morality. Vendetta was abolished. Paragraph 6 is a purely theological idea, it emphasizes the baneful influence of the father of all evil, Satan. Para-

²⁵ Koran, 05, 1.

²⁰ Koran, 4, 34.

²⁷ Or, "a specific command." It is difficult to render this expression appropriately in English.

²⁸ Koran, 49, 10, mentions mu'mins, not muslims.

²⁰ Outlines, 310; Ismaili Law of Wills, 26, para. 3.

graphs 7 and 8 are important legal rules merging into the moral and social sphere. The earlier gives the power to chastise women, the latter counsels mercy. Paragraph 9 is a declaration of the fulfilment of his duty—that of conveying the Lord's behests to the people; it is also one of the earliest and most authoritative rules regarding the binding force of the first two sources of Law, the Word of God and the example of His Messenger. Paragraph 10 is a statement of a popular doctrine of Islam—the brotherhood of Muslims. Paragraph 11 may be said to be the "verification clause" of this extraordinary document. The Prophet asks his Lord to bear witness to what he has done. This is the end of his Mission. The other two rules are clear rules of law.

No document of early Islam, apart from the Koran itself, is so highly venerated by Muslims as the Last Sermon. It has even been compared to the . Sermon on the Mount. And it is here, in the very centre of the Islamic teaching, that law and religion are completely fused.

(b) Omar's Instructions to the Cadi

The second document to which attention is drawn is the letter the second Caliph of Islam, the great Omar b. al-Khaṭṭāb, is reported to have written to Abū Mūsā al-Ash'arī upon his appointment as Cadi. The text has come down to us in a condition that suggests the same degree of authenticity as a sound tradition. Students of law are fortunate that Margoliouth edited this document as long ago as 1910; and added a translation and critical notes. I shall therefore give the English rendering according to Margoliouth and proceed to make a few comments. For convenience of reference, I have divided the translation into paragraphs, which will not be found in Margoliouth's rendering.⁸⁰

OMAR'S INSTRUCTIONS

- (1) The Judge's office is (the application of) either an unequivocal ordinance of the Kur'an or a practice that may be followed. Understand this when considerations are put before you, for it is useless to utter a plea when it is not valid.
- (2) Equalize all Muslims in your court and your attention; so neither the man of high station will expect you to be partial, nor will the humble despair of justice from you.
 - (3) The claimant must produce evidence; from the defendant an oath may be exacted.
 - (4) Compromise is permissible between Muslims, provided no law is violated thereby.
- (5) If you have given judgement, and upon reconsideration come to a different opinion, do not let the judgement which you have given stand in the way of retraction; for justice may not be annulled, and you are to know that it is better to retract than to persist in injustice.

³⁰ D. S. Margoliouth, "O nar's Instructions to the Kadi," JRAS, for 1910, pp. 307, 311-12. The instructions are often cited in legal and other literature, see for instance, Tyabji, Muhammadan Law, (4th ed.), pp. 83-4; Haykal Pasha, al-Fārāq Omar (Cairo, 1304 A.H.), vo ii. pp. 225-7; Shibli Nu'mānī, al-Fārāq (Delhi, 1913), V iii. p. 41, the author's "Law and Culture in Islam" (1943) Islamic Culture, pp. 422, 420-7; Outlines, 278-9.

- (6) Use your brains about those matters which perplex you, to which neither Law nor Practice seems to apply; study the theory of analogy, then compare things, and adopt the judgement which is most pleasing to God and most in conformity with Justice so far as you can see.
- (7) If a man bring a claim in the absence (of the defendant), fix a term by which the defendant is to appear; if the plaintiff then produce evidence, his claim shall be allowed, otherwise you will be entitled to give judgement against him.
- (8) All Muslims are credible witnesses except such as have suffered stripes for offences with fixed penalties, such as have been proved to have given false witness, and such as are suspected of partiality on the ground of relationship whether of blood or of patronage.
- (9) God concerns himself with your secret character, and leaves you to follow appearances. Avoid fatigue and the display of weariness or annoyance at the litigants in the courts of justice, wherein God enables you to earn reward and make a handsome store. For when a man's conscience towards God is clear, God makes His relations with man satisfactory; whereas if a man simulate before the world what God knows that he has not, God will put him to shame.

The character of the second Caliph of Islam has often been the subject of comment by authors on Islam. He was one of the most forceful of men; resolute, independent and courageous; temperamental and emotional, and yet steady as a rock and loyal to the core. Tor Andrae considers him among the best of Muslims; ³¹ and Muslim authors have showered unbounded praise upon him. ³² It is therefore natural that a great deal of importance should been given to this letter of instructions which has been handed down by such authorities as al-Mubarrad, Ibn Qutayba and Ibn Khaldūn.

(1) The first sentence had been mistranslated by von Hammer, and Margoliouth corrects the mistake. It lays down unequivocally that the Koran and the sunna are the first two sources of the Law. The word muhkam refers to the distinction in the Koran between a text which is verbally applicable, and mutashābih, which may be susceptible of interpretation (Koran, 3, 7). The question is not free from difficulty, but Margoliouth's comment that it refers to authentic and doubtful verses of the Koran appears to be wrong; the verse refers to direct application or allegorical interpretation, as M. Pickthall puts it "the substance of the book" and "allegorical" verses. The correct interpretation appears to be that some verses are directly and literally applicable; whilst others must be interpreted suitably before they can be applied.³³

Since Margoliouth's days much research has been carried out on the hadith and its authenticity. In particular the recent work of Joseph Schacht, The Origins of Muhammadan Jurisprudence (Oxford, 1950) tells us with a convincing array of learned evidence that Sunna, the second source of the law, represents the opinions of the learned in Damascus, rather than the inspired words or example of the Prophet. It is too early, and indeed beyond the

³¹ Tor Andrae, Mohammed (London, 1936), p. 180.

³² The works of Haykal Pasha, Shibh and Tyabji cited above.

³³ Baydāwi, ed. Fleischer,) Vol. i. p. 145 (lines 16-25); Abū'ı-Kalām Āzād, Tarjumānu'l-Que'ān (Delhi, 1st ed., no date) vol. i. p. 281; Ashraf Ali Thānawi, Bayānu'l-Qur'in, a standard Urdu commentary on the Koran on Sunnite principles, Vol. ii, pp. 3-4 (Delhi, 1349/1931).

scope of this paper, to deal with Schacht's theory; but it will be sufficient to say that his work merits the highest consideration.

"The considerations" refer to the legal doctrine that when a plea or argument is put forward, the duty of the court is to administer justice according to law, written or customary; it is not proper to proceed on considerations of abstract logic or natural justice when a clear rule of law exists. For example, an argument that men and women are equal cannot be propounded, for apart from recommending mercy and kindness, there are clear indications in the Koran itself that, as a general rule, man is placed in a position of superiority. Using the language of modern law, we would say "The duty of the judge is to administer justice according to law, not according to his own notions of fair-dealing."

- (2) This admonition of equal treatment was very necessary in the days when considerations of birth, nobility and wealth were so paramount. It also enjoins the judge to bring himself down to the level of the litigants and not terrify them by an exhibition of his power and pomp and glory.
- (3) Margoliouth has some instructive comments to make on this sentence.³⁵ The rule is derived from Jewish law, and is one of the earliest formulations of the rule that (i) the plaintiff cannot succeed without clear and cogent evidence; but (ii) the defendant may in certain cases save himself by an oath. For example, in *li*⁴ān (mutual imprecation), if a husband accuses his wife of adultery and has no tangible proof, the wife may swear her innocence and, on such oath being taken, the judge pronounces divorce.³⁶
- (4) This doctrine is familiar to modern lawyers; it lays down that only those compromises or settlements of claim are lawful which do not infringe a clear rule of law. An example from the law of property is the law of family settlements (Outlines, p. 221, and as to agreements regarding marital rights, see ibid., pp. 104-109).
- (5) This is a most important rule. Legally the court has the power suo moto to review its own judgement; morally, the humility to confess error is recommended and persistence in injustice condemned. This is a typical instance of Omar's attitude to religion and the law.
- (6) Additional weight is given to the well-known tradition of the Prophet allowing the human intellect to build the superstructure of jurisprudence on the sure foundations of revelation.³⁷

³⁴ The fundamental text is Koran, 4,34. See also R. Levy, Sociology of Islam, Vol. I, p. 131 sqq., 140-4. Other instances are the divorce laws, Outlines, p. 144 sqq., and the laws of Inheritance where the male obtains a double share, ibid., p. 333, (B), rule 4.

³⁵ р. 318.

³⁶ Outlines, pp. 127, 142-4.

³⁷ The tradition has come down to us in various forms, Outlines, p. 17.

- (7) Here are the beginnings of a law of ex parte applications.
- (8) The capacity of witnesses is an important branch of Muslim law. Both cogency and capacity are dealt with.
- (9) This is the conclusion and it rightly deals with the conduct of a judge in court. The importance of purity of character is stressed; judicial independence and impartiality are inculcated, and a hypocritical simulation of rightcourses is condemned in no uncertain terms.

This document is almost wholly concerned with law and its proper administration. It is invariably referred to in Muslim books on law; it is a typical example of the attitude of Omar to the sharī'a and justifies his high reputation for equity and impartiality.

(c) The Testament of Ali

The last document I propose to discuss is the Testament (waṣiyya) of Ali to be found in the well-known Fatimid text-book, The Da'ā'imu'l-Islām (Pillars of Islam) of Cadi Nu'mān (died, Cairo, 363/974 A.D.). The first volume of the text has recently been edited by me and published by the Maaref Press, Cairo. It is a fairly large volume (464 pages of Arabic text, with Arabic and English Introductions and Indexes), and I hope to follow it up with volume II, as early as possible. It is in the second volume, still unpublished, that in the Book of Wills (Kitābu'l-Wasāyā) we find this instructive document.³⁸

The Testament of Ali, still comparatively unknown to Western scholarship, is a confession of faith and a defence of the Fatimid doctrine of Imamate, as distinguished from the Sunnite doctrine of Caliphate.³⁰ It is mainly religious and ethical, except for the doctrine of Imamate, which is in a sense part of the constitutional law of Shiite Islam.

IMAMATE. The will of Ali is vouched for by his grandson and great grandson, 'Alī Zaynu'l-'Ābidīn b. Ḥusayn, and Muḥammad al-Bāqir b. 'Alī (ILW, 67, §9). The will is primarily in favour of Ḥasan, the son of 'Alī b. Abī Ṭālib. The testator hands over his books and weapons to Ḥasan and says that this is

³⁸ The Chapter on Wills was edited and translated by me in *The Ismaili Law of Wills* (Oxford, 1933), abbreviated ILW. The testament of Ali will be found at pp. 34-46 (Arabic text) and at pp. 67-78 (English rendering). The numerals in brackets in what follows refer to the pages of this book.

³⁹ The distinction between caliph and imām is that a Sunnite khalifa, although an independent temporal ruler, is a successor of the Prophet and a servant of the shari 'a; whereas the Shiite imām is the final interpreter of the law on earth and "leader" of the community, even though he may have no temporal authority, Outlines, p. 31 sqq. For one of the carliest discussions of the subject in the Ithnā 'Ashari Creed by Ibn Bābawayhi, see my Shiite Creed, (I.R.A. Series No. 9., Oxford University Press, 1942), Index.

done by command of the Prophet. Hasan in turn is to do likewise to his brother Husayn (The Martyr) and he to his son, and so forth, so that the hereditary Imamate is duly established. Hasan is described as the "Guardian of the Divine Command" (similar to the English "Defender of the Faith") and "Guardian of the Blood"—that is, it is he who will decide upon the right punishment for Ibn Muljam, the murderer of Ali (69). At the end of his will Ali repeats and confirms the right of Hasan: "O Hasan, you are the guardian of my blood and he (Ibn Muljam) is with you, and I have handed him over to you... To no one clse is authority given in this mater. If you wish to kill him, do so, and if you wish to forgive him, do so. You are the *Imām* after me, and the heir to my knowledge, and the most excellent of those whom I leave behind after me..."(77), and then he speaks of Husayn as well (78).

The Imamate is a trust (70,) and love of the Imams, the People of the House, is the only requital that the Prophet asked of his people (70). Denial on the part of any Muslim of this right will entail loss of intercession by the Prophet on the Day of Judgement (72). Devotion to the Imams (walāya) is a necessary act of faith, 40 for obedience to God involves obedience of the Prophet, and obedience to the Prophet necessitates obedience to the Imams of his House (74). The Imams are the ahl adh-dhikr (a word of doubtful significance) mentioned in the Koran, 16, 43 (Fluegel, 16, 45). The Imams have made an everlasting covenant with God and His Prophet to obey and serve them (76)—"O my God verily Thou art witness. . . verily I and three others (Hasan, Husayn and Fāţima) of the People of my House have covenanted with Thy Messenger and Thy Proof in Thy earth, Muhammad, that we shall, for the sake of God, obey each one of his (Muhammad's) commands, and avoid each one of his prohibitions" (75-76). He then mentions his numerous relatives who were killed fighting for God and His Messenger (76-77) and, dealing with himself, there is a magnificient peroration: "In the company of the Prophet, I waged holy war by the command of God and His Messenger. And when God removed his Messenger, I waged holy war against those among the wrongdoers whom the Prophet ordered me to fight." This refers to Ali's wars against those among the Muslims who denied his own rights.

FAITH. True faith consists in believing that God is one, that Muḥammad is His Messenger, and that the Imamate belongs to the House of the Prophet (69-70). Sin is to be avoided by being clear-sighted; passion leads to blindness and blindness to eternal doom (70). Worship must be sincere—"so worship Him out of your own free will and also out of fear" (70). Love of the Prophet and his family is a trust (amāna); it must be returned to God, for he who does not so love the Imams becomes the adversary of the Prophet, and the adversary of the Prophet is the adversary of God (70-71).

⁴⁰ Walāya is a basic concept among the Shī'a. I have discussed it fully in a long note (6) on p. 96 of the Shiite Creed.

Faith ($\bar{\imath}m\bar{a}n$) has been defined in the first volume of the $Da^{\iota}\bar{a}^{\prime}im$ as follows: Profession by tongue, belief in conscience, and action according to principles (of Islam).⁴¹ The same doctrine is put forward here; Ritual Purity, Prayer, Alms-giving, Fasting and Holy War are laid down as obligatory (71). In its deeper aspects, faith involves a fight with passions and destruction of wordly desires (74).

Law. The taking of property unlawfully, intoxicating drinks and adultery are forbidden (72). Adherence to righteousness should be by action, speech and belief—"Verily the Prophet charged me and said: O Ali, bid what is reasonable and forbid what is wrong, 42 by your hand; and if you cannot do so, then by your tongue; and if you cannot do so, then by your heart" (72-73).

At the end of his discourse Ali asks the people whether any one has a complaint against him or a claim for wrong done to his person or property. As no one made any claim, and someone began to praise him, he said that this was not the time for idle words or flattery. It was wrong on the part of those who disapproved some of his actions to remain silent and not give him an opportunity to "reproach his soul" and die in penitence; and then, as no one made a claim, Ali spoke of his covenant with God and the Prophet (75-76).

Social Rules. The claims of close relations for considerate action are strongly recommended: "Have regard for your kith and kin" (73), this is in consonance with the Prophet's asking for special love and devotion to his own progeny (doctrine of walāya). Hatred and backbiting are to be avoided; courtesy is enjoined. Circumcision of children should be expeditious. Falsehood, obscenity and conceit are abominable things. Orphans should be fed and treated kindly; special care should be taken of guests—"Never let him (a guest) depart without being grateful to you" (73-74).

Women. Nu'mān had apparently a very poor opinion of women. He puts the following in the mouth of Ali: "Beware of trusting women, for it was they who caused your father (Adam) to depart from Paradise, and rendered him up to the affliction of this world" (74).

At the end of his testament, Ali constantly repeats the confession of faith, praises God and the Prophet, asks for forgiveness and blesses his own children, the Imams of his House. And thus he died on 21 Ramadan 40/28 January 661.

⁴¹ Da 'ā'imu l-Islām, ed. Fyzee (Maaref Press, Cairo, 1951), Vol. I, p.3; Wensinck, Muslim Creed (Cambridge, England, 1932), p. 22 sqq., and the first article in Wasiyat Abi Islanifa at p. 125.

⁴² Refers to Koran 31, 17.

The Testament of Ali is a colourful document describing the main elements of the Shiite faith. Its authenticity, its historicity and its doctrine require careful examination. For our purposes, however, it may be said that, except for a few minor rules, the bulk of the injunctions aim at strengthening the doctrine of Imamate. The will also lays stress on certain moral and doctrinal matters. Among its most charming injuctions are, first, Ali's praise of the role of the peace-maker "... I have heard the Prophet saying that: The composing of differences and the strengthening of the bonds of friendship among men is better than all fasts and prayers (69)." And second, the delicate hint concerning the treatment of a guest "... let him not feel lonely and yearn for his kinsfolk when he is your guest ... never let him depart without being grateful to you" (73-74).

IV

The Prophet's Last Sermon exhibits a complete fusion of law and religion; Omar's instructions are mainly legal and Ali's testament is chiefly religious, with a strong partisan bias. A deeper consideration of each of these cannot but convince any serious student of Islam that in the early centuries at least law was very much the voice of God. God desired that man should lead an orderly life and win divine favours; thus man followed the law, and the law was mainly religious. In fact, in Semitic religion the idea of God as the fountainhead of Justice and the maintainer of law is constant. It was only later, as society grew in complexity, that secular law $(q\bar{a}n\bar{u}n)$ developed as a separate entity and had to be considered in its relation to sacred law (sharī'a). new institutions came into existence. National loans, insurance, income-tax, hire-purchase agreements, the law of the air, industrial legislation, statutory crimes—to name but a few at random—had to be dealt with by society, and the shari'a could not possibly deal with all of these. The growth of a general civil law, applicable to all persons in a state, and not merely to the Muslims, was a natural corollary. The relation between qānān and sharī'a is therefore a fruitful and instructive form of inquiry.43

In addition to the study of sacred and secular law in a Muslim state, there is another matter to which attention must now be drawn. Many universities have courses in Comparative Law. At present there are five highly-developed legal systems in the world (not to speak of Chinese law, of which, unfortunately I have no information to offer). Arranged in an approximately chronological order, they are as follows: (i) Hindu Law, which affects some 300 million people in India and Pakistan; (ii) Roman Law and its offshoots, which prevails in Western Europe, Latin South America, Quebec and South Africa; (iii) Islamic Law. In North Africa, Middle East, India, Pakistan, Indonesia, and

⁴³ See the masterly study of Joseph Schacht, "Śarī'a und Qānūn in Modernea Ägypten," Der Islam, Vol. XX. (1932), pp. 209-36.

elsewhere, it is applicable to 365 millions, that is, one-seventh of the world's population;44 (iv) English Common Law, in the Commonwealth of Nations (including India and Pakistan,) about 525 millions and the United States of Americaa bout 150 millions; (v) Soviet Law, U.S.S.R., applicable to 193 millions.45

No study of Comparative law can claim to be truly comprehensive which is not based on a competent study of all these systems. It is indeed a striking and—if I may be allowed to say so—unfortunate thing that no proper and comprehensive survey of the laws of the world exists. When comparative law is spoken of, we usually mean comparison of the English common law with Roman law; or some aspects of Continental law with Roman or English law; or some of these systems with the ancient laws of Hammurabi or Ishtar or the Egyptians. None of the usual text-books on the history of law contain even a passing reference to the great systems developed by Hinduism and Islam. Two familiar examples are W. Seagle's Quest for Law, a brilliantly written introduction to the history of law, and A. S. Diamond's recently published and stimulating volume on the Evolution of Law and Order (London, 1951). In my view a proper study of Mayne's Hindu Law and Abdur Rahim's Muhammadan Jurisprudence would possibly have given a new direction to the thoughts of these two authors, or at least have shed a fresh light on many a by-path in the intricate forest of law and custom and usage as they grow together through the ages. But these authors never considered these two systems of Jurisprudence as worthy of their attention and study. The complex structure of Hindu caste and the moral basis of Muhammadan law, not to speak of its logical perfection, to which Ostrorog40 and Sir William Jones⁴⁷ have paid striking tributes, have been left aside as being beyond the pale of their studies.

An Indian student of the law of Islam and an admirer of the legal systems of the West cannot but deprecate this attitude. It is to be hoped that a wider, more catholic, more philosophical tendency will appear in studies on comparative law, and that a serious attempt will be made by the trained scholars of the West to understand and appreciate the solutions offered, not by some only, but by all the five great systems, to individual social problems and not to neglect the living tradition of sacred law in the Old World. Modern scholars go to Hammurabi and Ishtar, but have no time either for Imam ash-Shāfi'ī, one of the greatest of Muslim jurists, 48 or the eponymous Manu, the father of Hindu Jurisprudence. An adequate study of any one topic in the manner suggested would yield the most fruitful results, not only in the

⁴⁴ Hazard, Atlas of Islamic History (Princeton, 1951), p. 5.

⁴⁵ Figures of (iv) and (v) are taken from The Oxford Atlas, 1951.
40 The Angora Reform (London, 1927), pp. 30-1.
47 Cited in Tyabji, Muhammadan Law (4th edition, Bombay, 1940), p. 820.
48 J. Schacht, Origins of Muhammadan Jurisprudence, pp. 287, 324.

field of theoretical studies, but also in our endeavours to find suitable solutions to the newer ills of civilized life.

Indian art and Indian philosophy are objects of study and admiration in the West; but law and history, no less than art and philosophy and poetry and song and legend, go to the making of civilization; even mountain, stream, forest, desert and the sea impress themselves indelibly upon national culture. If law is the "distilled essence" of the civilization of a people⁴⁰ and if it "streams from the soul of a people like national poetry, it is as holy as the national religion, it grows and spreads like language; religious, ethical, and poetical elements all contribute to its vital force," then surely the labours of the jurists of Islam and of Hinduism merit the closest attention of modern students of comparative law.

The population of the world has been estimated at 2,232 millions in 1947⁵¹ out of which the adherents of Islam and of Hinduism number 665 millions, almost one-third of the world's inhabitants: this is an additional reason why greater attention should be paid to these two legal systems.

As this paper deals with law and religion, before concluding, I should like to propose for the consideration of students of Islam a rationalized method of historical criticism to be applied to the study of sharī'a. Many authors have criticized the Muhammadan system of jurisprudence as unprogressive, stagnant and petrified. The criticism is to a certain extent just and its force cannot altogether be denied. Professor H.A.R. Gibb has recently pointed out in his illuminating lectures on Modern Trends in Islam that, despite many good features and hopeful signs, the besetting intellectual sin of Muslims in general is the readiness to indulge in a romantic glorification of the past and the existence of a paralyzing confusion of thought. With his knowledge of the Middle East and his long and unremitting studies of Islamic civilization and Arabic literature, he has diagnosed the disease of modern Islam with true insight. As a Muslim I would admit the force of the criticism, accept the challenge and offer a new solution—or rather, an old solution applied to a new set of facts.

The rules of Muhammadan jurisprudence $(u\bar{s}\bar{u}l)$ and Muhammadan law $(fur\bar{u}^2)$ should be studied in their relation to social conditions. In such study, historical, political and cultural factors should not be neglected, and the material studied should be exhaustive; it should not be confined to Arabic sources, but Latin and Greek, the four Semitic languages—Arabic, Hebrew

⁴⁰ Diamond, Evolution of Law and Order, p. 303.

⁵⁰ Allen, Law in the Making (Oxford, 1927), p. 54.

⁵¹ Oxford Atlas, xxv.

Syriac, Ethiopic—and Urdu and Persian and Turkish should also be laid under contribution. With such an equipment the following five-stage study should be attempted:

- (A) What was the condition of society, in relation to a particular legal doctrine, prior to Islam? What was the criticism levelled, if any, by the Prophet and his Companions and the early writers? Both prose and poetry must be carefully studied and its lessons extracted. Evidence in unexpected quarters must be unearthed.
- (B) What was the rule of law laid down by the Prophet? Koran or Tradition, word or act or tacit approval, is there good evidence to substantiate the claim—the Prophet did so, as a matter of principle, and as matter of practice or usage or custom, and not merely as a stray action, unrelated to any other act? What is the true meaning of certain words and expressions the significance whereof as explained by later authorities does not seem to be scientific or logical?
- (C) What was the result of such legislation? Did society follow the rule? Was it beneficial? How did the Companions and the classical jurists interpret and follow, or disregard the rule? Did they understand the spirit of the command? Or did they merely follow the letter, murdering the spirit? Did kings and governments twist rules to suit their own ends?
- (D) Today, after fourteen centuries, how is the rule interpreted in the diverse countries in which Islam subsists? Has it, in part at least, been given up because conditions have changed? What are the defects and shortcomings in the rules of Muhammadan law as applied in the different countries in the world?
- (E) Can we not, always keeping the spirit of Islam before us, mould the rules of law so that healthy reforms can be carried out? Can we not narrow the circle of 'essential principles' and widen the horizon of unessential conventions? Can we not examine the concepts of muhkam and mutashābih commands in the Koran⁵² afresh and come to new conclusions, more in consonance with the spirit of the times and the discoveries of science? By the relentless pursuit of logic and the critical method, history, economics, politics and modern law, can we not forge a new critique of sharī'a which will galvanize Islamic society into a healthier fabric?

The answer depends upon whether Islam today can produce a mind and spirit which would be the equal of Ghazālī or Ibn Khaldūn; St. Thomas Aquinas or Luther; or even Barth, Kierkegaard, Maritain or Berdyaev. And the question would still remain: If such a one does arise and speak, will his voice be heard?

⁵² Discussed above in footnote 33.

THE ORIGIN OF MAN

By

M. HERMANNS

(A Challenge to Darwinism from Human Biogenetics and Physical Anthropology.)

I. INTRODUCTION.

The questions "What is man?" and "How man originated?" are as old as mankind. The answer to these questions has been a tremendous mystery and has racked man's brain from time immemorial. Different are the answers given in innumerable myths and legends which narrate the old traditions of many primitive people. These colourful legends of hundreds and thousands of tribes scattered over the five continents all tell one and the same story: the first man was created by a Supreme Being who created heaven and earth. This is the essential point in all the different creation-myths of mankind. As an example let me refer to one of the legends which I collected during my recent research work among the Lepchas.

The Lepchas of Sikkim have several current myths of the creation of man. Pum thing rum, the High-God, created the first man. The first man was called Ti gung thik, and his wife Ni gung ngal. They lived in the land of Mayal lyang. There was no disease, no suffering and no death. It lies on the other side of the Holy Mountain King tzum song bu. All men return to this happy land after death. In olden times it was possible to reach it from the earth. But by men's sin the entrance to Mayal has been blocked. When men became sinful Rum punished them and sent great floods which lasted fifteen days so that all were drowned. Only one Lepcha couple were able to save themselves in a wooden boat.

Not only many primitive peoples believe in the tradition that man was created by the High-God but also people who have developed a high culture have the same old myths of the first man's creation. The Indo-Iranian mythology relates several creation legends of man. According to the Vedic and later writers Manu, the son of Vivasvat, was the prime generator of man (Rv. I. 80,16). In other legends Yama and Yami, twin children of Vivasvat, are mentioned as the first human parents. (Rv. X. 10. 2; X, 17. 1-2). In Old Iran, Yama is known as Yima, son of Vivahvant (Avesta, Jasna IX, 3-5; IX, 8-11; V 25-27; XXXII, 8; Vendidad 2. A. 1-19). Among the Tibetans the first man is called Yi mon, whose name is clearly related to the

Indo-Iranian Yama-Yima. Similar creation myths of the first man are known in Babylonia, Egypt, Greece, China, etc.

The same traditions are preserved in the holy scriptures of many religions; e.g. in the Old and the New Testaments, in the Quoran, in Manicheism. Not only religion but also ancient philosophers have been dealing with the origin of man. Their interest in this question was very keen. Were not some of them forerunners of Darwin? Anaximander of Greece, for instance, could not understand how the first human couple could start off their careers as all men do, namely, as babies. In baby form they would undoubtedly have perished in the struggle for life. Therefore, he suggested that the first man had been derived from sharks, because he could see a remarkable likeness between this aquatic animal and man. Empedocles supposed that animals produced bizarre monsters, animals with human heads and men with heads of animals. Finally a complete man came out and survived. People of those days had no difficulties in believing such queer transformations. Observations had shown as ocular demonstration—they believed—that beings could be generated by spontaneous generation. This means that they came into existence suddenly and abruptly from mud and slime without any reason. Spontaneous generation was the clue to every mystery of life. It was the "science of life" not only in ancient times but also throughout the Middle Ages until the 19th century. This doctrine of spontaneous generation was widely accepted until the well known experiments of Pasteur finally exploded this fabulous theory. even today there are men who believe in this ancient superstition. Haeckel claimed that spontaneous generation must be true, not because its truth could be confirmed, but because, otherwise, it would be necessary to believe in a Creator. Therefore he also substituted a clever subterfuge, called evolution.

What does evolution really mean? There are very confused ideas of evolution. The verbal meaning is: something evolves or develops by a natural process which is caused by agencies belonging to the nature of the thing itself; for instance a chicken evolves from an egg. The confusion begins when different ideas are connected with one and the same word evolution. We can group them into four classes.

(1) Atheistic or absolute evolution: The whole world developed from nothing or from an ever-existing matter. Inorganic matter developed into organic matter, the first cell and from this cell evolved the different kingdoms of life as a result of physico-chemical agencies. There exists no God, who had created something. This theory is absolutely necessary to the Atheists and Materialists. "Belief in Evolution is the basal doctrine in the Rationalist liturgy" writes Keith, the leading Anthropologist of England (A. Keith, Darwinism and his Critics, 1935, p 53) Rationalists and Materialists, believe only in human rationality and matter and nothing else, and make evolution

their creed. This is spontaneous generation en gros covered with a quasiscientific cloak and renamed Darwinism. Whether Darwin himself believed in atheistic evolution or not is another question. But Th. H. Huxley and other co-workers did believe and they have many followers. B. Bavink writes: "The incredible rapidity with which Darwinism—and in those days this meant the same thing as the doctrine of descent—won the day is only to be understood when we take into account the intellectual position of the time; the collapse of the speculative philosophy of nature and the penetration of pure empiricism into science, with a resulting return to materialistic tendencies, the universal progress of industrialisation among European nations, and the corresponding appearance of the social question. Taking it altogether, it was a new philosophy of life which appeared to be then in process of formation, a philosophy of the pure 'there and now,' of pledged enmity to all speculative philosophizing, to all belief in transcendental reasons or purposes of the world at a time of a determined struggle for existence in economic life as well." (The Anatomy of Modern Science, 1932, p. 454). In their struggle for power Marxism and Communism have made Darwinism the stronghold of their theory. "Michurin's theory has adopted and developed the best sides of Darwinism. Darwin has explained the evolution of animals and plants from the materialistic point of view. Michurin has developed this knowledge and taught methods of directing the process of producing new species of plants and new species of domestic animals, thus transforming Darwinism into a really practical creative doctrine. Thanks to the care of the Bolshevist party and of the Soviet Government, as well as to the personal care of our great leaders, Lenin and Stalin, Michurin's theory has been preserved from oblivio 1 and has become the property of the people." (Kastanos, Minister of Higher Education in the U.S.S.R. in an editorial article in Izvestia of September 8th. 1948). The Soviets do not give proofs for the new species of plants and animals which they claim to have produced. Atheistic evolution developed as the backbone of the communistic world view.

- (2) Deistic evolution is the second class which means that God exists and created the worldmatter. But the whole world-process developed as a result of natural agencies, let us say, from a gaseous ball to the sun-systems from inorganic matter to organic life and from an amoeba to man. For controversial purposes the atheistic and the deistic evolutions are the same.
- (3) Theistic evolution supposes not only the creation of the world by God but invokes extranatural activities to bring about the more radical changes in the development of the animal kingdom. Where are the limits of radical and non-radical changes? Does the formation of phylum, class and order need a radical change or not? Can family, genus and species be developed without a radical change? Anyhow, theistic evolution supposes that man's body developed from a lower non-human species; that means, that from animal

bodies, which are animated by sensitive entelectry, a human body developed through internal agencies only. The body is adequate to the animating entelechy; an animal body is adequate to a sensitive, a human body to a spiritual entelechy. Both, body and entelechy, are incomplete components of one organic unit. A sensitive life principle cannot develop a body which overpasses the sensitive limit and should be adequate to the spiritual sphere. That is against the law of the adequate cause. "To believe that some species unable to speak and of which the mental powers were very greatly inferior to those of man, became transformed into human beings is to make very great demands on the credulity, unless by selective breeding it has been possible very greatly to increase the mental powers of some species. In fact no one has succeeded in adding an iota to the intelligence of an animal species, and it may be doubted whether any zoologist believes this is possible. There seems to be a definite limit to the intelligence of every kind of animal which cannot be overpassed. This being so it is unreasonable and therefore unscientific, to accept the theory of the animal descent of man unless those who support the theory can give a good reason for this failure to increase intelligence compatible with belief in the theory." (Douglas Dewar, Man: A Special Creation, 1946, p. 5). The Theistic evolutionist does not go quite so far; only for the human body he accepts an evolution from the animal body; with regard to the soul he supposes a special creation. The law of entelechy states: an entelechy cannot surpass the sphere of its specific activity. The vegetative entelechy of a plant cannot overpass the limit of the plant kingdom; a plant cannot evolve into an animal. The sensitive entelechy of an animal cannot transgress the limit of the animal kingdom developing a human being. And man cannot evolve into a super-man who lives beyond the human nature.

(4) Special creation: The fourth view holds that man needs a special creation for body and spirit. The human body possesses a special, extraordinary position in the kingdom of life which can be explained by a special creation only. This theory admits that an animal body could be re-created into a human body as we shall explain later on. Furthermore it concedes that evolution happens within the limits of natural species.

To clarify the confused meanings of evolution it would be better to use the word "transformation" for "absolute evolution" mentioned under point 1 and 2. Refusal of absolute evolution means the refusal of atheistic and deistic evolution.

To prove the origin of man as a special creation we depend on the above mentioned law of entelechy and its consequences. Modern biogenetics proves that there is a stable and unchangeable specific human chromosomegene-system which is built up, organized and ruled by a human entelechy. This is the basis for man's genotype (internal structure). If the human

genotype is essentially one and the same, then, in consequence, man's phenotypes (external, physical appearance) must be essentially the same. Physical anthropology is able to show that all the different fossil races and modern races of man can be traced back to one human "typical form" (forma typica). These are the arguments in our demonstration of man's origin:

- (1) The human genotype is the result of man's special chromosome-gene-system.
- (2) The human phenotypes are the result of an evolution from man's typical form which was the effect of the original human genotype.

H

The Genotype of Man; Elements of Human Bio-genetics.

1. Atom and cell

What is genetics? Genetics is the study of the origin of life or bios as the Greek word for life means. It is a part of biology which is the science of the entire life. Different answers were given to the question: Where is the origin of life?

Once upon a time—and this time is not so far back—men believed that life or animate matter could be evolved from lifeless stuff by spontaneous generation; that means lifeless matter could be transformed into a living cell by a sudden and abrupt change as mentioned before. Arrhenius supposed that sperms of life came from interstellar spaces to the earth by pressure of rays. But modern research proves that every sperm of life would be killed in the stratosphere by ultraviolet rays and by the great cold. The last landmarks in the search for the origin of life were the discoveries by Pasteur. He made it clear that an organism like a bacterium can originate from a living cell only. There exists a fundamental difference between a lifeless atom and a living cell. An atom has a mechanical structure built up by nucleus, neutron, proton etc. A cell, an organic structure is formed by protoplasm, centrosom, nucleus with its chromosomes and genes etc. There is a big gap between an inanimated atom and an animated cell, a gap which cannot be bridged be transition of a crystal to an amoeba.

A last attempt was made by some scholars to prove by demonstrations with virus that lifeless matter can evolve into a cell. Virus produces small pox, yellow fever and other contagious diseases. The virus Siphonospora polymorpha which developes cancer originates from crystals but only if these crystals are irritated by a certain irritation. And what is this irritation? What is the cause

for it? That is a principle of life. New researches were able to show that protein may be the fundamental element of the biological phenomenon. Virus as well as genes are composed by nuclear protein but the genes only achieve the processes of life. And a fundamental biogenetic law is accepted: "Omne vivum e vivo, every life from a living cell," or "Omne vivum ex ovo, every life from an egg." Inorganic matter cannot evolve into an organic cell. Such evolution is impossible as modern sciences prove.

2. What is Life?

The difference between an inanimate atom and an animated cell is recognisable by many characteristic signs. The characteristics of living things are:

- (a) The power of assimilation, i.e., a plant can convert inorganic stuff like salts, phosphorus, etc., into cellulose, the substance forming the solid framework of the plant. An animal can convert organic food, like grass or flesh, into protoplasm or protein which is the essential element of life.
- (b) The power of growth: to grow and to develop by its intrinsic constitution is the second characteristics of an organism. A crystal grows chemically from outside when crystal joins crystal.
- (c) An organism can breathe, i.e., it continuously takes in oxygen and gives out carbon dioxide and water vapour. An atom needs no breathing.
- (d) The power to excrete is the fourth sign of life. By excretion waste and useless matter is thrown out from the organism.
- (e) The faculty of procreation: an organism only can procreate its own kind producing an offspring to perpetuate its species. An atom is not able to reproduce its own kind. It can change by loss or augmentation but a quite different element will be produced.
- (f) Power of restitution; i.e., reparation of injury or restoration of lost parts; for instance, if the cells of a developing sea-urchin are cut half off, the left half will reproduce the whole organism.
- (g) Death to end life by decomposition, i.e., the life-principle is separated from the body which decomposes into inorganic elements. The above mentioned characteristics belong to the whole organic world. The following signs are characteristics of the animal and human kingdom.
- (h) The power of irritability, i.e., to respond to external stimuli by the help of the senses.
 - (i) The faculty to move at will by means of moving apparatus.

An organism is not an object only which is used but is a subject which uses other things for its own purposes. Materialists and mechanists suppose that life is an epiphenomenon of matter only. They deny an essential difference between inanimate matter and animate cell. But they cannot explain the

above mentioned characteristics of living organism. Vitalists believe that life originates through a vital force which is quite distinct from physico-chemical forces. They suppose and prove that life is an original phenomenon which cannot be traced back to and cannot be derived from inanimated matter. The atom-system is a wonderful system ruled by fixed laws. But man is able to interfere with the system, can split up the atoms by force and can change one form of an element into another element. The cell has also a material system and the nucleus of the cell is constituted by atoms, relatively by molecules. Scholars try to change the chromosome-gene-system by X-rays' treatment. But they could not change it essentially as we shall see later on, or they killed life.

The principle of life is called entelecty by Aristotle and by modern Vitalists. But the modern meaning is different from the Aristotelian meaning. Aristotle supposed entelecty is a partial substance and is a component which forms together with the indefinite matter (materia prima) a complete substance. According to Vitalists entelecty is an independent natural factor, a causal factor which forms the teleological unit of the organism.

There are three kinds of entelechy: (a) the vegetative entelechy of plant; (b) the sensitive or psychical entelechy of animal; (c) the rational or spiritual entelechy of man or human soul. These three entelechies are distinctly different and there is no development from one to the other. The plant entelechy cannot change into an animal entelechy, and that of an animal cannot evolve into a human spirit. We have the following hierarchy: The physico-chemical rules are transformed by the vegetative and sensitive entelechy into the higher order of vegetative and sensitive life and the biological laws of the plant and animal kingdom are transformed by the human spirit into the higher order of spiritual life. There is no blind evolution from matter into a plant, from a plant into an animal and from animal to man. Detailed proofs are given later on.

3. Human Genetics

(a) The source of life.

The biological unit is called cell. A cell is surrounded by a wall or membrane which separates one cell from another. Inside the membrane contains the living substance called protoplasm. Some of the protoplasm concentrates to form the nucleus. It is composed by the chromatin net-work which masses together during cell divisions into visibly definite structures termed chromosomes which consist of an immense number of genes. According to the latest report each human chromosome contains 44.000 pairs of genes. The human cell has 24 pairs of chromosomes; that means 48 times 88.000 genes. Other components of the nucleus are the nuclear matrix which is a clear substance,

and the nucleoli which are highly refracting particles. The nucleus is surrounded by the cystoplasm in which there is an attraction sphere with an attraction particle known as the centrosome. Each human cell is built in the same marvellous structure with one important exception in the human germ cell. Each female egg and male sperm cell receives only 24 chromosomes and not 24 pairs and the ovum contains no centrosome. When an ovum is fertilised by a sperm which brings along the centrosome the two half-sets of chromosomes come together, and so in the fertilised egg the full number of 48 is restored and the cell-system is completed. The human egg is about 85.000 times as large as a sperm. Has the ovum a plus of quantitative matter, so has the sperm cell a plus of dynamic power through the centrosome. But there is no difference in the effect on a child's characteristics. In general, inherited effects are equal from both parents. Thus is the unchangeable human chromosome-gene-system.

(b) The organs of human life.

In wild animals sperms are produced during only one part of the year, during the rutting season, and only at this time does the male display interest in the female. In man the production of sperm is continuous, and if there is any seasonal variation it is not of practical significance. In all female wild animals eggs are produced intermittently; in some only in spring, in others, that have litters, several eggs ripen at once. During the time of egg-producing the behaviour of the female animal changes; she is said to be on heat, or in ocstrous, and she is willing to receive the male. At other times the male is repelled. It seems that in most mammals the female oestrous cycle synchronises the male rutting cycle. Woman has again a special position. A woman usually is fertile between the age of 15 and 45, though exceptionally the fertile period may be much longer. During this period one ovum develops every 28 days, approximately, in alternate ovaries, except during pregnancy and to some extent during lactation, when no eggs are produced.

In woman egg-producing is regulated through the menstrual cycle. While most mammals have an oestrous cycle, only a few menstruate; they are certain monkeys, the apes. But their menstruation occurs during the oestrous time only. The sex life of mammals demonstrates that the sexuality of the animals is bound by fixed natural laws and by blind instincts and is compulsory during the rutting season and the oestrous cycle. Man only is completely free in his sexual life. Could this freedom be developed from unfree and blind instincts? The continuous production of human sperm and ovum requires a special hormone system. Let us demonstrate it by one example on the pituitary, a small endocrine gland lying in a pit in the bone below the brain and above the roof of the mouth. The pituitary produces a hormone which stimulates the sperm and ovum producing organs. This gland is always functioning in man but seasonally in animal during the mating period. But

what stimulates the animal pituitary to produce hormones at a fixed time? Some say it is the increase in the amount of daylight in spring. But that is not the case in the tropical zone, where is the same rutting season and oestrous cycle. During my research in Tibet I could observe that the mating periods depend on the altitude of the districts. In the lower valleys it is earlier and in the high mountain regions it is later. Both districts have the same amount of daylight. If the lambs, for instance, which are born in the lower valleys in December and January, would be born at the same time in the high mountains they would perish by cold and starvation. In the high regions the lambs are born in May.

Other hormones influencing the sexual life-function-circle as the hormone produced by the pituitary are oestrogen and progesterone. The gland—and hormone—system is another test that the materialists with their mechanical and physico-chemical explanation of life are at the end of their wisdom. There is an essential difference between human sex and animal sex. The Vitalists can prove that entelechy is the cause of this rhythm. The sensitive entelechy of the animal is bound by fixed natural laws and instinctive function-cycles and is not free at all. The rational and spiritual entelechy of man is free also in sex-life and dominates natural laws. Do you believe that this quite different human sexual life could be evolved from animal sex-life? Can this human sex-specialisation be the effect of a blind evolution?

A very interesting and instructive question is how and by whom is the sex of an individual determined? Who is responsible for a boy or a girl baby? We have already seen that there are 24 pairs of chromosomes in man. One pair plays a special part in sex-determination. In a woman's cell the members of this pair are identical, both are called X-Chromosomes. In a man's cell the members are different, one X-chromosome and one Y-chromosome. Now consider what happens when the germ-cells are produced each with a half-set of chromosomes. Each ovum gets always one X-chromosome, but a sperm cell may have either an X-or a Y-chromosome. If an egg is fertilised by a sperm with an X-chromosome the ovum will have two X-chromosomes and will develop into a female; but if a Y-bearing sperm fertilised it there will be one X and one Y and so development will be into a male. In a normal ejaculaton there are perhaps 240 million sperms, that means 120 millions of possibilities for the birth of a boy or a girl respectively. Is it possible to determine sex during fertilisation? Attempts have been made to do it but so far none has been successful. The Tibetans claim to have medicines which could determine sex, but I was not able to verify their statement.

The chance of fertilising an ovum by an X or Y bearing sperm is equal. But it is well known that rather more boys are born than girls: in Germany and Britain about 105 boys are born for every 100 girls. What is the reason?

The mortality among male babies is higher. The higher sex-ratio at birth combined with the higher mortality gives a sex ratio of about 100 at puberty so that youth of each sex are approximately equal at the time of marriage! Another fact is surprising. After the first and second world war the birth-rate of boys was much greater than the normal. During the wars the loss of males was very great and the percentage of females rose up. All these facts which are unknown among animals are not due to a blind mechanism ruling life. There is a spiritual entelechy which regulates human life in a teleological way. The regulations of human nature are psycho-physical and not physico-chemical regulations. Let us make a short reference to another interesting question.

Has astrology any effect in determining the sex or the character of a human being? The horoscope is taken from the time of a person's birth and is to be believed to have great importance during his whole life. The horoscope taken at a person's birth is without any value because from his very birthday onwards the person lives an independent life. Cosmic rays and astral influences may have some effect at the time of conception and in the early stages of embryonic development. Procreation at the time of the crescent or waning moon may be in favour of boys or girls respectively. More important as the cosmic are the telluric rays, which are quite unknown and which the astrologers do not take into account. Radiation of radioactivity emanated by water veins underneath are very influential on animal and man. Most effective are the rays produced by crossing water-currents which make animals sterile; of course women also. These are the causes of cancer and many other diseases. There is a corresponding connection between sexual polarity of man as microcosmos and magneto-electrical polarity of the macroscosmos. Man has a positive, woman has a negative polarity. Here and there man and woman can change so that man may be negative and woman positive. By means of this polarity test it is possible to determine the sex of a foetus. Such strong influences could have something to do with sex determination during conception. How cosmic and telluric rays have influenced the development of human races we shall demonstrate later. Only man is a microcosmos and corresponds with the macrocosmos to such extent. How could that be if man had evolved from an animal ancestor?

(c) Ontogenesis and Phylogenesis.

We saw that the source and the organs of human life have their special peculiarities quite different from an animal. The fertilised human egg contains in its chromosome-gene-structure the potentialities and potencies of the complete human being. Now let us see how these potencies are developing.

The development of an individual person is called ontogenesis. The evolution of a whole phylum—vertebrates for instance—is termed phylogenesis,

The extreme evolutionists suppose that the human ontogenesis is a recapitulation of the phylogenesis; it means that in our foetal development there appear the ancestral characters of our prehuman evolution. They say that we go through a fish-, through a reptile-stage representing the fish- and the reptileperiod of our prehuman ancestors. That is not all, because they state that we climb our family tree during our embryonic development, which is an evolution from a protozoan (a single cell-animal), the ovum, to the Homo sapiens. This is the most important dogma of extreme evolution: "Every embryo recapitulates the history of the phylum". This dogma, which is called "the biogenetic law", was first stated by Haeckel who used falsifications to produce embryonic stages, which were missing. Which are the traces of such an evolutionary history, which they try to find? They believe that the most obvious can be found about four weeks after fertilisation. Externally the embryo seems to have rudimentary gills though actually these never fully develop; it has a long tail in relation to the length of the body; and in general it resembles, not a fish, but a fish embryo, they suppose. Internally the resemblance is carried further: for instance, the arrangement of the blood vessels is fish-like, and the principal muscles are divided into segments which are developed in a fish. But all these structures undergo a rapid and complete transformation, and within a few weeks there is hardly any trace of them. They are not stages but transient structures only. Others will find traces of a reptilian stage in human foetal evolution. If there would be a recapitulation of prehuman ancestors why are there other examples of the ways in which development fails to reflect such evolution? Take for example, the shape of the head and of the face. In mammals there is a small brain capacity but a most pro ninent chewing apparatus with a big snout. If there were a straight forward recapitulation of ancestral characters we should expect that the human embryo would develop a small brain but a prominent snout and than lose it. In fact no snout ever appears, the face is completely flat and the skull is extraordinarily large as we shall see afterwards. Why do evolutionists point out the similiarities which are no proofs of affinity and overlook the discrepancies? The phenotypes, the outer appearance, may be similar between the human and animal foctus in the first four weeks. But a specialist is able to recognise a human embryo on the 30th day and no one can mistake it for that of any other creature on the 49th day.

"The phenomena of embryonic development exhibit two outstanding features and that, when once these are grasped, the reasons for many of the phenomena become clear. These features are:

(1) The structural changes through which an animal passes in its embryonic development follow the shortest and most direct route possible to the adult state, compatible with the immediate necessities of life. A nong these necessities are an unceasing supply of nutriment and oxygen and the means

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of ridding itself of carbonic acid and other waste products of the chemical changes that take place within it.

The fertilised ovum is endowed with the power of developing at a very early period the tissue-producing cells or primordia of each of the major organs and structures that occur in any member of the phylum or class to which the animal belongs, even the primordia of structures which that particular individual will not need in the adult state: in the case of these the development of the primordia capable of producing them is early checked; thus the embryo of every higher animal exhibits the primordia of both the male and female generative organs, but in normal circumstances only those of one sex attain maturity." (H. S. Shelton and S. D. Dewar, Is Evolution Proved? London 1947, p. 205) The fact that the development of all these embryos is similar in the first few weeks is due to the mechanical necessity of cell division. "There is a mechanical or physiological reason for every feature exhibited by the human, and every other embryo at every stage of its existence, and in nearly every case we have sufficient knowledge to be able to state what this is. Every embryo, including that of a man, begins existence as a minute cell, not because of its supposed descent from a one-celled ancestor, but because this is the only possible method by which it can commence its existence". (D. Dewar, Man: A Special Creation, op. cit. p. 30) The same mechanical necessity works in the following cell-division. This is the reason why all embryos generally resemble one another in the earliest stages, but a time soon comes when they begin to differ, namely, when the ground plan of the specific phylum of the embryo is reached; for instance, the ground-plan of the vertebrates. As all the vertebrates are constructed on the same plan which entails bilateral symmetry, a dorsal central nervous system, a dorsal endo-skeleton (notochord or backbone), a head and a tail, and never more than two pairs of limbs, all vertebrate embryos whether fishes, amphibia, reptiles, birds or mammals, develop in the same way until the general outline of the vertebrate plan is established. This development is again a mechanical necessity if the embryo is to reach the adult state in the most direct manner. In this stage the embryo of fish, reptile, amphibia, bird, man etc. must be similar to each other. But the phenotype, the outer appearance, only is similar; the genotype, the genesystem, is completely different. The same happens with the embryos of the same phylum, when they reach the ground plan of their specific class, order, family, genus and species. In this manner the human embryo has to pass in the first month of its evolution the ground-plan of the phylum Vertebrates, of the class Mammals, of the order Primates of the suborder Anthropoidea, so as to reach his special state of the family, genus and species Homo, man, in the most direct manner and shortest way. Therefore human foetal development or man's ontogenesis is not a recapitulation of the phylogenesis and is never a reproduction of prehuman ancestors. De Beer, who is an evolutionist, admits: there is no logical justification in regarding an embryological stage as evidence of such a stage representing an adult pre-human ancestor (Dr. de Beer, Embryology and Evolution, pp. 86, 90, 104). The famous biologist Uexküll vehemently opposed the theory of embryonic reapitulation stating that it is flatly grotesque to value embryonic stages as relicts of prehuman ancestors which are supposed to have lived in earlier periods. (O. Kuhn, Die Descendenztheorie, München 1950 p. 80).

The decisive causes for the development of the human ontogenesis is the plan of the end-product, which is the formation of a man; therefore this final object of the whole development rules every stage of this evolution. The ruling plan of man's ontogenesis is effective through the human entelechy. She is the architect who builds up the human body from the fertilised egg to the mature child. In conclusion I may say that human embryology disproves man's evolution from an animal. As the most stringent proof I regard the end-product: the new-born human child which is an immature birth.

(d) The Immature Human Baby.

The life of every animal depends on its foetal development. When the embryo is mature it will be born and is fit to live. An immature animal embryo cannot live at all. There exists an embryonic rule: the higher the body is organised the longer is the embryonic period. The higher organised mammals like cattle, horse, ape, have a more specialised structure of their body and therefore the foetal development is longer and the number of the new born is mostly one or two. But at their day of birth the offsprings are so far developed that they have the movement and behaviour like that of their parents. A new born calf, colt, elephant, ape, can stand and move immediately after birth. Thus maturity is reached with their birth at the end of pregnancy. This is the embryonic function circle of higher animals. The pregnancy of a chimpanzee lasts 253 days, that of an orang-outang 275 days. The new born ape baby is able to stand, can grasp mother's chest-hair and cling to it, can move and search for the breast to suck and that too from the very first day of its life. The ape mother does not need to carry and support her baby. After six months the chimpanzee mother drives her child away and does not care for it any more. A six months old chimpanzee is completely independent.

The pregnancy of a human mother lasts about 280 days, that is 27 days longer than that of a chimpanzee. According to the pattern of evolution and according to the embryonic function-circle the new born human baby should be able at birth to stand upright, should be fit to walk and to grasp her mother's hand. But what a striking contrast! A new born human baby is weak and helpless. It lies down unable to turn from one side to another, nor to hold its own head, which declines without support. How could it stand and walk at birth? How could it grasp the hand of the mother or search for the breast? Without mother's help the human child would perish; it needs support in every way.

The proportions of a baby-animal's body are exactly the same as that of the adult. But the proportions of a human baby's body are quite different from those of the adult. First of all the head is very large and the body with the limbs is small. A one day old ape-baby can communicate with others by certain cries and signs and reacts to warning cries of its mother. Accordingly the human baby should be able at birth to speak the first words, to make signs and to react to words and signs, but it is unable to speak, to make signs and to react. Is it so because its intelligence is less developed than that of a chimpanzee-baby? Not at all! The reason is that the child's body is completely helpless because he is immature at birth and needs one more year of development to reach the stage of a new born chimpanzee. This immaturity is so striking that some scholars suppose man's morphology is of a foetalized and highly unspecialised type which is in no way adapted to nature as the animals This view is contrary to the pattern of evolution which lays down that man stands on the top and is the climax of the natural development. (A. Gehlen, Der Mensch, Seine Natur und seine Stellung in der Welt, Bonn 1950, 107sq.)

Let us demonstrate in short the main stages of the development during the first year after birth.

(1) The development of the body to get the erect posture: In the first month the human baby is helpless. During the second and third months it learns to hold its head upright. From the 5th to the 6th month it tries and finally is able to sit upright. From the 6th to the 8th month it is able to get up supported by a person or leaning against something. From the 11th to the 12th month it can stay free and makes some steps. Thereafter it learns quickly to go and even to run. From the 11th to the 13th month a child lying on its belly is able to get up from the belly-position. Correspondingly is the growth of body and limbs. But about three years are required before the spine and the pelvis of a human child have the structure of the mature form. Only a year after birth has the human child reached the same stage of bodily maturity as the ape baby on its birthday. We may say it needs an intrauterine development of nine months plus an extra-uterine growth of twelve months, in all 21 months to reach maturity like an ape baby on its birthday. These are the reasons why I stated: the human baby is an immature birth. According to the embryonic function-circle of the animal human pregnancy should last 21 months. Do not think that such a long period of pregnancy would be impossible. The Indian elephant is born after 21 or 22 months, and is 3 ft. in height and 200 pounds in weight.

Another decisive reason is the fact that it is impossible for the human child to get the erect posture owing to the humped position during his foetal life. To get the erect posture requires these 12 months of extra-uterine deve-

lopment. The erect position is one of man's main characteristics and enables him to have his hands always free that they may serve as "universal instruments". As such man becomes the "Homo faber", the craftsman or artisan. This enables him to develop his practical and technical intelligence which serves him to build up his own surrounding world. The first main reason for man's peculiar extra-uterine development is to get the erect posture.

(2) Another reason is to learn the language. During the embryonic period the foetus is completely cut off from the outer world. For animals this does not matter because they are bound by instinct and nature. Their instincts are developed during foetal life and are completed at birth. For instance: a chicken just out of its eggshell notices the approaching hawk, recognizes the danger and flees immediately. A chimpanzee baby seeing a snake clings to its mother. The animal instincts work automatically and immediately after birth.

Man on the contrary is not wholly bound by instinct and is not restricted through function-circles. He depends on psychic faculties and powers, which cannot be developed in the maternal womb. They can only be completed through the immediate contact between the child and the outerworld. After birth a human baby's conscious psyche reacts in no way and is unable to speak a word. Language is the faculty to communicate with others by the help of words and signs, which as different combinations of meanings are arranged in a special way. The alluring voice of a bird, the imitation of words by a parrot, the warning cry of a stag are not a language. A human baby also reacts by crying, squeaking and smacking like an animal but these sounds are not a language. Nor is it the basis to develop speech. Which are the different steps evolving the human language? A three or four months old child begins to babble. In its fifth and sixth month it is able to give a babbling monologue using sounds and voices which it will not use later on. Babbling is a international baby language common to children all over the world. From this babbling every language may have developed. A nine or ten months old baby imitates words of the mother in a deficient way. A single word has the meaning of a whole sentence or some words mean a complex of facts, wishes or aims. Imitating the words of his mother the child starts to speak his mother's tongue and clumsily attempts to express his inner feeling. The innerpsychic life is much richer than its ability to express this through words and signs. With 15 months the baby finishes the period of imitating and is able to use the language independently. What a great difference between the human child and the chimpanzee baby which can produce 23 different sounds at the age of one year and about 200 sounds when grown up. But the so-called "chimpanzee language" is not a real spiritual language but an instinctive expression of affections and cannot be developed. The human child develops his language more and more because man only is the "Homo loquens", man

as speaker and as such is able to form his social world. To learn the language at an early stage is the second main reason of man's peculiar evolution which has not only no connection with the animal stage but is contrary to it.

(3) At the same time when the language develops the child learns also to act and react, to behave and conduct himself in an intelligent way. this respect the discrepancy between man and animal is extraordinary. The animal instincts are instincts of their organs through which the animals are adapted to the surrounding world. These instincts follow blindly the great rhythms of nature which have fixed times when they are allowed to awake and to operate automatically; for instance the sex-instinct at the rutting season, migrating instinct at a fixed time, hibernating instinct at the end of autumn etc. Man is not instinct bound and is able to act freely as he likes. The baby has to learn this free acting. In its ninth or tenth month it is able to understand and to act according to its understanding. The child, of course, recognises much earlier, for instance, its mother, but later on it understands a situation and reacts accordingly in a free way. This understanding, this intelligent acting and free behaviour is the strongest proof for the spiritual intelligence of a child. Spirituality is the greatest gap between man and animal, which cannot be breached by an evolution. (A. Gehlen, Der Mensch, Seine Natur and seine Stellung in der Welt, Bonn 1950, 53 sq.) Such language proves man as a thinker, as Homo sapiens.

A characteristic sign of the spirituality of a human baby are its highly developed psycho-physical organs, the great capacity and complicated structure of its brain, the highly organised nerve-system, the extra-ordinary big head and the high body-weight at birth. The following table shows the corresponding data between man and ape:

Subject	at birthday			at grown up period	
	Foetal time days	Total weight g.	Brain weight g.	Brain weight g.	Total weight kg.
man	280	3.200	360-386	1 · 450	65-75
gorilla	?	1·500 (1·800)	ca. 130	430	100
chimpanzee orang	253 275	1.500 1.500	ca. 130 ca. 130	400 400	50-75 75

⁽A. Portmann, Biologische Fragmente zu einer Lehre vom Menschen, Basel 1944, p. 39 and passim).

The brain of a human baby is three to four times heavier than the brain of the greatest ape; corresponding with the brain-weight is its complicated structure, and the highly organised nerve-system which is more important than the brain-mass. These facts show obviously that the psycho-spiritual organs of a human baby are the most significant. If they are so highly organised and so important the human spiritual psyche must play an extraordinary role not only during foetal development but also in the first year of life when the first period of human evolution is accomplished. This is the third main reason that the baby is an immature birth because the immediate contact between the child's psycho-physic organs and the outerworld is necessary to develop its spirituality. Man is a "Homo sapiens", is a thinker, and uses his spiritual power to build up his spiritual world of moral, religion, art, poetry and sciences; in short man alone is able to build up a cultural world.

Thus it becomes clear why a human baby cannot come under the law of a blind function-circle during the first year of its life like the animals. It is under the law of its own history. Even a baby has its own history and makes its history. From its birthday on it is growing up as a socio-cultural being in a society and is surrounded by a certain culture. That is even the case with any child of the most primitive tribes in the jungles.

Between the human intelligence and the intelligence of the most clever ape, the chimpanzee, exists an essential difference and not a difference in degree only. That is proved by the latest intelligence-tests on apes. The chimpanzee displays its highest degree of intelligence just before it reaches the age of puberty about 7 years. At the same time its impulse to play is the strongest. Such a chimpanzee is able to solve simple "problems" which are not difficult because it follows its inborn intelligence; that means: after some fruitless efforts the chimpanzee sits down reflecting and then suddenly it cries, jumps up and is able to solve the problem, for instance to open a door. It solved this problem not by experimenting but by mere reflecting. In this regard the intelligence of an 7 to 8 years old ape is similar to the intelligence of a four years old child. After reaching puberty the intelligence of an ape begins to degenerate. At this age it is impossible to train it any further. The conclusion of the author is: "The question is the ape on the way to become a man is answered in the negative". (H. Wendt, Zwichen Tier und Mensch; in the Journal "Du und das Tier", München 1950. H. 11.) The most clever chimpanzee is not able to learn the use of fire or to make by itself the simplest instrument. Like the above mentioned "ape-language" the "apeintelligence" is the result of a sensitive psyche and is not produced by a spiritual agency.

That is the reason for some other remarkable differences between man and ape during the time of growth and of decline. A gorilla is grown up at

its seventh year, a chimpanzee at its eleventh or twelfth year, an orang-outang at its twelth or fourteenth year. A man is grown up at his 19th or 22nd year. Animals grow rapidly before their puberty. Thereafter they grow very slowly and soon finish their growth. The time of puberty is for some animal as follows: stag at 1½ year, cattle at 1½ to 2 years, horse 3-4, gorilla 5-6, chimpanzee and orang-outang 8-10, elephant 8-10 years. In man this time is much higher. The average of the human puberty-time in white races is at 13-15 years for males and about the 15th year for females. In more nordic countries it can be at the 18th year and among people living in tropical climates the average is lower. But even in India there are primitive races, which have their puberty at the 15th or 16th year for girls. In modern times there is a tendency to show that the average of puberty time is lowering in industrialized countries. This great variations of puberty time among man shows again his special position.

Contrary to the mammals which have their main growth-period before puberty, man's main growth-period begins at the time of puberty and growing goes on until the 19th and the 22nd year respectively. Corresponding with the growth is the inner-secretory development of the glands and of the hormones.

Man has a long youth and when he is still young the anthropoids are getting old. Orang-outang, gorilla and chimpanzee reach their senile period at the age of 20 years and the oldest apes reach not much more than 30 years. That means, when anthropoids die man finishes his youth. The average age of a man is now 60 to 70 years.

Thus the development of man from the time of conception until death is quite different from the evolution of every animal which is bound through a fixed function-circle. Man has a special position in all cases. His bio-genetic development is very peculiar. Human genetics and human biology contradict vehemently an evolution of man from an apc. Nowadays there is no competent scholar who supposes that an ape is the ancestor of mankind because the apes are too much specialised and man is more primitive in many respects, for instance, in feet and teeth. The special position does not admit an evolution of man and ape from a common far remote ancestor. Darwin himself laid very great stress on the proofs from embryonic development to support his theory of man's animal descent and wrote: "Man is developed from an ovule, about 125th of an inch in diameter, which differs in no respect from that of other animals". "This assertion is not correct: What Darwin ought to have said was that to the eye the human ovum looks like an animal ovum (phcnotype); the fact that one (with a chromosome-system of 24 pairs, genotype,) grows into a man, and the other (with 22 pairs of chromosomes) grows into an animal (rabbit) shows that there is a very great difference (in the very first beginning),

Darwin continues: 'The embryo itself at a very early period can hardly be distinguished from that of other members of the vertebrate kingdom''. (D. Dewar, Man, A Special Creation, op. cit. p. 29) That the outer appearance must be so is due to the same ground-plan of the phylum vertebrates which man and the other vertebrates have in common as we explained before. Similiarities are no proofs of affinity. The genotype only is decisive which is special human in the fertilised ovum. That Darwin could not know because this cell theory and its chromosome-system was quite unknown in Darwin's time. His modern followers therefore try to modify Darwinism saying mutation and selection are responsible for man's animal descent. That means: the chromosome-gene-system is not absolutely fixed and stable; it can be altered by mutation. To understand the whole range of this statement we must have a look into the chromosome-gene-mechanism.

3. Mendelism and mutation.

The principles of genetics have mostly been worked out from experiments on plants that can be artificially pollinated, and on quickly breeding animals, such as the fruit fly, Drosophila. The first man to publish an accurate account of the way in which the transmission of characters—what we now call genes determine—works was an Austrian priest, Gregor Mendel. He used sweet peas for his experiments. It is an extraordinary fact that these results published in 1866 were completely ignored. The Mendelian genetic law, as it is termed, was very inconvenient for materialistic evolutionists because it supposes the stability of species which does not allow evolution. And herefore it was ignored and buried in the tomb of silence.

In 1900 two Germans, Correns and Tschermak, and a Dutchman, de Vries, independently published papers confirming Mendel's observations. Since then an enormous mass of research has been done on the subject, but Mendel's priority is still associated with his name "Mendelism." Mendelian heredity and chromosomes-effect are most important.

Is it possible to give examples of the working of the Mendelian law from man? There are various examples; for instance, heredity of hair, eye, and skin colour follows a fixed regulation. The same applies to with other characteristics. The bearers of the different characters are the genes. There are two kinds of characters, one is dominant whose genes command, the other latent or recessive whose genes are overpowered; for instance, the genes for red hair are latent, those for black hair are dominant. Thus a mother with red hair and a father with black hair, not carrying a single latent gene for red hair, would have all children with black hair and not one with red hair. The phenotype is non-red-hair but in the genotype are recessive red hair genes Let us suppose one of these children marries the child of a similar couple.

Although they themselves have non-red-hair, one in four of their children on the average, will have red hair. This is the three to one ratio of the Mendelian law which of course is noticeable only in a large number of observations.

By no means are all characters inherited in this simple fashion. And many characters are not inheritable. There are very complicated processes and it is not easy to find out the dominant genes and the recessive ones. Heredity of psychic characters is much more complicated. Certain talents, for instance, skill in music or in painting, gifts for poetry or mathematics are often hereditable and we find great musicians and painters in one and the same family for several generations. Such talents presuppose a special disposition of certain cells in the brain. This special cell-structure can be hereditable as well as certain psychic powers responsible for the talent. Similarly, other psychic talents and characters are hereditable; e.g. a sanguine or choleric temperament, sentimentality or unfeelingness, a strong will or a weak The real disposing element for this is our function-structure, which is the corporal basis for our feeling, recognising and acting. And this corporal basis together with certain powers is handed over by heredity from parents to the offsprings. But it is impossible to explain the innumerable physical and psychical co-operating factors in the character of a person. Each man is an individual and is not a copy. This individuality is due to man's spiritual soul which is not transferred from the parents to the child by heredity but is created individually.

The rules which reveal such marvellous working in human biogenetics go to prove that there must be a ruler behind who regulates those much complicated laws. There must be a designer who designed this excellent plan. It is not a blind fate that guides human destiny. The origin of man is not due to a blind evolution by means of "Natural Selection," "Struggle for Life," and "Survival of the Fittest." There is a wonderful regulation in the Mendelian laws. Is it therefore that the Soviet Government banned Mendelism? "There are two opposite trends in biological science. One of them is progressive and materialistic, called Michurin's theorythe other is the reactionary, idealistic Weisman's or Mendel-Morgan theory. In opposition to the Mendel-Morgan trend Russia developed and, encouraged by the Soviet regime, brought to its full bloom, the great theory of the great modifier of nature I.V. Michurin....This idealistic, reactionary theory is fundamentally antagonistic to Darwin's teaching." (Isvestia, Sept. 8th 1948, by Kaftanof, Minister of Higher Education in the U.S.S.R.) Like Marx who introduced Darwinism in his sociological, economical system, the Soviets also make Darwinism the backbone of their "Weltbild" because absolute evolution fits their party-programme. But this is not science, this is political propaganda. They force every new discovery into the service of Darwin's views, whilst the truths that tell irrefragably in the opposite direction that man as such could not evolve from an animal are either ignored or deliberately put aside.

To the greatest surprise of all Radio Moscow announced on the 20th November 1952 that Darwin's theory of evolution was wrong because the development of plants from lower to higher forms was not gradual but sudden and revolutionary. Lysenko had made a large number of experiments and succeeded in proving such sudden changes by artificial means. It is a well known fact in palaeobiology that the new phylum, class, order etc. appear suddenly.

Is there no exception to the "Mendelian law"? The genes in the chromosome system are generally fixed and their normal constancy goes on from generation to generation. But sometimes they change or mutate. Such a change is called mutation. Nowadays, mankind possesses different skin-colour, such as yellow, brown, red, black, white and many other shades. The form and colour of the hair and eyes are also different in various races. In the beginning of mankind, of course, the colour was of one kind only. The same applies to other characteristics. During man's history many different races developed. Such differentiations and changes are caused by changes of the genes. It appears that, on occasion, during nuclear division, a gene is not reproduced exactly, and the new gene is similar to the old but not identical with it. The forces which compel the gene to mutate will be discussed later on.

First of all, the rate of mutations in nature is very low, secondly, the degree of mutation is very small. Thirdly, the minute mutation produces a little accidental change in the same line. This small mutation is termed micromutation.

The second kind of mutation would be the large or macromutation which causes an essential change in the structure of the individual. What is meant by an essential change? If the hair of man would change into feathers, the arms into wings and the feet into claws and if by this way a bird-man would evolve, then we could speak of a large mutation and an essential transformation. The legends of a man with a bird head or a dog head and the myths of animals with human heads are mere phantasy. All the stories of such various monsters are fairy-tales. There is no evidence of a large mutation in mankind and during the whole history of man a macromutation has never happened as it will be evidenced later on by the records of fossil man. If the first man appeared at the end of the Tertiary period he would have a history of about one million years. Modern races all over the world belong to the same species man because they can intermarry and are fertile. If the recent races are of the same species why should it not also be the case with the fossil races some 100.000 years ago? The time-factor is very important for an absolute evolution. longer the evolution lasts the greater the variation into different species. mankind after one million years of evolution has only one species then 'a fortiori's he must have had only one species, let us say, 500.000 years ago. This is a theoretical conclusion; the practical demonstration will be given later on.

The fossil records of the whole animal kingdom support the same conclusion. After giving detailed evidences of the stability of species, genera, families, orders, Dewar summarises: "The gradual conversion of a Protozoan into a Mammal involves the evolution of two Phyla—a simple Metazoan, such as a jelly fish and a Vertebrate (fish)—a matter of $100 \cdot 000$ million years. The conversion of a fish into a mammal involves the evolution of three classes—Amphibia, Reptilia and Mammalia—requiring $15 \cdot 000$ million years, thus the whole process is a matter of $115 \cdot 000$ million years." What does this matter? Modern man gets accustomed to astronomical numbers. "But, according to the latest views—those of Prof. Holmes—the earth has not been in existence for more than $3 \cdot 000$ million years, and it is open to doubt if the earth has been habitable for half this period." (Shelton & D. Dewar, op. cit. p. 149).

Be it as it may. Surely, the facts show that if new species arise by evolution, the process is very slow. The fossil records prove that many species are very stable; for instance 84 per cent of the species of mollusces now living have left fossils dating from the beginning of the Pliocene Period, which is about 11 million years ago. (op. cit. 130) Slow gradual changes cannot be proved; on the contrary, every new type of animal appeared suddenly in the records with all the characteristic attributes. If the phenotype appeared suddenly without intermediate and transient stages the geno-type must be produced in the same sudden way; that means the new chromosome-gene structure occurs abruptly. What a tremendous internal change is needed to perform a completely new genotype. Remember that in every chromosome many thousands of genes—according to the latest record 44.000 pairs—have to be changed before a new species can be produced. How many more changes are required to form a new genus or a new family. "Take the fishes. The earliest nearly complete skeleton known reveals that the fishes then living had typical fish bodies, tail, and backbone. They show not the least resemblance to any other phylum; so much so that there is no agreement among the transformists as to the Phylum that is supposed to have given birth to vertebrates. Later new orders of fishes appear, but no transitional forms between them and the earlier fishes." (op. cit. p.126). The same happened with all the other groups.

In the same sudden way the so-called "ancestors" of man, the Primates, (Lemurs, Tarsiers, New World Monkeys, Old World Monkeys) appeared suddenly at the Eocene and the Oligocene Period in different genera and species. The apes (Gibbon, Orang-outang, Chimpanzee, Gorilla) arose abruptly in the Miocene Period, let us say about 14 million years ago. And where do we find the common ancestor of ape and man? Who is he? That is a great enigmatical question. Some suggest he is Dryopithecus, others suppose him to be Propliopithecus or Proconsul, who roamed the forests perhaps in the Oligocene Period. And what do we know about this common ancestor? There are some small bone fragments only, and nothing else. These little fragments cannot

be a scientific basis for a comparitive anatomical study of the skeletons of the common ancestor. Now notice that there is no other trace from about 35 million years of the Oligocene to about 400.000 B.C. when we have the first remains of the human skull. The existence of man is proved by stone implements in an earlier time at the beginning of the Pleistocene Period. (Cf. F. E. Zeuner, Dating the Past, London 1950, fig. 83, opp. p. 310; fig. 80, p. 286-87; fig. 89, p. 331; p. 358) As with all the animals man also appears abruptly without passing through transitorial stages. The missing links between man and ape are missing. There is no mutation from animal to man. (Fig. 5)

What can mutations afford and what can they not produce? Modern genetics realise that new species and new organs or structures can only arise by a genemutation. There are three possibilities of genemutation: (1) Mutation by the loss or inhibition of, or damage to a gene. The gene-system remains the same but an accidental change happens; for instance, black hair would change into fair hair. (2) Mutation of one gene into a different kind of gene. for example, the genes producing arms change and bring forth wings. Mutation by the origin of entirely new genes when instead of 22 pairs of chromosomes 24 pairs would be produced which means the creation of a huge number of genes, because every chromosome contains many thousands of genes. "Clearly (3) would be a miracle (a creation and not a mutation), and so would (2) if the rearrangement of the molecules that make up a gene were such as to produce a new gene having the power to originate a new structure favourable to the animal of which it formed a part. Thus the only mutations available to cause evolution are those resulting from the loss or inhibition of, or damage to, a gene. Breeding experiments indicate that these are the only kinds of mutation that occur under domestication or in the laboratory. In other words all the breeds and mutants that have appeared are defective in some respect, although many may be useful to man. The changes of any of them surviving in nature are small. Nor is this all: breeding operations have not resulted in the production of any new organ or type of animal, and there is no sign of the appearance of any new kind of animal." (op. cit. p. 186 sq.).

The methods used by man to produce mutations are artificial means: breeding experiments in nature and in the laboratory. Breeders keep the new breed separate and select. Thus by rebreeding the extinct wild horse Tarpan and the wild cattle Aurox were bred back. Man practises breeding for about $12 \cdot 000$ years or more. The tamed dog appears in the Mesolithic period and is known in Maglemose culture (from $8 \cdot 000$ B.C.) Bones of domesticated cattle, sheep and goats are known in the Yamukian culture (Palestine c. $7 \cdot 000$ B.C.). The origin of cattle breeding goes further back into the Mesolithic Period, I suppose about $10 \cdot 000$ B.C. During such a long time of domestication cattle remained cattle, sheep, sheep, goat, goat, donkey, donkey, horse,

horse. All attempts to breed a fertile mule, the hybrid of horse and donkey, were failures. Many of the breeds are due to freaks resulting from gland-unbalance, such as dachshund, Pekinese, fantail pigeons. The breeders were unable to produce a new species.

The experiment of modern biologists tell the same story. They tried and try again and again to change the character of the genom which is the amount of the genes and which has a special character in every species. They use X-ray and other short-wave treatment to change the genes.

"The animal on which geneticists have done most work is the little fruit fly Drosophila melonogaster, of which some 25 million individuals have been bred, representing nearly 1.000 generations in which about 1.000 mutations have been recorded. But these mutations are almost all clearly what may be called loss mutations, all are defective in some way, thus over 100 mutations of wings have been recorded, in all of which the wings are defective or reduced to stumps or absent. This is equally true of all other animals experimented on....

Common sense suggests that a new organ or a new kind of animal cannot result from the accumulation of losses. And so far as I am aware, no new organ or structure has been produced as a result of breeding operations....

What makes the experimental evidences so unfavourable to the evolution theory is that no mechanism has been discovered capable of originating any new structure or organ." (op. cit. p. 187) Hurst writes: "By far the greatest mystery in evolution is the continued existence of numerous species, and even phyla whose genes have not mutated and whose chromosomes have not transmutated and whose characters remain the same today as they were thousands of millions of years ago. Their fossils remain a standing witness to the stability and relative immortality of the mechanism of the genes and chromosomes." (C.C. Hurst, The Mechanism of Creative Evolution, Cambridge 1932, p. 188).

The botanist W. Troll deals with the origin of life and the stability of the chromosome-gene-system. "From the modern viewpoint we can state this problem as follows: Spontaneous generation seemed to be possible as long as protoplasm was considered as a tiny particle of simple albumen, that means as long as the knowledge of the chemical composition of a living cell was very poor. But the great progress in physico-chemical research of living matter proves that it is a very complicated composition. Therefore is the explanation most improbable that the origin of this very complicated mechanism of a simple cell should be due to a blind chance... But all that we can say is that a mere play of 'inorganic' natural forces should have produced this effect is

more incredible than the accidental origin of a car in an iron mine. The Darwinian phrase that only the fittest of many possible combinations could survive cannot help us in any way. The simple reason is that the Struggle for Life could start only when this living 'mechanism' existed which was thrown together (according to the Darwinists) by a monstrous chance." He stresses strongly the following facts: Today we know very well that the "short" time of one milliard of years, which is available for the evolution of life, is far too short if a protozoan should have evolved from inorganic atoms; because the number of atom-combinations which are required for the "accidental" formation of only one highly constructed protein-molecule is immense. And how many molecules are needed to build up one cell? "For this evolution (from atom to cell) the time required is not available when we consider that life exists on earth since 100 (10.000.000.000) years." Troll concludes his paper with the sentence: "Primeval generation needs a primeval generator. This is the same as the act of creation." (W. Troll, Das Urzeugungsproblem, in "Neue Abendland", Augsburg, November 1951, 607-614). (Fig. 1 & 2)

By X-ray treatment it was possible to divide and augment the chromosomes of plants in an arithmethic order. But did this multiplication of chromosomes produce a macromutation so that a new species was brought forth? Till now we know nothing about an essential new natural species produced by X-ray treatment.

If mutations cannot produce a new species man could never be evolved from an animal by a natural process, because man possesses not only a special chromosome-gene-system but also has quite a different spiritual entelechy, a rational soul. It is the entelechy which forms, organises and rules the body. Greater than the gap between an animal and a human body is the abyss between the sensitive life principle of an ape and the spiritual soul of a man.

The classical definition of man given by Aristotle is "Animal rationale, rational animal." Animal, the material element, is subject and rational, the spiritual element, is adjective. I prefer to make the main component of man as subject and the subordinated component as adjective. As such I suggest the definition of man "spiritus incorporatus", it means "incorporated spirit," because the human spirit is living within a body and with a body. Modern biogenetics support this definition by the law of entelechy and modern science acknowledges the sentence of the Old Testament (Gen. 2.7): "The Lord God formed man, breathed into his nostrils the breath of life, and made him a living soul." Science also proves that man is a special creation by God. Did the Lord God form the body of the first man "from the clay of the ground," in the meaning of inorganic matter or did He re-create an animal body, that means organic matter, into a human body? I am in favour of the latter mode of creation, because the hierarchy of life shows a marvelous order in the

kingdom of plants and in the kingdom of animals, in which higher organised creatures presuppose the lower stages. If we suppose that the human body was created from an animal body then we can easily understand the similiarities between animal and man. 'Homo sapiens' is at the top in the hierarchy of natural life.

III

THE PHENOTYPE OF MAN, ELEMENTS OF PHYSICAL ANTHROPOLOGY.

1. Archanthropus (archaic man)

The genotype of man proves that man is a special creation. Can this conclusion be affirmed by the human phenotypes?

Let us give a short explanation of the evolution of the human races. Here we have a true evolution within the same species. Evolutionists were possessed by the idea that the early man must be ape-like. Guided by this prejudice they started to hunt the missing link. One of the first who began hunting was Dubois. He went to Java on purpose to find the ape-like missing link of man predicted by Haeckel. How did he succeed to find it near Trinil, in Java, in 1891-92? He found a skull vault and called the being belonging to it Pithecanthropus. Later on he found some other fragments and how did he reconstruct this famous so-called missing link? "Dr. Dubois who brought the bits of him (Pithecanthropus) back from Trinil, Java, tricked the whole scientific world. From his many boxes of specimens he produced only the skull-cap, the two simian teeth, and the human femur found at fifteen meters distance a year later. He concealed the human tooth found in the same stratum, and four other human femurs, in bits. But far worse than this he concealed the fact that he had found the two Wadjak fossil skulls only forty miles from Trinil, and though difficult to date exactly, certainly in a very early stratum. He only produced them in 1925 (more than 30 years later) because of similar finds by another man; and he kept the human tooth dark until 1937." (V. Barclay, Challenge to the Darwinians, Newport 1951, p.149). The handling of the findings should be enough to brand the whole affair. Each of these remains were found at different times, and at varying distances from each another. Today there is no longer any doubt that the three teeth belonged to an extinct orang-outang and the left thigh bone to another individual. But what a big noise was made with the fragments, from which far reaching conclusions were drawn! The creature was called Pithecanthropus erectus which means "the erectly walking ape-man." From the false femur the height of Pithecanthropus has been calculated to have been about 5 feet 8 inches and his weight about 150 pounds. From the skull vault the brain capacity was calculated at somewhat more than 1.000 c. c. The whole story of the Pithecanthropus is an example how evolutionists produce the missing link persas and ness.

From three molar teeth found in a Chinese apothecary they reconstructed a whole man and called him Gigantanthropus, the giant man. Weidenreich made Gigantopithecus as the main root of mankind in his genealogical tree. (F. Weidenreich, American Anthropologist, Vol. 49, No. 2, 1947.) From him he let stem of Meganthropus, Pithecanthropus and Sinanthropus. Gigantopithecus as ancestor of man is alive in the phantasy of some evolutionists only. The oldest fossil men are grouped as Archanthropus; archaean means the earliest, anthropus means man. To this type belong later finds at Java which were discovered by Koenigswald in the years 1937 to 1939. In 1941 he found a second lower jaw which is larger and more massive than any thing else human. He named him Pithecanthropus robustus. We have no complete skulls; only fragments and no fragments of the skeleton. Till now there are no implements found in close connection with the Pithecanthropus fossils to prove that he produced tools and fire. One of the features of Archanthropus is the thicker and heavier bone of the skull, compared with modern man. They have a prominent brow ridge, a receding forehead and no chin. The teeth were larger but not more ape-like than our own. Because of their primitiveness evolutionists arrange them near the apes. (Fig. 8)

There are other fossil men belonging to the Archanthropus; for instance, the Homo modjokertensis. West of Soerabaja in Java, skull fragments of a child were found in a Lower Pleistocene horizon, which are therefore older than Pithecanthropus who is found in Middle Pleistocene layer. Only six miles from Trinil, Oppenoorth excavated in 1931 at Nagandong on the Solo River a fossil human skull of Upper Pleistocene. Later on 11 skulls were accumulated, all closely similar in type. Though he is advanced beyond the Pithecanthropus, he is more primitive than the Neandertal and therefore he is included in the Palacoanthropus class and not in the Archanthropus.

To make the Anthropology of Java more complicated the Wadjak man appeared, concealed by Dubois. In Wadjak I, possibly a female, the brain capacity is 1.550 c. c., in Wadjak II 1.650 c. c. The Pleistocene age of these skulls is without doubt and they bear a striking resemblance to the Australian aboriginal skull. But what is more striking: in Australia near the village of Keilor, 10 miles northwest of Melbourne, was found a fossil skull, which belongs to the Riss-Würm Interglacial age in the Middle Pleistocene period, and which has the closest connection to the Wadjak skull. The brain capacity is 1.593 c. c. Wadjak and Keilor man do not belong to the primitive Pithecanthropus type but represent the Homo sapiens type, it means the type to which modern man belongs.

Even Solon man is closer to Rhodesian man than to the European and Palestinian Neandertalers and his mastoid processess are fairly well developed as in modern man. This specialisation in the skull makes it impossible to conjecture an evolution from the Pithecanthropus via Solon man to the Wadjak man. The morphological and historical order of Java fossil men alone make an evolution from Pithecanthropus to higher types impossible. These two orders do not correspond.

That is supported by the other fossils of Archanthropus type. First of all there is the Sinanthropus of China, also called Homo pekinensis. At Chou Kou Tien forty miles southwest of Peking human teeth were recognized among animal bones, excavated in a brokendown cave rich in Pleistocene fossil. Late in 1929 a complete skull vault, that of an adolescent, was found together with stone and bone implements and fire places. Now the same story was repeated as with the Pithecanthropus. The evolutionists triumphed over the long expected missing link. At that time I myself was in China. I collected the facts of the excavations; fragments of skulls found together with stone and bone instruments; fireplaces in the cave prove that these creatures knew the use of fire. I was the first to prove in a paper that Sinanthropus was a true man. Later on I visited the caves and made a thorough study. Fragments from about forty-two Peking men and women have been found. 16 skulls or parts of skulls have been recovered. Seven of these skulls are complete enough to yield most of the customary measurements. Body bones are much rarer than skull, jaw and tooth remains. It is important to know that we have not even one complete skull and least of all no complete skeleton. All the reconstructions are mere conjectures. By general agreement the age of the deposits is somewhere near Middle Pleistocene. would presumably correspond with the early portion of the second interglacial period of Europe, let us say about 400.000 years ago. In age there is not much difference between Pithecanthropus and Sinanthropus, but in morphology they differ much. The Sinanthropus skull is higher, has a fuller or less sloping forehead, and somewhat greater capacity. A special point is that the Sinanthropus skulls have little or none of the intrabone air chamber known as the frontal sinus whereas this is well developed in Pithecanthropus, Neandertal, and most living races. The capacity of the nearly complete skulls has an average of about 1.050 c. c.—say some 15 or 20 per cent, larger than Pithecanthropus. The jaws are fairly primitive. There is no large protruding canine tooth. The incisors are shovel-shaped as modern Mongoloids. All in all, the teeth are farther advanced towards recent human type than is the jaw-a condition which is true also for Heidelberg man. So we have a mixture of primitive and advanced characteristics a fact which is contrary to the evolutionistic theory. To stress this point more: It might be said that where Pithecanthropus is archaic and somewhat specialized, Sinanthropus is also archaic but a bit more generalized in his features. On the one side the Sinanthropus is much developed as the Pithecanthropus; on the other side the Peking man is generalized and rather specialized; the Pithecanthropus is more primitive and more specialized. All these facts are contrary to the common morphological scheme of evolution. Compared with the contemporaneous or even older Sinanthropus it appears that Pithecanthropus is an aberrant development and leading experts call him an "aberrant type." In no way could he be the forerunner of the Peking man. (Fig. 7)

At Chou Kou Tien is another place, the so-called upper cave, which contained a rich mammalian fauna and a few human fossils. The age of this deposit is claimed to be Late Pleistocene on faunal evidence. The stone industry is regarded as Upper Palacolithic. The stone implements are few but of an excellent type; bone tools and ornamental objects are abundant. Greatest attention must be paid to the three skulls which have a Homo sapienslike form, that means they are like that of modern man. One skull, that of an elderly male, who was tall and large-brained—the brain capacity is about 1.500 c. c., -is diagnosed by Weidenreich as primitive Mongoloid, by Hooton as primitive Caucasian and quite Ainu-like. These authorities disagree also in their interpretation of the difference between the three individuals. On the one hand Weidenreich supposses that the three skulls typified three different racial elements, best to be classified as primitive Mongoloid, Melanesoid and Eskimoid; on the other hand he believes that the people from the upper cave were still undifferentiated and that pure racial types as we know them crystallized out late. Hooton thinks they represent a racial mixture. Another question is: did they develop from the primitive Sinanthropus of the lower caves or are they quite a new race? Here again evolutionists disagree. Eickstedt supposes that there is slow and gradual development from the primitive Sinanthropus via upper cave-man to the modern Chinese. This is another show-piece of evolution: the development of the primitive, ape-like Asiatic Archanthropus (old Sinanthropus) to a less crude but Neandertal-like Palaeoanthropus (new Sinanthropus), who finally evolved into the gracile Chinese Neoanthropus and modern Chinese. But this pedigree of Chinaman is a mere phantastic reconstruction without any solid facts. The human fossils tell another story. We mentioned the Homo modjokertensis, Wadjak etc. who are different.

At the same time when the primitive Pithecanthropus and Sinanthropus roamed about there was quite another race more like modern man. In 1935-36 skull fragments were found at Swanscombe, Kent, England, in a deposit which is not later then Middle Pleistocene. Except for the remarkable thickness and the great breadth of the occiput, these bones are otherwise indistinguishable in form and character from those of modern man. Associated with these fragments were implements of Middle Acheulian type, that is to say, representing an industry very appreciably antedating the Late Acheulian and Mousterian implements of Neandertal man.

Even about the year 1912 fragments of a human skull, the upper and the lower jaws, and several vertebrae were found at the same Swanscombe place deep in the gravel. But since the explorers were possessed by the idea that the primitive man must look ape-like in any case they assumed this skull of modern type could not have been of the geological antiquity indicated by the deposit in which it was found.

More than that; in 1888 the remains of a human skeleton were found in a direct extension of those same deposits at Swanscombe associated with implements of Pre-Chelean industry. It is known as Galley Hill man. The skull bones are remarkable for their thickness; the brain capacity is about 1.400 c. c., the chin well developed, and the forehead is high. Several primitive features are however present; for instance in the molar teeth of the upper and lower jaws, where the biting surface of the last molar is seen to be longer then the second, a very primitive feature similarly known in the jaw of the old Heidelberg man; while the brow ridge of the modern type are exceptionally pronounced. The fact that a virtually complete skeleton was found has led to the belief that the Galley Hill man must have been interred, and hence must actually belong to a later period. The fluorine content of the bones proves also a later age. In any event, his skull bones were like those of Swanscombe.

A more disputed fossil is that of the Piltdown man found in 1911-12 at Piltdown, Sussex, England. The form is reconstructed from several fragments of a female brain case, some small portions of the face, nearly half the lower jaw, and a number of teeth. Later small fragments of a second skull were found. The skull capacity has been estimated by several scholars with different results. The average capacity is perhaps 1.300 c. c. The skull proper is not particularly primitive. Except for unusual thickness of the bones—a characteristic of all the old fossil skulls—it might pass as modern. But what puzzles one very much are the jaw and the teeth which are distinguishable from those of a chimpanzoe, but resemble them markedly; for instance, the canines project beyond the other teeth, as those of the apes. They are certainly less human than the Pithecanthropus and Sinanthropus jaw and teeth. More than one expert has got over the difficulty by assuming that the skull of a human being and the jaw of an ancient ape happened to get associated in the same gravel. But the great objections to this way out of the impasse, are: the accidental association of parts of a man and a ape should occur twice, which is extremely unlikely, because we have the main find and a second smaller one; above all no Pleistocene anthropoid-ape fossils have yet been found in England or Western Europe. The combination of an ape-like jaw with a human skull is proved twice. The contrary is also known from the Australopithecus of Africa which possesses an ape-like skull with a humanlike jaw and teeth. Are these freaks of nature to disprove the morphological pedigrees of the evolustionists? Be it as it may! More important is that the Piltdown skull has the form of recent man. Its general structure is closer to modern man than Neandertal man. Piltdown man appears to antedate the later by a considerable period. His age is now fixed by the new fluor test at the last Interglacial Period. (Fig. 10)

Another skull was found in November 1925 during excavations for the new Lloyd's building in Central London. The brain capacity has been estimated of about 1.250 c. c. some 50 c. c. less than the average of modern English women. Some features of the skull bear close affinities to Neandertal man and some to the Piltdown man, but all in all the "Lady of London" is sufficiently distinguished from the "Neandertal cavalier" and akin to an earlier type of "Homo sapiens-knight."

Skulls of the fossil Homo sapiens type are also known from the Continent. In 1933 a skull, probably that of a female, was found at Steinheim in Germany associated with artefacts of Acheulian age, in a deposit of Mindel-Riss interglacial period of the Middle Pleistocene. A number of features are common to modern man rather than to Neandertal man.

The French counter-part of him is to be found in the fossil man of Fontéchevade, which was excavated in 1947. The type of this skull is the same as that of Swanscombe and resembles modern man. Its age is of the Riss-Würm interglacial period or even older; according to Wiergers it belongs to the Mindel-Riss period.

Archanthropus of Homo sapiens type is not only known in England Germany and France, but there is strong evidence that he had also migrated far afield in Pleistocene times. Thus for example are the jaw fragments with their teeth found in 1932 at West Kanam, East Africa. Kanam man resembles the modern type of man in every way. His age is disputed; Leakey believes he belongs to the Lower Pleistocene; others doubt this great age. In any way Kanam man is of a modern type and can be very well contemporaneous with Pithecanthropus and Sinanthropus.

In a deposit at Kanjera, in Kenya, were found the skeleton remains of four individuals of modern Negroid type associated with artefacts of Chellean industry. The age of these is of early Middle Pleistocene.

The Boskop man of South Africa also resembles modern man and has a remarkable high brain capacity of 1.650 c. c. He is undoubtedly extremely old but the geologic age cannot be determined.

The above mentioned Keilor skull proves that the Archanthropus of modern type had also reached Australia. All these facts strongly prove that Archanthropus types of Homo sapiens form have migrated over great distances, and have already early differentiated into distinct ethnic groups, even before

Neandertal man had done so. The picture which emerges from the evidence as we now have it, quite upsets the older notion of early man, which states that man recently of the ape-stem was waiting for evolution, as it were, to push him into a more advanced type. At the middle line of the Archanthropus we find a "forma typica, typical form", which is very similar to modern man. Branching off from this middle line there are aberrant types like Sinanthropus and Pithecanthropus. All the pedigrees of man's evolution which show an ape-like form in the beginning and the Homo sapiens at the end of the family tree are misleading and completely wrong. (G. Heberer, Bemerkungen zum "Sapiens"—Problem, Homo Bd. 2. H. 1. p. 4 sq. Göttingen 1951.) What is the reason why evolutionists ignore the Homo sapiens fossils?

"I am constrained to say that the fossil evidence has been so manipulated by evolutionists that the writings of the great majority of them do not give an unbiased account of the facts. The fossils unfavourable to the evolution theory are almost universally ignored in modern books. One of these is the Calaveras skull found in 1866 in the U. S. A. in a deposit of Pliocene or possibly Miocene date. This seems to be the oldest known fossil of a man of modern type...

The second fossil generally ignored consists of skeletal remains of modern human type found in a Pliocene deposit at Castenedolo in Italy by Prof. Raggazoni in 1860. The well known zoologist Sergi, who visited the site and saw the fossils and deposit, is satisfied that they are of Pliocene date.....

It is legitimate for transformists to disbelieve their antiquity, but it is not legitimate for writers to ignore them in their books, especially those written to instruct the public. The reason of this almost universal rejection by transformists of these early fossils is that their acceptance would destroy completely the claim of the much-vaunted Pithecanthropus fossil from Java and the Sinanthropus fossil from China which are paraded as possible ancestors of modern man, because these two fossils are of much later date than the Castenedolo and Calaveras fossils. In fact there are several more fossils of men of modern type of earlier date than Pithecanthropus and Sinanthropus, which are largely ignored." (H. S. Shelton & Douglas Dewar, op.-c. p. 253 sq.).

The evolutionistic theory does not get any support from the newly discovered Australopithecus in South Africa. In the latter half of 1949, and during 1950, many discoveries were made at Swartkrans. Two skulls are nearly complete and only slightly crushed, which belong to females. The brain-cases are well within the human range and have a capacity of about 850 c. c. The face seems very flat with wide cheeks. The bony brow ridge is well marked but rather feeble. In the midst of the skull is a well developed bony crest, where the strong jaw muscles must have met. The

perfectly preserved jaws with the teeth are human-like. A chin is likewise developed. No tools or weapons were found in connection with these bone-remains nor are fireplaces connected with them. The age of these finds cannot be fixed exactly. They are said to be of Upper Pliocene or of Lower Pleistocene. In any case Australopithecus is so late that he cannot be taken for the ancestor of primitive man, who was his contemporary. Broom, the discoverer of the "Missing link," does not believe that Australopithecus is the missing link between ape and man so arduously searched for. He supposes that man and "ape-man" have a common ancestor "closely allied to Propliopithecus, but just a little more primitive, which lived in Early Oligocene—or possibly, but less likely, in Upper Eocene—say 25.000.000 years ago." (R. Broom, Finding the Missing Link, London 1951, p. 95). He goes back to a far remote time, where anything is unknown, the common ancestor and the branching offspring, so that everything can be reconstructed by mere phantasy. (Fig. 6).

2 Palaeoanthropus

The best known primitive man is not the Pithecanthropus or the Sinanthropus. Our world-famous ancestor is the Neandertal man, much honoured by reconstructions of his "beauty" in plastics and paintings which were exhibited for instance at the UNESCO Exhibition in Paris (1949) and in the London South Bank Exhibition (1951). These exhibitions try to show that man began from nothing but an animal and that primitive man must look like an animal.

The first recognized discovery was made in a cave of the little Neander gorge near Düsseldorf in Germany in 1856. This fossil man was called Homo neandertalensis (Neandertal man). His brain capacity average is 1.500 c. c. or more for males, while the figure for modern man is only 1.350 c. c. The skull is massive with prominent brow ridges, receding forehead and receding chin. The face is large and long, the eye orbits large, the nose very large—both wide and projecting. The jaw is prognathous, though not more so than in many Australians and Negroes. The teeth are larger—but in no way ape-like than our own. The skeleton bones are also very thick and must have been provided with powerful muscles. The chest is large, the neck bulllike, and the tighbone is curved which indicates a knee habitually somewhat bent. But that doses not mean a bowed and clumsy gait. Neandertal man is below the average stature of modern man but his average height of 1.60-1.65m (5 feet and 3 inches) for males fits well in the line of fossil man. That is the picture that we can draw with certainty from the skeleton. All the beastlike features, as the hairy coat of the body, long hair on the whole face, the brutal look, are mere phantasy.

The Neandertal skull is relatively low-domed despite a very large brain. In spite of the fact that conclusions relating to mentality drawn from the shape of the head have been demonstrated to be utterly false, there are still evolutionists who forget themselves to such an extent as to assert that Neandertal man must have had a poor mind because he has a low brow. Why do they not say because he has very large nostrils? That would be of the same conclusive value. Even brain capacity is not conclusive for higher or lower intelligence. What is decisive is the structure of the brain and the brain-convolutions. The famous scientist Leibniz and Anatol France had a brain capacity of 1.000 c. c. only. (Fig. 3,4,11)

A few words must be said concerning the reconstructions of the facial appearance and expression of Neandertal man. Such reconstructions have been determined by the belief that he was nearer to the "beasts" than Homo sapiens is. Hence the reconstructors have given a very beastial appearance. But the real truth is: First: we know nothing about the soft parts of the fossil man and far less, nothing concerning the expression of his features. Second: the more primitive and more rude Neandertal type is the younger one. The early Neandertalers are more like modern man than the later ones. That is just contrary to the evolutionary theory.

There are complete skeletons of more than twenty individuals, and the fragmentary remains of very many others. Fossils of Neandertal type were excavated in many European countries, in the Near East and even in the Far East, for instance, Teshik tash in the Turgan Darja valley at the upper Amu Darja in West Turkestan. A whole collection of different Neandertal types was made in Krapina near Zagreb in Croatia in 1899. Many of them show a strong tendency towards modern man in forehead and round-headness and even broad-headness (brachycephaly). It is in the Krapina Neandertaloids that brachycephaly occurs for the first time in mankind. Similar variant types are Spy II Belgium (1886), Galilee (1925) and Gibraltar II (1926) which exhibit an approach towards Homo sapiens. The discoveries in Central Europe (Germany, Italy, Yugoslavia and Southern Russia) revealed Neandertaloid types which—according to their geological and faunal associations—lived in the Riss-Würm Interglacial period. Their industry is of Acheulian and Pre-Mousterian form. This indicates a much greater age than the age of the Western European Neandertal man, who was living in the last Glaciation. The earlier Neandartaloids are not so massive and rugged. They are not so extremely specialized as the younger Neandertal man of the fourth Glaciation. These facts give us the clue to solve the problem. The earlier interglacial period had a warm climate and good economic conditions. The Neandertaloids of this time were rather massive. The fourth Glaciation brought a very bad deterioration of climate and life was very hard during the severe ice-time. The effect and influence of these deteriorations are visible also in the physical constitution of the man living in this ice-time. The whole skeleton became very massive and rugged. That shows clearly that the West European Neandertal man is an aberrant type which during the last ice-age retrogressed in the direction of developing a massive and rude sub-race. All these facts show clearly the "devolution"—not evolution—of a massive and specialized aberrant type from a moderate one. What happened with Neandertal man could equally happen to Pithecanthropus and Sinanthropus whose rugged types evolved through similar natural forces, through change of climate and life.

There is another interesting fact that upsets the theory of man's evolution. In 1931 to 1932 fossils were excavated in caves on the slopes of Mount Carmel, Palastine. The bone remains show two different types, a frankly Neandertal type, the Tabun group, and a modern type, the Skhül group. These types must be regarded as representing a recent racial mixture between Neandertaloids and Homo sapiens. A comparision of the typical characteristics gives the following picture:

The skull capacity is between 1550 and 1600 c.c. Their stature runs from 5 feet 5 inches up to 5 feet 10 inches. The limb bones show a lighter body. In 111 characters examined 16 were like Neandertal man, 32 like modern man, 46 were intermediate, 13 indeterminate and 4 were peculiar. This proves that the Homo sapiens element was very strong in this mixture. This racial mixture shows that modern man was contemporaneous with the Neandertaloids.

The fact that Homo sapiens was also one remarkable type among the Palaeoanthropus groups is also proved by other fossils. Some of them, Sinanthropus upper cave (China), Keilor (Australia), Fontéchevade (France) are mentioned above. The Wadjak (Java) fossils bear a striking resemblance to the Australian aboriginal skull. Some students believe that Rhodesian man, together with Solo (Java) are early Homo sapiens types which bear no relationship to Neandertal man at all. The best proof for early Homo sapiens was provided by the excavation of C. Coon in the Hotu limestone cave above the southern Caspian shore in Iran 1951. Three skeletons were found which were like modern men and amazingly different from those of Neandertal and even Piltdown. The age of the deposit is clearly fixed because the vertical section of the cave shows levels of earth down through the ages from the iron to the old stone age. At the bottom of the excavation are layers of sand and gravel deposited during the last glacial period of the Ice-Age, about 75.000 to 100.000 years ago. The geological evidence is conclusive for the age but there were also animal bones and stone tools with the skeleton which resembled exactly those in definitely dated last Ice-Age levels in Europe. The skulls of the Hotu man are small-brained and could be duplicated among living

people. The chin is well developed. The teeth are modern and projecting as in many modern races. The long bones are as straight as in modern man and show no signs of curvature. The three skulls and skeletons of Hotu man are the oldest so well preserved. Until now we had only skulls and small fragments of the skeleton from such early periods. These lucky finds prove the old age of Homo sapiens and disprove completely the common evolution theory of man. (C. S. Coon, Excavations in Hotu Cave, Iran, 1951, in Proceedings of the American Philosophical Society, Vol. 96, N. 3, p. 231 sq.) (Fig. 9).

Another fact has the same conclusive effect. In Europe the Neandertal communities were quite suddenly replaced by men of modern type, by the so called Cro-Magnon. The same happened with Neandertalers throughout the world where they were finally displaced by modern races. This group is called Neoanthropus, New man, from whom all living races originated.

3 NEOANTHROPUS.

The earliest Neoanthropic men, who were identical in almost every respect with modern men are the men of Predmost in Moravia. His brain capacity was 1590 c.c., his height about 5 feet 7 inches. He lived in the Late Aurignacian and was a contemporary of Neandertal man. This is again a clear evidence that Homo sapiens types existed before the appearance of the Neandertal man. The skeleton which gave the name to the type was originally discovered in 1868 in a rock shelter near a little village of Cro-Magnon, France. Later on many fossils of this type were found. The Cro-Magnons were a very remarkable people in many ways. Physically they varied very much. The size of the brain-case compared to the size of the face, which is very short, is tremendous. The bones are robust, not slender and the muscles are powerful. In any case the Neoanthropus is alike to modern man to such a degree, that he is also called Homo sapiens fossils. A number of attempts have been made to distinguish the different types of Neoanthropus into subraces. But no permanent agreement has been attained on these subdivisions. The common characteristics of all these types are a form like the Australian of today. The fossil Cro-Magnons are universally excepted as having been already a primitive Caucasian who is very like to an Australian. They were more similar to living Europeans than these Europeans are to living Mongoloids or Negroids of today. And that is the connection of fossil Cro-Magnon with modern races. (Fig. 12).

4. Modern man.

Cro-Magnon blood is supposed to have flowed into several European subraces and to have been modified in varying degrees. This component of Cro-Magnon is different among the Mediterraneans, the Dinarics, the Alpines, the Nordics, Dravidians, Indo-Aryans and so on. These modern races belong to the so-called "Middle Line", which bears closer connections with Homo sapiens fossils. The same sort of relation holds in the other continents, in Asia, Africa, Australia. The primitive races show closer similarities with the Cro-Magnon. The general name for them is Australoids, or archaic Caucasoids. From this middle line which is held by the Australoids and Caucasoids two side-lines have branched off; to the left the Mongoloids (Chinese, Japanese, Indo-Tibetans, Mongols, Amerindians etc.), to the right the Negroids (Negro, Negrillo, Negrito, Melansean, Papuan etc.). The left and the right line are later specialisations. (Fig. 13)

This is in short the story of the human phenotypes. The very early man was of an unspecialized, general typical form (forma typica). He developed as Archanthropus into different types; aberrant types like Pithecanthropus and Sinanthropus which became specialized died out; the Archantropus of Homo sapiens type survived and developed into Palacoanthropus. The "Old man" differentiated again into different types. The more specialized Neandertaloids vanished away. The Homo sapiens forms survived and developed into the different Neoanthropus races from which the modern races evolved.

5 The causes for racial differenciations

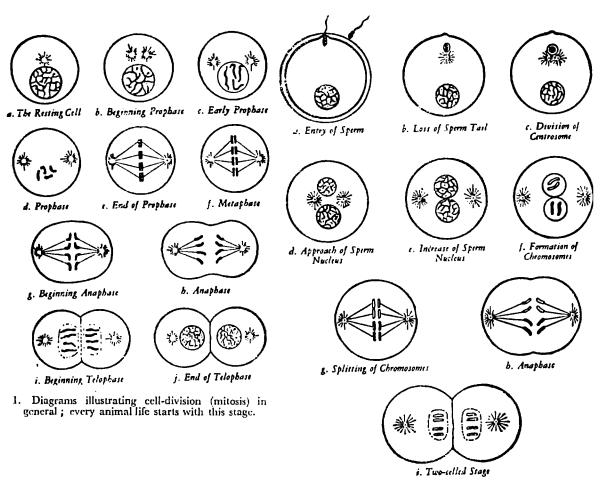
When mankind became numerous, groups migrated to find their living in other regions. They had to live in zones which were geologically and climatically different from their original home. The change of the surroundings gradually did form a new type. This process lasted of course many generations. Fundamental elements of the surroundings are : cosmic rays (sun, moon, atmospheric rays); telluric rays (magnetism and radioactivity from the earth). I believe that the cosmic and telluric effects on the chromosomes and on the genes are at the first instance responsible for racial differentiation. Through the new research of radiaesthesy it is proved that earth-radiation affects man very much and that it is the cause for many diseases (cancer, sterility etc.) Modern biologists try to produce gene mutations through X-rays treatment of the chromosomes. Nature did the very same since times immemorial. Biologists could produce loss-mutations, degenerations only, and could not effect a productive fundamental mutation. Sometimes nature produced also degenerative mutations, for instance the aberrant types of Pithecanthropus and Neandertal which died out. But contrary to man's artificial way nature produced many productive mutations, the inumerable modern races for instance.

Other fundamental elements for race mutation are water-contents in the atmosphere, atmospheric pressure, contents of mineral-salt in the air and in the earth, the kind of diet; for instance vegetables; agriculturists, who have meat occasionally only, or nomadic cattle breeders, who live on meat, with a small portion of grain and no vegetables at all. During my research work among the cattle breeders in Inner-Asia, among the Tibetans and Mongols, and among the agriculturists I noticed the effect of these elements in raceformation. It is a known fact, that all the nomadic cattle breeders have generally very few children. The common explanation of this fact is that the women ride too much on horse back. By this the procreative organs are effected so that the birth rate is low. I do not think that riding is the true cause of a lower birth rate. Women do not ride so much that the organs would be affected. I suppose the reason is this: the cattle breeders pitch their camps always near running water to have the water-supply nearby. The camp ground is therefore mostly under strong radiation from watercurrent beneath and the people sleep on the ground. This radioactive influence is the cause for the lower birth rate of the nomadic herdsmen. It happened that one part of the tribe settled down and started agriculture. They now live in houses, sleep on elevated bedplaces, and do not suffer from radiation of earth rays to such an extent. The effect is that their birth rate is higher than that of their nomadic tribesmen. Their vegetarian diet and other way of life produces gradually a racial change. (For details cf. my book "The Nomads of Tibet", Vienna, 1949 p. 271f).

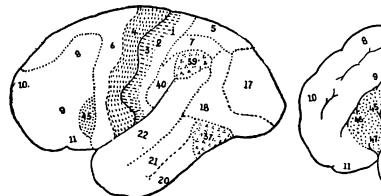
The above mentioned elements cause by their mutual co-operation the racial differenciations and form new races. Races are within the same species. The origin of species is quite another question which cannot be explained by these reasons. Even such a strong evolutionist as Weidenreich made the statement: "I believe, that all Primate forms recognized as hominids—no matter whether they lived in the past or live today—represent morphologically. an unity when compared with other Pirmate forms, and that they can be regarded as one species. I arrived at this conclusion by an eleborated anatomical analysis of all particular features, from Pithecanthropus robustus up to modern man of today". (Fr. Weidenreich, Concerning the origin of Homo sapiens, American Anthropologist, N.S. 49, 1947, p. 188 sq.). Le speak of subhuman races or of different human species is an impossible thing. The phenotypes of man apparent in various races are different but there is only one and the same genotype which is identical within all the fossil and modern races. Man is a special creation and the whole mankind derived from one pair only. We are forced to make these scientific conclusions by the biogenetic law which shows that man has a special chromosome-system which is fixed and unchangeable; we are forced by physical anthropology which proves that all the different phenotypes of man depend on one and the same genotype only. This conclusion can be supported by comparitive anatomy and morphology and by the fossil records of palaeobiology.

Man has a special position in many ways, even his classification in the animal kingdom is extraordinary. All the Primates, the Order to which man belongs, have different Families, Genus and Species; e.g., the Family Pongidae has the Genus gorilla, chimpanzee, and ourang-outang. The Genus chimpanzee has at least two species, the common chimpanzee (Pan satyrus) and the bald-headed chimpanzee (Pan valvus). Only man consists of one Family (Hominidae), one Genus (Homo) and one Species (Homo). To prove the origin of man from an animal it is necessary to prove the evolution of a complete new Family and Genus and not merely a new Species. The Family is built upon a constitutional family-ground-plan which forms the essential family-type. The plans of construction from Phylum to Family are typical and entirely fundamental and cannot be evolved by intrinsic or extrinisc factors of evolution only, by natural selection or retardation of the hormonefunctions. An essential entelechy is needed to form the Family-type. This essential entelchy is created and not developed as the law of entelechy proves. That again contradicts the origin of human species, genus and family from an animal. The origin of species cannot prove the origin of man who is not only a separate species but olso a separate genus and family of its own. (Fig. 14).

ILLUSTRATIONS



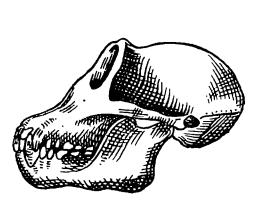
2. Fertilization and cell-division of the human ovum which is determined through its 24 pairs of human chromosomes in the very beginning as a human being.



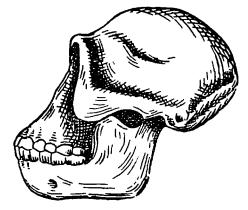


- 3. The brain of a chimpanzee and its cerebral localisations
- 8-11, centers of association
- 6. centers of pre-locomotion
- 4. principal center of locomotion
- 3. centers of feeling
- 5-7. centers of association
- 37, 39, 40, 45 centers connected with voice
- 17. center of sight .
 18. center of visual associations
- 20-22, centers of hearing and its associations

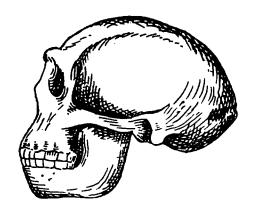
- 4. The human brain and its cerebral localisations
- 8-11, centers of association
- 6. centers of pre-locomotion
- 4. principal center of locomotion
- 1-3, center of feeling
- 5-7. centers of association
- 17. center of sight
- 18. center of visual associations
- 20-22, centers of hearing and its associations
- 37-47. centers of language

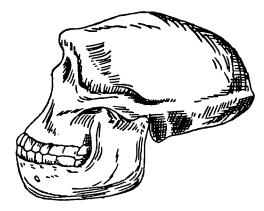


5. The skull of a recent chimpanzee.



6. The skull of an adult Australopithecus transvalensis (fossil).



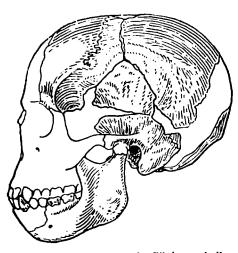


7. The skull of a Sinanthropus pekinensis (fossil).

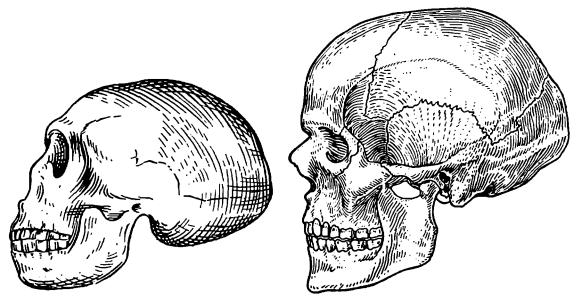
8. The skull of a Pithecanthropus robustus (fossil).



9. The skull of a Homo sapiens fossilis (Hotu, Iran).

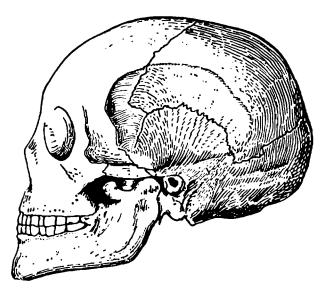


10. Reconstruction of the Piltdown skull (Homo sapiens fossilis).



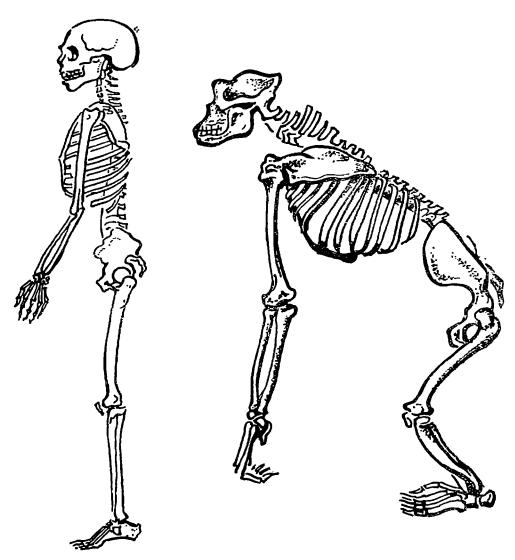
11. The skull of a Homo neanderthalensis fossilis.

12. The skull of a Cro-Magnon male (Homo sapiens fossilis).



13. The skull of a modern man (Homo sapiens recens).

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14. The natural posture of man and gorilla on earth; the architectonic plan of the human skeleton follows the vertical line of the erect posture and all the hones from top to toe are build according this architectonic law. The apes are not adapted for walking, but have very long arms and four hands (quadrumana) suitable for brachiation in trees.

A NOTE ON KARNABHĀRA

By

G. C. JHALA

Although the shortest among the one-Act plays attributed to Bhāsa, Karnabhāra is artistically, perhaps, the best. The construction of its plot is simple and straight, without being weighted down by undramatic descriptions or mere poetic flights of imagination. Indeed, there is very little of action The play is a psychological exercise laying bare the currents and cross-currents that storm the mind of Karna at a critical moment of his career. A sworn enemy and jealous rival of Arjuna, Karna has just been appointed Commander-in-Chief of the Kaurava army. He is introduced on the stage as a brave and accomplished warrior impatient to meet his chosen foe and kill him—a dream which he has been looking forward to throughout his life. Eagerly and firmly, he commands his charioteer Salva to "drive the chariot to where that Arjuna is." The supreme moment of victory over Arjuna is at hand. But at this very time when he is about to march against his enemy, his mind is overcast with ominous memorics of past actions—a promise which he had given to Kuntī and a mortal curse which he had invited upon himself and which was now coming home to roost. The heroic heart struggles against the choking weight of these disheartening reminiscences and evil forebodings. With dour resignation, Karna asserts himself and with self-conscious firmness directs Salya again to "drive the chariot to where that Arjuna is." The moment they 'get' into the chariot, however, Indra disguised as a Brahmin arrives and asks for alms. Karna takes on the characteristic hue of the hero of a Shakespearcan Tragedy when he promises the Kavaca and Kundalas to the Brahmin. Salya warns him against divesting himself mortally of his natural protection. But Karna the Dana-Vira is even greater than Karna the Yuddha-Vīra that he has been shown to be upto this stage in the drama. ordinary nature of the demand made by the Brahmin is fully realized by Karna who even suspects that, perhaps, it was all the mischief of the deceitful Krsna.² And yet, fully aware of the consequences of his action, Karna proves true to his natural generosity and parts with the Kavaca and Kundalas—virtually his life—by offering them to the Brahmin, as he is on the way to the battlefield. His lofty moral stature is underlined by his refusal to accept the Sakti from Indra by way of a return obligation. As he and Salya climb into the chariot, the sound of a conch is heard—the warrior in Karna is provoked; and he,

¹ कर्ण: -- शल्यराज, यत्रासावर्जुनस्तत्रैव चोद्यतां मम रथ:।

² कर्णः—(आत्मगतम्) एष एवास्य कामः। कि नु खल्वनेककपटवृद्धेः कृष्णस्योपायः।

a warrior who has lost the battle before it began, is eager to march and orders, for the third and last time, that Salya should "drive the chariot to where that Arjuna is."—Karṇa's character is enveloped in a halo of tragic grandeur as he still insists upon his march against Arjuna which, as he well understands, is foredoomed to failure. The play is constructed with chiselled neatness and gracefulness and is a complete literary piece by itself.

Let us now consider one or two points of detail. As Karna orders Salya for the first time (after vs. 5) to "drive the chariot to where that Arjuna is," Salya replies, "well." This is followed by the stage-direction Codayati (he drives the chariot) which is utterly unwarranted. Karna and Salya have yet to get into the chariot and this they do after some time for, after vs. 14, Karna tells Salya that they should get into the chariot and the stage-direction following immediately after Salya's reply states that they climb into the chariot.8 This stage-direction, too, has to be cautiously interpreted because once again, after the Brahmin episode, Karņa proposes that they should climb into the chariot, Salya agrees and the same stage-direction follows.4 Therefore, the proper interpretation of these stage-directions should be as follows: when, at the beginning of the play, Karna and Salya appear on the stage, they are just coming out of the former's camp and are walking on foot towards the chariot. Karna's direction to Salya at this stage to "drive the chariot to where that Arjuna is" can only be a general hint which Salya had to follow after they got into the chariot. This being the case, the stage-direction Codayati is misplaced because the two have not yet climbed into the chariot and therefore there is no possibility of Salya driving the chariot yet. The second stage is reached after the narration of the curse and the sight of ominous signs. Karna tells Salya that they should now get into the chariot. The stage-direction "Ubhau ratharohanam natayatah''must mean that they are about to climb into the chariot; Rathārohaņa must mean Rathārohaņa-pravṛtti. Before, however, they have got into the chariot, the Brahmin arrives and Karna deals with him, all the while standing near the chariot. The third and last stage is reached when Karna after having dismissed the Devadūta turns to Salva and proposes that they should get into the chariot. The stage-direction here must mean that they have finally climbed into the chariot and are ready to march—"to where that Arjuna is" as Karna once again commands. By a brilliant stroke of dramatic imagination, the author of the Karnabhāra has synchronized these three stages of progressive action of Karna with his three utterances of the command to

कर्णः - शत्यराज, यावद्रथमारोहावः।
 शत्यः - वाढम्।
 (उभौ रथारोहणं नाटयतः।)
 कर्णः - शत्यराज, यावद्रथमारोहावः।
 शत्यः - वाढम्।
 (रथारोहणं नाटयतः।)

Salya to "drive the chariot to where that Arjuna is" and made them the visible symbols of the stages of his mental struggle which results in a progressively firm determination to march against the enemy.

What does the title 'Karnabhāra' signify? This question has engaged the attention of scholars who have offered various explanations. The suggestion of T. Ganapati Sāstri⁵ as well as Woolner and Sarup⁶ that the title means "responsibility of Karna" as a commander of the Kaurava army is scarcely satisfactory because this interpretation would require the hypothecation of at least one succeeding Act to the present play in order to make the title significant. It has, however, been explained above how the play is a self-sufficient literary piece raising no doubt whatever about its being fragmentary. Another serious objection to this view is that in the play Karna's personal jealousy and hostility to his sworn enemy Arjuna are the mainspring of his action as the expression "Asau Arjunah" shows; the fact of his generalship is only an inevitable accident in the situation and, therefore, of not more than secondary importance.

Dr. Pusalkar considers the play "to be complete in itself" and interprets the title as "the burden of the ears." He clarifies his view in the following words: " कर्णयो: भारभृतानि कुण्डलानि (Sic. The plu. should be substituted by the dual) दत्त्वा कर्णेनापूर्वी दानश्रुरता प्रकटीकृता। तामधिकृत्य कृतं नाटकम्। During the interval of time that clapsed between the verbal gift of the Kundalas and their actual delivery, those Kundalas were felt as if a burden (bhāra) to his ears (Karna)." Obviously, this is not an adequate interpretation of the title, for it does not mention the Kavaca—as important as, if not more than, the Kundalas for Karna's safety-at all. Vs. 21 would show that Karna attached more importance to his Kavaca than Kundalas. As for the colophon 'Kavacanka Nataka' found in a Ms. of the play, it is apparently as inadequate as the present title as understood by Pusalkar, because both of them represent efforts at explanation based on a partial view of the plot. The remark that "during the interval of time that clapsed between the verbal gift of the Kundalas and their actual delivery, those Kundalas were felt as if a burden (bhāra) to his ears (Karna)" is gratuitous, though flattering to Karna made famous by the epic for his extraordinarily generous nature. In the play, however, as soon as the Brahmin excitedly says "Dedu, Dedu" (Give, yes, give) in reply to Karna's offer of his Kavaca and Kundalas, the latter indulges in second thoughts and wonders if this was not a piece of fraud practised against him by that archconspirator Krsna to deprive him of his God-given protection. There is almost a streak of repentance at what he has promised; but immediately he pulls himself up and says to himself that he knows where the path of duty lay.

⁵ TSS No. 22 Preface.

⁶ Thirteen Trivandrum plays, Vol. II. p. 32.

⁷ Bhāsa-A Study, p. 188.

It is only after passing through this mental calculation that he openly says to the Brahmin "Well, you may take them." The evidence of the text would thus go against Pusalker's interpretation of the word Bhara in the title. Lastly, this interpretation of the title overlooks the fact that neither the generous vein of Karna nor his gift of Kavaca and Kundalas is the predominant note or episode of the play. The episode of the gift comes as a climax in the play whose first half deals with the character of Karna but not with his generosity. As has been shown earlier in this article, the emphasis in the latter half of the play shifts from the earlier Yuddha-Vīra Karņa to the Dāna-vīra Karna, the gift-episode coming like the proverbial last straw that would have broken the back of any other heroic heart which has had to struggle against a host of evil premonitions and disheartening reminiscenes as Karna's had. As far as possible, the title of the play should be interpreted so as to cover the entire plot. Pusalkar's interpretation fails to do so.

From this point of view, Dr. G. K. Bhat's interpretation is more satisfactory than the two which we have considered. He asserts, the "Bhāra" in the title means "burden; not the physical, but the psychological burden", His thesis, however, that "Bhāsa realized that the central trait of Karna's character was his flair for generosity, which was bound to bring his downfall some day"10 is open to the same charge of mis-emphasis as Pusalkar's explanation discussed above. The Tragic excessiveness of Karna's generosity is exploited by the dramatist only as a means and not an end; the gift-episode comes as the last and of course the most serious obstacle to Karna's determination to march against the enemy. In spite of this mounting series of unnerving experiences, Karna does not hesitate or falter: rather his resoluteness gains a keener edge and, even after he has given away his God-given armour, he only thinks of driving the chariot "to where that Arjuna is."

It would appear, therefore, that the title of the play which obviously has been employed significantly must have some connection with Karna's march. Even while it admits of the possibility of subsidiary shades of meaning like the one proposed by Dr. Bhat, the title Karnabhāra must mean 'Karna's March', if it is to be adequate and pertinent to the subject-matter of the play. interpretation requiring Bhāra to be understood in the strange and unusual sense of marching is supported by evidence from an unsuspected source. In the first Act of Pañcarātra, another of the plays attributed to Bhāsa, after Duryodhana has granted Drona's request on behalf of the Pāndavas, Bhīsma tells Duryodhana that he would like to capture the cattle of Virāţa with whom he had some secret enmity. Duryodhana accedes to the proposal, whereupon

⁸ कर्ण:-(आत्मगतम्) एप एवास्य काम:। किं न खल्वनेककपटवृद्धे:कृष्णस्योपाय:। सो s पि भवतु । घिगयुक्तमनुशोचितुम् । नास्ति संशय: । (प्रकाशम्) गृह्यताम् ।

9 The Problem of Karnabhara in JUB (Sept. 1947) Vol. XVI (New Series) Part 2, p. 71.
10 Ibid p. 70.

Droṇa calls upon his servants to fetch his chariot, Sakuni orders his elephant to be brought and—कर्ण:—भाराय भृत्रमुद्यतेरिह ह्येयुंक्तो रय: स्याप्यताम्। 11 (Karṇa says, his "chariot should be brought here, yoked with horses which are ever ready for carrying (me) i. e. marching.) The juxta-position of the words कर्ण: and भारायम् is significant (the words could have been put into the mouth of Droṇa, say) and, apparently, is not accidental. It would imply that the author of Paūcarātra was aware of the existence of Karṇabhāra. More probably, he was himself responsible for the composition of Karṇabhāra with its intriguing title which he slyly tries in this speech of Karṇa to clarify. In Karṇabhāra exactly as in Paūcarātra, Karṇa is about to march in a chariot against an enemy. In Paūcarātra he calls for the chariot; in Karṇabhāra he approaches it himself. Thus, this speech of Karṇa in Paūcarātra would confirm the view that the title 'Karṇa-bhāra' should mean 'Karṇa's March'. Well might it have this meaning; for, what a march it was!

¹¹ जु: द्रोण:—तस्मान्मे रथमानयन्तु पुरुषा:, शकुनि:—हस्ती ममानीयतां, कर्ण:—भारार्थं भृशमुद्यतैरिह हयैर्युक्तो रथ: स्थाप्यताम् । —Pañca I 55 ab,

श्री योगयाज्ञवल्क्यः

Abbreviations

अत्रोपयुक्तानां संज्ञानां विवृत्तिः—

न१, २, ३, ४, ५, ६, ७, ८==(देव—)नागरी-हस्तलेखाः १, २, ३, ४, ५, ६, ७, ८ । ग१, २, ३, ४, ५, ६,=ग्रन्थलिप्यां लिखिताः हस्तलेखाः १, २, ३, ४, ५, ६ ।

त=तेलुगुलिप्यां लिखितो हस्तलेखः ।

क==कन्नडलिप्यां लिखितो हस्तलेखः ।

त्रि.पू. ≕त्रिवेन्द्रम् नगरे मुद्रितं पूस्तकम् ।

मु.पु. = मुम्बापुर्या मुद्रितं पुस्तकम् ।

न.पु. ==नडीआदनगर्यां मुद्रितं पुस्तकम् ।

क.पु. ≕कलिकातायां मुद्रितं पुस्तकम्।

मु.पु. = मुरादाबादनगरे मुद्रितं पुस्तकम्।

imes imes imes imes imes imes =एतच्चरणं न विद्यते ।

 $\times \times \times \times \times \times \times =$ एषा पंक्तिनं विद्यते ।

----= चयापूर्वं ज्ञेयम्।

श्री योगयाज्ञवल्क्यः॥

श्री प्रह्लाद चन्द्रशेखर दिवानजी एम. ए., एल एल. एम इत्यनेन संशोध्य संपादितः॥

प्रथमोऽघ्याय : ॥

याज्ञवल्क्यं मुनिश्रेष्ठं सर्वज्ञं ज्ञाननिर्मलम् । सर्वज्ञास्त्रार्थतत्त्वज्ञं सदा ध्यानपरायणम् ॥१॥

वेदवेदांगतत्त्वज्ञं योगेषु परिनिष्ठितम् । जितेन्द्रियं जितऋोघं जिताहारं जितामयम् ॥२॥

तपस्विनं जितामित्रं ब्रह्मण्यं ब्राह्मणप्रियम् । तपोवनगतं सौम्यं संध्योपासनतत्परम् ॥३॥

ब्रह्मविद्भिर्महाभागैर्बाह्मणैश्च समावृतम् । सर्वभूतसमं शान्तं सत्यसन्धं गतक्लमम् ॥४॥

गुणज्ञं सर्वभूतेषु परार्थेकप्रयोजनम् । ब्रुवन्तं परमात्मानमृषीणामुप्रतेजसाम् ॥५॥

१/१५/१-२-ग १, ५, ६, त, क लेखेष्विमे क्लोका न दृश्यन्ते । १/१-न १, २, ५, ७—याज्ञवल्क्यमृषिश्रेष्ठं । १/२-ग२—कृष्णं हिरहरं प्रभुम् ; न ८- सर्ववेदिवदं शुभम् । १/४-न ६- सदाध्यापनतत्परम् ; ग२-सदाध्ययनतत्परम् ; ग४-वेदेषु परिनिष्ठितम् ।

२/२-ग२-योगे च—; २/४-न३—जिताद्वारं (?) जिताश्रमम् ; न४,८,ग४-जिताहारं जित-श्रमम् ; ग२-जिताहारं जिताश्रयम् ।

३/१-ग२-जितशास्त्रं जितामित्रं ; ग४-तपोवनगतं शान्तं । ३/२-न३-ब्रह्मस्यं ब्रह्मणप्रियं; ग४---सद्भयो-(सन्ध्यो-)पासनतत्परम् । ३/३-न६-तपोवनरतं---; न८-तपोवनगतं शान्तं ; न३-तपोवनंतरं सौम्यं ; ग४----ब्रह्मविद्भिर्महाभागं ।

४/१—ग४—-ब्रह्मविद्भिर्महाभागं; न६— $\times \times \times \times$; ४/३—न३—सर्वभूतशमं (?—समं) शान्तं; ग२—-सर्वभूतिहतं शान्तं । ४/४—न१, २, ४, ५, ७, ग३—-त्रिसन्ध्यं गतकल्मषम् ; न३-ब्रह्म-भूतमकल्मषम् ; ग२—-मन्त्रसिद्धं गतकल्मम् ।

५/३—ग२—-ब्रुवन्तं परमं योगं ; न६—(ब्रु-) वत परमात्माने(?); न७—ध्यायंतत्परमात्मानं (?स्तत्परमात्मानं) ।

प्रथमोऽध्याय :

तमेवं गुणसंपन्नं नारीणामुत्तमा वधूः । मैत्रेयी च महाभागा गार्गी च ब्रह्मविद्वरा ॥६॥

सभामध्यगता चेयमृषीणामुग्रतेजसाम् । प्रणम्य दण्डवद्भूमो गाग्येतद्वाक्यमन्नवीत् ॥७॥

*गार्ग्वाच---

भगवन्सर्वशास्त्रज्ञ सर्वभूतहिते रत । योगतत्त्वं मम ब्रूहि साङ्गोपाङ्गं विधानतः ॥८॥

एवं पृष्टः स भगवान्सभामध्ये स्त्रिया तया । ऋषीनालोक्य नेत्राभ्यां वाक्यमेतदभाषत ॥९॥

†याज्ञवल्क्य उवाच---

उत्तिष्ठोत्तिष्ठ भद्रं ते गागि ब्रह्मविदां वरे । वक्ष्यामि योगसर्वस्वं ब्रह्मणा कीर्तितं पुरा ॥१०॥

समाहितमना गागि श्रृणु त्वं गदतो मम।

इत्युत्नवा ब्रह्मविच्छेष्ठो याज्ञवल्वयस्तपोनिधिः ॥११॥

६/१—न३—तमेव गुणसम्पन्नं ; न४—तमेवं गुणसंपूर्णं ; न७—तमेवं गुणसंपन्ना । ६/३—ग२—मेधावती महाभागा । ६/४—ग२—गार्गी च ब्रह्मविद्वरम् ; न३—गार्गी तु ब्रह्मविद्वरा ; न४—गार्गी ज्ञानपरायणा ।

७/१-न१, २, ५, ७-सभामध्यगता त्वेवं ; न८-सभामध्यं गते एतं (?); ग२—सभामध्यगतं चैनं; न३-सभामध्यगतं प्राप्ता ; न६-सभामध्यगता सा ते ; ग४-सभामध्यगतात्सेनं (?——गता त्वेनं) । ७/४-ग२, ३, न५, ६-गार्गी तद्वाक्यमब्रवीत् ।

*८–न७ \times \times \times \times \times । $\mathcal{L}/3$ –न.४—योगं त्वं च मम ब्रूहि; ग३—योगतत्त्वं मया ब्रूहि । $\mathcal{L}/4$ –न३, ७, ८, ग३—साङ्गोपांगविधानतः ।

९/२-न१, २, ५, ७ — स्त्रया तदा ; ग२— प्रियां ततः ; न४, ६ — स्त्रियानया ; ग३ — स्त्रिया अपि (?)। ९/३-न७, ग३— ऋषिरालोक्य । ९/४-ग४-वाक्यमेतदुवाच ताम् ; न४-वाक्यमेतदथाब्रवीत् । \dagger न३-श्रीभगवानु-वाच ; न६-भगवानुवाच । न७-भगवान् ।

१०/२—न३ — वरा । १०/३—मम योगं सर्ववरं (?) । १०/४—ग२, ४, न८—ब्रह्मणा कथितं पूरा ।

११/२—न१, ५, ७, ८, ग४—-श्रृणु त्वं वदतो मम । **११/३**—न५—इत्युक्तो——; ग३— इत्युक्तौ (?) \times \times ; **११/४**—न२, ५, ७—-याज्ञवल्क्यस्तपोघनः ।

नारायणं जगन्नायं सर्वभूतहृदि स्थितम् । वासुदेवं जगद्योनि योगिष्ययं निरञ्जनम् ॥१२॥

आनन्दममृतं नित्यं परमात्मानमीश्वरम् । घ्यायन्हृदि हृपीकेशं मनसा मुसमाहितः ॥१३॥

नेत्राभ्यां तां समालोक्य कृपया वाक्यमश्रवीत् ।

एह्येहि गार्गि सर्वज्ञे सर्वशास्त्रविशारदे ॥१४॥

योगं वक्ष्यामि विधिवद्धात्रोक्तं परमेष्ठिना । मृनयः श्रूयतामत्र गार्ग्या सह समाहिताः ॥१५॥

पद्मासने समासीनं चतुराननमव्ययम् । चराचराणां स्रष्टारं ब्रह्माणं परमेष्ठिनम् ॥१६॥

कदाचित्तत्र गत्वाहं स्तुत्वा स्तोत्रैः प्रणम्य च । पृष्टवानिममेवार्थं यन्मां त्वं परिपृच्छसि ॥१७॥

देवदेव जगन्नाथ चतुर्मुख पितामह । येनाहं यामि निर्वाणं कर्मणा मोक्षमव्ययम् ॥१८॥

१२/१–न१, २, ५, ७, ग३—नारायणं जगद्योनि ; ग२–नारायणं जगद्व्याप्तं । १२/२– न६–सर्वभूतहिते रतम्; न८–जगतः कारणं परम् । १२/३– न१, २, ४, ५, ७, ग१, ३–वासुदेवं जगन्नाथं । १२/४–न४–योगिष्येयं निरन्तरम् ; ग४—जगतः कारणं परम् ।

१३/१—न८ — सत्यं । **१३**/२—न१, २, ४, ५, ६, ग२, ४—-परमात्मान-मन्ययम् ।

१४/३-न८-एह्येहि गागि सर्वत्र (?सर्वज्ञे) ।

१५/१—ग४, न८—योगं वक्ष्यामि तत्त्वेन । १५/२—न१—यथोक्तं परमेष्टिना; ग२—संप्रोक्तं——; न३, ६—यथोक्तं ब्रह्मणा पुरा; न४, ग३—प्रोक्तं मे परमेष्टिना; ग४, न८—निर्दिष्टं—। १५/३—४—"क" लेखे प्रथमा पंक्तिः । १५/३—न३, श्रूयतां सर्वे । १५/४—ग३—गार्ग्या सह समाश्रिताः।

१६/१–२–ग५, ६, त'' लेखेषु प्रथमा पंक्तिः। १६/१–ग४—पद्मासीनं मुखासीनं ; न७–पद्मासीनं सुखासीनं; न२—पद्मासीनं समासीनं, न३–पद्मासीनसमासीनं। १६/२–न८–चतुरासन–(?चतुरानन–)मव्ययम् । १६/३–ग४, न८–चराचराणां भूतानां। १६/४–न३–ब्रह्मणं पर–मेष्ठिनम् ; ग४, न८–स्रष्टारं ——.

१७/२—न२—स्तुतिः स्तोत्रैः प्रणम्य च ; ग५—कृत्वा स्तोत्रं —— । १७/३— पृष्ट-वानमुमेवार्थं ; न५, ग५, ६, त—पृष्टवानिदमेवार्थं ; न८—पृष्टवान्धौतमेवार्थं ; क—पृष्टवानिदमेवार्थं ; क—पृष्टवानिदमेवार्थं । १७/४—ग५, ६, त—यद्य्यं परिपृच्छय ; क—यद्ययं (?यद्य्यं) परिपृच्छय ।

१८/१-ग६-देवदेव महादेव । १८/३-ग२-येनाहं नाम(?) —— । १८/४-न५, ग२, ५—कर्मणा मोक्षमक्षयम् ; न३--कर्मसाक्षिकमञ्ययम् ; ग६-तज्ज्ञानं मोक्षमञ्ययम् ; न८-कर्मणो मोक्षमञ्ययम् ।

ज्ञानं च परमं गुद्धां यथावद्वृहि मे प्रभो । मर्यवमुक्तो दुहिणः स्वयंभूळींकनायकः ॥१९॥

मामालोक्य प्रसन्नात्मा ज्ञानकर्माण्यभाषत ।

ज्ञानस्य द्विविधौ भेयौ पन्थानौ वेदचोदितौ ॥२०॥

अनुष्ठितौ तौ विद्विद्भः प्रवर्तकनिवर्तकौ । वर्णाश्रमोक्तं यत्कर्म कामसंकल्पपूर्वकम् ॥२१॥

प्रवर्तकं भवेदेतत्पुनरावृत्तिहेतुकम् । कर्तव्यमिति विध्युक्तं कर्म कामविवर्णितम् ॥२२॥

येन यत्क्रियते सम्यक् ज्ञानयुक्तं निवर्तकम् । निवर्तकं हि पुरुषं निवर्तयति जन्मतः ॥२३॥

प्रवर्तकं हि सर्वत्र पुनरावृत्तिहेतुकम् । वर्णाश्रमोक्तं कर्मेव विध्यक्तं कामवर्जितम् ॥२४॥

१९/१-२-"ग१," लेखे प्रथमा पंक्तिः । १९/१-ग२—स्थानं च ———; न४-ज्ञानानां ——— । १९/३-ग४, ५, ६, क—मयैवमुक्तो दाक्षिण्यात् ; ग२—मयैवमुक्तो हृषितः । १९/४-न१, ८-स्वयंभूर्लोकभावनः ।

२०/१-न१, २, ६, ७—समालोक्य—। २०/२-न१, २, ५, ७—कर्मज्ञानमभाषत ; ग१-ज्ञानं सर्वमभाषत ; ग२—ज्ञानमर्म प्रभाषत ; न४-त्यक्तु(?)कर्माण्यभाषत ; ग३—त्यक्त्वा कर्माण्यभाषत । २०/३-४-न४, ग३- \times \times \times । २०/३-न१, २, ७, ग१, २—जातस्य ———। २०/४-ग६, त-——भ्रुतिचोदितौ ; ग२-——श्रुतिवेदितौ ; न३ वेदनोदितौ ।

२१/१—न५, ७, ग५, ६ ——— च विद्विद्भिः ; ग२ — —— हि— ; ग३——— तु——। २१/३—ग५, ६, क-वर्णाश्रमाणां यत्कर्म । २१/४–ग२–काम्य ———— ; ग६– कार–(?काम–) ————।

२२/३-४-न१, २ $-\times \times \times \times \times \times \times \times$

२३–२७–"न१, २" लेखयोरेतेषु क्लोकेष्वतीव क्रमविपर्ययः सांकर्यं च दृश्येते । २३/१– न३, ४, ५, ६, ७, ८, ग३ ————— नित्यं ; ग५, ६, क— ———— कर्मः ग२– येन यत्क्षीयते सम्यक् । २३/४–न७—निवर्तयति जन्मनाः ग१, २, ४, ५, ६, त———— जन्मनः ।

२४/१-ग२, ३, ४, न५, ६, ८, क-प्रवर्तकं तु सर्वत्र ; न४-प्रवर्तकं हि सर्वेज्ञ (?); ग६-प्रवर्तयित सर्वत्र । २४/३--न६-वर्णाश्रमोक्तं सर्वत्र ; ग५, न८-वर्णाश्रमाणां कर्मेव ; क-वर्णा-श्रमाणां कर्मेवं । २४/४-ग२- ----- काम्यवर्जितम् ; ग४, ५--विधिवत्कामपूर्वकम् ; ग६-विध्युक्तं कामनाजितम् ।

विधिवत्कुर्वतस्तस्य मुक्तिर्गागि करे स्थिता । वर्णाश्रमोक्तं कर्मेव विधिवत्कामपूर्वकम् ॥२५॥

येन यत्त्रियते तस्य गर्भवासः करे स्थितः । संसारभीरुभिस्तस्माद्विध्युवतं कामवर्जितम् ॥२६॥ -

विधिवत्कर्म कर्तव्यं ज्ञानेन सह सर्वदा । जातारच त्रिषु लोकेषु आनुलोम्येन मानवाः ॥२७॥

ते देवानामृषीणां च पितृणामृणिनस्तथा । ऋषिभ्यो ब्रह्मचर्येण पितृभ्यश्च सुर्तेस्तथा ॥२८॥

कुर्याद्यज्ञेन देवेभ्यः स्वाश्रमं धर्ममाचरन् । चत्वारो ब्राह्मणस्योक्ता आश्रमाः श्रुतिचोदिताः ॥२९॥

. क्षत्रियस्य त्रयः प्रोक्ता द्वावेकौ वैश्यशूद्रयोः । अधीत्य वेदं वेदार्थं साङ्कोपांगं विधानतः ॥३०॥

२५/१–२–ग१, ४, ५, न४, त, क $\times\times\times\times\times\times\times\times$ । २५/१–ग२–विधिवृत्तवध-स्तस्य(?); न३–विधिवत्कर्मतस्तस्य; ग३–विधिवत्कर्मभिस्तस्य। २५/२–न३, ग२–मुक्तिमागंः करे स्थितः; ग३—मुक्तिं गागि करोति सा; ग६–मुने मुक्तिः करे स्थिता। २५/३–४–ग४– × × × × × × × । २५/३–ग५, ६, त–वर्णाश्रमोक्तं यत्कर्म। २५/४–न४, ग५, क $\times\times\times\times$ ×

२७/२—न४— \times \times ने सह सर्वदा ; ग३—ज्ञानिनः सह — ; त—सह ज्ञानेन सर्वशः । २७/३—न१, ४, ५, ७, ८, ग४, ५, ६, क — — वर्णेषु ; ग१—तत्र च त्रिषु वर्णेषु ; ग२—जातस्य — ; न३ ग३ — जातश्च — ; न६-धाराश्च(?) — । २७/४—न१, २, ३—त्वानुलोम्येन मानवाः ; न८—त्वानु मानुषाः ; ग१—अनुलोमेषु — ; ग२, ५, ६, न७—चानुलोम्येन — ; न ६—आनुलोम्येन मानवैः ; ग४-त्वानुलोम्येन मानुषाः ।

२८/१-न८-तथैवाहमृषीणां च(?)। २८/२-न२-पितृणामृणिनस्तदा ; त—पितृणामनृणाः स्मृताः ; न३-पितृणां च(?) ऋणिनस्तथा ; ग४ न८, क—पितृणामृणिनः सदा ; ग६-पितृणा-मर्यमा स्थितः । २८/३-४—ग४- \times \times \times \times \times \times \times । २८/४-ग५, ६, क—पितृभ्यः स्वधया तथा ; न८-पितृभ्यः स्वसुतैस्तथा ; ग१-पितृभ्यः पुत्रयोगतः ।

२९/१-न१, २, ४, ७, ग३—मुच्येद्यज्ञेन ———; ग४-कुर्युर्यज्ञेन ——— । २९/२-न१, २, ३, ४, ५, ६, ७, ग२, ३, ४, ५, ६—— धर्ममाचरेत् । २९/४-ग२, ४, ५, ६, न८, क—स्वाश्रमाः श्रुतिचोदिताः ।

३०/२—ग४, ५, ६, न७, ८, क—द्वावेको —— । ३०/३—ग२, ३, न६—अधीत्य वेदं वेदांगं । ३०/४—न३, ४, ७, ८, क—सांगोपांगविघानतः ; न६—सांगं सार्थं——।

स्नायाद्विध्युक्तमार्गेण ब्रह्मचर्यव्रतं चरन् । संस्कृतायां सवर्णायां पुत्रमुत्पादयेक्ततः ॥३१॥

यजेदग्नौ तु विधिवत्भार्यया सह वा विना । कान्तारे विजने देशे फलमूलोदकान्विते ॥३२॥

तपदचरन्वसेन्नित्यं साग्निहोत्रः समाहितः । आत्मन्यग्नीन्समारोप्य संन्यसेद्विधिना ततः ॥३३॥

नन्यासाश्रमसंयुक्तो नित्यं कर्म समाचरन् । यावत्क्षेत्री भवेत्तावद्यजेदात्मानमात्मनि ॥३४॥

क्षत्रियश्च चरेदेवमासंन्यासाश्रमात्सदा । वानप्रस्थाश्रमादेवं चरेद्वैश्यः समाहितः ॥३५॥

शूद्रः शुश्रूषया नित्यं गृहस्थाश्रममाचरेत् । शूद्रस्य ब्रह्मचर्यं च मुनिभिः कैश्चिदिष्यते ॥३६॥

३१/१-ग५-स्नात्वा विध्युक्तमार्गेण । ३१/२-न१, ३, ४, ग३--ब्रह्मचर्यं वृतं चरेत् । ३१/३-त, क ------ स्ववर्णायां; न६--स्वीकृतायां ---- । ३१/३-४-न३--- $\times \times \times \times \times \times$

३२/१-ग४, न६—यजेदग्नी तु विधिना ; ग५-क-यजेदसी च- ; न३—यजेदाग्नेय- ; ग६-यजेदाग्नि च- ; न८-यजन्नाग्नी तु-। ३२/२-न१, ४, ७-भायंया सह वासितः ; न२, ५---- वासिनः ; न६, ८, ग४, ६, क---- वासिनः ; ग२-भायंया सहसा विना । ३२/१-२-ग३- × × × × × × × × × । ३२/३-न३-कान्तारे निर्जने देशे । ३२/३-४-ग३-× × × × × × × × ।

३३/१-ग१-तपश्चरेत्सपत्नीकः ; न६--तपश्चरिक्तराहारः । ३३/२-न४-अग्निहोत्रसम-ित्तः ; ग१-तां विना वा सहाग्निभः ; न६-सर्वधर्मसमन्वितः ; न३-साग्निहोत्रसमन्वितः । ३३/१-२-ग३ \times \times \times \times । ३३/३-न३, ग५-स्वात्मन्यग्नीन्समारोप्य । ३३/४-त-अभ्यसेिंढिधना ततः ३३/३-४-ग३- \times \times \times \times \times \times \times \times

३४/२–न३, ८, ग५, ६, क—ित्यं कर्म समाचरेत् ; न२ — समाचरे । ३४/१–२ ग३ $\times \times \times \times \times \times \times$ । ३४/३–ग१–यावत्क्षेत्रं भवेत्तावत् ; ग५, ६, त, क—यावत्क्षेमी — ; न४–यावत्क्षेत्रे — - ; ग३–यावत्क्षेत्रे) — - ; न६–यावत्क्षेत्र $\times \times \times$ । ३४/४– न१, २, ५, ७—यजेदात्मानमात्मना ।

३५/१—न३, ६, ग३——क्षत्रियस्तु चरेदेवं । ३५/२—ग१, २, ४, त—आसन्यासाश्रमात्तदा; न३, ६, ८—आसन्यासाश्रमं तथा; न४, ग३—आसन्यासाश्रमात्तथा; ग५, क—आसन्यासाश्रमं सदा; ग६—आसन्यासाश्रमं तदा । ३५/३—न३—वानप्रस्थाश्रमं नैवं ; ग३—वानप्रस्थाश्रमादेवं ; ग५, ६, न८, क—वानप्रस्थाश्रमात्पूर्व ; त—वानप्रस्थाश्रमात्पूर्व ।

योगयाज्ञवल्क्यः

ञानुलोम्यप्रसूतानां त्रयाणामाश्रमास्त्रयः । शूद्रवच्छूद्रजातानामाचारः कीर्तितो युर्घः ॥३७॥

चतुर्णामाश्रमस्थानामहत्यहनि नित्यशः । विध्युक्तं कर्मं कर्तत्र्यं कामसंकल्पवजितम् ॥३८॥

तस्मात्त्वमपि योगीन्द्र स्वाश्रमं धर्ममाचरन् । श्रद्धया विधिवत्सम्यक् ज्ञानकमं समाचर ॥३९॥

इति मे कर्मसर्वस्वं योगरूपं च तत्त्वतः । उपदिश्य ततो ब्रह्मा योगनिष्ठोऽभवत्स्वयम् ॥४०॥

श्रुत्वैतद्याज्ञवल्क्योक्तं वाक्यं गार्गी मुदान्विता । पुनः प्राह मुनिश्रेष्ठमृषिमध्ये वरानना ॥४१॥

*गार्ग्य्वाच--

ज्ञानेन सहयोगीन्द्र विध्युक्तं कमं कुर्वतः । त्वयोक्तं मुक्तिरस्तीति तयोर्जानं वद प्रभो ॥४२॥

४०/१–ग२–एवं मे———; ग४, न८—— इति मे योगसर्वस्वं । ४०/२–ग४, न८— कर्मयोगं च तत्त्वतः । ४०।३–न२– ———तदा—; ग५, क- ——तया—— । ४०/४ न३–योगयुक्तोऽभवत्स्वयम् ।

४१/१–ग२–श्रुत्वैवं—; न६–श्रुत्वैदं(?)–— । ४१/२–न७–गार्गी मुनिमुदान्विता । ४१/४–न६–ऋषिमघ्य वरांगना । *ग२, ३, त $-\times\times\times\times$; ग४–गार्गी ; ग५–गार्गिः ।

४२/३—न४—यत्त्वयोक्तं मुक्तिरिति । ४२/४—ग१, ३—-तस्माज्ज्ञानं वद प्रभो ; ग५, ६—-वद ज्ञानं मम प्रभो ; त—यदज्ञानं(?) मम प्रभो ; ग२—ततो ज्ञानं वद प्रभो ; न३, ६—-तयो— ज्ञानं वदस्य भो ; ग४—तथा ज्ञानं वद प्रभो ।

प्रथमोऽध्यायः

भार्यया त्वेवमुक्तस्तु याज्ञवत्क्यस्तपोनिघिः । तां समालोक्य कृपया ज्ञानरूपमभाषत ॥४३॥

***याज्ञवल्ब**य उवाच---

ज्ञानं योगात्मकं विद्धि योगश्चाष्टाङ्गसंयुतः । संयोगो योग उत्युक्तो जीवात्मपरमात्मनोः ॥४४॥

वक्ष्याम्यङ्गानि ते सम्यग्यथा पूर्व मया श्रुतम् । समाहितमना गागि ऋषिभिः सह संशृण् ॥४५॥

यमश्च नियमश्चेव आसनं च तर्थव च । प्राणायामस्तथा गागि प्रत्याहारश्च धारणा ॥४६॥

ध्यानं समाधिरेतानि योगाङ्गानि वरानने । यमश्च नियमश्चैव दशघा संप्रकीर्तितः ॥४७॥

आसनान्युत्तमान्यर्प्टा त्रयं तेपूत्तमोत्तमम् । प्राणायामस्त्रिघा प्रोक्तः प्रत्याहारश्च पंचघा ॥४८॥

४३/१-न१, २, ६, ७, ग१, २, ३, ४, ६, त—भार्ययाप्येवमुक्तस्तु; न३-भार्यया त्वेव-मुक्तो हि; ग५, क-भार्यया ह्येवमुक्तस्तु; न८-भार्यया चैवमुक्तस्तु। ४३/२-ग२-याज्ञवल्क्यो महामुनिः। ४३/३-न५-स तामालोक्य कृपया; क-त्वं समालोक्य विधिना(?)। ४३/४-ग१-ज्ञानजातमभाषत । *न१, ग१, २, ३, ४, त-भगवानुवाच; न३, ६,-श्रीभगवानुवाच; ग५, ६, न८- \times \times \times ।

४४/२-ग३, ४, ५--योगं चाष्टांगसंयुतम् ; क-योगं त्वष्टांगसंयुतम् ।

४५/३—ग४, न८–समाहितमना भूत्वा । ४५/४–त—मुनिभिः सहिता श्रृणु ; ग५, ६— मुनिभिः सह संश्रृणु ।

४६/२--न५-आसनानि----। ४६/३--न१, ५, ८, ग१, २, ४, ५, क-प्राणायामा-स्तथा गागि ; न४-प्राणायामस्तथा प्रोक्तः । ४६/४--ग५--प्रत्याहारस्तु धारणा ।

४७/३—ग५—िनयमश्च यमश्चैव । ४७/४—न६—दशधानुप्रकीर्तिताः ; ग४, ५—दशधानु-प्रकीर्तितः ; ग६—दशधा तु प्रकीर्तितौ ; न४—दशधा संप्रकीर्तितौ ; ग२, त—दशधा सुप्रकीर्तितः ; ग१—द्विधा संपरिकीर्तितौ ।

४८/२—ग१, ५, ६, न६-त्रयस्तेपूत्तमोत्तमाः ; न३, ४, ५, ७—त्रयमेतेपूत्तमोत्तमं ; ग४, न८, क-त्रयस्तेपूत्तमाः स्मृताः ; ग२-त्रीणि तेपूत्तमानि तु । ४८/३—ग१, २, ४, न५, ७-प्राणा-यामास्त्रिधा प्रोक्ताः ; ग३, ६—प्राणायामास्त्रयः प्रोक्ताः । ४८/४-न ४, ५, ६, ७, ८, ग३, ४, ५, ६, क—प्रत्याहारस्त् पंचधा ; ग१, २-प्रत्याहारस्त् त्र्वधः ।

वारणा पंचधा प्रोक्ता ध्यानं पोढा प्रकीर्तितम् । त्रयं तेषूत्तमं प्रोक्तं समाधिस्त्वेकरूपकः ॥४९॥ वहधा केचिदिच्छन्ति विस्तरेण पृथक् शुण् ।

अहिंसा सत्यमस्तेयं ब्रह्मचर्य दयार्जवम् ॥५०॥

क्षमावृतिर्मिताहारः शौचं त्वेते यमा दश । कर्मणा मनसा वाचा सर्वभृतेषु सर्वदा ॥५१॥

अक्लेशजननं प्रोक्तमहिंसात्वेन योगिभिः । विष्युक्तं चेदिंहसा स्यात्कलेशजन्मैव जन्तुषु ॥५२॥

वेदेनोक्तेऽपि हिसास्यादभिचारादि कर्म यत् । सत्यं भूतहितं प्रोक्तं न यथार्याभभाषणम् ॥५३॥

कर्मणा मनसा वाचा परद्रव्येषु निःस्पृहा । अस्तेयमिति सा प्रोक्ता ऋषिभिस्तत्त्वदर्शिभिः ॥५४॥

५१/२-न३, ग५, ६-शौचं चैते यमा दश ; क-शौचं चैते यमादयः न६, ८-शौचं चेति---। ५१/४-ग१--सर्वावस्यासु सर्वदा ।

४९/२-न४ ग३—ध्यानं च परिकीर्तितम् (न४-लेखकस्य टिप्पणी-ध्यानमपि पंचधेत्यर्थः ।) न५-ध्यानं पोढा च कोर्तितम् । ४९/३-ग१, ३, ४, ५, ६, न८, त, क-त्रयस्तेषूत्तमाः प्रोक्ताः ; गर-त्रीणि तेषत्तमानि स्युः ; न४-त्रीणि तेष्त्तमान्याहुः । ४९/४-ग३, ४, न६, ८, त, क-समाधिस्त्वेकरूपतः ; गर-समाधेस्त्वेकरूपता ।

५०/१-न४, ग३-मुनयः केविदिच्छन्ति ; ग४ न८-ब्रह्मा कैश्चिदुच्यन्ते (?)।

कर्मणा मनसा वाचा सर्वावस्थासु सर्वदा । सर्वत्र मैथुनत्यागो ब्रह्मचर्यं प्रचक्षते ॥५५॥

ब्रह्मचर्याश्रमस्थानां यतीनां नैष्टिकस्य च । ब्रह्मचर्यं तु तत्त्रोक्तं तथैवारण्यवासिनाम् ॥५६॥

ऋतावृतौ स्वदारेषु संगतिर्या विधानतः । ब्रह्मचर्यं तु तत्प्रोक्तं गृहस्थाश्रमवासिनाम् ॥५७॥

राज्ञश्चैव गृहस्थस्य ब्रह्मचर्य प्रकीर्तितम् । विशां वृत्तवतां चैव केचिदिच्छन्ति पण्डिताः ॥५८॥

शुश्रूषेव तु शूद्रस्य ब्रह्मचर्यं प्रकीर्तितम् । शुश्रूषा वा गुरोनित्यं ब्रह्मचर्यमुदाहृतम् ॥५९॥

गुरवः पंच सर्वेषां चतुर्णां श्रुतिचोदिताः । माता पिता तथाचार्यो मातुलः श्वश्रस्तथा ॥६०॥

५५/१–४–त, न३– $\times \times \times \times \times \times \times$ । ५५/२–३–ग३– $\times \times \times \times \times \times \times \times$ । ५५/४–ग४–ब्रह्मचर्यं प्रकीर्तितम् ।

५८/१–२–ग१, त $-\times\times\times\times\times\times\times\times$; ग६———गृहस्थानां ; ग५– राज्ञश्चैव गृहस्थानां ; त $-\times$ राज्ञश्चैव गृहस्थानां ; त $-\times$ राज्ञश्चैव गृहस्थस्य । ५८/२–ग५— ब्रह्मवर्षमुदाहृतम् । ५८/३–न१, २, ५, ६, ७——विशां वृत्तिमतां चैव ; ग१–राज्ञश्चैवं वृत्त-वतः; ग३—दिशां वृत्तवतां——-; त-राज्ञश्चैवं नोतिवतां । ५८/४–ग१–विशश्चेच्छन्ति पण्डिताः।

५९/१–न३, ५, ग४—-शुश्रूषैव च शूद्रस्य ; ग६–शुश्रूषा इति शूद्रस्य । ५९/१–२–न४, ग३– $\times\times\times\times\times\times\times$ । ५९/३–न१, ५–शुश्रूषावान्गुरोन्तियं ; न२, ७, ग६, त, क– शुश्रूषया गुरोन्तियं ; ग१–शुश्रूषा च——-; ५९/४–न१, त–ब्रह्मचयं प्रकीर्तितम् । ५९/३–४– ग४– \times \times \times \times \times \times \times \times \times

६०/२—न१—श्रुतिप्रेरिताः ; न३, ४—श्रुतिनोदिताः । ६०/४—त—मातुलः स्वगुरुस्तथा ; न६—मातुलश्वसुरौ तथा । ६०।३—४—ग३— \times \times \times \times \times \times \times ।

एषु मुख्यास्त्रयः प्रोक्ता आचार्यः पितरौ तथा । एषु मुख्यतमस्त्वेक आचार्यः परमार्थवित् ॥६१॥

तमेवं ब्रह्मविच्छ्रेष्ठं नित्यकर्मपरायणम् । शुश्रूषयाचेयेन्नित्यं तुष्टोऽभूद्येन वा गुरुः ॥६२॥

दया च सर्वभूतेषु सर्वत्रानुग्रहः स्मृतः । विहितेषु तदन्येषु मनोवाक्कायकर्मणाम् ॥६३॥

प्रवृत्तौ वा निवृत्तौ वा एकरूपत्वमार्जवम् । प्रियाप्रियेषु सर्वेषु समत्वं यच्छरीरिणाम् ॥६४॥

क्षमा सैवेति विद्वद्भिगंदिता वेदवादिभिः । अर्थहानौ च वन्धनां वियोगेष्वपि सम्पदाम् ॥६५॥

तयोः प्राप्तौ च सर्वत्र चित्तस्य स्थापनं घृतिः । अष्टौ ग्रासा मुनेर्भक्ष्याः षोडशारण्यवासिनाम् ॥६६॥

६१/१—न१, ५, ७—तेषां—————; ग२—एते—————; न४, ६, ८, ग३, ४, ५—एषां———; त—तेषु———। **६१/३**—न१, ७—एषां मुख्यतमस्त्वेकः ; न६——एषां मुख्यतमस्त्वेकं (?); ग२, ४, त—तेषु————; ग३, न—८तेषां———; ग६, क—एषु मुख्यतमः प्रोक्तः ।

६२/१–न३, ५, ६————तमेव ब्रह्मविच्छ्रेष्ठं । ६२/२–न५, ६, ७–िन्तत्यं कर्म-परायणम्; क–िन्त्यं कर्मपरायणः; ग५–िन्तत्यकर्मपरायणः । ६२/३–न२, ७–शुश्रूषयाचरेन्नित्यं (?); ग५, ६, त, क—-गुरुं शुश्रूषयेन्नित्यं ; न४, ग३–शुश्रूषयाश्रयेन्नित्यं ; ग४–शुश्रूषयाच्या(?) नित्यं ६२/४–ग५, ६, न६, क–नुष्टः स्याद्येन वा गुरुः ; ग१–(स वै) तुष्टेद्यथा———; ग२–तुष्टो हृष्टो यथा———; न३–तुष्टोऽभूहेवता———; न७—तुष्टो भवेद्येन वा———।

६३/२—ग२—सर्वदानुग्रहात्स्मृतः ; ग४, न८—सर्वत्रानुग्रहो मतः ; न२—सर्वत्रानुग्रहे(?)स्मृतः ; ग५—सर्वत्रानुग्रहस्ततः । ६३/३—ग२—अहितेषु तदन्येषु ; न३—विहितेषु वदान्येषु ; न४, ग३—विहितेषु तथान्येषु । ६३/४—न१, २, ५, ७, ८, ग२, ४—मनोवाक्कायकर्मभः ; न४, ग३—मनोवाक्कायकर्मणा ।

६४/१-न३-प्रवृत्ती च निवृत्ती च। ६४/२-त-एक एवोक्तमार्जेत्रम्। ६४/३-ग१-प्रियाप्रियेषु सर्वत्र। ६४/४-ग१-सहित्वं-----; ग३-समत्वे व्यवहारिणा।

६५/१—ग५, ६—क्षमा सैबेह विद्वन्धिः ; न३—क्षमा सैबेति गिंदता । ६५/२—न३, ८, क—विद्वन्ध्विदेवितिः ; ग१, त—गिंदता वेदवेदिभिः ; न१, २, ७—गिंदता ब्रह्मवादिभिः ; ग२—गिंदतं वेदवेदिभिः ; ग४—गिंदतं योग—गिंदतं वेदवेदिभिः ; ग४—गिंदतं योग—वेदिभिः ; । ६५/३—न६—अर्थहानौ च जन्तूनां । ६५/४—न१, २, ७—वियोगे च स्वसंपिदः ; ग१—वियोगे अय संपिदः ; न३, ५, ग४, ५, ६—वियोगेष्विप संपिदः ; न८, क—वियोगेष्विप संसिदः ; न६—वियोगेष्विप संयितः (?) ।

६६/१—ग१, न६, ८—भयप्राप्तौ च सर्वत्र; ग ४, ६—तेषां प्राप्तौ——— । ६६/२ न३—सिचत्तस्थापनं— ; न४, ग३—चित्तस्य स्थापना धृतिः। ६६/३—न२, ग२—अष्टौ ग्रासा मुनेर्भक्ष्यं; न१, ५, ७———मुनेः प्रोक्ताः । ६६/४—ग१, न८, क—पोडशारण्यवासिनः ।

प्रथमोऽष्यायः

द्वात्रिशच्च गृहस्थानां यथेष्टं ब्रह्मचारिणाम् । एषामयं मिताहारो ह्यन्येषामल्पभोजनम् ॥६७॥

शौचं तु द्विविधं प्रोक्तं बाह्यमाभ्यन्तरं तया । मृज्जलाभ्यां स्मृतं बाह्यं मनःशुद्धिस्तथान्तरम् ॥६८॥

मनःशुद्धिश्च विज्ञेया धर्मेणाध्यात्मविद्यया । आत्मविद्या च धर्मश्च पित्राचार्येण वानघे ॥६९॥

तस्मात्सर्वेषु कालेषु सर्वेनिःश्रेयसार्थिभिः । ग्रवः श्रुतसम्पन्ना मान्या वाङमनमादिभिः ॥७०॥

***इति श्रीयोगयाज्ञवत्क्ये प्रथमोऽध्यायः ॥**†

६७/१-न१, २, ५, ८-द्वात्रिंशत् गृहस्थानाम् ; ग५-द्वात्रिंशततं (?) — ; ग६, क-द्वात्रिंशतं — । ६७/२-ग१, ६, क-यथेष्टं ब्रह्मवारिणाम् । ६७/३-न३-एषामेव मिताहारः ; न४, ६-एपामेप मिताहारः ; ग३-एवमेव — — ; न८, क-एप एव मिताहारो ; ग४-विषमोऽयं — — । ६७/४-त-सर्वेषां मितभोजनम् ; न३-अन्येषां स्वल्पभोजनम् ; न४, ग३-त्वन्येषां मित भोजनम् ; न६, ग५-त्वन्येषामल्पभोजनम् ; ग४-त्वन्येषां स्वल्पभोजनम् ।

६८/१–न२, ३, ५, ग३–शौचं च द्विविधं प्रोक्तं । ६८/३–ग२–मृज्जलाभ्यां स्थितं वाह्यं। ६८–४–ग१, ४, त–मनःशुद्धिस्तथा।ररम्; ग२–अन्तःशुद्धिःखान्तरम्(?); ग५, क–मनः शुद्धिर्यदान्तरम्; न७–मनःशुद्धिस्तयोत्तरे ; ग६–मनःशुद्धिर्यदन्तरम् ।

७०/३-न२, ६, ८, क-गुरवः श्रुतिसम्पन्नाः ; त-स्वधर्मनिरताः पूज्याः ; ग२, ५, न८ (पाठा-त्तरत्वेन) ; ग६-स्वधर्मनिरतैःपूज्याः । ७०/४-न१, २, ५, ७—पूज्या वाङमनसादिभिः ; ग१-तोष्या—— ; ग२-सामान्यं (?सन्मान्या) वन्दनादिभिः ; न४, ग३-तोष्या वाक्कायमानसैः ; त-मान्यवो (?मान्या वा (ङ्) मनसादिभिः ।

^{*}अत्र "न८" लेखे ७०/३-४ अनन्तरमधिकः श्लोकः, स इद्रशः--- गुरवः श्रुतिसम्पन्नाः विद्वांसश्च, तथाविधाः। स्वधर्मानरताः पूज्याः सदा वाङ्मसादिभिः॥

[्]रीहस्त छे तेष्वपाय गरित पान्ति छे ताना नास्तरं वाद्यं च वैविध्यमतीव दृश्यते । तल्लेखकानां वृष्टिदिवलासः एवेति मत्त्वा तेषां भेदा नास्मिन्ग्रन्ये प्रदर्शिताः ॥

दितीयोऽध्यायः ॥

[‡]याज्ञवल्क्य उवाच---

तपः संतोष आस्तिक्यं दानमीश्वरपूजनम् । सिद्धान्तश्रवणं चैव न्हीमेतिश्च जपो व्रतम् ॥१॥

एते तु नियमाः प्रोक्तास्तांश्च सर्वान्पृथक् शृणु । विघिनोक्तेन मार्गेण कुच्छ्चान्द्रायणादिभिः ॥२॥

शरीरशोषणं प्राहुस्तापसास्तप उत्तमम् । यदुच्छालाभतो नित्यमलं पुंसो भवेदिति ॥३॥

या धीस्तामृषयः प्राहुः संतोषं सुखलक्षणम् । धर्माघर्मेषु विश्वासो यस्तदास्तिक्यमुच्यते ॥४॥

न्यायार्जितं घनं चान्नमन्यद्वा यत्प्रदीयते । अथिभ्यः श्रद्धया युक्तं दानमेतदुदाहृतम् ॥५॥

द्वितीयोऽध्यायः ॥

*न१, ४-याज्ञवल्क्य उवाच ; न२, ५, ७-श्रीयाज्ञवल्क्य उवाच ; न८, क-याज्ञवल्क्यः ; न३-श्रीमगवानु । ; ग६-ओम् भगवान्-; ग१, २, ३, ४, ५, न६, त- \times \times \times । १/१-न२, ६,७, ८, ग१, २, ४, ५, ६, त, क-तपः संतोपमास्तिक्यं । १/३-ग२-सिद्धान्त-वेदान्तश्रवणं चैव(?) ।

३/१–२—ग३– \times \times \times \times \times \times \times \times । ३/२—ग५–तपसां तप उत्तमम् । ३/४—ग५— अलं पुंसां भवेदिति । ३/३–४—न४, ६, ग३—- \times \times \times \times \times \times \times \times ।

५/१ ग३, न६—न्यायाजितं घनं वान्नं; ग४——धनं चान्यत्; ग६, क——धनं धान्यं; त, न८— \times \times \times । ५/२—ग२—अन्यद्वा यः प्रयच्छित् ; न३—वाक्य(?) यच्च प्रदीयते ; न४—वात्रेद्ययां(?) यत्प्रदीयते ; ग४—अन्यस्मं——— । ५/१–२—त, न८— $\times \times \times \times \times \times \times$ । ५/३—ग३—अधित्वा श्रद्धया युक्तं ; ग४, न८—अक्षतं———— ; ग५. ६—अधिभ्यः श्रद्धया देयं ।

योगयाज्ञवल्क्य:

यत्प्रसन्नस्वभावेन विष्णुं वा प्र्यन्यमेव वा । ययाशक्त्यर्चनं भक्त्या ह्येतदीश्वरपूजनम् ॥६॥

रागाद्यपेतं हृदयं वागदुष्टानृतादिना । हिंसादिरहितः काय एतदीश्वरपूजनम् ॥७॥

सद्धान्तश्रवणं प्रोक्तं वेदान्तश्रवणं वुर्धः ।
 द्विजवत्क्षत्रियस्योक्तं सिद्धान्तश्रवणं वृद्धैः ॥८॥

विशां च केचिदिच्छन्ति शीलवृत्तवतां सताम् । श्द्राणां च स्त्रियाश्चैव स्वधमस्यतपस्विनाम् ॥९॥

सिद्धान्तश्रवणं प्रोक्तं पुराणश्रवणं वृधैः । वेदलौकिकमार्गेषु कुत्सितं कर्म यद्भवेत् ॥१०॥

६/१-ग१, २, ५, ६, न६-यत्प्रपन्नस्वभावेन ; न४-यत्प्रपन्नं स्वभावेन ; ग३-यत्प्रयत्नं -----; त-यत्प्रसन्नत्वस्वभावेन । ६/२--न६-विष्णुं वा चान्यमेव वा ; न१-विष्णुपाप्यन्यमेव वा ; ग२, ४, ५, ६, न३-विष्णुं वा रुद्रमेव वा ; न४--बहु वाप्यल्पमेव वा ; ग३---बहु वा अल्पमेव वा ; त-विद्ययाय घनेन वा । ६/३-न७, ८, ग४, क-यथाशक्तयर्वयेद्भक्त्या । ६/४--ग१-चैतदीश्वर-पूजनम् ; न३-त्वेतदीश्वरपूजनम् ।

७/१-न१, २, ५, ७, ग१-रागादपेतं हृदयं ; न८-रागादिरिहतं चित्तं ७/२-ग३-मम द्रष्टा-नृतादिना (?) ग१-वागदुष्टानृतादिभिः ; न१, ५-वागदुष्टा व्रतादिना ; त- यथापृष्टं \times \times \times ; न३-वागपे-|--|-नृतादिना ; न४-ममतादुष्टतादिना । ७/१-२-ग५, क- \times \times \times \times \times \times । ७/३-त-हिंसादिरिहतं यत्स्यात् । ७/४-ग१-चैतदीश्वरपूजनम् ; न४-तपईश्वरपूजनम् । *ग७, त-अत्रायमिषकः श्लोकः—येन केनाप्युपायेन यस्य कस्यापि देहिनः । संतोपं जनयेत्प्राज्ञस्तदेवेश्वरपूजनम् । ७।३-४-ग५, क- \times \times \times \times \times \times \times \times \times

८/२-न३-द्विजे च क्षत्रियस्योक्तं ; न६-द्विजवत्क्षत्रिये प्रोक्तं ; ग३-द्विजवत्क्षत्रियप्रोक्तं । ८/४-न३-वेदान्तश्रवणं वृषैः ; त-सिद्धान्तश्रवणाद्वृषैः ; ग३-पुराणश्रवणं वृषैः ।

९/१-२-ग२, ३- \times \times \times \times \times \times \times \times । ९।२-न२-शील्रवृत्तमतां सताम् ; न६-शील्रवृत्तमतां तसा(?); ग५, ६, त-शील्रवृत्तवतां सदा ; न३-शीस्तव्रत- (?शील्रवत) वतां । ९/३-न२-शूद्राणां च स्त्रियश्चैव ; ग१-शूद्राणां च तथा स्त्रीगां ; न६, ८, ग५, क-शूद्राणां च स्त्रियां चैव । ९/४न१-स्वधर्मस्तु तपस्विनाम् ; न२, ५, ७-स्वधर्मस्तु तपः स्मृतम् ; ग५, ६, त, क-स्वयमंवशर्वातनाम् । ९/३-४-ग२, ३- \times \times \times \times \times \times \times \times ।

तस्मिन्भवति या लज्जा ऱ्हीस्तु सैवेति कीर्तिता। विहितेषु च सर्वेषु श्रद्धा या सा मतिर्भवेतु ॥११॥

गुरुणा चोपदिप्टोऽपि वेदवाह्यविवर्जितः । विधिनोक्तेन मार्गेण मन्त्राभ्यासो जपः स्मृतः ॥१२॥

अधीत्य वेदं सूत्रं वा पुराणं सेतिहासकम् । एतेप्वभ्यसनं यच्च तदभ्यामो जगः स्मृतः ॥१३॥

जपक्च द्विविघः प्रोक्तों वाचिको मानसस्तथा । वाचिक उपांशुरुच्चैश्च द्विविधः परिकीर्तितः ॥१४॥

मानसो मननध्यानभेदाद् द्वैविध्यमास्थितः । उच्चैर्जपादुपांशुक्च सहस्त्रगुण उच्यते ॥१५॥

मानसस्तु तथोपांशोः सहस्त्रगुण उच्यते । मानसाच्च तथा ध्यानं सहस्त्रगुणमुच्यते ॥१६॥

११/१-क-पद्भवित — — । ११/२-त-व्हीस्तु सैवित कीर्तितम् ; न६-व्हीस्तु सैव तु कीर्तिता ; ग४ न८, क-व्हीश्च सैव तु कीर्तिता । ११/३-त-विहितेषु च कृत्येषुः ग२, ३, न४-विहितेषु च मार्गेषु । ११/४-न३, ८, ग४, क-श्रद्धया मा मित्रमेवेत् ; ग३-शुद्धा या सा——; ग५-श्रद्धा वा सा—।

१२/१-न१-गुरुणा चोपदिष्टेऽपि ; न३-गुरुणां चोपदिष्टोऽपि : ग५, ६, क-गुरुणा चोपदि-ष्टार्थो ; त———चोपदिष्टार्थं ; ग४-विधिना चोपदिष्टोऽपि । १२/४-ग२————— विधिः स्मृतः ।

१३/१-ग१-अधीत वेदसूत्रे वा ; न३, ४, ६, ८-अधीत वेदेष्त्रंगेयु ; त-अयं स्मृतो वा सूत्रे वा (?);ग२--अदो स्मृतो (?) वा सूत्रे वा ; ग६-अथ स्मृतो — । १३/२-ग१, २, ६, न३, ४, ६, ८, त-पुराणे सेतिहासके । १३/१-२-ग३, ४, ५, क- $\times \times \times \times \times \times \times \times \times$ । १३/३- न१-एतेष्वभ्यसनं तच्च ; न५-एतेष्वभ्यसनं यच्च ; न५-यद्यध्ययनं तच्च (?) न७----तच्च ; न४, ६-पदिहाध्ययनं तच्च ; ग२, ६-वेदेष्वध्ययनं पुसा ; त-वेदस्याध्ययनं — । १३/४-न१, २, ५, ७-सदभ्यासो जपः स्मृतः ; ग१-तस्य त्वभ्यासो ; — न६, ८-मन्त्राभ्यासो — — । १३।३-४-न३, ग३, ४, ५, क- $\times \times \times \times \times \times \times \times$ ।

१४/१-ग५, क-जगस्तु द्विविद्यः प्रोक्तो । १४/२-न८-मानसो वाचिकस्तथा । १४/३-न६-वाचिकोपांशुदन्तैश्च ; न३, ४, ५-वाचिको तीवा (-तीव) उच्चैश्च । १४/४-ग२- द्विविद्यो वाचकः (स्मृतः) ; ग४, न८-भेदाद्द्वैविद्यमाश्रितः ; न७, ग५, ६-——वैविद्यमास्थितः ; ग३-त्रिविद्यः परिकीर्तितः ।

१५/१–न१, २–मानसो मानसध्यान—; ग२–मानसो मनसा घ्यानं ; न३, ४, ५, ६, ७, ग३———घ्यान–। १५/२——ग२–द्वैविघ्यमिष्यते ; ग४——द्वैविघ्यमाश्रितः। १५/१–२–न८– × × × × × × × । १५/३–न३–उच्चैर्जप उपांश्इच । १५/३–४–ग३– × × × × × × × × × × × ।

१६/१–न५, ग१, ४, ६, क——मानसश्च तथोपांशोः ; न३—मानसश्च तथा चैव ; ग५– मननं च तथोपांशोः ; **१६/१**–२–ग३, न८– \times \times \times \times \times \times \times । **१६/३**–ग४–मानसस्तु तथा घ्यानं ; ग५, ६–मननाच्च तथा———। **१६/३**–४–३, ४, ६, ग३– \times \times \times \times \times \times \times ।

योगयाज्ञवल्बय :

उच्चैजंपस्तु सर्वेषां यथोक्तफलदो भवेत् । नीचैः श्रुतो न चेत्सोऽपि श्रुतश्चेन्निष्फलो भवेत् ॥१७॥

ऋषि छन्दोऽधिदैवं च ध्यायन्मन्त्रं च सर्वदा । यस्तु मन्त्रजपो गागि स एव हि फलप्रदः ॥१८॥

प्रसन्नगुरुणा पूर्वमुपदिष्टं त्वनुज्ञया । धर्मार्यमात्मसिद्धयर्थमुपायग्रहणं व्रतम् ॥१९॥

इति श्रीयोगयाज्ञवल्क्ये द्वितीयोऽध्यायः ॥

१७/१—न१ २, ५, ७, ८, ग४, त, क—उच्चैर्जपश्च सर्वेषां । १७/२—ग५—ययोक्तं फलदो भवेत् । १७/३—न६—नीचैः श्रुतो न चेद्वापि ; ग२—नीचैः श्रुतो वचःसोऽपि । १७/४—न२, ५, ७—श्रुतश्च निष्फलो भवेत् ; ग५ श्रुतश्चेन्निष्फलं भवेत् । १७/३—४—न४— $\times \times \times \times \times \times \times$ ।

१९/१-न१, ७-व्रतं च गुरुणा पूर्वं ; न२-वृत्तं च---- ; न८, ग४-प्रसन्नगुरुणा-सार्धं । १९/२-न२-उपदिष्टं तदज्ञया (?) ; न५----तदनुज्ञया ; ग४-उपदिष्टे त्वनुज्ञया ; न३-उपतिष्टं----। १९/३-न१, २, ग३-धर्मार्थकामसिद्धयर्थं ; ग५, ६-धर्मार्थमर्थसिद्धयर्थं ; ग४-धर्मार्थकाममोक्षायं ; न८, क-धर्मार्थकाममोक्षाणां । १९/४-ग२-उपायग्रहणं हितम् ; न३-उपायग्रहणायते ; न६-उपांश्ग्रहणं कृतम ।

तृतीयोऽध्यायः ॥

*याज्ञवल्क्य उवाच---

आसनान्यधुना वक्ष्ये शृणु गागि तपोधने । स्वस्तिकं गोमुखं पद्मं वीरं सिहासनं तथा ॥१॥

भद्रं मुक्तासनं चैव मयूरासनमेव च । तथैतेषां वरारोहे पृथग्वक्ष्यामि लक्षणम् ॥२॥

जानोर्वोरन्तरे सम्यक्कृत्वा पादतले उभे । ऋजुकायः सुखासीनः स्वस्तिकं तत्प्रचक्षते ॥३॥

सीवन्यास्त्वात्मनः पाश्वं गुल्फौ निक्षिप्य पादयोः । सत्र्ये दक्षिणगुल्फं तु दक्षिणे दक्षिणेतरम् ॥४॥

एतच्च स्वस्तिकं प्रोक्तं सर्वपापप्रणाशनम् । सव्ये दक्षिणगुरुफं तु पृष्ठपाइर्वे निवेशयेत् ॥५॥

दक्षिणेऽपि तथा सन्यं गोमुखं गोमुखं यथा । अंगुष्ठौ च निवष्नीयाद्धस्ताभ्यां न्युत्क्रमेण तु ॥६॥

तृतीयोऽध्यायः ।

*न४, ५–याज्ञवल्क्य उवाच ; ग४, न८–याज्ञवल्क्यः; ग३–श्रीयाज्ञवल्क्यः ; न६–श्रीभगवानु-वाच ; न३–श्रीभगवानु । ; न१, २, ७, ग१, २, ५, ६, त, क- imes imes imes ।

१/१-२-न२- \times \times \times \times \times \times \times \times \times

४/१-ग५-सीवत्या वामतः पाद्ये ; न१, २, ३, ५, ७--सीवत्यादचात्मनः———; ग६-सीवत्या वर्त्मनः——; ग३--निविश्या (?) चात्मनः पाद्ये । ४/२-ग५, ६-गुल्फौ निष्पीडच पादयोः । ४/१-२-न४- $\times \times \times \times \times \times \times \times$ । ४/३-न४-सव्ये दक्षिणगुल्फौ तु ; ग३--सव्यदिक्षणगुल्फौ तु । ४/४-न२, ६, ग४-दिक्षणे दिक्षणगेलरम् ; न३-दिक्षणा दिक्षणेतरम् । ४/३-४-न५- $\times \times \times \times \times \times \times \times$ ।

जर्नोरुपरि विप्रेन्द्रे कृत्वा पादतले उभे । पद्मासनं भवेदेतत्सर्वेषामपि पूजितम् ॥७॥

एकं पादमर्थेकस्मिन्विन्यस्योर्हाण संस्थितम् । इतर्रास्मस्तथा चोरुं वीरासनमुदाहृतम् ॥८॥

*गुल्फौ च वृषणस्याघः सीवन्याः पार्श्वयोः क्षिपेत् । दक्षिणं सव्यगुल्फेन दक्षिणेन तथेतरम् ।।९।।

हस्तौ च जान्वोः संस्थाप्य स्वांगुलीश्च प्रसार्य च । व्यात्तवक्त्रो निरीक्षेत नासाग्रं सुसमाहितः ॥१०॥

सिंहासनं भवेदेतत्पूजितं योगिभिः सदा । गुल्भौ च वृषणस्याधः सीवन्याः पाक्वयोः क्षिपेत् ॥११॥

७/१-न३, ६, ७, ग३, ५--- उर्वोरुपरि विप्रेन्द्र ; ग१--------- विन्यसेत् (?) ; ग४, न८-उर्वोरुपरि मैत्रेयी ; न४-जंघोपरि तु विप्रेन्द्रे । ७/२-न३-कृत्वा पादतले शुभे । ७/३- न२-पद्मासनं भवेत् \times । ७/४-न२+ + तेषामपि (?) पूजितम् ; ग४, न८-पूजितं योगिभिः सदा ।

 $^{^{\}prime}$ १-न३-गुल्फौ -|- वृषणस्याधः ; ग४---गुल्फेऽल्प-----------; न८--गुल्फे च-----; ग६- तु वृषणस्याथ । गुल्फौ $^{\prime}$ १-, -ग२-दक्षिणं सत्र्यभागं च ; ग३------सत्र्यगुल्फैंश्च । $^{\prime}$ १-न४. ६, ८, ग४--दक्षिणेन तथोत्तरम् ।

१०/१–न१, २, ५–हस्ती जानूपरि स्थाप्य ; न७–हस्ती च——— ; ग२—हस्ती तु जान्वोः संस्थाप्य । **१०**/२–न३, ८, ग६–स्वांगुली(ः)संप्रसार्य च ; न४, ग३, ४–स्वांगुलीभिः प्रसार्य च । **१०**/३–न४–व्याघ्रवक्तो निरीक्षेत । **१०**/४–ग३—नासाग्रं तु समाहितः ।

पार्श्वपादौ च पाणिभ्यां दृढं बद्धवा सुनिश्चलम् । भद्रासनं भवेदेतत्सर्वव्याघिविपापहम् ॥१२॥

संपीडच सीवनीं सूक्ष्मां गुल्फेनैव तु सव्यतः । सव्यं दक्षिणगुल्फेन मुक्तासनमितीरितम् ॥१३॥

मेढ़ादुपरि निक्षिप्य सव्यं गुल्फं तथोपरि । गुल्फान्तरं च निक्षिप्य मुक्तासनिमदं तु वा ॥१४॥

अवष्टभ्य घरां सम्यक् तलाभ्यां तु करद्वयोः हस्तयोः कूर्परौ चापि स्थापयन्नाभिपार्श्वयोः ॥१५॥

समुन्नतिशरःपादो दण्डवन्द्योम्नि संस्थितः । मयूरासनमेतत्तु सर्वपापप्रणाशनम् ॥१६॥

१२/१–ग५, ६, त–पार्श्वपादी तु पाणिभ्यां ; न ६–पार्श्वे पादी च— ———। १२/२–ग१– दृढं बद्धवा सुनिश्चलः । १२/४–न४–सर्वव्याघिविनाशनम् ; न७–सर्वव्याघिविपापहः ; ग६– पूजितं सर्वे योगिभिः (पाठान्तरत्वेन "सर्वव्याघिविषापहम्" अप्यस्त्येव) ।

१४/१—ग१—मेब्स्योपरि निक्षिप्य ; ग५, ६, त—मेब्रादुपरि विन्यस्य । १४/२—ग१, २, त— सब्यं गुल्फं ततोपरि ; । १४/३.—न१—गुल्फान्तरं तु निक्षिप्य ; न६—गुल्फान्तरं विनिक्षिप्य ; ग३——गुल्फान्तरे————; ग५—गुल्फान्तरं तु निक्षिप्तं । १४/४—न१, २, ४, ५, ७, ग३—मुक्ता-सनिमदं तथा ; न३, ६——मुक्तासनिमतीरितम् ।

१५/२–न१, २, ५, ७–तलाभ्यां करयोर्द्वयोः ; ग१————चाथ हस्तयोः ; न३– कराभ्यां तु करद्वयोः(?); न४–कूर्पराभ्यां तु(?)करद्वयोः ; न६–कराभ्यांतः(?)करद्वयोः। १५/३– ग२–हस्तयोः कूर्पकाञ्चापि ; न६–हस्तद्वयोः (?) कूर्परौ वा ; ग३, ४, ५–हस्तयोः——वापि । १५/४–न५, ६, ७, ८, ग३, ४, ५, ६–स्थापयेश्वाभिपार्वयोः ।

१६/१—न२, ७, ग१, ६, त—समुन्नतिशराःपादौ ; न३—समुन्नतिशरेःपादौ (?)। **१६/२**—ग१, ४, त—दण्डवद्व्योम्नि संस्थितम् । **१६/३**—ग२—मयूरमासनं प्रोक्तं ; ग६—मयूरासनमेतिद्ध ; न३—मयूरासनमेतिच्च ; न५——मयूरासनमेवैतन् ।

योगयाज्ञवल्बय :

*सर्वे चाभ्यन्तरा रोगा विनश्यन्ति विषाणि च । यमैश्च नियमैश्चैव आसनैश्च सुसंयुता ॥१७॥

नाडीशुद्धि च कृत्वा तु प्राणायामं ततः कृरु ॥१८॥

इति श्रीयोगयाज्ञवल्क्ये तृतीयोऽध्यायः ।

१७/१-न३---- ह्याभ्यन्तरा रोगाः ; न४----- आभ्यन्तरा--- ; १७/१-२-न६- $\times \times \times \times \times \times \times \times$ । *त-अत्र सार्धंकश्लोकोऽधिको दश्यते । स च---

येन केन प्रकारेण सुखं धैर्यं च जायते । तत्सुखासनमित्युक्तमशक्तस्तु समाचरेत् ।। -

आसनं विजितं येन जितं तेन जगत्त्रयम्।।

स एव 'ग६'' लेखेऽपि विद्यते किन्तु निम्नलिखिताशुद्धपाठान्तरै :—
१. घार्यं(?)च; २. अधतस्तत्समाचरेत्; ३. आसनं विणतं(?)येन । १७/३–न१, ५, ७, ८—यमैश्च नियमैश्चापि; न४—यमं च नियमं चैव। १७/४—न२, ८, ग२, ३, ४, ५, ६, क—आसनैश्च सुसंयतः; न३—आसनं तैश्च संयुता; न४—आसनं च सुसंयतः(?); न६—आसनैश्च सुसंयुतं; न७————तु संयता।

१८/१—ग५, ६—नाडीशुद्धि च कृत्वाथ ; न२————कृत्वा वै ; ग२—————कृत्वादो ; न८, क—————कृत्वेव ; न३, ६————ततः कृत्वा ; ग४—————श्रुत्वेव ; त— \times \times • \times \times । १८/२—न३—प्राणायामं तथा कुरु ; न४, ग३————ततः परम् । त— \times \times \times \times ।

चतुर्थोऽध्यायः ॥

श्रुत्वेतद्भापितं वाक्यं याज्ञवल्क्यस्य घीमतः । पुनः प्राप्त महाभागा सभामध्ये तपस्विनी ॥१॥

*गार्ग्युवाच---

भगवन्द्रूहि मे स्वामिन्नाडीर्झाद्ध विधानतः । केनोपायेन शुद्धाः स्यूर्नाङयः सर्वदेहिनाम् ॥२॥

उत्पत्ति चापि नाडीना चारणं च यथाविधि । † कन्दं च कीदुशं प्रोक्तं कति तिष्ठन्ति वायवः ॥३॥

स्थानानि चैव वायूनां कर्माणि च पृथवपृथक् । विज्ञातव्यानि यान्यस्मिन्देहे देहभृतां वर ॥४॥

वक्तुमहंसि तत्सर्व त्वत्तां वेता न विद्यते ।

इत्युक्तो भायंया तत्र सम्यक् तद्गतमानसः ॥५॥

गार्गी तां सुसमालोक्य तत्सर्व समभाषत ।

चतुर्थोऽध्यायः

 $\sqrt{2}$ -ग५, ६, क-भगवन्त्रह्मविच्छ्रेष्ठ । $\sqrt{2}$ -ग६-नाडचस्ताः सर्वदेहिनाम् ।

४/३-ग४, न८-विज्ञातव्या मयान्यत्र । ४/४-ग४--देहि देहभृतां वर ।

५/१–न३–वक्तुमर्ह्सि सर्वज्ञ ; न१, २, ५, ७–——मे सर्व ; ग३–———सर्व त्वं । ५/२–ग४, ५, न८–त्वत्तो वक्ता न विद्यते ; ग६–त्वत्तो छेत्ता————। ५/४– न६–सम्यक् हृद्गतमानसः ।

६/१-ग२-गार्गी च तां समालोक्य ; न३-गार्गी गीतं----; न४-गार्गी तां च---; ग४. ५, न८, क-गार्गी तां तू----।

*याज्ञव[्]क्य उवाच—

शरीरं ताबदेवं हि पण्णवत्यङगुलात्मकम् ॥६॥

विद्धयेतत्सर्वजन्तूनां स्वाङ्गुलीभिरिति प्रिये । गरीरादिषकः प्राणो द्वादशाङ्गुलमानतः ॥७॥

चतुर्दशाङगुलं केचिद्वदन्ति मुनिसत्तमाः । हादशाङगुल एवेति वदन्ति जानिनो नराः ॥८॥

आत्मस्यमनिलं विद्वानात्मस्येनैव विद्वाना । योगाभ्यासेन यः कुर्यात्समं वा न्यूनमेव वा ॥९॥

ग एव ब्रह्मविच्छ्रेष्ठः स सम्पूज्यो नरोत्तमः। आत्मस्थवह्निनैव त्वं योगजेन द्विजोत्तमे ॥१०॥

आत्मस्थं मातरिश्वानं योगाभ्यासेन निर्जय । देहमध्ये शिखिस्थानं तप्तजाम्बूनदप्रभम् ॥११॥

^{*} न३, ६—श्रीभगवानुवाच ; ग४, न८—याज्ञवल्क्यः ; ग२, ५, त, क $-\times\times\times\times$ ६।३-ग२-शरीरं देहिनां तावत् ; न६- — तावदेतत्तु । ६/४ न१, २-पण्णवेत्यंगुलान्वितम् ; ग२-पण्णवत्यंगुलायतम् ।

७/१-ग२-विश्वेन (?) सर्वजन्तूनां ; न६-विद्यात्तत्सर्वजन्तूनाम् । ७/३-ग३-शरीरादिधकं (?) प्राणः ; ग२-शरीरोदररन्ध्राणाम् (?) ।

९/१–ग१, २, ४, ६, न६, त–आत्मस्थमिनलं विद्यात् ; ग३–आत्मस्थानिलान्विद्वान् । ९/३–न३–योगाभ्यासेन तत्कुर्यात् ; ग३, ६—————यत्कुर्यात् । ९/४–न७—समं वा न्यूनमेव च ; न३–शर्वाश्रययमेव(?) वा ।

१०/१-न८, क-स नरो ब्रह्मविच्छ्रेष्टः । १०/२-ग२, ४-सम्पूज्यश्च नरोत्तमः ; ग३-स पूज्यश्च——; ग१, न८, त, क-सम्पूज्यश्च नरोत्तमैः ; न३-सम्पूज्यः स नरोत्तमः ; न४-सम्पूज्यश्च नरोत्तमे ; न६-सम्पूज्यस्तु नरोत्तमः ; ग६-सुसंपूज्यो नरोत्तमः । १०/३-ग२-आत्मस्य-विह्मिता चैव ; ग३-आत्मस्यविह्मितैवाछं । १०/४-ग२-योगाभ्यासाद् द्विजोत्तमे : ; ग५-योगस्थेन द्विजोत्तमे ; न७-योग्तेन द्विजोत्तमे ; न७-योग्तेन द्विजोत्तमे ; न७-योग्तेन द्विजोत्तमे ; न७-योग्तेन द्विजोत्तमे ;

त्रिकोणं मनुजानां च चतुरस्नं चतुष्पदाम् । *मण्डलं तत्पतंगानां सत्यमेतद्ववोमि ते ॥१२॥

तन्मध्ये तु शिला तन्वी सदा तिष्ठित पावकी । देहमध्यं च कुत्रेति श्रोतुमिच्छिस चेच्च्छुगु ॥१३॥

गुदात् द्वयंङ्गगुरुविमघो मेद्राच्च द्वयंङ्गगुरात् । देहमध्यं तयोर्मध्यं मनुष्याणामितीरितम् ॥१४॥

चतुष्पदां तु हृन्मध्यं तिरश्चां तुन्दमध्यमम् । द्विजानां तु वरारोहे तुन्दमध्यमितीरितम् ॥१५॥

कन्दस्यानं मनुष्याणां देहमध्यान्नवाङगुलम् । चतुरङगुलमुरसेधमायामश्च तयाविधः ॥१६॥

१४/१—न६—गुदाच्च————— । १४/२—ग१—अघो मेढूं (च) द्वयंगुठात् ; ग२, ५, ६—मेड्रातु द्वयंगुठादचः ; न६, क—अयो(?अघो) मेड्राच्च द्वयंगुठात् । १४/३—न२, ३—देहमध्यं तयोर्मध्ये । १४/४—न४, ६, ग५—मनुष्याणामुदीरितम् ; न५, त—मनुजानामितीरितम् ; न७— जनुजानामितीरितम् (?) ।

१६/१-न३-कन्दस्यानां (?) मनुष्याणाम् ; ग५-नुन्दस्यानं — ; ग६-कुन्दस्यानं — ; ग६-कन्दस्यानं मनुष्यादेः । १६/२-न१, २, ५, ग३—देहमध्ये नवांगु रुम् । १६/३-ग२-चनुरंगु रुमुच्वेदं ; न४, ६, ग३, ५, ६—मुरक्षेवः ; न२, ७———पुरक्षेवे ; न३-चनुरंगु रुसमुरक्षेवि । १६/४-न१, २, ५, ग१, २, त-आयामं च तयाविवम् ; न७-आयामं नु— ग४, न८, क-आयतं च—— ।

ज्ञातुमिन्छसि चेन्छुगु ।

अण्डाकृतिवदाकारं भूषितं तत्त्वगादिभिः । चतुष्पदां तिरश्चां च द्विजानां तुन्दमध्यमे ॥१७॥

तन्मध्यं नाभिरित्युक्तं नाभौ चक्रसमुद्भवः । द्वादशारयुतं तच्च तेन देहः प्रतिष्ठितः ॥१८॥

^{क्ष}चक्रेऽस्मिन्भ्रमते जीवः पापपुण्यप्रचोदितः । तन्तुपंजरमध्यस्था यया भ्रमति लृतिका ॥१९॥

जीवस्य मूलचकेऽस्मिन्नघः प्राणश्चरत्यसी । प्राणारूढो भवेज्जीवः सर्वभृतेषु सर्वदा ॥२०॥

तस्योध्वं कुण्डलीस्थानं नाभेस्तियंगयोध्वंतः । अष्टप्रकृतिरूपा सा अष्टधा कुण्डलीकृता ॥२१॥

१८/१—न४, ६, १, ८, ग२—तन्मध्ये नाभिरित्युक्तं; न३—तन्मध्य (१६यं) ——————; ग५, क—तन्मध्ये नाभिरित्युक्ता; ग६—तन्मध्ये नाभिरित्युक्ता (१क्ता) । १८/२—ग ५, ६—नाभौ चक्रस्य संभवः ; क—नाभौ वक्रस्य सम्भवम् (१) ; त—नाभित्रक्रत्र नुद्भवम् । १८/२—ग२, ३, न४—— द्वादशारयुतं चक्रं; ग५—द्वादशारयुतं चक्रं: (१क्रं) । १८/४—न३, त—तेन देहं प्रतिष्ठितम् ; न१, २, ५——नरदेहं प्रतिष्ठितम् ; ग२—तेन देवाः प्रतिष्ठिताः ; ग३—देव देहः (१) प्रतिष्ठितः ; ग४—तत्र देहः ———— ; ग५, ६, क—तेन जीवः———— । *इतः प्रभृति ४१।४ पर्यन्तं "क" लेखे तालयत्रं गिलतिमिति टिप्पणीविद्यते ।

१९/२—ग२—पुण्यपापप्रबोधितः ; न३, ४, ग३—पुण्यपापप्रणोदितः ; न५—पुण्यपापप्रचोदितः; न७, ग५, ६—पुण्यापुण्यप्रचोदितः । **१९**/३—ग१, ३, ४, ६, न५, ६, ८—तन्तुपंजरमध्यस्थः; न१—तस्यां जरमध्यस्था (?) । **१९**/४—ग१, ४, ६, न६, ८—यथा भ्रमित लूतिकः; न५—यथा चरित लूतिकः ; न१, २, ७—यथा चरित लूतिका ; ग३—यथा भ्रमित यूतिका ; न४——यूथिका ।

२०/१-ग२-जीवस्य मुनिचके(?)ऽस्मिन्। २०/२-ग३, न६-अथ प्राणश्चरत्यसी; न२-भ्रमत्प्राणे त्यरचासी(?); ग४-पश्य प्राणश्चरत्यसी। न८-वश्यः— २०/३-न३-न३-प्राणरूपो भवेज्जीवः; न६-प्रागाहारो———; ग३-प्रागारूठि(?)——; न१-प्राणारूठास्तु ता नाडचः। २०/४-ग१-सर्वजोशेषु सर्वदा; ग५, ६-सर्वदेहेषु———।

२१/१-ग५-तस्योध्वें कुण्डलीस्यानं । २१/२-न६-नाभेस्तिर्यगधीर्ध्वतः ; न१, २, ५-नाभेस्तिर्यगवो वृता ; ग५-नाभेस्तिर्यगयोध्वेकम् ; न४, ग३-नाभेस्तिर्यगधोगतिः ; न७-नाभेस्तिर्यगधोगतिः ; न७-नाभेस्तिर्यगधोगतिः ; न७-नाभेस्तिर्यगधोगतम् ; त-नाभेस्तिर्यगधोवृतम् (?) । २१/३-ग४, ५-अष्टप्रकृतिरूपासा । २१/४-ग२-अष्टधा कुष्टलाकृतिः ; न४, ग३-अष्टधा कुण्डली मता ; ग४-अष्टधा कुष्टलीकृता ; न३-त्वष्टघा कुण्डलीकृता ।

यथावद्वापुसंचारं जलान्नादीनि नित्यशः । परितः कन्दराश्वेषु निरुद्धयैव सदा स्थिता ॥२२॥

मुखेनैव समावेष्ट्य ब्रह्मरन्ध्रमुखं तया । योगकाले त्वरानेन प्रवोधं याति साग्निना ॥२३॥

स्फुरन्ती हृदयाकाशे नागरूया महोज्ज्वला। वायुर्वायुसखनैव ततो याति सुपुम्णया ॥२४॥

कन्दमध्ये स्थिता नाडी सुषुम्गेति प्रकीर्तिता । *तिष्ठन्ति परितः सर्वाश्वकऽस्मिन्नाडोसंज्ञकाः ॥२५॥

नाडीनामिप सर्वासां मुख्यास्त्वेताश्चतुर्दश । इडा च पिगला चैव सुपुम्गा च सरस्वती ॥२६॥

वारुणी चैव पूषा च हस्तिजिह्वा यशस्विनी। विश्वोदरा कुट्टरचैव शंखिनो च पयस्विनो ॥२७॥

२२/१-न१, २, ७, ८, ग१, ४-प्रयावद्वापुवारं च ; ग२-प्रयावद्वापुसंवारः ; न४-प्रयावद्वापुत्तंवारः ; न४-प्रयावद्वापुत्तंवारः व (?) ; ग३-प्रयावद्वापुवेठांश्व (?) । २२/२-न१, ५-जलान्यादोनि नित्यशः ; ग३-म्रजलावि (?दो-) न्य (?नि) नित्यशः ; न४- ज्वलनादोनि नित्यशः ; ग२-सर्वनाडोषु-नित्यशः । २२/३-न५, ग३, ४-गरितः कन्दगश्वे तु ; न८-गरितः कन्ठगश्वे पु । २२/४-ग५-निरुद्धपैवं सदा स्थिता ; ग२-निरुद्ध पैत्र व्यवस्थितः (?) ।

२३/१-त१, २, ३-पुत्रेतैत्र समाविश्य ; ग२-पुत्रेत स्त्रोवेष्ट्य ; त-पूत्रेतैत्र समाविश्य ; न३, ४, ६, ग३--पुत्रेतैत्र सदा वेष्ट्य ; न७ ---- --- समावेश्य । २३/२-ग३-त्रह्मरन्ध्रमुखं सदा ; ग ५ ब्रह्मरन्ध्रं मुखं तथा । २३/४-ग४-प्रवोबयित साग्तिना ; ग५-प्रवोबं यान्ति (?) ------ ; न४-प्रवोबं यातु ----।

२६/२-त, ग२-मुख्याश्चैताश्चतुर्दश; न३,८, ग१-मुख्या गागि----। २६/४-ग३-सुषुम्णा तु सरस्वतो ।

२७/१–न१, २, ३, ५, ग३, ५, ६—वारुणा चैव पूपा च। २७/३–न२, ४, ५, ७,८, ग४, त-विश्वोदरी कुहूरचैव ; ग३– + + कोहर्श्चैव (?कुहूरचैव)। २७/४–ग१–———तपस्विती ; न५–——सरस्वती।

अलम्बुषा च गान्धारी मुख्याश्चैताश्चतुर्दश । आसां मुख्यतमास्तिस्त्रस्तिसृष्वेकोत्तमोत्तमा ॥२८॥

मुक्तिमार्गेति सा प्रोक्ता सुषुम्णा विश्वधारिणी । कन्दस्य मध्यमे गागि सुषुम्णा सुप्रतिष्ठिता ॥२९॥

पृष्ठमध्ये स्थिता नाडी सा हि मूर्घिन व्यवस्थिता । *मुक्तिमार्गः सुपुम्णा सा ब्रह्मरन्ध्रेति कीर्तिता ॥३०॥

अव्यक्ता सैव विज्ञेया सूक्ष्मा सा वैष्णवी स्मृता । एडा च पिंगला चैव तस्याः मव्ये च दक्षिणे ॥३१॥

इडा तस्याः स्थिता सब्ये दक्षिणे पिंगला स्थिता । इडायां पिंगलायां च चरतश्चन्द्रभास्करी ॥३२॥

२८/१—न३—अलंमुखा च————; ग३—अलंबुसूचि(?)—— । २८/२—न४ मुख्याश्चें- व चतुर्दश; ग५, ६—मुख्या एताश्चतुर्दश । २८/३—ग२—तासु मुख्यतमास्तिस्रः; न३—एता—— । २८/४—न१, ग१, ४, त–ितमुष्वेकोत्तम मता; ग२—श्रेष्टितेका(?) + + + ।

२९/१—न३—मुक्तिमार्गेण(?)सा प्रोक्ता ; ग४, न८—मुक्तिमार्गे स्थिता सातु ; न४, ग३ मुक्तिमार्गेऽपि———— । २९/३ न१, २, ५—कन्दस्था मध्यमे————।

> तिष्ठन्ति परितस्तस्य नाडयो मुनिसत्तमे । द्विसप्तिति सहस्त्राणि तासां मुख्याश्चतुर्देश ॥ पृष्टमध्ये स्थिता नास्छा वीणादण्डेन सुब्रते । सहमस्तकपर्यंतं सुष्मना सुप्रतिष्ठिता ॥

३१/१-ग५, ६-अञ्यक्ता सा तु विज्ञेया ; ग२-अञ्यक्ता नैव----; न४, ६, ८, ग३ अञ्यक्ता चैव----; ग४, न८-अभ्यासेनैव । ३१/२-न३, ६-सुषुम्णा वैष्णवी स्मृता ; न४, ग३-सूक्ष्मा सा वैष्णवी मता ।

३२/२-ग५-पिंगला दक्षिणे स्थिता; ग३----तथा; ग२-सव्यदक्षिण पिंगला (?); न३-दक्षिणे पिंगला स्मृता ।

इडायां चन्द्रमा ज्ञेयः पिंगलायां रिवः स्मृतः । चन्द्रस्तामस इत्युक्तः सूर्यो राजस उच्यते ॥३३॥

विषभागो रवेर्भागः सोमभागोऽमृतं स्मृतम् । तावेव धत्तः सकलं कालं रात्रिदिवात्मकम् ॥३४॥

भोक्त्री सुपुम्णा कालस्य गुह्चमेतदुदाहृतम् । सरस्वती कुतुरुचैव सुपुम्णापार्श्वयोः स्थिते ॥३५॥

गान्धारी हस्तिजिह्वा च इडायाः पृष्ठपार्श्वयोः । *कृहोश्च हस्तिजिह्वाया मध्ये विश्वोदरा स्थिता ॥३६॥

यशस्विन्याः कुहोर्मध्ये वारुणी च प्रतिष्ठिता । पूषायाश्च सरस्वत्याः स्थिता मध्ये पयस्विनी ॥३७॥

३३/२–ग१–पिंगलायां च भास्करः ; न४–——रिवः स्थितः । ३३/३–न८ चन्द्र स्तु मन इत्युक्तः ।

३७/१-न३, ७, ८, ग६-यशस्विनी कुहमध्ये ; न१, २, ५-यशस्विनी कुहोर्मध्ये ; ग२-मध्ये कुहोर्यशस्विन्याः ; ग१-पयस्विन्याः कुहोर्मध्ये । ३७/२-ग२, ६-वारुणी सुप्रतिष्ठिता ; न१, २, ३, ५, ७, ग४-वारुणा च प्रतिष्ठिता ; न४-वारुणा सुप्रतिष्ठिता ; ग१----च प्रतिष्ठिता । ३७/३-न१, २, ४, ५, ७, ग३, त-वारुणायाः सरस्वत्याः । ३७/४-ग२, ४, ५-स्थिता मध्ये यशस्विनी ; न२, ग१-----तपस्विनी ; न४, ग३, क- \times \times \times ।

गान्घार्याश्च सरस्वत्याः स्थिता मध्ये च शंखिनी । अलम्बुषा च विप्रेन्द्रे कन्दमध्यादघः स्थिता ॥३८॥

पूर्वभागे सुषुम्णाया आमेढ्रान्तं कुहूः स्थिता । अधश्चोध्वं च कुण्डल्या वारुणी सर्वगामिनी ॥३९॥

यशस्विनी च याम्यस्य पादाङ्गगुष्ठान्तमिष्यते । पिगला चोर्ध्वगा याम्ये नासान्तं विद्धि मे प्रिये ॥४०॥

याम्ये पूषा च नेत्रान्तं पिंगलायास्तु पृष्ठतः । पयस्विनी तथा गागि याम्यकर्णान्तमिष्यते ॥४१॥

सरस्वती तथा चोर्ध्वमाजिह्वायाः प्रतिष्ठिता । आसव्यकर्णीद्विप्रेन्द्रे शिङ्कानी चोर्ध्वगा मता ॥४२॥

३८/१–न६, ८, ग१, २, ४–गान्धारायाः सरस्वत्याः ; न४, ग३ \div × × × × । ३८/२–ग५–स्थिते मध्ये तु शंक्षितो ; न४- × × × × । ३८/३–न१, ७–अलम्बुषा च विप्रेन्द्र ; न३–अलंमुबा (?) च विप्रेन्द्र । ३८/४–न२, ३, ग१, ४–कन्दमध्यादवस्थिता ; न१, ५, ७, त–कन्दमध्यादथोगता ; ग२–कन्दमध्यादधः शरा (?) ; न४–गुदमध्यादधोगता ; ग३—सुरमध्य (?) ययागता ।

३९/१-न२, ५-पूर्वभागे सुयुम्णायां । ३९/२-ग२-आमेढ्रान्तं कुहूः स्मृता ; न१, २, ४, ५, ७-मेढ्रान्तं च कुहूः स्थिता । ३९/३-न१, २, ३, ४, ५, ७, ग१, २, ३, ४, त-अधश्चोध्वं च विज्ञेया ; न६-अतश्चोध्वं च विज्ञेया । ३९/४-न१, २, ३, ५, ७, ग३, ६, त-वारुणा सर्वगिमिनो ; ग१-वारणा-----; ग२-धारणा(?)------।

४०/१-ग४-यशस्विनी तु याम्यस्य ; न८-यशस्विनी तु याम्यस्य ; न१-+ + याम्यस्य ; न६--- याम्यस्य ; न४--- याम्यस्य ; न४--- याम्यस्य ; न४--- याम्यस्य ; ग५,६-- यशस्विनी च सौम्या च । ४०/२-न३- पादांगुब्टान्तरिष्यते । ४०/३-न१-पिंगञा चोध्वं याम्यस्य (?याम्यस्य) ; न२--- चोध्वं याम्यस्य ; न७---- चोध्वं याम्यस्य । ४०/३-४- ग२,६- \times × × × × × × × ।

४१/१–न५–याम्य (?याम्ये) पूषा च नेत्रान्त ; न३–वामे————; ग३–याम्यपृष्टं च ————। ४१/२–न७, ग१, त-पिंगलायां तु ———; ग५–पिंगलायां च ———४१/१–२–ग२ — $\times \times \times \times \times \times \times \times \times$ । ४१/३–न१, ४, ५, ७, ८, ग३ –पयस्विनी तथा गागि ; ग१–तपस्विनी ————। ४१/४–ग५, न८–याग्ये कर्णान्तमिष्यते ; ३—वामकर्णान्तमिष्यते । ४१।३–४–ग२, ४, न६– $\times \times \times \times \times \times \times \times \times$ ।

४२/१-२-ग४- \times \times \times \times \times \times \times \times । ग१-सरस्वती तथा चोर्ष्वंगामिनी या प्रतिष्ठिता । ४२/२-ग२-आजिह्नान्तं ———; ग४-आजिह्नायां ———। ४२/३-न४-आस-व्यक्षणं विप्रेन्द्रे ; ग५-आसर्वंकण्ठाद्विप्रेन्द्रे ; न६-नासान्तकृर्गाद्विप्रेन्द्र । ४२/४-ग५, ६-शंबिनी चौर्ष्वंगामिनी ; न३-----चोर्ष्वंगामिना (?-गामिनी) ।

गान्धारी सव्यनेत्रान्तमिडायाः पृष्ठतः स्थिता । इडा च सव्यनासान्तं सव्यभागे व्यवस्थिता ॥४३॥

*हस्तिजिह्वा तथा सव्यपादांङ्गगुष्ठान्तमिष्यते । विक्वोदरा तु या नाडी तुन्दमध्ये व्यवस्थिता ॥४४॥

अलम्बुषा महाभागे पायुमूलादघोगता । एतास्त्वन्याः समुत्पन्नाः शिराइचान्याश्च तास्वपि ॥४५॥

यथाश्वत्थदले तद्वदब्जपत्रेषु वा शिराः । नाडीष्वेतासु सर्वासु विज्ञातव्यास्तपोधने ॥४६॥

प्राणोऽपानःसमानश्च उदानो व्यान एव च । नागः कुर्मोऽय कृकरो देवदत्तो घनंजयः ॥४७॥

एते नाडीषु सर्वासु चरन्ति दश वायवः । एतेषु वायवः पंच मुख्याः प्राणादयः स्मृताः ॥४८॥

४३/१–न३, ग१–गान्धारा सव्यनेत्रान्ते ; ग६, न८, क–गान्धारी सव्यनेत्रान्ता ; न६, ग३, ४–गान्धारा सव्यनेत्रान्तं ; न४–गान्धारा सव्यनासान्तं । ४३/२–ग१–(नेत्रान्ते) चेडायाः पृष्टतः स्थिता ; ग२–इडायाः पृष्टतः स्थिरा । ४३/३–ग२–इडा च सव्यनेत्रान्तं । ४३/४–ग४–सर्वभागे व्यवस्थिता । ४३/३–४–ग५, ६, क– \times \times \times \times \times \times \times

*४४/१–४–न३, ग५, ६, क- \times \times \times \times । ४४/१–२–ग२–हस्तिजिह्वा सदा सव्य-पादांगुष्टान्तिमिष्यते । ४४/३–न४, ५, ७, त—िवश्वोदरी तु या नाडी (न७–नारी?) । ४४/४–ग२–कन्दमध्ये व्यवस्थिता ।

४५/१–ग३, ६–अलंबुसा महाभागा ; न३–अलंमुखा(?)महाभागे । ४५/२–ग४, ५, ६, क—पायुमूलादथोघ्वंगा ; ग२–पायुमूलादधोमुखी ; न१–पायुमूलमधोगता ; ग४–पायुगुल्फादधोगता (?); न८–वायो–(?पायो–) मूंलादधोगता । ४५/३–न१, २, ३, ५–एतास्वन्याः समुत्पन्नाः; न६–तास्त्वन्याश्च———; त–एतामुख्या(ः)समुत्पन्नौ(?समुत्पन्नाः) । ४५/४–ग१, त–िसरास्वन्याश्च तास्विप ; ग२, ३, ४, न६–शिरास्त्वन्याश्च——— ; न३–शिरास्वन्यासु तास्विप ; ग५, ६—तास्वन्याश्चैव तास्विप ।

४७/१—न३, ग३—प्राणापानः समानश्च । ४७/२—ग६—चोदानः व्यानः स एव च (?चोदानो-व्यान एव च) । ४७/३—न१, ५, ६, ग२—नागः कूर्मश्च कृकरः ; न३,७———— कृकलः ; ग६——कृकरकः ; ग३—नागहमं फ्रकरश्च(?नागः क्मंः कृकरश्च) ।

४८/३--ग३--एते च वायवः पंच।

तेषु मुख्यतमावेतौ प्राणापानौ नरोत्तमे । प्राण एवेतयोर्म्ख्यः सर्वप्राणभृतां सदा ॥४९॥

आस्यनासिकयोर्मध्ये हृन्मध्ये नाभिमध्यमे । प्राणालय इति प्राहुः पादाऊगुष्टेऽपि केचन ॥५०॥

अघरचोध्वं च कुण्डल्याः परीतः प्राणसंज्ञकः। निष्ठप्रतेषु चतुर्षु प्रकाशयति दीपवत्।।५१।।

अपाननिलयं केचिद् गुदमेढोरुजानुषु । उदरे वृषणे कटघां जङ्कोनाभौ वदन्ति हि ॥५२॥

५०/१–त-अक्षिनासिकयोर्मघ्ये । ५०/२–न४, ८–हृन्मघ्ये नाडी. (?नाभि–) मघ्यमे ; न३– हृन्मघ्यं नाभिमध्यमं ; न१, २, ५, ६, ७, क–हृन्मघ्ये तालुमघ्यमे । ५०/३–ग५, ६, न६, क– प्राणालय इति प्रोक्तः ; न३, ४, ग३–प्राणालयमिति प्राहुः ; ग४–प्राणाद्वय (?प्राणालय) इति प्राहुः । ५०/४–न६–पादांगुष्टे च केचन ; ग५, ६–पादांगुष्टादिकेन च ।

५२/१-४-अयं क्लोकः "न३, ६, ८, ग४, ५, ६, क" लेखेषु "व्यानः" इत्यादि ५४ तम-स्यानन्तरं, नात्र । ५२/१-ग३-अपाननियमं (?निलयं)——; ग४, ५-अपाननीयं (?अपान-निलयं)——; ग६—अपाननिल्याः——; न१, ३, ७-अपानमिल्लं—; न५-अपानमिल्लं—; न२-अपक्वोनमिन्ले(?)——; ग२-आधारिन्लयं——; ५२/२-न४-गुदमेढ्रानुजानुषु (?गुदमेढ्राक्जानुषु); न७-गुदे मेढ्राक्जानुषु; ग२, त-गुदा मेढ्राक्जानुषु। ५२/३-ग१, २, न६-उदरे वंक्षणे कट्यां; न१, २, ३, ५, ७———दक्षिणे——। ५२/४-न१, २, ३, ५, ७, ग३, त-जङ्घा नाभौ——; न४-जङ्घा सूरौ(?)——; ग१, २-जघने तौ———।

गुदाग्न्यागारयोस्तिष्ठन्मध्येऽपानः प्रमञ्जनः। अघक्चोर्ध्वं च कृण्डल्याः प्रकाशयति दीपवत् ॥५३॥

व्यानः श्रोत्राक्षिमध्ये च कृकटचां गुल्फयोरपि । घ्राणे गर्छे स्फिजोर्देशे तिष्ठत्यत्र न संशयः ॥५४॥

उदानः सर्वसन्घिस्यः पादयोर्हस्तयोरपि । समानः सर्वगात्रेषु सर्वं व्याप्य व्यवस्थितः ॥५५॥

भुक्तं सर्वरसं गात्रे व्यापयन्विह्नना सह । द्विसप्ततिसहस्रेषु नाडीमार्गेषु संचरेत् ॥५६॥

समानवायुरेवैकः साग्निव्याप्य व्यवस्थितः । अग्निभिः सह सर्वत्र साङ्गोपांगकलेवरे ॥५७॥

५५/१-४-ग१- \times \times \times \times \times \times \times । ५५/३-न३-समानं सर्वगात्रेषु । ५५/४-न८, ग४, ५, क-सर्वव्यापि व्यवस्थितः ।

५६/१–न४, ६, ८, ग३, त, क-भुक्तसर्वरसं——। ५६/२–ग५–ब्यापयन्निमा सह ; ग२, ६, क-ब्यापयत्यिग्निना ——; न८-ब्यापयन्वायुना——। ५६/४–ग१, २, ३, ४, ५, ६, न३, ४, ६————संचरन्।

५७/१-न२, ४, ७, ग३-समानो वायुरेवैकः । ५७/२-ग३-साग्नि व्याप्य----; न१, २, ४, ५, ७, ग४, ५, ६-सोग्नि व्याप्य----; न७-सोग्निर्व्याप्य(?)----। ५७/३-न३, ६, ग५, ६-अग्निना सह सर्वत्र; ग३-अग्निभश्च हि----; न४-प्रागुक्तैःसह----। ५७/४-न१, ८, ग१, २, ४, क-सांगोपांगकलेवरे ; न४, ग५, ६-सांगोपांग-----; न५-सांगोपांग-कलेवरम् ।

५३/१-४-अयं श्लोकः १६ लेखेभ्यो १० लेखेषु पाठभेदैर्दृश्यते । ते लेखाः—न३, ४, ६, ८, ग१, ३, ४, ५, ६, क । तेभ्यो यस्मिन्स्वरूपे स ग्रन्थे स्वीकृतस्तस्मिन् "ग५, क" इति संज्ञितयोर्लेखयोरेव विद्यते । तस्य चतुष्टं चरणं सर्वत्र समानरूपम् । अन्यानि यैः पाठान्तरै- युंक्तानि विद्यन्ते तानिः—५३/१-ग६-गुदाग्न्याघारयोस्तिष्ठन् ; न३-गुद्वग्रोगारयोस्तिष्ठन् (?गुदा-ग्रागारयोस्तिष्ठन्); ग१-गुदाग्राघारयो————; ग३-गुदान्नागादयो————(?); न४-गुदान्तु देहमध्ये तु; ग४-गुदाद्गुल्फस्य जान्वोश्च ; न८-गुदादुद्भिद्य जान्वोश्च ; न६-गुदा + + तयो(?); ग४- $\times \times \times \times$ । ५३/२-ग३- + + प्राणः प्रभजनः; ग४- + + + । ५३/४-ग४- + + + + ।

नागादि वायवः पंच त्वगस्थ्यादिषु संस्थिताः । तुन्दस्यं जलमन्नं च रसानि च समीकृतम् ॥५८॥

तुन्दमघ्यगतः प्राणस्तानि कुर्यात्पृथवपृथक् । पुनरज्नी जलं स्याप्य त्वन्नादीनि जलोपरि ॥५९॥

स्वयं ह्यपानं संप्राप्य तेनैय सह मारुतः । प्रवाति ज्वलनं तत्र देहमध्यगतं पुनः ।६०॥

वायुना वातितो विह्निरपानेन शर्नैः शर्नैः । तदा ज्वलति विप्रेन्द्रे स्वकुले देहमच्यमे ॥६१॥

ज्वालाभिज्वलनस्तत्र प्राणेन प्रेरितस्ततः । जलमत्युष्णमकरोत्कोष्टमघ्यगतं तदा ॥६२॥

५८/३—ग४, ५, ६—तुन्दस्थजलमन्नं च ; न३—तुन्दस्थं जलमानं च(?) ; न२, ५—उदरस्थं जलमन्नं च ; ग३—गुदं जलं च मन्नं(?) । ५८/४—ग३—रसानि च समाकृतिः ; ग४—रसादीनि समंस्थितम् ; न३—रसादि च समीकृतम् ; न८—रसादीनि समीकृतम् ; न७——— समीकृतः ; ग५ ६, क———च समीरितम् ; न४—रसानां च समासतः ।

५९/१–ग३–गुदमध्यगतः प्राणः । ५९/२–न१, २, ५, ७, त–स्थानं कुर्यात्पृथवपृथक् ; न४, ग३—सर्वं — । ५९/३–न४, ५, ग ५, ६, क–उपर्यग्नेर्जलं स्थाप्य ; ग३–उपर्यग्ने — ; न१–उपर्यग्रे — ; न१–उपर्यग्ने ; न१–उपर्यग्ने ; न१–उपर्यग्ने ; न१–उपर्यं निर्जलं (?उपर्यग्निर्जलं उपर्यग्नेर्जलं वा) — । ५९/४–न३, ग६–अन्नादीनि जलोपिर ; ग५–चान्नादीनि — ।

६१/१–ग१, ५, ६, क–वायुना पातितो (?) विद्धः ; ग३–वायुना पीडितो(?)———; न७-प्राणेनापातितो——; ग२–वायुनो चाशिरो (?)———; न२–जन्तुना वातितो——। ६१/१–२–ग४– \times \times \times \times \times \times \times \times (?) ६१/३–न६–तथा ज्वलित विप्रेन्द्रे; न२, ७–ततो ———; ग५, ६,–तत्रो(?)ज्वलित (?तत्रोज्ज्वलित)———; न३–ततो———विप्रेन्द्र (?) ; ग३–ततो———प्रस्पन्दे(?) । ६१/४–ग३–त्वकुति (?)देहमध्यगे । ६१/३–४–ग४– \times \times \times \times \times \times \times \times

६२/१—११—ज्वालाभिस्तु ज्वलंस्तत्र ; न३—ज्वलित ज्वलनस्तत्र ; ग२—ज्वालाज्विलित् स्पेण । ६२/२—ग३—प्राणेन पूरितस्ततः ; न३—प्राणेन प्रेरितः स्थितः (?) ; ग५, क—प्राणेन प्रेरितस्तया ; ग२—विह्ना परितापितः । ६२/१—२—ग४— $\times \times \times \times \times \times \times \times \times$ । ६२/३— न४—जलान्नमुष्णमकरोत् ; ग३—ज्वलन्नत्युष्णमकरोत् ; ग२—ज्वल्त्युष्णं भवत्तत्र । ६२/४—न१, २, ६, ग५,—कोष्टमध्यगतं तथा । न८, क—काष्ट—(?कोष्ट—) मध्यगतं तथा ; ग६—कोष्टमध्यगतं यथा ; ग२—कोष्टमध्यगतं ततः ; त—कोष्टमध्यगतः स्वयम् ; ग१—कोष्टमध्यगतस्तथा ; ग३— (कोष्ट—)मन्नमध्यगतस्तथा (?) । ६२/३—४—ग४— $\times \times \times \times \times \times \times \times$

[।] अन्नं व्यञ्जनसंयुक्तं जलोपरि सर्मापतम् । ततः सुपक्वमकरोद्वह्निः सन्तप्तवारिणा ॥६३॥

स्वेदमूत्रे जलं स्यातां वीर्यरूपं रसो भवेत् । पूरीषमन्नं स्याद्गागि प्राणः कुर्यात्पृथक्पृथक् ॥६४॥

समानवायुना सार्ध रसं सर्वासु नाडीपु । व्यापयञ्च्छ्वासरूपेण देहे चरति मास्तः ॥६५॥

त्र्योमरन्धेश्च नवभिः विष्मूत्रादिविसर्जनम् । कुर्वन्ति वायवः सर्वे शरीरेषु निरन्तरम् ॥६६॥

निःश्वासोच्छ्वासकासाश्च प्राणकर्मेति कीर्त्यते । अपानवायोः कर्मेतद्विण्मूत्रादिविसर्जनम् ॥६७॥

हानोपादानचेष्टादि व्यानकर्मेति चेप्यते । उदानकर्मं तत्प्रोक्तं देहस्योन्नयनादि यत् ॥६८॥

६३/१–४–५४– $\times \times \times \times \times \times \times \times$ । ६३/१–न१, २, ५, ग१, २–अन्नव्यंजनसंयुक्तं । ६३/२–न३–जलोपिर समन्वितं ; ग३————समर्पणम् (?) । ६३/३–न१, ३, ग१, त–ततः स पक्वमकरोत् ; न४–ततः स तप्तमकरोत् ; न६, ८, क–ततस्तत्पक्वमकरोत् ; ग३–ततस्त–त्त्वक्त–(?त्यक्व–)मकरोत् ; ग२–ततः सुपक्वभवित । ६३/४–न३–विह्नःसन्त्यज्य (?सन्तप्त–) वारिणा ।

६४/१-न१-स्वेदमूत्रं रसं———; न५-स्वेदमूत्रं रसं——; त———रसे——; न३———जलस्यान्नं (?जलं स्यातां) ; न६-स्वेदमाने (?स्वेदमूत्रे) जले (?जलं)———; ग३-स्वेदमूत्रजलस्यान्तं (?स्वेदमूत्रे जलं स्यातां) ; ग५-स्वेदमूत्रे जलं मूत्रं(?) ; ग६, क— स्वेदमूत्रजलं रक्तं ; न४-स्वेदमूत्रं जनस्यांतर (?) । ६४/२-ग२-घातुरूपं रसो———; न१, २, ५, ग-वीर्यरूपं रसं भवेत् ; न४, ग३-यायुरूपं रसो———। ६४/३-ग२-पूरीपमन्य-द्भवति(?)। ६४/४-न४, ग३-सर्वं———। ६४/१-४-ग४- \times × × × × × × × ।

६५/१-न६-समानं वायुना सार्घं । ६५/२-ग३-रसाः(?)----- । ६५/३- न२, ५, ७--व्यापयंच्छवासमार्गेण ; ग२-व्यापयन्घातुरुपेण ; त-व्यापयंस्तासु नाडीपु ; न३---- व्यापयन्सासुरूपेण (-श्वासरूपेण) ; ग३-व्यापयन्स्वं स्वरूपेण । ६५/४-ग२-देहो भवित संक्रमात् (?) ।

६६/१--ग६-च्योमरन्ध्र्रवमा + + भिः (?व्योमरन्ध्र्रव नवभिः); न३-रोमरन्ध्र्रवन + भिः; (—नवभिः); न४, ग१, ३, त-रोमरन्ध्र्रव नवभिः; ग२, ४-देहरन्ध्र्रव ———। न८- देहे रन्ध्रव ———। ६६/३-४-ग२, ४- \times \times \times \times \times \times \times !

६७/१–४–ग२, ४– \times \times \times \times \times \times \times । ६७/१–न३–निःश्वासोश्छ्वासकारश्च ; न४, ग५, ६—निः–श्वासोञ्छ्वासकासश्च ; न५–———कोसाश्च (?कासाश्च) । ६७/२–न३, ४, ग३–प्राणकर्मेति कीर्तितं ; न६, ८, ग१, त, क————कीर्तिताः ।

६८/१—ग५—हानोपानादि चेष्टादि ; न३—हानादानं च चेष्टादि । ६८/२—ग१, २, ५— व्यानकर्मेति चोच्यते ; ग१, त———— कीर्त्यते ; न३————शिष्यते (?) ; ग२—विद्या-कर्मेति चोच्यते । ६८/३—न१—उदान कर्मेति प्रोक्तं ; ग५, ६—उदानकर्म यत्प्रोक्तं । ६८/४—ग४, ५, ६, क—देहस्योन्नयनादिषु ; ग१—देहस्योन्नयनादिकम् ; ग२—देहस्योन्नयनादिकम् ।

पोषणादि समानस्य शरीरे कर्म कीर्तितम् । उद्गारादि गुणो यस्तु नागकर्मेति कीर्त्यते ॥६९॥

निमीलनादि कूर्मस्य क्षुतं वै कृकरस्य च । देवदत्तस्य विप्रेन्द्रे तन्द्रीकर्मेति कीर्तितम् ॥७०॥

धनंजयस्य शोफादि सर्वं कर्म प्रकीर्तितम् । ज्ञात्वैवं नाडीसंस्थानं वायुनां स्थानकर्मणी ॥७१॥

*विधिनोक्तेन मार्गेण नाडीसंशोधनं कुरु ।।७२॥

इति श्री योगयाज्ञवल्क्ये चतुर्थोऽध्यायः ।

६९/२—न६—शरीरं (?शरीरे) कर्म कीर्तितम् । ६९/३—ग३—उद्गाराविणो (?उग्दारादि गुणो) यस्तु । ६९/४—ग१—नागकर्मेति चोच्यते ; न३, ग३———चेष्टितम् ; न४———चेरितम् ; न४———जीवितम् (?) ; ग५, ६—व्यानकर्मेति (?)कीर्तितम् ; ग४—नाम-कर्मेति (?)———।

७०/१-४-त- \times \times \times \times । ७०/१-न२-निर्मलानादि (?निमीलनादि) कूर्मस्य ; न३-न मीलनादि (?निमीलनादि)—; न६-उन्मीलनादि——। ७०/२-न३, ६, ग३, ४-क्षुतं कुकरकस्य च ; न२-क्षुतं च कुकरस्य च ; ग२-क्षुतं नु कुकलस्य च ; न४-क्षुतं नु कुकलस्य च ; न१-कृतं (?क्षुतं)च कृकरस्य च ; न७-क्षुतं च कृकलस्य च ; (पाठान्तरत्वेन) क्षुत्तृषे कृकलस्य च ; ग५-क्षुतकृत्कृकरस्य च (?) ; ग६-क्षत्रकृत्कृकरस्य च (?) ७०/४-न१, २, ५-तन्त्रीकर्मेति कीर्त्यते ; ग३-तन्त्रीकर्मेति कीर्तितम् ; ग२-तन्त्रीकर्मेति चोच्यते ; न७ ग६----कीर्त्यते ।

७२/१--ग५, ६, न८, क-विधानोक्तेन मार्गेण ।

पंचमोऽध्यायः ॥

*गार्ग्वाच-

भगवन्त्रह्मविच्छ्रेष्ठ सर्वशास्त्रविशारद । केनोपायेन शुद्धाः स्युर्नाडयो मे त्वं वद प्रभो ॥१॥

इत्युक्तो ब्रह्मवादिन्या ब्रह्मविद्ब्राह्मणस्तदा । तां समालोक्य कृपया नाडीशृद्धिमभाषत ॥२॥

†याज्ञवल्क्य उवाच-

विध्युक्तकर्मसंयुक्तः कामसंकल्पर्वजितः । यमैश्च नियमेर्यक्तः सर्वमाङ्गविवजितः ॥३॥

कृतविद्यो जितकोघः सत्यवर्मपरायणः । गृरुशुश्रुषणरतः पितृमातृपरायणः ॥४॥

स्वाश्रमस्थः सदाचारः विद्वद्भिरच सुशिक्षितः । तपोवनं सुसम्प्राप्य फलमूलोदकान्वितम् ॥५॥

पंचमोऽध्यायः ।

*ग४, ५–गार्गी-; ग६–ओम्–गार्गी ; न१, ७, ८, ग१, क– \times \times \times \times ।

१/१–न८, क–भगवन्सर्वविच्छ्रेष्ठ । १/२–न३–सर्वशास्त्रविशारदः । १/३–न६–येनो-पायेन । १/४–न२, ५, ७, ८–नाडयस्त्वं——; त–नाडयः स्वं वदस्व मे ; ग२–नाडयस्तु——; ग३–नाडयो मे तद्वदाशु मे ; ग५, ६, क–नाड य : सर्वदेहिनाम् ।

३/२-ग२-काम्य-----; ग१, ५, न३------विजतम् । ३/३-४-न१, ८, ग२, ४, ५, क- \times \times \times \times \times \times \times \times

४/१-न६———— जितः शान्तः ; ग३———— जितश्वासः ; न१, २, ५, ६, त——— जितः श्रान्तः ; ग२——— जितश्रान्तः ; ग१, ४, न३-श्रुतविद्यो जितश्रान्तः ; न८-श्रुतविद्यो जितः शान्तः । ४/३-न३——शिश्रूषणस्तः (?श्रुश्रूषणस्तः) ; ग३———श्रुश्रूषणं कर्ते (?) ; न६-पित् शुश्रूषणरतः ।

समभ्यसेत् ।

तत्र रम्ये शुचौ देशे ब्रह्मघोपसमन्विते । स्वघर्मनिरतैः शान्तैर्बृह्मविद्भिः समावृते ॥६॥

वारिभिश्च सुसम्पूर्णे पुष्पैर्नानाविधैर्युते । फलमूलैश्च सम्पूर्णे सर्वकामफलप्रदे ॥७॥

देवालये वा नद्यां वा ग्रामे वा नगरेऽथवा । *सुशोभनं मठं कृत्वा सर्वरक्षासमन्वितम् ॥८॥

त्रिकालस्नानसंयुक्तः स्वधर्मनिरतः सदा । वेदान्तश्रवणं कुर्वस्तस्मिन्योगं समभ्यसेत् ॥९॥

केचिद्वदन्ति मुनयस्तपःस्वाघ्यायसंयुताः । स्वधर्मनिरताः शान्तास्तन्त्रेषु च सदा रताः ॥१०॥

निर्जने निरुये रम्ये वातातपविवर्जिते । विष्युक्तकर्मसंयुक्तः शुचिर्भुत्वा समाहितः ॥११॥

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६/२-न३-ब्रह्मविद्भिः समन्विते ; क-ब्रह्मविद्भिः समावृते । ६/३-न१, ५, ७-स्वकर्म
निरतै:—— । ६/४-न३———समावते (?) ; नZ——सनातनै: ।
    ७/१–ग२–कुशाभिः(?)———। ७/२–न३, ग५, ६, क– × × × ×।
७/३–न३, ६, क-\times\times\times\times। ७/४–न३, ६-\times\times\times; ग५,६–पूर्ज-
र्नानाविधैर्यते ।
    ८/१-ग३, न८-शिवालये वा----। ८/२-न६-ग्रामेषु---; न१, २, ७,
ग४----नगरे तथा ; ग४, ५, न८-नगरेऽपिवा । *न१, २, ५, ७-अत्रैधिका पंक्तिः-
सिद्धकूपे देवलाते तडागे सरसीय वा। ८/३-भूशोघनं ---। ८/४ न५-सुरज्ञा (?) च----;
गर----समन्वितः ; ग४, न८----समावृतम् ।
    ९/१–न७–त्रिकालं—----; ग२–-----स्तानसंशुद्धः । ९/२–ग४, न८–---
———निरतस्तथा ; ग१–स्ववर्मं च समाश्रितः ।  ९/४–ग५, क–ँतत्र—————;
ग६-तत्र योगं समारभेत ।
     १०/२-न३, ८---संयुतः(?) । १०/३-न३, ८, ग४, ६, क----
निरतः शान्तः । १०/४-न३, ग६-----रतः ; न१, २, ५, ७, त-योगतन्त्रविशारदाः ;
न४, ग३-योगेषु च सदा रताः ; ग४, न८-शास्त्रेगेषु च विचक्षणः ; क-शास्त्रेषु च सदा रताः ।
    ११/१-न२, ८---विनये----। ११/३-ग४-----कुर्वन्यः ; न६-विघ्युक्तं-
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-कूर्वीत ; न८-विष्युक्तं---कूर्वन्सन् ; क-----धर्मसंयक्तः । ११/४-ग२-शुचियौगं

मन्त्रैन्यंस्ततनुर्धीरः सितभस्मधरः सदा । मृद्वासनोपरि कुशान्समास्तीयं ततोऽजिनम् ॥१२॥

विनायकं सुसम्पूज्य फलमूलोदकादिभिः । इष्टदेवं गुरुं नत्वा तत आरुह्य चासनम् ॥१३॥

प्राङ्मुखोदङ्मुखो वापि जितासनगतः स्वयम् । समग्रीवशिरःकायः संवृतास्यः सुनिश्चलः ॥१४॥

नासाग्रदृक् सदा सम्यक् सव्ये न्यस्येतरं करम् । नासाग्रे शशभृद्विम्त्रं ज्योत्स्नाजालवितानितम् ॥१५॥

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१२/१–ग२, ४, ६, न८, क-मन्त्रन्यस्त---; न६----तनुर्वीरः ; ग५-
——तनुः सदा ; ग२–सितभस्मावकुण्ठितः ; ग५–	imes 	imes 	imes 	imes । १२/३–ग२–
————कुक्षाःँ(?) ; न६–मृद्वासनोपविष्टः सन् । १२/४–ग२——— शुभाजिने ; न<sub>्</sub>१,
२, ३, ४, ७, ग३, ५, ६, क————थवाजिनम् ; न६———— नवाजिनम् ; ग१–संस्तीर्य
ह्मयवाजिनम् ।
    १३/१-न२----ससंपूज्य ; ग५-----तु संपूज्यः ग६-विष्वक्सेनं----;
\pi \psi - \times \times \times \times 1 १३/२-\pi \psi - \times \times \times \times 1 १३/४-\pi Y, \Psi = 0, \Psi = 0
त, क----आरभ्य चासनम् ; न४, ग३---- आसनम् ; न३-तं तथारभ्य आसनम् ;
ग२-ततो(ऽ)वष्टभ्य चासनम् ।
    १४/१-त---भूत्वा ; न४----वा स्यात् । १४/२-न३----
गत(:) स्वयम् । १४/३–न१——शिराः कायः ; न३———शिरः काय(:) ।
    १५/१-न५, ग५-नासा (ग्र) दृक् ; ग१-नासाग्रे न्यस्तदृक् ; ग३-
    न १, २, ५, ६, ७, ग२, ३-अनन्यगतमानसः ; न४,-अनन्यगतभावनः । १५/३-४, १६/१-४ एतासां
पंक्तीनां मुलं निश्चयपूर्वकं निर्णेतुमशक्यम् । तथापि पूर्वापरसम्बन्धमवलोक्य तन्निर्णीयोपरिष्ठा-
ल्लिखितं, सर्वेषु लेखेषु च यद्यद्यादृशं यादृशं दृष्टं तत्ततादृशंतादृशमधस्तादवतीर्यते ।
१५/३-नासाग्रे शशभृद्धिम्बं-ग१, ३, ४,५,† ६,† न४, ६, ८,† क. [ †एतेषु लेखेषु द्वाविप पाठौ विद्येते ॥
———शशभद्धिम्बे–ग२, ५,† ६,† न८,† त.
[† एतेषु लेखेषु द्वावपि पाठौ विद्येते ॥
१५/४–ज्योत्स्नाजालवितानितम्–ग१, ५,† ६.†
———जालं वितन्वता-न१, २, ५(—वितन्वतं).
ज्योत्स्नाजालविनिर्मितम्–ग४, न८.†
-----विराजितम्–न७.
विन्द्रमध्ये तुरीयकम्-ग२, ३, न४.
विन्दुमच्च न३, ८, क, ग५ ६.
वीक्यमध्ये ------न६.
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सप्तमस्य तु वर्गस्य चतुर्थं बिन्दुसंयुतम् । स्रवन्तममृतं पश्यन्नेत्राभ्यां सुसमाहितः ॥१६॥

*इडया वायुमारोप्य पूरियत्वोदरस्थितम् । - ततोऽर्गिन देहमध्यस्यं ध्यायन्ज्वालावलीयुतम् ॥१७॥

रेफं च विन्दुसंयुक्तमग्निमण्डलसंस्थितम् । ध्यायन्विरेचयत्पश्चान्मन्दं पिगलया पृनः ॥१८॥

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१६/१-२-सप्तर्मस्य तु वर्गस्य चतुर्थ बिन्दुसंयुतम्-न१, २, ५, ७, ८, ग४, ५, ६.
                                                          ——— × × × × × ४ × –त.
                                ., ३-४-स्रवन्तममृतं पश्यन्नेत्राभ्यां सुसमाहितः-न१, २.
                               –ॄ----- ---पद्येन्नेत्राभ्यां------ −ग१, ५, ६, न३, ५, ६, ७, ८, त.
                            प्रवृत्तममृतं ———— –ग४.
                            \times \times \times \times \times \times \times \times -
          *अत्राधिकः क्लोकः केषुचिल्लेखेषु निम्नलिखितैः पाठान्तरैः सह दृक्यते ।
                 १–२–बिन्दुमस्तकमालोक्य नेत्राभ्यां मनसा सह–न१, ५, ७, ८.* *न८–द्वौ पाठौ विद्येते ।
                             मुर्घिन विन्दुं समालोक्य----न२.
                             बिन्दुमध्यस्थमालोक्य नेत्राभ्यां सुसमाहितः-ग४.
                                                         ─── विन्दुमघ्यस्थमालोक्य विन्दुमच्चतुरीयकम्-----न८.*
                             बिन्दुमात्रं समालोक्य × × × × ----त.
                 ३-४-नासाग्रे शशभृद्धिम्बं विन्द्रमध्ये च दीपकम्-न१, २, ५, ७.
           मुद्रितपुस्तकेषु ये ये पाठाः स्वीकृता दृश्यन्ते ते :--
            १५/३---- मुं., पु., न, पु., मु. पु., क. पु.–नासाग्रे शशमृद्धिम्त्रं; त्रि. पु.–नासाग्रे शशभ् 🕂 🕂 ।
            १५/४–मूं. पू., न. पू., मू. पू. क. पू.-ज्योत्स्नाजालविराजितम् ; त्रि. पू.– ++ द्यु तुरीयकम्।
            १६/१-२-मुं. पु., न. पु., मु. पु., क. पु-सप्तमस्य तु वर्गस्य चतुर्यं विन्दुसंयुतम्; त्रि. पु.-
            \times \times \times \times 1 १६/३–४–त्रि. पु., मुं. पु.—स्रवन्तममृतं पश्येन्नेत्राभ्यां सुसमाहितः; न. पु.—-
                    —पश्यन्नेत्राभ्यां सुसमाहितम् (?) ;ं मु. पु., क. पु.—स्रवन्तममृतं पश्यन्नेत्राभ्यां सुसमाहितः ।
            १७/१–न१, २, ४. ५, ८, ग६–इडायां———; ग६, न८–इडया पूरयेद्वायुं (पाठान्तर-
त्वेन) । १७/२-न६-पूरियत्वोदरं स्थितः ; न८-पूरियत्वोदरं ततः ; त- बाहृचाद् द्वादशमात्रकैः ;
ग६, न८-—- द्वादशमात्रकम् । १७/१-२-क- <math>	imes 	imes 	imes 	imes 	imes। १७/४-ग१-घ्यात्वा
ज्वालावलीवृतम् ; ग२, ४, ५, न८–ध्यायेज्ज्वालावलीयुतम् । १७/३–४ क-\times \times \times \times \times \times ।
            १८/२—ग१, २, न८–अग्निमण्डलसंयुतम् ; क- 	imes 	imes
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ध्यायेद्वा रेचयेत्पश्चात् । १८/४-न४-अंगपिंगलया पुनः ।

पुनः पिंगलयापूर्य प्राणं दक्षिणतः सुघीः । पुनर्विरेचयेद्धीमानिडया तु शनैः शनैः ॥१९॥

त्रिचतुर्वत्सरं वाथ त्रिचतुर्मासमेव वा । *षट्कृत्व आचरेक्रित्यं रहस्येवं त्रिसन्धिषु ॥२०॥

नाडीशुद्धिमवाप्नोति पृथिवचह्नोपरुक्षिताम् । शरीरलघुता दीप्तिवंह्नजंठरवितनः ॥२१॥

नादाभिव्यक्तिरित्येते चिह्नं तित्सिध्दिमूचकम् । †यावदेतानि सम्पश्यतावदेव समाचरेत् ॥२२॥

इति श्रीयोगयाज्ञवल्क्ये पंचमोऽध्यायः।

१९/१–ग२–वायुं पिंगलयापूर्य ; ग४–पुनः पिंगलया ध्यायन् ; न१, ३, ५, क $-\times\times\times\times$ । १९/२–ग३, न४–घ्राणं दक्षिणया———; ग२–प्राणं दक्षिणया———; ग४–पूर्य———; न१, ५, क $-\times\times\times\times$ । १९/३–न६–पुनविरेचयेत्पश्चात् ; ग३–पुनर्वेदे + + । १९/४–न३, ६, ग३, ५–इडया च————; ग६–इडायां (?) तु– १९/३–४–क $-\times\times\times\times\times\times$ ।

२२/१-न६-नादाभिवृद्धिरित्येते ; — क $\times \times \times \times$ । २२/२-ग२-चिह्नं तस्य विवोधकम् ; ग३- आरोग्यं सिद्धिसूचकम् ; ग४, न८-चिह्नं नाड्यो (?चिह्नान्यादौ) भवन्ति हि ; क $\times \times \times \times$ । २२/३-ग४-यावद्दै तानि — ; न७-यावद्वयेतानि — ; क $\times \times \times \times$ । २२/४-त, न३, ८, ग४, ५, ६-तावदेवं — ; न१, ३, ४, ५, ७, ग१, २, ३, त — समभ्यसेत् ।

अत्र "न३" लेखे यर्तिकंचिदधिकं दृश्यते तन्न योगयाज्ञवल्क्यस्य कस्मिन्नपीतरहस्तलेखे न वा तस्य कस्मिन्नपि मुद्रिते संस्करणे । तथापि तदत्रोध्दृत्य दीयते ।

"स्कन्दे—अथवैतत्पिर्त्यज्य स्वान्ध (?)-बुद्धि समाचरेत् ॥२१॥ आत्मशुद्धः समादानीयः (?) सुसस्वरूपः स्वयं प्रभु (:) ॥२१॥ अज्ञानान्मिलनो भाति ज्ञानाद्वृष्ट्दो विभात्ययं । अज्ञानपंकं यः-किंचत्क्षालये (ज्) ज्ञानतो वतः (?नरः) ॥२२॥ स एव सर्वदा शुद्धो ज्ञानकर्मरतो द्विजः । न बुद्धिभेदं जनयेदज्ञानां कर्मसंगिनाम् ॥२३॥ कर्मं कर्तव्यमित्येव नोघयेता (?) सुबुद्धितः ॥ इति श्री-याज्ञवल्कीये पंचमोऽष्ट्यायः ॥"

''क" लेखे च १५ क्लोकानन्तरं लेखकस्य टिप्पणीर्वर्तते :--''तालपत्रं चतुष्ट्यं गलितमस्ति'' इति ।।

योगयाज्ञवल्क्य:

षष्ठोऽध्यायः ॥

*याज्ञवल्क्य उवाच—

प्राणायाममयेदानीं प्रवक्ष्यामि विधानतः । समाहितमनास्त्वं च शृणु गागि वरानने ।।१।।

प्राणापानसमायोगः प्राणायाम इतीरितः । प्राणायाम इति प्रोक्तो रेचपूरककुम्भर्कः ॥२॥

वर्णत्रयात्मका ह्येते रेचपूरककुम्भकाः । स (?य) एषः प्रणवः प्रोक्तः प्राणायामश्च तन्मयः ॥३॥

*इडया वायुमारोप्य पूरियत्वोदरस्थितम् । - शनैः षोडशभिर्मात्रैरकारं तत्र संस्मरेत् ॥४॥

षष्ठोऽघ्यायः ।

३/१-न६-वर्णत्रयात्मके—; न२, ७, ग२, ६, क $-\times\times\times\times$; त-एवं त्रयात्मका—। ३/२-ग३-केचित्पूरक—; न१——कुम्भकपूरकाः; न२, ग२, ६, क $-\times\times\times\times$ । ३/३-न४, ग३-स एव——; न३-स एकः——; ग४-एतैश्च——; ग२-य एदं(?)प्रणवं प्रोक्तं(?); ग६, क $-\times\times\times\times$ । ३/४-ग६, क $-\times\times\times$

*न३—"स्कन्दे-प्राणायामेन चित्तं तु युक्तं भवित सुव्रते । चित्ते शुद्धे ततः साक्षात्प्रत्यग्ज्योति-र्व्यवस्थितम् ; न६—नासाग्रदृक् सदा सम्यक्चेले (?सव्ये) न्यस्ये (तरं)करम् । नासाग्रशशभृद्धिम्बं ज्योत्स्नाजालवितानितम् ॥ सप्तमस्य तु वर्णस्य (?वर्गस्य) चतुर्थं विन्दुसंयुतम् । विम्वमध्यस्थ-मालोक्य नेत्राभ्यां मनसा सह । न८, ग५, ६-एतेषु लेखेषु वहवोऽधिकाः श्लोकाः विद्यन्त इति ते षष्ठाध्यायस्यान्ते परिशिष्टे लिखिताः ।

४/१-न१, ६, ७, त-इडायां———; ग५, ६-आकृष्य श्वसनं बाह्यात्। क- \times \times \times \times । ४/२-ग२-पूरियत्वोदरं ततः ; ग५, ६-पूरपित्रज्ञयोदरं ; अत्राधिकाः श्लोकाः। (अध्यायान्ते परिशिष्टं पश्यताम्) । क- \times \times \times \times । ४/३-क- \times \times \times । ४/४- न४, त- संस्मरन् ; ग२-उकारं तत्र संस्मरन् ; न३-उकारं तत्र संहरेत् (?); न६-उकारं तत्र संस्थितम् ; ग३-+ कारं तत्र संस्मरेत् ; क-+ + + ।

धारयेत्पूरितं पश्चाच्चतुःपष्ठया तु मात्रया । उकारमूर्तिमत्रापि संस्मरन्प्रगवं जपेत् ॥५॥

यावद्वा शक्यते तावद्वारणं जपसंयुतम् । पूरितं रेचयेत्पश्चात्प्राणं वाह्यानिलान्वितम् ॥६॥

शनैः पिंगलया गागि द्वात्रिंशन्मात्रया पुनः । मकारमूर्तिमत्रापि संस्मरन्त्रगवं जपेत् ॥७॥

त्राणायामो भवेदेषः पुनश्चैवं समभ्यसेत् । *ततः पिंगलयापूर्यं मात्रैः षोडशभिस्तया ॥८॥

जकारमूर्तिमत्रापि संस्मरन्सुसमाहितः । पूरितं धारयेत्प्राणं प्रणवं विश्वतिद्वयम् ॥९॥

५/१-न३-धारयेत्प्रेरितं———; ग५-धारयेत्र्रजिता(?)———; ग१, क- $\times \times \times \times$ । ५/२-न३-चतुःपष्ठी(?)तु———; ग१, क- $\times \times \times \times$ । ५/३-ग२-मकारमूर्ति———; ग४-अकारमूर्ति———; ग१, क- $\times \times \times$ । ५/४- ग४———-ग्रणवात्मकम् ; ग५-संस्मरेत्प्रणवं(?) जपेत् ; ग१, क- $\times \times \times$ ×।

६/१–ग१, क $-\times\times\times\times$ । ६/२–ग२–धारयेज्जप——; ग४, न८–घारयन्जप——; ग१, क $-\times\times\times\times$ । ६/३–ग४, न८–पूरितं रेचयेत्प्राणं ; ग१, क $-\times\times\times\times$ । ६/४–न४, ग२–——बाह्यानिलात्मकम् ; गर्थं, न८–पश्चाद्वाह्या———; ग१, क $-\times\times\times$ ।

 $egin{array}{lll} & \end{array} & \end{ar$

*जपेदत्र स्मरन्मूर्ति मकाराख्यं महेश्वरम् ।. यावद्वा शक्यते पश्चाद्रेचयेदिडयानिलम् ॥१०॥

†एवमेव पुनः कुर्यादिडयापूर्य पूर्ववत् । ाडचा प्राणं समारोप्य पूरियत्वोदरस्थितम् ॥११॥

‡प्रणवेन सुसंयुक्तां व्याहृतीभिदच संयुताम् । - गायत्रीं च जपेद्विप्रः प्राणसंयमने त्रिशः ॥१२॥

पुनक्चैवं त्रिभिः कुर्यात्पुनक्चैव त्रिसन्विषु । यद्वा समभ्यसेन्नित्यं वैदिकं लौकिकं तु वा ॥१३॥

१०/१—न१, २, ८, त————मूर्ष्मिं; न७—जपेदेतत्स्मरेन्मूर्ष्मिं; ग२, क $-\times\times\times\times$ । १०/२—ग३,—मकाराख्य महेश्वरी(?); ग४, ५—मकाराख्यां महेश्वरीम्; ग६—उकाराख्यं महेश्वरम् ग२, क $-\times\times\times\times$ । १०/३—न३————चैव; ग४, न८———तावत्; ग२, क $-\times\times\times\times$ । १०/४—न३—पश्चाद्रेचकयानिलम्(?); ग३—रेचते पिडयानिलम्; ग२, क $-\times\times\times\times$ ।

†अत्र पाठान्तरत्वेन 'ग४' लेखे–अकारमूर्तिमत्रापि संस्मरन्पूर्वतत्तदा ॥ ,, 'ग५, ६, न८' लेखेयु–मकार————तया ॥

११/१–न६, ८–एवमेवं———; न३–एवमेतत्पुनः——; ग२, ४, क $-\times\times\times\times$ । ११/२–न१, ७, ग६———पूर्वपूर्ववत्; न४, ग३———पूर्वपूर्वतः ; ग२, ४, क $-\times\times\times\times$ । ११/३–न६–यद्वा प्राप्यं(?)———; न१, २, ४, ५, ७, ग३–यया—————; त– यावत्प्राणं———; ग२, क $-\times\times\times\times$ । ११/४–ग५–पूर्रियत्वोदरे———; न३– पूर्यंश्चोदरिचतां(?) ; ग२, क $-\times\times\times\times$ ।

^{*} इतः परं २३/१–२ पर्यन्तं 'ग२' लेखे ६.६५–७८।१।२ इलोकाः पाठान्तरैर्युक्ता दृश्यन्ते ते ब्लोकाश्च स्वस्थानेषु न सन्ति । इमे १०–२३/१–२ इलोकाश्च तत्र समुलं कृत्राऽपि न सन्तीत्यवगम्यते ।

प्राणसंयमने विद्वान्जपेत्तद्विंशतिद्वयम् । ब्राह्मणः श्रुतसम्पन्नः स्वधर्मनिरतः सदा ॥१४॥

स वैदिकं जपेन्मन्त्रं लौकिकं न कदाचन । केचिद्भूतहितार्थाय ृजपिमच्छन्ति लौकिकम् ॥१५॥

द्विजवत्क्षत्रियस्योक्तः प्राणसंयमने जपः । वैश्यानां घर्मयुक्तानां स्त्रीशूद्राणां तपस्विनाम् ॥१६॥

प्राणसंयमने गागि मन्त्रं प्रणववर्जितम् । *नमोन्तं शिवमन्त्रं वा वैष्णवं वेष्यते बुधैः ॥१७॥

यद्वा समभ्यसेच्छूदो लौकिकं विधिपूर्वकम् । प्राणसंयमने स्त्री च जपेत्तद्विशतिद्वयम् ॥१८॥

१५/१- न१, ५, ७—स्ववैदिकं———; न३—सा(?) वैदिकं———; ग३-न वैदिकं———; ग२, क- \times \times \times \times । १५/२-न१, ७-लौकिकं च————; ग२, क- \times \times \times । १५/३-न७-केचिद्भूतिहितार्थाय ; ग२, क- \times \times \times । १५/४-ग२, क- \times \times \times \times ।

१६/१—न३—द्विजस्य(?)क्षित्रयस्योक्तः ; ग२, क $-\times\times\times\times$ । १६/२—न१———यमः ; ग३————जसः(?); ग२, क $-\times\times\times\times$ । १६/३—न८———युक्तघर्माणां ; ग२, क $-\times\times\times\times$ । १६/४—ग४—शूद्राणां तु————; ग२, क $-\times\times\times\times$ ।

न वैदिकं जपेच्छूद्रः स्त्रियश्च न कदाचन । स्वाश्रमस्यस्य वैश्यस्य केचिदिच्छन्ति वैदिकम् ॥१९॥

सन्ध्ययोरुभयोनित्यं गायत्र्या प्रणवेन वा । प्राणसंयमनं कुर्याद्ब्राह्मणो वेदपारगः ॥२०॥

नित्यमेवं प्रकुर्वीत प्राणायामांस्तु षोडश । अपि भ्रूणहनं मासात्पुनन्त्यहरहः कृताः ॥२१॥

*ऋतुत्रयात्पुनन्त्येनं जन्मान्तरकृतादघात् । वत्सरादृब्रह्महा शुद्ध्येत्तस्मान्नित्यं समभ्यसेत् ॥२२॥

योगाभ्यासरतास्त्वेवं स्वधर्मनिरताश्च ये । प्राणसंयमनेनेव सर्वे मुक्ता भवन्ति हि ॥२३॥

१९/१—ग२, क $-\times\times\times\times$ । १९/२—ग२, क $-\times\times\times\times$ । १९/१—२-एपैंव पंक्तिः 'न४, ग३' लेखयोः किंचित्पाठान्तरेण १९/१—२, १९/३—४ पंक्तयोरन्तरालेऽपि विद्यते । १९/३—ग२, क $-\times\times\times\times$ । १९/४—ग२, क $-\times\times\times\times$ ।

२१/१–ग२, न६, क $-\times$ × × ×। २१/२–न३–प्राणायामांस्तु———; न५, ग३–प्राणायामस्तु———; ग२, न६, क- × × × × । २१/३–न८——भूण-हतं(?-हनं)———; न३————भूणहननं पापात् ; ग२, न६, क- × × × × । २१ ४–ग३–पुनात्हरहः (?पुनात्यहरहः)—————; ग२, न६, क- × × × × । ——*'न३' लेखेऽत्राधिकः क्लोकः–ब्रह्महत्यादिभिर्दोषैर्मुच्यते मासमात्रतः । षण्मासाभ्यासतो विप्रो वेदनेछा-(?च्छा-)मवाप्नुयात् ।

बाह्यादापूरणं वायोरुदरे पूरको हि सः। सम्पूर्णकुम्भवद्वायोर्घारणं कुम्भको भवेत् ॥२४॥

*बहिर्यद्वेचनं वायोरुदराद्वेचकः स्मृतः । - प्रस्वेदजनको यस्तु प्राणायामेषु सोऽघमः ॥२५॥

कम्पको मध्यमः प्रोक्त उत्यानश्चोत्तमो भवेत् । पूर्वं पूर्वं प्रकुर्वीत यावदुत्तमसम्भवः ॥२६॥

सम्भवत्युत्तमे गागि प्राणायामे सुखी भवेत् । प्राणो लयति तेनैव देहस्यान्तस्ततोऽघिकः ॥२७॥

देहरुचोत्तिष्ठते तेन कृतासनपरिग्रहः । निःश्वासोच्छ्वासको तस्य न विद्येते कथंचन ॥२८॥

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२४/१-न४-बाह्यस्य वायोर्ह् दये; क- \times \times \times \times। २४/२-न३-----पूरके
(?) हि सः; न६——•हदरे पूरितो भवेत्; न४-पूरणात्पूरको हि सः; क-\times\times\times\times।
\frac{28}{3} — कूंभ-(व-) द्वायों — ; ग२ — वित्कुक्षी ; न१ — वद्वायः — ;
ग५----- कुम्भके वायो- ; न४-पूर्णकुंभो भवेद्वायो-- ; ग३-बाह्याद्वा पूरणं वायो:- ; क-
\times \times \times \times । २४/४-न८-धारणं कुम्भवद्भवेत् ; ग२-धारणे----; न४---धीरणे
———; न६———रुदरे———; ग३——धरिणं———; न१-धारणं
              —; क– 	imes 	imes 	imes 	imes 	imes। *न८–बहिर्यद्रेचनं वायोर्घारणं कूम्भको(?)भवेत्–
इत्यधिका पंक्तिरत्र ।
     २५/१–ग३–बहिर्याद्रेचनं(?) ; न२–वहिर्विरेचनं\cdots; क\times \times \times \times ।
२५/२-ग२--- हदरास्त्रिजकश्चन(?); न४------ हदयाद्रेचको हि सः; ग३-उदरो(?)रेचको हि सः;
ग४——कदराद्रेचक(?)ततः ; न२——क्द्गाराद्रेचकः——; क-\times \times \times \times 1
प्राणायामस्तु——; ग३– \times \times \times सो \times दः(?); ग२, क– \times \times \times \times।
     २६/१-न१, २, ४, ५, ७, त, ग४-कम्पनान्मध्यमः----; न३, ६, ग५, ६-कम्पनो
      ———; न८–कम्पनं मध्यमः———; ग२, क– × × × ×। २६/२–
न१, २, ४, ५, ७-उत्थानाच्चोत्तमो---;ग३----;ग३----;
ग४, न८-उत्थानं चोत्तमो----; न३-उत्थितश्चोत्तमो----; ग२, क- × × × ×।
२६/३-ग२, ३, क- \times \times \times \times 1 २६/४-न५-सम्भवेत्(?); न६----
संन्नमः(?) ; ग४——सम्भवम्(?) ; ग२, ३, क\times \times \times \times 1
     २७/१–ग३, क-\times\times\times\times। २७/२–न४-----सूर्ल---; न३----
प्राणायामसुधीर्भवेत्(?); न३, क-\times\times\times\times\times। २७/३—ग४-प्राणो लीयेत-; ग३-प्राणालयेति(?)—; न८-प्राणा लयन्ति—; क-\times\times\times\times। २७/४—ग२,
न३, ६, ग५, ६, त्रि. पु., मु. पु., क. पु.-देहस्यान्तस्ततोऽधिकः ; ग२, न८, मुं पु., न. पु.- देह-
स्यान्तस्ततोऽधिकम् ; न१, ४, ५–देहःस्यात्तपनाधिकः ; न२, ६, त–——तापनाधिकः ;
ग३–देहस्याभवनायक(?); क-\times\times\times\times।
     २८/१-न३-देहस्योत्तिष्ठते (?-श्चोत्तिष्टते )-; न६-देहस्य तिष्ठते (?)--; क- \times \times \times \times 1
२८/२–ग२–त्यक्तासन(?)——; न२–कृतासनपरिग्रहात् ; क-\times\times\times\times। २८/३–न३–
निःश्वासोच्छवासको (?) तस्या (?); ग३-निःश्वासोच्छवासको (?)----; क-\times \times \times \times
२८/४–ग६, न८——कदाचन ; न३–नि(?)विद्येते कथंचन ; क-\times\times\times।
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देहे यद्यपि तौ स्याता स्वाभाविकगुणावुभी । तथापि नश्यतस्तेन प्राणायामोत्तमेन हि ॥२९॥

तयोर्नाशे समर्थः स्यात्कर्तुं केवलकुम्भकम् । रेचकं पूरकं मुक्त्वा सुखं यद्वायुधारणम् ॥३०॥

प्राणायामोऽयमित्युक्तः स वै केवलकुम्भकः । रेच्य चापूर्य यः कुर्यात्स वै सहितकुम्भकः ॥३१॥

सहितं केवलं चाय कुम्भकं नित्यमभ्यसेत् । यावत्केवलसिद्धिः स्यानावत्सहितमभ्यसेत् ॥३२॥

केवले कुम्मके सिद्धे रेचपूरणवर्जिते। न तस्य दुर्लमं किचित्त्रिषु लोकेषु विद्यते ॥३३॥

३०/१-न५-तयोर्नाशं(?)——; न३-तयोर्नाशं समर्थ(:)——;ग३-तयोर्नादः(?)समर्थस्य(?); ग५-तयोर्नान्यः—; न८— सुवृद्धः—; क $-\times\times\times\times$ । ३०/२-न३——केवलकुम्भकैः(?); ग३- + -|- केवल + -|-; क $-\times\times\times\times$ । ३०/३-न१———मत्त्वा(?); ग५———हित्वा(?); क $-\times\times\times\times$ । ३०/४-न३, ४, ग३, ६-यदिस्मन्वायुधारणम्; न१, २, ५, ७, ८, ग५-यदिसम्वायु——; ग४-यत्स्यत्वा——; ग२-यत्तु स्याद्वायु——; न३-यिस्मन्वा वायु———; क $-\times\times\times\times$ ।

३२/१-न१, २, ग१, २, त——वाथ ; न४, ग५, ६——वाप ; ग३—
——वाह्यं(?); न३—आत्मन्यात्मानमारोप्य; क— $\times \times \times \times$ । ३२/२—ग४—
कुम्भके———; क— $\times \times \times \times$ । ३२/४—ग६—ताबदेवं समभ्यसेतु; क— $\times \times \times$ ।

३३/१–न१, ५, ८, ग१–केवलं कुम्भकं \times \times ; न३–केवलं कुम्भकं(?)——; ग२–केवलः कुम्भकः सिद्धोः; क $-\times\times\times\times$ । ३३/२–ग३, ४, ६–रेचपूरक———; ग२–रेचपूरकर्वाजतः ; क $-\times\times\times\times$ । ३३/३–४– क $-\times\times\times\times$ ।

मनोजवत्वं लभते पलितादि च नश्यति । मुक्तेरयं महामार्गो मकारास्यान्तरात्मनः ॥३४॥

नादं चोत्पादयत्येषः कुम्भकः प्राणसंयमः । प्राणसंयमनं नाम देहे प्राणस्य धारणम् ॥३५॥

एषः प्राणजयोपायः सर्वमृत्यूपघातनः। किचित्प्राणजयोपायं तव वक्ष्यामि तत्त्वतः ॥३६॥

बाह्यात्प्राणं समाकृष्य पूरियत्वोदरस्थितम् । नाभिमध्ये च नासाग्रे पादाङगुष्ठे च यत्नतः ॥३७॥

धारयेन्मनसा प्राणं सन्ध्याकालेषु सर्वदा । सर्वरोगविनिर्मुक्तो जीवेद्योगी गतकलमः ॥३८॥

३४/१-त-मनोजयत्वं ; क- \times \times \times \times \times | ३४/२-न३, ५, ग५, ६—— विनश्यित ; न३-स्खिलतादि च—— (?); ग३-विदितादि च—— (?); न८-पटुतादि च—— ; क- \times \times \times \times | ३४/३-न८, क- \times \times \times \times | ३४/४-न१, २, ५, ग६-मकाराख्योऽन्तरात्मकः ; न३-भकाराक्षोंतरात्मकः(?) ; ग४-मकाराख्यो हठात्मकः(?) ; ग५-मकाराख्यो हठात्मकः (?) ;

३५/१-त, ग२, त५— चोत्पादयत्येव ; न८-नादं च स्वादयत्येषः(?) ; ग१-ज्ञानं चोत्पादयत्येषः; क $-\times\times\times\times$ । ३५/२-त— प्राणसंयमात् ; न३— प्राणसंयुतः; ग५, ६-ज्ञेयः केवलकुम्भकः; न८-कुम्भकः केवलो हि तः(?सः); क $-\times\times\times\times$ । ३५/४-ग५, ६-प्राणसंयमनो— ; क $-\times\times\times\times$ । ३५/४-ग२-भवत्प्राणादि $\times\times$ (?) ; ट— धारणी(?) ; क $-\times\times\times\times$ ।

३६/१–न३, ५, ६, ७, ग४, ५–एष(:)————; ग६–एव———; ग३– विषप्राण——(?); क $-\times\times\times\times$ । ३६/२–न४–स स्यान्मृत्यूपघातकः(?); क $-\times\times\times\times$ । ३६/२–न४, ५—कंवित्प्राण———; ग६–किचत्प्राण———; न८–कि च———; ग२———जयोपायः; न४———जयोपायः; क $-\times\times\times\times$ । ३६/४–ग२–—स्तव——; न४———सत्वं(?)——; क $-\times\times\times\times$ ।

*नासाग्रे घारणं गार्गि वायोविजयकारणम् । सर्वरोगविनाशः स्यान्नाभिमध्ये च धारणात् ॥३९॥

शरीरं लघुतां याति पादाङगुष्ठे च धारणात् । रसनावायमाकृष्य यः पिबेत्सततं नरः ॥४०॥

श्रमदाही न तस्यास्तां नश्यन्ति व्याधयस्तथा । सन्ध्ययोब्राह्मकाले वा वायुमाकृष्य यः पिबेत् ॥४१॥

त्रिमासात्तस्य कल्याणि जायते वाक्सरस्वती । षण्मासाभ्यासयोगेन महारोगैः प्रमुच्यते ॥४२॥

आत्मन्यात्मानमारोप्य कुण्डल्यां यस्तु घारयेत् । क्षयरोगादयस्तस्य नश्यन्तीत्यपरे विदुः ॥४३॥

४२/१—न४, ग३———तस्य कल्याणं। ४२/४—न२, ३, ६, ७. ग१, ३, त, क—महारोगात्———।

^{*}अत्र "न३" लेखे विशेषः श्लोकः–इडया वायुमाकृष्य भ्रुवोर्मध्ये निरोधयेत् (?–यन्) । यः पिबेदमृतं शुद्धं व्याधिभिर्मुच्यते नरः ॥

३९/१–ग४, ५–नासाग्रधारणं———; क $-\times\times\times\times$ । ३९/२–क $-\times\times\times\times$ । ३९/३–४–न४–एषा पंक्तिलिखित्वा पीतरंगेनाच्छादिता दृश्यते । ३९/३–क $-\times\times\times\times$ । ३९/४–न३, ६, ग४, ६–———तु घारणात्; क $-\times\times\times\times$ ।

४०/१—न२, ग१—शरीरलघुतां——; ग३—शरीरलघुतां——; क $-\times\times\times\times$ । ४०/२—क $-\times\times\times\times$ । ४०/३—न५, ग३, त-रसनां वायु———; ग२—रसज्ञया समारोप्य ; न४—रसज्ञां तालुमारोप्य ; ग५, न८—रसनाद्वायुमाकृष्य ; न ७—अपः शरीरमारोप्य ; क $-\times\times\times\times$ । ४०/४—क $-\times\times\times\times$ ।

४३/१-न४-आत्मानं स्थान----(?) ; ग४-आत्मन्यमुं समारोप्य । ४३/२-त, न३-कुण्डिलन्यां तु----- ; न४, ग३, ५, ६-कुण्डिल्या----। ४३/४-ग२----जगुः ; न८, क-नश्यन्तीत्यब्रुविन्वदः ।

जिह्नया वायुमानीय जिह्नामूले निरोधयन् । यः पिबेदमृतं विद्वान्सकलं भद्रमञ्जूते ॥४४॥

आत्मन्यात्मानमिडया समानीय भ्रुवोन्तरे । पिवेद्यस्त्रिदशाहारं व्याधिभिः स विमुच्यते ॥४५॥

*नाडीभ्यां वायुमारोप्य नाभौ वा तुन्दपार्श्वयोः । घटिकैकां वहेद्यस्तु व्याधिभिः सोऽभिमुच्यते ॥४६॥

मासमेकं त्रिसन्ध्यायां जिह्नयारोप्य मारुतम् । †पिवेद्यस्त्रिदशाहारं धारयेतुन्दमध्यमे ॥४७॥

गुल्माष्ठीला प्लीहा चान्ये त्रिदोषजनितास्तथा । तुन्दमघ्यगता रोगाः सर्वे नश्यन्ति तस्य वै ॥४८॥

ज्वराः सर्वे विनश्यन्ति विषाणि विविधानि च । बहुनोक्तेन कि गागि पलितादि च नश्यति ॥४९॥

४८/१-अस्य चरणस्य पाठो यथोपरि स्वीकृतस्तथा न कस्मिन्नपि लेखे न वा मुद्रितपुस्तके विद्यते । मुद्रितपुस्तकेभ्यो त्रिवेन्द्रम्मुद्रिते "गुल्मापी वा प्लीहा चान्याः" इति यः स्वीकृतः पाठस्तत्र "गुल्मापी" इति शब्दोऽर्यहीन इव दृश्यते ; कोशे "अपी" "आपी" वा इति न कोऽपि शब्दो विद्यते, "अन्याः" शब्दे च व्याकरणदोषो दृश्यते। मुरादाबाद–कलिकातामुद्रितयोः "गुल्मप्लीहोदरं चान्ये" इति यः पाठः" सोऽपि दोषपुक्तः; "गुल्मप्लीहोदरं "इत्यत्र "उदरं" न कस्यापि रोगस्य नाम, समासान्ते नपुंसकलिंग-स्यैकवचनप्रत्ययक्च न युक्तो ग्रन्थसन्दर्भे । मोहमय्यां मुद्रितपुस्तके "गृल्फप्लीहोदराक्चान्ये" द्वित यः पाठः सोऽपि न युक्तः, 'गुल्फम्' इत्यवयवस्य, न कस्यापि रोगस्य नाम ; 'उदरम्' इत्यपि न रोगस्य नाम । नडीआदपुस्तके 'गुल्मप्लीहोदराश्चान्ये' इति यस्तत्रापि समासान्ते "उदरेम्" शब्दोऽस्त्येव । पोडश हस्तलेखेषु पंत्त्रयाः प्रथमपडक्षराणां १२ भिन्नभिन्न पाठाः; अन्त्याक्षरद्वयस्य च १० भिन्नभिन्न पाठाः दुश्यन्ते । तेपां समन्वये कृते सति किचित्संशोघनेन च पंच पाठा आप्यन्ते, ते:-"ग१, ३, ४, ५, ६, नं६, ८, त, क–गृत्माष्टीला प्लीहा ; न१, २, ५, ७–गृत्ममाला प्लीहा ; न३–गुल्मप्लीहा जरा ; न४-गुल्मादिनि लोम्नि वा ; ग२-गुल्फे निष्टावति, इति । तेभ्यः प्रथमः "ष्ट" स्थान "ष्ठ" निवेशनाद्यो लब्धः स स्वीकृतोऽत्र । अन्त्याक्षरद्वयस्यापि तथैव समन्वये कृते सति १० पाठा अवशि-ष्यन्ते, ते:–ग६–जन्यः; ग५–जान्य ; न१–वान्य ; ग३–वान्ये ; न७–वान्या ; न२ ५ वान्यान् ; ग१, त-चान्याः ; न३, ४, ८, ग४, क-चान्ये ; ग२-च यतु ; न६-हा वांता इति। तेभ्यः श्लोकस्य द्वितीयायां पंक्त्यां "रोगाः" शब्दो वर्तते इति स पाठो ग्रणाही भवति येन प्रथम चरणस्य द्वितीयेन सम्बन्धो युज्येत । तस्मात् "चान्ये" कि वा "वान्ये" पाठः समीचीनो भवति । तत्र "गुल्मः–" पंचप्रकारो रोगविशेषः ; "पंच गुल्मा ६ति वातपित्तकफसन्निपातशोणितजाः पंच प्लीह-दोषाः इति ग्ल्मैर्व्याख्याताः" इति चरकसंहितायाँ १.१९.४ सूत्रे कथितत्वात् । "अष्ठीला", अपि द्विप्रकारो रोगविशेषः, "उत्तरापये दीर्घवर्त्लयाषाणविशेष इत्येंके, चर्मकाराणां वर्त्लदीर्घा लौही भाण्डि-रित्यपरे (डल्हण)" इति सुश्रुतसंहितायां निदानस्थाने १.८७-८८ क्लोकयोरुपरि टीकाकारस्य वक्तव्ये। तस्याः प्रकारौ "वाताष्ठीला" (१.८७,) प्रत्यष्ठीला" (१.८८) चेति वर्णितौ सुश्रुतेन । "प्लीहा" शब्दस्यार्थों प्लीहाविवर्धन नाम रोग इत्यपि भवतीति शब्दकोशेभ्यः प्रतीयते। एवं गुल्म, अष्ठीला, प्लीहा, रोगाः, अन्ये च त्रिदोषजनितास्तुन्दरोगाः अधस्तात्कथितेन प्राणनिरोधनाभ्यासेन नश्यन्तीत्यर्थफल-दायको प्रथमचरणस्य पाठः "गुल्माप्ठोँला प्लीहा चान्ये" इति संगृहीतोऽस्मिन्ग्रन्थे । "जन्याः" इति पाठो न कुत्रापि विद्यते । यद्यपि सौऽपि समीचीना भवेन्, यदि "गुल्म", "अष्ठीला", "प्लीहा" शब्दाः शरीरा-वयववाचका भवेयु:। तेभ्य: "गुल्म", "प्लीहा" च शेव्दी तद्वांचकी स्तस्तथापि ती पर्यायशब्दी भवतस्तेन पुनरुक्तिदोष आगच्छिति । तस्मात् "ग६" लेखान्तर्गतः "जन्यः" इति पाठो "जन्याः" इति बहु-वचनप्रत्ययान्वितस्य मूलशब्दस्य विकृतिरिति मत्त्वा न संगृहीत : ।।

8C/2-13-तुन्दमध्यगतो रोगो(?) ग४-तुन्दमध्ये महारोगाः । 8C/8-न१, २, ५, ७-सर्वे नश्यन्ति किल्विषाः; ग२----तत्क्षणात् ।

४९/१—ग५—रुजः————; ग२—ज्वरानल्पा(?)———; ग४——सर्वेऽपि नश्यन्ति । ४९/३—ग४—िकमत्र बहुनोक्तेन । ४९/४—न१, २, ग१, २, त, न८, क—पिलतानि च(?)———; न३, ४———िवनश्यित ; ग५—पिलतं च विनश्यित ; न५, ७ ग६—नश्येति पिलतानि च ; ग५—िकं गार्गि फिलतेन च ।

एवं वायुजयोपायः प्राणस्य तु वरानने ।

शक्यमासनमास्याय समाहितमनास्तथा ॥५०॥

करणानि वशीकृत्य विषयेभ्यो बलात्सुधीः। अपानमूर्ध्वमाकृष्य प्रणवेन समाहितः ॥५१॥

*हस्ताभ्यां वन्धयेत्सम्यक्कर्णादि करणानि च । अङ्गुष्टाभ्यामुभे श्रोत्रे तर्जनीभ्यां च चक्षुषी ॥५२॥

नासापुटी मध्यमाभ्यां प्रच्छाद्य करणानि वै । आनन्दानुभवं यावत्तावन्मूर्द्धनि घारयेत् ॥५३॥

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५०/१-न४, ग५, ६-एप वायोर्जयोपायः ; ग२-एवं वायुजयो यस्य(?) ; ग४-ध्रृवं वायो-
र्जयोपायः । ५०/२-ग६, क-प्राणस्य च-----; न५, ७-प्राणस्य तु समाहितः ; ग२-प्राणस्तस्य समाहितः । ५०/३-ग२-दिव्यमासन---; न६-स्वस्तिकासन---;
न ३-शक्यते मास(?)——; ग३- \times \times \times । ५०/४-न५, ७———मनस्तया ;
ग५, ६, क----मनाःसतो ; न४---मनास्तदा ; ग४----मनाः सदा ;
ग३- \times \times \times \times  ।
    ५१/१–ग३– \times \times \times \times। ५१/२–ग४–---- बलात्सुखी; ग२–--- क्रमात्सुधीः;
ग३-\times\times\times\times। ५१/३–त-अपानमूर्घनमाकृष्य(?); न३-अपानमूर्द्ध-—-; ग४-
———मूर्घन———; ग३– \times \times \times । ५१/४–ग२–प्रणवे सुसमाहितः; ग–६–
प्राणं तत्रैव धारयेत् ; ग५-वायुमार्गविधानकम् ; क-वायुमार्गवितातकृत्(?) ; ग३- \times \times
🗴 । *अत्र केष् े लेखेष्वधिका पंक्तिः । सा च—नेद, ग५, ६, त-विन्हस्थाने निरुद्धयैनं
प्राणं तत्रैव धारयेत् ; 'क, न८' लेखयोः सा विद्यत एव, तदुपरि च तस्याः पाठान्तरं–"वस्तिस्थाने
निरुद्धर्यनं प्राणं तत्र निरोधयेत्" इत्यपि दृश्यते ; : ।
    गर-शब्दादि———; ग३– \times \times \times । 47/3-न५———मुभी श्रोत्रौ(?)
५३/१-न१, २, ३, ७, ग२,-नासापुटे----; ग४, न८-नासापुटं-----; ग१-
  -—— — वथान्याभ्यां ; त, ग२————च मध्याभ्यां ; न६————वधानाभ्यां(?);
----करणाद्य वै(?) । ५३/३-ग१, ३, ४, ६, न८-आनन्दाविर्भवं-----; न१, २-
आनन्दाप्तिभेत्रेद्यावत्; त-आनन्दादि भत्रेद्यात्रत्; गर्-आनन्दाद्युद्भवो ----; नर्-आनन्दा-
विर्भवो ---- ; न५-आनन्दानुभवेद्यावत् ; न६-अनादादिर्भवं (?) ---- । ५३/४-
ग६-तावन्मूर्धेनि रोधयेत् ; ग४-तावन्मूर्धेनि चानयेत् ।
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प्राणः प्रयात्यनेनैव ततस्त्वायुर्विघातकृत् । ब्रह्मरन्द्र्ये सुषुम्णायां मृणालान्तरसूत्रवत् ॥५४॥

नादोत्पत्तिस्त्वनेनैव शुद्धस्फटिकसन्निभा । आमूष्ट्रो वर्तते नादो वीणादण्डवदुत्थितः ॥५५॥

शंखघ्वनिनिभस्त्वादौ मध्ये मेघध्वनिर्यया । व्योमरन्ध्रे गते नादे गिरिप्रस्रवणं यथा ॥५६॥

व्योमरन्ध्रे गते वायौ चित्ते चात्मिन संस्थिते । तदानन्दी भवेद्देही वायुस्तेन जितो भवेत् ॥५७॥

योगिनस्त्वपरे ह्यत्र वदन्ति समचेतसः। प्राणायामपराः पूता रेचपूरणवर्जिताः ॥५८॥

५४/१-ग३-प्राणं (?)----; न५-प्राण (:)-----। ५४/२-न१, २, ५, ग६–ततश्चायुर्विघातकृत् ; न३–तत आयु———; न६–ततस्यायु(?)————; न८– ततश्चायुर्विघातकः । ५४/४-न४, ग३-मृणालस्यांतसूत्रवत् । ५५/१–"नालोत्पत्तिस्त्वनेनैव" इति पाठः, "त, ग२, ६," लेखेषु, शिष्टेषु सर्वेषु तु "नादोत्पत्ति ——— " इति; मद्रितपुस्तकेभ्यो त्रिवेन्द्रम्पुस्तक एव प्रथमः, चतुःस्वीतरेषु च द्वितीयः। तयोः को मूल आसीदिति निर्णेतुं न शक्यते यतो यद्यपि द्वितीयायां पंक्त्यां ५६ तमे रेलोके च नाद-स्यैव वर्णनं विद्यते तथापि नादोत्पत्तिः "शुद्धस्फटिकसन्निभा" कथं भवेदिति न कल्पनाक्षमम् । द्वितीय चरणे ये पाठभेदास्तेऽपि न तत्करणे सहायभूताः । ५५/२-ग२----सन्निभम्; न१, २, $\sqrt{3}$, $\sqrt{3$ ग३ $- \times \times \times \times$ । —िनिर्भश्चादौ ; न४, ग३– imes imग५, ६————भेरिध्वनिर्यथा ; ग३–मध्ये $\times \times \times 1$ ५६/३–न१, २, ग३, ६– व्योमरन्ध्रगतो नादो; न४-व्योमरन्ध्रगता नादो(?); न३, ग५- \times \times \times । ५६/४-नर-गिरिप्रस्नवणे--; न४,-गिरिप्रस्नवणस्तथा(?); ग६-गिरिप्रस्नवणो यथा; न३, ग५imes imes imes imes ; त-चित्ते चात्मिन संस्थिते । ५७/१-त----नादे; क-ब्रम्हरन्ध्रेगते---। ५७/२-त-गिरिप्रस्रवणं यथा । ५७/३-न२, ७-तदानन्दी भवेद्योगी ; न४-तदानन्दो भवेद्योगी ; त-सदानन्दी भवेद्देही ; भवेद्योगी ; ग४, न८-तदा नादो भवेद्देहे ; ग६-ततो नन्दी (?) भवेद्देही ; ५७/४-क-"एक तालपत्रं गलितम् "इत्यत्र लेखकस्य टिप्पणी । $\times \times \times$ । ५८/२–क– $\times \times \times \times$ । ५८/३———भूताः; न३———परो-द्भता ; न६———रताः पूर्वे ; क $-\times \times \times \times$ । ५८/४—न३, ४, ८, ग३, ५, ६–

रेचपुरक $oldsymbol{-}$; न६–रेचपुरविर्वाजताः(?) ; क $oldsymbol{-} imes imes imes imes$

दक्षिणेतरगुल्फेन सीवनीं पीडघेत्शिराम् । अघस्तादण्डयोः सूक्ष्मां सन्योपरि च दक्षिणम् ॥५९॥

जंघोर्वोरन्तरं गागि निश्छिद्रं बन्धयेद्दम् । समग्रीवशिरस्कन्धः समपुष्ठः समोदरः ॥६०॥

नेत्राभ्यां दक्षिणं गुल्फं लोकयन्नुपरिस्थितम् । धारयन्मनसा साधै व्याहरन्त्रणवाक्षरम् ॥६१॥

आसने नान्यधीरास्ते द्विजो रहिस नित्यशः । क्षत्रियश्च वरारोहे व्याहरन्प्रणवाक्षरम् ॥६२॥

आसने नान्यघीरास्ते रहस्येव जितेन्द्रियः । वैश्याः शूद्राः स्त्रियश्चान्ये योगाभ्यासरताः नराः ॥६३॥

६०/१—न१, २, ५, ७, ग३, ५, ६—जंघोर्वोरन्तरे———; न६—जंघयोरन्तरे———; ग२—ग२—जंघेदारन्तरं(?)———; क- \times \times \times \times \times \times \times \times । ६०/२—ग६—अछिदं———; ग३— निश्चनुं बन्धयोर्दृढाम्(?)——; क- \times \times \times \times \times \times । ६०/३—ग५, ६- \times \times शिरः कायः; न६, ग४————शिरस्कश्च । ६०/४—क- \times \times \times \times \times ।

६३/१—ग२—आसीतानन्यधीनित्यं ; ग३, ५, ६, क $-\times\times\times\times$ । ६३/२—न१, ५, ६—रहस्यं विजितेन्द्रियः ; न२, ३—दीपं हस्ते विलोकयन् ; ग२—द्विजो रहिस नित्यशः(?) ; ग३, ५, ६, क $-\times\times\times\times$ । ६३/३—न२, क $-\times\times\times\times$ । ६३/४—न३, ४, ६, ग३———रताः सदा ; न२, क $-\times\times\times\times$ ।

<mark>श</mark>ैवं वा वैष्णवं वा<mark>थ</mark> व्याहरन्नन्यमेव वा । अासने नान्यधीरास्ते दीपं हस्ते विलोकयन् ।।६४॥

आयुर्विघातकृत्प्राणस्त्वनेनाग्निकुलं गतः । घूमध्वजजयं यावन्नान्यघीरेवमभ्यसेत् ॥६५॥

घारणं कुर्वतस्तस्य शक्तिः स्यादिष्टभोजने। देहरुच लघुतां याति जठराग्निरुच वर्धतः ॥६६॥

दृष्टचिह्नस्ततस्तस्मान्मनसारोप्य मारुतम् । मन्त्रमुच्चारयन्दीर्घं नाभिमध्ये निरोधयेत् ॥६७॥

६५/१–ग५, ६–आयुर्विघातकः———; ग२–आयुविपूतकृत्प्राणः (?); न४–आयुविघा+कृत्प्राणः ; ग३–आयं विद्यूतकृत्प्राणः (?); क $-\times\times\times\times$ । ६५/२–ग२——कुलं चतः न३————कुलं तपः (?) ; ग२–गच्छेद्गार्गि कुलं गतः (?ततः) ; क $-\times\times\times\times$ । ६५/३–न२, ३, ६, ७, ग६–घूमघ्वजजयो———; न१–धूमघ्वनिजया———(?) ; न५–धूमघ्वनिजयो———; क $-\times\times\times\times$ । ६५/४–तावद्वीरेव– (?) मभ्यसेत् ; क $-\times\times$

६६/१—न३—धारणं कुकुतो रोप्य(?); ग२, क $-\times\times\times\times\times$ । ६६/२—एतच्चरणं कि चिंत्संशयास्पदम्। तस्य हस्तलेखेषु पाठभेदाः—(?)न२, ५, ७, त—यथा ग्रन्थे स्वीकृतः; (२) न१, ग१—शिंत्तस्याने प्रमंजनम्; (३) न४—शिंत्त—प्रमंजनः; (४) ग४—शिंत्ति—प्रमंजनः; (४) ग४—शिंत्ति—प्रमंजनः; ग२, क $-\times\times\times\times\times$ । मृद्रितपुस्तकेभ्यश्च नडीआदे, मुरादाबादे, किलकातायां च मृद्रितेषु "विह्नस्थानं प्रमंजनम्" इति पाठो, यो न किस्मिश्नपि लेखे दृष्यते; मुंबापुर्यां च मृद्रिते "विह्नस्थानं प्रमंजनः" इति पाठो यः स "न६, ग३" लेखयोविद्यते; तथापि स न समीचीन इति मन्ये पूर्वापरसम्बन्धाभावात्। ग्रन्थे स्वीकृतः पाठस्तु सन्दर्भे युक्त इति मे मित्यंतस्तेन द्वितीयचरणेनोक्तरीत्या प्राणघारणेन प्राणजयस्यैकस्य चिह्नस्य कथनं भवित, यथा द्वितीयतृतीययोः ३—४ चरणाभ्याम्। ६६/३—न१—देहस्तु—————; ग२, क $-\times\times\times\times$ । ६६/४—न२, ५—जठराग्नेश्च दीपनम्; ग४, ५, ६—जाठराग्निश्च वर्धते; न३—जठराग्निरिवर्धितः(?); त—जाठराग्नेश्च दीपनम्; ग२, क $-\times\times\times\times$

६७/१-एतच्चरणं द्विधा विभज्य साम्यवैषम्ये निर्णितव्ये । तत्र प्रथमो विभागः "दृष्टचिह्न—"। तस्य ये पंच भेदा दृष्यन्ते तेः—न१, ३, ४, ६, ८, ग१, ४, ५, ६, त—दृष्टचिन्हः— ; न२, ५—दृष्टचिह्नः; ग३—दृष्टिचिह्नः; न६—दृष्टवा चिह्नः; न७—दृष्टचिह्नः । द्वितीयो विभागः "ततस्तस्मात्" । तस्य त्रयः पाठभेदा दृष्यन्ते, ते :—न३, ४, ६, ८, ग३, ४, ५, ६—ततस्तस्मात्; न१, ७—ततस्तिस्मन् ; न२, ५, ग१,

यावन्मनो लयत्यस्मिन्नाभौ सवितृमण्डले । तावत्समभ्यसेदिद्वान्नियतो नियतासनः ॥६८॥

एतेन नाभिमघ्यस्थघारणेनैव मारुतः । कुण्डली याति वह्निश्च दहत्यत्र न संशयः ॥६९॥

सन्तप्ता बह्मिना तत्र वायुना चालिता स्वयम् । प्रसार्यं फणभृद्भोगं प्रवोधं याति सा तदा ॥७०॥

६८/१—न१, २, ३, ५, ७, ८—यावन्मनोल्यस्तस्मिन् ; ग३—यावन्मनः स्थितस्तस्मिन् (?) ; न४—यावन्मनो भवेत्तस्मिन् ; ग६—याविन्नरोघयेत्तस्मिन् ; ग२, क $-\times\times\times\times$ । ६८/२—ग१—नामौ सावित्रमण्डले ; ग२, क $-\times\times\times$ । ६८/४—ग२, क $-\times\times\times$ । ६८/४—ग२, ४, ५, ६—————नियताशनः ; ग२, क $-\times\times\times$

६९/१—न१, २, ५, ७, ग१———नाभिमध्यस्यो ; न३———नाभिमध्यस्यं (?) ग३———नाभिमध्यस्तु ; ग४———नाभिमध्येन; ग२, क $-\times\times\times\times$ । ६९/२—ग३—वारणे नैव(?)———; न४—घारयेच्चैव मारुतम्; ग२, क $-\times\times\times\times$ । ६९/३—न३—कुंडलीं चाति(?)———; न८—कुंडलीं वाति——; ग५, ६—कुंडलीं वायु———; ग१—कुण्डली यत्र———(?)। ग२, क $-\times\times\times\times$ । ६९/४—ग३—देह्यन्यत्र(?)———; ग२, क $-\times\times\times\times$ ।

७०/१-ग१, ४, न३, ४-सन्तप्तो — ; न५, ८, ग३-सन्तप्तबिन्ना ; न६-सन्तप्ते — ; ग५, ६-सवंतो — ; ग२, क — \times \times \times \times । ७०/२-त — — चारिता — ; न६, ग४, ५, ६-वायुना च प्रवातितः ; ग१ — — प्रवाहितः ; न३, ४ — — प्रचालितः ; ग३ — अभिप्रचालितः ; न८ — तीत्र वातिता ; ग२, क — \times \times \times \times । ७०/३-न८ — प्रसार्यं फिणभृद्भोगं ; ग२, क — \times \times \times । ७०/४ — अस्मिश्चरणं पुनः साम्यवैषम्ये भवतस्तेन तं द्विघा विभज्य निश्चयो कर्तं व्यः । तस्य द्वौ विभागौः — (१) प्रवोधं याति, (२) सा तदा चेति । तत्सम्बिघनो लेखभेदाः — (१) — न१, २, ३, ५, ७, ८, ग१, ४, ५, ६, त — प्रवोधं याति ; तस्य विकृतयस्त्रयः — न४ — प्रवाधं याति ; न६ — प्रवोधयति ; ग३ — अगायं याति । (२) न२, ५, ७, त — सा तदा ; न१, ४, ग१, ४ — तत्तदा ; न३, ६, ८, ग३, ५ ६ — तत्तया । ग२, क — \times \times \times । 'कुण्डली' (६९/३) शब्दस्य स्त्रीलिंगत्वात्तस्य गुण-वाचकाः सर्वेऽिप शब्दाः स्त्रीलिंगत्वात्त्वता एव भवेय्रिति स्वीकृतपाठस्यौचित्यमवगन्तव्यम् ।

प्रबुद्धे संसरत्यस्मिन्नाभिमूले तु चित्रिणि । ब्रह्मरन्ध्रे सुषुम्णायां प्रयाति प्राणसंज्ञकः ॥७१॥

सम्प्राप्ते मारुते तस्मिन्सुषुम्णायां वरानने । मन्त्रमुच्चार्य मनसा हृन्मध्ये घारयेत्पुनः ॥७२॥

हृदयात्कण्ठकूपे च भ्रुवोर्मघ्ये च घारयेत् । तस्मादारोप्य मनसा साग्नि प्राणमनन्यघीः ॥७३॥

धारयेद्व्योम्नि विप्रेन्द्रे व्याहरन्प्रणवाक्षरम् । वायुना पूरिते व्योम्नि साङ्गोपाङ्गे कलेवरे ॥७४॥

७१/१-न१, २, ५, ७, त— संचरत्यस्मिन् ; न३, ग१, ३, ६— संस्मरत्यस्मिन् ; न४— प्रसृते ह्यस्मिन् ; ग५— न्च स्फुरत्यस्मिन् ; न६—प्रबुद्धः संस्मरत्यस्मिन् ; ग४—प्रबुद्धः संस्मरत्यस्मिन् ; ग२, क— \times \times \times \times । ७१/२—न१, २, ५, ७, त—नाभिमूले च— ; ग३— च चान्नणि(?); ग१— आदिमूले च चिन्नणि ; ग२, क— \times \times \times \times । ७१/४—ग२, क— \times \times \times \times । ७१/४—न२— प्राणसंज्ञिकम्(?) ; ग१, न७— प्राणसंज्ञकम्(?) ; ग३— प्राणसंज्ञकम् ; ग२, क— \times \times \times \times \times ।

तदातमा राजते तत्र यथा व्योम्नि विकर्तनः ।

शरीरं विसुसृक्षुश्चेदेवं सम्यक् समाचरन् ॥७५॥

एकाक्षरं परं ब्रह्म ध्यायन्त्रणवमीश्वरम् । संभिद्य मनसा मूघ्नि ब्रम्हरन्ध्रं सवायुना ॥७६॥

प्राणमुन्मोचयेत्पश्चान्महाप्राणे खमध्यमे । देहातीते जगत्प्राणे शून्ये नित्ये धुवे पदे ॥७७॥

आकाशे परमानन्दे स्वात्मानं योजयेद्धिया । ब्रह्मेवासी भवेदगार्गि न पुनर्जन्मभाग्भवेत् ।।७८।।

तस्मात्त्वं च वरारोहे नित्यं कर्म समाचर । सन्घ्याकालेषु वा नित्यं प्राणसंयमनं कुरु ॥७९॥

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७५/१–न३———रितते(?)——; ग३–तथात्मा———; न१–तदा तु–
–———; ग४–तथा विराजते———; न७, त–तदात्मा राजते तस्य ; न५–तदा तु——
तस्य ; ग२, क-\times \times \times \times । ७५/२-न५-\cdotsविवर्तिनः ; न३-तथा\overline{-\cdots}
—विकर्तनः; ग२, क-\times\times\times\times। ७५/३–ग३–शरीरं मेवशि सूक्ष्मं चेत्(?); ग६–शरीर-
मपि सुक्ष्मं चेत् ; ग२, क- × × × × । ७५/४-न२, ३, ४, ६, ७, ८, ग४-----
समाचरेत ; गं\sqrt{\xi} ----समभ्यसेत ; गं\sqrt{\xi} ----सम्पं(?) समाचरेत ; गं\sqrt{\xi} क- \times × × × ।
     ७६/१-न१, २, ५---- ब्रह्म ध्यायन् ; न४, ग३-एकाकारं परं ब्रह्म; ग१, २, क-
\times \times \times \times । ७६/२–न१, २, ५–प्रणवमीश्वरं सदा; ग१, २, क– \times \times \times \times । ७६/३-
न८-संभेद्य---; न३-संरुध्य---; ग१-संक्षिप्य(?)----;
गर, क\rightarrow \times \times \times \times। ७६/४–ग५, ६–ब्रह्मरन्धस्य वायुना ; ग४–ब्रह्मरन्धस्व(?) वायुना;
नप्-ब्रह्मरन्धसचायुना(?); न३-ब्रह्मरन्धसमाधिना; ग२, क-\times\times\times ।
     ७७/१-ग३, ६-प्राणानुन्मोचयेत्पश्चात्; न४-प्राणांस्तु मोचयेत्पश्चात्; न६-प्राणं हि मोच-
येत्पश्चात् ; ग४, न८-प्राणं च मोचयेत्पश्चात् ; ग१-प्राणं विमोचयेत्पश्चात् ; ग२, क- \times \times \times \times।
७७/२-न१, २, ४, ग३------सुमध्यमे ; न३, ५, ७, ग६-महाप्राणेषु मध्यमे ; ग१-
महाप्राणे च---; ग४-महाप्राणश्च(?)---; न८-महाप्राणीध---; ग२,
क-\times\times\times\times। ७७/३–न३–देहातीते ततो योगी; ग३–चेहातीतजगत्प्रागे(?); न६——
———जयत्प्राणे(?); ग२, क-\times\times\times\times। ७७/४–न३, ४, ७———नित्यध्रुवे
----; ग३–शून्ये सत्ये---; ग२, क-\times\times\times\times ।
     ७८/१-न३-आकाशेयोपमानन्दे ; ग२, क- \times \times \times । ७८/२-न१, २,४,५, ७,
ग३, त- स्थी: ; न६- तदा ; ग२, क- \times \times \times ।
७८/३-न३, ग५-ब्रह्मीय स भवेद्गाणि ; न४-ब्रह्मीय संभवेद्गाणि ; ग४-ब्रह्मीयानुभवेदगाणि ; ग३-
७९/१–ग३–तहमात्त्पंच——; न३, ग२, क-\times\times\times\times। ७९/२–ग१, ३, ४–
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नित्यकर्म \longrightarrow ; न६ \longrightarrow समाचरेः; न३, ग२, क \longrightarrow \times \times \times । ७९/३ \longrightarrow

न३, क $-\times\times\times\times\times\times\times$

योगयाज्ञ वल्क्य:

प्राणायामपराः सर्वे प्राणायामपरायणाः । प्राणायामविशुद्धा ये ते यान्ति परमां गतिम् ॥८०॥

प्राणायामादृते नान्यत्तारकं नरकादपि । संसारार्णवमग्नानां तारकः प्राणसंयमः ॥८१॥

तस्मात्त्वं विधिमार्गेण नित्यं कर्म समाचर (न्)। विधिनोक्तेन मार्गेण प्राणसंयमनं कृरु ॥८२॥

, इति श्रीयोगयाज्ञवल्क्ये पष्ठोऽध्यायः ॥

८०/१-क- \times \times \times \times । ८०/२-त४-"ब्रह्मविष्णुशिवादयः"——प्रथमं लिखितं यथा-स्वीकृतं चरणं पिधाय ; क- \times \times \times \times । ८०/३-त४, ६, ग४, ५, ६-प्राणायामैविशुद्धा ये ; क- \times \times \times \times । ८०/४-क- \times \times \times \times ।

८१/१–२–ग२–प्राणायामातारं + + त्तारं नरकादिप(?); न६,क- \times \times \times \times \times \times \times ८१/१–न५–प्राणायामादृतं——। ८१/२–न५, ७———— नरकादिषु; न२, त– तारको नरकादिषु(?)।८१/३–न६,क- \times \times \times \times । ८१/४–ग३–तारकं प्राणसंयमम्(?); न६, क- \times \times \times \times \times ।

८२/१-ग४-तस्मात्त्वं च वरारोहे; क- \times \times \times \times । ८२/२-न१, २,४,६,ग१ ३- नित्यकर्म---; ग२-नित्यं संयममाचर ; क- \times \times \times \times । ८२/३-न३-विधिनो-, क्तेन मार्ग्रेण(?)म.ग्रेग ; ग२,४,क- \times \times \times \times । ८२/४-न३-प्राणसंय(-म-)नं----; ग२ ४, क- \times \times \times \times ।

परिशिष्टम्

षष्ठाष्यायस्य ४।२ अनन्तरं + इति संज्ञितायां पादिटप्पण्यामुल्लिखिता अधिकाः श्लोकाः ॥

न८—नासाग्रे दृक् सदा सम्यक् सव्ये न्यस्येतरं करम् । नासाग्रे शशभृद्धिम्बे ज्योत्स्नाजालवितानके ॥(१)॥

अम्बोमा (?) सहितं शुभ्रं सोमसूर्याग्निलोचनम् । पंचवनत्रं महादेवं चन्द्रशखरमीश्वरम् ॥२॥

नन्दिवाहनसंयुक्तं सर्वदेवसमन्वितम् । प्रसन्नं सर्ववरदं थ्यायेत्सर्वायुषं शिवम् ॥३॥

यो वेदादौ स्वरः प्रोक्तो वेदान्ते च प्रतिष्ठितः । अकारमृतिरेतेषां रक्तांगी हंसवाहिनी ॥४॥

दण्डहस्ता सती बाला गायत्रीत्यवघार्यताम् । अकारमूर्तिरेतेषां कृष्णांगी वृषवाहनी ॥५॥

चऋहस्ता सती चैव सावित्रीत्यवधार्यताम् । मकारम्तिरेतेषां श्वेतांगी ताक्ष्यंवाहिनी ॥६॥

शूलानन्दमयी वृद्धा सरस्वत्यवधार्यताम् । माहेश्वरीति सा प्राज्ञैः पश्चिमा परिकीर्तिता ॥७॥

सृष्ठिस्थित्यन्तकालाद्या मकारोऽप्यन्तकारमकः । अक्षरत्रयमेवैतत्कारणत्रयमिष्यते ॥८॥

त्रयाणां कारणं ब्रह्म सदूपं सर्वकारणम् । एकाक्षरं परं ज्योतिस्तमाहुः प्रणवं बुधाः ॥९॥

ग५-एम्यः १, ४-१० श्लोका अस्मिन्नपि लेखे सन्ति निम्नलिखितैः पाठान्तरैः---

१/१-नासाग्रदृक्——। १/३; -नासाग्रशशभृद्धिम्ब——। १/४-ज्योत्स्नाजालविता-नितम् । २–३- × × × × । ४/१-यद्वेदादौ ————। ५/३-जकारमूर्तिरेतेषां । ५/४-इवेतांगी तार्क्यंवाहिनी । ६/४-कृष्णांगी वृषवाहिनी । ७/१-त्रिशूलानन्दमयी । ७/३-माहेश्वरीति सा प्राज्ञी । ८/१-सृष्टिस्थितिकृत्वाद्यौ (?) । ८/३-अक्षरत्रयमेतत्तु । ९/१-यात्राणां (?) ————। ९/२-भारूपं ————।

ग६—ये श्लोकाः (१, ४–१०) ग५ लेखे त एवास्मिन्नपि लेखे सन्ति तथापि तस्मिन्कानि विशिष्टानि पाठान्तराणि दृश्यन्ते, तानिः—

एवं ज्ञात्वा विघानेन प्रणवेन समन्वितम् । प्राणायामं ततः कुर्याद्वेचपुरककुम्भकैः ॥१०॥

१/१-नासाप्रदृक् — — । १/३-नासाप्रश्रामृद्धिम्वं । १/४-ज्योत्स्नाजालिवता-नितम् । २-३- + + + + । ४/१-यद्वेदादौ — — । ५/३-उकारमूर्तिरेतेषां । ५/४-इवेतांगी ताक्ष्यंवाहिनी । ६/४-कृष्णांगी वृषवाहिनी । ७/१-त्रिशूलं दघती — । ८/१-पृष्ठिस्यत्यात्मकावादौ । ८/२-मकारो त्यन्त-(?)-कारकः । ८/३-अक्षरत्रयमेतत्तु । ९/२-मारूपं — — — ।

विशेषा टिप्पणी:-एम्पो टिप्पणीम्पो स्पष्टमेव प्रतीपते यत् "ग५, ६" लेखावेकस्पैव मूललेखस्य प्रति-लेखाविति, "न८" लेखश्च तस्पैव मूललेखस्य तृतीयप्रतिलेखस्य प्रप्रतिलेख इति ।

MISCELLANEOUS NOTES

Ι

The Decimal Notation

By

P. V. KANE

It is generally agreed that the world owes to India the cypher or zero and the decimal notation. When the decimal notation system arose in India is a matter of controversy. MM. Prof. Mirashi holds the view that the decimal notation began to supersede numeral symbols in inscriptions both in South and North India about the last quarter of the 8th century A. D. Dr. Gai on the other hand controverts his view and holds that this happened in the 2nd quarter of the 7th century. Mere Inscriptional evidence cannot finally solve this question. Literary references also must be searched and relied on. In this communication I should like to rely on two literary references. In the Yogasūtrabhāṣya (III. 13) it is said "one and the same stroke (or line) is designated as one when placed in the unit place, ten when in the ten's place and a hundred in the hundred's place" Sankarācārya in his bhāṣya8 on Vedāntasūtra (II. 2. 17) employs similar language viz. "one and the same line (or stroke) when occupying different places, is conceived as meaning either one, ten, one hundred, a thousand etc."

These illustrations are important. They establish that by the time of these two works the decimal notation must have been well established and generally known. Unfortunately the dates of the Yogasūtrabhāṣya and of Śaṅkarācārya are not certain. No scholar, however, would put down Śaṅkara as flourishing later than about 800 A.D., though there are some scholars who would place him about a century earlier. As regards the date of the Yogasūtrabhāṣya Prof. J. H. Woods in his Introduction to the translation of the Yogasūtra with bhāṣya (Harvard Oriental Series, Vol. 17, pp. XXXXI) places the Yogasūtrabhāṣya between 650 and 850 A. D. In my opinion 850 is too late a date for the bhāṣya, since it was commented upon by Vācas-

Vide Journal of Ganganath Jha Research Institute, Vol. IV, p. 306 (Dr. Gai) and Vol. VIII, pp. 77-81 (MM. Prof Mirashi).

² यर्पका रेखा शतस्थाने शतं दशस्थाने दश एका चैकस्थाने । योगसूत्रभाष्य III. 13.

³ यथा चैकापि सती रेखा स्थानान्यत्वेन निविशमानैकदशशतसहस्रादिशब्दप्रत्ययभेदमनुभवति । शास्त्ररभाष्य on वेदान्तस्त्र II. 2.17.

pati who composed one of his works viz. Nyāyasūcīnibandha in 841 A. D. Therefore, it would be proper to say that the Yogasūtrabhāsya cannot be later than 800 A. D. Māgha in Sisupālavadha (IV. 55)4 mentions several technical terms of Yoga and pointedly refers to the Yogasūtra (I. 33) and the peculiar introductory words of the Bhasya thereon. The Sisupalavadha must be held to be later than the Yogasūtrabhāsya by a few years (50 or so at the least). I have shown in my recently published 'History of Sanskrit Poetics' (1951) that the Sisupalavadha should be placed between 700 and 750 A.D. (p. 113). Therefore, the Yogasūtrabhāsya must be placed before 700 A.D. The Bhasya employs the decimal notation by way of illustration as a familiar and well-known matter. It follows that the decimal notation must have been prevalent some time before 700 A.D. and that the opinion of Dr. Gai about the time when the decimal notation came into general use has to be preferred to that of MM. Prof. Mirashi. In my opinion the decimal notation might have come into vogue much earlier than the period mentioned by Dr. Gai. But this note has already become long and the question of the first beginnings of the decimal notation in India may be left for treatment later on.

⁴ मंड्याविचित्तपरिकर्मंविदो विधाय क्लेशप्रहाणिमह लब्धसवीजयोगा:। स्याति च सत्त्व-पुरुशान्यतयाधिगम्य वाञ्छन्ति तामि समाधिमृतो निरोद्धम् ॥ शिशुपालवध IV. 55. The योगसूत्र 1. 33 is: मैत्रीकरुणामुदित।पेक्षाणां सुखदुःखपुण्यापुण्यविषयाणां भावनातिश्चत्त-प्रसादनम् । यस्य चित्तस्यावस्थितस्येदं शास्त्रेण परिकर्म निर्दिश्यते तत्क्यम् । भाष्य । It should be noted that the word employed in the योगसूत्र is चित्तप्रसादन (and not चित्तपरिकर्म), while it is explained in the Bhaya by the words चित्तस्य परिकर्म.

REVIEWS OF BOOKS

A Concordance of Kālidāsa's Poems.—By T. K. Ramachandra Aiyar; edited by V. Raghavan, pp. x11-408; University of Madras, 1952. Rs. 20.

This Concordance which is No. 20 of the Madras University Sanskrit Series will be warnily welcomed by all interested in Kālidāsa-studies as it places in their hands a useful reference-work containing a Pāda-index of the poet's metrical works. In the Introduction, Dr. Raghavan has indicated the scope of the work as well as its usefulness in an intensive study of the different aspects of Kālidāsa's compositions. A critical edition of Kālidāsa's poems is a consummation devoutly to be wished for; but the task is beset with difficulties which are only aggravated not merely by the number of commentaries but by the unsettled condition of the commentaries themselves. As it is, publications like the one under review can only be tentative in character from the textual point of view but not the less useful on that account. A valuable feature of the work is the footnotes which notice different readings adopted and different interpretations offered by different commentators. The author has done well at this stage to refrain from drawing conclusions except in a rare case or two and to rest content with reporting the data.

It is rather strange that Prof. Aiyar did not think it necessary to prefix a Note explaining the nature and scope of his work as well as his approach to it. A clear statement on a few important points was obviously necessary: for instance, it is left to the reader to understand that the author's text of the pādas is based on Mallinātha's commentary and that the variants offered by others are noticed in the footnotes. What is more surprising, however, is the fact that, at a time when anyone caring to question the authenticity of Rlusamhāra shall have to build up his case anew, Prof. Aiyar has quietly excluded this poem from his purview without giving any explanation for this serious omission. Again, Prof. Aiyar should have pointed out that he has omitted the last nine cantos out of seventeen of the Kumārasambhava, though one feels he had better printed the pādas of these stanzas in small type and thus increased the usefulness of his work.

The work is neatly printed and decently got-up. There are a few printing mistakes noticeable apart from those mentioned in the correction-list: e. g. januaro for januaro in line 4 on page 146, ārambhmam for ārambham in the last line on page 235. Lastly, it would have made reference to the pādas easy and simple if they were numbered, say, in tens.

Bibliography of Indian Coins, Part II. (Muhammadan and Later Series). By C. R. Singhal. pp. vi+220. Bombay, The Numismatic Society of India, 1952. Royal 8°. Rs. 15.

Mr. C. R. Singhal, author of the Bibliography of Indian Coins, Part II, on Muhammadan and Later Series, is a well-known numismatist. His catalogue of the Coins of the Sultans of Gujarat, published by the Prince of Wales Museum, Bombay, is the only authoritative work on the coins of Gujarat during the Sultanate period. His Bibliography of Indian Coins from the earlie t time to c. 1200 A.D. published in 1950 shows his indefatigable industry and clarity of style which won him the appreciation of scholars.

The study of Indian Numismatics of the Muslim period has suffered a great set-back during the recent years and Mr. Singhal may be counted as one of the few amongst the distinguished band of scholars who are trying their best to bring before scholars new material of Muslim coinage in India.

A glance at the Bibliography on Indian Coins, Part II should convince us of the wealth of information it contains. It gives a historical retrospective of the work done by the great pioneers and well defines the present state of Muslim numismatics. His entries are not merely dry recordings of the names of the authors and the titles of their works. He has clearly summarized the articles and drawn our attention to the contributions they have made to the study of Muslim numismatics. This kind of work requires hard labour and command over the subject and it must be admitted that Mr. Singhal has done his best.

I am informed that Mr. Singhal is at present engaged on the compilation of the list of the Mint Towns of the Mughal Emperors of India. The original list was published by Dr. Whitchead in 1912. His list will include all the new mints discovered during the last forty years. It will be of great interest to scholars and should be indispensable to the students of the Mughal numismatics.

It is hoped that Mr. Singhal's work will encourage scholars of younger generation to take up Muslim numismatics more seriously.

M. C.

Excavations at Brahmapuri (Kolhepur) 1945-46. By Dr. H. D. Sankalia and Dr. M. G. Dikshit. Crown 4°. pp. xv+153. 37 plates and 30 figs. Poona, Decean College Postgraduate and Research Institute, 1952. Rs. 30.

It is a good sign that the importance of archaeology as a major source of history, and of scientific excavation, where stratigraphy receives its due significance, has been recognised in India, and the excavations at Ahichchhatra, Hastinapur, Sisupalgarh, Arikamedu and other sites were carried on strictly scientific lines. One of the main objects in some of these excava-

tions was, if possible, to bridge the gulf that separates the Indus Valley finds from those of the Mauryan period, by hitting on a site in continuous occupation since prehistoric times illustrating the development of the culture, and thus solve the riddle of the chronology of the Indus Culture with reference to the Vedic Culture. Excavations at Brahmapuri also rank among the perfect specimens of archaeological work. Both Dr. Sankalia and Dr. Dikshit have established themselves as seasoned archaeologists and the work under review adds one more feather to their cap.

Situated on the right bank of the Pañcagangā and on the western out-skirts of the city of Kolhapur, Brahmapuri has attracted the attention of antiquarians since its antiquity was revealed in 1877. The immediate cause of the present excavation, however, was the discovery of a bronze Graeco-Roman Statuette (Poseidon, Roman God of the Sea), bronze vessels, a toy cart and other interesting objects by Prof. Kundangar in trial diggings on the western side of the mound. Though the present excavation did not reveal any prehistoric site, it gives us a rough sequence of cultures prevalent in the Deccan under several dynasties during the last 2000 years or more. It is a pity that further digging had to be stopped "as there was no time nor funds to undertake deep digging in all the squares".

Dr. Sankalia has contributed the first two chapters dealing respectively with "Antiquity of Kolhapur" and "Excavation and Stratigraphy", and sections on "Terracotta and other Figurines", "Bangles", "Tools and Weapons", and "Objects of Stone" in Chapter III (Excavated Finds). "Coins", "Pottery", and "Beads" from the same chapter are by Dr. Dikshit. Chapter IV (wrongly numbered V in Contents) entitled "General Observations" with the sub-title "The Place of Kolhapur Cultural Remains in Indian Culture" is the joint contribution of Drs. Sankalia and Dikshit. On the basis of literary and archaeological sources Dr. Sankalia has traced back the antiquity of Kolhapur to the early centuries of the Christian era under the Sātavāhanas. Both contributors are specialists in the particular branches of the subject on which they have written, and the reviewer has nothing but praise for their performance.

The excavation has thrown light on many important and interesting aspects of the early history of the Deccan, and has supplied new material for study. It is possible to refer to but a few such matters in the course of a review where only a short survey of the excavated material can be taken. Goin No. 3685 is the only copper coin of Gautamīputra Śātakarṇi, and this is a distinct addition to our knowledge. Coins of Viļivāyakura have been familiar to numismatists, but "it is for the first time that they have been recovered from stratified excavations which have enabled us to know the cultural history of the site, and also the probable place in time of these coins themselves". The present excavations have also brought to light the coins of Viļivāyakura of the smaller sizes for the first time. It is interesting to

note that the majority of the pottery found at Kolhapur belongs to the Bahmani and Late Šātavāhana groups, Šātavāhana and pre-Šātavāhana being meagrely represented. With the exception of a solitary (hand-made) vessel, all the pottery of the Bahmani period is wheel-turned. The site is also important for supplying a targe number of glass beads from accurately dated strata. It appears certain that glass was actually worked at the site, and glass bangles, rings and other articles were manufactured along with the beads. But for the uncertainty surrounding the stratigraphy of the metal image of Pārvatī, we would have got important data in the history of early Hindu iconography. About houses, the authors are certain that they were not storeyed and were roofed with baked, clay tiles. Curiously enough, the tiles in their shape and technique "recall the so-called modern Mangalori tiles and are quite unlike the 'Gāôṭhi' ones".

The printing and get-up are nice, and the plates, line drawings and illustrations are well brought out.

With this high encomium on the matter of the book, the reviewer feels constrained to pass some adverse remarks about the 'editing' (or the work of the person in charge of publications) which seems to have been indifferently done. The Deccan College Postgraduate and Research Institute has a good number of excellent publications to its credit and it has mastered the technique of book production. It is with a great amount of diffidence that the reviewer, without any knowledge of book production, has ventured to invite attention to the defects of this otherwise commendable production, with the sole purpose that similar indifference may not be repeated in subsequent productions. Want of Index seriously detracts from the reference value of such a first class publication. Another defect is the omission of "Abbreviations". Though some well-known abbreviations need no explanation, the reviewer feels that, for some readers at least, explanations of such abbreviations as BISM, CICAWK, FEM, INKK, QBISM, SMHD would have been welcome.

On p. 57, line 13 from below, instead of giving reference to the page number, question mark (made by the press reader) is retained. "Varient" uniformly occurs for "variant". "Clayey" sometimes occurs as "clayee". On p. 46, n. 4, "Indian History Congress" is wrongly put for "Indian Science Congress". The meaning of the following sentence is not clear: "This fact was also assumed hitherto on palaeographic grounds, and Vāsiṣthiputra's Gautamīputra's son's synchronism with Kṣatrapa Rudradāman". (p. 140).

Despite these formal defects we have no hesitation in strongly commending the book to scholars interested in archaeology and ancient Indian history and culture.

ACKNOWLEDGEMENTS

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 Bhandarkar Oriental Series, No. 8. Bhandarkar

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Extracts from the Report

For the year 1951-52.

There were, 1,104 members on the roll at the end of the year:

	Life Member		Ordinary Members	Total	
Resident		169	795	964	
Non-Resident		32	108	140	
	Total	201	903	1,104	

Obituary: Our Committee regret to record the death of the following members:

Dewan Bahadur B. K. Thakore

Mr. Shoorji Vallabhdas

Maj. Vasant R. Sanzgiri

Dr. M. S. Nadkarni Mr. Pandurang S. Sane

Prof. V. N. Naik

Miss Prabhavati R. Kulkarni

Cultural Activities: During the period under review, the literary and cultural activities were continued, and a comprehensive programme was put through, drawing a large and select audience to the Society's rooms.

The literary and cultural activities were inaugurated with an address on "The Spirit of Europe" by Don Salvador de Madariaga, the well-known Spanish scholar and philosopher of the first rank on 11th April, 1951. There was a large gathering in the Town Hall and the lecture was followed by a recital of Folk songs by the Goan Folk-song and Choral Society, which was much appreciated. The President, Hon'ble Mr. M. C. Chagla, presided. The following lectures were delivered in the course of the year.

"Glimpses of China from 1932-1951." 29-5-1951

"Library Service in Renascent India." 30-5-1951

By Mr. H. R. Bhateja. Chairman: Prof. P. A. Waida

By Dr. S. R. Ranganathan. Chairman: Mr. T. D. Waknis, Curator of Libraries.

168 EXTRACTS FROM THE REPORT					
"Educating our Master 26-6-1951		By Mr. A. D. Gorwala. Chairman : Dr. John Matthai.			
"Yoga Yajnyavalkya ar Yoga Literature 24-7-1951	**	By Rao Bahadur P.C.Divanji. Chairman: Prof. H. D. Velankar.			
"High Prices—A Sugge 31-7-1951		By Mr. B. C. Dutt. Chairman : Prof. S. G. Panandikar.			
"Portuguese Diplomacy of Bassein." 21-9-1951		By Rev. Dr. A. da Silva Rego. Chairman: Prof. G. M. Moraes.			
"Comparative Study of Philosophy." 25-9-1951		By Dr. V. M. Kaikini. Chairman: Dewan Bahadur K. M. Jhaveri.			
"Congress of Orientalis 6-11-1951		By MM. Dr. P. V. Kane. Chairman: Sir R. P. Masani.			
"The University Scene 27-11-1951		By Mr. S. R. Dongerkery. Chairman: Sir R. P. Masani.			
"U. N. and Status of V 7-12-1951		By Mrs. Lakshmi Menon. Chairman: Mr. H.R. Bhateja.			
"The Ajivakas—A Van 8-1-1952	ished Indian Religion.'' ?	By Dr. A. L. Basham. Ghairman: MM. Dr. P. V. Kanc.			

"Importance of Arabic Language." 22-1-1952

"Four Freedoms as they exist in America." 29-2-1952

By Mr. A. A. A. Fyzec. Chairman: Sir R. P. Masani.

By Dr. Wilbert Snow. Chairman: Rev. Dr. M. M. Balaguer, S.J. "The Theatre in Great Britain."
18-3-1952

By Mr. R. G. Newton. Chairman: Mr. Prithviraj Kapoor.

"Starry Heavens." 25-3-1952

By Mr. B. G. Narayan. Chairman: Prof. D. D. Kosambi.

(A verbatim report of some of these lectures is available in a bound volume, and will be made available for reading on the premises.)

Seminar: A very pleasant evening was spent on 24th October 1951, when Prof. C. R. Boxer, Professor of Eastern History in the School of Oriental Studies, University of London, was present and gave an interesting talk on how records are kept in the Portuguese Government Archives at Goa, and what light these documents throw on the modern period of Indian History.

Conversazione: A Conversazione was held on 7-3-1952 with Dr. (Mrs.) J. E. Van-de Leeuw, speaking on "Archaeological world in Indonesia."

Educational and Cultural Films: In all 21 filmshows were held during the period and there were on an average two shows per month of two features each. It is encouraging to note that an ever increasing proportion of the members of the Society and their friends patronized these shows. We are very much obliged to the following institutions for the loan of their films.

- 1. British Information Service, and
- 2. United States Information Service.

Representation of the Society on Learned Bodies: The Society was represented at (a) All India Sanskrit Parishad held at Somnath in May 1951; (b) 22nd International Congress of Orientalists held at Istambul (Turkey) in Sept.1951; (c) 16th Session of the Oriental Conference at Lucknow held in December 1951; (d) 9th All India Library Conference held at Indore in 1951. (e) 28th Session of the Indian Historical Records Commission and the 14th Session of the Indian History Congress both held at Jaipur, when Prof. G. M. Moraes, was elected Jt. Secretary of the Indian History Congress for the year 1952.

President's Visit to the Library: The President of India, Dr. Rajendra Prasad, visited the Library on 25th February 1952, at 5-30 p.m. The President was introduced to the members of the Managing Committee and thereafter taken through the Central Library to the Durbar Hall, where a small

exhibition of rare books and manuscripts and other rare collections of the Society was held, and the President was very much interested in this collection. He was then conducted through the Society's rooms, and he addressed members and visitors numbering about 2,000, who had assembled in the Garden on the north side, from the dais erected on the terrace over the Society's entrance. The band of the Indian Navy was in attendance and the Choral Group sang, under the direction of Prof. Antsher Lobo, the harmonized version of Jana Gana Mana prepared for the occasion by him. A Souvenir giving a short account of the Society's history and activities and of the Central Library was specially compiled and copies distributed to members and visitors. The President of the Society, in welcoming the Chief Guest, said that he might direct that all Government of India publications as well as the publications of other States in India should be sent free of cost to the Central Library; the Asiatic Society in Bengal has been getting a substantial donation from the Government of India, and he requested the Chief Guest to bear in mind our Library, when considering grants to cultural institutions. In his reply, the Chief Guest said inter alia that both these points would receive sympathetic consideration by his Government. MM. Dr. P. V. Kane proposed a vote of thanks.

The President has presented two autographed copies of his photographs to the Library, and has recorded his impressions in the "Distinguished Visitors' Book" as under:

"It gave me great pleasure to be taken round the rooms and Library of the Bombay Branch Royal Asiatic Society. The authorities had exhibited in one place some of the important and most valuable books and manuscripts out of their large collection and I could get some idea of the nature and value of the collection. It has the good fortune of being served by a succession of great scholars and the results of their researches are embodied in the journal and brochures published by the Society for a long time. It has now expanded its activity and while it maintains the Library of rare and valuable books which are used mostly by the learned few, it has also become the Central Library and in that capacity, it serves the public at large, who are taking full advantage of the facilities provided by it.

I wish the authorities success and hope their work will expand and will be appreciated by all.

RAJENDRA PRASAD.

REGULATIONS CONCERNING CONTRIBUTIONS TO THE JOURNAL

- 1. A paper may be offered by any Fellow or Member of the Society. Papers by Non-Members must be communicated through a Member.
- 2. A paper offered for publication should be completely ready as copy for press, i.e., type-written on one side of each sheet and prepared in accordance with regulations printed below, and should be sent to one of the Editors of the Journal.
- 3. The Editorial Committee will determine whether a paper shall be printed, and, if printed, in what form.
- 4. Every paper consisting of more than 10 pages of type-script or manuscript should be accompanied by summary not exceeding 200 words in length.
- 5. Contributors are earnestly requested to use the system of transliteration now adopted by this Society.
- 6. Titles of books cited should be given in full at the first citation; thereafter reference should be made by using only significant words in the title, but with sufficient clearness to avoid doubt or confusion. Uniformity of abbreviations must be observed throughout the paper.
- 7. Titles of articles in periodicals should be cited in quotation marks; the name of the periodicals should be printed in italic. The following abbreviations for the Journals of the principal Oriental Societies should be adhered to:—Ep. Ind., Ind. Ant., JA., JAOS., JASB., JBBRAS., JRAS., WZKM., ZDMG. Volume and pagination should be indicated as in the following examples:—ZDMG, 27, 369 ff. (Zeitschrift der deutschen morgenländischen Gessellschaft, volume, 27, pages 369 and following.)
- 8. The greatest possible conciseness in their papers is desired of contributors for the sake of economy. Additional printer's charges for alterations other than corrections of printer's errors must be borne by the contributor.
- 9. The indiscriminate use of Oriental characters along with Roman being very undesirable from the points of view of both printer and reader, only longer quotations from Oriental languages will, as a rule, be printed in non-Roman character.
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